Joyce, Joseph P.

Working Paper
Through A Glass Darkly: New Questions (And Answers) About IMF Programs


Provided in Cooperation with:
Department of Economics, Wellesley College


This Version is available at:
http://hdl.handle.net/10419/23214

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
THROUGH A GLASS DARKLY:

NEW QUESTIONS (AND ANSWERS) ABOUT IMF PROGRAMS

by

Joseph P. Joyce
Department of Economics
Wellesley College
Wellesley, MA 02482
jjoyce@wellesley.edu

June 2002

Abstract

Recent research on the International Monetary Fund has focused on the adoption, implementation and impact of their lending programs and their political dimensions. This paper evaluates this literature and suggests promising areas of future work. The first area to be surveyed deals with the initiation of a Fund program, which has been shown to be influenced by political and institutional variables. The record also shows that in some cases governments borrow from the Fund on a continuing basis. A second focus of research analyzes the design and implementation of Fund supported polices, since many programs are often not successfully completed. Political economy models attribute the incomplete implementation to a lack of domestic support for reform measures, and empirical studies provide evidence is support of this hypothesis. The third issue that is addressed is the impact of IMF policies on the economy of the borrowing government. Most of the empirical work finds that these policies improve the balance of payments but may have a negative impact on growth and income distribution. Finally, there are no signs of a catalytic effect on Fund programs on private capital flows to program countries, but some evidence of moral hazard.

JEL: F3
THROUGH A GLASS DARKLY:
WHAT WE KNOW (AND DON’T KNOW) ABOUT IMF PROGRAMS

For now we see through a glass, darkly;
1 Corinthians 13:12

I. Introduction

In recent years the activities of the International Monetary Fund have drawn increased attention. The rise in the scrutiny of Fund activities is due in part to the IMF’s heightened profile. The IMF played a prominent role in dealing with the Asian currency crisis of 1997, as well as the subsequent crises in Russia, Brazil, and most recently, Argentina. The outstanding amount of IMF credit more than doubled during the 1990s as shown in Table 1, before declining at the end of the decade.

A number of studies were undertaken in response to criticisms of the IMF’s policies, which resulted in proposals for changes in its response to crises. The increase in public notice has been accompanied by a rise in scholarly work on the Fund. New questions about the adoption, implementation and outcome of the IMF’s lending programs have been raised, while the political dimensions of these arrangements have received increased examination. Economists and political scientists have utilized innovative tools of theoretical and empirical analysis, such as game theory and duration models, to address these issues.

This paper reviews the recent literature on the IMF’s lending programs, and outlines the advances that have been made and the issues that merit future analysis. It does not address all aspects of the Fund’s activities, many of which have been examined in other surveys, such as those of Edwards (1989) or Krueger (1998).
Rather, it assesses the state of our knowledge about IMF sponsored programs, and points to promising areas of further work.

The next section reviews the research that has been undertaken on the factors that affect the decision to initiate a program. Section III surveys issues relating to the design and implementation of IMF programs, including the changing nature of conditionality and program completion. Section IV reviews the literature on the economic impact of Fund-sponsored policies. Section V deals with the response of private capital markets to IMF programs. The last section summarizes our understanding of Fund programs and delineates the issues that need to be further explored.

II. Ex Ante Country Characteristics

A member country of the IMF that faces an external sector crisis may request financial support from the Fund. A government that is participating in a program signs a “letter of intent,” which specifies the policies that it will implement to restore external sector balance. In some cases these have been “precautionary” programs, which indicates that the domestic government has stated that it does not intend to utilize the available credit. However, this is not a binding commitment, and the government can later reverse its decision and borrow from the Fund.

The Fund’s primary lending programs are the Stand-By Arrangement, which is designed to deal with short-term (usually one-year) balance-of-payments problems, and the Extended Fund Facility, which provides assistance for structural reforms and takes
place over a longer time horizon, typically three years. The IMF also administers the Poverty Reduction and Growth Facility to provide assistance on concessional terms to low-income countries for the purposes of fostering economic growth and reducing poverty. The latter was known until 1999 as the Enhanced Structural Adjustment Facility, and it had replaced the Structural Adjustment Facility. Table 2 reports the numbers of these arrangements in effect during the last decade.

A substantial portion of the research devoted to Fund programs has dealt with the economic characteristics of countries that adopt IMF programs. Among the papers that addressed this issue are those of Joyce (1992), Edwards and Santaella (1993), Conway (1994), Santaella (1996), and Knight and Santaella (1997). These studies often used a binary choice model (logit, probit) to distinguish between countries and time periods where an IMF program was in place and those where it was not, and sought to determine the economic factors that influenced the initiation of a Fund program. Knight and Santaella (1997) pointed out that these estimation equations can be interpreted as the reduced form derived from the “demand” for a Fund program by a borrowing country and the IMF’s “supply.”

Bird (1996) summarized this literature, and the areas of overlap and disagreement. He noted that these studies generally showed that the adoption of a Fund program was linked to the occurrence of balance of payments deficits, low levels of reserve holdings, increased debt, an overvalued exchange rate, and a record of past programs. These features are consistent with economies that have external disequilibria, and therefore fall under the IMF’s mandate in its Articles of Agreement to address such
imbalances. However, the studies often left explained much of the variation in the occurrence of Fund programs.

The methodology and ensuing results found in these studies are similar to those that appear in models of currency crises. This parallel is not surprising, since borrowing from the IMF is one response to a currency crisis. Placing the initiation of Fund programs in the broader context of a currency crisis allows us to differentiate between the characteristics of those countries and governments that turn to the IMF from those in similar economic circumstances that do not borrow.

Recent work has focused on political and institutional determinants of Fund borrowing. The relevant papers include those of Thacker (1999), Vreeland (1999, 2001), Przeworski and Vreeland (2000), Barro and Lee (2001), Bird and Rowlands (2001a), and Dreher and Vaubel (2001). The literature has progressed enough for some areas of consensus to emerge. Thacker (1999) and Barro and Lee (2001), for example, found evidence that access to Fund programs is skewed towards countries that are aligned with the US, as measured by United Nations voting patterns. Przeworski and Vreeland (2000) and Dreher and Vaubel (2001) report that governments are more likely to enter into an agreement with the IMF in the year after an election, suggesting that some form of political business cycle may exist. Oatley and Yackee (2000) and Oatley (2002) find that the size of a country’s IMF loan is related to the size of its commercial bank debt.

While political and institutional factors undoubtedly play a role in the decision to initiate a Fund program, the evidence to date does not indicate that they have a
predominating influence. Bird and Rowlands (2001a), for example, found that while such variables are in some cases statistically significant, they do not greatly increase the ability of models to predict the occurrence of Fund programs. Sturm, Berger and de Haan (2002) reported a similar result in their tests of the determinants of changes in the amount of IMF credit disbursed. While this area of research on the IMF’s programs, therefore, may have reached the point of diminishing returns, it does provide evidence on the economic and political factors that make borrowing from the Fund more likely.

Another approach to explaining patterns of IMF lending has been taken by Vaubel (1991, 1994), who utilized public choice theory. He maintains that an increase in lending allows Fund officials to maximize their power and remuneration, as manifested by their budget and staff size, as well as operational independence. Willett (2001, 2002) also adopts a public choice perspective, although he differs from Vaubel in emphasizing autonomy and a desire to avoid failure as determinants of the actions of Fund officials. This line of analysis seems better suited at explaining lending in the aggregate than the start of individual programs.

The significance of past lending in explaining the introduction of new programs has recently led to a new focus of research on the use of Fund credit. A number of countries have participated in consecutive lending programs over time. Table 3 shows those countries such as Jamaica and Uganda that have spent over a decade in a series of programs. This continued borrowing would appear to contradict the IMF’s own Articles of Agreement, which include as a purpose of the Fund the “temporary” availability of its resources to member countries. However, it may be useful to differentiate
concessional lending from non-concessional lending in this context, since the former is intended for the poorest nations that are likely to need access to Fund resources for extended periods.

Several studies have dealt with the characteristics of countries that borrow frequently. Bird, Hussain and Joyce (2002) used models of count data to examine “recidivist” borrowers, and found that the factors that contributed to prolonged borrowing included low reserve holdings, frequent current account deficits, large debt service ratios, and low investment rates and per-capita income. Conway (2000) used probit and survival models to examine how participation in IMF programs affects the probabilities of a country entering and exiting a crisis. He reported that participation in Fund programs lessens the duration of an external crisis, but that continuing reliance on Fund programs weakens this effect. Joyce (2001) also used duration models to investigate the time dependence of program spells and the factors that affect these spells, and found evidence of extended program duration for countries with lower per-capita income and exports concentrated in primary goods.

These studies shift the focus from the decision by a government to adopt a program in period $t$ to a government’s sequential decisions regarding participation in Fund programs over periods $t$, $t+1$, $t+2$, etc. A government may use a multi-period perspective when deciding whether to fulfill all the conditions of a particular program, or to let a program lapse in hopes of negotiating a more favorable one in the following period (see the discussion in the next section). This choice will be based on a government’s assessment of its bargaining ability vis-a-vis the Fund as well as its
forecast of future economic conditions. Future work in this area may attempt to model
this governmental decision-making process.

III. Program Design and Implementation

The Fund disburses credit only if a government adheres to the policies outlined in the letter of intent. The IMF periodically evaluates a country’s fulfillment of its obligations as measured by performance criteria, structural benchmarks and overall program reviews, and non-compliance usually results in the suspension or termination of a program. Several studies, including those of Killick (1996, 1997), examine the justification for conditionality in the context of a principal-agent relationship, where the IMF seeks to ensure that the borrowing government implements policies consistent with the Fund’s goals, with conditionality serving as a monitoring device.

Much recent work has dealt with the changing nature of the policy conditions. IMF conditionality traditionally focused on measures of demand-management, such as constraints on a central bank’s holdings of domestic assets and a government’s fiscal position. The increased emphasis by the IMF on growth as an objective has resulted in the increasing use of structural conditions. These measures are designed to foster the use of markets in the allocation of resources, and include domestic deregulation and the liberalization of trade and capital flows.

The programs initiated during the Asian crisis were criticized for imposing an excessive number of structural conditions, particularly in the case of Indonesia. Goldstein (2000) examined the record of structural conditions in IMF programs and found an increase in the average number of structural conditions contained in programs
over time. Goldstein (2000) and Bird (2001b) suggested that this might have led to a decline in program compliance. Gould (2002) attributed the rise in the use of structural conditions to the influence of private creditors who supplement Fund resources. Kapur (2001) analyzed the increasing number of conditions related to “governance,” and pointed out that they could conflict with a domestic government’s desire for autonomy.

The IMF itself (2001a, 2001b, 2001c, 2001d) undertook several studies of conditionality in the aftermath of the Asian crisis. The authors of these reports also reported an increase in the number of structural conditions contained in Fund programs, but claimed that there was no evidence that the number of criteria was linked to program compliance. However, they did agree that conditionality should be streamlined.

The record of program completion by borrowing countries has received increasing scrutiny. Killick (1995) undertook an examination of programs that took place between 1979 and 1993, and used the proportion of credit actually disbursed by the end of a program relative to the amount initially committed as a criterion to measure program completion. He selected a 80% disbursement rate as a floor to indicate whether or not a program was “completed.”

Killick reported that by this standard only 47% of all programs were successfully completed. He found empirical evidence that the completion rate was affected by a country’s external debt position, with more frequent breakdowns in program completion occurring in highly indebted countries. Killick also found that the size of the IMF’s initial commitment of credit relative to a country’s current account
deficit was higher in those countries that did successfully finish their programs.

Mussa and Savastano (2000) provided a comprehensive review of the IMF’s lending arrangements over the period 1973 and 1997. They point out that a country may not receive all of the originally planned credit for a number of reasons, including external shocks. In some of these cases the program is canceled early because of an unanticipated change in the external environment and a new arrangement is made.

They characterized those programs where 75% or more of the planned credit was actually disbursed as situations where the governments generally completed the agreed-on policies. Such programs represented 46% of the total, which is almost identical to Killick’s (1995) calculation of the proportion of successful completions. The programs where 50% to 75% of the credit was disbursed represent a range of circumstances and outcomes, including some successful programs, some that were rescheduled and some that were not finished because of failure to comply with the performance criteria. There was a serious divergence between the planned policies and those executed in the remaining cases where less than one half of the planned credit was disbursed.

Studies originating at the IMF of its programs have pointed to the importance of political factors in successful program implementation. Schadler et al. (1995) pointed out that there is a large variation among countries in their commitment to carrying out reform measures, while Mecagni (1999) attributed a major proportion of program breakdowns to political changes and civil instability. The IMF’s (2001b) own study of the literature on program implementation concluded that a national commitment to
reform is necessary to the successful completion of a program.\textsuperscript{9}

Theoretical models based on a political economy perspective focus on the domestic political factors that affect program implementation. These models, which often use game theory, stress the divergent interests of the different interest groups within a country and the impact of an IMF program on their relative positions. Vreeland (1999, 2001), for example, contends that some governments adopt Fund programs even when economic conditions do not warrant one in order to increase their bargaining leverage over domestic opponents of reform policies. Drazen (2001) and Mayer and Mourmouras (2002) presented models of the political environment within a borrowing country, where there are “veto players” within a government and special interest groups outside that could block reform. Mayer and Mourmouras (2002) demonstrate that conditional assistance can strengthen or “tip the hand” of the reformers. Boughton and Mourmouras (2002) reviewed this theoretical modeling of policy reform and drew implications for strengthening policy ownership, a subject also analyzed by Khan and Sharma (2001).

Ivanova, Mayer, Mourmouras and Anayiotas (2001) used several measurements of program implementation in their study of the factors that affect the outcomes of Fund programs. Their methodology is similar to that used by Dollar and Svensson (2000) in a study of World Bank programs. They reported that completion is linked to domestic political conditions, including political cohesion, ethnic fragmentation, conflict, and the strength of special interests.

Other studies have examined the Fund’s behavior in cases of program
suspension. Stone (2002), for example, reported evidence to support the hypothesis that the IMF is more likely to suspend programs in more “important countries” (where importance is measured by the size of IMF quota, US foreign aid, and aid from other OECD members) but for shorter periods. Edwards (2001), however, found that the Fund was less likely to suspend the programs of larger countries, as measured by their quota. Dreher (2002) claimed that program interruptions are less likely to occur in election years. He attributes this both to the IMF’s desire to avoid damaging a government’s reputation, as well as the government’s desire to avoid a breakdown at election time.

In response to its critics, the IMF now emphasizes the ownership of programs in order to achieve their successful completion. The Fund is paying more attention to the domestic political environment when dealing with a country. For example, the IMF and the World Bank have sought to broaden the basis of support within a country for their programs by developing in consultation with a broad range of parties Poverty Reduction Strategy Papers that describe the policies needed to promote growth. A future focus of research will be evaluating whether this new emphasis affects program completion.

IV. Ex Post Policy Impact

The economic policies stipulated in a program are designed to restore a sustainable balance of payments position in the short-run while encouraging long-term output growth. An extensive amount of research has addressed the issue of whether Fund-supported policies actually improve economic performance, as manifested through
the balance of payments, inflation and growth. These studies seek to determine the
efficacy of the measures that the IMF recommends.

A crucial component of the empirical analysis has been the construction of the
“counterfactual,” a country’s economic performance if it had not elected to adopt a
program that serves as a basis of comparison with the actual record. A variety of
approaches have been adopted for this purpose. The “before-after” approach compares
a country’s post-program performance with its performance before the program. The
“with-without” approach contrasts changes in target variables in program countries with
changes in a control group of non-program countries. Both methods are biased by
systematic differences between the countries and periods where lending occurs and
those where it does not. Consequently, studies that ignore these differences may
exaggerate the impact of Fund programs.

Goldstein and Montiel (1986) developed a generalized evaluation estimator
(GEE) to deal with this problem. The GEE controls for the differences between
countries and takes into account the policies that would have prevailed in the absence of
a Fund program. This approach has been taken in most subsequent studies, such as
those of Khan (1990) and Conway (1994). Recent contributions in this area include the
works of Bagci and Perraudin (1997), Prezworski and Vreeland (2000), Dicks-Mireau,

Haque and Khan (1998) provided a comprehensive survey of this literature.
They report that the empirical evidence generally indicates:
…that Fund-supported programs lead to an improvement in the current account balance and the overall balance of payments. The results for inflation are less clear cut...In the case of growth, the consensus seems to be that output will be depressed in the short-run as the demand-reducing elements of the policy package dominate. Over time the structural reform elements of the program start to take effect and growth begins to rise…¹⁰

Bird (2001a) in a later survey agrees with this assessment, except with respect to the impact of IMF programs on growth. He finds that the evidence from recent studies indicates no impact or a negative one.

Other recent works have attempted to measure the impact of IMF programs on income distribution and poverty. Garuda (2000) found that participation in Fund programs has important distributional effects that depend on a country’s pre-income situation, with negative consequences for countries in the worse circumstances. Similarly, Vreeland (2002) reported that labor’s share of income is lower in countries with IMF programs. Easterly (2001) investigated the impact of structural adjustment programs of the IMF and World Bank and reported that such programs lower the impact of economic fluctuations on poverty, i.e., economic expansions benefit the poor less but contractions hurt them less.

This literature has generally not taken into account the compliance of the countries in IMF programs with their programs’ conditionality. This is a surprising omission, since presumably a country’s economic performance will vary in response to
its implementation of the program’s policies. Assessing the performance of program
countries without discriminating among them by their degree of compliance could give
a misleading view of the effects of IMF programs. On the other hand, if no systematic
linkages exist, then new questions arise about the effectiveness of Fund-supported
policies and the need for conditionality.

Killick, Malik and Manual (1992) did compare the impact on the balance of
payments of completed vs. uncompleted programs, but did not find evidence of a
significant difference in the two groups. Conway (1994) included measurements of the
time spent in programs and the amount of credit actually disbursed in his analysis of the
economic impact of Fund programs. Ergin (1999) also addressed this issue, and used
different measurements of participation in Fund programs, including a time-weighted
utilization of IMF credit which served as a proxy for program compliance. He found
that sustained access to Fund credit led to improvements in the current account and real
output, and a significant decline in the inflation rate. Mercer-Blackman and
Unigovskaya (2000) used the Fund’s Database for Monitoring Fund Arrangements
(MONA), and reported evidence of a link in the transition economies between growth
and compliance, as measured by MONA’s Index of Fund Program Implementation.

The impact of Fund programs on economic performance has consequences for
the occurrence of future programs. Policies that are effective reduce the need for new
programs. Unsuccessful policies could lead to more programs to address recurring
problems, although programs with negative side effects may drive countries away.
Assessing the effect of IMF programs on economic performance will undoubtedly
continue to be an important area of research.

V. IMF Programs and Private Capital Markets

The research reviewed to this stage has dealt with the IMF and the member countries that participate in a program. However, Fund lending does not take place in isolation. There are other sources of financial resources potentially available to a country, both public and private, and these may be affected by the operations of Fund programs.

The IMF itself states that the existence of an agreement with a country “…reassures investors and the official community and helps generate additional financing from these sources. Thus, IMF financing can act as an important lever, or catalyst, for attracting other funds.”¹¹ The presence of a Fund program would be viewed as a “pull” or domestic factor in the context of the literature on capital flows to developing countries, serving as an indicator of an improved domestic situation.¹²

Several studies have tested the validity of this claim. Rodrik (1996), Bird and Rowlands (1997, 2001b) and Ergin (1999), using different measurements of private capital flows, found no evidence that IMF lending to a country was followed by an increase in private credit flows. However, Ergin (1999) and Rowlands (2001) did find evidence of an increase in lending from other public sources, which is consistent with the Fund’s lead role in coordinating multilateral assistance.

These findings indicate that the existence of a Fund program does not serve as a sufficient condition to warrant an increase in private capital flows. This result is not
surprising in view of the record on program completion and impact reviewed above. It would be more fruitful to examine whether the private markets differentiate between successful and unsuccessful programs. Edwards (2000) addresses this issue, as well as the problem of selection bias. He also finds little evidence of a catalytic effect, although he does report a decrease in capital flows for program countries that had compliance problems in the past.

The initiation of a Fund program may affect private capital markets through an impact on existing debt. Marchesi and Thomas (1999) presented a model in which the presence of an IMF program does serve as a signaling device of a country’s willingness and ability to undertake substantive reform. In these circumstances, private creditors are more willing to reschedule the country’s external debt. Marchesi (2000) tested this prediction with a probit model of debt rescheduling and reported evidence in support of it. Easton and Rockerbie (1999) found that participation in an IMF program lowers the expected probability of a loan default and the average spread over LIBOR.

The reaction of the private financial markets to the start of IMF programs could be an important factor in the economic impact of these programs. Fund programs are designed to encourage private lending, but this outcome does not always take place. An increase in capital flows may depend in part on the status of financial markets within a country, as well as the assessment of private creditors of the extent of reform measures. The literature on capital flows to emerging economies may be useful in understanding how IMF programs could lead to increased capital flows.

While Fund lending does not seem to be followed by inflows of private capital,
the Fund has been criticized in recent years for indirectly encouraging risky behavior by either borrowers or private creditors in advance of a crisis. Moral hazard poses a problem if the potential availability of Fund support encourages risky loans to be made that precipitate or worsen a crisis. While the dangers of moral hazard have been frequently raised by the critics of the IMF, there is a paucity of evidence on its actual magnitude and relevance. This is partly due to the problem of contrasting a countervailing situation.

Nunnenkamp (1999) examined the amounts of external financing and IMF lending to developing countries, and could find little evidence of moral hazard problems. A number of other papers have utilized bond spreads, i.e., the difference between the return on U.S. Treasury bonds and that on the bonds of emerging markets, to determine whether the bond markets reacted to events such as IMF lending during a crisis. Zhang (1999) reported that he found no evidence of moral hazard in the wake of the Mexican crisis, while Lane and Phillips (2000) found a mixed record of market responses to news of Fund initiatives. Dell’Aricca, Gödde and Zettelmeyer (2000) found strong evidence in the case of the Russian crisis consistent with the existence of moral hazard, but cautioned that their findings could also be due to a change in the market’s perception of risk in emerging markets. The limited evidence on moral hazard indicates that more research is needed in this area, particularly as developing countries move to liberalize capital flows.

VI. Summary
The research summarized in this paper allows us to formulate a coherent story of the decisions involved in the evolution of an IMF lending program over time. A country faces an external imbalance, which is the result of current and past policies as well as exogenous shocks. Capital outflows may exacerbate the crisis, and further private lending is either unavailable or prohibitively expense.

Among the government’s (few) policy options is the initiation a Fund program. The financial resources made available through the program allow the government to finance the balance of payments deficit in the short-run while undertaking adjustment policies to rectify the situation over time, but at some political costs due to domestic opposition. The government needs to decide how much of the program to implement which in turn affects the state of the economy in the next period and the probability of another program. If the government can not muster sufficient support to proceed with the necessary stabilization and reform measures, then the program will break down. In these circumstances, a cycle of recurring balance of payments deficits and IMF programs may arise.

A balance sheet of our knowledge regarding the IMF’s lending programs would show entries on both sides of the ledger. Areas of consensus include:

- Countries that participate in IMF programs usually show signs of an external imbalance: large current account deficits, low reserve levels, high debt burdens and an overvalued exchange rate. In addition, they have often utilized Fund assistance before. Their governments are supportive of the US in forums such as the United Nations. IMF lending often occurs in the year after an election.
Some countries have participated in a continuous series of Fund programs over time. These frequent users are among the poorest nations. There is no institutional mechanism to limit a country’s access over time to Fund resources, although the IMF does maintain that the use of its resources is intended to be temporary.

A large proportion of Fund programs is not successfully completed. Incomplete implementation is due in part to adverse domestic political conditions that hinder the chances of economic reform.

The execution of IMF-sponsored policies improves a country’s external balance, as measured through the balance of payments. There is also an accompanying decline in output that may be later reversed. There is little evidence of a systematic effect on inflation. The distribution of income is worsened in program countries.

There is no evidence of an increase in private capital flows in the wake of Fund programs. However, foreign creditors may be more willing to reschedule debt. Credit from other official sources does increase.

There are many aspects of IMF programs, however, that we do not yet fully understand. Among the unanswered questions are:

Some countries do not enter a Fund program despite adverse economic circumstances. Is there a high initial political cost in approaching the IMF, which then falls with each successive program?

Is recurring lending the result of unsuccessful implementation of previous programs, badly-designed policies, adverse external conditions, or other factor(s)?

Is the partial completion of programs related to the design of the programs,
unfavorable domestic economic and political conditions, or other factors? How does it differ by type of program?

- Do measurements of the extent of program compliance improve our ability to gauge the impact of programs?

- Do private lenders reward countries with “successful” programs as opposed to those with uncompleted programs?

- Is there evidence that suggests that moral hazard has led to crises because of risky behavior by private lenders or borrowing countries?

These questions represent a far-ranging agenda of research. In many cases similar questions have been raised in other contexts, including the study of currency crises, the political economy of reform, the effectiveness of foreign aid and the determinants of capital flows to emerging economies. Research on IMF lending can incorporate findings from these related areas to provide new insights on these programs, which in turn may be incorporated into the Fund’s lending policies.
### Table 1

Outstanding IMF Credit, 1993-2001

<table>
<thead>
<tr>
<th>Year</th>
<th>Millions of Special Drawing Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>28,496</td>
</tr>
<tr>
<td>1994</td>
<td>29,889</td>
</tr>
<tr>
<td>1995</td>
<td>36,837</td>
</tr>
<tr>
<td>1996</td>
<td>42,040</td>
</tr>
<tr>
<td>1997</td>
<td>40,488</td>
</tr>
<tr>
<td>1998</td>
<td>56,026</td>
</tr>
<tr>
<td>1999</td>
<td>67,175</td>
</tr>
<tr>
<td>2000</td>
<td>50,370</td>
</tr>
<tr>
<td>2001</td>
<td>48,691</td>
</tr>
</tbody>
</table>

Note: Years are financial years that end on April 30.

Source: IMF Annual Report 2001
Table 2

IMF Arrangements in Effect

<table>
<thead>
<tr>
<th>Year</th>
<th>SBA</th>
<th>EFF</th>
<th>SAF</th>
<th>ESAF/PRGF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>14</td>
<td>5</td>
<td>12</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>1992</td>
<td>22</td>
<td>7</td>
<td>8</td>
<td>16</td>
<td>53</td>
</tr>
<tr>
<td>1993</td>
<td>15</td>
<td>6</td>
<td>4</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>1994</td>
<td>16</td>
<td>6</td>
<td>3</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>1995</td>
<td>19</td>
<td>9</td>
<td>1</td>
<td>27</td>
<td>56</td>
</tr>
<tr>
<td>1996</td>
<td>21</td>
<td>7</td>
<td>1</td>
<td>28</td>
<td>57</td>
</tr>
<tr>
<td>1997</td>
<td>14</td>
<td>11</td>
<td></td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>1998</td>
<td>14</td>
<td>13</td>
<td></td>
<td>33</td>
<td>60</td>
</tr>
<tr>
<td>1999</td>
<td>9</td>
<td>12</td>
<td></td>
<td>35</td>
<td>56</td>
</tr>
<tr>
<td>2000</td>
<td>16</td>
<td>11</td>
<td></td>
<td>31</td>
<td>58</td>
</tr>
<tr>
<td>2001</td>
<td>25</td>
<td>12</td>
<td></td>
<td>43</td>
<td>80</td>
</tr>
</tbody>
</table>

Note: Years are financial years that end on April 30.

SBA = Stand-By Arrangement; EFF = Extended Fund Facility; SAF = Structural Adjustment Facility; ESAF = Enhanced Structural Adjustment Facility; PRGF = Poverty Reduction and Growth Facility.

Source: IMF Annual Report 2001
Table 3


<table>
<thead>
<tr>
<th>Very prolonged users (15 or more years under program)</th>
<th>Prolonged Users (7 or more years under program over any 10 year period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Argentina</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Guinea</td>
<td>Benin</td>
</tr>
<tr>
<td>Guyana</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Burkina Faso</td>
</tr>
<tr>
<td>Kenya</td>
<td>Democratic Rep. of Congo</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Malawi</td>
<td>Equatorial Guinea</td>
</tr>
<tr>
<td>Mali</td>
<td>Gabon</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Gambia</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Ghana</td>
</tr>
<tr>
<td>Philippines</td>
<td>Haiti</td>
</tr>
<tr>
<td>Senegal</td>
<td>Honduras</td>
</tr>
<tr>
<td>Togo</td>
<td>Jordan</td>
</tr>
<tr>
<td>Uganda</td>
<td>Kyrgyz Republic</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
</tr>
<tr>
<td></td>
<td>Mongolia</td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
</tr>
<tr>
<td></td>
<td>Mozambique</td>
</tr>
<tr>
<td></td>
<td>Nicaragua</td>
</tr>
<tr>
<td></td>
<td>Niger</td>
</tr>
<tr>
<td></td>
<td>Panama</td>
</tr>
<tr>
<td></td>
<td>Peru</td>
</tr>
<tr>
<td></td>
<td>Romania</td>
</tr>
<tr>
<td></td>
<td>Somalia</td>
</tr>
<tr>
<td></td>
<td>Turkey</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
</tr>
<tr>
<td></td>
<td>Yugoslavia</td>
</tr>
<tr>
<td></td>
<td>Zambia</td>
</tr>
</tbody>
</table>

Source: IMF (2002)
NOTES


2 A comprehensive listing of research sources, including many of those that are cited in this paper, is available at the International Financial Institutions Research Site (www.wellesley.edu/Economics/IFI/index.html).

3 A country may obtain foreign exchange worth up to 25% of its quota with minimal conditionality. See Mussa and Savastano (2000) for a description of the process whereby a program is initiated.

4 Article of Agreement I (vi).

5 See Kaminsky, Lizondo and Reinhart (1998) for a review of this literature.

6 Article of Agreement I (v). The IMF now emphasizes that borrowing from the Fund is intended to be temporary. The IMF’s Internal Evaluation Office is undertaking an analysis of the prolonged use of Fund resources.

7 The Fund does grant waivers in situations where it feels they are warranted.

8 The disbursal rate would not be appropriate for precautionary programs, since the domestic government does not intend to utilize the resources. Even if it does borrow, it may not need all the committed amount.


12 See Fernández-Arias and Montiel (1996) for a review of this literature.
REFERENCES


Compliance.” Rutgers University. Mimeo.


Government Printing Office.

International Monetary Fund. 2001a. "Conditionality in Fund-Supported Programs: Overview."


International Monetary Fund. 2001c. "Conditionality in Fund-Supported Programs."

International Monetary Fund. 2001d. "Trade Policy Conditionality in Fund-Supported Programs."


Oatley, Thomas. 2002. “Commercial Banks and the International Monetary Fund:
An Empirical Analysis.” University of North Carolina at Chapel Hill.


