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Introduction

The International Monetary Fund is at a crossroads. Its apparent power to dictate broad programs to sovereign nations has never before been greater. In the year 2000 alone, sixty countries participated in IMF programs intended to promote international financial stability and national prosperity. Yet, in the aftermath of the East Asian financial crisis (1997–8), where financial instability in Thailand, Indonesia, Korea, and Japan, followed by Russia and Brazil affected the lives of hundreds of millions of people and threatened economic turmoil in the rest of the world, the IMF has come under close scrutiny. Calls for its reform or even dissolution have come from across the political spectrum.

The recent debate has largely focused on the question of whether the IMF should be in the "development business." That is, when providing loans to developing countries, should the Fund impose specific policy prescriptions (a practice called conditionality) to promote economic growth? At one extreme is the International Financial Institutions Advisory Committee (the Meltzer Commission), commissioned by the U.S. Congress in the aftermath of the East Asian crisis. It recommends that the IMF focus entirely on crisis prevention and cease the practice of providing loans with policy conditions after a country has already entered into a crisis. A more moderate view is taken by the Council on Foreign Relations, commissioned by President Clinton, which does not advocate doing away entirely with *ex post* policy conditions, but recommends that the IMF avoid long-term reform programs and focus rather on short-term crisis management.[1] Both these commissions – one put together by Republicans, the other by Democrats – conclude that the IMF should not focus on promoting economic growth.

[1] For a review of these recommendations, see Willett (2001a) and Mosley (2001). Also see Jager (2001). For a broader look at reform of the international financial system, see Eichengreen (1999).

But the promotion of "national prosperity" (*IMF Articles of Agreement*) has long been a goal of the Fund. According to the former Managing Director of the Fund, Michel Camdessus,

> Our primary objective is growth. In my view, there is no longer any ambiguity about this. It is toward growth that our programs and their conditionality are aimed. It is with a view toward growth that we carry out our special responsibility of helping to correct balance of payments disequilibria and, more generally, to eliminate obstructive macroeconomic imbalances. When I refer to growth, I mean high-quality growth, not . . . growth for the privileged few, leaving the poor with nothing but empty promises. (*IMF Survey 1990*: 235)

After the East Asian crisis, a new Managing Director, Horst Köhler, took the helm at the IMF. Although Köhler has emphasized the importance of promoting world financial stability, he continues to echo the views of his predecessor, contending that "the IMF should strive to promote non-inflationary economic growth that benefits all people of the world" (Köhler 2000). The IMF is experimenting with some new lending programs in line with alternative views, focusing on *ex ante* rather than *ex post* policy conditions.[2] Still, the old lending windows, where loans are provided in exchange for policy changes designed ultimately to promote growth, remain open.

Do these economic programs sponsored by the IMF succeed in promoting economic growth? This question has been posed since the inception of the IMF after World War II. Throughout its history, the Fund has faced what economist Manuel Pastor (1987a, 1987b) calls the *growth critique*. In the 1950s, for example, opponents of tight monetary controls, designed by the IMF to stabilize exchange rates and limit inflation, argued that these policies stifled economic growth. As the Fund became more involved in the policies of developing countries, scrutiny of its policies increased.

In the 1960s, and particularly in the 1970s when the United States went off the gold standard and the fixed exchange system collapsed,[3] the IMF changed its focus from regulating currency to managing balance of payments crises and assisting countries with market-oriented growth strategies. These programs involved stabilization packages designed to address balance of payments disequilibria. The strategy of the IMF was to lower demand by cutting government budget deficits and raising interest rates. Many charged that these programs were contractionary, but the IMF contended that its policies favored growth in the long run.

With the onset of the Latin American debt crisis in 1982, the IMF faced new criticism. Fixing the economic problems of the Third World was no longer viewed as merely a question of stabilization. Rather, the fundamental

[2] Such as the "Contingent Credit Lines."

[3] See Gowa (1983). Note that surveillance of exchange rates remains an important function of the IMF. See Simmons (2000).

structure and management of the economy was now seen to be at fault. In the long run, stabilization was a futile task as long as the underlying problems in the economy remained. Hence, the IMF began to require that countries receiving foreign exchange assistance implement structural adjustment. In the 1990s, the IMF stepped up the number of specific conditions it required countries to meet. IMF opponents nevertheless continued to believe that the policies of the IMF hurt growth, whereas the Fund argued the opposite.

The early empirical evidence seemed to slightly favor the Fund. Obviously countries selected to participate in IMF programs had low growth, but this appeared to be because these countries had problems to begin with. In study after study, after one accounted for observable factors that led to participation in Fund programs, the IMF seemed to have no negative consequences for economic growth (Reichmann and Stillson 1978; Connors 1979; Pastor 1987a, 1987b; Gylfason 1987; Killick 1995). The "growth critique" of the IMF was pronounced dead (Pastor 1987a). Later, additional studies showed that although the immediate impact of IMF programs might be negative, improved growth resulted within three years (Conway 1994; Khan 1990). But when the contagion of the East Asian financial crisis spread from Thailand to Indonesia, Korea and Japan, then on to Russia and Brazil – even shaking U.S. capital markets – the growth question resurfaced.

The importance of this question is clear. How well IMF programs have performed indicates whether the Fund should be in the business of promoting economic development. The purpose of this study is to apply a new methodology to the question of IMF performance. How does one assess the effectiveness of IMF programs? The answer eludes straightforward observation. Significantly, what one observes in the world is not a random experiment. Governments enter into agreements with the IMF only under certain conditions. Economically, they may have shortfalls in foreign reserves and high levels of debt. Politically, they may have the will to change these situations. As a result, observed outcomes are due in part to the effects of IMF policy prescriptions and in part to the characteristics of countries entering into IMF programs. To answer the important policy questions surrounding the IMF, one must be able to identify what part of the outcome should be attributed to circumstances under which countries find themselves and what part to the effect of IMF policies under these circumstances.

Hence this study entails two related questions: Why do governments and the IMF enter into agreements, that is, what is the mechanism of *selection*? And what are the consequences for economic growth? To underscore the importance of these questions consider the following. According to my "full model" sample of observations (described at the end of this chapter), sixty-seven out of seventy-nine countries participated in IMF programs during 465 of a possible 1,024 country-years from 1970 to 1990. While participating in Fund programs, growth was observed to be lower by 2.35 percent per year compared to observations of countries not participating. Cumulatively, this

amounts to hundreds of billions of dollars of output. Was this outcome entirely due to nonrandom selection or is some of the difference due to the inherent effect of IMF programs?

A NEW APPROACH AND NEW FINDINGS

Because countries often turn to the IMF under bad economic conditions, it is not surprising that countries participating in IMF programs experience lower growth rates than countries not participating. To conclude from this observation that IMF programs hurt economic growth, however, is akin to concluding that aspirin causes headaches or that doctors hurt their patients. People do not go to the doctor randomly. They often go because they are ill. If one fails to account for the initial health of a patient, one may understate the effectiveness of the doctor's treatment and conclude that the treatment hurts the patients.

Similarly, one must account for the fact that countries participating in IMF programs have economic problems to begin with. That is why they turn to the Fund. It turns out that if one compares countries participating with countries not participating in IMF programs – under the same *observed* conditions – the programs appear to have no negative effect on economic growth. Study after study replicates this result.

These previous statistical evaluations of the effects of IMF programs have all paid attention to the *selection* question, from early before-after studies (Reichmann and Stillson 1978; Connors 1979; Pastor 1987a, 1987b) and with-without studies (Gylfason 1987; Edwards and Santaella 1993), to more recent work which corrects for observable determinants of nonrandom selection of program countries (Khan 1990; Conway 1994). Each of these approaches makes implicit assumptions about what drives selection into IMF programs. For instance, the before-after approach evaluates IMF program effects by looking at the performance of countries before entering the program and after the program ends. One problem with this method is that other factors outside of the program may also change over the course of the program. The with-without approach attempts to control for this possibility by comparing the performance of countries with programs to the performance of countries without programs. A problem with this method, however, is that countries entering into programs may be systematically different from countries that do not participate in programs. Methods that correct for the observable determinants of selection begin to address this problem by separately estimating the probability that countries participate in programs and then including the probability of participation in the subsequent analysis.[4]

[4] For an excellent formal presentation of what can go wrong with each of these methods when evaluating IMF programs, as well as some empirical results, see Goldstein and Montiel (1986). I return to these methods with greater detail in Chapter 5.

None of these studies, however, accounts for the possibility that *unobserved* factors may also play a role in selection and performance.[5] How can unobserved factors influence the apparent effect of IMF programs on growth? Consider once again the analogy of doctors and their patients. Not all people go to the doctor when they are sick. People who are highly motivated to stay healthy may go to the doctor with more frequency, whereas people with low motivation may ignore health problems. One may not be able to observe "motivation," but it may play a role, not only in determining who goes to the doctor, but also in who fares the best. Suppose highly motivated people get well faster than people with low motivation, independent of treatment. If one fails to account for unobserved motivation, one will mistakenly attribute the effects of motivation to the doctor's treatment, *overstating* its effectiveness.

Unobserved factors may play a role in determining which countries participate in IMF programs and which do not. Consider "political will" as an example. When a country fails to persevere in a program, the Fund often claims that the government lacks the "political will" to continue. Graham Bird, a prominent scholar of the IMF, observes, "The IMF has frequently blamed the poor record of the programs that it supports on a lack of 'political will' to carry them through" (1998: 90). As an example, consider Norman Humphreys' (author of *The Historical Dictionary of the International Monetary Fund*) assertion,

> Fund-supported adjustment programs have had mixed success, with failures coming mainly as the result of internal political will . . . in the last analysis the elements of the program and the timing of their implementation must rest with the national authorities of the country in question. (1999: 17–18)

Note that by blaming a *lack* of political will when programs fall apart, one implies that countries persevering throughout a program do have political will.[6]

Despite constant references to a failure of political will, however, the IMF is notoriously bad at defining exactly what the term means (see Bird 1998 for a discussion; also see Nelson 1990). Humphreys seems to indicate that it has something to do with a government's timing in following prescribed policies. Bird (1998) conjectures that it may have something to do with the government's commitment to the program. Perhaps Fund officials are referring to the competence of the government and its advisors, or to the government's

[5] Goldstein and Montiel note that unobserved variables can play a role, but they do not attempt "a vigorous implementation" of the method (1986: 338). They refer readers to Heckman (1979) "for a description of the appropriate procedure" (1986: 325–6). The Heckman approach is precisely the methodology employed in this study.

[6] Stokes (1996: 6) cites examples of countries who implemented reform packages which "actually went well beyond the advice of international economists." She claims the program itself sends a signal to private lenders of the government's "political will" to economic reform.

reputation or its publicly unobserved negotiation posture with international creditors. Alternatively, it may refer to other, as yet unnamed, factors. The bottom line is that there is some factor that observers close to IMF programs – the Fund officials themselves – claim systematically determines both selection into IMF programs (perseverance) and their outcomes (program failures).

This has important implications for the evaluation of the effects of IMF programs. Suppose the Fund continues signing agreements only with countries that have high levels of political will. If political will also affects economic growth, then one will overstate the effectiveness of IMF programs if one fails to control for this unobserved determinant of participation and performance. The Fund may not be involved just with the "basket cases," but, in particular, with the basket cases that want to do better.

Other unobserved factors may also affect the decision of a government to participate in an IMF program. "Trust," for example, can play an important role in selection and performance. IMF riots in the Dominican Republic, Egypt, Ghana, Indonesia, Jamaica, and elsewhere underscore the importance of trust in being able to persevere through an IMF program. Governments that do not enjoy a certain level of societal support may be less likely to continue participation.

At the same time, trust is a form of social capital that may also independently influence rates of economic growth (see Fukuyama 1995; Levi 1998). As Putnam suggests, trust "can improve the efficiency of society by facilitating coordinated action" (1993: 167; cited in Levi 1998: 83).[7] But if a labor force feels that it is paying unduly for the costs of an IMF adjustment program, or that the program is imposing unnecessary hardships, efficiency may suffer. Mistrust of this sort manifests itself violently in riots and ransacking of supermarkets, but there are many less obvious ways in which it may have effects under IMF programs, such as worker slowdowns.[8] Anticipation of this may make a mistrusted government less likely to bring in the IMF. The governments that actually do turn to the IMF may systematically enjoy higher levels of trust, which may in turn facilitate the success of a program. Thus, trust in government may affect selection into and performance of IMF programs. Although there are many possible ways one might attempt to measure such a variable, there may always be some systematic component that remains unobserved.[9]

[7] Also see Coleman (1988, 1990), Dasgupta (1988), and Hardin (1993).

[8] See, for example, Scott (1985).

[9] Whereas Solow (1995) argues that measurement of social trust "seems very far away," Knack and Keefer (1997) use survey data from 29 countries to develop indexes of trust and trustworthiness in societies. They find that these "social capital variables exhibit a strong and significant relationship to growth." Their data, however, cover just a few countries that have participated in IMF programs for limited years.

Overall, just because we do not observe all factors that affect selection and performance does not imply that we should ignore them. As we will see, it is possible and important to account for unobserved factors when addressing an empirical question. It is particularly important in this setting, where one can identify such factors a priori.

Given that participation in programs is not a series of random experiments, how can one evaluate the effects of IMF programs? To tell a story about the consequences of IMF programs, one must first tell a story about the determinants of IMF program participation. Only after such determinants have been identified can one distinguish between the conditions that lead countries to participate in IMF programs and their inherent effects.

Yet, the selection problem has been largely ignored and misunderstood in the literature on IMF programs. Consider what was said in a review of the statistical findings on IMF programs:

> From the research available it is probably legitimate to claim that we now have a reasonable understanding of the overall effects of Fund-backed programs. But is there a similar degree of consensus about the characteristics of user countries? (Bird 1996b: 1753)

These statements exemplify how the literature on IMF programs has put the cart before the horse. One should ask questions about selection into IMF programs before evaluating their overall effects. If one does not know "about the characteristics of user countries," that is, if one does not know what drives program participation, then one cannot claim to have an understanding of the effects of programs. Assessing performance entails understanding selection. Thus, although the ultimate goal of this book is a narrow one – to determine empirically the effect of IMF programs on economic growth – I first address the question of selection: Why do governments and the IMF enter into agreements?

The research strategy employed in this study to address the selection question is triangular. I begin in Chapter 2 by selecting analytically significant cases to explore potentially important features of selection into IMF programs. Chapter 3 develops these features into a coherent argument about selection using formal models of why governments enter into IMF programs. Finally, Chapter 4 presents statistical tests of the story to determine whether a typical pattern of selection can be identified.

Telling a statistical story of selection into IMF programs is of central importance to this study. A statistical story involves predicting different outcomes from observed variables. Predictions are then compared to actual observed outcomes. The difference between the prediction and the outcome is the "error term." This error term is the part of the story that is "unexplained" or "unobserved" or perhaps random. Importantly, it is also a proxy for the unobserved factors discussed earlier that may influence IMF program participation.

Chapter 4 tells a statistical story of selection into IMF programs, and Chapter 5 tells a statistical story of economic growth performance. Each story has its own error term or unobserved factors. These unobserved factors may be "trust" or "political will." If these factors are randomly distributed across countries that participate and countries that do not participate in IMF programs, then there will be no correlation between the error terms from the selection and performance statistical stories. If the error terms are correlated, however, then the unobserved factors are not randomly distributed across the population of countries. A significant correlation indicates that the same unobserved factors that drive selection into IMF programs also drive the performance of economic growth. Once such a correlation is detected, one can derive selection-corrected estimates of the effects of IMF programs. (A more detailed description of the method is found in Chapter 5. The appendix to that chapter provides the technical details.)

The results of this study are striking: after one controls for selection – caused by observed and unobserved factors – *IMF programs have a negative effect on economic growth*. The finding is robust to different specifications and time periods. Ironically, this finding leads back to the question of selection: If IMF programs hurt economic growth, why do governments and the IMF enter into these arrangements? The answer may have to do with the way the negative effects are distributed. Thus, I consider the distributional consequences of IMF programs in Chapter 6. It turns out that not everyone is hurt in the short run by the adverse effects of IMF programs on economic growth. Those persons who are worst off in a country, however, are doubly hurt: Total growth slows and their share of income decreases. The conclusion is clear: The IMF has failed to promote what Camdessus called "high-quality growth" (*IMF Survey* A90: 235).

WHERE DO IMF PROGRAMS COME FROM?

In 1944, forty-four countries signed the Bretton Woods agreement establishing the International Monetary Fund for the purpose of maintaining exchange rates for international free trade.[10] When the world shifted away from the gold standard in the 1970s, the old exchange system collapsed. The new system did not need the IMF, and the organization faced a crisis of purpose. The original purposes of the Fund, however, also included "providing [members] with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity" (de Vries 1986: 14).[11] Thus, the IMF changed its

[10] This summary follows de Vries 1986, Pastor 1987a, and Bird 1995. For a discussion of the original purposes of the IMF, see Eichengreen (1996).

[11] The IMF defines a country's overall balance of payments as the sum of the current account, the capital account, and the financial account plus net errors and omissions. The

major operation from regulating currency to managing balance of payments difficulties, becoming more involved in the national policies of much of the developing world.

The primary way in which the Fund intervenes in a country's balance of payments problem is by entering into an agreement with the government whereby the Fund promises to provide a loan of foreign currency and the government promises to make specific policy changes. Where does the IMF obtain the resources required to provide these loans? Each country that is a member of the Fund – there are currently 183 – contributes a deposit held by the IMF. This "contribution," which earns interest for the member, is called a quota, and the size depends on the size of the member's economy. The bigger a country's economy, the larger is the quota. The quota determines each member's share of votes. (Most Fund decisions require a 50 percent majority, although some major decisions, such as adjusting a country's quota, require an 85 percent majority.) Thus, the larger the economic size of a country, the greater the voting power, although officials claim that actual voting at the IMF is rare, with most decisions being made by consensus.

The Fund uses the currency provided by quotas to lend to member-countries facing balance of payments shortfalls or shortages of foreign reserves. In this respect, "the financial structure [of the IMF] is close to that of a credit union [with] access to a pool of resources, which it can onlend [sic] to member countries" (Fischer 1999). By providing countries with loans during financial crises, the IMF plays the role of an international lender of last resort. Such an option is designed to lower the risks of international trade and thus encourage countries not to engage in beggar-thy-neighbor trade policies and competitive devaluations of currency.

The existence of this lender of last resort, however, introduces moral hazard concerns (see Bird 1995 and Fischer 1999). Moral hazard can occur whenever there is insurance against bad outcomes and thus risky behavior is encouraged (Spence and Zeckhauser 1971). In this case, shortfalls in foreign reserves may arise from normal trading, but they may also arise from bad policy. If a government knows it has access to an IMF loan (a form of insurance), it will have a weaker incentive to adjust its policies to avoid bad outcomes. The loan simply ends up subsidizing the balance of payments deficit.

current account of the balance of payments is the credits minus the debits of goods, services, income, and current transfers. The capital account refers "mainly" to transfers of fixed assets and nonproduced, nonfinancial assets. The financial account is the net sum of the balance of direct investment, portfolio investment, and other investment transactions. Net errors and omissions reflect statistical inconsistencies in the recording of entries and are included so that all debit and credit entries in the balance of payments statement sum to zero. By construction (of net errors and omissions), the overall balance of payments is equal to minus "reserves and related items," the sum of transactions in reserve assets, exceptional financing, and use of Fund credit and loans. For more, see *International Financial Statistics*, published monthly by the IMF.

How does one distinguish between a balance of payments problem due to normal trading and one due to bad policy? The general view of the Fund is that the ebbs and flows of reserves due to trading-as-usual may lead to small balance of payments deficits, causing a government to draw on no more than 25 percent of its quota. Thus, a member can freely draw on other countries' currency up to an amount equivalent to 25 percent of its quota whenever it faces a balance of payments shortfall (Stiles 1991: 2). If a government needs to draw on more than 25 percent, it is assumed that the balance of payments deficit is due to bad policy. Consequently, in these cases the IMF calls for policy changes as a condition of the loan.

The Fund has instituted four main types of arrangements that involve policy conditions (or "conditionality"): the Stand-By Arrangement (SBA), the Extended Fund Facility (EFF), the Structural Adjustment Facility (SAF), and the Enhanced Structural Adjustment Facility (ESAF).

In 1952, the Fund designed the SBA to address temporary balance of payments deficits.[12] On October 1, 1952, the Executive Board adopted a general policy on SBAs: "[The Fund will consider requests for stand-by credit arrangements] designed to give assurance that, during a fixed period of time, transactions up to a specified amount would be made whenever a member requested and without further consideration of its position" (*Annual Report 1953*: 50).[13] The current definition found in the IMF *Articles of Agreement*, which applies to all four types of arrangements, states that they are "a decision of the Fund by which a member is assured that it will be able to make purchases from the General Resources Account in accordance with the terms of the decision during a specified period and up to a specified amount" (*Articles of Agreement*: Article XXX b). When a government enters into an arrangement, a certain amount of foreign exchange is set aside for the duration of the agreement, hence the name, "Stand-by." Provided the country lives up to the agreed conditions, the government can draw on these funds at scheduled intervals, purchasing hard currency with its own domestic currency. The latter, held by the IMF, is subject to "repurchase" with interest. The arrangement is thus thought of as a "loan" from the IMF, even though the government is under no obligation to actually draw down any of the foreign exchange provided.

[12] This summary is based on Polak (1991). Jacques J. Polak was a member of the Bretton Woods negotiations team (1944), is a former IMF economic counselor (1966–79), and a former IMF Executive Director (1981–6) (Bradley 1991: 46–8).

[13] The first transaction under this policy was announced May 12, 1952: "Finland might purchase up to $5 million from the Fund at any time during the next six months" (*Annual Report 1953*: 50). In fact, this agreement was not actually signed until January 1953, and in the interim the first agreement with Belgium was signed on June 19, 1952. Under this agreement, Belgium could purchase with Belgian francs the equivalent of up to US$ 50 million in currencies held by the Fund. The agreement was renewable for additional periods of 6 months for the next 5 years (*Annual Report 1953*: 50).