Institutional Determinants of IMF Agreements

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Abstract

Do domestic institutions influence decisions to participate in IMF programs? I argue that executives facing more veto players are more likely to turn to the IMF, but the IMF is more likely to conclude agreements when there are fewer veto players. Reform-minded executives often use the IMF's leverage to push through unpopular policies. The more actors in a political system with the veto power to prevent policy change, the more likely an executive will find the IMF useful. Even with the added pressure of the IMF, however, the presence of additional veto players may limit policy change. Such limits are not preferred by the IMF. Thus, as the number of veto players increases, executives are more likely to enter into IMF agreements; the IMF is less likely. To test these arguments, I use a version of bivariate probit to analyze data from 76 developing countries from 1976 to 1990.

1. Introduction

Do domestic political institutions influence decisions to participate in programs sponsored by the International Monetary Fund (IMF or Fund)? This paper argues that the number of veto points (Tsebelis 1995, 2002) in a political system matters: Executives facing more veto players are more likely to turn to the IMF, but the IMF is more likely to conclude agreements when there are fewer veto players. Reform-minded executives often use the IMF's leverage to push through unpopular policies. The more actors in a political system with the veto power to prevent policy change, the more likely an executive will find the IMF useful. Even with the added pressure of the IMF, however, the presence of additional veto players may limit policy change. Such limits are not preferred by the IMF, and when there are too many veto players in the political system the amount of policy change possible may be too small to win IMF approval. Thus, as the number of veto players increases, executives are more likely to seek out IMF agreements, but the IMF is less likely to accept them.

How does bringing in the IMF help an executive push through unpopular policies? Note that unlike other international agreements, only executives enter into IMF arrangements. The approval of actors (veto players) may be required for policy change, but their approval is not required for the executive to enter into an IMF arrangement. Once an executive has entered into an IMF arrangement, however, failure to enact policy change becomes more costly because rejection of reform is not merely the rejection of the executive, but also a rejection of the IMF. Rejecting the IMF is costly to all domestic actors: The IMF may restrict access to loans, it may precluded debt rescheduling with creditors who require an IMF arrangement to be in good standing, and decreased investment may result if investors take cues from the IMF. This argument is hardly new; it follows from Putnam's (1988) work on two level games and is a direct application of Alt and Eichengreen's (1989) work on overlapping games. Actors use constraints at the international level as leverage against domestic veto players.

Increasing the number of veto players may have the opposite effect, however, on the preferences of the staff and officials of the IMF. When a reform-minded executive faces no veto players, he can potentially agree to a high degree of policy change. A similarly reform-minded executive facing many veto players is more constrained. He may only be able to agree to a small degree of policy change because there is a greater chance of opposition. The latter executive needs more help to push through reform, and would find the pressure of the IMF useful, but this executive is also unable to commit to a high degree of reform. The pressure of the IMF may help push reform past veto players, but there is a limit.

If the IMF faces a budget constraint and must chose between countries facing many veto players (able to agree only to low degrees of reform), and countries with few veto players (able to agree to a high degree of reform), the Fund may prefer countries with fewer veto players. This argument is also not new; it follows from Schelling's (1960) conjecture that governments facing democratic commitments are credibly constrained and make tougher negotiating partners at the international level.

In sum, I argue that executives facing higher numbers of veto players are more likely to turn to the IMF for political leverage, but cannot commit to high degrees of reform and thus are not preferred by the IMF. As the number of veto players increases, governments are more likely to enter into IMF agreements; the IMF is less likely.

How can these two arguments be tested? One must assign the same variable, the number of veto players, to two different actors. I use a dynamic version of bivariate probit with partial observability that allows one to estimate separate effects of the number of veto players on the decisions of executives and the Fund to enter into IMF arrangements. Using panel data from 76 developing countries from 1976 to 1990, I estimate results that confirm my hypotheses, controlling for many other factors that may also lead to IMF programs.

This paper is organized as follows. Section 2 presents the argument along with some empirical examples. Section 3 presents the empirical tests, starting with standard techniques followed by more sophisticated tests using a statistical model that appropriately reflects the decision-making setting. Section 4 concludes.

2. The Argument

Many have argued that a reform-oriented executive can use IMF arrangements to push through unpopular policies: Spaventa 1983, Vaubel 1986, Remmer 1986, Putnam 1988, Edwards and Santaella 1993, Dixit 1996. While the details of the story are not usually laid out, the basic idea is fairly straightforward: Rejecting the demands of an IMF arrangement is costly.

One can think of an IMF arrangement as composed of two parts: a "loan"[1] and a set of "conditions" imposed by the IMF in return for the loan. When an executive of a country enters into an IMF arrangement, the Fund sets aside a certain amount of hard currency. The country can draw upon the currency at specified intervals as long as it lives up to certain conditions set by the Fund. These conditions entail specific fiscal and monetary policy changes. If the IMF deems that the country is not meeting the required policy changes, it can suspend disbursements of the loan and even cancel the arrangement – both of which are costly to the country. Often countries turn to the IMF when they are in desperate need of a loan. But governments may also turn to the IMF for political reasons.

The salient feature of IMF arrangements that allows an executive to use them against veto players – such as the legislature in a presidential system or a coalition partner in a parliamentary system – is that the executive can enter into them unilaterally. The approval of veto players is required for policy change, but not to enter into an IMF arrangement. IMF arrangements are spelled out in a "Letter of Intent," written by IMF staff

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[1] Technically, the "loan" is really a "purchase" of foreign currency.

and government officials, and formally sent from the country's finance minister – recognized as the country's "proper authority" – to the IMF Managing Director. The Managing Director subsequently brings it before the IMF Executive Board for approval. Once the Board approves the Letter of Intent, the country is under an IMF program. The approval of veto players is bypassed.

By entering into an IMF agreement, an executive ties its preferred policies of economic reform to the conditions of the IMF. This move raises the costs of rejecting the executive's proposals, because a rejection is no longer the mere rejection of an executive but also of the IMF. The IMF is brought in to "tip the balance" (Bird 2001).

For this strategy to be effective, it must be true that failure to comply with an IMF agreement is costly to the veto players opposing reform. This does not mean that enforcement of conditions must be one hundred percent. In fact, it is not. There are many anecdotes of the IMF relaxing conditions or continuing to extend credit to a country that has not fully complied with an IMF agreement. On the other hand, noncompliance is often sanctioned:

(1) The most obvious sanction imposed on a country is the restriction of access to the IMF loan. In a study of 59 IMF agreements from 1988 to 1992, Schadler (1995) found that the IMF restricted access to the agreement loan 35 times (cited in Edwards 1999). This is a direct cost that a country risks when it does not comply with an IMF agreement.

(2) One indirect sanction for rejecting IMF conditions involves creditors. As Callaghy (1997, 2001) explains, organizations such as the Paris Club, an informal group of creditor countries that reschedules country debt, almost always require that countries be in good standing under an IMF agreement if any debt negotiations are to take place. Rejecting IMF conditions may preclude debt rescheduling desperately needed in many developing countries.

(3) A third form of sanction for noncompliance may come through investors. Stone[2] (2000: 2) contends, "When the Fund negotiates a stabilization program with a government that imposes policy conditions, it creates a focal point for investors to coordinate their expectations. Investors benefit from following IMF signals because the threat of IMF sanctions for noncompliance helps to protect the value of their investments." Edwards (2000) finds that while increased investment is not associated with compliance with an IMF agreement, decreased investment is associated with a failed IMF arrangement. Investors do not rally to countries in compliance with an IMF agreement, but they do withhold support from a country with a failed IMF arrangement. When an IMF agreement is cancelled due to noncompliance, investment is hurt.

It can, therefore, be costly in several ways for countries to reject the policies

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[2] Also see Stone 2002.

imposed by the IMF. Note that the potential "rejection costs" are imposed on the country as a whole, and they may even be higher for the executive than for the veto players. Thus, the strategy may be risky. But as long as there is some positive cost that the opponents of economic reform face as well, the strategy can be effective. Facing the trade-off between rejection costs and policy changes, opponents of economic reform may prefer the latter, and the executive can push through more of the reform program with the additional bargaining leverage that an IMF agreement brings.

Alternatively, one can argue that rejecting the IMF can have political benefits for the opposition. Opponents may claim that the executive is selling out the national patrimony to the IMF. Thus Remmer (1986) argues that the strategy of bringing in the IMF is a "double-edged sword" – it steps up the pressure for reform, but also leaves the executive open to the criticism of being the sell-out agent of the Western Capitalism. To avoid such "sovereignty costs," executives may be more likely to enter into agreements after elections, so that they are less an issue during campaigns. They may also be likely to enter into agreements when they can point out that other governments have followed a similar course: When other developing countries are also participating, or when they can point to other governments in their own country's history who have also participated in IMF programs. So executives may be more likely to participate in programs when the "sovereignty cost" edge of the sword is less sharp.

Note that while opponents may accuse the executive of surrendering national sovereignty to the IMF, taking the further step of actually causing the IMF agreement to fail can be a risky venture for veto players. If rejected, the IMF may punish the country and the executive can blame the veto players for not following his proposed policies. Veto players hold office themselves and have their own reelection concerns, which may be difficult under bad economic performance.[3]

So it may be that reform-minded governments facing opposition can use the IMF to pursue their agendas. Indeed, scholars have provided many anecdotes where IMF pressure has been used to push through policy. Putnam (1988, 457), building on the work of Spaventa (1983), cites IMF negotiations with Italy in 1974 and 1977 as instances where "domestic conservative forces exploited the IMF pressure to facilitate policy moves that were otherwise infeasible internally." Bjork (1995) makes a similar observation about Poland. He contends, "most of the macroeconomic program imputed to IMF conditionality can be more accurately traced to economic imperatives or to domestic Polish political factors" (1995, 89).

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[3] This is not to say that successfully completed IMF programs necessarily improve economic outcomes. Never having entered an IMF program may be the best outcome for veto players. But this is out of their control, since the executive can enter IMF programs without their approval. And failed IMF programs result in worse outcomes than successful programs because of the rejection costs discussed above.

Another example is Brazil, where President Cardoso entered into an IMF arrangement at the end of 1998. The Fund called for Brazil to meet certain conditions in return for the loan: cutting overall federal expenditures by 20 percent, cutting federal infrastructure projects by 40 percent, and reforming the social security system (*Reuters*: 9 November 1998). President Cardoso had been trying for years to get the approval for some of these measures but met resistance from within his governing coalition. After the East Asian financial crisis, Cardoso presented the changes as necessary to win IMF approval: "The whole world is watching us, watching to see if we'll be able to resolve the crisis" (*Associated Press*: 5 November 1998). Under such scrutiny, those resisting reform acquiesced on some issues, and the pace of reforms stepped up.

In Uruguay, despite a strong reserve position and surpluses in both the current account and the overall balance of payments, the executive entered into an IMF arrangement in 1990. Uruguay did not need an IMF loan, but the newly elected president, Luis Alberto Lacalle, faced tough opposition to his unpopular program of economic reform. Over the course of his administration, his coalition party and eventually even his own party abandoned him. Lacalle had few domestic allies for his reform program, and so he brought in the IMF to have conditions imposed. While he was unable to push through his entire program, he had many successes, notably recording the highest budget surplus in Uruguay's history. Although a majority of legislators (even many from his own party) denounced Lacalle, the legislature reluctantly voted in favor of measures demanded by the IMF (for the details of this case, see Vreeland 2003).

Dixit (1996, 85) suggests that the phenomenon illustrated by these anecdotes may be indicative of a broader pattern:

> most countries, particularly less developed ones, in need of fiscal and monetary restraint are able to make a commitment by using international organizations such as the World Bank or the International Monetary Fund as 'delegates' for this purpose. When their domestic constituents press for protection, subsidies, or inflationary finance, the treasuries can point to the conditions imposed by these bodies in return for much needed project loans or foreign currency.

This paper extends the insights from these observations to the area of domestic political institutions, and tests the implications in a large-n setting. Do certain domestic political institutions make executives more likely to use the strategy of bringing in the IMF to push through reform? While such a strategy is available to executives in different types of regimes, it is most likely to be pursued when there is greater institutional resistance to policy change. I follow Tsebelis (1995) who argues that policy stability (or resistance to change) is a function of the number of veto players in a political system. Thus, I argue that executives facing more veto players are more likely to turn to the IMF. The IMF serves as an outside ally in the face of potential veto player opposition to economic reform. Because rejecting the IMF is costly to them, opponents will accept more reform than they would without the threat of the IMF.

Note that increasing the number of veto players may have the opposite effect on the preferences of the staff and officials of the IMF. Executives hindered by a system with many checks and balances may require the most assistance to push through unpopular reforms, but they are also the least able to commit to large policy shifts. If the IMF prefers to enter into agreements with countries that can bring about the most reform, they may be more likely to enter into arrangements with countries with lower numbers of veto players.

Such an argument follows Schelling's (1960: 28) contention that "the ability of a democratic government to get itself tied by public opinion may be different from the ability of a totalitarian government to incur such a commitment." In their negotiations with the Fund, democracies – especially those with many veto players – may have to plead, "I'd like to accept your proposal, but I could never get it accepted at home" (Putnam 1988: 440). Executives facing few constraints in the form of veto players cannot credibly make the same plea. As Putnam (1988, 449) explains, "diplomats representing an entrenched dictatorship are less able than representatives of a democracy to claim credibly that domestic pressures preclude some disadvantageous deal." Often executives use domestic constraints to obtain more favorable conditions from the Fund (see Mo 1995, Iida 1993 and 1996, Milner and Rosendorff 1997), but sometimes these constraints actually preclude an agreement.

For example, under democracy in Nigeria in 1983, President Alhaji Shehu Shagari attempted to conclude an IMF arrangement, but the demands of the IMF were too harsh, considering Shagari's political constraints. Publicly, Shagari announced, "Nigeria will not be dictated to" by the IMF (*Financial Times*: 16 August 1983) – he faced opposition in the legislature and elections on the horizon. Privately, however, Shagari-administration officials admitted, "the whole idea of bringing in the IMF is to get the alibis to persuade the politicians of what we need to do." (*Financial Times*: 16 August 1983). Shagari wanted to use IMF conditionality to push through certain reforms, but the IMF refused to grant the precise conditions required politically by his administration. No agreement was concluded because the democratic regime could not agree to the degree of reforms demanded by the IMF.

Interestingly, democracy soon collapsed in Nigeria, replaced by a new dictatorial regime – without the constraint of a legislative veto point. The new regime was able to decree the economic reforms without the political assistance of the IMF, and no agreement was sought. Most of the reforms were exactly what Shagari had wanted but could not push through on his own. When the dictatorial government finally turned to the IMF four years later, the IMF agreed to the arrangement because all of the previous conditions had already been met and the government was willing to agree to even further reform (*IMF Survey 1987*: 46; *New York Times*: 1 October 1986).

Because countries with fewer veto players are less constrained, they have the ability to agree to greater reform and may be preferred by the Fund. This conjecture is consistent

with Bandow's (1992: 26) observation that "the IMF has rarely met a dictatorship that it didn't like." It is also borne out by statistical evidence. Przeworski and Vreeland (2000) find that the IMF is more likely to enter into agreements with dictatorships than with democracies.

Yet my argument is not that the IMF has an intrinsic preference for dictatorships, or any other political system with a low number of veto players. The IMF actually has a reputation for not paying attention to politics or political regimes (Polak 1991, Tanzi 1989, Denoon 1986). Rather, the IMF has a preference for countries that promise a high degree of economic reform. The public choice approach to the IMF contends that the Fund maximizes its utility by imposing the most conditions per loan (see Bird 1995: 94-6). Thus, the IMF may prefer to enter into arrangements with countries that agree to the most amount of policy change. Countries with fewer numbers of veto players, on average, will be able to accept a greater degree of policy change, so the IMF may prefer to enter into agreements with them. Countries with a high number of veto players are unable to make the same commitments. Because the IMF faces a budget constraint,[4] it may prefer to sign agreements with countries that commit to the most reform and tend to avoid countries with many veto players.

Alternatively, one could argue that the IMF is pressured by advanced industrial democracies to grant assistance to emerging democracies, for example, the new democracies that emerged in post-Communist Eastern Europe. This trend – if it is indeed a trend – should be examined as more data become available. For most of my empirical work below, data end in 1990, before concern with supporting democratic regimes became an issue for the IMF. Up until the mid-1990s, the IMF was widely regarded as not paying attention to domestic politics, interested only in promoting economic reform. Even staff and officials at the Fund noted this (see, for example, Polak 1991 and Tanzi 1989). If increasing the number of veto players on average increases resistance to policy change, the IMF may have historically avoided such regimes due to their inability to deliver enough economic reforms.[5]

In summary, I conjecture the following:

(1) Executives are more likely to enter into arrangements with the IMF when there

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[4] Like most bureaucracies, this budget has grown over the years, but at any given point in time, the resources of the IMF are limited.

[5] As a robustness check in my empirical work below, I test to see whether my results are driven by emerging democracies. Perhaps the IMF is more likely to sign agreements with new democracies and perhaps new democracies experience an increase in the number of veto players. I find that the dummy variable coded 1 for the first year of a democracy and 0 otherwise is not significant in any of my models/specifications. These results are available upon request.

are higher numbers of veto players.

(2) The IMF is more likely to enter into arrangements with countries that have fewer numbers of veto players.

The intuition behind the two arguments is straightforward: The more veto players, the more potential resistance to policy change. Reform-minded executives require assistance from the IMF when there is more resistance to change – more veto players. But since the IMF prefers change, it prefers arrangements with countries that have less resistance to change – fewer veto players. When the number of veto players increases, the government is more likely to enter into an arrangement, the IMF is less likely.

Note that these conjectures should only hold stochastically. Some particular cases will not fit. For example, there could be a country with many veto players in favor of reform and an executive who is opposed. I would not expect such an executive to bring in the IMF to gain leverage over veto players to force through reform. On the other hand, there could be a country with just one veto player who is opposed to reform, and pro-reform executive. Such an executive would be likely to bring in the IMF for political leverage, even though he faces only one veto player. Thus, my argument could best be tested if we could get inside of the heads of actors and measure their true preferences. Such data, however, is unobservable. But the argument has other testable implications.

On average, I expect that when there are more veto players there is a greater chance that there will be at least one veto player desiring less economic reform than the executive, and the executive will seek out the IMF to help push through his agenda. Furthermore, when there are more veto players – for the very reason that the executive requires outside assistance – the overall amount of reform will be less, so such countries will not be preferred by the IMF.

How can these two arguments be tested? First, consider what one might find using standard statistical techniques:

The combination of the two effects of the number of veto players may result in a nonlinear relationship between this variable and the probability of an IMF arrangement. On the one hand, executives who do not face veto players do not require political assistance from the IMF. After controlling for factors that may lead a country to sign an IMF agreement for economic reasons, countries facing few veto players should be unlikely to enter into an IMF agreement. On the other hand, executives facing too many veto players – who do require political assistance – may not agree to adequate reform to please the IMF. These countries should also be unlikely to conclude IMF agreements because they are not preferred by the IMF. Thus, after one controls for economic factors, executives facing a mid-range level of veto players should be the most likely to enter into an IMF agreement to have conditions be imposed.

Ultimately, however, I use a statistical model that reflects how IMF agreements are joint decisions made over time by executives and the IMF. In the following section, I employ a **dynamic version of bivariate probit with partial observability**. This statistical model allows me to assign the number veto players as a variable to both the executive and the IMF. This statistical model allows the variable to have a different effect for each actor. Thus, after presenting results using standard techniques, I turn to a statistical model of bilateral cooperation.

3. Empirical tests

In this section, I start by presenting descriptive statistics which indicate the possibility that increasing the number of veto players has two countervailing effects. Next, I use standard statistical techniques to show that the descriptive pattern holds when one controls for a host of other factors. Finally, I turn to a more sophisticated statistical model that shows that the effect of the number of veto players on entering into an IMF program is positive for the government and negative for the IMF.

In this empirical work, I use Beck et al.'s (1999) measure of the number of veto players in a political system. They define the number of veto players as follows: For presidential systems, the sum of 1 if multiple parties are legal and compete in executive elections, 1 for the president, and 1 for each legislative chamber (the number of legislative chambers is dropped to zero if either of the following is true: the electoral system is closed list and the president's party has more than 50 percent of the seats in the legislature, or multiple parties do not participate in legislative elections). For parliamentary systems, the sum of 1 for the prime minister, and 1 for each party in the governing coalition (the number of parties in the coalition is reduced by one if the electoral system is closed list and the prime minister's party is in the coalition, and if multiple parties do not participate in legislative elections, the number of parties in the coalition is dropped to zero).[6]

Descriptive Statistics

First, consider what is observed. My data include 3,018 country-year observations of 179 countries between 1975 and 1996. Of these observations, there are 1,033 observations of countries participating in IMF conditioned agreements during some part of the year.[7] The average number of veto players in the entire sample is 2.07. The average number of veto players in country-years observed participating in IMF agreements is 2.01. And the average number of veto players in country-years observed not participating

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[6] I use this measure for veto players – "Check1a" in the *Database of Political Institutions* – because it is the most consistent with my argument. The empirical findings below also hold when I use "Check2a," which is "recommended" by Beck et al. (1999).

[7] An appendix with a detailed description of all variables used is available from the author upon request.

is 2.10. The correlation between these two variables is -0.03.

This obviously does not confirm either the conjecture that governments with more veto players are more likely to turn to the IMF, or that the IMF is more likely to avoid such countries. A closer look at the data, however, indicates the nonlinear relationship between the number of veto players and the probability of an IMF agreement. Figure 1 breaks down participation in IMF programs by number of veto players. Participation when there are 1 or 2 veto players is between 30 and 35 percent of observations. When there are 3 or 4 veto players, participation is between 40 and 45 percent. And when there are 5 or more veto players, participation is less than 5 percent. A similar pattern is exhibited for observations of countries entering into their first year of participation in IMF programs. Again, this is not particularly strong evidence for either hypothesis. Because countries have economic as well as political reasons to turn to the IMF, economic determinants of participation in IMF agreements should also be considered.

Figure 1: IMF participation by number of veto players
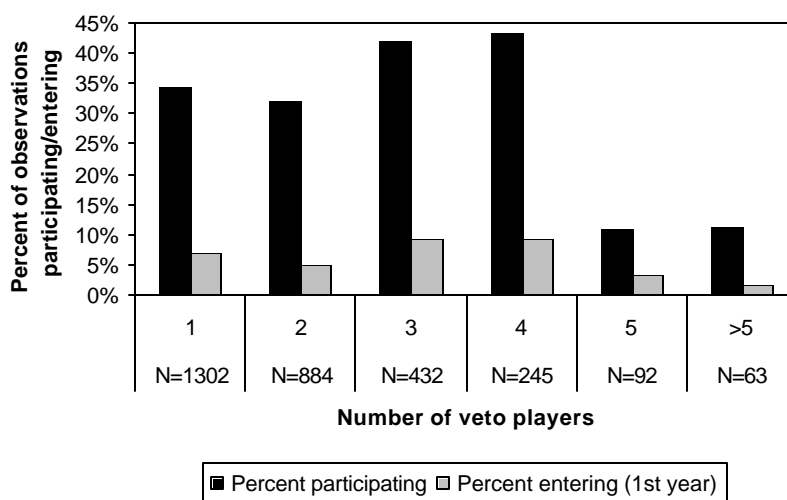
Preliminary Analysis

I argue that the number of veto players should have two effects on the likelihood of IMF participation: positive for the government and negative for the IMF. As a first cut to test these arguments, I use a standard static probit model to analyze IMF participation. To allow the number of veto players to have two different effects, I include both the number of veto players and the square of the number of veto players. Including the quadratic term allows the number of veto players to have different effects at different levels.[8]

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[8] Not reported here, I also used the natural logarithm of the number of veto players and the square of this variable, and obtained similar results (available from the author on request). The reason for testing with the natural logarithm is that there may be

Table 1: Estimating the effect of veto players on IMF participation

	Using static probit				Using conditional logit	
	Model 1		**Model 2**		**Model 3**	
Variable	**Coefficient**	**Mean**	**Coefficient**	**Mean**	**Coefficient**	**Mean**
Constant	-0.24	1	-0.10	1		
	(0.11)		(0.21)			
Number of veto players	**0.57**	**2.25**	**0.70**	**2.23**	**0.80**	**2.10**
	(0.09)		**(0.12)**		**(0.21)**	
Number of veto players squared	**-0.08**	**6.92**	**-0.10**	**6.80**	**-0.08**	**6.02**
	(0.01)		**(0.02)**		**(0.03)**	
GDP per capita	-0.0002	4993	-0.0001	3035	-0.0013	2558
	(0.00001)		(0.00002)		(0.0002)	
Foreign reserves			-0.07	3.49		
			(0.02)			
Debt service			0.06	6.33		
			(0.01)			
Investment			-0.02	22.79		
			(0.005)			
Budget			0.01	-3.97		
			(0.01)			
Current account			0.01	-4.36		
			(0.01)			
			(Standard errors in parentheses.)			
Number of observations	2085		928		1309	
Log likelihood function	-1123.05		-574.49		-585.92	
Chi-squared	546.87		136.99		100.19	

Estimated probability of IMF participation by number of veto players (holding other variables to their means):

1 veto player	0.23	0.41
2 veto players	0.34	0.56
3 veto players	0.41	0.63
4 veto players	0.41	0.62
5 veto players	0.35	0.53

The results from Model 1 of Table 1 show it is important to control for GDP per capita – it has a significant negative effect on the probability of participating in an IMF agreement. Poor countries are more likely to enter into IMF agreements. Note that because income is correlated with democracy, and democracies are likely to have more

diminishing returns from adding additional veto players if their preferences are correlated.

veto players, failing to control for per capita income may mask the effects of veto players.

Controlling for GDP per capita, the number of veto players turns out to have interesting effects. The number of veto players has a significant positive effect on the probability of IMF participation, while the square of this variable has a significant negative effect. Thus, increasing the number of veto players from 1 to 2 increases the probability of an IMF agreement, but increasing the number of veto players from 3 to 4 veto players does not. The bottom of Table 1 presents the predicted probability of IMF participation for 1 to 5 veto players holding GDP per capita to its mean (similar results are obtained when it is held to its median).

An alternative story of why increasing the number of veto players may increase the probability of IMF participation is that political systems with more veto players are too slow to respond to crises, and thus governments end up requiring the financial assistance of the Fund. The apparent effect of the number of veto players could be spurious – the number of veto players may in fact lead to economic crisis, which in turn leads to a need for an IMF loan.[9]

I control for this possibility by including standard economic variables used to predict selection into IMF programs (see Bird 1996b for a review). I include Foreign reserves (as a proportion of average monthly imports), the Current account balance (as a percentage of GDP), Debt service (as a percentage of GNP), and Investment (as a percentage of GDP). In addition to these variables, I also include Budget – the budget surplus as a percentage of GDP. Countries with high budget deficits may have the most need for fiscal discipline to be imposed. Thus, I expect countries with large budget deficits to be more likely to participate.

Model 2 of Table 1 presents results of another probit analysis including these variables that may effect IMF participation. Note that when these control variables are included, more than half of the country-year observations are lost, due to missing data. Of the countries lost, however, most of them are from the industrialized world, where participation in IMF programs has been rare, and the Communist world, where most countries were not even members of the IMF until the 1990s. An appendix with a list of countries and years in the sample is available from the author upon request.

It turns out that the effects of veto players hold when these other variables are taken into account. Increasing the number of veto players from 1 to 2 increases the estimated probability of IMF participation from 0.41 to 0.56; increasing the number of veto players from 4 to 5 decreases the estimated probability of IMF participation from

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[9] Roubini and Sachs (1989) argue that divided political systems will have particular difficulty responding to a fiscal crisis. Beck et al. (1999, 27), however, find no significant relationship between the number of veto players and response to fiscal crisis.

0.62 to 0.53.

While it may be true that more veto players in a political system lead to economic crises and greater need for IMF financial assistance,[10] the number of veto players has a direct effect on the probability of IMF participation. Essentially, the results indicate that for whatever values the other variables may take on – "crisis" values or not – having more veto players in the political system increases the probability of an IMF agreement to a point, and then decreases the probability.

This specification shows that most of the control variables have the expected effects. Countries with low foreign reserves – with a greater need for an IMF loan – are more likely to participate in an IMF program. When debt service is high – when countries are more sensitive to the decisions of creditors – countries are more likely to participate in IMF programs. Countries with low investment – those particularly sensitive to the decisions of investors – are more likely to participate in an IMF agreement. Although the current account balance has no significant effect, nor does the level of budget deficit. In general, the results indicate that countries are more likely to participate in IMF agreements when "rejection costs" are high.

The importance of the economic variables should be underscored. The strong significant effects of foreign reserves, debt service and investment indicate that the need for an IMF loan is a strong predictor of IMF agreements. Often governments turn to the IMF because they have a desperate need for foreign exchange.

What is surprising is that after one controls for these economic factors political institutions also play a role. Governments also turn to the IMF when they want specific IMF conditions to be imposed upon them because they require political assistance to push policy change past veto players. When there are too many veto players in the political system, however, not enough change is possible to win IMF approval. Hence the effect of increasing the number of veto players first increases the probability of IMF participation, and then decreases the probability.

Model 3 of Table 1 shows that the veto players results even hold when one employs a fixed effect logit (see Chamberlain 1980 and Green et al. 2000). Due to the unbalanced nature of the panel data, 776 country-year observations are lost when this method is used (from 2,085 observations to 1,309 observations). The coefficients on Number of veto players and Number of veto players squared show that increasing the number of veto players has a significant positive effect when the number of veto players

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[10] To establish this, one would of course need to consider the effect of veto players on different dependent variables, such as the balance of payments, foreign reserves, or inflation.

is low, and a significant negative effect when the number of veto players is high.[11]

It is encouraging that these standard statistical techniques broadly confirm my hypotheses: After controlling for economic determinants of IMF participation, executives facing few veto players do not require political assistance from the IMF, and IMF participation is less likely. When executives face too many veto players, they may seek political assistance but cannot agree to enough reform to please the IMF because large policy changes will be vetoed; IMF participation is again less likely. When there is a mid-range level of veto players, the executive seeks political assistance, and it is granted by the IMF. IMF participation is most likely when there is a mid-range level of veto players.

Note, however, that the static univariate models used in Table 1 can be improved upon. There are two major problems with these statistical techniques that must be addressed.

- First of all, IMF arrangements are a joint decision of an executive and the IMF. I predicted in the previous section that the variable should have opposite effects for the two actors – positive for the executive, negative for the IMF. Thus, I require a statistical model that allows for two actors making decisions to participate in IMF programs.

- Second of all, my argument is about the decision to *enter* into IMF arrangements, not about participation in general. Once countries initiate an IMF program, they tend to continue participation on average for about five years – and some countries have been known to participate consecutively for up to twenty years. Decisions to continue participation in IMF arrangements may have completely different determinants than the decision to enter.[12] Since my story is about the initial decision to bring in the IMF, I require a dynamic statistical model that addresses precisely the onset of IMF participation.

Thus, I turn to a dynamic model of bilateral cooperation. This more theoretically informed statistical model[13] allows me to test the effects of variables on (1) the decision of

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[11] This result is obtained when controlling for GDP per capita. Estimated probabilities are not presented, since these vary by country in the fixed effects model. I also attempted to estimate the fixed effects model controlling for Foreign reserves, Debt service, Investment, Budget and Current account. Only 340 observations can be used with this model specification, due to missing observations. Using this small sample, the number of veto players and the square of this variable have the expected signs, but they are not statistically significant. It cannot be known if this is because of the specification changes or the reduction of the sample size.

[12] In fact, they do. See Przeworski and Vreeland (2000).

[13] For more on statistical models that reflect the decision-making setting, see Signorino (1999) and Smith (1999).

the executive to enter into an IMF agreement, (2) the decision of the IMF to enter into an agreement.

Modeling the Joint Decision

Assume participation at time t depends on participation at time t-1 (i.e., assume the data obey a first-order Markov process). Let $p_{NU,i,t}$ denote the "transition probability" that country i enters into an IMF arrangement at time t (that it goes from *not* under at time t-1 to *under* at time t). Note that in using this model, the dependent variable is the same as in the previous statistical model used in Table 1 – the dichotomous variable coded 1 if a country participates at time t and 0 otherwise – but one considers only those observations where lagged participation is equal to 0.[14] This is essentially a hazard model with no duration dependence.[15] Thus the model predicts the probability of *entering* into an IMF arrangement.

To model this transition probability as a joint decision, let $p_{NU,i,t} = F_2\left(\boldsymbol{\gamma}'\mathbf{x}_{i,t-1}^{Gov}, \boldsymbol{\mu}'\mathbf{x}_{i,t-1}^{IMF}, \boldsymbol{r}\right)$, where $F_2(\cdot)$ represents the cumulative distribution function of the standard bivariate normal distribution. $\boldsymbol{x}_{i,t-1}^{Gov}$ is the vector of variables that determine the decision of the executive, and $\boldsymbol{\gamma}$ is the vector of parameters that captures the effects of these variables on the decision. $\boldsymbol{x}_{i,t-1}^{IMF}$ is the vector of variables that determine the decision of the IMF, and $\boldsymbol{\mu}$ is the vector of parameters that captures the effects of these variables on the decision. $\boldsymbol{r}$ captures the correlation between unobserved variables driving the decisions of the executive and the IMF. This is essentially a dynamic version of Poirier's (1980) bivariate probit with partial observability.[16] In some specifications presented below, unobserved variables are found to be uncorrelated ($\boldsymbol{r}$ is not statistically significant). In these specifications, a better fit was produced by using the

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[14] When one considers observations where lagged participation is equal to 1, one estimates the determinants of continued participation, which is not what the argument of this paper is about. For more on this as well as a description of the full model, see Przeworski and Vreeland (2002).

[15] See Amemiya (1985: Chapter 11) for details. An alternative method for addressing duration dependence when the dependent variable is dichotomous is presented by Beck et al. (1998). This method, however, is for occasional events. IMF participation involves many periods of both nonparticipation and participation, so this approach is not appropriate for dealing with IMF programs.

[16] A partial observability model is required because it is impossible to observe the individual decisions of the executive and the IMF for all but the rarest cases of IMF negotiations, which are typically held behind closed doors. Moreover, negotiations can be initiated by either side.

Abowd and Farber (1982) variant of Poirier's model, which assumes uncorrelated error terms: $p_{NU,i,t} = F\left(\boldsymbol{?}'\mathbf{x}_{i,t-1}^{Gov}\right)F\left(\boldsymbol{\mu}'\mathbf{x}_{i,t-1}^{IMF}\right)$, where $F\left(\cdot\right)$ is the cumulative distribution function of the standard normal distribution.

Using a bivariate approach allows one to include some of the same variables for the two actors. With standard probit, the probability of an IMF agreement is a function of one vector of variables. With bivariate probit (with partial observability), the probability of an IMF agreement is a function of two vectors of variables. One variable that I assign to both actors is the natural logarithm of the number of veto players. I expect it to have a positive effect for the government and a negative effect for the IMF. I use the logarithm of this variable to allow for the possibility of diminishing effects, which are likely if veto players' preferences are correlated.

One caveat of the bivariate approach is that $\boldsymbol{x}^{Gov}$ cannot include exactly the same set variables as $\boldsymbol{x}^{IMF}$, or the model will not be identified. One must, therefore, have prior beliefs about the variables that matter to the executive and those that matter to the IMF. At least one of these variables must not be in common between the two actors. The variable I use to distinguish the IMF is the overall balance of payments deficit weighted by the economic size of a country. I use this variable because the mandate of the IMF includes maintaining global financial stability. The IMF may give special attention to countries with large balance of payments problems in absolute terms, while governments care about the relative size of a foreign exchange crisis. The overall balance of payments is used for the IMF throughout. I also use elections as a variable to "identify" the government in the final specification.

Model 4 in Table 2 presents results using the bivariate approach. For the executive, I include the "rejection cost" variables described above as well as the budget deficit variable. For the IMF, I include a variable to capture its mandate to maintain world economic stability, using the overall balance of payments as a proportion of GDP weighted by the size or importance of the country in terms of GDP. (This is, of course, simply the absolute size of the balance of payments deficit.) To measure the budget constraint of the IMF, I use a rough proxy: the number of other countries currently participating in an IMF program. If one could include an actual measure of the IMF budget constraint, one might get a better picture, but such data are not generally available. I include the natural logarithm of the number of veto players for both actors because, as noted above, if the ideal points of veto players are correlated, there will be diminishing returns from additional veto players. The main qualitative findings presented below hold when I include the number of veto players,[17] but results are stronger and more significant with the logarithm of the number of veto players.[18] To facilitate convergence of the model, the variables have

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[17] These results are not reported but are available on request.

[18] These results are robust when I exclude outlying observations of countries with high numbers of veto players (>5). Thus, I believe that results are stronger with the natural

been divided by powers of ten so that they are all of the same order of magnitude.[19]

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logarithm of the number of veto players because there are indeed diminishing effects of additional veto players, not because less weight is placed on outliers.

[19] Foreign reserves, Debt service, Budget, Current account, Number under and Years under were divided by 10; Investment and Inflation were divided by 100; Balance of payments (already measured in millions of 1987 dollars) was divided by 1,000; GDP per capita was divided by 10,000.

Table 2: A statistical model of bilateral cooperation to explain IMF participation

	Model 4	Model 5	Model 6	Model 7	Mean of x
Variables assigned to executive					
Constant	-0.01	1.08	0.93	-0.28	1.00
	(0.43)	(0.80)	(0.78)	(0.62)	
Log (number of veto players)	**0.81**	**1.18**	**1.25**	**0.90**	**0.48**
	(0.38)	**(0.51)**	**(0.51)**	**(0.43)**	
Foreign reserves	-2.23	-2.13	-2.05	-2.58	0.37
	(0.84)	(1.08)	(1.06)	(1.09)	
Debt service	1.57	0.91	1.16	1.69	0.44
	(0.57)	(0.50)	(0.61)	(0.74)	
Investment	-7.30	-5.82	-6.03	-7.15	0.15
	(2.38)	(2.59)	(2.68)	(2.96)	
Budget	-0.48	-0.39	-0.37	-0.43	-0.55
	(0.20)	(0.22)	(0.23)	(0.26)	
GDP per capita		-1.76	-1.48	0.01	0.26
		(1.43)	(1.44)	(1.53)	
Current account		0.27	0.24	0.08	-0.77
		(0.26)	(0.26)	(0.25)	
Inflation		-0.21	-0.09	0.21	0.16
		(0.90)	(0.91)	(0.86)	
Latin America			-0.36	-0.92	0.27
			(0.34)	(0.48)	
Past agreement				0.91	0.63
				(0.37)	
Variables assigned to the IMF					
Constant	1.71	0.78	1.02	1.70	1.00
	(0.94)	(0.88)	(0.89)	(0.99)	
Log (number of veto players)	**-0.88**	**-1.06**	**-1.04**	**-0.82**	**0.48**
	(0.36)	**(0.45)**	**(0.43)**	**(0.39)**	
Interact BOP and Size	-1.21	-1.04	-1.10	-1.46	-0.08
	(0.43)	(0.41)	(0.39)	(0.55)	
Number under	-0.43	-0.21	-0.26	-0.45	3.76
	(0.18)	(0.15)	(0.15)	(0.18)	
GDP per capita		0.99	0.58	-0.43	0.26
		(1.52)	(1.36)	(1.05)	
Current account		-0.23	-0.20	-0.18	-0.77
		(0.21)	(0.20)	(0.19)	
Inflation		-0.13	-0.17	-0.27	0.16
		(0.70)	(0.67)	(0.55)	
Correlation of error terms	Not significant	-0.75	-0.70	Not significant	
		(0.33)	(0.36)		
Number of obs	483	437	437	437	
Observations correctly predicted	71%	59%	61%	70%	
Log likelihood function	-162.69	-140.72	-140.11	-137.62	
Restricted likelihood function	-206.84	-185.50	-185.50	-185.50	
Chi-Squared	88.30	89.56	90.79	95.77	

(Standard errors in parentheses.)

Table 3: The effect of veto players on the probability of IMF participation holding other variables to their means

Number of veto players	Model 4		Model 5		Model 6		Model 7	
	Pr(Gov)	Pr(IMF)	Pr(Gov)	Pr(IMF)	Pr(Gov)	Pr(IMF)	Pr(Gov)	Pr(IMF)
1	0.18	0.57	0.25	0.68	0.24	0.66	0.16	0.54
2	0.37	0.33	0.56	0.40	0.57	0.38	0.35	0.32
3	0.50	0.21	0.74	0.24	0.75	0.23	0.49	0.21

Model 4 shows that the natural logarithm of the number of veto players has a significant *positive* effect on the decision of the executive to enter into IMF agreements and significant *negative* effect on the decision of the IMF to enter agreements. The size of the coefficients are relatively large with respect to their standard errors, so we can say with more than 95% confidence that as the number of veto players increases, the probability that the executive wants to enter into the IMF agreement increases, and the probability that the IMF wants to enter decreases. Table 3 shows that the effect of increasing the number of veto players is dramatic.[20] When the number of veto players goes from 1 to 2, the estimated probability that the executive will enter into an agreement goes from 0.18 to 0.37; the estimated probability that the IMF will enter goes from 0.57 to 0.33.

All of the other variables for the executive that were presented in Model 2 have the same qualitative effects, with the exception of the **budget deficit** variable. In this model, Budget has a significant effect, as originally predicted: when the deficit is high (i.e., when the surplus is small), executives are more likely to turn to the IMF. Executives are more likely to enter into agreements when Foreign reserves are low, Debt service is high, and Investment is low.

The variables included for the IMF also have the expected effects. The IMF is more likely to enter into agreements with countries with large absolute balance of payments deficits. The effect of the number of other countries under IMF agreements ("Number under") is negative. The IMF–facing a budget constraint–is less likely to enter into agreements when it already has many other countries participating in agreements.[21]

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[20] For presentation purposes, Table 3 presents the *unconditional* probability that each actor want the agreement. Thus, the estimated probability that the executive wants to enter is calculated from $F\left(\gamma' x_{i,t-1}^{Gov}\right)$, and the estimated probability that the IMF wants to enter is calculated from $F\left(\mu' x_{i,t-1}^{IMF}\right)$.

[21] Notably, while all of the variables have significant effects on the decisions of executives and the IMF to enter into agreements, none of them have significant effects on the decisions to continue agreements or "remain." These results are available from the author upon

In the remaining specifications presented in Table 2 (Models 5 through 7), I introduce additional control variables. In Model 5, I introduce GDP per capita, Current account, and Inflation for both the executive and the IMF. The coefficients of these variables all have relatively large standard errors and do not significantly change the main results. The strong effects of the number of veto players – positive for the executive and negative for the IMF–persist.

I include a Latin American regional dummy for the executive in Model 6. I include this variable because Latin American countries tend to have higher numbers of veto players than other regions in the developing world due to the prevalence of presidential systems. The region is also known to have the most extensive history of IMF participation in the world. Yet, the effects of veto players persist when this variable in included.

Another important control variable is introduced in Model 7: Past agreement. In his review of literature on the IMF, Bird (1996a) reports that the dummy variable indicating past participation in an IMF program has been found in some studies to have a significant positive effect on current participation. When included for the executive, it does have a significant positive effect. Countries that have participated in the past are more likely to enter into new agreements with the IMF. The introduction of this variable, however, does not substantially change the effects of the number of veto players.

Table 3 shows that in all of these specifications, the effects of increasing the number of veto players are strong.

Table 4 continues the robustness checks. In Model 8, three more variables are introduced for the executive: Number under, Election and Years under. These variables were found to have significant effects by Przeworski and Vreeland (2000). The Number under variable has a significant positive effect for the executive. This indicates that governments are more likely to turn to the IMF when other countries are doing so.[22] The election variable is also significant (at the 90% level), indicating that governments are more likely to enter into IMF agreements following elections, perhaps to give time for the reform policies to take effect, and perhaps to avoid an unpopular IMF agreement right before elections. The effect of Years under, which is a variable that counts the total number of years in the past that a country has participated, is not significant in this specification.

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request. Using this statistical model, the continuation of IMF agreements appears to be largely stochastic. For further research on the duration of IMF agreements, see Joyce (2001).

[22] Similarly, Simmons (2000) argues that government compliance with IMF Article VIII – which requires governments to "keep their current account free from restriction" – increases as the number of other countries in the world and in the region also comply with Article VIII.

The introduction of these variables decreases the size of the coefficient of veto players for the executive without decreasing the standard error. But one can still be 90% confident that increasing the number of veto players increases the probability that the executive will enter into an IMF agreement. The negative effect of the number of veto players for the IMF (found on the continuation of Table 4) is also significant at the 90% level.

In Model 9, variables that were introduced above for the executive are introduced for the IMF as well: Latin America, Past agreement, Election, and Years under (Number under is already included for the IMF). Interestingly, the IMF does not appear to be particularly inclined to enter into agreements with Latin American countries – when included in this specification, it has a large standard error and a negative coefficient. Past agreement does not appear to have a significant effect for the IMF either. Years under does have a significant negative effect (at the 90% level), so the IMF may prefer to avoid countries with extensive histories of IMF agreements. The Election variable also has an interesting effect for the IMF – it is negative. These interesting results, however, do not appear to be robust (see Models 10 and 11).

What does remain robust is the effect of veto players. It remains positive and significant (at the 90% level) for the executive and negative and significant (at the 95% level) for the IMF.

Only in Model 10 does the standard error for the effect of veto players on the executive's decision increase so much that we can say with only 85% confidence that increasing the number of veto players increases the probability that the executive will want an IMF arrangement. This occurs when Foreign reserves, Debt service, Investment, and Budget are introduced for the IMF. Note that none of these variables have significant effects for the IMF. The coefficients are relatively small with large standard errors. Thus, the increased standard error on veto players for the executive seems to be due to the inclusion of irrelevant variables.

The specification in Model 10 demands a lot of the variable "Interact BOP and Size." This is the only variable that distinguishes the set of variables assigned to the executive and the set of variables assigned to the IMF. All other variables are in common between the two actors. From a mathematical point of view, it is sufficient to have just one variable between the two vectors of variables for the model to be identified. But from a theoretical point of view, we may want to have at least one variable that is assigned to each actor, which distinguishes it from the other actor.

Thus, in Model 11, I assign Election only to the executive, on the assumption that the actor that typically cares about elections is the executive, while the actor that typically cares about the absolute size of the balance of payments deficit is the IMF. All other variables are in common between the two actors.

The main substantive findings about veto players are strengthened in this

specification. The positive effect of this variable for the executive is significant at the 90% level, and the negative effect of this variable for the IMF is also significant at the 90% level. And again the effect is dramatic: Holding all other variables to their means and increasing the number of veto players from 1 to 2 increases the probability that the executive wants to enter from 0.30 to 0.52. It decreases the probability that the IMF wants to enter from 0.38 to 0.23.

The effects of other variables in this specification help give confidence in the interpretation that the positive effect veto players belongs to the executive and the negative effect of veto players belongs to the IMF: The actor who is more likely to enter into agreements following elections, when the budget deficit is high, and when the number of other countries participating is high (the executive) is the actor more likely to enter when there are more veto players. The actor who is likely to enter into agreements with countries with large absolute balance of payments deficits but is less likely to enter agreements when many other countries are participating because it faces a budget constraint (the IMF) is the actor less likely to enter into agreements when there are more veto players. For both actors, agreements are more likely when investment is low. None of the other variables are significant for either actor in this specification.

Table 4: Further specifications of IMF participation – *Results for the Executive*

Variables assigned to executive	Model 8	Model 9	Model 10	Model 11
Constant	-2.47	-1.79	-2.12	-3.04
	(1.01)	(0.95)	(1.08)	(1.36)
Log (number of veto players)	**0.70**	**0.60**	**0.58**	**0.82**
	(0.40)	**(0.35)**	**(0.38)**	**(0.49)**
Foreign reserves	-2.96	-2.34	-1.71	-2.49
	(1.50)	(1.28)	(1.71)	(2.03)
Debt service	0.80	0.97	1.24	0.87
	(0.68)	(0.60)	(0.96)	(1.30)
Investment	-6.71	-6.80	-6.80	-7.06
	(3.48)	(2.77)	(3.03)	(3.44)
Budget	-0.71	-0.55	-0.83	-1.12
	(0.35)	(0.26)	(0.41)	(0.58)
GDP per capita	-1.60	-2.08	-2.31	-3.17
	(1.98)	(1.26)	(1.32)	(2.06)
Current account	0.04	-0.04	0.01	-0.03
	(0.29)	(0.24)	(0.27)	(0.36)
Inflation	-0.47	-0.34	-0.24	-0.52
	(0.72)	(0.73)	(0.88)	(1.13)
Latin America	-0.29	0.30	0.17	0.25
	(0.54)	(0.71)	(0.85)	(1.01)
Past agreement	0.52	0.18	0.21	0.20
	(0.43)	(0.48)	(0.53)	(0.63)
Number under	0.91	0.46	0.43	0.90
	(0.26)	(0.23)	(0.25)	(0.46)
Election	0.79	1.58	1.78	1.58
	(0.47)	(0.56)	(0.66)	(0.69)
Years under	0.32	0.91	0.90	0.91
	(0.46)	(0.56)	(0.67)	(0.79)
Correlation of error terms	-0.79	-0.66	Not significant	Not significant
	(0.42)	(0.46)		
Number of obs	437	437	437	437
Observations correctly predicted	59%	66%	66%	62%
Log likelihood function	-129.75	-124.23	-122.43	-123.54
Restricted likelihood function	-185.50	-185.50	-185.50	-185.50
Chi-Squared	111.52	122.54	126.14	123.93

(Standard errors in parentheses.)

The effect of the number of veto players holding other variables to their means	Pr(Gov)	Pr(Gov)	Pr(Gov)	Pr(Gov)
1 veto player	0.37	0.22	0.23	0.30
2 veto players	0.56	0.37	0.37	0.52
3 veto players	0.67	0.46	0.46	0.65

Table 4 continued: Further specifications of IMF participation – *Results for the IMF*

Variables assigned to the IMF	Model 8	Model 9	Model 10	Model 11
Constant	3.75	4.32	4.58	3.82
	(1.42)	(1.81)	(1.98)	(1.53)
Log (number of veto players)	**-0.59**	**-0.87**	**-0.79**	**-0.61**
	(0.33)	**(0.42)**	**(0.42)**	**(0.32)**
Interact BOP and Size	-0.77	-1.46	-1.74	-1.29
	(0.35)	(0.73)	(0.53)	(0.33)
Number under	-0.98	-0.94	-0.95	-0.95
	(0.29)	(0.35)	(0.36)	(0.32)
GDP per capita	0.59	2.20	2.00	1.43
	(1.34)	(1.78)	(1.92)	(1.68)
Current account	-0.04	0.00	-0.12	-0.13
	(0.13)	(0.17)	(0.23)	(0.17)
Inflation	0.10	0.02	-0.21	-0.11
	(0.49)	(0.68)	(0.76)	(0.62)
Latin America		-0.79	-0.75	-0.65
		(0.59)	(0.54)	(0.45)
Past agreement		0.44	0.46	0.50
		(0.64)	(0.66)	(0.52)
Election		-1.00	-0.69	
		(0.54)	(0.52)	
Years under		-0.86	-0.66	-0.35
		(0.47)	(0.44)	(0.32)
Foreign reserves			-1.72	-1.46
			(1.52)	(1.27)
Debt service			0.09	0.37
			(0.48)	(0.39)
Investment			-3.63	-4.17
			(3.48)	(2.84)
Budget			0.12	0.12
			(0.43)	(0.29)
Correlation of error terms	-0.79	-0.66	Not significant	Not significant
	(0.42)	(0.46)		
Number of obs	437	437	437	437
Observations correctly predicted	59%	66%	66%	62%
Log likelihood function	-129.75	-124.23	-122.43	-123.54
Restricted likelihood function	-185.50	-185.50	-185.50	-185.50
Chi-Squared	111.52	122.54	126.14	123.93

(Standard errors in parentheses.)

The effect of the number of veto players holding other variables to their means	Pr(IMF)	Pr(IMF)	Pr(IMF)	Pr(IMF)
1 veto player	0.63	0.81	0.53	0.38
2 veto players	0.47	0.61	0.32	0.23
3 veto players	0.37	0.47	0.22	0.16

4. Conclusion

In Putnam's (1988) seminal piece on two-level games, he draws attention to the "Schelling conjecture": by tying its hands domestically, a government may gain bargaining leverage in international negotiations (Pahre and Papayoanou 1997, 9). Scholars who have studied this phenomenon have found that domestic constraints can influence negotiations at the international level (see Mo 1995, Iida 1993 and 1996, Milner and Rosendorff 1997, Pahre 1997, Martin 2000). In this paper, I find that countries with more domestic constraints in the form of veto players are less desirable for the IMF because they are unable to agree to high degrees of policy change. The Fund prefers countries that can agree to greater degrees of reform unhindered by domestic actors with veto power.

This paper has also addressed the flipside of the two-level game – a phenomenon Gourevitch (1978, 1986) calls "the second image reversed." Just as domestic constraints influence negotiations at the international level, international constraints can increase bargaining leverage at the domestic level. The paper makes testable predictions about political institutions and IMF arrangements based on Putnam's speculation that "International negotiations sometimes enable government leaders to do what they privately wish to do, but are powerless to do domestically... this pattern characterizes many stabilization programs that are (misleadingly) said to be 'imposed' by the IMF." I argue that executives facing greater resistance to policy change are more likely to bring in the IMF to increase their leverage over domestic actors. I find that executives facing more veto players are more likely to turn to the IMF.

These results beg the question: Why do governments seek to push through the unpopular policies of the IMF? The answer probably lies in the effects that these programs are expected to have. What effects do we know that IMF programs have? The ostensible goals of IMF programs are to promote economic stability and growth (*IMF Articles of Agreement*). Yet for nearly twenty years, every study found that IMF programs have no effect on economic growth (Reichmann and Stillson 1978, Pastor 1987, Killick 1995). Recent studies even show that the immediate impact on growth is negative (Conway 1994, Przeworski and Vreeland 2000). Regarding economic stability, Bird contends, "while IMF-backed packages seem to nudge countries toward better overall BOP performance, their impact is rather muted. Moreover, they generally have rather insignificant effects on inflation" (1996a, 502). If IMF programs do not improve growth or stability, what effects do they have that would lead executives to enter into them?

Perhaps governments care about income distribution. In his 1987 study, Pastor found, "the single most consistent effect the IMF seems to have is the redistribution of income away from workers" (1987, 89). Recently, Garuda (2000) confirmed this finding, showing that typically the income distribution deteriorates for most countries participating in IMF programs. Vreeland (2002) shows that even if IMF programs have overall contractionary effects, the favorable shift in income towards some groups is large enough to mitigate lower growth. The income of the owners of capital can actually increase in the short run.

If the most consistent effect that IMF programs have regards the distribution of resources in a society, it should not be surprising to find that political institutions play a role in the decisions of governments to bring in the IMF. Some groups stand to gain by pushing through the policies supported by the IMF, while others stand to lose. When there are more veto players, there is greater potential that at least one of them will represent the potential bsers. The evidence presented in this paper suggests that where there are more of these potential opponents with veto power, a government is more likely to bring in the IMF. Executives find IMF conditionality useful where institutional resistance to policy change is high.

This finding adds impetus to the debate over reform of IMF conditionality. Some argue, for example, that seeking out and assisting reform-oriented governments should become the explicit policy of the IMF (IMF 2001: 65; citing Dollar and Svensson 2000). This would essentially make my argument – that governments enter into IMF programs to force their own reform agendas – the explicit policy of the Fund. Instead of "making" reformers, the IMF should look for reformers and extend financial and political assistance to them.

Others might argue that this approach will exacerbate problems already present in the imposition of IMF programs, by increasing the animosity of those groups within a country who are "left out." If governments use IMF programs as leverage to push through policies that increase income inequality, labor and the poor have grounds for concern. This does not mean that without IMF programs governments would not or should not undertake reform, but, as Remmer (1986: 7) argues, "The politics of stabilization are likely to be rather different where an outside villain [the IMF] cannot be identified so readily."

This point of view supports a recent IMF staff suggestion that, "subject to the guidance of the authorities, the Fund staff can .play a role.by holding substantive discussions with other groups, including other ministries, trade unions, industry representatives, and local non-governmental organizations, especially at a stage at which the design of the program is still under consideration" (IMF 2001: 42). The goal of such meetings is to "help groups within the country to participate meaningfully in the process" (IMF 2001: 42). In terms of this paper, this suggestion would have veto players included in the initial negotiations of an IMF arrangement instead of bypassing them.

Regardless of the direction that the Fund takes, it should make explicit the role it plays in domestic politics. Historically, the IMF has shied away from domestic issues, claiming at it should not get involved. Yet, the moment the IMF demands that deficits be cut and interest rates raised, it has entered into domestic politics. The influence of the IMF can be used as leverage to push through policies that favor some at the expense of others, and the IMF should not pretend otherwise.

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