

# **Independent Actor or Agent? An Empirical Analysis of the impact of US interests on IMF Conditions**

**Axel Dreher**  
**School of Business and Economics**  
**University of Exeter**

**Nathan Jensen**  
**Department of Political Science**  
**Washington University in St. Louis**

## **Abstract**

In this paper we analyze whether IMF conditionality is exclusively designed in line with observable economic indicators or, alternatively, whether it is partly driven by its major shareholder, the United States. A panel data analysis of 206 letters of intent from 38 countries from 4/1997-2/2003 reveals that the number of conditions on an IMF loan depends on a borrowing country's voting pattern in the UN general assembly. Closer US allies receive IMF loans with fewer conditions especially prior to elections. Countries not allied with the US have to accept more conditions at election time. We believe that these empirical results speak to the current debate on IMF conditionality and contribute to the broader literature on the role and functioning of international institutions in the global economy.

**Keywords:** IMF, conditionality, elections

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## 1. Introduction

There is a growing debate on the purpose, role and impact of international institutions. Institutions of global governance such as the United Nations and the International Criminal Court are struggling to find their place on the world stage. Other international institutions designed to govern the global political economy, such as the World Trade Organization, the World Bank, and the International Monetary Fund have been subject to protests and criticism from scholars, activists, and politicians.

Some of this criticism has been leveled on international institutions for their perceived failure to solve global political and economic problems. The institution that has come under some of the most intense fire is the International Monetary Fund.<sup>1</sup> In the wake of the Asian Financial Crisis scholars from both outside and inside the IMF issued scathing criticisms of both the organization's inability to help avoid the financial crisis and their overly draconian policies in response to the crisis. The IMF was seen as being both too passive and too active in reacting to the crisis.<sup>2</sup> Many critics argue that the IMF is to blame for these perceived poor policy prescriptions.<sup>3</sup>

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<sup>1</sup> Some of the most leveling criticism has been on the link between IMF agreements and lower levels of GDP growth. See Przeworski and Vreeland (2000) and Vreeland (2003). For a review of the recent literature see Stone (2002). Jensen (2002, 2003) finds that IMF loans have a negative impact on foreign direct investment inflows, Boockmann and Dreher (2003) show that neither Fund credits nor its conditionality promote economic freedom in creditor countries.

<sup>2</sup> For an interesting discussion of the IMF both before and after the Asian Financial Crisis see Lane et. al. (1999), Sachs (1999). For a broader criticism on IMF programs see G-24 (1987). For an excellent discussion of the IMF in Argentina's recent financial crisis see Mussa (2002).

<sup>3</sup> This led International Financial Institutions Advisory Committee (the Meltzer Commission) to recommend the IMF to focus on crisis prevention. The Council of Foreign Relations recommends that the Fund should focus on short-run crisis and leave long-run growth considerations to the World Bank. See Mosley (2001), Willett (2001), Jager (2001) and Vreeland (2003).

This claim is obvious at first glance. Who else could be responsible for IMF policies than the IMF itself? Those well versed in the principal agent literature recognize that bureaucracies may have some power via their principals, but principals can maintain a tremendous amount of control over their actions. In the case of the IMF the largest shareholder, the United States, holds a de facto veto over major IMF policies through the IMF's system of weighted voting.

Although the US's formal voting power doesn't directly affect conditions, this power asymmetry can have a dramatic indirect effect. For example, the Executive Board usually accepts all loan proposals put forward by Fund staff without formal voting. However, majorities are known to staff and critical points are discussed before the agreement is presented to the Board. If the US is willing to support a country, country authorities have greater bargaining power. This is because they know the Fund has almost no choice but to agree to the arrangement. Fund staff might also try to prevent being overruled by the Executive Board and design the letters of intent in a way suitable to the Board. The question remains, does the IMF setting too tight conditions because conditions are in the Fund's own interest,<sup>4</sup> or are the principal stakeholders demanding too tight of conditions?

This question fits into the broader literature on the political economy of the IMF. Gould (2003) has claimed that IMF conditions are partly driven by private banks attaching their loans to those of the Fund. Others assert that the US government drives the IMF's policies (Goldstein 2000: 67, Frey 1997: 121). It has even been stated that "no managing director...can make a major decision without clearance from the U.S." (Swedberg 1986: 379). Prominent examples are the credits granted to Russia in 1992 and 1996 where the US government exerted strong pressure on the Fund to lend in spite of missed targets (Goricki 1999: 223). Another example is the case of Pakistan receiving low conditionality credits from

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<sup>4</sup> Vaubel (1991) and Dreher and Vaubel (2003) develop models deriving the degree of conditionality that is optimal for the Fund.

the Fund after joining the United States-led alliance against Afghanistan. Oatley (2003) presents further examples where the United States pressed the Fund to extend credits to Argentina during the 1980s and to Mexico in 1982 and 1985. The US Congress even passed several legislative mandates instructing the American Executive Director to enforce American interests (General Accounting Office 2001).

Cross-national empirical studies, such as Thacker (1999) and Barro and Lee (2001) report that access to Fund programs are skewed towards countries supportive of United States foreign policy. Oatley (2003) shows that closer allies of the USA receive larger loans (especially after the end of the Cold War). According to these results, the US uses its influence in the Fund to enforce its own political agenda.<sup>5</sup> In order to further test this proposition, we have to analyze whether political relations with US influence conditionality.

We argue that the IMF is also responsive to domestic political conditions in the country receiving its loan. The literature on political business cycles argues that politicians have the incentives (and usually the means) to expand monetary and fiscal policy in the period prior to democratic elections. We believe this is the period when we should see the most obvious case of US influence on IMF policy. In countries that are not strongly allied with the United States, the IMF should restrain this fiscal and monetary policy expansion by setting tight conditions on the loan. For countries that are allied with the US, the IMF will loosen conditions on the loan, rewarding incumbent politicians with loose conditions and the opportunity to manipulate the economy for electoral gain.

Answering these questions on the role and functioning of the IMF has broad ramifications for the study of international institutions, and for the understanding of the functioning of the International Monetary Fund. In this paper we focus on how the IMF sets conditions on donor countries. In an empirical analysis of 38 countries from 1997-2003 we

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<sup>5</sup> Bird and Rowlands (2001), however, do not find such relationship.

find that political factors, namely the borrower's relationship with the United States, are important determinants of the number of conditions the IMF imposed on the country.

The paper proceeds as follows. We start with providing an overview of the literature on international regimes and the IMF. The third section describes the Fund and its conditionality in greater detail, followed by a section on the IMF and international relations theory. We continue presenting our data, method and results. The final section sums up.

## **2. International Regimes and the IMF**

International relations scholars have long regarded cooperation between nation-states as one of the most interesting, complicated, and important questions in the field.<sup>6</sup> The creation and maintenance of international regimes are one element of this cooperation.<sup>7</sup> Stephen Krasner defines regimes as “a set of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations”.<sup>8</sup> Although Krasner's view has become the accepted definition, scholars still hotly debate the function and operation of international regimes.

Some scholars, particularly in the Realist and neo-Realist camp argue that international regimes reflect the distribution of power within the international system.<sup>9</sup> Nation-states are the primary actors in the international system and they create international regimes. For example, Hegemonic Stability Theory states that a hegemonic nation-state, a nation-state with a preponderance of power in the international system, creates and maintains international regimes.<sup>10</sup> Other nation-states may benefit from the existence of this

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<sup>6</sup> Kindleberger (1973), Bull (1977), Waltz (1979), Axelrod (1984), Keohane (1984).

<sup>7</sup> See Keohane and Nye (1977), Young (1977), Haas (1980), Krasner (1983), Keohane (1984), Grieco (1988), and Ruggie (1992). For an excellent review of existing theories of international regimes see Haggard and Simmons (1987).

<sup>8</sup> Krasner (1992) and Ruggie (1975) are classic works on the subject.

<sup>9</sup> Three classic works are Waltz (1959, 1975) and Mearsheimer (1994).

<sup>10</sup> See Keohane (1980, 1984) and Stein (1984) for an interesting discussion of the literature.

international regime, but its creation and survival is based on hegemonic leadership in the international systems.<sup>11</sup>

This conception of the IMF as an agent of the most powerful stakeholders has become common in the popular press. The IMF is seen as “an agent of U.S. foreign policy” promoting the interests of the United States under the veil of an international institution.<sup>12</sup> This power is exercised through the system of weighted voting based on the size of a country’s capital contribution, rather than a one-country one-vote system like the UN general assembly.

Even official United Nations documents lament the institutional framework of the IMF. A recent United Nations Human Development Report claims that developing countries have little formal power within the international institutions of the IMF, World Bank, UN Security Council, and the WTO:

Representation and accountability has always been weak in these multilateral institutions. But today the weaknesses are glaring because the institutions are being called on by their power members to intrude much more deeply into areas previously the preserve of national governments – especially in developing countries. (UN 2002, 112)

A number of academic works have stressed the disproportionate influence of the United States foreign policy on international organizations. Vaubel, Dreher and Soylu (2003) have shown that the staff of international organizations expands if the financing share of the largest contributor (usually the United States) declines and if the ideological orientation of the U.S. President shifts to the left. Thacker (1999), Barro and Lee (2001), and Oatley (2003) all find that closer allies of the United States are given preferable treatment by the IMF.

Others argue that international institutions can behave as independent actors in the international system. Changes in the institutions would thus reflect the institutions’ drive to greater power (Vaubel, 1996). This theory builds on the Principal-Agent perspectives

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<sup>11</sup> For an interesting theoretical discussion on the impact of international regimes see Krasner (1982).

<sup>12</sup> The Toronto Star Oct 26, 2000. “Reforms Need to Restore IMF Credibility”. For an interesting discussion of leadership selection in the IMF see Kahler (2001).

constructed in the study of firms, later applied to the study of American politics.<sup>13</sup> International institutions may be created by nation-states, but once they're built, they have their own sets of preferences. As one example, Vaubel (1991) shows that the IMF tries to obtain quota increases by "hurry-up lending" at the time of the regular quota reviews. Also, the growth of IMF staff does not seem to be related to the "need for balance of payments credits" as defined by the Fund but rather seems to grow because a larger staff is in the bureaucracy's own interest (Vaubel 1996). Barnett and Finnemore (1999: 703) have theorized that "state power may be exercised in political battles inside IOs over where, on the Pareto frontier, political bargains fall, but the notion that IOs are instruments created to serve state interests is not much questioned by neorealist or neoliberal scholars. After, all, why else would states set up these organizations and continue to support them if they did not serve state interests?"

All of these arguments stress that although powerful nation-states have an important degree of control in the building of international institutions, there are theoretical reasons why international institutions could exercise some degree of control, independent of nation-states. In the case of the IMF, although the US was an important actor in constructing the Fund and still holds a de facto veto over major IMF policies, the IMF may maintain a considerable amount of autonomy in setting policy.

We argue that examining the functions of the IMF, specifically in how the IMF sets conditions for countries seeking IMF finance can help answer these questions. Does the IMF set conditions based on economic fundamentals, functioning as a lender of last resort along the lines of multilateralism, or does the IMF set policies according to the interests of the principal stakeholder, the US? We believe that answering this question is important for

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<sup>13</sup> Banks (1989), Banks and Weingast (1992), Hammond and Knott (1996), Martimort (1999), McCubbins and Schwartz (1984), McCubbins, Noll and Weingast (1987), Miller and Moe (1983), Niskanen (1971), Waterman and Meier (1998), and Wilson (1989).

understanding the role and impact of the Fund as well as for intellectual debates on the role of international institutions in the global economy.

### **3. The IMF and IMF Conditions**

When the IMF concludes a program it agrees with the host government to a set of “conditions” on the loan.<sup>14</sup> Such conditions typically include limits on credit expansion, reforms of the financial system, a target on foreign reserves and the budget deficit and a range of structural measures.

When the IMF was founded in Bretton Woods in 1944, there was no consideration of the intrusive conditionality now common under its programs. The Fund was created to provide short-term balance of payments credits and stabilize the post war financial architecture under a fixed exchange rate system. In the beginning of its operations, the only nation interested in IMF conditionality was the United States – the only country which was able to provide internationally accepted currency after the war. Even though the United States had no interest in attaching detailed conditionality to the IMF’s loans they wanted to be able to reject drawings if misbehavior was flagrant (Cornelius 1988: 48). The countries with expectations of high deficits, such as the United Kingdom, however, refused this. Due to this conflict no ultimate decision on conditionality was made at Bretton Woods. Therefore, as the Fund started its operations, its Executive Board had to decide on whether to attach conditions to the loans. It was agreed that several goals should be negotiated to secure the revolving character of IMF resources. The borrowing countries were, however, free to decide with which instruments to achieve these goals.

In the beginning of Fund operations conditions mainly focused on policy targets. Those targets covered monetary and fiscal policy, relative price distortions, current account and budget deficits, and international reserves (Dreher 2002: Table 1). In the following years,

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<sup>14</sup> For a discussion of IMF conditions see Sidell (1988) and James (1996). Dreher (2002) summarizes conditions included in a huge number of programs.



however, especially after the introduction of the Extended Fund Facility in 1974, IMF conditions became increasingly detailed. Moreover, not only targets were negotiated but also detailed conditions concerning specific instruments (Gould 2001, Dreher 2002). This should give a borrowing country confidence that negotiated tranches would be available in the case of compliance with conditionality. Would only targets be negotiated, external shocks could be responsible for deviations from these targets. However, this new type of conditionality increasingly reduced the scope for independent policy.

Policies included in IMF programs often were not those preferred by borrowing countries' governments; they claimed that the increasing intrusiveness of conditionality would not be justified by the relatively small amount of money provided. Developing countries protested that IMF conditions were not tailored to individual countries' circumstances and that industrialized countries received its loans merely without conditionality. Their protests led to a review of Fund conditionality in 1979. It was agreed that individual country's priorities and characteristics should weigh more heavily in the programs. However, at the same time, a new kind of conditionality was introduced. In addition to performance criteria, which must be implemented to secure tranche releases, prior actions should be taken before a program is presented to the Executive Board. Officially, these prior actions should ensure that programs were in line with the targets of the IMF. However, governments frequently had to execute prior actions not critical for the success of programs in order to demonstrate willingness to comply.

In the years following the IMF conditionality review, supply side aspects gained weight in the programs. This led to a greater Fund involvement into social and political issues of developing countries. Compared to the 70s, not only did the IMF prescribed more detailed conditions but also paid out less money at the beginning of programs. Moreover, waivers were more difficult to achieve (Dreher 2002).

In 1986, the IMF introduced the Structural Adjustment Facility (SAF). With the introduction of this facility, another kind of conditions – structural benchmarks – were established. If those conditions, which were not provided for under the IMF guidelines are not met, access to credit tranches is not automatically terminated. Non-compliance with these benchmarks might lead Fund staff, however, to be more stringent if performance criteria were not achieved. Moreover, though the importance of structural benchmarks within the IMF is not clear, non-compliance can lead to program interruptions (IMF 2001: 17). Compared to traditional performance criteria, structural benchmarks are much more microeconomic, which reflects the shifted focus of the Fund.<sup>15</sup> Whereas its initial focus has been to provide short-term balance of payments support, it increasingly evolved into a development agency with a focus on economic growth in borrowing countries.

The tendency to include structural conditions has been enhanced by the breakdown of the Soviet Union and their successors' huge demand for Fund credit. The Asian crisis had a similar effect on conditionality (Dreher 2003a). With the evolution of the IMF, the average number of conditions gradually increased and became inseparably associated with the loans. As the IMF (2001) reports, the number of structural conditions increased from about 3 in 1987 to about 9 in 1999. This is mainly due to the increase of benchmark conditions that increased from 0 to 5 in the same time period. However, performance criteria surged as well.<sup>16</sup> Whereas earlier programs contained only some performance criteria, in the 90s, an average program included almost 12. The total number of conditions between 1999-2001 was about 21 (Dreher 2002).

#### **4. Theory**

The purpose of this paper is not a comprehensive test of the competing theories on the role, functions and operations of international institutions. Rather, we want to situate the

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<sup>15</sup> A detailed description of structural conditionality since 1987 can be found in IMF (2001a).

<sup>16</sup> Dreher and Vaubel (2003: Table 1) documented the increase in the number of those conditions.

debate on the functioning of the International Monetary Fund into this larger literature on international institutions. Does the IMF function as an institution to solve financial crises, reacting to domestic economic conditions, policy, or humanitarian demands? Many studies have tried to answer these questions focusing on large sample analysis of IMF program conclusions or amounts of credit drawn. These studies found that IMF lending is influenced by a borrower country's debt service, its international reserves and economic growth. With respect to political variables, government stability, the quality of bureaucracy and the extent of political opposition have been found to be robust predictors of IMF lending.<sup>17</sup>

Since the amount of credit is only one of the Fund's two major policy instruments, similar patterns probably prevail with respect to its other instrument, conditionality. We thus theorize that the IMF acting as an international organization trying to solve problems associated with financial crises or alleviating poverty, will set the number of conditions on loans according to observable economic indicators of the borrower country. Thus we set our null hypothesis as:

*Hypothesis 1:* The IMF will set conditions based on domestic economic conditions including the growth rate of real GDP, the government's consumption, the budget deficit, the rate of monetary expansion and the current account balance.

Alternatively, we believe that the Fund may set conditions based on political relationships between the hegemon in the international system (the United States) and the recipient country. Countries with closer alliances to the United States will be rewarded with looser conditions on IMF loans, while the IMF will impose stricter conditions on non-allied countries. Countries allied with the United States are rewarded with IMF funding without serious conditions attached to the loan.

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<sup>17</sup> Sturm, Berger and de Haan (2001) provide an overview of the more recent literature on this topic.

Once again, we stress the exact mechanism through which the United States dictates IMF conditions is complex and indirect. The IMF system of weighted voting does not formally give the US power over the setting of conditions. Rather, we argue that the tremendous amount of influence it has over the broad IMF policies and the IMF budget, can lead to policies favorable to the United States.

This power dynamic between nation-states and the IMF is related to the relationship between politicians and “independent” central banks.<sup>18</sup> Although in many countries central banks are nominally independent, de facto independence is much more complex. According to Franzese (1999, 682): “Independence from political authority can never be complete because the bank’s authority derives from statutes or constitutional provisions, either of which the political authority can change if the bank’s policies were to become sufficiently distasteful. Nor is independence ever completely absent. Administering and monitoring monetary policy is costly, political and economically, because banks enjoy expertise and/or informational advantages over governments and because time and other resources are required for governments to monitor banks.”

The IMF is independent in some ways, setting conditions free from the formal system of weighted voting. Yet, major stakeholders have a tremendous amount of influence over the institution, forcing the IMF to set policy with due respect to these stakeholders’ preferences. This is because, although rarely happening, they could always press for a formal vote on an agreement and reject it. The degree of independence is an empirical matter. Thus our second hypothesis is:

*Hypothesis 2:* The IMF will specify softer conditionality on countries that are closely allied with the United States.

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<sup>18</sup> For recent literature on central banking see Barro and Gordon (1983), Clark (2003), Cukierman (1992), Lohmann (1992).

A final set of hypotheses takes into account the incentives of political leaders in democracies prior to elections to engage in “political business cycles”.<sup>19</sup> We argue that these insights from the political business cycle literature on the incentives for fiscal and monetary policy expansion prior to elections have important implications for IMF conditionality. IMF conditions usually prescribe austerity measures that conflict with incumbents’ incentives for monetary and fiscal policy expansion. Politicians have the incentive to inflate the economy when the IMF is attempting to tighten monetary and fiscal policy which results in the contraction of the economy in the short-run. On the other hand, IMF money can be used to finance the desired expansion (Vaubel 1991).

Several empirical studies have shown that the pattern of IMF lending is different at election times. It has been shown that the conclusion of IMF arrangements is significantly less likely immediately prior to elections (Dreher 2003b) although net credits are significantly larger (Dreher and Vaubel 2004). Moreover, breakdowns of Fund programs are more likely at those times (Dreher 2003c). Program conclusion is more likely after elections (Przeworski and Vreeland 2000, Vreeland 2003). It has even been shown that the IMF can help incumbents win elections (Dreher 2003b) or stay in power (Smith and Vreeland 2003).

We believe that the different incentives in the period prior to elections also provide some insights into the functioning of IMF conditionality. If the IMF is attempting to limit the impact of financial crisis and adverse policy, we would expect that its conditions would become stricter in the periods prior to democratic elections. Politicians have the incentive to

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<sup>19</sup> For studies of economic voting see Kramer (1971), Hibbs (1987), Lewis-Beck (1988), Alesina et. al. (1993), and Alesina and Rosenthal (1995). The classic works on political business cycles are Nordhaus (1975), Tufte (1978), Hibbs (1987), Rogoff and Sibert (1988), Rogoff (1990), and Persson and Tabellini (1990). See See Alesina et. al. (1999) and Franzese (2002) for an excellent overview of the literature.

inflate the economy in this period, and the IMF will specify a more complete contract to limit the opportunities for inflation.

*Hypothesis 3: The IMF will set tougher conditions in the period prior to democratic elections.*

An alternative hypothesis is that if the IMF reflects the power of the hegemon (the United States) it will act strategically in the period prior to democratic elections. For the countries that are not allied with the United States, the IMF will impose strict conditions. Countries closely allied with the United States, the IMF will impose looser conditions in order to allow the incumbent to have some degree of discretion over monetary and fiscal policy authority. In short, the IMF will be careful not to threaten the political survival of incumbents closely allied with the United States.

*Hypothesis 4: The IMF will set fewer conditions in the period prior to democratic elections for countries closely allied with the United States.*

## **5. Data**

Since it is impossible to measure and compare the stringency of particular conditions in an objective way, our dependent variable for the empirical analysis is the number of IMF conditions. The number of conditions has been the focus of heated debate. For example, in 1999 US congress threatened to refuse ratification of the quota increase if the Fund did not reduce the stringency and number of its policy conditions.

The number of conditions has been used as a proxy for stringency in previous studies. Mosley (1991) studied the tightness of World Bank Structural Adjustment Loans using this measure. Gould (2003) and Dreher (2003d) used the number of IMF conditions to analyze the

determinants of conditionality. Dreher and Vaubel (2003) employed the number of conditions to examine the causes and consequences of conditionality. The IMF (2001) has used similar data in empirical analysis as well. Our data on the number of IMF conditions are from Dreher and Vaubel (2003) who analyzed 206 IMF letters of intent with 38 countries between October 1997 and March 2003.<sup>20</sup>

A typical loan agreement includes very detailed descriptions of the policies the borrowing governments promise to implement over the time of the arrangement. Whereas in older programs it was very difficult to judge whether those statements will be subject to Fund evaluation or have just been included by the government to express its policy objectives, most recent arrangements provide tables classifying conditions into performance criteria and structural benchmarks. Prior actions are, however, not always available to the public. In those cases where it was not obvious whether there were no prior actions included in a program or where those conditions were simply not attached, the specific country-period was omitted from the disaggregated analysis and set to zero in the analysis of the total number of conditions. Since it is not possible to weigh the different types of conditions in an objective way, we use the unweighted sum. However, we also provide a separate analysis for each type of conditions.

The countries included in the sample have been randomly selected. 23 of the countries covered received loans under the Fund's Standby Arrangement or Extended Fund Facility, 18 countries received PRGF loans. For each selected country, all letters of intent publicly available have been analyzed, starting with the first letter posted on the Fund's web page in

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<sup>20</sup> The countries included in the study are Albania, Argentina, Armenia, Azerbaijan, Belarus, Benin, Bolivia, Brazil, Bulgaria, Burkina Faso, Cambodia, Cameroon, Cape Verde, Central African Republic, Colombia, Croatia, Estonia, Georgia, Ghana, Guinea, Indonesia, Jordan, Kazakhstan, Korea, Latvia, Mali, Moldova, Nicaragua, Pakistan, Panama, Peru, Russia, Rwanda, Sao Tome and Principe, Uganda, Uruguay and Zimbabwe.

October 1997. The resulting data are quarterly and refer to periods where an IMF arrangement has been active.<sup>21</sup>

While the total number of conditions of each type can thus be objectively counted, classifying conditions according to category was sometimes critical. Clearly, a ceiling on monetary growth is a monetary condition while a ceiling on government expenditure is a fiscal one. However, there are cases that are less obvious. In those critical cases the conditions have not been classified as monetary or public-sector (and are thus only included in the analysis of the total number of conditions). In Table 1 we summarize the number of conditions by type and sector. As can be seen, the country programs analyzed include more than 22 conditions on average.

*Insert Table 1*

To empirically estimate how relations between the US and the country signing an IMF agreement affect conditionality, we include a variable on voting in the UN general assembly.<sup>22</sup> We operationalize our variable “Voting with the US” as the percentage of UN general assembly where the recipient country and the United States vote either both “yes” or both “no” together on a given issue. Since some quarters have more UN votes than others, we smooth the time series by using a quarter moving average. To test for the robustness of our results we also changed the construction of the UN variable, starting with a zero value for each new government. The estimated results are qualitatively similar to the ones reported here.

We also include a dummy variable for democratic elections. We coded cases of legislative and presidential election from a number of sources. In the empirical analysis we used the dummy variable, “election”, which included legislative and presidential elections.

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<sup>21</sup> Notice that, since all countries in our sample are under active programs, we do not have sample selection bias.

<sup>22</sup> UN general assembly voting is publicly available through the official UN website.



We also tested legislative and presidential elections independently. Our empirical results remain unchanged.

We use a number of economic control variables. Most of these control variables are from the IMF's International Financial Statistics Indicators. All additional variables with their means and standard deviations, their precise definitions and data sources are listed in the appendix.

## **6. Method**

We estimate pooled time-series cross-sectional regressions to identify the determinants of conditionality. Since our data are strongly skewed to the right, we estimate the model using Poisson regressions. However, the data is displaying signs of over-dispersion, and the relevant tests reveal that not all of our dependent variables follow the Poisson distribution. We therefore replicate all regressions using OLS and Negative Binomial Regressions instead. The basic results, however, are robust to the method of estimation.

Since some of the (quarterly) data are not available for all countries or periods, the panel data are unbalanced and the number of observations depends on the choice of explanatory variables. To account for time-invariant unobservable heterogeneity potentially correlated with the regressors, we use country dummies. We also include a dummy for each quarter of the year ("fixed time effects").

## **7. Results**

### *Insert Table 2*

Column 1 of Table 2 replicates the analysis of Dreher and Vaubel (2003).<sup>23</sup> We find that IMF programs include significantly more conditions the more adjustment loans with the

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<sup>23</sup> Similar covariates have been used by Dreher (2003d). The exceptions are real GDP growth, LIBOR, the government's budget deficit and changes in international reserves. Dreher (2003d) additionally uses principal arrears, US military grants and loans, public and publicly guaranteed bilateral and commercial debt, an index

World Bank have been concluded at the same time. To avoid competition and contradictory advice IMF and World Bank send members of their staff to each other's organization mission teams. This improves the range of competences in those teams and therefore the possible scope for conditionality. As a consequence, the number of IMF conditions is higher the higher is the World Banks' contemporaneous involvement in a country.<sup>24</sup> IMF programs also include more conditions when the borrower's real GDP is low and real per capita GDP growth in the OECD countries has been high. If IMF staff is interested in enforcing as many conditions as possible, they negotiate more stringent programs with countries in a weak bargaining position. The possibility to enforce its own agenda in negotiations with the Fund is worse the more a government is in need of IMF loans. Moreover, a countries' power to negotiate is influenced by other countries' willingness to support the potential borrowers (Bird and Rowlands, 2002). Both a country's own (direct) influence in the Fund and support by other countries rise with its GDP, since countries with higher GDP are more important for the world economy. Moreover, their quota with the Fund is higher which results in higher voting rights. Countries with lower GDP must therefore accept more conditions. Fund staff may enforce more conditions in recessions. However, they might also be inclined to lend more freely since they feel that external circumstances, not domestic misgovernment, lead a country into crisis. The Fund might even deliberately vary its conditionality counter-cyclically. The latter effects dominate here.

LIBOR on three months credits to US banks increases the number of conditions since the interest rate subsidy provided by the Fund is higher with higher world interest rates, and demand for Fund credits should rise. Finally, the results show that a high rate of monetary expansion leads to significantly more conditions. This is what we would expect from a

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measuring democracy and an index measuring economic freedom. We cannot employ those variables here since they are not available on a quarterly basis.

<sup>24</sup> For a more detailed discussion see Dreher (2003a, 2003d).

normative perspective. Table 2 also shows that the World Bank's technical and other loans, a country's real GDP growth, government consumption, the government's budget deficit, the change in international reserves, the current account balance and the amount of Fund credit disbursed do not significantly influence the number of conditions.

The following columns add variables directly testing our hypotheses. We report two regressions for each specification. The first includes all variables of column 1; the second uses only those variables which have been significant in this regression at the ten percent level at least. This increases our number of observations to 139.

Columns 2 and 3 include the variable measuring the voting behavior in the UN general assembly. At the one and ten percent level of significance, respectively, the number of conditions is lower for closer allies of the US. According to the estimates for the larger sample reported in column 3, an increase in the voting index from zero to one reduces the number of conditions by about three. This provides strong evidence for Hypothesis 2. Our result is thus in line with those of Thacker (1999) and Oatley (2003) for IMF lending reported above. Our findings contradict Gould (2003) who claims that the US has not driven changes in IMF policy.<sup>25</sup>

In columns 4 and 5 we include a dummy variable for elections within the next six months; columns 6 and 7 add the interaction of the election variable with the voting variable. Most important for our analysis, the coefficient of the voting variable stays significant in all but one regressions. When the interaction term is excluded, the election dummy has no significant effect on the number of conditions. If all variables are included, however, the results confirm our hypotheses: Prior to elections, programs include more conditions – but

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<sup>25</sup> Of course, using the proxy employed by Gould (2003) to proxy US interest in a country, US loans and grants, Dreher (2003d) also found no influence. However, US loans and grants are probably an inferior proxy, since the USA often try to press the IMF to lend to exactly those allies that it can for political reasons not lend to by themselves.

less so, the more often a country voted in line with the USA in the general assembly. According to the estimates of column 7, an increase in the voting index from zero to one increases the number of conditions directly by 2.64 and by an additional 1.36 via the election effect. As the coefficient of the dummy shows, IMF programs include half a condition more in election years.

*Insert Table 3*

*Insert Table 4*

In Tables 3 and 4 we examine how IMF policies vary by sector. As can be seen, voting with the US affects conditions in both the monetary and the public sector. In all regressions, the coefficient of the voting variable has the expected sign; in all but two it is significant at the ten percent level at least. Although less compelling, there is evidence in favor of the election hypothesis as well. When both the election dummy and the interacted variable are included, the results confirm the aggregated analysis. At the five and one percent level of significance, the number of conditions in the monetary and, respectively, the public sector is generally higher in election years but lower for closer US allies.

*Insert Table 5*

Table 5 reports disaggregated results by type of conditions. However, we only report results for the larger sample. As can be seen, performance criteria are neither influenced by general assembly votes nor by elections. The effects of our political variables are confined to structural benchmarks where the results confirm the aggregated analysis. Since some performance criteria are included in almost all programs, there is less variation in those conditions compared to structural benchmarks. It is therefore more difficult to justify the omission of typical performance criteria. However, it would be interesting to analyze whether performance criteria are less demanding for US allies. Unfortunately we lack the data for such analysis.

As column 6 shows, in election periods the number of structural benchmarks is higher for countries not voting in line with the USA in the general assembly but lower for closer allies of the US. Column 8 shows that there are fewer prior actions at election time. This contradicts our Hypothesis 3. One possible explanation is provided by Dreher (2003c). His results show that in democratic countries fewer IMF programs break down prior to elections. He attributes this to a general tendency of Fund staff to take the incumbent politicians' necessities at election time into account. After all, number and stringency of conditions are the outcome of a bargaining process, and the Fund, eager to lend, is probably prepared to endorse fewer conditions if it feels that this is necessary to reach an agreement. Another possible explanation is that IMF participation is a joint decision. Prior to democratic elections countries only sign IMF agreements with loose conditions – especially prior action – and refuse loans with tighter conditions. However, the result is not very robust. It is insignificant when the interaction term is included (column 9). We leave any further analysis of disaggregated IMF conditions by sector and type of conditions for future research.

## **8. Summary**

International institutions, such as the IMF, play an important role in the functioning of the global economy, and in some cases have an enormous direct impact on nation-states. Understanding how these international institutions function has important academic and public policy ramifications.

In this paper we analyzed whether IMF conditionality is driven by its major shareholder, the United States. Our empirical results reveal that the number of conditions depends on a borrowing country's voting pattern in the UN general assembly. Countries that vote with the United States in the UN General Assembly systematically receive less conditions on IMF loans.

Our empirical results on the relationship between IMF programs and democratic elections are equally straightforward. We find evidence that countries receive tighter conditions prior to democratic elections – but less so for closer US allies.

These results show that the IMF, an international institution created to provide financing for balance of payment crisis as a lender of last resort, does not function simply as an institution of multilateralism. Although domestic economic conditions are an important determinant of the number of IMF conditions a country faces, the United States remains a dominant player in influencing IMF policy.

## References

- Alesina, Alberto, Nouriel Roubini and Gerald Cohen. 1999. *Political Cycles and the Macroeconomy*. Cambridge, MA: MIT Press.
- Alesina, A., G.D. Cohen, and N. Roubini. 1993. Electoral Business Cycles in Industrial Democracies. *European Journal of Political Economy* 23:1-25.
- Alesina, A., and H. Rosenthal. 1995. *Partisan Politics, Divided Government and the Economy*. Cambridge: Cambridge University Press.
- Axelrod, Robert. 1984. *The Evolution of Cooperation*. New York: Basic Books.
- Banks, Jeffrey S. 1989. Agency, Budgets, Cost Information, and Auditing. *American Journal of Political Science*, 33: 670-699.
- Banks, Jeffrey S. And Barry R. Weingast. 1992. The Political Control of the Bureaucracy under Asymmetric Information. *American Journal of Political Science*, 36: 509-524.
- Barnett, Michael N. and Martha Finnemore. 1999. The Politics, Power, and Pathologies of International Organizations. *International Organization* 52 (4): 699-732.
- Barro, Robert J. and R. Gordon. 1983. Rules, Discretion, and Reputation in a Model of Monetary Policy. *Journal of Monetary Economics* 12 : 101-22.
- Barro, Robert J. and Jong-Wha Lee. 2001. IMF-Programs: Who Is Chosen and What are the Effects?, Paper presented at the IMF Annual Research Conference November 29-30, 2001.
- Bird, G., and Dane Rowlands. 2001. IMF Lending: How Is It Affected by Economic, Political and Institutional Factors? *Journal of Policy Reform* 4, 3: 243-270.
- Bird, G., and Dane Rowlands. 2002. Political Economy Influences within the Life-Cycle of IMF Programmes. *The World Economy* (forthcoming).
- Boockmann, Bernhard and Axel Dreher. 2003. The Contribution of the IMF and the World Bank to Economic Freedom, *European Journal of Political Economy* 19, 3: 633-649.
- Bull, Hedley. 1977. *The Anarchical Society: A Study of Order in World Politics*. New York: Columbia University Press.
- Clark. William R. 2003. *Capitalism, No Globalism: Capital Mobility, Central Bank Independence, and the Political Control of the Economy*. Ann Arbor: University of Michigan Press.
- Cornelius, Peter. 1988. Das Prinzip der Konditionalität bei Krediten des Internationalen Währungsfonds, Verlag V. Florentz GmbH, München.
- Cukierman, A. 1992. *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*. Cambridge: MIT Press.

- Dreher, Axel. 2002. The Development and Implementation of IMF and World Bank Conditionality, Hamburg: HWWA Discussion Paper 165.
- Dreher, Axel. 2003a. Die Kreditvergabe von IWF und Weltbank: Ursachen und Wirkungen aus politisch-ökonomischer Sicht, Wissenschaftlicher Verlag Berlin.
- Dreher, Axel. 2003b. The Influence of IMF Programs on the Re-election of Debtor Governments, *Economics & Politics*, 16, 1: 53-76.
- Dreher, Axel. 2003c. The Influence of Elections on IMF Program Interruptions, *The Journal of Development Studies* 39, 6: 101-120.
- Dreher, Axel. 2003d. A Public Choice Perspective of IMF and World Bank Lending and Conditionality, *Public Choice*, forthcoming.
- Dreher, Axel and Roland Vaubel. 2003. The Causes and Consequences of IMF Conditionality, *Emerging Markets Finance and Trade*, forthcoming.
- Dreher, Axel and Roland Vaubel. 2004. Do IMF and IBRD cause moral hazard and political business cycles? Evidence from panel data, *Open Economies Review* 15, 1: 5-22.
- Franzese, Robert. 1999. Partially Independent Central Banks, Politically Responsive Governments, and Inflation. *American Journal of Political Science* 43 (3): 681-706.
- Franzese, Robert. 2002. Electoral and Partisan Cycles in Economic Politics and Outcomes. *Annual Review of Political Science*. 5: 369-421.
- Frey, Bruno S. 1997. "The Public Choice of International Organizations", in Dennis C. Mueller, *Perspectives on Public Choice*, Cambridge University Press: 106-123.
- General Accounting Office. 2001. International Monetary Fund: Efforts to Advance U.S. Policies at the Fund, Washington D.C.
- Goldstein, Morris. 2000. IMF Structural Programs, Paper prepared for NBER Conference on "Economic and Financial Crisis in Emerging Market Economies", mimeo.
- Goricki, Clarissa. 1999. Marktwirtschaftliche Reformsteuerung – Die Rolle von IWF und Weltbank in Mitteleuropa nach 1990, Verlag Fakultas, Singapur.
- Gould, Erica R. 2003. Money Talks: Supplemental Financiers and International Monetary Fund Conditionality. *International Organization* 57 (3): 551-586.
- Grieco, Joseph M. 1988. Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism. *International Organization* 42 (3): 485-507.
- Group of Twenty-Four (G-24). 1987. *The Role of the IMF in Adjustment with Growth*, Report of a Working Group. Washington D.C.: Group of 24, March.
- Haggard, Stephan and Beth A. Simmons. 1987. Theories of International Regimes. *International Organization* 41 (3): 491-517.



- Haas, Ernst B. 1980. Why Collaborate? Issue Linkage and International Regimes. *World Politics* 32 (3): 357-405.
- Hammond, Thomas and Jack Knott. 1996. Who Controls the Bureaucracy?: Presidential Power, Congressional Dominance, Legal Constraints, and Bureaucratic Autonomy in a Multi-institutional Model of Policy Making. *Journal of Law, Economics, and Organization*, 12:119-166.
- Hibbs, D. 1987. *The American Political Economy: Macroeconomics and Electoral Politics*. Cambridge, MA: Harvard University Press.
- International Monetary Fund. 2001. Structural Conditionality in Fund-Supported Programs, February 16, <http://www.imf.org>
- James, Harold. 1996. *International Monetary Cooperation Since Bretton Woods*. Washington D.C., International Monetary Fund.
- Jensen, Nathan. 2002. *The Political Economy of Foreign Direct Investment: Government Policies, Political Institutions and Foreign Direct Investment Flows*. Ph. D. Dissertation. Yale University.
- Jensen, Nathan. 2003. Conditions, Confidence, and Credibility. The Effects of International Monetary Fund Agreements on Foreign Direct Investment Inflows. Forthcoming, *The Journal of Conflict Resolution*.
- Kahler, Miles. 2001. *Leadership Selection in the Major Multinationals*. Washington D.C.: Institute for International Economics.
- Keohane, Robert O. 1980. The Theory of Hegemonic Stability and Changes in International Economic Regimes, 1967-1977. in Ole Holstie et. al. *Change in the International System*. Boulder: Westview Press.
- Keohane, Robert O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.
- Keohane, Robert O. and Joseph S. Nye. 1977. *Power and Interdependence*. Boston: Little, Brown.
- Kindleberger, Charles P. 1974. *The World in Depression, 1929-1939*. Berkeley: University of California Press.
- Kramer, G. 1971. Short-Term Fluctuations in U.S. Voting Behavior. 1896-1964. *American Political Science Review* 65:131-43.
- Krasner, Stephen D. 1982. Structural Cause and Regime Consequences: Regimes as Intervening Variables. *International Organization* 36 (2): Pages 185-205.
- Krasner, Stephen D. 1983. *International Regimes*. Ithaca: Cornell University Press.

- Lane T., A. R. Ghosh, J. Hamann, S. Phillips, M. Schultz-Ghattas and T. Tsikata. 1999. IMF-Supported Programmes in Indonesia, Korean and Thailand: A Preliminary Assessment. Mimeo.
- Lewis-Beck, Michael. 1988. *Economics and Elections*. Ann Arbor: University of Michigan Press.
- Lohmann, Susan. 1992. Optimal Commitment in Monetary Policy, Credibility Versus Flexibility. *American Economic Review* 82: 273-86.
- Martin, Lisa. 1992. Interests, Power, and Multilateralism. *International Organization* 46 (4): 765-92.
- Martimort, David. 1999. Renegotiation Design with Multiple Regulators. *Journal of Economic Theory*, 88: 261-293.
- McCubbins, Mathew D. and Thomas Schwartz. 1984. Congressional Oversight Overlooked: Police Patrols and Fire Alarms. *American Journal of Political Science*, 28: 165-179.
- McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast. 1987. Administrative Procedures as Instruments of Political Control. *Journal of Law, Economics, and Organization*, 3: 243-277.
- Mearsheimer, John. 1994. The False Promise of International Institutions. *International Security* 19 (3): 5-49.
- Miller, Gary J. and Terry M. Moe. 1983. Politicians, Bureaucrats, and the Size of Government. *American Political Science Review*, 77: 297-322.
- Mosley, Paul. 1991. Conditionality as Bargaining Process: Structural-Adjustment Lending, 1980-86, International Finance Section, Dept. of Economics, Princeton University.
- Mussa, Michael. 2002. *Argentina and the Fund: From Triumph to Tragedy*. Washington D.C.: Institute for International Economics.
- Niskanen, William. 1971. *Bureaucracy and Representative Government*. Chicago: Aldine-Atherton.
- Nordhaus, William. 1975. The Political Business Cycle. *Review of Economic Studies* 42: 169-90.
- Oatley, Thomas. 2003. American Interests and IMF Lending, mimeo, University of North Carolina at Chapel Hill.
- Persson, T. and G. Tabellini. 1990. *Macroeconomic Policy, Credibility, and Politics*. Chur, Switzerland: Harwood Academic Publishers.
- Przeworski, A., and J.R. Vreeland. 2000. The Effect of IMF Programs on Economic Growth *Journal of Development Economics* 62: 385-421.

- Rogoff K. and Sibert A. 1988. Elections and Macroeconomic Policy Cycles. *Review of Economic Studies*. 55(1): 1-16.
- Rogoff K. 1990. Equilibrium Political Budget Cycles. *American Economic Review*. 80(1): 21-36.
- Ruggie, John G. 1975. International Responses to Technology: Concepts and Trends. *International Organization* 29 (3): 557-84.
- Ruggie, John G. 1982. International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. *International Organization* 36 (2): 379-415.
- Ruggie, John G. 1992. "Multilateralism: The Anatomy of an Institution." *International Organization* 46; 533-60.
- Sachs, Jeffrey. (1999). Power Unto Itself. In McQuillan and Montgomery (eds.) *International Monetary Fund: Financial Medic to the World?* Stanford: Hoover Institution Press.
- Sidell, Scott R. 1988. The IMF and Third World Instability: Is There a Connection? Basingstoke: Macmillan.
- Smith, Alastair and James R. Vreeland. 2003. The Survival of Political Leaders and IMF Programs: Testing the Scapegoat Story, mimeo.
- Stein, Arthur A. 1984. The Hegemon's Dilemma: Great Britain, the United States, and the International Economic Order. *International Organization* 38 (2): 355-86.
- Stone, Randall W. 2002. *Lending Credibility: The International Monetary Fund and the Post-Communist Transition*. Princeton, NJ: Princeton University Press.
- Sturm, J.-E., Berger, H. and J. de Haan. 2001. IMF Credit: How Important are Political Factors? A Robustness Analysis, Paper presented at the EPCS meeting 2002.
- Swedberg, Richard 1986. The Doctrine of Economic Neutrality of the IMF and the World Bank, *Journal of Peace Research* 23, 4: 377-90.
- Thacker, Strom C. 1999. The High Politics of IMF Lending. *World Politics* 52: 38-75.
- Tufte, E. 1978. *Political Control of the Economy*. Princeton, NJ. Princeton University Press.
- United Nations. 2002. *Human Development Report: Deepening Democracy in a Fragmented World*. New York: Oxford University Press.
- Vaubel, Roland. 1991. "The Political Economy of the International Monetary Fund: A Public Choice Analysis", in: R. Vaubel and T.D. Willett (Eds.), *The Political Economy of International Organizations: A Public Choice Approach*. Boulder, Co.: Westview Press: 204-244.

- Vaubel, R. 1996. Bureaucracy at the IMF and the World Bank: A Comparison of the Evidence. *The World Economy* 19: 185-210.
- Vaubel, R., A. Dreher, and U. Soylu. 2003. Staff Growth in International Organizations: A Principal-Agent Problem? An Empirical Analysis, University of Mannheim. Mimeo.
- Vreeland, James. R. 2003. *The IMF and Economic Development*. Cambridge: Cambridge University Press.
- Waltz, Kenneth. 1959. *Man, the State and War*. New York: Columbia University Press.
- Waltz, Kenneth. 1979. *Theory of World Politics*. Reading Mass: Addison-Wesley.
- Waterman, Richard W. and Kenneth Meier. 1998. Principal-Agent Models: An Expansion? *Journal of Public Administration Research and Theory*, 8: 173-202.
- Young, Organ R. 1977. *Resource Management at the International Level: The Case of the North Pacific*. London and New York: Pinter and Nichols.

**Table 1: IMF conditionality, Summary Statistics**  
**(206 letters of intent, 38 Countries, 4/1997-2/2003)**

	mean	median	min	max
all conditions	22.19	18.5	5	102
performance criteria	8.96	8	3	21
structural benchmarks	10.70	7	0	94
prior actions	2.56	0	0	39
monetary sector, total	7.32	5	0	79
public sector, total	5.62	5	0	23
monetary sector, performance criteria	2.78	3	0	7
public sector, performance criteria	2.15	2	0	10
monetary sector, structural benchmarks	4.11	1	0	75
public sector, structural benchmarks	2.46	2	0	20
monetary sector, prior actions	0.39	0	0	9
public sector, prior actions	1.02	0	0	15

Source: Dreher and Vaubel (2003)

**Table 2: Total number of IMF Conditions (quarterly panel data, 1997-2003, Poisson, fixed effects)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
voting with USA		-9.01 (3.05***)	-2.93 (1.72*)	-9.00 (3.05***)	-3.02 (1.77*)	-8.59 (2.91***)	-2.64 (1.55)
election within next six months				0.01 (0.06)	-0.04 (0.74)	1.46 (2.77***)	0.45 (2.12**)
voting with USA * election variable						-3.52 (2.78***)	-1.36 (2.38***)
world bank adjustment loans	0.14 (2.12**)	0.15 (2.37**)	0.02 (0.39)	0.15 (2.25**)	0.02 (0.36)	0.14 (2.11**)	0.01 (0.31)
world bank other loans	-0.03 (0.89)	-0.08 (0.56)		-0.04 (0.98)		-0.05 (1.39)	
world bank technical loans	-0.08 (0.55)	-0.08 (0.56)		-0.08 (0.57)		-0.05 (0.32)	
real GDP	-0.03 (4.27***)	-0.03 (4.66***)	-0.02 (3.84***)	-0.03 (4.65***)	-0.02 (3.87***)	-0.03 (4.33***)	-0.02 (3.75***)
real GDP growth (t-1)	0.001 (0.09)	-0.001 (0.06)		-0.0003 (0.04)		0.001 (0.08)	
real per capita GDP growth in OECD countries (t-1)	0.59 (5.11***)	0.48 (3.94***)	0.46 (4.32***)	0.48 (3.94***)	0.45 (4.23***)	0.50 (4.05***)	0.47 (4.43***)
LIBOR (t-1)	0.11 (1.85*)	0.26 (3.32***)	0.14 (2.77***)	0.26 (3.32***)	0.14 (2.80***)	0.25 (3.18***)	0.14 (2.69***)
government consumption (in percent of GDP, t-1)	-0.01 (0.35)	0.02 (0.40)		0.02 (0.40)		0.04 (1.03)	
government budget deficit (in percent of GDP, t-1)	0.004 (0.06)	0.004 (0.62)		0.004 (0.61)		0.01 (0.84)	
monetary expansion (percent, t-1)	0.01 (4.58***)	0.02 (5.32***)	0.01 (5.13***)	0.02 (5.32***)	0.01 (5.17***)	0.02 (5.28***)	0.01 (5.21***)

Table 2 (continued)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
change in international reserves (t-1)	-0.002 (0.97)	-0.001 (0.34)		-0.001 (0.34)		0.0002 (0.01)	
current account balance (in percent of GDP, t-1)	-0.01 (0.90)	-0.002 (0.31)		-0.002 (0.30)		-0.001 (0.10)	
new net IMF credit (in percent of quota, t-1)	-0.0004 (0.74)	-0.001 (0.91)		-0.001 (0.87)		-0.001 (1.13)	
log likelihood	-250.76	-246.01	-399.22	-246.01	-398.94	-241.98	-396.08
number of countries	19	19	29	19	29	19	29
number of observations	92	92	139	92	139	92	139

Notes:

z-statistics in parentheses

Levels of significance: 1 percent (\*\*\*), 5 percent (\*\*), 10 percent (\*)

**Table 3: Total number of IMF Conditions in the monetary sector  
(quarterly panel data, 1997-2003, Poisson, fixed effects)**

	(1)	(2)	(3)	(4)	(5)	(6)
voting with USA	-6.97 (2.03**)	-9.88 (1.76*)	-6.59 (1.91*)	-9.52 (1.69*)	-6.49 (1.88*)	-9.59 (1.71*)
election within next six months			0.16 (1.68*)	0.14 (0.92)	1.12 (2.27**)	0.86 (0.83)
voting with USA*election variable					-2.53 (1.98**)	-1.79 (0.70)
world bank adjustment loans	0.09 (1.30)	0.04 (0.37)	0.11 (1.54)	0.08 (0.70)	0.09 (1.36)	0.08 (0.67)
world bank other loans		-0.01 (0.12)		-0.02 (0.25)		-0.03 (0.34)
world bank technical loans		-0.28 (1.16)		-0.33 (1.32)		-0.30 (1.19)
real GDP	-0.02 (2.22**)	-0.03 (2.36**)	-0.01 (2.12**)	-0.03 (2.32)	-0.01 (2.14**)	-0.03 (2.28**)
real per capita GDP growth in OECD countries (t-1)	0.48 (2.01**)	-0.003 0.22	0.51 (2.14**)	0.69 (2.76***)	0.56 (2.33**)	0.70 (2.79***)
LIBOR (t-1)	0.27 (2.32**)	0.32 (2.00**)	0.26 (2.24**)	0.32 (1.96**)	0.26 (2.23**)	0.32 (1.97**)
government consumption (in percent of GDP, t-1)		-0.03 (0.53)		-0.03 (0.40)		-0.02 (0.27)
government budget deficit (in percent of GDP, t-1)		-0.01 (1.14)		-0.01 (0.78)		-0.01 (0.77)
monetary expansion (percent, t-1)	0.01 (3.33***)	0.01 (1.08)	0.01 (2.79***)	0.01 (0.97)	0.01 (2.99***)	0.01 (1.07)
change in international reserves (t-1)		0.01 (2.22**)		0.01 (2.04**)		0.01 (2.08**)
current account balance (in percent of GDP, t-1)		-0.02 (1.42)		-0.02 (1.32)		-0.02 (1.27)
new net IMF credit (in percent of quota, t-1)		-0.001 (1.82*)		-0.001 (1.44)		-0.001 (1.53)
log likelihood	-221.89	-146.94	-220.50	-146.52	-218.52	-146.27
number of countries	29	19	29	19	29	19
number of observations	139	92	139	92	139	92

Notes:

z-statistics in parentheses

Levels of significance: 1 percent (\*\*\*), 5 percent (\*\*), 10 percent (\*)



**Table 4: Total number of IMF Conditions in the public sector  
(quarterly panel data, 1997-2003, Poisson, fixed effects)**

	(1)	(2)	(3)	(4)	(5)	(6)
voting with USA	-2.76 (0.83)	-11.25 (1.88*)	-2.93 (0.88)	-11.46 (1.92*)	-2.31 (0.70)	-11.45 (1.92*)
election within next six months			-0.11 (0.87)	0.46 (1.96**)	1.78 (3.72***)	0.62 (0.50)
voting with USA*election variable					-5.79 (4.03***)	-2.82 (0.88)
world bank adjustment loans	-0.13 (1.20)	0.25 (1.42)	-0.11 (1.06)	0.24 (1.37)	-0.10 (0.92)	0.21 (1.18)
world bank other loans		0.02 (0.32)		0.04 (0.55)		0.03 (0.43)
world bank technical loans		-0.04 (0.13)		-0.12 (0.36)		-0.03 (0.11)
real GDP	-0.03 (1.56)	-0.02 (1.00)	-0.03 (1.62)	-0.02 (1.14)	-0.03 (1.77*)	-0.02 (1.13)
real per capita GDP growth in OECD countries (t-1)	0.27 (1.42)	0.21 (0.85)	0.26 (1.32)	0.27 (1.11)	0.34 (1.72*)	0.28 (1.15)
LIBOR (t-1)	-0.01 (0.10)	-0.03 (0.18)	-0.004 (0.04)	-0.01 (0.09)	0.01 (0.08)	-0.01 (0.05)
government consumption (in percent of GDP, t-1)		0.12 (0.18)		0.10 (1.07)		0.12 (1.27)
government budget deficit (in percent of GDP, t-1)		0.002 (0.14)		-0.01 (0.32)		-0.002 (0.20)
monetary expansion (percent, t-1)	0.01 (2.21**)	0.02 (3.43***)	0.01 (2.34**)	0.02 (3.07***)	0.01 (2.55**)	0.02 (3.08***)
change in international reserves (t-1)		-0.0003 (0.06)		-0.001 (0.26)		-0.001 (0.10)
current account balance (in percent of GDP, t-1)		0.01 (0.60)		0.01 (0.52)		0.01 (0.73)
new net IMF credit (in percent of quota, t-1)		0.003 (1.25)		0.004 (1.73***)		0.003 (1.58)
log likelihood	-237.23	-143.56	-236.85	-141.56	-228.27	-141.17
number of countries	29	19	29	19	29	19
number of observations	139	92	139	92	139	92

Notes:

z-statistics in parentheses

Levels of significance: 1 percent (\*\*\*), 5 percent (\*\*), 10 percent (\*)

**Table 5: Total number of IMF Conditions by sector (quarterly panel data, 1997-2003, Poisson, fixed effects)**

	performance criteria			structural benchmarks			prior actions		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
voting with USA	-1.47 (0.59)	-1.44 (0.57)	-0.93 (0.36)	-7.72 (2.73***)	-7.87 (2.78***)	-7.36 (2.60***)	-0.93 (0.18)	-0.56 (0.11)	-1.92 (0.37)
election within next six months		0.01 (0.13)	0.46 (1.42)		-0.09 (1.04)	1.38 (3.68***)		-1.09 (3.88***)	0.42 (0.38)
voting with USA*election variable			-1.33 (1.44)			-3.91 (3.99***)			-5.03 (1.40)
world bank adjustment loans	-0.01 (0.13)	-0.01 (0.14)	-0.01 (0.07)	0.06 (1.07)	0.05 (0.86)	0.03 (0.56)	-0.25 (1.34)	-0.06 (0.28)	0.14 (0.56)
real GDP	-0.002 (0.29)	-0.002 (0.28)	-0.001 (0.25)	-0.02 (4.46***)	-0.03 (4.50***)	-0.03 (4.45***)	0.09 (1.58)	0.09 (1.56)	0.09 (1.53)
real per capita GDP growth in OECD countries (t-1)	0.06 (0.40)	0.06 (0.41)	0.09 (0.58)	0.87 (4.56***)	0.86 (4.47***)	0.96 (4.89***)	0.14 (0.38)	0.04 (0.11)	-0.03 (0.09)
LIBOR (t-1)	-0.003 (0.04)	-0.004 (0.06)	-0.01 (0.07)	0.22 (2.56**)	0.23 (2.61***)	0.21 (2.43**)	0.44 (2.19**)	0.38 (1.87*)	0.36 (1.78*)
monetary expansion (percent, t-1)	0.001 (0.23)	0.001 (0.21)	0.001 (0.25)	0.01 (5.92***)	0.02 (5.96***)	0.02 (6.36***)	0.003 (0.35)	0.003 (0.36)	0.01 (0.52)
log likelihood	-216.82	-216.81	-215.78	-375.54	-374.99	-366.92	-127.67	-119.09	-118.05
number of countries	29	29	29	29	29	29	20	20	20
number of observations	139	139	139	139	139	139	85	85	85

Notes:

z-statistics in parentheses

Levels of significance: 1 percent (\*\*\*), 5 percent (\*\*), 10 percent (\*)

## Appendix: Descriptive Statistics and Data Sources

Variable	Data Source	Mean	Std. Dev.
Voting with US	www.un.org	0.36	0.13
Dummy for elections	Election Watch in Journal of Democracy, Various years; Alan J. Day ed. Political Parties of the World, 5th Edition, (UK: John Harper Publishing, 2002); <a href="http://www.electionworld.org">http://www.electionworld.org</a> .	0.08	0.27
World Bank adjustment loans	www.worldbank.org	0.15	14.95
World Bank other loans	www.worldbank.org	0.57	0.96
World Bank technical loans	www.worldbank.org	0.05	0.22
GDP (billion US\$, real)	IMF (2003)	18.74	53.83
GDP growth rate	IMF (2003)	1.65	12.00
real per capita GDP growth in OECD countries	OECD (2003)	0.61	0.38
LIBOR	IMF (2003)	4.53	1.84
Government consumption (in percent of GDP)	IMF (2003)	15.18	5.60
Government budget deficit (in percent of GDP)	IMF (2003)	11.72	148.84
Monetary expansion (percent)	IMF (2003)	19.81	27.54
Change in international reserves (percent)	IMF (2003)	3.85	20.76
Current account balance (in percent of GDP)	IMF (2003)	-45.37	599.82
Change in IMF liabilities (percent of Quota)	IMF (2003)	0.39	55.51