# Courant Research Centre

## 'Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis'

**Georg-August-Universität Göttingen**
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Discussion Papers

**No. 36**

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**June 2010**

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# Does membership on the UN Security Council influence IMF conditionality?

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June 2010

**Abstract:** We investigate whether elected members of the United Nations Security Council receive favorable treatment from the International Monetary Fund (IMF), analyzing panel data on the level of conditionality attached to (a maximum of) 314 IMF arrangements with 101 countries over the period of 1992 to 2008. We find a negative relationship: Security Council members receive about 30 percent fewer conditions attached to the loans that they receive from the IMF. We conclude that conditionality is softer for these countries because the major shareholders of the IMF desire influence over the Security Council.

**Keywords:** IMF, UN Security Council, Voting, Aid, Conditionality
**JEL-Codes:** O19, O11, F35

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## 1. Introduction

Recent evidence suggests that temporary members of the United Nations Security Council (UNSC) receive increased foreign aid from several sources, including the International Monetary Fund (IMF). Presumably, the aid goes towards winning favorable votes for decisions of the Security Council on censures, economic sanctions, and military action. As the argument goes, the major shareholders of the IMF – the United States, Japan, Germany, France, and the United Kingdom – desire influence on the Security Council and can pool the costs of that influence by lending through the IMF. The governments of some developing countries may care more about the foreign exchange that the IMF can provide than they care about the global security issues considered important by the IMF's major shareholders. Trades of UNSC votes for IMF loans are thus possible.

But are IMF loans really such a prize? The answer is not immediately obvious. IMF loans are not provided entirely upfront – in order to receive continued disbursements of the loans, governments are expected to comply with specific policy conditions, reviewed on a quarterly basis. These arrangements are notorious for stringent and controversial economic austerity. During the East Asian Financial Crisis, for example, desperately needed liquidity came at the price of national sovereignty as the IMF required tight monetary policy and fiscal contraction in return for continued disbursements of credit. The image of the IMF managing director standing with arms crossed over the president of Indonesia as he signed an IMF arrangement has become emblematic of what leaders of developing countries have complained about for decades: Conditionality. If IMF loans come with strict policy conditions, how can they be considered a reward by countries serving on the UNSC?

One possibility is that conditionality is less stringent when loans go to countries considered strategically important by the IMF major shareholders. Stone (2002, 2004) shows, for example, that the punishment for noncompliance with IMF conditions is significantly weaker for countries that are considered important to the United States. It is also possible that the conditions themselves are fewer in number and severity for countries favored by the most powerful members of the IMF (Dreher and Jensen 2007, Stone 2008). This would explain why countries that vote with the United States, Japan, Germany, France, and the United Kingdom at the United Nations General Assembly are more likely to receive IMF loans (see Thacker 1999, Barro and Lee 2005, Copelovitch 2010).

Do UNSC members receive fewer conditions? In previous work (Dreher et al. 2009), we compare 15 cases of UNSC members with 124 other cases and find a significant difference. This analysis suffered, however, from the use of limited data coming from

unofficial sources. The reason can be summarized in a word – transparency – or rather the IMF's historical lack thereof. Until relatively recently, an IMF arrangement – formally called a Letter of Intent (LOI) – was kept secret for many years before being made available at the IMF archives in Washington, DC. Since 1999, however, nearly all IMF arrangements have been posted on the IMF website. In January 2001, the Executive Board took the "Transparency Decision," making information about the IMF's operations more accessible to the public. In our previous work, the data came from Dreher (2004) and Dreher and Jensen (2007), who code the number of conditions in IMF arrangements that were publicly available on the Internet. Since then, the IMF has continued its successful and admirable efforts to become a more open institution. After years of asking, we have finally obtained access to the IMF's Monitoring of Fund Arrangements (MONA) database. The IMF official dataset contains many more cases than our old dataset and provides more details. For example, beyond looking at the number of conditions, we can now disaggregate the data by the type of policy condition and by the type of arrangement. We can also consider the scope of conditionality in terms of the number of different policy areas that conditionality covers. The data cover 101 countries over the period of 1992 to 2008 for a total of 314 IMF arrangements detailing thousands of specific policy conditions.[1]

To foreshadow our results, we find that temporary members of the UNSC receive fewer conditions than other countries participating in IMF programs. The magnitude of the average annual effect is substantial: About two and a half fewer conditions. Considering that programs include an average of about eight policy conditions,[2] UNSC members receive about 30 percent fewer conditions. More specifically, the IMF requires fewer prior actions to receive loans and fewer performance criteria to continue receiving loans. We find weaker results with respect to structural benchmarks and the overall scope of conditionality, although there is evidence that the scope of the policy areas covered by the performance criteria is narrower for UNSC members. The overall effect appears to be especially driven by specific policy areas such as conditionality related to repaying debt, conditions related to trade and the balance of payments, domestic pricing, and detailed conditions referring to information technology systems employed by the government bureaucracy.

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[1] This IMF arrangements database which we have extracted from the MONA data will be made available at http://www.kof.ethz.ch/imf-mona after publication of this paper.

[2] Note that the number of conditions typically reported in official IMF statistics is considerably higher than this. We provide more details on how we calculate the average number of conditions below.

In the remainder of this paper, we describe our data (section 2) and methodology (section 3) in more detail. Section 4 presents the results of our analysis, and section 5 concludes.

## 2. Data

Table 1 presents descriptive statistics of our dependent variables. Our data cover three types of conditioned IMF arrangements, which differ according to their time horizons and interest rates: Stand-by Arrangements (SBA) and Extended Fund Facility (EFF) arrangements, which we group together, and Poverty Reduction and Growth (PRGF) arrangements.[3]

[Table 1 here]

**(a) Dependent variables:** Measuring the level of conditionality in IMF arrangements is not straightforward. Conditionality varies across arrangements according to the severity of the policy conditions, the number of conditions, the nature or type of the condition (whether it is a performance criterion, a required prior action, or a structural benchmark), and the scope or breadth in terms of the number of policy areas addressed. There are also different types of IMF arrangements – those for the most impoverished countries and those for other, more developed countries. Data on the precise severity of conditions are not systematically available (see Vreeland 2006 for a discussion). Data on the number, type, and scope of conditions are available. Thus, we define the level of conditionality in two ways (1) the *number* of conditions, and (2) the *scope* of conditionality. We consider each of these by the type of condition, and the type of arrangement. Here, we consider each of these – type of arrangement, type of condition, number of conditions, and scope of conditionality – in turn:

*Type of arrangement:* The IMF provides loans through various facilities. The most common type of arrangement dates back to 1951: The Standby Arrangement (SBA). These are supposed to last one to two years, but in many cases they have lasted much longer. In the 1970s, recognizing that many governments entered into consecutive SBAs, the IMF opened

[3] The PRGF was previously called the Enhanced Structural Adjustment Facility (ESAF), and it was recently renamed again as the Extended Credit Facility (ECF). We also include in this category arrangements under the ESAF's predecessor, the Structural Adjustment Facility (SAF). We intend to make this database available at http://www.kof.ethz.ch/imf-mona.

the Extended Fund Facility (EFF) for arrangements intended to last about four years. The nature of conditionality did not change, just the explicit time horizon. We thus group these types of arrangements together. In the 1980s, the IMF opened the Structural Adjustment Facility (SAF) and the Enhanced Structural Adjustment Facility (ESAF) – later renamed the Poverty Reduction and Growth Facility (PRGF). These types of arrangements did represent a change in conditionality, as they were supposed to promote economic development in the poorest countries. We thus group these facilities as separate from SBAs/EFFs.

*Type of condition:* The type of condition refers to how and when the IMF measures compliance. The vast majority are "performance criteria" – they account for 14,962 of the 22,810 quarterly conditions in our dataset. (Note that in the original dataset the same conditions are repeated each time they are reviewed – usually four times per year. We correct for this repeated counting below.) These include fiscal deficit targets that the government is expected to achieve over the course of an arrangement in order to receive continued loan disbursements. There are also "prior actions" that governments are required to take before the IMF makes the first loan disbursement. There are 2,559 of these conditions in our dataset. Finally, there are "structural benchmarks," such as the privatization of national assets. There are 5,429 of these conditions in the dataset.[4]

*The number of conditions:* The number of conditions has been used as a proxy for stringency of conditionality in several previous studies (e.g., Ivanova et al. 2003, Gould 2003, Dreher 2004, Bulíř and Moon 2004, Dreher and Vaubel 2004, Dreher and Jensen 2007, Copelovitch 2010). While imperfect, because it does not capture the severity or depth of any individual condition, the data are readily available and have been shown in previous studies to proxy for the degree of conditionality in ways that various theories predict.

Importantly, the data are provided by the IMF as the cumulative number of conditions evaluated during each quarter of the year(s) an arrangement is in force. Not all of the conditions enter an arrangement when it is initiated; some are added and subtracted over time.[5] Ideally, we would want to count only those conditions that were included at the

[4] In 140 cases the condition is labeled as both prior action and structural benchmark.

[5] Consider the example of Albania's June 26, 2006 PRGF Arrangement. The Letter of Intent (dated January 11, 2006) contained a ceiling on net domestic credit to the government, to be tested by the end of March and the end of September (as performance criteria). On July 14, 2006 and January 11, 2007, Albania submitted follow-up Letters of Intent. In July, a prior action and a structural performance criterion were added; ten structural

initiation of a program. But the structure of the MONA database (as we have access to) does not provide this information. We know only for certain the total number of conditions that were evaluated, not their timing.[6] A specific performance criterion is usually included throughout all quarters of the program, while prior actions and benchmarks come and go. For our analysis, we calculate the sum of all of these conditions. As the resulting number is obviously larger the longer a program is in effect, we divide by the number of quarters.[7] While the average number of conditions is a good proxy for the number of performance criteria, which tend to be consistently evaluated each quarter, it represents a lower bound for structural benchmarks and prior actions, which may not be evaluated each quarter. Still, dividing by the number of quarters avoids over-counting individual conditions and gives our variable the proper order of magnitude in a yearly setup. We also control for the duration of the arrangement (see below).

*The scope of conditionality:* The scope of conditionality is a new approach, suggested by Stone (2008). Sometimes several conditions refer to one policy area, but as conditions cover a broader scope of distinct policy areas, the effective level of conditionality imposed on a government increases. To capture the scope of IMF conditionality, we categorize all conditions into one of 20 policy areas. We then sum the total number of policy areas that an arrangement covers. Note that unlike the number of conditions, the data are provided as the total number of policy areas for the duration of the arrangement (in other words, policy areas are not repeatedly counted for each quarter). Still, the scope can only increase over the duration of an arrangement as new conditions come into effect over time. We, therefore, control for the duration of the arrangement (see below). Most of the policy area categories are straightforward: Arrears, balance of payments/reserves, the broad capital account, central bank reform, government credit, debt, exchange system, financial sector, governance, government budget, monetary ceiling, pricing, private sector reforms, privatization, public

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benchmarks were also included – some of which had already been included in the first Letter, while others had not. The January 2007, Letter of Intent again contained the performance criterion on credit to the government, to be tested on March and September 2007.

[6] In the example of Albania, we therefore observe (among others) four quantitative performance criteria on credit to the government from the first and the third Letter of Intent, four prior actions, and three structural performance criteria. In addition to the ten structural benchmarks included in the first Letter, the number of additional benchmarks entering in the other Letters of Intent would also be included.

[7] The number of quarters are determined by comparing the last known review date with the approval date of the arrangement.

sector, social sector (including expenditures), trade, wages & pensions, "systemic," and a final residual category. The last two policy areas merit more description. The "systemic" category is identified explicitly in the IMF database and refers to various – rather specific – policies, mainly pertaining to the information technology employed by the government.[8] The residual category includes specific policy conditions that otherwise defy categorization.

**(b) Independent variable:** Our key independent variable of interest is temporary membership on the UNSC.[9]

By no means a random draw, membership appears to be largely idiosyncratic due to varying regional norms. The ten elected seats are allocated by region, with three seats for Africa, two for Asia, two for Latin America, one for Eastern Europe, and two for the Western Europe and Others group. As discussed in Dreher et al. (2009) different regions follow different norms. Africa typically rotates. Latin America and Asia hold competitive elections with regional hegemons winning most often (e.g., Brazil and Japan). Western Europe has a mixture of rotation and competitive elections. Eastern Europe, since the Cold War (when most of them joined the IMF), has exhibited no pattern.

Typically, regions agree on a clean slate of nominations in advance, which is then ratified by the United Nations General Assembly. Sometimes competitive elections are held, decided by a two-thirds majority rule by the Assembly. Two-year term limits are strictly enforced, which helps to reinforce the exogeneity of the selection process. Elections are held in the fall every year. Since it is often known in the run up to the election who will be selected, we code our UNSC membership indicator variable one for the year of election, as well as for the two years during which a country serves on the Security Council – and zero

[8] Scholars have documented the growth of IMF micro-conditionality over the 1990s (see Vreeland 2007, Dreher 2009, Babb and Buira 2005, Dreher and Vaubel 2004, and Bird 2001). Examination of this category shows the extent. Examples include the computerization of hydrocarbon customs procedures, the updating of the administrative status of civil servants and roster, TIMS customs software, computerization of customs offices, government payroll system computer interface, the introduction of version 1.16f or ASYCUDA (Automated System for Customs Data), and the complete transfer of all taxpayers' files. There are also 32 "systemic" conditions that are opaquely referred to as "ownership reform." Ownership refers to policy conditions developed by governments through their own initiative, and so these appear to be informational technology systems policies suggested by recipient governments.

[9] In our analysis below, we would like to test our hypothesis on the permanent UNSC members – particularly Russia (the other permanent members never participated in IMF arrangements during our sample years). But country-fixed effects are too important to ignore. With country fixed effects, permanent members drop out of the analysis.

otherwise (all existing work on UNSC membership show that the benefits drop off immediately when a term ends).

**(c) Control variables:** Following the numerous previous studies cited above, we include as determinants of IMF conditionality variables that have been found to influence participation in IMF arrangements more generally. We thus draw on the robust determinants of IMF arrangements according to the extreme bounds analysis of Sturm et al. (2005).

Specifically, we employ an indicator for lagged legislative election year (Beck et al. 1999), gross capital formation as a percent of gross domestic product (World Bank 2008), total debt service as a percent of gross national income (World Bank 2008), total international reserves as a percent of total external debt (World Bank 2008), total external debt as a percent of gross national income (World Bank 2008) and the external balance on goods and services as percent of gross domestic product (World Bank 2008). We tested many other variables, but they were generally not statistically significant at conventional levels.[10]

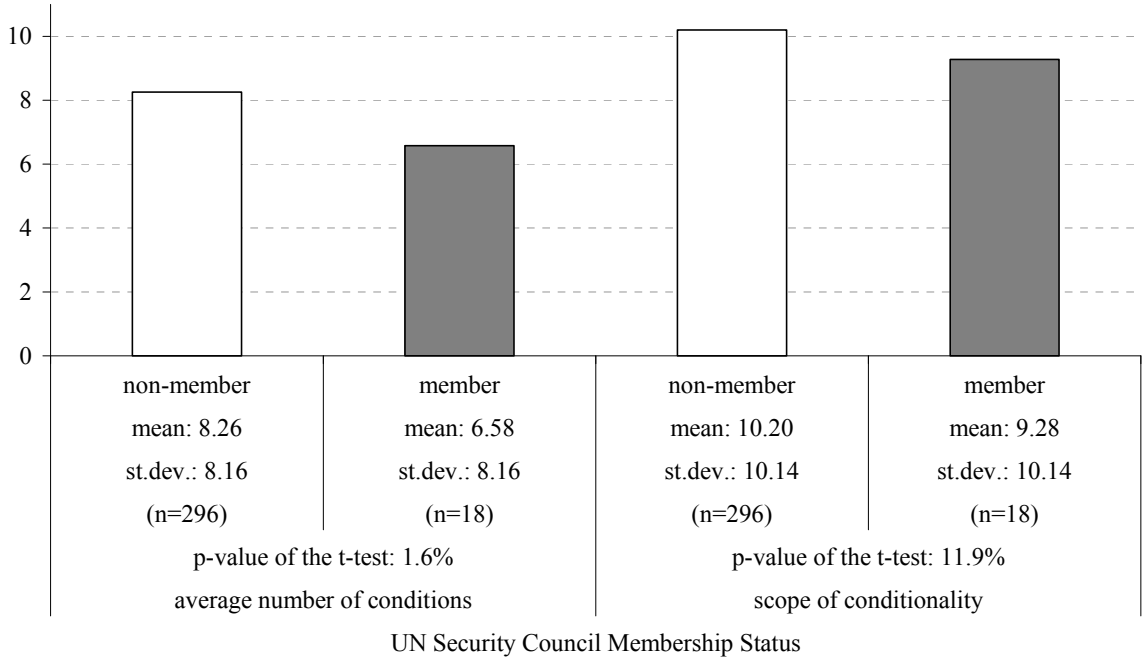
We also control for the number of quarters that an arrangement is in effect. As mentioned above, conditions are sometimes added or subtracted over the course of an arrangement. For the number of conditions, MONA reports the total that are evaluated each quarter, thus counting most conditions multiple times (for example, if a condition is in effect for an entire year, it is counted four times for that year – once for each quarter). We normalize this dependent variable by dividing by the total number of quarters an arrangement is in effect. Scope of conditionality is reported as the total number of policy areas for the entire duration of the arrangement. Policies are thus not counted multiple times, and there is no need to divide this variable by the total number of quarters an arrangement is in effect. For both dependent variables, however, we do include as a control variable the total number of quarters an arrangement is in effect.

**(d) Descriptive evidence:** Figure 1 presents descriptive evidence supporting our hypothesis. For a typical country – not a member of the Security Council – the average number of conditions is 8.4 and the average scope of conditionality covers 10.2 areas. For UNSC

[10] The additional variables we tested include GDP per capita (constant 2000 US$), an indicator of democracy, government fractionalization, a left-wing government indicator, US foreign aid (% of GDP), short-term debt as a share of total debt, trade (% of GDP), changes in net reserves (BoP, current US$), deposit interest rate (%), general government final consumption expenditure (% of GDP), money and quasi money (M2) as % of GDP, use of IMF credit (DOD, current US$), GDP growth (annual %), and total reserves in months of imports. These results are available on request.

members, however, conditionality appears less stringent: The average number of conditions is 6.7 and the average scope of conditionality covers 9.3 areas. The t-tests indicate that the relationship between UNSC membership and number of conditions is statistically significant but the relationship with the scope of conditionality is not. The evidence is weakly suggestive at best, thus we turn to more rigorous analysis.

**Figure 1: Temporary UNSC membership and IMF conditionality**




## 3. Method

In our analysis below, we begin with OLS regression analysis, controlling for fixed country effects. We then adopt a feasible Generalized Least Squares (hereafter, GLS) fixed effects estimator to control for country unobservables, to correct for AR(1) autocorrelation within panels (where needed), and to address heteroskedasticity across countries.[11] We thus test:

[11] Autocorrelation is an issue for the scope of conditionality, but not for the number of conditions. For the latter, there is no sign of significant autocorrelation, and hence we only correct for heteroskedasticity. Note that we correct for autocorrelation across consecutive arrangements, not necessarily consecutive years. The GLS estimator has been shown to perform efficiently under heteroskedasticity and autocorrelation as compared to standard panel estimators. Note that the GLS correction for a single AR(1) term is unlikely to cause the standard errors to be flawed as would be the case employing the Parks correction with individual AR(1) terms for each country (Beck and Katz 1995: 637). In the specifications explaining the scope of conditionality the Wooldridge

$$C_{it} = \alpha_i + \beta_1 UNSC_{it} + \beta_2 Z_{it} + u_{it}, \quad (1)$$

where $C_{it}$ is, alternatively, the average *number* or the *scope* of conditions in country $i$ for the arrangement beginning in year $t$. *UNSC* represents the indicator for temporary UNSC membership for country $i$ in year $t$, and $Z$ is a vector of the control variables described in the previous section, again for country $i$ in year $t$. The $\beta$-vectors capture the effects of these variables. Country fixed effects are represented by $\alpha_i$, and $u_{it}$ is the error term.

## 4. Results

We have several sets of results. Note that in each table, we present two sets of control variables, a "full" set, and a subset that includes fewer variables. The subset of variables is selected by a general to specific procedure applied to the average number of conditions and the scope of these conditions. Consequently, the subset differs across these two dimensions.

First, we consider the average number of conditions. Table 2 considers the number of conditions using fixed effects OLS and GLS models. Given significant heteroskedasticity – as indicated by the Breusch-Pagan test – inference needs to be based on the GLS model, and we thus report only GLS results in subsequent tables. Table 3 presents results for the number of conditions by conditionality type (performance criteria, prior action, or structural benchmark). Table 4 presents results for the number of conditions by type of IMF arrangement (EFF/SBA or PRGF).

We then consider the scope of conditionality. Table 5 uses fixed effects OLS and GLS. Again GLS is preferred – this time because of significant autocorrelation – and thus these results are reported in the subsequent tables. Table 6 presents results for the scope of conditionality by conditionality type, and table 7 presents the scope of conditionality by type of IMF arrangement.

Finally, we consider the scope of conditionality in more detail: Table 8 presents the effect of our principal independent variable of interest – UNSC membership – on the number of conditions in each of the 20 policy areas mentioned above.

**(a) The effect of temporary UNSC membership on the number of conditions:** Throughout tables 2 to 4, our principal independent variable of interest – UNSC membership – has a

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test for serial correlation in panel-data models rejects the hypothesis of no AR(1) at conventional levels of significance. The procedure of estimation employed here is standard in the recent literature (see, e.g., Kilby 2006).

statistically significant negative effect on the average number of conditions, consistent with the suggestive results presented in figure 1 above. The finding holds whether we employ the OLS or the GLS model, and it holds in the presence of our control variables.

Regarding the type of condition (table 3), our finding holds for both performance criteria and for prior actions at the one percent level of significance, regardless of the set of control variables we include. For structural benchmarks, the effect of UNSC membership is negative, as expected, but not robust – it is significant at the ten percent level when we include election year and external debt as control variables, but not when we drop them or when we include the full set of control variables.

Regarding the type of program (table 4), again our finding holds for the SBA/EFF types of IMF arrangements as well as the concessional PRGF arrangements. For the SBA/EFF arrangements, the significance is only at the ten percent level when we control only for number of quarters, though the significance is at the one percent level with the full set of control variables. We see a similar pattern for PRGF arrangements, where the effect of UNSC membership is negative and significant at the five percent level without the full set of control variables, and significant at the one percent level with the control variables. As for the magnitude of the effect, the lower bound of the 95 percent confidence intervals from the "full GLS-FE" model in table 2 is -3.16 conditions, while the upper bound is -1.90 conditions. Considering that the average number of conditions is about eight, we can say with 95 percent confidence that the effect of UNSC membership is to reduce conditionality by 23 to 39 percent.

**(b) The effect of temporary UNSC membership on the scope of conditions:** In contrast to the results for the number of conditions, the effect of UNSC membership is not robustly statistically significant for the scope of conditionality. For the sample presented in table 5, the UNSC membership coefficient has the expected negative coefficient, but it is neither statistically significant in the OLS nor in the GLS models, regardless of the control variables we include.

Regarding the type of condition (table 6), there is some evidence that the scope of performance criteria is narrower for UNSC members. The effect is negative and statistically significant in our larger samples, when we leave out the control variables or when we include only total foreign reserves and external balance on goods and services. But the finding does not hold when we include the full set of control variables. Whether this is due to missing data or the presence of important control variables is not obvious, although we suspect the former

because none of the control variables are statistically significant for performance criteria. Because the average scope of performance criteria covers about 7.3 policy areas, and the effect is about 1.5 (without the insignificant control variables), UNSC membership appears to reduce the scope of performance criteria by about 20 percent. We can say with 95 percent confidence that the effect of UNSC membership is to reduce the scope of performance criteria by 0.3 to 2.7 topics, or 4 to 37 percent (based on column (1) in Table 6). The negative effect makes sense since these are the most common conditions, and, importantly, compliance with them is usually the key to receiving continued loan disbursements.

As for prior actions and structural benchmarks, we find no evidence of a statistically significant effect of UNSC membership. Regarding the type of arrangement (table 7), again, we find no evidence of a statistically significant effect of UNSC membership for either EFF/SBA programs or PRGF programs.

**(c) The effect of control variables:** Perhaps the most interesting of our control variables is lagged legislative elections, which has a positive significant effect (at the 10 percent level in the OLS model and at the 5 percent level in the GLS model, table 2), consistent with other findings in the literature. The finding holds for type of condition (table 3), and for EFF/SBA programs (table 4). While it does not hold for PRGF programs (table 3), it should be noted that this type of program is exclusively for the poorest countries in the world, countries where meaningful elections have historically been rare (see Przeworski et al. 2000). By and large, we do not find the same effect of elections on the scope of conditionality (tables 5-7), although it does hold for the scope of conditions for EFF/SBA programs.

There are a number of potential explanations for the positive effect of lagged elections. It may result from stricter IMF conditionality following expansionary policies during the run up to elections. Alternatively, the election result may arise from less experienced negotiators of new governments. Or perhaps governments are willing to accept the highest level of austere conditionality when the next election is furthest away (see Przeworski and Vreeland 2000 and Vreeland 2003). Indeed, both the IMF and governments are strategic actors who must take account of what is politically possible. As elections approach, high levels of conditionality may result in the eviction of incumbents and the collapse of an IMF program.

Strangely, the control variables accounting for economic circumstances do not perform as well. External debt has a negative effect, indicating fewer conditions if debt is a larger share of gross national income. This effect may result from the ironically strong

negotiation posture of a heavily indebted government that can threaten default on large loans. Yet, the effect is not robust. It is only statistically significant at conventional levels in the GLS model; it is not significant in the OLS model (table 2). It does hold for performance criteria and prior actions (table 3); it does not hold for EFF/SBA programs but does hold for PRGF arrangements (table 4). It does not hold for the scope of conditionality (tables 5-7).

Debt service as a percent of gross national income has a similarly non-robust negative effect (table 2), which does not hold at the level of condition type (table 3). For EFF/SBA programs, debt service has a positive significant effect, which is more in line with the literature – more indebted countries receive harsher conditionality. But it strangely has a negative significant effect for PRGF arrangements, perhaps reflecting the concessional nature of these programs (table 4). We detect no statistically significant effect of debt service for the scope of conditionality (tables 5-7).

Total reserves has a negative effect on the number of conditions, though its significance is not robust (table 2). The finding does not hold for performance criteria but does hold for prior actions and structural benchmarks (table 3). The effect is positive but not statistically significant when we focus alternatively on EFF/SBA and PRGF arrangements (table 4). Turning to the scope of conditionality, we find a negative effect, although, again, the finding is not robust (table 5). The effect is negative but not statistically significant for the various types of conditions (table 6) and the different types of programs (table 7). The negative effect of reserves is consistent with arguments that countries with the lowest levels of foreign reserves have the weakest negotiation posture with the IMF and thus must accept higher levels of conditionality (see Bird 1995, Vreeland 2003).

The effect of external balance on goods and services as a percentage of GDP is the most inconsistent of any of our control variables. Notably, we detect a negative effect that is significant for PRGF arrangements. It seems that when poor countries that receive PRGF arrangements run negative external balances, the number and scope of structural conditionality is higher. This makes sense and is consistent with the literature. The effect does not hold for other situations – namely for the middle income countries receiving SBA/EFF arrangements – and strangely runs in the opposite direction.

The effect of investment as a percentage of GDP is not statistically significant at conventional levels in twelve of the thirteen regressions we consider. The exception is for PRGF programs, where it has a positive effect on the number of conditions, significant at the one percent level. So, for poor countries with high levels of investment, more conditionality applies. Otherwise, we find no evidence that investment impacts level of conditionality, even

though the variable has been found in many studies to have a negative effect on the likelihood of participation in IMF programs.

Throughout our regressions, the number of quarters variable has the expected effects. It is negative for the average number of conditions (tables 2-4), where number of quarters is the denominator of the dependent variable, and it is positive for the scope of conditionality (tables 5-7), where, by definition, scope can only increase over the duration of an arrangement. Throughout most of our regressions, these relationships are statistically significant.

**(d) The effect of temporary UNSC membership on specific policy areas:** We conclude this section by returning to the effect of our principal variable of interest, UNSC membership, on specific policy areas. Table 8 reports the effect of temporary UNSC membership on the average number of conditions in each of the following specific policy areas: Debt, Government Budget, Monetary Ceiling, Financial sector, BOP/ Reserves, Credit to Government, Public Sector, Trade, Systemic, Pricing, Arrears, Governance, Privatization, Exchange system, Wages & Pensions, Central Bank Reform.[12] For each of these areas, we test for the effect of UNSC membership in the baseline model (controlling only for the number of quarters over the duration of a program), and the full model (controlling for our full set of control variables – the results for the control variables are not presented but are available on request).

We find evidence in favor of our hypothesized negative effect of UNSC membership on conditionality for the following policy areas: Debt, Monetary Ceiling, Financial sector, BOP/ Reserves, Credit to Government, Trade, Systemic, Pricing, and Arrears. The negative effect is robust for the policy areas of: Debt, BOP/ Reserves, Trade, Systemic, and Pricing. The only policy area that robustly goes against our hypothesized relationship is Public Sector, where we find that UNSC members are likely to have more conditions. Perhaps the content and severity of these conditions is light. Another study finds that when democratic countries that are temporary members of the UNSC participate in IMF programs, wages and salaries increase as a proportion of total government spending, in contrast to the austerity typical of IMF conditions (Nooruddin and Vreeland 2010). Perhaps politically important governments negotiate for fewer conditions in other areas, where compliance may be more transparent, and

[12] We do not consider the following policy areas because there are too few observations: Social (27 countries), Private Sector Reforms (26 countries), Capital Account (10 countries). For all of the other policy areas, there are at least 53 countries, and a maximum of 101 countries (see table 8).

accept a larger number of public sector conditions, where compliance can be more easily obfuscated. This interpretation is buttressed by the negative effect of UNSC membership on the number of policy conditions in other areas. In fact, for all other policy areas, we find either no effect, or we find evidence of our hypothesized relationship: Fewer conditions for UNSC members.

## 5. Conclusion

During the first decade of the 2000s, when many governments avoided borrowing from the IMF for the first time in their histories, several studies emerged showing that participation in IMF programs during the twentieth century resulted in lower rates of economic growth.[13] The finding found acceptance from across the political spectrum, although people disagreed over the mechanism. Some have argued that IMF programs hurt economic growth by imposing weak conditionality, thereby encouraging moral hazard.[14] As countries are now returning to the IMF – and the debate about conditionality has again taken center-stage – addressing the question of moral hazard continues to be of importance.

The problem with corroborating the moral hazard argument has been the historic lack of transparency of the IMF when it comes to providing systematic data on levels of conditionality. So, in a recent study of the effect of participation in IMF programs by temporary members of the UNSC, where Bueno de Mesquita and Smith (2009) find lower rates of economic growth for such countries, evidence on a crucial piece of evidence – the level of conditionality – is missing. Presumably, UNSC members that participate in IMF programs have lower rates of economic growth because the IMF loans prop up bad policies and sometimes even corrupt governments because important policy changes are not required through conditionality. To test this argument, however, data on levels of conditionality are required. Our study provides the necessary analysis of this key variable, thanks to the continuing opening of the IMF and their providing us access to their Monitoring of Fund Arrangements (MONA) database.

Our main finding is in fact that politically important countries – as measured by temporary membership on the UNSC – receive fewer conditions than other countries participating in IMF programs. The effect is substantial, accounting for a reduction of

[13] See, for example, Dreher (2006), Barro and Lee (2005), Przeworski and Vreeland (2000). See Atoyan and Conway (2006) for a more nuanced view.

[14] See Conway (2006) for a summary.

conditionality of perhaps 30 percent. Specifically, fewer prior actions are required of them to enter into an arrangement, and they face fewer performance criteria to receive continued loan disbursements. While the number of structural benchmarks required appears unaffected, as does the scope of policy areas covered by prior actions, there is evidence that the scope of policy areas covered by performance criteria may be narrower. In particular, our findings may be driven by conditionality related to repaying debt, conditions related to trade and the balance of payments, domestic pricing, and detailed conditions referring to information technology systems employed by the government bureaucracy.

While these results do not imply that the IMF always imposes the best conditions, they do suggest that politically important countries can expect soft treatment from the IMF. If the governments of such countries can expect fewer conditions in return for access to loans of foreign exchange, these arrangements may indeed serve to promote moral hazard for countries considered politically important to the major shareholders of the IMF. Still, better access to IMF loans with lighter conditionality can be considered a short-run perk of participation in the UNSC.

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**Table 1: Descriptive Statistics**[15]

| | All | EFF/SBA | PRGF |
|---|---|---|---|
| Number of countries | 101 | 68 | 61 |
| Number of years (1992-2008) | 17 | 17 | 17 |
| Number of programs | 314 | 163 | 152 |
| Avg. number of quarters | 9.61 | 7.14 | 12.49 |
| Total number of conditions | | | |
| Overall | 22,810 | 11,807 | 12,309 |
| Performance criteria | 14,962 | 8,365 | 7,481 |
| Prior actions | 2,559 | 1,350 | 1,368 |
| Structural benchmarks | 5,429 | 2,188 | 3,504 |
| Average number of conditions per quarter | | | |
| Overall | 8.16 | 10.10 | 6.64 |
| Performance criteria | 5.52 | 7.24 | 4.06 |
| Prior actions | 0.86 | 1.09 | 0.68 |
| Structural benchmarks | 1.84 | 1.85 | 1.93 |
| Number of areas covered by conditionality ("scope") | | | |
| Overall | 10.14 | 9.07 | 11.40 |
| Performance criteria | 7.34 | 6.15 | 8.77 |
| Prior actions | 2.47 | 2.33 | 2.77 |
| Structural benchmarks | 4.31 | 3.31 | 5.43 |

[15] Note that the number of conditions typically reported in official IMF statistics is considerably higher than what we report here. We provide the details on why this is the case in the main text above.

## Table 2: Temporary UNSC membership and average number of IMF conditions

| Average number of conditions | Baseline model OLS-FE | Baseline model GLS-FE | Full model OLS-FE | Full model GLS-FE | Truncated model OLS-FE | Truncated model GLS-FE |
|---|---|---|---|---|---|---|
| Temporary member of the UNSC, dummy | -2.410* | -1.263* | -3.204** | -2.531*** | -3.091** | -2.800*** |
| | (-1.906) | (-1.908) | (-2.152) | (-7.841) | (-2.162) | (-15.37) |
| Number of quarters of program | -0.184*** | -0.189*** | -0.0885 | -0.115*** | -0.104 | -0.0897*** |
| | (-2.611) | (-21.99) | (-0.993) | (-2.923) | (-1.214) | (-2.628) |
| Election year (t-1), dummy | | | 1.271* | 1.381*** | 1.257* | 1.327*** |
| | | | (1.727) | (6.643) | (1.785) | (10.02) |
| External debt, total (% of GNI) | | | -0.0141 | -0.0175*** | -0.0137 | -0.0145*** |
| | | | (-1.365) | (-5.204) | (-1.608) | (-5.762) |
| Total debt service (% of GNI) | | | -0.0549 | -0.0478* | | |
| | | | (-0.865) | (-1.898) | | |
| Total reserves (% of external debt) | | | -0.000715 | -0.0146* | | |
| | | | (-0.0418) | (-1.684) | | |
| External balance on goods and services (% of GDP) | | | -0.0560 | -0.0418* | | |
| | | | (-1.119) | (-1.899) | | |
| Investment (% of GDP) | | | -0.0206 | 0.0285 | | |
| | | | (-0.244) | (0.785) | | |
| Observations | 314 | 314 | 273 | 273 | 282 | 282 |
| Number of countries | 101 | 101 | 90 | 90 | 93 | 93 |
| R-squared | 0.049 | | 0.072 | | 0.059 | |
| F-test for fixed country effects (p-value) | 0.000 | | 0.000 | | 0.000 | |
| Wooldridge test for serial correlation (p-value) | 0.942 | | 0.797 | | 0.909 | |
| Breusch-Pagan heteroscedasticity test (p-value) | 0.000 | | 0.000 | | 0.000 | |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for heteroskedasticity

## Table 3: Temporary UNSC membership and average number of IMF conditions by condition type, GLS

| Average number of conditions | Performance criteria (1) | (2) | (3) | Prior actions (4) | (5) | (6) | Structural benchmarks (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|---|
| Temporary member of the UNSC, dummy | -1.840*** | -1.568*** | -2.424*** | -0.177** | -0.240*** | -0.292*** | -0.000697 | -0.118 | -0.165* |
| | (-5.188) | (-4.003) | (-11.74) | (-2.021) | (-3.211) | (-3.665) | (-0.00756) | (-1.096) | (-1.713) |
| Number of quarters of program | -0.142*** | -0.125*** | -0.120*** | 0.00338 | 0.0185*** | 0.0189*** | -0.0240*** | 0.0325*** | 0.0187* |
| | (-8.644) | (-4.945) | (-8.465) | (1.252) | (3.678) | (3.910) | (-3.540) | (2.851) | (1.693) |
| Election year (t-1), dummy | | 0.592*** | 0.520*** | | 0.0456** | 0.0587** | | 0.239*** | 0.257*** |
| | | (3.142) | (2.759) | | (2.198) | (2.486) | | (4.525) | (4.038) |
| External debt, total (% of GNI) | | -0.00858** | -0.00886*** | | -0.00363*** | -0.00202*** | | -0.00574*** | -0.00142 |
| | | (-2.554) | (-3.730) | | (-6.380) | (-4.363) | | (-7.504) | (-1.092) |
| Total debt service (% of GNI) | | -0.0340 | | | -0.00136 | | | 0.00452 | |
| | | (-1.428) | | | (-0.465) | | | (0.440) | |
| Total reserves (% of external debt) | | -0.00156 | | | -0.00377*** | | | -0.00542** | |
| | | (-0.248) | | | (-3.667) | | | (-1.990) | |
| External balance on goods and services (% of GDP) | | -0.00876 | | | 0.00651* | | | -0.0353*** | |
| | | (-0.463) | | | (1.850) | | | (-5.546) | |
| Investment (% of GDP) | | 0.0116 | | | -0.00606 | | | 0.0169 | |
| | | (0.460) | | | (-1.008) | | | (1.494) | |
| Observations | 314 | 273 | 282 | 314 | 273 | 282 | 314 | 273 | 282 |
| Number of countries | 101 | 90 | 93 | 101 | 90 | 93 | 101 | 90 | 93 |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for heteroskedasticity

**Table 4: Temporary UNSC membership and average number of IMF conditions by arrangement type, GLS**

| Average number of conditions | EFF/SBA (1) | EFF/SBA (2) | PRGF (3) | PRGF (4) |
|---|---|---|---|---|
| Temporary member of the UNSC, dummy | -2.271* | -3.618*** | -1.706** | -1.982*** |
| | (-1.759) | (-2.920) | (-2.232) | (-7.347) |
| Number of quarters of program | -0.155*** | 0.0358 | -0.336*** | -0.00764 |
| | (-8.219) | (0.436) | (-6.114) | (-0.193) |
| Election year (t-1), dummy | | 1.106*** | | 0.0317 |
| | | (3.874) | | (0.110) |
| External debt, total (% of GNI) | | -0.0113 | | -0.0135*** |
| | | (-0.707) | | (-3.772) |
| Total debt service (% of GNI) | | 0.256* | | -0.0671** |
| | | (1.782) | | (-2.563) |
| Total reserves (% of external debt) | | 0.00925 | | 0.00828 |
| | | (0.515) | | (0.459) |
| External balance on goods and services (% of GDP) | | 0.000462 | | -0.0412 |
| | | (0.00492) | | (-1.492) |
| Investment (% of GDP) | | -0.141 | | 0.106*** |
| | | (-1.510) | | (2.733) |
| Observations | 163 | 143 | 152 | 134 |
| Number of countries | 68 | 59 | 61 | 55 |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for heteroskedasticity

## Table 5: Temporary UNSC membership and the scope of IMF conditionality, GLS

| Average number of areas covered (scope) | Baseline model | | Full model | | Truncated model | |
|---|---|---|---|---|---|---|
| | OLS-FE | GLS-FE | OLS-FE | GLS-FE | OLS-FE | GLS-FE |
| Temporary member of the UNSC, dummy | -0.208 | -0.564 | -0.265 | -0.795 | -0.281 | -0.775 |
| | (-0.356) | (-0.925) | (-0.397) | (-1.118) | (-0.433) | (-1.151) |
| Number of quarters of program | 0.304*** | 0.310*** | 0.306*** | 0.291*** | 0.291*** | 0.279*** |
| | (9.316) | (8.980) | (7.666) | (6.904) | (7.460) | (6.783) |
| Election year (t-1), dummy | | | 0.438 | 0.456 | | |
| | | | (1.327) | (1.201) | | |
| External debt, total (% of GNI) | | | 0.00513 | 0.00615 | | |
| | | | (1.109) | (1.301) | | |
| Total debt service (% of GNI) | | | 0.00360 | 0.0145 | | |
| | | | (0.126) | (0.474) | | |
| Total reserves (% of external debt) | | | -0.0111 | -0.00800 | -0.0157** | -0.0135** |
| | | | (-1.454) | (-1.105) | (-2.200) | (-2.007) |
| External balance on goods and services (% of GDP) | | | -0.0339 | -0.0333 | -0.0304 | -0.0297 |
| | | | (-1.510) | (-1.449) | (-1.467) | (-1.406) |
| Investment (% of GDP) | | | -0.0285 | -0.0374 | | |
| | | | (-0.753) | (-0.989) | | |
| Observations | 314 | 299 | 273 | 259 | 278 | 266 |
| Number of countries | 101 | 86 | 90 | 76 | 91 | 79 |
| R-squared | 0.291 | | 0.279 | | 0.258 | |
| F-test for fixed country effects (p-value) | 0.000 | | 0.000 | | 0.000 | |
| Wooldridge test for serial correlation (p-value) | 0.004 | | 0.007 | | 0.007 | |
| Breusch-Pagan heteroscedasticity test (p-value) | 0.852 | | 0.855 | | 0.962 | |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for autocorrelation

## Table 6: Temporary UNSC membership and the scope of IMF conditionality by condition type, GLS

| Average number of areas covered (scope) | Performance criteria | | | Prior actions | | | Structural benchmarks | | |
|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Temporary member of the UNSC, dummy | -1.491** | -1.201 | -1.406** | -0.0808 | -0.140 | -0.0940 | 0.585 | 0.0859 | 0.239 |
| | (-2.443) | (-1.613) | (-2.006) | (-0.134) | (-0.189) | (-0.135) | (1.000) | (0.131) | (0.387) |
| Number of quarters of program | 0.400*** | 0.381*** | 0.372*** | 0.185*** | 0.220*** | 0.218*** | 0.222*** | 0.243*** | 0.240*** |
| | (11.51) | (8.661) | (8.677) | (5.388) | (5.038) | (5.113) | (6.722) | (6.224) | (6.390) |
| Election year (t-1), dummy | | 0.395 | | | -0.0363 | | | 0.255 | |
| | | (0.982) | | | (-0.0908) | | | (0.743) | |
| External debt, total (% of GNI) | | 0.00424 | | | -0.00503 | | | -0.000435 | |
| | | (0.859) | | | (-1.029) | | | (-0.0988) | |
| Total debt service (% of GNI) | | 0.0211 | | | -0.00495 | | | 0.00776 | |
| | | (0.660) | | | (-0.156) | | | (0.277) | |
| Total reserves (% of external debt) | | 0.00277 | -0.00140 | | -0.00402 | -0.000747 | | -0.00866 | -0.00909 |
| | | (0.371) | (-0.202) | | (-0.544) | (-0.109) | | (-1.256) | (-1.441) |
| External balance on goods and services (% of GDP) | | -0.00812 | -0.00709 | | 0.0258 | 0.0249 | | -0.0637*** | -0.0663*** |
| | | (-0.339) | (-0.322) | | (1.087) | (1.139) | | (-2.974) | (-3.398) |
| Investment (% of GDP) | | -0.0265 | | | 0.0177 | | | 0.00731 | |
| | | (-0.674) | | | (0.454) | | | (0.206) | |
| Observations | 299 | 259 | 266 | 299 | 259 | 266 | 299 | 259 | 266 |
| Number of countries | 86 | 76 | 79 | 86 | 76 | 79 | 86 | 76 | 79 |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for autocorrelation

**Table 7: Temporary UNSC membership and the scope of IMF conditionality by arrangement type, GLS**

| Average number of areas covered (scope) | EFF/SBA (1) | EFF/SBA (2) | PRGF (3) | PRGF (4) |
|---|---|---|---|---|
| Temporary member of the UNSC, dummy | -0.596 | -0.279 | -0.231 | 0.928 |
| | (-1.529) | (-0.753) | (-0.210) | (0.749) |
| Number of quarters of program | 0.250*** | 0.271*** | 0.353*** | 0.213** |
| | (49.36) | (6.162) | (7.672) | (2.379) |
| Election year (t-1), dummy | | 0.782** | | 0.660 |
| | | (2.478) | | (1.298) |
| External debt, total (% of GNI) | | 0.00608 | | 0.00456 |
| | | (0.511) | | (1.323) |
| Total debt service (% of GNI) | | -0.00122 | | -0.00594 |
| | | (-0.0194) | | (-0.144) |
| Total reserves (% of external debt) | | -0.0145 | | -0.0258 |
| | | (-1.281) | | (-1.409) |
| External balance on goods and services (% of GDP) | | 0.123*** | | -0.0797*** |
| | | (2.776) | | (-2.732) |
| Investment (% of GDP) | | 0.0608 | | -0.0486 |
| | | (1.018) | | (-0.915) |
| Observations | 163 | 143 | 152 | 134 |
| Number of countries | 68 | 59 | 61 | 55 |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for heteroskedasticity

**Table 8: Temporary UNSC membership and IMF conditionality by area classes, GLS**

| | Baseline model | | | | Full model | | | |
|---|---|---|---|---|---|---|---|---|
| | beta | t-stat | Obs | Cnt | beta | t-stat | Obs | Cnt |
| Debt | -0.31 | -3.29 *** | 312 | 101 | -0.39 | -5.72 *** | 271 | 90 |
| Government Budget | -0.08 | -0.31 | 302 | 100 | -0.39 | -1.62 | 261 | 89 |
| Monetary Ceiling | -0.07 | -2.97 *** | 281 | 98 | -0.04 | -0.82 | 251 | 90 |
| Financial sector | -0.14 | -0.95 | 252 | 93 | -0.43 | -4.09 *** | 220 | 83 |
| BOP/ Reserves | -0.17 | -1.85 * | 252 | 87 | -0.36 | -3.36 *** | 220 | 77 |
| Credit to Government | -0.21 | -9.66 *** | 233 | 88 | -0.11 | -1.47 | 208 | 78 |
| Public Sector | 0.22 | 2.32 ** | 222 | 89 | 0.41 | 4.12 *** | 194 | 77 |
| Trade | -0.26 | -3.37 *** | 169 | 78 | -0.22 | -2.13 ** | 153 | 72 |
| Systemic | -0.24 | -16.90 *** | 150 | 77 | -0.17 | -2.15 ** | 142 | 72 |
| Pricing | -0.08 | -1.95 * | 142 | 75 | -0.09 | -2.39 ** | 128 | 68 |
| Arrears | -0.56 | -8.04 | 122 | 54 | -0.41 | -1.74 * | 112 | 49 |
| Governance | -0.11 | -1.17 | 118 | 66 | -0.08 | -1.08 | 97 | 56 |
| Privatization | 0.15 | 0.68 | 95 | 57 | 0.31 | 2.22 ** | 86 | 52 |
| Exchange system | 0.00 | 0.08 | 96 | 59 | -0.04 | -0.44 | 83 | 53 |
| Wages & Pensions | -0.01 | -0.07 | 81 | 56 | -0.21 | -0.99 | 69 | 51 |
| Central Bank Reform | -0.11 | -1.09 | 76 | 53 | -0.03 | -0.21 | 59 | 44 |

t statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The GLS results are corrected for heteroskedasticity

## Appendix: Descriptive Statistics (Estimation sample of column 3, Table 1)

| | N | mean | median | min | max | st.dev | skewness | kurtosis |
|---|---|---|---|---|---|---|---|---|
| Average number of conditions per quarter | 314 | 8.16 | 7.25 | 0.75 | 45.08 | 5.07 | 2.61 | 15.59 |
| Scope - number of areas covered by conditionality | 314 | 10.14 | 10.00 | 1.00 | 17.00 | 2.88 | -0.17 | 2.72 |
| Temporary member of the UN Security Council | 314 | 0.06 | 0.00 | 0.00 | 1.00 | 0.23 | 3.81 | 15.51 |
| Number of quarters of program | 314 | 9.61 | 12.00 | 1.00 | 18.00 | 4.37 | -0.10 | 1.67 |
| Total debt service (% of GNI) | 284 | 5.94 | 4.52 | 0.06 | 80.75 | 6.55 | 5.99 | 63.00 |
| Legislative election year (t-1), dummy | 300 | 0.33 | 0.00 | 0.00 | 1.00 | 0.47 | 0.74 | 1.55 |
| Gross fixed capital formation (% of GDP) | 286 | 19.85 | 19.24 | 4.03 | 61.34 | 6.84 | 2.12 | 13.36 |
| Total reserves (% of external debt) | 281 | 24.72 | 17.84 | 0.09 | 223.24 | 25.19 | 3.32 | 20.34 |
| General government final consumption expenditure (% of GDP) | 286 | 14.42 | 13.07 | 2.97 | 39.34 | 5.83 | 0.85 | 3.71 |
| External balance on goods and services (% of GDP) | 290 | -9.12 | -7.76 | -99.09 | 36.36 | 15.21 | -2.08 | 13.79 |
| Total reserves in months of imports | 258 | 3.50 | 3.07 | 0.03 | 11.08 | 2.20 | 1.09 | 4.36 |
| External debt, total (% of GNI) | 284 | 81.68 | 63.19 | 4.46 | 479.22 | 69.53 | 2.64 | 12.26 |