

A Two-Level Principal-Agent Model of IMF Program Design: The Turkish Case

Merih Angin

Department of International Relations/Political Science
The Graduate Institute of International and Development Studies
Geneva, Switzerland
merih.angin@graduateinstitute.ch

ABSTRACT:

IMF conditionality has always been the most controversial aspect of the programs designed for countries borrowing from the Fund. The difference between the number and scope of conditionality in the programs designed for European countries since 2008 and those in the programs of developing countries in the late 1990s and early 2000s has made the question of which factors influence the design of IMF programs and how they shape conditionality stand out more in the literature, which is the puzzle this research project attempts to solve. The literature examining the institutional aspects of the IMF includes the state-centric approach, which focuses on the influence of the powerful states in explaining the variation in the conditionality of IMF loans, and the public choice approaches, which put a greater emphasis on the intellectual dominance of the IMF staff. However, neither of these approaches fully explains the variation as they neglect the impact of the relation between the Executive Board, the IMF staff and the recipient country authorities, on the decision-making of the institution. This study analyzes the variations in IMF conditionality through building a new analytical framework. I introduce a “Two-Level Principal-Agent Model” of IMF lending with hypotheses that are tested using a single-country study, namely the Turkish case. The main findings of this study provide supporting evidence for the strong influence of economic bureaucracy in the design of conditionality in IMF programs. The validity of the causal mechanisms involved, i.e. antinomic delegation, power of economic bureaucracy and fragmentation in the political system of the recipient country, which I demonstrate through process tracing on the Turkish case, is strengthened by a computational simulation of negotiations over conditionality during IMF program design. The findings and research methods of this study pave the way for enhanced analysis of decision-making processes in international organizations, particularly for cases involving delegation of authority within multiple sides of negotiations, as in the case of IMF lending.

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I. Introduction

Questioning the legitimacy of the International Monetary Fund (IMF) became fairly popular after the collapse of the Bretton Woods System, especially following the Asian financial crisis of 1997, regularly by those who believe that the Fund failed in fulfilling its mission.² The IMF was harshly criticized for its insistence on the adoption of capital account liberalization and its role in handling the crises Turkey and Argentina faced in 2001 raised further skepticism about IMF program design. Consequently, the emerging markets decided to increase their accumulation of international reserves to avoid IMF loans³ with many strings attached that were harming economic growth and leading to social upheavals in some cases, as a result of the unpopular economic policies.⁴ For that reason, the Fund was transformed into an international financial institution whose mandate was mainly providing technical assistance, rather than an international lender of last resort. Rodrigo de Rato, former Managing Director of the IMF, once admitted that the IMF's legitimacy was damaged by "a combination of formal institutional constraints" and, particularly by "how its policies are perceived by international and world society."⁵ However, things have been changing since the financial crisis of 2008 followed by the European debt crisis that erupted in the wake of the Great Recession; the Fund was literally born out of its ashes after years of legitimacy crisis. After the London Summit, Dominique Strauss-Kahn, who was then the Managing Director of the Fund, openly stated: "the IMF is back."⁶

James Boughton's⁷ famous book *Silent Revolution* observed the evolving role of the Fund from 1979 to 1989 as an international financial institution mainly taking care of system management for Western industrialized states in the late 1970s, whereas it became a crisis manager for the Third World in the late 1980s.⁸ What we observe today can be considered as a rather *reversed revolution*. Many European Union (EU) member countries, particularly those who have become members with the Eastern Enlargement, faced recession with growing budget deficits. With the collaboration of the EU and the IMF, emerging EU countries, such as Hungary

² See Gerald K. Helleiner, "Stabilization, Adjustment and the Poor," *World Development* 15, no. 12 (1987); Lance Taylor, *Varieties of Stabilization Experience: Toward Sensible Macroeconomics in the Third World* (New York: Oxford University Press, 1987); Tony Killick, *IMF Programmes in Developing Countries: Design and Impact* (London: Routledge, 1995); Matthew Martin, *The Crumbling Facade of African Debt Negotiations: No Winners* (London: Macmillan, 1991); Ngaire Woods and Domenico Lombardi, "Uneven Patterns of Governance: How Developing Countries Are Represented in the IMF," *Review of International Political Economy* 13 (2006).

³ Barry Eichengreen, "A Blueprint for IMF Reform: More than just a Lender," *International Finance* 10, no.2 (2007): 153.

⁴ Indeed, based on their empirical research, Przeworski and Vreeland found a negative correlation between participation in IMF programs and economic growth. For more details, see Adam Przeworski and James Raymond Vreeland, "The Effect of IMF Programs on Economic Growth," *Journal of Development Economics* 62, no. 2 (2000): 385-421.

⁵ Quoted in Leonard Seabrooke, "Legitimacy Gaps in the World Economy: Explaining the Sources of the IMF's Legitimacy Crisis," *International Politics* 44, no. 2/3 (2007): 250.

⁶ Quoted in Allan Meltzer, "The IMF Returns," *Review of International Organizations* 6, no. 3 (2011): 445.

⁷ James Boughton is historian of the International Monetary Fund and, since 2001, Assistant Director in the Policy Development and Review Department at the IMF.

⁸ For more details, see James M. Boughton, *Silent Revolution: International Monetary Fund, 1979-1989* (Washington, DC: International Monetary Fund, 2001).

and Latvia, were granted IMF financing when their economies were badly hit in 2008. Subsequently, the IMF, the European Commission (EC), and the European Central Bank (ECB) formed the “Troika” to lend to the euro zone members; Greece, Portugal and Ireland still stand as the biggest borrowers of the Fund (based on the amount outstanding as of 13.03.2015),⁹ while Romania’s (SBA), and Poland’s Flexible Credit Line (FCL) are still ongoing.¹⁰ Without doubt, these lending processes provide scholars with new research questions and case studies. The difference between the way the Fund has been treating European countries since 2008 and its treatment of developing countries in the late 1990s and early 2000s has made the question of who runs the organization, and how the IMF programs are designed with various conditions attached, stand out more in the literature recently.

Determinants of Conditionality

The variation in IMF conditionality has been the focus of debates both in academia and among policymakers, as the underlying reasons are not obvious. As Copelovitch’s work on IMF lending demonstrates, there is no clear relationship between either loan size or “country-specific macroeconomic characteristics” and IMF conditionality,¹¹ unlike loan size, where the G-5 have greater leverage over decision-making.¹² In this regard, this research focuses on one particular aspect of IMF program design: determinants of the number and scope of IMF conditionality. It attempts to answer two questions: What factors influence the number and scope of conditionality of an IMF program? And how do those factors play into shaping the design of the programs?

The IMF is often criticized for its “one size fits all approach,”¹³ as its programs to a large extent consist of a list of the conditions set, labeled as the “Washington Consensus.” Nevertheless, it is usually acknowledged that the Fund’s lending policies vary across time and space.¹⁴ As Biersteker underscores, “within the general guidelines of orthodox stabilization and adjustment, there is room for considerable variation in the specific terms of agreements.”¹⁵ While Broome considers the variation in the conditionality attached to the loans granted to Iceland, Belarus and Mexico as “flexibility in the use of loan conditionality,” which illustrates that the Fund is learning from its previous mistakes,¹⁶ other scholars still perceive them as reflections of powerful states’ interests. Based on a data set drawn from the IMF’s record of conditionality, Randall Stone has found evidence of US influence in cases where the Fund lends to politically important countries.¹⁷ However, under ordinary circumstances, the Fund “produces predictable policies that express the

⁹ International Monetary Fund, “Factsheet: The IMF at a Glance as of March 27, 2015,” <http://www.imf.org/external/np/exr/facts/glance.htm>.

¹⁰ International Monetary Fund, “IMF Lending Arrangements as of June 30, 2012,” <http://www.imf.org/external/np/fin/tad/extarr11.aspx?memberKey1=ZZZZ&date1key=2020-02-28>.

¹¹ Mark S. Copelovitch, *The International Monetary Fund in the Global Economy: Banks, Bonds, and Bailouts* (London: Cambridge University Press, 2010), 23.

¹² Mark S. Copelovitch, “Master or Servant? Common Agency and the Political Economy of IMF Lending,” *International Studies Quarterly* 54, no.1 (2010): 73.

¹³ See Joseph E. Stiglitz, *Globalization and Its Discontents* (New York: W.W. Norton & Company, 2003).

¹⁴ Seonjou Kang, “Agree to Reform? The Political Economy of Conditionality Variation in International Monetary Fund Lending, 1983–1997,” *European Journal of Political Research* 46, no.5 (2007): 685.

¹⁵ Thomas J. Biersteker, “International Financial Negotiations and Adjustment Bargaining: An Overview,” in *Dealing with Debt: International Financial Negotiations and Adjustment Bargaining*, ed. Thomas J. Biersteker (Boulder, CO: Westview Press, 1993), 4.

¹⁶ Andre Broome, “The International Monetary Fund, Crisis Management and the Credit Crunch,” *Australian Journal of International Affairs* 64, no. 1 (2010): 37.

¹⁷ Randall W. Stone, “The Scope of IMF Conditionality,” *International Organization* 62, no. 4 (2008): 590.

consensus view of its most influential members, and it enjoys broad discretion within its zone of delegation.”¹⁸ He calls this view “informal governance” signifying the US intervention in contradiction with the formal rules. In this context, several high-profile IMF lending cases, namely the Russia, Ukraine, Argentina and Turkey cases, are mentioned as instances where the US pressure caused “laxity in enforcing conditionality”, which ultimately caused the programs to fail.¹⁹ Kang’s empirical study has found analogous results. He explains the variation in conditions attached to loans by the strategic interests of the G-5 countries, namely the US, United Kingdom, Japan, Germany and France, which “compromises the effectiveness of the IMF programs.”²⁰ By the same token, Copelovitch suggests a “common agency” framework in explaining the variation in the IMF loan size and conditionality, where the G-5 countries, exercising a “*de facto* control over the Executive Board” act as the “political principal” of the institution. He argues that “preference heterogeneity” among the G-5 determines the said variation. Based on his empirical research, he claims that when G-5 countries’ interests are not intense, the agent, namely the IMF staff, enjoys greater autonomy; consequently, the lending policies reflect “technocratic and/or bureaucratic interests.”²¹

In contrast to the abovementioned state-centric views, according to public choice approaches, the IMF staff is a highly independent actor; bureaucratic politics rather than the interests of the major shareholders are the main political factor in the Fund lending policies.²² From a constructivist perspective, Chwieroth argues that “the Fund staff by and large adopted, interpreted, and applied the norm on their own.”²³ Similarly, Momani criticizes the reform proposals aiming to change the governance structure of the Fund – the quota shares and the Fund’s surveillance role– which overlook the necessity of an “organizational change at the staff level.” She argues that the Fund staff has “intellectual dominance and discretion in the design of loan conditionality, writing of surveillance reports, and provision of technical and policy advice.”²⁴ Therefore, the criticisms against the IMF policies should address the Fund staff as well.²⁵ After all, the Executive Board of the Fund has to rely on the IMF staff’s expertise “including their experience negotiating with government.”²⁶

The abovementioned approaches focus on the decision-making at the international institution level, however, it is known that IMF programs are designed not only by the IMF staff; recipient country bureaucrats play a significant role in the negotiations and thus in shaping the programs. One of the main findings of Vreeland’s study on IMF lending is that “although governments turn to the Fund under bad economic circumstances... they also turn to the Fund because they want conditions to be imposed. IMF agreements make it more costly for opponents

¹⁸ Ibid.

¹⁹ Ibid., 617.

²⁰ Kang, “Agree to Reform,” 685.

²¹ Copelovitch, “Political Economy of IMF Lending,” 50-1.

²² Ibid., 54.

²³ Jeffrey M. Chwieroth, “Normative Change from Within: The International Monetary Fund’s Approach to Capital Account Liberalization,” *International Studies Quarterly* 52 (2008): 155.

²⁴ Bessma Momani, “IMF Staff: Missing Link in Fund Reform Proposals,” *Review of International Organizations* 2, no. 1 (2007): 39.

²⁵ Ibid., 42.

²⁶ Erica R. Gould, “Delegating IMF Conditionality: Understanding Variations in Control and Conformity,” in *Delegation and Agency in International Organizations*, ed. Darren G. Hawkins, David A. Lake, Daniel L. Nielson, and Michael J. Tierney (New York: Cambridge University Press, 2006), 305.

of economic reform to reject the preferred policies of a reform-oriented executive.”²⁷ The role of conditionality stands out especially in cases where a government faces resistance to reform domestically.²⁸ Declaring the IMF as a scapegoat is indeed not an uncommon practice, especially in developing countries. In a similar fashion, what I argue in this paper is that reform-minded bureaucrats of the recipient country might very well use an IMF program as an excuse to push for reforms they deem essential for the country. This leads us to open the black box of negotiations, which is a process to be traced meticulously in order to account for the variation in IMF conditionality. Conditionality is a product of negotiations between the IMF staff and recipient country authorities. It stands to reason that the negotiation process is not detached from the domestic politics of the recipient country and politics at the Executive Board. As a result, the number and scope of conditionality is determined by a number of factors, “as opposed to being determined separately by one party, independently of prevailing economic and/or political circumstances.”²⁹ In this context, based on an extensive review of the Fund activity, Woods argues that the work of the IMF is affected by “the preference of their most powerful members, by their own bureaucratic motives, and by politics within countries with whom they work,”³⁰ which is an observation that has inspired the line of argumentation that this research is built upon. Stone (2008, 2011), Copelovitch (2010), Chwieroth (2009) and Vreeland (2003) made notable contributions to the study of IMF lending behavior. The model I develop in this research attempts to demonstrate how their explanations are complementary rather than contending.

This brings us back to the main focus of this research. How are IMF programs with various conditionality designed and why do some programs have more strings attached while others are sweeter deals? To address these two questions, I focus on a single-country study, where we get variation in number and scope of conditionality over time. If a country was getting favorable conditions from the Fund due to its strategic importance for the US or the Group of 7 (G-7) countries, then how do we explain the variation in conditionality across programs implemented in the same country? The variation over time in a single country study, in this regard, allows us to seek an explanation the state-centric approach fails to deliver.

The majority of the scholarly work done so far in this literature is based on statistical analyses in a large-N context, and they are definitely great contributions to the IMF studies. However, with process tracing of a critical case study, the causal mechanisms that explain the variation in conditionality can be revealed. For this purpose, I analyze the Turkish case; the selection criteria of which are explained in the following sections. As Checkel points out, “process tracing should not be viewed as the only way of capturing causal mechanisms” though.³¹ In this regard, I complement my qualitative analysis with an agent-based modeling of IMF program design to strengthen the validity of the causal mechanisms observed in process tracing, which is a method that has not been fully explored by International Political Economy (IPE) scholars yet.

²⁷ James Raymond Vreeland, *The IMF and Economic Development* (New York: Cambridge University Press, 2003), 153.

²⁸ Allan Drazen, “Conditionality and Ownership in IMF Lending: A Political Economy Approach,” in *Globalization and The Nation State: The Impact of the IMF and the World Bank*, ed. Gustav Ranis, James Raymond Vreeland and Stephen Kosack (New York: Routledge, 2006), 75-6.

²⁹ International Monetary Fund, “Evaluation of Structural Conditionality.”

³⁰ Ngaire Woods, *The Globalizers: The IMF, the World Bank and Their Borrowers* (Ithaca: Cornell University Press, 2006), 179.

³¹ Jeffrey T. Checkel, “Mechanisms, Process, and the Study of International Institutions,” in *Process Tracing: From Metaphor to Analytic Tool*, ed. Andrew Bennett and Jeffrey T. Checkel (Cambridge: Cambridge University Press, 2015), 90.

The agent-based model enabling the creation of boundedly rational agents, which is crucial for modeling the program negotiations, where agents interact under imperfect information.

The rest of the paper is organized as follows: The next section outlines the Principal-Agent (P-A) Theory that this research is taking on board to build an analytical framework, followed by the IMF decision-making flow. It then explains the Two-Level P-A Model and the hypotheses. The third section presents the findings of the case study followed by the fourth section that contains a computational simulation of the two-level P-A model of IMF program design. The main goal is to see whether the results of my simulation resemble the empirical findings of the process tracing conducted. The conclusion summarizes the contributions of this research to the literature.

II. A Two-Level Principal-Agent Model of IMF Program Design

Principal-Agent Theory in Application to IOs

P-A theory is considered as a subset of Public Choice Theory, which was popularized by the works of Nobel Laureates, George Stigler, Gary Becker, and James M. Buchanan, who suggested that the “governmental-political failure” distorts the working of the market.³² The argument emanates from the assumption that rent-seeking, self-interested policy makers, namely the politicians and government officials, make decisions that lead to inefficiency in the market. According to the Public Choice Theory, apart from rent-seeking behavior, the reasons behind government failure are “rational voter ignorance and irrelevance, vote trading in the political decision making process, voting mechanism, shortsightedness effect, government as an inefficient organization and imprecise reflection of consumer preferences.”³³ Although Public Choice Theory does not imply that international organization is generally undesirable, it can be used to stress on the advantages of decentralized policymaking and to warn against “naive internationalism.” International organization can be abused with a systematic tendency toward collusion at the expense of the citizens.³⁴

P-A Theory argues that “incomplete” and “asymmetric information” leads to the principal-agent problem, which refers to the situation that the “principal” faces difficulties in deeming the agent responsible for seeking the interests of the principal.³⁵ Due to the different interests of the principal and agent, the principal faces “Madison’s dilemma,” in which the agent can use the powers obtained through the principal’s “delegated authority” against the principal.³⁶

As described by Andonova, P-A models in application to IOs are based on the assumption that IOs “use their autonomy” in pursuit of “organizational interests,” which include “survival” as well as preserving their “budget, competences, legitimacy, and authority.” IOs could “reinterpret institutional contracts,” “set policy agendas” and promote particular policy instruments to the benefit of having increased authority, which may not always be in correspondence with the

³² James M. Buchanan, *Liberty, Market and State, Political Economy in the 1980s* (New York: New York University Press, 1985), 256.

³³ Coşkun Can Aktan, *Privatization & the Turkish Experience* (Ankara: Seçkin Yayıncılık, 2004), 52.

³⁴ Roland Vaubel, “A Public Choice Approach to International Organization,” *Public Choice* 51, no. 1 (1986): 53.

³⁵ Mary M. Shirley, “Bureaucrats in Business: The Roles of Privatization versus Corporatization in State-Owned Enterprise Reform,” *World Development* 27, no. 1 (1999): 116.

³⁶ Nielson and Tierney, “Delegation to International Organizations,” 246.

preferences of principals.³⁷ What matters to the “international agents” is the “survival and growth of their organization.”³⁸

As Gutner stresses, the flexibility of P-A theory makes it a useful tool for understanding IOs and modeling their performance through examination of the “interactions among the politics and preferences of member states,” “internal incentives” for IO staff and recipient country actors.³⁹ However, as Gould points out, most of the work in the P-A tradition is based on “thin assumptions” regarding agent interests, which are mainly maximization of budget and “slack” as well as task expansion.⁴⁰ Despite the concerns with runaway agents, P-A models in the literature have mostly focused on the causes of delegation, designing of mandates for agents, external instruments for controlling agents, and have not given much consideration to “agency behavior.”⁴¹

P-A theory, which has been highly influential in studying IOs, is the backbone of this research. Nielson, Tierney and Weaver’s explanation integrating the “top-down” logic of P-A theory- “targeting the redesign of organizational structures, hiring procedures and promotional standards,” with the “bottom-up” logic of sociological constructivism- focusing on the transformation of bureaucratic culture,⁴² has been inspirational in designing this research with an “eclectic approach.”

Copelovitch’s research on IMF lending suggests that the rationalist approach, which has a state-centric view with a particular focus on P-A problems when addressing the question of the influences of bureaucrats and states in IOs, and the constructivist approach that considers bureaucrats as “authorities in their own right” are complementary approaches.⁴³ In a similar fashion, this work addresses what I consider as the main shortcoming of the P-A tradition by having a more nuanced view on agent interests. The following section provides a general overview of decision-making at the IMF in order to demonstrate how the P-A theory can explain the operation of the Fund.

Decision-Making at the IMF

The variation in loan features of the IMF, particularly its conditionality leads us to question the decision-making processes of the Fund. The changing role of the Fund as discussed in the previous section makes the study of the lending behavior of the IMF highly important for the study of International Organizations. Despite numerous empirical studies, the root of the problems with the IMF programs is still a debated issue, as it lies on the question of who runs the organization: the powerful states via the EB or the IMF staff? There is a growing literature on the

³⁷ Liliana Andonova, “Why Do International Organizations Innovate? A Principal-Agent Perspective on Partnership for Sustainable Development,” paper prepared for the Annual Congress of the Swiss Political Science Association, 2010, http://www.sagw.ch/svpw/taetigkeiten/Kongress/Kongress-2010/Papiers_2010.html.

³⁸ Roland Vaubel, “Principal-Agent Problems in International Organizations,” *Review of International Organizations* 1, no. 2 (2006): 126-127.

³⁹ Tamar Gutner, “World Bank Environmental Reform: Revisiting Lessons from Agency Theory,” *International Organization* 59, no. 3 (2005): 782.

⁴⁰ Gould, “Delegating IMF Conditionality,” 308.

⁴¹ Manfred Elsig and Cédric Dupont, “European Union Meets South Korea: Bureaucratic Interests, Exporter Discrimination and the Negotiations of Trade Agreements,” *Journal of Common Market Studies* 50, no 3. (2012): 493.

⁴² Daniel Nielson, Michael Tierney, and Catherine Weaver, “Bridging the rationalist–constructivist divide: re-engineering the culture of the World Bank,” *Journal of International Relations and Development* 9 (2006): 107.

⁴³ Copelovitch, *Banks, Bonds, and Bailouts*, 11.

“political aspects” of the institution, which is the main focus of this research, contrary to the previous studies assuming that the decisions of the Fund are purely based on macroeconomic criteria.⁴⁴ In order to explain the puzzle of the research, it is important to discuss the structure of IMF governance more thoroughly.

Decision-making at the IMF starts as early as the phase during which the staff prepare proposals. Before a proposal reaches the EB for approval or rejection, “informal communications” between national authorities, Executive Directors (EDs), management and the IMF staff take place to set “the scope for bargaining and negotiation” of proposal details. After reaching the EB, it is unlikely that the proposal will be rewritten.⁴⁵ Therefore, the IMF lending decisions are made on the basis of an “up-or-down decision,” the EB cannot amend them, since the recipient country signs the letter of intent before the EB meeting. As a matter of fact, the EB has the right to reject a proposal, which will then be sent back for renegotiation, however, it has not done this in “recent memory.”⁴⁶ As Stone underscores, “the Executive Board ratifies whatever the IMF management proposes.”⁴⁷

According to Stone, extensive “authority” delegated to management “weakens the Executive Board” and causes a great deal of “information asymmetries.” Lending decisions of the Fund are of primary importance to the recipient country. They involve considerable “information asymmetries” among the other member states and “substantial delegation” to the IMF management and staff.⁴⁸ EDs do not take part in the “mission to countries” or the negotiation process for the programs, with the exception of the recipient country’s representative. Moreover, they do not have access to “confidential documents” that are crucial for the negotiation process, including the “mission briefs” and “back-to-office reports.” The EDs’ influence on conditionality is thwarted by the aforesaid “information asymmetry.”⁴⁹ Given the operation of the IMF, using a P-A model as described in the next section, can be considered as the most natural way of capturing the mechanisms behind the decision-making at the Fund.

Two-Level P-A Framework

As Gutner points out, the application of the P-A theory to IOs customarily focuses on the relationship between the member states and the IOs, which is certainly useful in questioning why state principals “delegate” authority to IO agents.⁵⁰ However, when we stop the “chain of delegation” with the IO, we neglect a potential exogenous variable, namely the relation between the IMF staff and recipient country authorities, which might be significant in explaining the variation in the number and scope of IMF conditionality. Conditionality has been considered a P-A issue, as it involves recipient countries being asked to change certain policies by donors “in

⁴⁴ Graham Bird and Dane Rowlands, “Political Economy Influences Within the Life-Cycle of IMF Programmes,” *The World Economy* 26, no. 9 (2003): 1256.

⁴⁵ Ngaire Woods and Domenico Lombardi, “Effective Representations and the Role of Coalitions within the IMF,” working paper 2005/17 (Global Economic Governance Programme, 2005), <http://www.globaleconomicgovernance.org/wp-content/uploads/Woods%20and%20Lombardi%20-%20Coalitions%20and%20IMF.pdf>.

⁴⁶ Randall W. Stone, *Controlling Institutions: International Organizations and the Global Economy*, (New York : Cambridge University Press, 2011), 60.

⁴⁷ *Ibid.*, 56.

⁴⁸ *Ibid.*, 52.

⁴⁹ *Ibid.*, 57.

⁵⁰ Gutner, “World Bank Environmental Reform,” 780.

return for aid.” This fact draws similarity between the “traditional P-A relationship” of private lenders-borrowers and the International Financial Institution (IFI) principals lending to recipient country agents, and the P-A problems arising from “asymmetric information” is common to both.⁵¹ However, this approach assumes no country ownership of the programs and neglects the possibility of bureaucrats and/or governments having reformist mindsets. In this regard, studying IMF lending behavior as a single-level P-A problem between the IMF as the principal and the recipient country as the agent fails in explaining the cases where reform-minded bureaucrats/governments use the Fund as a scapegoat to implement reforms that they cannot otherwise due to domestic opposition. Therefore, both the relation between the IMF staff and the recipient country authorities, who are the negotiators of the programs, and the relations of these two sets of actors with their own principals, namely the IMF Executive Board and the recipient country government, matter in explaining the dependent variable (DV) of this research, i.e. the number and scope of conditionality. It is important to note that the P-A problem in the relationship between the IMF and the borrowing governments is highly “complex” due to “the nature of the task and the underlying contract, the mandate and structure of the principal, and the characteristics of the agents.”⁵²

In this context, Putnam’s famous two-level game theory, which asserts that “we need to move beyond the mere observation that domestic factors influence international affairs and vice versa, and beyond simple catalogs of instances of such influence, to seek theories that integrate both spheres, accounting for the areas of entanglement between them,”⁵³ has been a great inspiration for building a two-level P-A model. Focusing on the P-A problem either uniquely between the EB and the IMF or uniquely between the IMF staff and the borrowing countries cannot account for the variation in the number and scope of IMF conditionality. Instead, we need theories that “account simultaneously for the interaction of domestic and international factors,” as suggested by Putnam.⁵⁴ In our case, this requires a two-level analysis of IMF lending.

As described by Putnam, the two-level game can be modeled using a scenario where representatives from two organizations negotiate under the constraint that tentative agreements they reach need to be approved by their organizations.⁵⁵ This process can be decomposed into two stages: Level I consists of the negotiations between the representatives and Level II involves discussions among the members of the organizations regarding the approval of the agreement reached between the representatives.⁵⁶ In this context, Putnam mentions a finance minister negotiating with an IMF team or heads of government as an instance of a negotiator at Level I, and bureaucratic agencies, interest groups, or social classes as actors at Level II. If the actors at Level II do not support an agreement reached at Level I, the negotiations will be influenced to take into account the discontent. Putnam provides an illuminating example of the actions taken by negotiators to increase the chances of approval at Level II through a description of the 1977 negotiations between the IMF and the Italian government, where the IMF representatives directly consulted with the unions and left-wing parties in Italy to redesign the proposed long-term

⁵¹ Tamar Gutner, “Explaining the Gaps between Mandate and Performance: Agency Theory and World Bank Environmental Reform,” *Global Environmental Politics* 5, no. 2 (2005): 14.

⁵² Mohsin S. Khan and Sunil Sharma, “IMF Conditionality and Country Ownership of Programs,” working paper 01/142 (IMF Institute, 2001), <http://www.imf.org/external/pubs/ft/wp/2001/wp01142.pdf>.

⁵³ Putnam, “The Logic of Two-Level Games,” 433.

⁵⁴ *Ibid.*, 430.

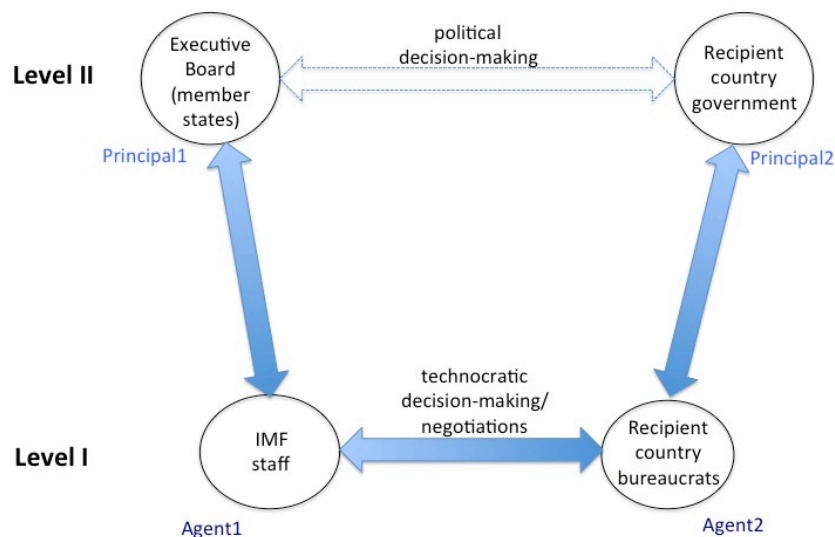
⁵⁵ *Ibid.*

⁵⁶ *Ibid.*, 435-6.

investment and economic recovery program in order to avoid defection due to strong opposition by those parties.⁵⁷

Putnam’s two-level game metaphor and the previously mentioned shortcoming in the literature with the general focus on P-A problems at a single-level only, motivated me to form a *two-level P-A model* for this research: at Level I, we observe the negotiations between two agents, namely the IMF staff and the recipient country authorities, whereas at Level II the P-A problems between the political principals of these agents, the IMF Executive Board and the recipient government respectively, are analyzed. I claim that in order to have a full picture of the P-A problem in the design of IMF programs, we need to take into account both sets of relationships. One can easily draw an analogy between the "two-table" metaphor Putnam uses to “capture the dynamics” of the negotiations at the Bonn summit conference of 1978⁵⁸ and the two-level P-A model this research builds to analyze variation in IMF lending behavior. I have chosen not to consider the relation between the EB and the recipient country, since the staff acts as a mediator between the two and I observe the IMF management and the staff as a unitary actor. Therefore, I limit my discussion to the basic delegation from states to an IO, but I do acknowledge that each step in the chains of delegation may lead to increases in “agency slack.”⁵⁹

Figure 1: The Two-Level P-A Model



Level I

The negotiations for an IMF program involve interactions among bureaucratic agents. Therefore, making any observations at this level requires a clear understanding of bureaucratic incentives. As Frey points out, the main factors making up the bureaucrats’ utility function may include the “prestige, power and influence” they have relative to the group they serve, i.e. their

⁵⁷ Ibid., 454.

⁵⁸ Ibid., 434.

⁵⁹ Gould, “Delegating IMF Conditionality,” 288.

“clientele.”⁶⁰ One of the few “explicit” public choice analyses of the IMF in the literature includes that of Roland Vaubel, which focuses on bureaucrats’ incentives for budget maximization under the assumption of “perfect markets, rent-seeking bureaucrats and powerful special interest groups.”⁶¹ Vaubel argues that

[I]nternational bureaucrats have the same utility function as national bureaucrats and that the economic theory of bureaucracy applies to both of them. Both try to maximize their power in terms of budget size, staff and freedom of discretion... Both enjoy some freedom to pursue these objectives because, in many respects, they have acquired an information monopoly and because the politicians need their cooperation.⁶²

In the case of the IMF, Vaubel asserts that the mechanism through which the IMF increases its power is by imposing discretionary conditions that are created ex post in order to prevent elimination of moral hazard. The IMF does not publish these conditions to maintain some level of protection against “charges of ineffectiveness”. Vaubel explains the “procyclical variation of IMF conditionality” with the bureaucratic desire for maximization of power and budget in the case of a rising need for the services of the bureaucrats, such as during a world recession.⁶³

Willett, on the other hand, argues that public choice analysis can be used to consider many more parameters including the “fear of failure and the desire to minimize criticism” when explaining IMF loan policies.⁶⁴ As explained previously, this research does not take on board the “thin assumptions” of the standard P-A models regarding bureaucratic interests. Following Willett’s suggestion, it is instead based on more specific preferences over agent activity that contrasts the typical P-A theory assumption of self-interested, self-maximizing bureaucrats pursuing their own preferences owing to information asymmetries.

As mentioned previously, the studies that employ P-A models to explain IMF lending consider borrowing countries as the agent with the assumption that there will be agency slack in implementing the conditionality set by the IMF. Such a framework essentially disregards the possibility that the recipient country bureaucrats might also have an active role in designing the programs and may not necessarily disagree with the IMF staff’s view. Here, it is important to note that the bureaucrats engaged in designing IMF programs are a team of technocrats, who make decisions based on economic rationality. In this regard, agency behavior of economic bureaucrats bears closer resemblance to that of IMF staff than to the behavior of spending ministry bureaucrats.

As Woods points out, the 1980s witnessed the embracing of the market-oriented reforms of the Washington consensus in the Latin America region due to the empowerment of technocrats trained in the United States, who constantly shared ideas and information with each other.⁶⁵ This broad network of technocrats with similar education and beliefs in “neoliberal solutions to key

⁶⁰ Bruno S. Frey, “The Public Choice View of International Political Economy,” *International Organization* 38, no. 1 (1984): 212.

⁶¹ Thomas D. Willett, “Towards A Broader Public Choice Analysis of the International Monetary Fund,” in *Governing the World's Money*, ed. David M. Andrews, C. Randall Henning and Louis W. Pauly (Ithaca: Cornell University Press, 2002), 63.

⁶² Vaubel, “A Public Choice Approach,” 52.

⁶³ Roland Vaubel, “Bureaucracy at the IMF and the World Bank: A Comparison of the Evidence,” *The World Economy* 19, no. 2 (1996): 195.

⁶⁴ Willett, “Broader Public Choice Analysis,” 69.

⁶⁵ Woods, *The Globalizers*, 65.

economic problems” allowed the IMF to widely disseminate its new economic policies.⁶⁶ Woods argues that the “epistemic” role of the IMF and World Bank becomes most apparent when we consider the fact that they mostly come into play during crises and encourage actions by technocrats who share the same views on their reform agenda. This has the effect of empowering policymakers to give them the leverage to implement reforms that are not popular with the public or the government.⁶⁷ Similarly, Kahler states that agreement on reforms is only possible when international financial institutions and technocrats of borrowing countries have similar mindsets and goals.⁶⁸ Haggard also emphasizes the importance of a “stabilizing cadre” for the success of the programs. Absence of such groups that are sympathetic to the IMF and World Bank in a country causes failure to satisfy commitments on the government side.⁶⁹

In sum, assuming a zero-sum relation between the IMF staff and the recipient country bureaucrats fails in explaining the cases where both sets of actors make decisions based on the same economic rationality emanating from similar educational backgrounds. Therefore, the existence of contending views of the two agents on the design of IMF programs should not be taken for granted; the seeming differences in the preferences of the two actors might be originating from the preferences of their political principals at Level II.

Principal-Agency at Level II

Delegation of Authority by the Executive Board

The two-level P-A model tries to examine not only *agency slippage*, but also what Gutner terms as *antinomic delegation* as a possible cause of the P-A problems in IMF lending, particularly at Level I, i.e. the EB-IMF staff relation. P-A theory recognizes the presence of “multiple or collective principals” in bureaucracies, who try to achieve goals that might sometimes be in “conflict.”⁷⁰ “Antinomic delegation” is defined as “delegation consisting of conflicting or complex tasks that are difficult to institutionalize and implement.” In the presence of antinomic delegation, it is not possible to blame “performance problems” only on “agency shirking,” as they might as well be caused by the difficulty agents have in implementing goals that are challenging to specify and balance.⁷¹

The IMF has the structure of a “Weberian bureaucracy” in the sense that there is a strict hierarchy in the authority relationships and the goals of the individuals in the institution match the goals of the institution itself. In this context, Rogoff states that most people at the IMF “believe in markets and market-based solutions to problems.”⁷² Therefore the staff designs the programs based on economic rationality unlike the Executive Directors, who also have political concerns. As discussed earlier, the Executive Board delegates a substantial degree of autonomy to the staff, who has the economic expertise and is concerned about both maintaining the legitimacy of the

⁶⁶ Ibid., 66.

⁶⁷ Ibid., 68.

⁶⁸ Miles Kahler, “External Influence, Conditionality, and the Politics of Adjustment,” in *The Politics of Economic Adjustment*, ed. Stephan Haggard and Robert R. Kaufman (Princeton: Princeton University Press, 1992), 127.

⁶⁹ Stephan Haggard, “The Politics of Adjustment: Lessons from the IMF’s Extended Fund Facility,” *International Organization* 39, no. 3 (1985): 184–186.

⁷⁰ Gutner, “Mandate and Performance,” 21.

⁷¹ Ibid., 11.

⁷² Quoted in Alan Beattie, “IMF Succession: A Contested Quandary,” *Financial Times*, May 25, 2011, <http://www.ft.com/intl/cms/s/0/07ca28e0-8702-11e0-92df-00144feabdc0.html>.

institution and his/her own prestige, meaning *fear of failure and the desire to minimize criticism* is at work. It is a challenging task to tailor a program that is supposed to save a country facing a deep economic crisis, which is usually the case when a country is borrowing from the Fund. However, if that country is strategically important to the political principal, the EB tells the IMF staff to sign an agreement regardless. This is risky for the institution, because if the program fails, the legitimacy of the Fund will be damaged. Besides, the EB might put the blame on the staff for designing a program that could not yield satisfactory results. Therefore, the IMF staff may design tough programs with many strings attached, especially in cases where the Executive Board demonstrated discontent with the design of the previous program, in order to ensure that even if the program fails, the IMF will not be declared as the scapegoat.

Delegation of Authority by the Government

The extent of the authority delegated by the government to the bureaucrats is not constant across programs. The government as a political principal is aware that a technocrat's primary concern when designing a program will be economic rationality rather than political feasibility. Therefore, a political leader in power will prefer to limit the extent of the authority delegated to the bureaucrats as much as possible, *ceteris paribus*. Nevertheless, at times of severe economic crises, the government has to delegate more authority to the technocrats, as they need to benefit from their expertise in order for agile recovery. As Frey asserts, although the parliament and government impose some restrictions on the public bureaucracy, their control on the public administration is not so tight, as the amount of information available to them is so limited compared that available to the bureaucracy and they rely on bureaucracy to achieve their goals.⁷³

When bureaucrats gain power as a result of an economic crisis, they will attempt to seize the opportunity to push for reforms that they could not implement under normal circumstances. As mentioned in the first section, there is a well-established belief that reform-minded governments sometimes use the IMF as a scapegoat. As Drazen argues, "when a government faces domestic opposition to reform, conditionality can play a role even when the IMF and the government agree on the objectives of an assistance program."⁷⁴ The IMF defines national ownership as "a willing assumption of responsibility for an agreed program of policies, by officials in a borrowing country who have the responsibility to formulate and carry out those policies, based on an understanding that the program is achievable and is in the country's best interest."⁷⁵ However, in practice, country ownership is much more intricate than the way the IMF defines the concept. In this context, Drazen underlines that "though the authorities may "own" the program, this is not identical with ownership by the country as a whole."⁷⁶ More formally put, since policymaking is the process of collective choice in the face of conflicting interests, ownership by some important policymakers is not ownership by the "policymaking apparatus." Conditionality may then "strengthen the hands" of the reformers who are committed to carrying out reform but face domestic opposition."⁷⁷ In a similar fashion, reform-minded bureaucrats can also make use of crisis conditions and commitments to the IMF to set a more reformist agenda. In this regard, we

⁷³ Frey, "The Public Choice View," 213.

⁷⁴ Allan Drazen, "Conditionality and Ownership in IMF Lending: A Political Economy Approach," *IMF Staff Papers* 49, special issue (2002): 65.

⁷⁵ International Monetary Fund, "Strengthening Country Ownership of Fund-Supported Programs," IMF, December 5, 2001, <http://www.imf.org/external/np/pdr/cond/2001/eng/strength/120501.pdf>.

⁷⁶ Drazen, "Conditionality and Ownership in IMF Lending," 43.

⁷⁷ *Ibid.*

can expect them to add more conditionality to the programs designed together with the IMF staff. Building on this argument, we can surmise that there will be more extensive conditionality in an IMF program when a country is facing a severe economic crisis, thus the bureaucrats have greater leverage over decision-making domestically.

Fragmentation of the Political System

Fragmentation in a political system results from the existence of a large number of political parties. As Woods highlights, while reaching consensus is tough for a large number of parties, the difficulty increases further if the parties have widely different ideological views as in the case of Russia and Turkey in the late 1980s.⁷⁸ Furthermore, it is highly likely for the domestic politics of a developing country to impact its negotiations with the IMF. In this context, Kahler argues that political resistance against IMF prescriptions develops in three major ways including opposition to the IMF's economic model and emphasis on adjustments of balance-of-payments rather than goals like growth, objections to the idea of having external forces rule over national policies, and economic interests.⁷⁹

As Allison (1969) argues in his influential article *Conceptual Models and the Cuban Missile Crisis*, the leaders of organizations are individual players in the competitive game of "bureaucratic politics" rather than "a monolithic group". Government behavior is shaped by this game of bargaining played between many actors at different levels of the hierarchy in the government, focusing on "diverse intra-national problems" rather than solely on strategic issues. The players at the center of this game are the political leaders and people at important posts in critical organizations. Decentralization of the decision-making process in order to meet the needs of dealing with foreign policy problems ensures that each player has some level of discretion, resulting in distribution of power. Foreign policy problems can cause significant disagreement between these actors regarding the actions to be taken and making wrong choices can cause broad damage.⁸⁰ Similarly, there may be divergent views among the domestic policy-makers regarding issues such as spending policies and economic reforms⁸¹ weakening the bargaining power of the recipient country while negotiating with the IMF as compared to a unified actor firmly defending its arguments regarding the design of the program, which could result in more extensive conditionality.

Research Design

Given the complexity of P-A problems in the design of IMF programs, how can we best trace the mechanisms creating variation in conditionality?

Answering my research question requires more than a simple statistical analysis. Despite his rigorous quantitative research on IMF lending, Copelovitch acknowledges that statistical

⁷⁸ Woods, *The Globalizers*, 79.

⁷⁹ Miles Kahler, "Bargaining with the IMF: Two-Level Strategies and Developing Countries," in *Double-Edged Diplomacy: International Bargaining and Domestic Politics*, ed. Peter B. Evans, Harold K. Jacobson, and Robert D. Putnam (Los Angeles: University of California Press, 1993), 370.

⁸⁰ Graham T. Allison, "Conceptual Models and the Cuban Missile Crisis," *The American Political Science Review* 63, no. 3 (1969): 707.

⁸¹ Graham Bird and Thomas D. Willett, "IMF Conditionality, Implementation and the New Political Economy of Ownership," *Comparative Economic Studies* 46, no. 3 (2004): 428.

analyses “do not offer much insight into the actual process of Fund decision-making.”⁸² In this regard, we need to move beyond the generalizations a large-N study can provide in order to uncover the causal mechanisms at play. Process tracing can be used to shed light on the existence of causality vs. spuriousness in the differences between the outcomes of marginally different cases, as well as provide insights for the study of cases that lie outside existing theories.⁸³

Measuring “political-economic processes,” are essentially difficult, which limits analyses on them to qualitative ones. Existing databases do not have “reliable proxies” for many important political economy variables, such as the “influence of special interest groups.”⁸⁴ This makes case studies a suitable approach for better understanding of “the new practice of conditionality.”⁸⁵ Case studies provide the advantage of accommodating “causal relations such as equifinality, complex interaction effects, and path dependency,”⁸⁶ which is essentially what is needed to solve the puzzle of this research. In the case of equifinality, accurate distinction of causal processes relies on meticulous attention to the details of the decision-making chain with process tracing.⁸⁷ As my hypotheses consider equifinality to be at work, process tracing is the only technique that can distinguish one causal process from the other. Besides, as will be explained in the next section, path dependence is also taken into account, which also requires process tracing. It is impracticable to observe the change in bureaucratic power and the fragmentation of the political system in different country cases, since in different political contexts the denotations of these concepts might differ. In this regard, it makes more sense to test the hypotheses with a single-country study, as concentrating on the temporal variations within multiple cases in a single country provides precision in the observation of the causal mechanisms.

The single-country study presented in the next section is the case of Turkey, with its four SBAs implemented between 1994-2008. As Denzin underscores, “triangulating data sources” would allow us to use the same methods to achieve “maximum theoretical advantage.”⁸⁸ In this context, data triangulation is taken on board for this research; the details of the case selection criteria as well as data collection are explained in the following section.

As Checkel points out, “process tracing should not be viewed as the only way of capturing causal mechanisms.”⁸⁹ There is a growing body of work on ethnic conflict and civil war employing computational simulation to “explore the logic and hypothesized scope conditions or particular causal mechanisms. For example, in recent work on civil war, scholars have used such modeling to analyze the transnational diffusion of social identities as a key process underlying the

⁸² Copelovitch, *Banks, Bonds, and Bailouts*, 27.

⁸³ Alexander L. George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge: MIT Press, 2004), 7.

⁸⁴ Oscar Calvo-Gonzalez, “Ownership and Conditionality in IMF-supported Programs: Back to Per Jacobsson’s Time,” *Review of International Organizations* 4, no. 4 (2007): 331.

⁸⁵ *Ibid.*

⁸⁶ George and Bennett, *Case Studies and Theory Development*, 22.

⁸⁷ See Lisa L. Martin, *Coercive Cooperation: Explaining Multilateral Economic Sanctions* (Princeton: Princeton University Press, 1992).

⁸⁸ Norman K. Denzin, *The Research Act: A Theoretical Introduction to Sociological Methods*, (Chicago: Aldine Publishing, 1970), 301.

⁸⁹ Jeffrey T. Checkel, “Mechanisms, Process, and the Study of International Institutions,” in *Process Tracing: From Metaphor to Analytic Tool*, ed. Andrew Bennett and Jeffrey T. Checkel (Cambridge: Cambridge University Press, 2015), 90.

spread of civil conflicts.”⁹⁰ However, the popularity of agent-based modeling in IPE has been relatively limited. I complement my qualitative analysis with an agent-based modeling of IMF program design to strengthen the validity of the causal mechanisms observed in process tracing. To my knowledge, this is the first computational simulation of negotiations over IMF conditionality, which can be considered as a novel contribution to the literature.

Operationalization of the Dependent Variable

As mentioned earlier, the dependent variable of my P-A model is the number and scope of conditionality. However, there are certain clarifications that need to be made regarding the operationalization of my dependent variable, since measuring the stringency of conditionality is not as straightforward as it might seem. As “objectively” measuring and comparing the “intrusiveness and stringency” of certain conditions is a challenging task,⁹¹ various scholars such as Kang, Copelovitch, Dreher and Jensen⁹² set the dependent variable for their empirical analyses as the number of IMF conditions.⁹³ Due to the lack of a “comprehensive index” of Fund structural conditionality covering a long period of time, scholars used to rely on a set of statistics to measure conditionality.⁹⁴ However, in January 2009 a previously internal IMF database, MONA (the Monitoring of Fund Arrangements), was released on the website of the Fund upon recommendation by the IEO of the IMF, approved by the Board. MONA is a collection of comparable data on the economic objectives and results of arrangements supported by the IMF.⁹⁵ As this is the only dataset providing a comprehensive view of all types of structural conditions by including prior actions, performance criteria, conditions for completion of program reviews and structural benchmarks,⁹⁶ it is increasingly used by scholars to analyze IMF conditionality quantitatively.

Stone introduced a new method in 2008, which measures the substantive scope of conditionality as a dependent variable instead of a simple count of the number of conditions.⁹⁷ As a result, he showed that there is great variation in the “substantive focus” of IMF programs, and the “breadth of the programs” is partly shaped by the domestic political constraints of the recipient countries.⁹⁸ His foremost dependent variable was set as “the number of categories of conditions” that would be tested in a “particular review.” He argues that this is a good measure for capturing

⁹⁰ Ibid.

⁹¹ Ibid.

⁹² See Mark S. Copelovitch, “Master or Servant? Common Agency and the Political Economy of IMF Lending,” *International Studies Quarterly* 54, no.1 (2010): 49-77; Axel Dreher and Nathan M. Jensen, “Independent Actor or Agent? An Empirical Analysis of the Impact of U.S. Interests on International Monetary Fund Conditions,” *Journal of Law and Economics* 50, no. 1 (2007): 105-24; Seonjou Kang, “Agree to Reform? The Political Economy of Conditionality Variation in International Monetary Fund Lending, 1983–1997,” *European Journal of Political Research* 46, no.5 (2007): 685–720.

⁹³ As a matter of fact, measuring the average tightness of a program via counting the number of conditions imposed as the dependent variable is a method developed by Mosley, Harrigan and Toye. Nonetheless, they did not explicitly state the way they counted conditions. For details, see Paul Mosley, Jane Harrington and John Toye, *Aid and Power: The World Bank and Policy-based Lending, Volume I: Analysis and Policy Proposals* London: Routledge, 1995).

⁹⁴ Morris Goldstein, “IMF Structural Conditionality: How Much Is Too Much,” working paper 01-04 (Institute for International Economics, 2000), <http://www.petersoninstitute.org/publications/wp/01-4.pdf>.

⁹⁵ International Monetary Fund, “Frequently Asked Questions: MONA,” <http://www.imf.org/external/np/pdr/mona/monafaq.aspx>.

⁹⁶ Goldstein, “IMF Structural Conditionality.”

⁹⁷ Stone, “Scope of IMF Conditionality,” 591.

⁹⁸ Ibid.

the “scope of conditionality.”⁹⁹ Stone’s method has been an inspiration for the operationalization of the dependent variable of this research. Due to the “heterogeneity” of structural conditions, a within-program or cross-program unit of account allowing for the aggregation and comparison of structural conditionality measures fails to exist. While a single policy action can be subject to a “single condition” in some cases, it can be separated into steps in another case, with a separate condition for each step,¹⁰⁰ which is the main shortcoming of Stone’s method. Stone himself acknowledges that “a six-fold categorization of structural reforms exaggerates the similarity of conditions across countries.”¹⁰¹ This does not pose a problem for the operationalization of the dependent variable here, since the empirical findings presented in the next section are based on a single-country study.

Taking into consideration Goldstein’s analysis reporting that “a typical one-year SBA” has about “a dozen structural conditions” when performance criteria, conditions for program reviews, structural benchmarks and prior actions are combined, we cannot exclude the structural conditions from our analysis.¹⁰² Taking everything into account, the dependent variable of my P-A model measures the scope of conditionality via coding the conditions in categories according to their policy areas.

III. IMF Program Design: The Turkish Case, 1994-2008

In this section I present the findings of an in-depth analysis of IMF program design, revealing the role of economic bureaucracy in shaping conditionality at both Level I and II. As KKV underscore, “case studies are essential for description, and are, therefore, fundamental to social science. It is pointless to seek to explain what we have not described with a reasonable degree of precision.”¹⁰³ Evidently, a single-country study exploring the ways in which programs of the Fund are formed is fundamental for this research and the motives were partially explained in the previous section.

Having formulated hypotheses on the basis of a substantial body of literature involving theoretical and empirical research, which were discussed in the previous section, and having formed views from examining the available statistical findings in the literature, I conducted 40 semi-structured interviews (between August 2012 and January 2015 in Washington, DC and Ankara) with key Turkish politicians, bureaucrats (of the Undersecretariat of Treasury of the Republic of *Turkey*, Central Bank, Ministry of Finance, former State Planning Organization¹⁰⁴ and Banking Regulation and Supervision Agency) engaged in designing the programs (between 1994-2008), and the relevant IMF staff including mission chiefs and resident representatives, as well as a number of executive directors. Interviewees largely preferred to remain anonymous; therefore, references to the interviews are general, meaning if the interviewee is still holding his/her affiliation, the title is referred to as a “staff” of the institution only, even if the interviewee is the head the institution or the department, for instance.

⁹⁹ Ibid., 599.

¹⁰⁰ International Monetary Fund, “Evaluation of Structural Conditionality.”

¹⁰¹ Stone, *Controlling Institutions*, 159.

¹⁰² Goldstein, “IMF Structural Conditionality.”

¹⁰³ Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research*, (Princeton: Princeton University Press, 1994), 44.

¹⁰⁴ State Planning Organization of Turkey, founded in 1960 was affiliated with the Prime Ministry until June 2011 when it was incorporated into the newly established Ministry of Development.

In the following sections, I attempt to trace the causal processes that explain the variation in number and scope of conditionality of the IMF programs implemented in Turkey between 1994-2008, based on the analysis of the interviews and the recorded minutes of the EB meetings that provide significant insights into the views of the executive directors. Apart from the said primary data, secondary sources (including the data collected with an extensive archival research of the Turkish daily newspapers) have also been used to present a clear picture of the four cases.

Case Selection: Turkey 1994-2008

Turkey, who is a “key strategic ally” of the United States,¹⁰⁵ is an interesting case to study, not only because of its importance for the G-7 countries, but also because it has been one of what Bird, Hussain and Joyce might term as the “recidivist” borrowers¹⁰⁶ of the Fund despite the consecutive crises it faced following the implementation of an IMF-led disinflation program that was launched in December 1999.

Turkey has been a member of the IMF since 1947 and received its first financial support from the Fund the following year. It requested assistance in the form of SBAs for the first time in 1961 and it became one of the most ardent borrowers of the Fund. As stated by the IMF in 2002, Turkey borrowed resources over 15 times its quota,¹⁰⁷ which leads us to think that the quota system is not strict as long as the borrower is strategically important for the G-7 countries. It is especially the approval of lending approximately SDR 13 billion with the SBA signed in February 2002, which was then the largest one the IMF extended,¹⁰⁸ that makes one think it was the United States pushing the Fund for providing big loans to Turkey. In this context, Stone claims that “Turkey’s access to IMF loans appeared to be assured throughout the 1990s in return for its cooperation with the United States–led operation to contain Iraq.”¹⁰⁹ Although in 2009 Turkey declared that it preferred to “manage without IMF support and interference,”¹¹⁰ its long experience with the Fund is illuminating for this research. A country that signed 19 SBAs with the Fund in 47 years offers variation in a single-country study. Table 1 lists the arrangements of Turkey with the IMF since 1948.

As George and Bennett underscore, single cases are helpful especially when they are “most likely,” “least likely,” or “crucial” cases.”¹¹¹ Studying a single “deviant” case or a case where a variable is at “an extreme value” can be very useful for advancing “new causal mechanisms.”¹¹² Turkey can be considered as a *crucial case* to study, because on the one hand, one may assume that Turkey should be getting favorable conditions with fewer strings attached to the loans due to its strategic proximity as well as its economic relations with the G-7 countries. Based on their panel data analysis of 206 letters of intent from 38 countries (submitted during the period April 1997 through February 2003), Dreher and Jensen found evidence that “closer allies of all G-7

¹⁰⁵ Ngaire Woods, “Understanding Pathways Through Financial Crises and the Impact of the IMF: An Introduction,” *Global Governance* 12 (2006): 384.

¹⁰⁶ Graham Bird, Mumtaz Hussain and Joseph P. Joyce, “Many Happy Returns? Recidivism and the IMF,” *Journal of International Money and Finance* 23 (2004): 231.

¹⁰⁷ IMF, *IMF Annual Report*, (Washington, District of Columbia: IMF, 2000), 166-169.

¹⁰⁸ International Monetary Fund, “IMF Chronology.”

¹⁰⁹ Stone, “IMF Lending in Africa,” 578.

¹¹⁰ Meltzer, “The IMF returns,” 445.

¹¹¹ George and Bennett, *Case Studies and Theory Development*, 80.

¹¹² *Ibid.*, 81.

countries were given significantly fewer conditions.”¹¹³ Analogously, based on an analysis covering 314 IMF arrangements of the MONA database, Dreher, Sturm and Vreeland found that political importance, measured by temporary membership of the UN Security Council, receives softer conditionality.¹¹⁴ On the other hand, we observe many strings attached to the loans Turkey received between 1999-2005. This leads us to cast doubt on the state-centric approach claiming that the strategic allies of the United States are always favored by the IMF. Analyzing the numerous SBAs signed with the Fund provides us with variation in conditionality over time, which extends the scope of this research beyond a single case study. Apart from this, the intense anti-IMF feelings of the public, which were instigated further by the consecutive crises faced while implementing an IMF program, make the Turkish case a good fit to test if the Fund was being used as a *scapegoat*. As Vreeland argues, “[a] government can effectively use the IMF as a scapegoat only if the population believes it.”¹¹⁵ According to a poll conducted in 2005 for the BBC World Service by the Program on International Policy Attitudes (PIPA), the IMF received the least favorable rating in Turkey, even lower than what it received in Argentina, when the respondents were asked if they thought the Fund was having “a mainly positive influence in the world.”¹¹⁶ This is a noteworthy result, considering the fact that the public opinion was still very much against the IMF in 2005, when the new IMF program already yielded positive results in the Turkish economy. In this context, Turkish governments never really struggled in convincing the population when they had to put the blame on the IMF advice.

Variation in the Conditionality

The operationalization of the dependent variable was explained in detail in the previous section. However, it is essential to present the variation in conditionality over time before proceeding to the analysis of the data. Most IMF arrangements approved since 2002 are included in the MONA database (the SBA Turkey signed in 2002, which was approved on April 2, 2002, is one of the six arrangements that are not included).¹¹⁷ Therefore, I have merged the data available in MONA database with the MONA archive that provides data for the period 1993-2003. Accordingly, I set the time frame of the research from 1994 to 2008, as the first SBA covered by the archived MONA data was approved by the Fund on July 8, 1994, which allows me to analyze four cases over the course of fourteen years.¹¹⁸ Even if the archived MONA database covered the SBA approved on April 04, 1984, it would be problematic to collect data for the right hand side of the model in order to explain the variation, since the process tracing is based on both the relevant EB meeting minutes and the interviews with the IMF staff and Turkish bureaucrats. Table 1 lists the four cases of SBAs this research analyzes.¹¹⁹

¹¹³ Axel Dreher and Nathan M. Jensen, “Independent Actor or Agent? An Empirical Analysis of the Impact of U.S. Interests on International Monetary Fund Conditions,” *Journal of Law and Economics* 50, no. 1 (2007): 119.

¹¹⁴ See Axel Dreher, Jan-Egbert Sturm and James Raymond Vreeland, “Politics and IMF Conditionality,” *Journal of Conflict Resolution* 59, no. 1 (2015): 120-14.

¹¹⁵ Vreeland, *The IMF and Economic Development*, 13.

¹¹⁶ BBC World Service Poll “Evaluations of Global Institutions and Economic Conditions,” *Program on International Policy Attitudes (PIPA)*, 2005, http://www.worldpublicopinion.org/pipa/pdf/jan06/GlobalPlayers_Jan06_quaire.pdf.

¹¹⁷ International Monetary Fund, “Frequently Asked Questions: MONA.”

¹¹⁸ International Monetary Fund, “Turkey: History of Lending Arrangements from May 01, 1984 to May 31, 2012,” <http://www.imf.org/external/np/fin/tad/extarr2.aspx?memberKey1=980&date1key=2012-05-31>.

¹¹⁹ See Appendix for details of the number and scope of conditionality in each arrangement.

Table 1: IMF lending arrangements with Turkey, 1994-2008

Arrangement Type	Date of arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
SBA	July 8, 1994	Sept 1995- (discontinued)	610	460
SBA	December 22, 1999	Feb 4, 2002	15,038	11,739
of which SRF	December 21, 2000	Dec 20, 2001	5,784	5,784
SBA	February 4, 2002	Feb 3, 2005	12,821	11,914
SBA	May 11, 2005	May 10, 2008	6,662	4,414

Source: IMF website¹²⁰

Expected Evidence

By concentrating on the step-by-step process of IMF program design, the four cases will help me in testing my argument that both a fragmented political system and severe economic crisis cause more conditionality, as they both lead to higher authority delegated to the bureaucrats at the domestic level, while the *antinomic delegation* from the Executive Board leads the IMF staff to increase conditionality. For this purpose, I need to clearly specify the expected evidence before proceeding to seeking confirming evidence of my core argument in the four Turkish cases, however.

Antinomic Delegation at the Executive Board Level

As discussed in the previous section, my two-level P-A model tries to examine not only *agency slippage*, but also what Gutner terms as *antinomic delegation* as a possible cause of the P-A problems in IMF lending at the EB Level.¹²¹ In cases like Turkey, where a strategically important country for the United States and G-7 is borrowing from the Fund, while the macroeconomic fundamentals do not look promising, the IMF staff is supposed to design a program that can be portrayed as a success story. However, the design of such programs providing large loans is a complex task in itself, especially when the country is facing a severe economic crisis. Therefore, if the executive directors are not content with the result of a program and criticizes the IMF staff regarding the design, the staff might be more cautious the next time that country is borrowing. The IMF staff, being a risk-averse actor, has the primary concern of protecting institutional legitimacy and his/her own prestige at the institution; as discussed in the previous section, “bureaucrats' utility function may be assumed to be the prestige, power, and influence”¹²² and one of the main motivations of the IMF staff is “the fear of failure and the desire

¹²⁰ International Monetary Fund, “Turkey: Financial Position in the Fund as of April 30, 2015,” <https://www.imf.org/external/np/fin/tad/exfin2.aspx?memberKey1=980&date1key=2015-05-31>.

¹²¹ Ibid., 11.

¹²² Frey, “The Public Choice View,” 222.

to minimize criticism.”¹²³ Accordingly, I expect to see the IMF staff designing a program with more extensive conditionality when the executive board was not content with the design of the previous program implemented in the same country. Observably, there is “path dependence”¹²⁴ at this level, and process tracing is precisely the technique to be applied to this type of causal process occurring in cases consisting of a “sequence of events, some of which foreclose certain paths in the development and steer the outcome in other directions.”¹²⁵

Analyzing the relevant EB meeting minutes is central to spotting this P-A problem. It is necessary to note that the discontent of executive directors of the Fund may not always be directed at the IMF staff; the EB might simply demonstrate disappointment with the country’s poor performance, while in some cases, they blame the IMF staff regarding the design of the program if it does not yield the expected results. If the EB is content with the performance, they will most probably praise both actors, however. In this context, I expect to see evidence of the executive board’s explicit criticisms addressed to the staff in order to observe antinomic delegation.

Bureaucratic Power: The Impact of Crisis Intensity

Turkey went through three major crises between 1994 and 2001, which corresponds to three programs implemented while borrowing from the Fund. Based on the theoretical discussion of bureaucracy in the previous section, I expect to find evidence in the interviews for greater authority delegated to the Turkish bureaucrats during times of the said economic crises. Bureaucrats are aware of the fact that politicians cannot make decisions based on economic rationality. Some reforms might not be politically feasible, however, borrowing from the Fund when the country is facing a severe economic crisis changes the dynamics. The reformist bureaucrats can use the IMF as a scapegoat to push for reforms that the government would not be willing to implement under normal circumstances, resulting in more extensive conditionality. Since there are numerous large-N studies explaining IMF lending behavior with economic variables as key determinants, making sense of the correlation between economic crisis intensity and the number and scope of conditionality might look straightforward at first glance. However, different causal mechanisms could be at play; a severe economic crisis gives more authority to the bureaucracy, who makes use of the enhanced agenda-setting power to tailor the design of the program according to economic rationale instead of the political interests of the government. Accordingly, I expect to see inclusion of reforms, which had been on the agenda of Turkey and had not been implemented due to political reluctance, in the programs prepared following economic crises.

Fragmented Political System: Coordination Problems

The political conditions of the 1994-2002 and 2003-2008 periods in Turkey were widely dissimilar in the sense that the former can be distinguished by its “fragmented party system” with consecutive coalition governments, whereas a single-party government ruled the country in the

¹²³ Willett, “Broader Public Choice Analysis,” 69.

¹²⁴ I take on board the “narrower definition” of path dependence employed by Margaret Levi and Paul Pierson, which states that steps taken previously in a particular direction lead to movement in that same direction. For more details, see Margaret Levi, “A Model, a Method, and a Map: Rational Choice in Comparative and Historical Analysis,” in *Comparative Politics: Rationality, Culture, and Structure*, ed. Mark I. Lichbach and Alan S. Zuckerman (Cambridge: Cambridge University Press, 1997), 28; Paul Pierson, “Increasing Returns, Path Dependence, and the Study of Politics,” *The American Political Science Review* 94, no. 2 (2000): 252.

¹²⁵ George and Bennett, *Case Studies and Theory Development*, 212.

latter. In a coalition government, each coalition partner rules a different ministry, which causes coordination problems among the country authorities in the design and implementation of the programs. Considering the presence of a three-party coalition government during the negotiations for the 17th SBA, I expect to find evidence in the interviews for the largest coordination problems between 1999-2002, and no major issues in this context during the Justice and Development Party (AKP) rule. It becomes exceedingly difficult for the country authorities to be convincing during the negotiation process when there is no consensus among the coalition partners regarding the conditionality of the program, leading to more strings attached to the loans Turkey received during periods of more fragmented political system.

Analysis: IMF Lending to Turkey between 1994-2008

The four cases of IMF lending to Turkey between 1994-2008 provide evidence in support of the two level principal-agent theory of IMF program design. They offer confirmation of my core argument that antinomic delegation of the EB, the level of fragmentation in the political system and crisis intensity are the key determinants of variation in IMF conditionality.

EB Antinomic Delegation: The Effect of the Board's Discontent

As expected, stricter conditionality were observed in Turkey's programs when the EB was discontent with the previous program. The SAP implemented in Turkey in the 1980s left a good impression on the EB, accordingly when Turkey requested an SBA from the Fund in 1994, the staff designed a program with less strings attached as compared to the 1999 program. The general view of the EB on the program designed in 1994 was initially positive. However, the delays in the implementation of especially the structural reforms like privatizations of SEEs led to disappointment on the EB side, which manifested itself as criticisms at the EB meetings. Turkey ultimately terminated the said program before the general elections of December 1995. As a result, when Turkey requested an SBA following the earthquake of August 1999, the IMF staff had to be more precautionary and design a program with more extensive conditionality to protect the Fund from yet another failure after its legitimacy was damaged following the 1997 East Asian crisis.

Turkey faced two consecutive crises while implementing the 1999 program. The executive directors harshly criticized the IMF staff for failing to see the vulnerabilities of the economy and not taking the necessary measures to prevent the crises in November 2000 and February 2001. Therefore, despite the improved performance of Turkey thanks to the "Transition to the Strong Economy Program", the SBA designed in 2002 still had a large number and scope of conditionality. The 2002 program was widely considered as a successful one; the EB did not raise any major concerns during its meetings. Therefore, when Turkey requested its last SBA in 2005, the conditionality got much softer.

Crisis Intensity: Authority Delegated to Bureaucracy

In line with the expected evidence discussed at the beginning of this section, the severe economic crises faced during the implementation of the 1999 program forced the Turkish government to delegate extensive authority to the bureaucrats. This gave the reform-minded bureaucrats the opportunity to integrate the reforms that had been on Turkey's agenda for years into the IMF program, resulting in more extensive conditionality. The majority of the Turkish

bureaucrats interviewed argued that the Turkish bureaucracy was the main actor in designing and owning the 1999 SBA followed by the “Transition to the Strong Economy Program”. As a former Minister of Economic Affairs stated, the Turkish technocrats were the main actors behind the reforms in Turkey, but the political system was blocking them. They were able to set things in motion with the help of the crisis.¹²⁶ We see a sharp decline in the number and scope of conditionality when bureaucratic power diminished with high levels of economic growth after 2005.

Political System Fragmentation: Coordination Problems

In addition to the aforementioned determinants of variation in the number of scope of conditionality, the level of fragmentation in the political system also had an evident influence on the IMF program design, through coordination problems in coalition government periods. The lack of consensus between the three coalition partners on the design of the 1999 program landed itself into weaker arguments during the negotiations between Turkey and the IMF, resulting in acceptance of a long list of conditions attached to the loan Turkey received. As seen in the Turk Telekom instance, a dispute between coalition partners causes less bargaining power for the Turkish authorities, leading to stricter conditionality as suggested by the IMF. As clearly stated by many interviewees, the negotiations of the 2005 program witnessed a stark difference in terms of the level of unity in the government’s stand as compared to the previous programs, resulting in more bargaining power for Turkey.

Evidence for Alternative Explanations

As stressed by George and Bennett, the process-tracing procedure should be applied to “a wide of alternative hypotheses that theorists have proposed,” since otherwise “*left-out variables* may threaten the validity of research design.”¹²⁷

Past performance

In addition to lending strong support for the two-level P-A framework and the hypotheses linking variation in IMF conditionality to antinomic delegation, political system fragmentation and economic crisis intensity, the Turkish cases also illustrate the continued importance of past performance as a determinant of IMF program design. As evident from the interviews both with the Turkish bureaucrats and the IMF staff, in each of the programs discussed above, the IMF staff took into consideration the past performance of Turkey while setting the conditions of the program.

Nevertheless, past performance by itself is not sufficient to account for the variation in the number and scope of conditionality. If the past performance of Turkey was the main determinant of the IMF’s funding decisions, then Turkey would have gotten a shorter list of conditionality following its satisfactory performance during the implementation of the “Transition to the Strong Economy Program”.

Informal governance

¹²⁶ Phone interview with a former Minister of State for Economic Affairs, 29.08.2012.

¹²⁷ *Ibid.*, 80.

Although the Turkish cases support the informal governance approach when we consider the US influence on the size of the loans Turkey received, there is little evidence that it played a major role in shaping conditionality. As a strategic ally, Turkey received the largest loans of the time, however, its strategic proximity neither to the US nor the rest of the G-7 countries helped it get softer conditionality even after its growing importance in the region following 9/11.

IV. An Agent-Based Model of IMF Program Design

Since I tested my hypotheses with a single country study, in contrast to previous studies that used a pooled sample of countries, validating the strength of the causal mechanisms observed in the process tracing is essential. In this regard, agent-based modeling is a promising method to confirm the findings of my qualitative work.

What is Agent-Based Modeling?

An agent-based model is the simulation of a multi-agent system with the goal of capturing key theoretical elements of a real-world process.¹²⁸ An agent-based model is made up of individual agents that are implemented as objects in computer software. Each agent has states and rules that determine its behavior under different conditions. The process of running an agent-based model involves the instantiation of an agent population, followed by the monitoring of the interactions between the agents.¹²⁹

The agents in an agent-based model represent social actors—individual people, organizations such as firms, or bodies such as nation-states. The model simulates the behavior of these entities in an environment that mimics real world conditions under which the agents operate, also created in software. One of the most important features of agents is that they can communicate with each other by passing messages to each other and act based on the content of those messages. The ability to model interactions between agents is the main way which sets agent-based modeling apart from other computational models.¹³⁰

Agent-Based Modeling of IMF Program Design

In this paper, agent-based modeling is utilized to simulate the interactions between the main actors involved in the design of an IMF program, namely the IMF Executive Board, IMF staff, recipient country government and recipient country bureaucrats, under various economic and political conditions. Particularly, the causal mechanisms that explain the variations in the number and scope of program conditionality are observed through the simulation of IMF program design, which are then used to validate the hypotheses of the research and the conclusions of the process tracing.

The agent-based model presented here is based on assumptions derived from theories governing the interactions and behaviors of the agents involved in program negotiations, as discussed in section 2. The behavioral rules of the individual agents are extracted from the executive board meeting minutes, as well as interviews with IMF staff/directors and Turkish

¹²⁸ Eliot R. Smith and Frederica R. Conrey, “Agent-Based Modeling: A New Approach for Theory-Building in Social Psychology,” *Personality and Social Psychology Review* 11, no. 1 (2007): 88.

¹²⁹ Robert Axtell, “Why Agents? On the Varied Motivations for Agent Computing in the Social Sciences,” working paper No. 17 (Center on Social and Economic Dynamics November, 2000), 2.

¹³⁰ Nigel Gilbert, *Agent-Based Models* (Thousand Oaks: Sage Publications, 2008), 5.

bureaucrats. Various initial states for the economic and political conditions under which the program design was initiated have been introduced into the model and output data and observations have been gathered. Below I describe the main elements of the devised agent-based model including the simulation environment, the agents, and agent behavior rules, followed by a discussion of the main findings of the simulation.

Simulation Environment

The environment modeled in the simulation is a negotiation process over the inclusion of a list of conditionality in an IMF program. The model assumes that each conditionality in the program is negotiated separately (independent of other conditionality), involving back and forth discussions between the IMF staff and borrowing country bureaucrats, as well as between the bureaucrats and the borrowing country government. This assumption of independence between the negotiations for different conditionality is a simplification of the whole program design process, which focuses on the micro details of the conditions under which specific conditionality gain sufficient acceptance by both sides of the negotiation to be included in the program. As in any negotiation process, a decision is reached when one of the negotiators is able to convince the other of the necessity to include specific conditionality in or exclude it from the program. The preferences of the negotiators regarding each condition are encoded as a real number between 0 and 1 in the model, where 1 expresses complete acceptance and 0 expresses complete rejection of the conditionality by the corresponding party.

The environment variables that influence the preferences of the individual actors include the macroeconomic conditions (crisis scope) surrounding the program design, concerns regarding the design of previous IMF programs, and the political conditions under which the government is negotiating. The main assumption of the model is that the IMF negotiators will always present supporting arguments for the inclusion of conditionality, while the government negotiators will always resist their inclusion. As negotiations proceed, a softening viewpoint will be observed on either side of the argument and a balance will be reached, resulting in a decision being made for that specific conditionality. Starting with a list of conditionality supported by the IMF staff and continuing this negotiation process for each conditionality until they are either included in or ruled out of the program results in a program design with a number of conditionality attached when the simulation stops.

Simulation Agents

The agents modeled in the simulation consist of the main participants of IMF program design, i.e. the borrowing country government, borrowing country bureaucrats, the IMF executive directors and the IMF technocrats. Each agent has particular preferences regarding conditionality design, as determined by simulation parameters. Following the assumption of reform-minded inclination, the borrowing country bureaucrats are modeled as pro-conditionality actors in the simulation. The bureaucrats collectively act as intermediaries between the IMF staff and the borrowing country government over the negotiations for each conditionality, until a decision is reached about the inclusion of that conditionality in the program. The main parameter that determines how much leverage the bureaucrats have on the design of the program in general is a function of the scope of the crisis in the country, following the causal mechanism introduced in process tracing. For each step in the negotiation between the government and the bureaucrats over a specific conditionality, the variation in the acceptability of the conditionality is weighted by this

leverage factor, which takes on a value between 0.2 and 0.8. For IMF staff, agent preferences regarding conditionality are modeled using a parameter that represents the legitimacy concerns of the staff during program design. This parameter has the effect of determining how convincing and insistent the staff is when negotiating each conditionality in the program design. The legitimacy concern parameter is modeled as a function of the general degree of discontent in the Executive Board regarding the design of previous IMF programs. While the borrowing government is modeled as a collective agent in the negotiations with the country bureaucrats, in the case of coalition governments, the preferences regarding conditionality are integrated as an average of the individual preferences of the coalition partners. The model assumes the coalition partners have equal say in the conditionality preferences, but their views on some conditionality could diverge. The preferences of the government regarding the inclusion of specific conditionality are shaped by the political contentiousness of the conditionality, i.e. while a politically contentious condition will likely not be favored by the government, it is easier to convince the government for the inclusion of a not-so-contentious condition in the program.

The model allows for varying the number of coalition partners in the recipient government (between 1-3), the degree of divergence of views among the government constituents, and the level of criticism expressed by Executive Board members regarding the design of previous IMF programs, which allows for the observation of the different causal mechanisms at play in the design of a program.

Agent Behavior Rules

The negotiation process in the model starts with a list of conditionality specified by the IMF staff, with a neutral acceptability level attached to each condition. The number of conditions to be negotiated is set to 20 at the beginning of each simulation run, following the data regarding the design of IMF programs in the observed period. At each time step during the negotiation process for a condition, the acceptability level of the condition changes based on the preferences of the negotiators and the negotiation is only over when the acceptability level is above a certain threshold, in which case the condition becomes part of the program or below a certain threshold, in which case the condition is not included in the program. The magnitude of change in the degree of acceptance is modeled using a Gaussian process with a mean and variance specified using the values of the simulation parameters for different environment variables.

The first simulation variable is the probability that any Executive Director raised a concern about the design of a previous IMF program with the same country. A high level of criticism in the Executive Board is modeled as increasing legitimacy concerns for the IMF staff, which lends itself into greater pressure (i.e. increased acceptability level) from the IMF side on the acceptance of each condition. The second variable is a measure of the scope of the crisis in the borrowing country, which is an integer between 1 and 6 as in Reinhart and Rogoff's crisis index.¹³¹ This variable is encoded in the causal mechanism that increases the leverage of the reform-minded borrowing country bureaucrats in the negotiations when the crisis scope in the country assumes a high value. By the same token, the influence of the borrowing country government on the decision-making processes regarding conditionality decreases with a high crisis scope. The sum of the degrees of leverage of the bureaucrats and the government on the decision-making process at any point during the simulation is equal to 1. The change in the acceptability level of a specific

¹³¹ For more details, see Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton: Princeton Univ Press, 2009).

condition during the discussions on the borrowing country’s side is modeled as the degree of rejection by the government weighted by the leverage of the government at that point in time. The third variable is the number of coalition partners in the borrowing government, which is set to 1 if it is a single-party government. This number affects the acceptability level of a condition by generating different values for each coalition partner, which are averaged to form the general opinion on the government side of the negotiations. The differences among the opinions of the coalition partners are influenced by a fourth variable, the probability of divergence of views. While a probability close to zero suggests general consensus on most issues, a probability close to 1 means the partners could have radically different views on many conditions. The value of this variable is disregarded in case of single-party governments. The fifth variable, *average political contentiousness*, indicates how much political pressure the implementation of a specific condition would cause for the government. As discussed in sections 2 and 3, politicians do not favor some reforms simply because they have a bite on the public, at least in the short term. Hence, the value of this variable influences the preferences of the government regarding the conditionality in the program, i.e. it is used to set the change in the acceptability level of a condition on the government side at each negotiation step, with a high level of contentiousness leading to a lower level of acceptability. Table 2 provides a summary of the simulation variables along with the possible range of values for each.

Table 2. Simulation Parameters

Variable	Description	Possible Values
Average discontent	The probability that any Executive Board member raised concerns regarding the design of previous programs	(0-1), discontent across the Executive Board is normally distributed with this mean.
Crisis scope	The scope of the crisis in the borrowing country at the time of the negotiations	[1-6], integer
Number of government partners	The number of coalition partners in the borrowing country government at the time of the negotiations	1, 2 or 3
Average view divergence	The average divergence in the views of the coalition partners regarding conditionality	(0-1), view divergence for different conditions is normally distributed with this mean.
Average contentiousness	The average political contentiousness of the negotiated conditionality	(0-1), political contentiousness for different conditions is normally distributed with this mean.

Simulation Findings

The agent-based model presented here sheds light on the micro-processes involved in the negotiations and design of an IMF program and how they affect the macro processes, in this case the number of conditionality in the program. The main findings of the simulation as described below provide significant support for the hypotheses of the research and the causal mechanisms at play during negotiations. For all simulations, the average numbers over 1000 runs are reported.

Effects of Executive Board Discontent

This set of simulations illustrates the effects of varying discontent at the IMF Executive Board level on the number of conditionality included in a program after the initial negotiations. As mentioned earlier, the discontent of the Executive Board with a previous program demonstrates itself as increased cautiousness at the IMF staff level, resulting in a firmer stand of the staff during the negotiations for all proposed conditionality. For these simulations, the government consisted of a single party, the average level of political contentiousness of conditionality was fixed at 0.4, the crisis scope was fixed at 4 and the standard deviation for the discontent level of the Executive Board was set to 0.2.

Figure 2. Number of conditionality vs. probability of discontent of EB with previous program

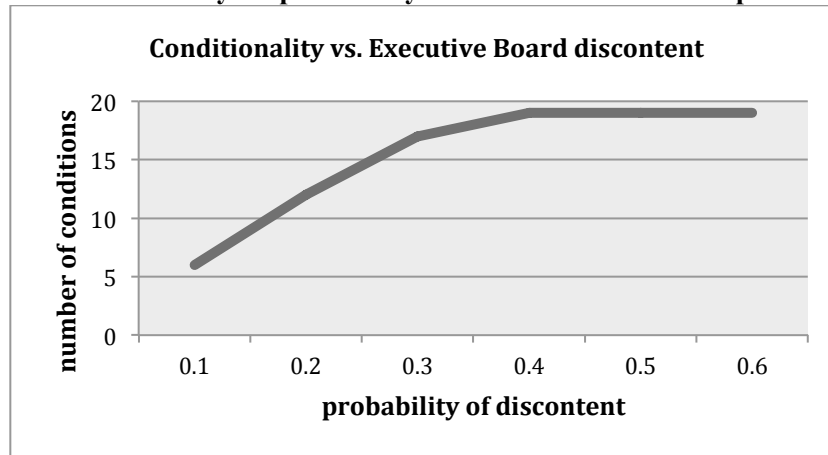
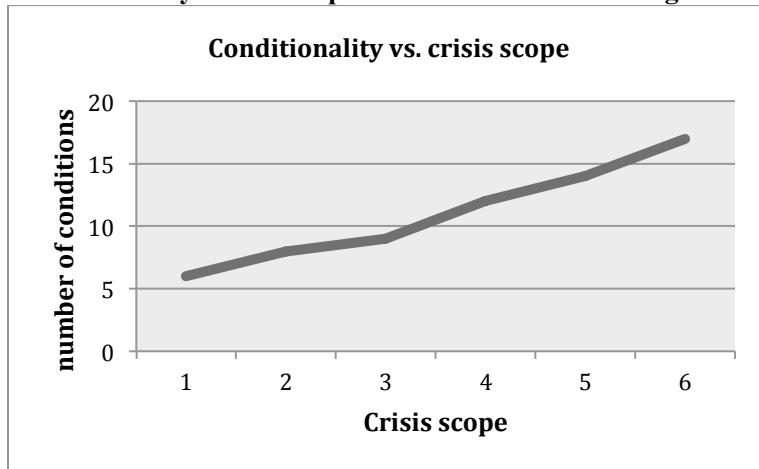


Figure 2 shows the results of the simulations. The effect of the discontent of the Executive Board with the design of previous programs clearly demonstrates itself with a significant increase in the number of conditionality as the level of discontent increases from 0.1 to 0.4 and reaches a plateau at that point. With all other parameters being fixed, this is a result of the causal mechanism discussed above, which increases legitimacy concerns of the IMF staff, making them stricter regarding the acceptance of proposed conditionality during the negotiations. The results of the simulation are in strong support of the hypothesis that increased discontent in the Executive Board leads to increased conditionality in the program design.

Effects of Crisis Scope

In the second set of simulations, the effects of the scope of crisis in the borrowing country at the time of negotiations on the number of conditionality were considered. The government consisted of a single party once again, the average political contentiousness of the conditionality was fixed at 0.4 and the average level of discontent of the Executive Board was fixed at 0.2. Figure 3 illustrates the change in the number of conditionality in response to the change in crisis scope. As expected, the number of conditionality in the program increases significantly with increasing crisis scope. While the number of conditionality in the program can be impacted by the scope of crisis in the borrowing country through multiple mechanisms such as changes in macroeconomic conditions, the causal mechanism at play here is the increased leverage of the borrowing country bureaucrats on the design of the program, as the model encodes that leverage as a direct consequence of the crisis scope and no other parameter in the simulation is directly affected by the crisis scope.

Figure 3. Number of conditionality vs. the scope of crisis in the borrowing country



Effects of Political Environment

The last set of simulations aims to demonstrate the effects of the political environment in the borrowing country on the number of conditionality in the program through two parameters: the level of fragmentation of the political system, i.e. how many parties are ruling the government and how divergent the views of the different parties are regarding various conditionality, as well as how politically contentious the proposed conditionality are given the current state of the country. For these simulations, the average level of political contentiousness of conditionality was fixed at 0.4, the crisis scope was fixed at 4 and the average level of discontent of the Executive Board was fixed at 0.2. The simulations were run under two types of scenarios: One where the number of parties in the government is fixed with varying degree of divergence between the views of the coalition partners and another where the view divergence is fixed, but the number of coalition partners varies from 1 to 3.

Figure 4. Number of conditionality vs. level of political system fragmentation

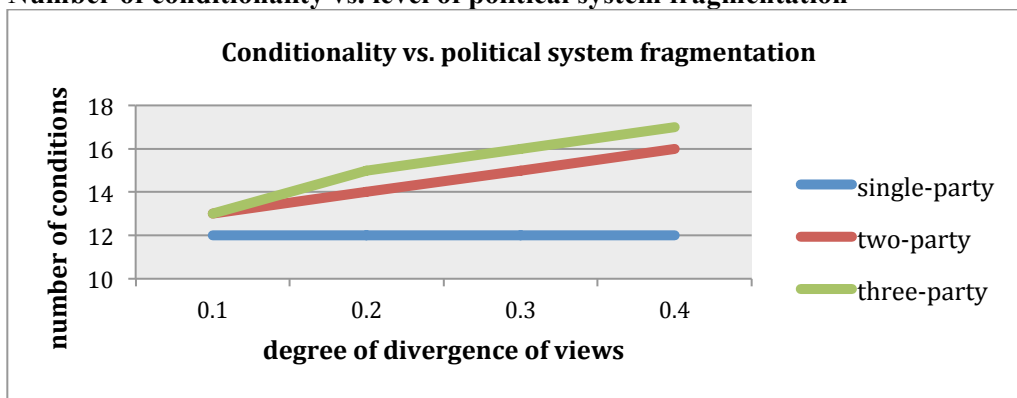


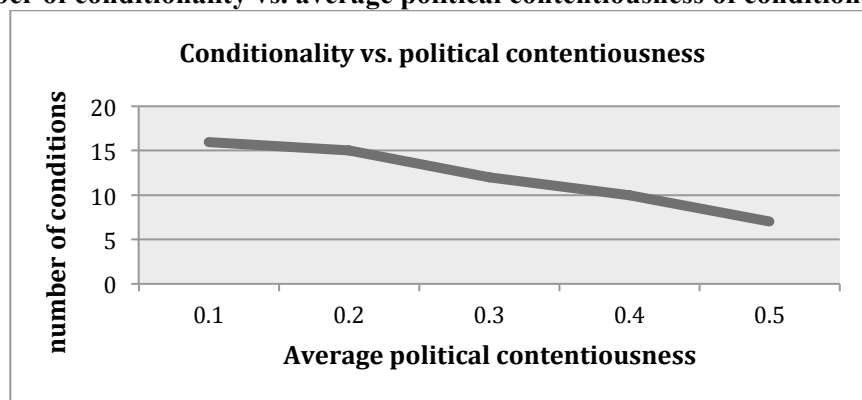
Figure 4 shows the results of the first set of simulations showing the effects of the political environment on the number of conditionality. As seen in the figure, both the existence of a fragmented political system and increased divergence between the views of the parties constituting the government have the effect of increasing the number of conditionality in the program. While a two-party government causes significant increase in the number of conditionality over the case of a single-party government, the difference between the cases of a two-party and three-party

government is subtler. Once again, the hypothesis of the research regarding the relation between the level of fragmentation in the political system and the number of conditionality in the program is validated through the simulation. Note that the causal mechanism behind these results is the intra-government negotiation process, which results in failure to reach consensus regarding the acceptability of particular conditions, demonstrating itself as weakened arguments during the negotiations with the IMF staff.

The second set of simulations related to the political environment in the borrowing country shows the effects of variation in the political contentiousness of the proposed conditionality on the number of conditionality that is ultimately included in the program. For these simulations, the government consisted of a single party, the standard deviation of political contentiousness of conditionality was set to 0.1, the crisis scope was fixed at 4 and the average level of discontent of the Executive Board was fixed at 0.2.

In the simulated model, the main determinant of the decisions on the government side of the negotiations is the political contentiousness of the conditionality as discussed previously. Figure 5 clearly illustrates the decrease in the number of accepted conditionality with increasing level of political contentiousness of the conditionality. Highly contentious conditionality causes a firmer stand on the government side during the negotiations to prevent the inclusion of the conditionality in the program, with the fear of losing votes.

Figure 5. Number of conditionality vs. average political contentiousness of conditionality



V. Conclusion

IMF conditionality has always been the most controversial aspect of the programs designed for countries borrowing from the Fund. There is a substantial body of literature examining the main factors explaining the variation in the loan size and conditionality shaping IMF programs. Nevertheless, the growing empirical literature on IMF lending has so far, to a large extent, neglected the impact of the negotiations between the IMF staff and recipient country bureaucrats in explaining how IMF programs are designed. Most of the previous work on the analysis of IMF lending focused on the decision-making at the international institution level, however, it is known that IMF programs are designed not only by the IMF staff; recipient country bureaucrats play a significant role in negotiations and therefore in shaping the programs. In some cases, reform-minded bureaucrats of the recipient country also use an IMF program as an excuse to push for reforms to be implemented in a country facing a severe economic crisis.

By building a two-level Principal-Agent model, this research attempts to open the black box of the negotiations for IMF programs, which sheds light on the processes leading to variation

in IMF conditionality. The operation of program design is illuminated by first focusing on the determinants of the number and scope of conditionality, and then through an in-depth analysis of the causal mechanisms at play using a single-country study, namely the Turkish case, which offers variation in conditionality over time.

I have found significant supporting evidence for the causal mechanisms explained earlier in the design of the SBAs Turkey signed with the IMF between 1994-2008. Section 3 presented the findings of an in-depth analysis of the said programs, with specific focus on the economic and political conditions in the country during the negotiations for and implementation of the SBAs, as well as consideration of the track record of the country and IMF Executive Board's criticisms for the staff regarding program design. Turkey being one of the most ardent borrowers of the Fund since early 1960s, exhibited great variation in the number and scope of conditionality attached to its programs as well as the economic and political conditions under which the programs were designed, making the case a well-suited one to study the causal mechanisms at play in the negotiations for IMF programs. The minutes of the related Executive Board meetings, interviews with key Turkish politicians, bureaucrats engaged in designing the programs, the relevant IMF staff including mission chiefs and resident representatives, and a number of executive directors provided significant insights into both the decision-making processes at the IMF and the involvement of the different institutions in Turkey as well as the Turkish government in the design of the programs.

Section 4 provided a computational simulation of the proposed two-level P-A model of IMF program design to provide stronger support for the validity of the mentioned causal mechanisms in creating the effects observed on the variation of conditionality across programs. An agent-based model was designed to simulate the interactions between the various actors involved in the design of an IMF program, i.e. the IMF Executive Board, the IMF staff, the recipient country bureaucrats and the recipient country government, and the related negotiations. The results of the model simulations under various conditions including different levels of criticism by the Executive Board, varying magnitudes of economic crisis in the recipient country and different levels of fragmentation in the government, provided support for the operation of the discussed causal mechanisms, strengthening the arguments of the conducted process tracing. The agent-based modeling approach presented here has the potential to become an indispensable part of methodological triangulation in the study of negotiations with international organizations if explored in greater depth by IPE scholars.

The findings of this study have significant implications for the study of decision-making processes in international organizations, particularly for instances where delegation of authority is involved at multiple levels or within multiple sides of negotiations, as is the case in IMF lending. The two-level P-A model of IMF lending I proposed in this work can be applied to various other country studies to illuminate the underlying mechanisms involved in the negotiations over conditionality. The story gets more complicated when the Fund collaborates with another institution, for instance the European Commission, to grant financing to a country facing an economic crisis, as that requires a negotiation process involving more actors with different preferences. In order to be able to accurately account for the diverse preferences of the actors in such cases, the model can be extended to include a new set of actors at the second level, i.e. the collaborating institution, and the corresponding P-A problems involved, which paves the way for further research using this framework.

VI. Appendices

Appendix I: Conditionality in the SBAs, 1994-2008

i. 1994 SBA

Structural conditionality	
Private sector reform	1 PC
Quantitative performance criteria	
Zero ceiling is specified on a commitment basis for all maturities	
Ceiling on Short-Term Debt	
Interest rates	
Total domestic credit	
Limit on public sector deficit as benchmarks/performance criterion	
BOP/Reserve Test	
Floor for stock of gross/net international reserves	
No new arrears/default (continuous injunction)	
Ceilings on Medium/Long-Term Debt	
Net Domestic assets	

ii. 1999 SBA

Structural conditionality	
Price controls	2 PA, 1 SB
Fiscal policy and public debt management	1 PA, 1 SB
Banking reform	1 PA, 1 SB, 1 PC
Private sector reform	1 PA, 1 SB, 1 PC

Quantitative performance criteria	
Zero ceiling is specified on a commitment basis for all maturities	
Ceiling on Short-Term Debt	
Total domestic credit	
Limit on public sector deficit as benchmarks/performance criterion	
BOP/Reserve Test	
Floor for stock of gross/net international reserves	
Ceilings on Medium/Long-Term Debt	
Net Domestic assets	
Government/public sector expenditures	
Public enterprise reform	
Financial sector reform	
Agricultural policies	
Divestment/privatization	
Pricing policy (incl. selected price adjustments)	
Wage/income policy	
Other monetary policy measures e.g. reserve requirements	
Tax measures	
Approval of budget	

iii. Structural Conditionality in 2001

Structural conditionality	
Banking sector reform	1 PA, 2 SB, 11 PC
Fiscal transparency and management	5 SB
Private sector reform	1 PA, 1 SB, 2 PC

Fiscal policy and public debt management	1 PA, 1 SB, 2 PC
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iv. 2002 SBA

Structural conditionality	
Fiscal policy and public debt management	1 PA, 2 SB
Banking reform	7 PA, 3 SB, 2 PC
Public sector reform	6 PA, 13 SB, 1 PC
Private sector reform	4 PA, 4 SB
Safeguards assessment	1 SB, 2 PC
Quantitative performance criteria	
Zero ceiling is specified on a commitment basis for all maturities	
Ceiling on Short-Term Debt	
Total domestic credit	
Limit on public sector deficit as benchmarks/performance criterion	
BOP/Reserve Test	
Ceilings on Medium/Long-Term Debt	
Financial sector reform	
Tax measures	
Civil service reform	
Domestic Arrears	
Tax/other revenue	
Change in net international reserves	

v. 2005 SBA

Structural conditionality	
Banking sector reform	3 PA, 7 SB, 1 PC
Fiscal measures	2 PA, 9 SB, 2 PC
Quantitative performance criteria	
Ceiling on Short-Term Debt	
Total domestic credit	
Limit on public sector deficit as benchmarks/performance criterion	
BOP/Reserve Test	
Ceilings on Medium/Long-Term Debt	

Appendix II: Agent-Based Model Simulation Code in Java

```
import java.util.ArrayList;
import java.util.Random;

public class Simulation {

    //actors
    BoardMember [] executiveBoard;
    CountryBureaucrat bureaucracy;
    Government govt;
    IMFStaff staff;

    final int NUM_NEGOTIATED_CONDITIONALITY = 20;
    final int NUM_GOVERNMENT_PARTNERS = 1; //between 1-3
    final double AVG_VIEW_DIVERGENCE = 0.4; //between 0-1
    final double AVG_CONTENTIOUSNESS = 0.5; //between 0-1
    final double CONCERN_PROBABILITY = 0.2; //for EB members
    final double CRISIS_INTENSITY = 3; //between 1-6

    final double ACCEPTANCE_THRESHOLD = 0.9;
    final double REJECTION_THRESHOLD = 0.4;
```

```

double governmentConsensusProbability;

double pastPerformance;

ArrayList<Conditionality> negotiatedConditionality;

int numNegotiated;

int numAccepted;

public void run() {

    staff = new IMFStaff();

    executiveBoard = new BoardMember[24];

    Random generator1 = new Random();

    double totalConcern = 0;

    for ( int i = 0; i < 24; i++ ) {

        double concern = generator1.nextGaussian() * 0.2 +
CONCERN_PROBABILITY;

        totalConcern += concern;

    }

    staff.legitimacyConcern = totalConcern/24;

    double bureaucraticPower = 0.2; //between 0.2-0.8

    bureaucraticPower += ( CRISIS_INTENSITY * 0.1 );

```

```

bureaucracy = new CountryBureaucrat( bureaucraticPower );

govt = new Government( NUM_GOVERNMENT_PARTNERS,
AVG_VIEW_DIVERGENCE );

Random generator = new Random();

negotiatedConditionality = new ArrayList<Conditionality>(
NUM_NEGOTIATED_CONDITIONALITY );

for ( int i = 0; i < NUM_NEGOTIATED_CONDITIONALITY; i++ ) {
    double cont = generator.nextGaussian() * 0.2 +
AVG_CONTENTIOUSNESS;

    Conditionality c = new Conditionality();
    c.contentiousness = cont;
    c.acceptance = 0.65;
    negotiatedConditionality.add( c );
}

numNegotiated = 0;
numAccepted = 0;

```

```

for ( int j = 0; j < NUM_NEGOTIATED_CONDITIONALITY; j++ ) {
    Conditionality c = negotiatedConditionality.get( j );
    if ( negotiationOver( c ) ) {
        numNegotiated++;
        if ( c.accepted ) {
            numAccepted++;
        }
    }
}

```

*//continue until decision is reached for each proposed
conditionality*

```

while ( numNegotiated < NUM_NEGOTIATED_CONDITIONALITY ) {

    for ( int i = 0; i < NUM_NEGOTIATED_CONDITIONALITY;
i++ ) {

        Conditionality c = negotiatedConditionality.get( i
);

        if ( !negotiationOver( c ) ) {

            //negotiation between bureaucrats-government
            bureaucracy.negotiateWith( govt, c );

            //negotiation between IMF staff-bureaucrats
            bureaucracy.negotiateWith( staff, c );

```

```

        if ( negotiationOver( c ) ) {
            numNegotiated++;
        }
    }
}

for ( int j = 0; j < NUM_NEGOTIATED_CONDITIONALITY; j++ ) {
    Conditionality c = negotiatedConditionality.get( j );
    if ( c.accepted ) {
        numAccepted++;
    }
}

}

public boolean negotiationOver( Conditionality c ) {

    boolean over = true;

    if ( c.acceptance >= ACCEPTANCE_THRESHOLD ) {
        c.accepted = true;
    }
}

```



```
    else if ( c.acceptance <= REJECTION_THRESHOLD ) {
        c.accepted = false;
    }
    else {
        over = false;
    }

    return over;
}
}
```

```
/**
 * @param args
 */
public static void main(String[] args) {

    Simulation s = new Simulation();
    int totalAccepted = 0;

    for ( int i = 0; i < 1000; i++ ) {
        s.run();
        totalAccepted += s.numAccepted;
    }
}
```

```
        System.out.println( "Num partners \t view divergence \t  
contentiousness \t concern \t crisis \t conditionality");
```

```
        System.out.println( s.NUM_GOVERNMENT_PARTNERS + "\t"+  
s.AVG_VIEW_DIVERGENCE + "\t" + s.AVG_CONTENTIOUSNESS + "\t" +  
s.CONCERN_PROBABILITY + "\t" + s.CRISIS_INTENSITY + "\t" +  
(totalAccepted/1000));
```

```
    }
```

```
}
```

```
public abstract class Agent {
```

```
    public abstract void negotiateWith( Agent a, Conditionality c );
```

```
}
```

```
public class BoardMember {
```

```
    private int concernsRaised;
```

```
    public void setConcernsRaised( int concernsRaised ) {
```

```
        this.concernsRaised = concernsRaised;
    }

    public int getConcernsRaised() {
        return concernsRaised;
    }
}
```

```
public class Conditionality {

    double contentiousness;
    double acceptance;
    boolean accepted;
}
```

```
import java.util.Random;
```

```
public class CountryBureaucrat extends Agent {

    double power;
    static Random generator1;
```

```

static Random generator2;

public CountryBureaucrat( double power ) {
    this.power = power;
    generator1 = new Random();
    generator2 = new Random();
}

public void negotiateWith( Agent a, Conditionality c ) {
    if ( a instanceof IMFStaff ) {
        double concern = ((IMFStaff) a).legitimacyConcern;
        double acceptance = generator1.nextGaussian() * 0.2 +
concern;

        c.acceptance = c.acceptance + acceptance;
    }

    else if ( a instanceof Government ) {
        double governmentWeight = 1 - power;
        double contentiousness = c.contentiousness;
        double rejection;

        if ( ((Government) a).numGovernmentPartners == 1 ) {
            rejection = generator2.nextGaussian() * 0.1 +

```

```

contentiousness;
    }
    else if ( ((Government) a).numGovernmentPartners == 2
) {
        double rejection1 = generator2.nextGaussian() *
0.1 + contentiousness;
        double rejection2 = generator2.nextGaussian() *
0.1 + contentiousness - ( ( Government ) a ).viewDivergence;

        rejection = ( ( rejection1 + rejection2 ) / 2 );
    }
    else { //3 partners
        double rejection1 = generator2.nextGaussian() *
0.1 + contentiousness;
        double rejection2 = generator2.nextGaussian() *
0.1 + contentiousness - ( ( Government ) a ).viewDivergence;
        double rejection3 = generator2.nextGaussian() *
0.1 + contentiousness - ( ( Government ) a ).viewDivergence;

        rejection = ( ( rejection1 + rejection2 +
rejection3 ) / 3 );
    }

    c.acceptance = c.acceptance - governmentWeight *
rejection;

}

```

```
    }  
}
```

```
import java.util.ArrayList;
```

```
public class Government extends Agent {
```

```
    ArrayList<CoalitionPartner> governmentPartners;
```

```
    int numGovernmentPartners;
```

```
    double viewDivergence;
```

```
    public Government( int numGovernmentPartners, double  
viewDivergence ) {
```

```
        this.numGovernmentPartners = numGovernmentPartners;
```

```
        this.viewDivergence = viewDivergence;
```

```
        governmentPartners = new ArrayList<CoalitionPartner>(  
numGovernmentPartners );
```

```
    }
```

```
@Override
```

```
public void negotiateWith( Agent a, Conditionality c ) {
```

```
}
```

```
}
```

```
public class IMFStaff extends Agent {
```

```
    double legitimacyConcern;
```

```
    public void negotiateWith( Agent a, Conditionality c ) {
```

```
    }
```

```
}
```