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THE MEDICINE OF WAR: IMF STRUCTURAL ADJUSTMENT, ETHNIC POLITICS, AND ARMED CIVIL CONFLICT

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DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
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By
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ABSTRACT OF DISSERTATION

THE MEDICINE OF WAR: IMF STRUCTURAL ADJUSTMENT, ETHNIC POLITICS, AND ARMED CIVIL CONFLICT

The dissertation research answers the question of what explains the variation across countries where the IMF SAP implementation is associated with the onset of armed civil conflict in some countries but not in others. Do SAPs increase the likelihood of the outbreak of armed civil conflict in recipient countries? By what causal mechanism could SAPs increase the probability of the onset of armed civil conflict? This study contributes to extant literature by taking actors' preferences and ethnicity in recipient countries into account. I argue that the effect of SAP implementation on armed civil conflict is conditional on the ethnic characteristics of recipient countries. From a two-level game perspective, highly ethnic-fractionalized countries have a strong bargaining position vis-à-vis the IMF at the international level due to their domestic weakness. Hence such governments will receive relatively moderate conditionality from the IMF because the Fund will adopt its second-order preference of containing the contagious effect of debt crisis and ensure the loan repayment. The ethnically fractionalized countries will also implement the austerity measures across different ethnic communities. The result is reducing probability of the onset of armed civil conflict when ethnic fractionalization increases. But in ethnically-dominant countries, the governments' bargaining position at the international level is relatively weak due to their domestic strength. Therefore the governments are more likely to get stringent conditionality from the IMF because the Fund will adopt its first-order preference of satisfying its constituents by imposing stringent conditionality. The result is to increase the likelihood of the onset of armed civil conflict when ethnic dominance increases. By analyzing cross-national data for 162 countries from 1992 to 2009 based on improved measurement of IMF conditionality, the empirical results confirm the theoretical hypotheses. The statistical results also reveal that SAP impact on the outbreak of armed civil conflict varies with conditionality. Historical analyses of Ghana and Rwanda provide further understanding of the theoretical mechanisms.

KEY WORDS: International Monetary Fund, Structural Adjustment Programs, Armed Civil Conflict, Ethnicity, Two-Level Game.

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Acronyms and Abbreviations

AFRC	Armed Forces Revolutionary Council
ALTU	Association of Local Trade Unions
BOP	Balance of Payments
BRICS	Brazil, Russia, India, China, and South Africa
BWI	Bretton Woods Institutions
CA	Collective action
CDR	Committees for the Defense of the Revolution
CIA	Central Intelligence Agency
CIRI	Cingranelli-Richards
COW	Correlated of War
DPI	Database of Political Institutions
ECF	Extended Credit Facility
EFF	Extended Fund Facility
ELF	Ethno-linguistic Fractionalization
ERP	Economic Recovery Program
ESAF	Extended Structural Adjustment Facility
FRL	Fiscal responsibility law
GDP	Gross Domestic Product
GNI	Gross National Income
GNP	Gross National Product
IDA	International Development Association
IDP	Internally Displace Person
IEO	Independent Evaluation Office
IFI	International Financial Institution
IGO	Intergovernmental organization
IMC	Interim Management Committee
IMF	International Monetary Fund
ISI	Import substitution industrialization
LDC	Less developed country
MONA	Monitoring of Fund Arrangement

NGO	Nongovernmental organization
NLC	National Liberation Council
PA	Prior action
PAMSCAD	Programme of Actions to Mitigate the Social Costs of Adjustment
PC	Performance criteria
PIN	Public Information Notice
PIP	Public Investment Programme
PNDC	Provisional National Defence Council
PPP	Purchasing Power Parity
PRGF	Poverty Reduction and Growth Facility
PRGT	Poverty Reduction and Growth Trust
PRIO	Peace Research Institute of Oslo
RPF	Rwandan Patriotic Front
SAP	Structural Adjustment Program
SB	Structural benchmark
SBA	Stand-by Agreement
SDR	Special Drawing Rights
SITC	Standard International Trade Classification
SMC	Supreme Military Council
SMP	Staff-Monitored Program
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
TUC	Trades Union Congress
UCDP	Uppsala Conflict Data Program
WDC	Workers' Defense Committee
WDI	World Development Indicators

Chapter 1

The IMF's Adjustment Puzzle: Facilitator or Inhibitor of Armed Civil Conflict?

1.1 The Nature of the Problem

A small but growing literature has investigated the relationship between the global integration of national economies and the likelihood of armed civil conflict. Extant research has shown that openness to trade decreases the probability of armed civil conflict (Esty et al. 1998; Barbieri and Reuveny 2005). While the structural adjustment programs (SAPs) of the International Monetary Fund (IMF or Fund) is an important mechanism through which national economies are integrated into the global economy (Barnet and Cavanagh 1994; Bartilow 1997; Vreeland 2003), there is controversy regarding the effect that SAPs have on the onset of armed civil conflict in countries that implement IMF conditionality. Some scholars show that SAPs create the conditions that generate grievances which lead to armed civil conflict because they slash budgets, eliminate state subsidies, remove trade restrictions, and reduce governments' ability to compensate or confront the losers of liberal economic reform (Auvien 1996; Abouharb and Cingranelli 2007; Hartzell, Hoddie, and Bauer 2010). Other scholars, however, challenge these assumptions and have found no relationship between IMF SAP and civil conflict (Bienen and Gersovitz 1985; Sidell 1988; Snider 1990).[1] In the attempt to replicate the findings of Hartzell, Hoddie, and Bauer (2010), other scholars challenged the theoretical and empirical evidence that supports the claim that IMF SAPs affect the onset of armed civil conflict. These scholars show that by using a lower threshold

[1] It must be noted that none of these studies address problems of endogeneity and selection bias.

of 25 battle deaths when defining civil war, IMF programs are negatively associated with the onset of civil war (Midtgaard, Vadlamannati, and Soysa 2013).

However, while this debate has improved our understanding of this phenomenon, there are no theoretically based causal mechanisms through which SAPs affect the outbreak of armed civil conflict. If it is assumed that IMF-induced SAPs generate grievance, which results in armed civil conflict, then what explains the lack of armed civil conflict in countries that undergo IMF-sponsored SAPs? Essentially, extant studies (Hartzell, Hoddie, and Bauer 2010; Abouharb and Cingranelli 2007; Midtgaard, Vadlamannati, and Soysa 2013) do not account for the causal mechanisms that explain why IMF-induced SAPs lead to armed civil conflict in some countries but not in others. Civil war broke out in Uzbekistan in 1999 after the country underwent a two-year SAP loan agreement that began in 1995. In neighboring Tajikistan, civil war broke out in 1998 after the implementation of an SAP in 1996. There are, however, a number of countries where the implementation of SAPs is not associated with armed civil conflict. Over the span of ten years from the 1990s to 2000s, the implementation of SAPs in Kenya did not lead to armed civil conflict. And ten years (1996 – 2006) of SAP implementation in Tanzania did not end in armed civil conflict. Similarly, Guyana's twelve-year (1994 – 2006) experience with the implementation of SAPs did not produce armed civil conflict.

1.2 Theoretical Contribution

To understand the causal mechanisms that link SAPs to the onset of armed civil conflict, this study considers how the implementation of SAP conditionality under conditions of varying ethno-political characteristics in loan recipient countries affect the likelihood of armed civil conflict. Borrowing countries vary in their ethnic characteristics and

IMF SAPs vary widely in terms of the scope of their conditionalities.[2] The question that motivates this research is: what explains the variation across countries where the implementation of SAP conditionality is associated with the outbreak of armed civil conflict in some countries but not in others?

In answering this question I analyze cross-national data for the years 1992-2009 for 162 countries that have and have not entered into SAP loan agreements with the IMF. I make a theoretical contribution to the extant literature by utilizing the theoretical metaphor of a two-level game that draws on and integrates existing theories of armed civil conflict, ethnic politics and the politics of economic adjustment. This study argues that the implementation of SAPs and the subsequent outbreak in armed civil conflict is conditional on the ethnic characteristics of recipient countries. This research considers two types of ethnic characteristics. These are societies characterized by ethnic fractionalization and ethnic dominance.

Given the theoretical metaphor of the two-level game, IMF negotiators face a bargaining dilemma (Bartilow 1997). On the one hand, in constructing SAP conditionalities the IMF attempts to satisfy its first order preference by offering recipient governments a loan package with stringent conditionalities that is designed to rigorously treat the debt crisis. In doing so, the Fund satisfies the preference of its constituency of creditor states and international commercial banks that respectively fund the IMF and supplement SAP loan packages to debtors. These financial actors profit from the effectiveness of SAPs in stabilizing the debt crisis as well as the Fund's ability to manage the repayment of debt from debtors to creditors. On the other hand, recipient governments' domestic constituencies

[2] This research is motivated by the SAP research agenda called by Steinwand and Stone (2008), which focuses on the characteristics of recipient countries and variation of different structural adjustment programs.

(Level II) must ratify tentative international level (Level I) agreements with the IMF that relates to the implementation of SAP conditionality.

The primary objective of governments who experience mounting debt is to seek IMF financing to stabilize their economies. However, the fractionalized nature of ethnic politics that is embedded within the institutions of government weakens the ability of these states to build policy consensus on economic reform to address problems that are associated with the debt crisis. Governments whose polities are characterized by high levels of ethnic fractionalization are more likely to defect from tentative agreements with the IMF at Level I since they are less likely to gain the necessary domestic support to secure SAP ratification at Level II. Consequently, these governments have a strong bargaining position vis-à-vis the IMF at Level I. Since countries who experience chronic external debt undermine the growth and health of the global economy, the second order institutional preference of the IMF (Bartilow 1997) is to secure SAP agreements to stabilize debt, limit its contagious effects to other economies and in the process secure financial gains for capital markets that provide credit to debtors. It is, therefore, not in the institutional interest of the Fund to accept debtor defection from tentative SAP agreements that stem from political weakness in securing domestic ratification. It is expected that under conditions of ethnic fractionalization, IMF negotiators will moderate SAP loan conditions so as to increase the likelihood that governments can secure the necessary domestic support and institutional ratification for the agreement. High levels of ethnic fractionalization will also undermine governments' ability to effectively implement SAP conditionalities that are attached to loan agreements. Therefore, the implementation of SAPs is less likely to create severe economic hardships and the muted austerity measures are likely to be absorbed across different ethnic communities, which will reduce the probability of armed resistance against the state. Moreover, armed civil conflict is

likely to be reduced when SAPs are implemented in ethnically fractionalized societies because such polities increase the collective action problem, which undermines the opportunity to coordinate armed resistance against the state.

However, in ethnic dominant polities, governments' bargaining position vis-à-vis the IMF at Level I is weak and it is expected that SAP loan conditionality will be more stringent. With high degrees of ethnic dominance at Level II, IMF negotiators recognize that the dominance of a particular ethnic group in the state and in civil society increases the likelihood of the government's ability to secure domestic support for SAP ratification. And with relatively few ethno-political obstacles to ratification, it is expected that IMF negotiators will demand the implementation of more stringent conditionality measures. To satisfy the Fund's demands, when implementing SAPs, recipient governments are likely to place the burden of economic austerity disproportionately on ethnic minority communities. Consequently, the implementation of SAPs increases minority groups' relative economic deprivation, which deepens the groups' grievance and ethnic hatred - hence increasing the probability of armed resistance against the state. In addition, the probability of armed civil conflict is more likely when SAPs are implemented in ethnically dominant polities because such polities reduce the collective action problem, which increase the opportunity for ethnic minority groups to coordinate armed resistance against the state.

1.3 Empirical Contribution

This study also makes an important empirical contribution to the extant literature. While scholarly research has made major methodological improvements by addressing issues of endogeneity and selection (Vreeland 2003; Abouharb and Cingranelli 2009), there are still empirical limitations with the indicator used to measure the implementation of IMF SAPs.

Extant research measures the indicator in terms of the number of years that a country is under an IMF-sponsored program (Vreeland 2003; Abouharb and Cingranelli 2007; Hartzell, Hoddie, and Bauer 2010). While this indicator does not fully capture the extent of SAP implementation, this study's operationalization of this indicator builds upon existing measures that are featured in the literature. The indicators that are used in this study capture the extent to which IMF programs are implemented and incorporated into the analysis and various program characteristics of SAP conditionalities. I develop a measure for SAP implementation as well as measures that capture the programmatic differences in SAP conditionalities by coding the IMF's program reviews and the *IMF Letters of Intent.* The program reviews document the Funds technical evaluation of countries' compliance in the implementation of SAP conditionalities. The *Letters of Intent* document the program agreements between the IMF and recipient governments. Following Ivanova et al. (2006), I code SAP implementation, using the IMF program reviews, in terms of the number of program waivers granted by the IMF. Specifically, the more waivers that the IMF grants to recipient governments reduce the extent of SAP implementation. And using the *Letters of Intent,* I develop indicators that capture the various program characteristics of SAPs (Woo 2013). These characteristics measure the scope of SAP conditionality and since they vary in terms of their fiscal, financial, and structural components, it is important to incorporate these differences into the analysis as they may have different effects on the probability of armed civil conflict.

1.4 The Roadmap of the Manuscript

This manuscript is organized as follows: In chapter 2, I examine the extant literature regarding the politics of SAPs. I then discuss the theoretical and empirical limitations of the

extant literature in order to contextualize the study's motivation. In Chapter 3, I draw upon and integrate insights from the SAP and ethnic conflict literatures to link SAPs to the onset of armed civil conflict. I adopt the theoretical metaphor of the two-level game to elaborate on the causal mechanisms of the implementation of SAPs on armed civil conflict in ethnically fractionalized and ethnically dominant countries and generate hypotheses at the end of this discussion. Chapter 4 describes the study's research design and methodology. The data estimation procedures, model specifications and the measurement and operationalization of the study's main variables are discussed in detail.

Chapter 5 discusses the empirical findings of the effects of SAP implementation on armed civil conflict under conditions of ethnic fractionalization. Chapter 6 discusses the findings of the effects of SAP implementation on armed civil conflict under conditions of ethnic dominance. In both chapters, I utilize different econometric estimators and execute a number of robustness tests that utilize different measures for SAP implementation and ethnicity that are featured in the extant literature.

In Chapters 7 and 8 respectively, I discuss Ghana and Rwanda as countries that are illustrative of the impact of SAP conditionality on the outbreak of armed civil conflict in ethnically fractionalized and ethnically dominant countries. Finally, in Chapter 9, I summarize the main findings of the study and discuss the theoretical and policy implications that flow from this research.

Chapter 2

Structural Adjustment Programs and Armed Civil Conflict:

Introduction and Existing Theoretical Approaches

2.1 The Political Economy of Structural Adjustment

From its beginning, as one of the Bretton Woods Institutions (BWI), the IMF's mission focused on stabilizing Europe's post-war balance of payment (BOP) crisis. However, as a result of the oil shock of the 1970s and the ensuing debt crisis of the 1980s, the IMF SAPs increasingly expanded to the developing world (Polak 1991; Stone 2008; Spero 1981).[3] As a consequence, IMF loans which attached conditionality increased from 26% in the 1970s to 66% at the end of the 1980s (Boughton 2001, 561; Stone 2008). There were 271 SAPs in the 1980s compared to 172 in the 1970s (Barro and Lee 2005; Hartzell, Hoddie, and Bauer 2010). In responding to the debt crisis in Latin America and the Asian financial crisis in the 1990s, the IMF expanded SAPs to countries in these respective regions of the world (Best 2012).

With more adjustment programs in the developing world, SAPs have become increasingly controversial regarding their applicability in less developed countries (LDCs). At the heart of this controversy is the notion that the free market assumptions of SAPs when applied to the developing world will lead to a "Debt Trap", promoting an endless cycle of debt, high levels of inflation, and stagnant economic growth (Hayter and Watson 1985). However, some scholars have shown that SAPs have a positive effect on the Balance of Payments (BoP) of recipient countries (Bird 1996, 2003).

[3] Polak (1991, 13-14) argues that the "introduction of the Extended Fund Facility in 1974 gave formal recognition to a medium-term outlook in Fund programs, as well as greater attention to structural and supply aspects of adjustment."

In terms of the scope of IMF programs, SAPs can be placed into four categories. These include: Stand-by Agreements (SBAs) that are in effect for two years;[4] the Extended Fund Facilities (EFFs) that are in effect for three years; and the Extended Structural Adjustment Facilities (ESAFs) and Poverty Reduction and Growth Facilities (PRGFs) (Przeworski and Vreeland 2000; Stone 2008).[5] The first objective of SAPs is to promote macroeconomic stability and then build countries' institutional capacity to support long-term economic growth (Bird 2003, 120).[6]

According to the IMF's neo-liberal economic doctrine, the main objective of SAPs in the resolution of BOP deficits is to promote economic growth. The IMF's assumption is that greater reliance on market forces will improve the efficient allocation of resources, which will expand countries' economic productive capacity (Goldsbrough et al. 1996, 55). To achieve its objective, IMF SAPs include three policy instruments. The first is fiscal reforms that are intended to reduce public sector deficits by raising taxes, cutting government expenditures, increasing prices for services provided by public sector enterprises, and freezing the wages of public sector employees. The second is monetary reforms that are intended to reduce inflationary pressures by limiting the supply of money in the economy. Such reforms increase interest rates and require higher reserve requirements for local banks. The third is liberalization reforms that are intended to unleash market forces through the abolition of import and foreign exchange controls, devaluation of the exchange rate, the removal of price controls and consumer subsidies as well as greater privatization and

[4] The typical length of a SBA is 12-24 months. However, exceptions can be made under emergency circumstances. For example, the Greek government requested a 3-year SBA in May 2010 (IMF 2010).
[5] PRGFs were succeeded by the Extended Credit Facility (ECF) under the Fund's Poverty Reduction and Growth Trust (PRGT) recently. I use PRGFs to represent both terms.
[6] While the definition of the objective of conditionality varies, Bird (2003, 120) gives a minimalist definition, that is, "to help bring about a durable modification in economic policy designed to create sustainability in the BoP and strengthen long-run economic performance."

government deregulation (Bienen and Gersovitz 1985; David 1985; Haggard 1985; Bird 1996; Crisp and Kelly 1999; Przeworski and Vreeland 2000; Vreeland 2006; Bartilow 1997).

The IMF's policy instruments, which is also referred to as the "Washington Consensus",[7] with its emphasis on economic and financial liberalization (Williamson 1990) have traditionally been challenged by some schools of international relations theory. Scholars who write in the tradition of world-systems theory contend that core capitalist industrial states that were the architects of post-war international financial institutions, like the IMF, use SAPs to penetrate and exploit peripheral LDC countries (Hopkins and Wallerstein 1987; Wallerstein 1992; Shannon 1996).[8] In a similar fashion, dependency theorists argue that the pro-market policies of the "Washington Consensus" reinforce the global asymmetrical distribution of wealth and power, which perpetuates the peripheries' dependency on the core and maintains the core's dominance in the capitalist world economy (Amin 1976; Frank 1980; Shannon 1996). Scholars who write in this tradition argue that while the neo-liberal economic reforms of the "Washington Consensus" are supposedly designed to promote economic growth, SAPs facilitate the underdevelopment of LDC countries by promoting a perpetual "debt trap" for countries that swallow the IMF's medicine (Santos 1970).

Non-dependency theorist argue that the IMF promotes a 'one size fits all" free market ideology that is insensitive and inappropriate to the local developmental needs of LDCs (Stone 2008; Haggard 1985). Although the IMF has responded to its critics by

[7] The term "Washington Consensus" was coined by Williamson (1990) in 1990 to explain the IFI polices designed as a reaction to Latin America's debt crisis in the 1980s.

[8] World-system theorists "regard capitalism as a global system for organizing economic activities" (Shannon 1996, 21). Put simply, there are four critical components in the world system: economic zones (defined in terms of the production process), nation-states, social classes (defined in terms of the ownership of the means of production), and status groups (identity groupings). Respectively, economic processes are carried out in core (capital intensive), periphery (labor intensive), and semi-periphery states. Furthermore, the inter-state political relationship is related to social classes. States compete to gain recourses, which will benefit national capitalists. And if necessary, cores states will use military force to intervene in peripheral states for the benefit of core states' capitalists.

embracing the rhetoric of "adjustment with a human face", which it claims is an attempt to limit the negative externalities of SAPs on the poor (Cornia, Jolly, and Stewart 1987; Streeten 1989, 9),[9] critics still contend that the impact of SAPs on LDCs external deficits and development is analogous to "fighting fire with petrol" and the IMF's medicine may actually kill rather than cure the patient (Narman 1995, 45; Tevera 1995, 79).

Conservative critics of the Fund contend that the perpetual cycle of LDC debt is not due to the inappropriateness of SAP conditionalities, but is largely a function of the fact that the IMF's conditions are not rigorous enough to treat the debt crisis. Some conservatives contend that IMF programs have worked so badly that it is worth shutting down the institution (Atoian et al. 2006, 352). While other conservatives fall short of calling for the eliminating the IMF, they have sought to fundamentally reform the lending practices of the institution. In 1998, the Meltzer Commission Report to the U.S. Congress proposed abolishing all traditional IMF lending programs and replacing them with larger loan facilities with very strict conditions for shorter program periods (Atoian et al. 2006, 353). Center-right critics of the IMF contend that the institution's poor track record poses a serious problem for the management of the global economy. Eichengreen (2002, 55), for example notes that since there is strong political pressure for the Fund to lend "the IMF rarely ever says no the first time; it says no only after being pushed into a corner by the failure of a long series of loans … where the short-run prospects of the country are so clearly hopeless that it becomes absurd for the IMF to continue lending." Not only are these programs wasteful of IMF resources, but also they have "permitted governments to cling longer…to unsustainable policies, allowing economies and financial vulnerabilities to buildup and creating the

[9] The social dimension means reducing the negative effects of SAPs on the most vulnerable social groups to the greatest extent (Streeten 1989).

potential for very severe political and social dislocations when support is ultimately withdrawn" (Eichengreen 2002, 7).

It should be noted that although the IMF's response to criticisms seems slow, it has changed its approach at some areas gradually. The Fund's early reaction to the criticisms of SAPs was that the root of the problem was that recipient governments did not have enough political will to carry out necessary reforms (Bird 2003; Vreeland 2003). Eventually, the Fund began to incorporate social issues into its SAP agenda. The Fund focuses on two areas of social issues with respect to its SAPs: social safety net and public spending on education and health care (Gupta et al. 2000). Also, from the beginning of the 21st century, the IMF began to stress the importance of greater program ownership to take more local conditions into account (Boughton 2001). Then in 2013 the Fund for the first time acknowledged its mistake in underestimating the negative effect of austerity policy on economic growth (Blanchard and Lieigh 2013). Given that the Fund has modified its approach regarding SAPs,[10] this research covers just one of the Fund's historical periods in its policy making.

The Economic Effects of Structural Adjustment Programs

The extant literature has moved from the customary broad theoretical critique of the IMF's lending practices and has emphasized the socio-economic effects of SAPs (Holm 1995; Bird 1996; Crisp and Kelly 1999; Przeworski and Vreeland 2000; Bird 2003; Hutchison

[10] There have been criticisms that the Fund's reform is not enough. But it is noteworthy that the Fund has really changed its approach at a gradual (if slow) pace. Despite SAPs, the IMF also made similar reforms as a response to NGO criticisms. For instance, the Fund adopted the "disclosure of information" policy to increase transparency in 1994 (Woods 2000). It began to provide the "Public Information Notice" (PIN) in 1997. The PIN releases information about member states' economic situation when national governments permit the disclosure (Woods 2000). In 2001, the Fund established the Independent Evaluation Office (IEO) to further promote transparency (Kahler 2004). Also, the IMF increases the NGO participation by consulting with local and global civil society (Woods and Narlikar 2001).

and Noy 2003; Nsouli, Atoian, and Mourmouras 2004; Dreher 2006; Easterly 2006; Nooruddin and Simmons 2006; Vreeland 2006; Vreeland 2007). Researchers now focus their analysis on the economic effects of SAPs in terms of improving countries' BOP, reducing or controlling inflationary pressures and helping to promote economic development.

The findings on the overall economic effects of SAPs have largely been mixed. As Bird (2001, 1852) reveals in his summary of the economic effects of SAPs from 1960s to early 1990s where the research findings during this period vary from "no effect", "negative effect", to "positive effect". However, there is consistent evidence that SAPs are successful in improving countries' BOP. In conducting before-and-after test on sixteen LDCs having IMF SAPs between 1979 and 1985, Bird (1996) reports that SAPs significantly improved countries' BOP performance. This finding is consistent with other research on the effects of SAPs on countries' external BOP (Pastor 1987; Bird 2003; Vreeland 2006). It is reported that SAPs are effective in reducing inflationary pressures in LDCs (Ivanova et al. 2006; IMF 2007).

Studies show that while SAPs may have a positive impact on countries' BOP, they may come at the expense of undermining economic growth[11] (Campbell and Stein 1992; Przeworski and Vreeland 2000; Vreeland 2003, 2006; Vreeland 2007; Vreeland 2008; Commander 1989b). In their research, Goldstein and Montiel (1986) report that SAPs have no significant effect on economic growth. In his research, Pastor (1987) reports that the effect of SAPs on economic growth in 18 Latin American countries from 1965 to 1981 are mixed. While the Fund continues to argue that SAPs have a positive effect on countries' economic growth (Nsouli et al. 1993; Goldsbrough et al. 1996; Ivanova et al. 2006; IMF

[11] Long-run economic growth leads to development, that is, rising living standards (Hubbard and O'Brien 2006, 642-643). Thus most research employs economic growth rate to measure the SAP impact on economic development.

2007; Harrigan and El-Said 2010),[12] critics consistently challenge these claims. For example, Pfeifer (1999), argues that in Tunisia, Morocco, Jordan and Egypt – the four cases that the IMF reports as successes in the 1990s – there were no significant gains in economic growth in these countries when compared to the pre-SAPs period. Crisp and Kelly (1999) report that SAPs weakly promote economic development. After investigating sixteen Latin American countries that implemented SAPs in the 1980s, they find that while SAPs decrease inflation, it is weakly associated with increasing economic growth, and reducing poverty and inequality.

Przeworski and Vreeland (2000) adopt a large-N statistical design to examine 135 countries implementing SAPs from the 1951 to 1990.[13] They find that SAPs negatively affect economic growth and that countries' economies grow faster in the absence of SAPs. While IMF SAPs improve countries' BOP, SAPs decrease economic development and increase inequality (Vreeland 2006; Vreeland 2007). Easterly (2006, 67-68) finds that most "African countries that received intensive treatment from structural adjustment have had negative or zero growth…… Most ex-communist countries that received shock therapy and many structural adjustment loans have had sharply negative growth and high inflation." Nsouli et.al (2004) use the percentage of IMF loans and irreversible interruptions to measure compliance. They find that the implementation of SAPs negatively affects economic growth, which is consistent with the findings of other researchers (Hutchison and Noy 2003; Dreher 2006).

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[12] IMF's country reports reveal a positive effect on economic growth under some SAPs. For example, Tunisia's economic growth under SBA and ESAF increases from 2.8% in 1982-86 to 5.0% in 1987-1992 (Nsouli et al. 1993).

[13] While the time period of their research is from 1951 to 1990, the data is concentrated on 79 countries from the 1970s to 1990 due to data availability from 1951 to 1970.

There now appears to be a growing consensus that SAPs fail to increase economic growth and decrease inflation (Hutchison and Noy 2003; Stiglitz 2003; Dreher 2006; Easterly 2006; Vreeland 2006).[14] Moreover, there is a growing body of literature, which suggests that SAPs have a negative effect on economic development.[15] It appears that improvements in countries' BOP may be a necessary but not sufficient factor in generating economic growth (Bird 1996, 2003). In other words, improvements in the external BOP does not necessarily lead to economic growth and that "there are no good theoretical reasons to believe that a balanced budget and foreign account are sufficient for growth to occur" (Przeworski and Vreeland 2000, 399).

The Social Welfare Effects of Structural Adjustment Programs

If the evidence regarding SAPs effect on economic growth is at best inconclusive or worst negative, then what are the social and political effects do SAPs have on recipient countries? Scholars and NGOs hold SAPs responsible for hurting the poor disproportionately through cutting public expenditures, reducing government subsidies on energy and food, and devaluating the currency (Crisp and Kelly 1999; Ferreira and Keely 2000; Nooruddin and Simmons 2006). Given the fact that the poor largely depend on welfare and social programs that are funded by government expenditures and will therefore

[14] In their review of twelve studies from 2000 to 2006 that examine the relationship between SAPs and economic growth, Steinwand and Stone (2008) find that seven of these studies report results that SAPs have a negative impact, two studies report SAPs having a positive impact while three studies report SAPs having no impact.

[15] While most academic research provides little evidence with respect to the positive effects of SAPs on economic development, IMF reports paint a more encouraging and promising picture, although the focus is on individual countries rather than large-N research. Ghana is a frequently cited example of adjustment success given its export growth rate of 94% from 1984 to 1990 under IMF programs, compared to 21% of Sub-Saharan Africa (SSA) (Mengisteab and Logan 1995). The Fund also claims an increase of gross domestic savings as a ratio of Gross Domestic Product (GDP), from 16.2 in 1986 to 20.4% in 1992, in Tanzania (Nsouli et al. 1993). But even the IMF itself admitted the poor program performance for nearly half of ESAFs (IMF 1997b).

suffer disproportionately when governments' subsidies are reduced, scholars and NGOs hold the IMF responsible for placing the burden of SAP conditionality on the backs of the poor. In their summary Crisp and Kelly (1999) notes that SAPs impose a negative impact on the poor disproportionately. First, deregulation and economic liberalization require cutting government subsidies on energy and foodstuffs, which are directly related to the poor. Second, cutting government spending leads to a negative impact on social welfare and public employment.[16] Third, the poor suffer the most when their purchasing power declines due to the devaluation of the exchange rate. In short, SAPs raise living costs and unemployment (Veltmeyer, Petras, and Vieux 1997), which further intensify the tension between governments and citizens.

After implementing SAP liberalization policies during the period 1980 to 1998, Mexico's GDP per capita (real PPP) rose by 10% (World Bank 2013) and the population living in households below the poverty line decreased from 12.78% in 1984 to 8.62% in 1998 (World Bank PovcalNet). However, Mexico's real wages and real minimal wages in 1998 decreased respectively to 57% and 29.5% of their 1980 levels (Peters 2000, 161), and during the period 1984 to 1998 the country's Gini coefficient recorded an 18% increase. It increased from 46.26 in 1984 to 54.51 in 1998 (World Bank PovcalNet). In other words, while the economic liberalization policies of SAPs may have made modest improvements in the lives of the very poor in Mexico, it comes at the cost of widening income inequality and the erosion of real wages. That is to say, while it increases GDP per capita, this growth in wealth is increasingly concentrated amongst Mexico's economic elite and did not flow to the country's middle class. Mexico's experience with SAP economic liberalization is quite similar to what other developing countries have experienced after the implementation of SAP-

[16] For example, as mandated by SAPs, Uganda carried out the civil service reform in the 1990s, which laid off a total number of 74,000 government employees (Sharer, De Zoysa, and McDonald 1995).

induced liberalization. For example, in her examination of the economic liberalization's 'race to the bottom' effect, Rudra (2008) reports that economic liberalization has eroded wages and decimated the middle class in developing countries.

In Tanzania, scholars find that IMF programs decrease living standards and manufacturing productivity (Campbell and Stein 1992). SAPs in Tanzania "precludes a public debate" and "the public are the losers" because they are left to "shoulder the burden of the reforms" (Kiondo 1992, 40). In South Korea, the IMF conditions during the 1997 Asian financial crisis dramatically increased unemployment. The Fund was labeled a "hostile foreign dictatorship" in the "period of national humiliation" (Singh 1999, 85).[17]

During the 1990s, IMF SAPs in Mozambique increased the fees for public-health services and privatized the country's water management as well as various manufacturing industries in the economy, which resulted in widespread job losses (Bond 2003). And five years of SAP, during 1991 to 1996, two thirds of Mozambique's civil servants lived below the poverty line due to major cuts in wages (Hanlon 1996). Moreover, researchers report that IMF SAPs in Africa and Latin America are responsible for increasing food prices while decreasing disposable income. Consequently, there has been significant reductions in food, which in turn increased malnutrition and infant mortality rates among the poor (Commander 1989a; Prinstrup-Andersen 1989). Other researchers also claim that IMF SAPs impose unacceptable costs on the environment. Costa Rica's implementation of nine consecutive

[17] There is an argument that attributes Korea's economic success ten years after the 1997 Asian financial crisis to IMF SAPs (Neiss, Tseng, and Gordon 2009). However, given that the conclusion is based on a single case, as Kim (2009, 35-36) notes, the claim is "a bit like a medical doctor relating how he or she successfully treated a young man who suffered from a severe case of the flu some ten years ago. That young man now has become a professional after having attended college and graduate school in the meantime. On the basis of what and how he is now doing, it is difficult to say that the doctor's treatment of the young man was anything but a success." After all, it "would be a mistake to attribute his present health entirely to the doctor's treatment ten years ago (Kim 2009, 35-36)."

SAPs from 1980 to 1989, expanded the country's banana industry, but at the cost of massive deforestation. Similarly, SAPs sponsored economic growth in Ghana was partially fuelled by increases in the country's timber production and deforestation (Bello, Cunningham, and Rau 1999). Not only is education, employment, and poverty in recipient countries negatively affected by IMF SAPs (Simon et al. 1995), but scholars such as H. Krugmann (1995) now conclude that the negative socio-economic impact of SAPs make them inherently incompatible with the objectives for sustainable development .

Political Effects of Structural Adjustment Programs

The negative social and economic effects of SAPs raise questions about the effects of IMF programs on recipient countries' political stability. It seems plausible that IMF financing would enhance the political stability of recipient governments that face economic crisis (Gould 2006). However, scholars have shown that the relative deprivation that is a by-product of SAPs promotes political instability in LDCs.[18] In their study of more than 90 LDCs from 1970 to 2002, Dreher and Gassebner (2012) report that some IMF SAPs lead to government crises, which they define as "any rapidly developing situation that threatens to bring the downfall of the present regime, excluding situations of revolt aimed at such overthrow" (Dreher and Gassebner 2012, 335). Likewise, Easterly's (2006, 218) analysis of eight cases of state failure in the 1990s finds that "spending a lot of time under an IMF program is associated with a higher risk of state collapse."

[18] Bird (2003) argues that SAPs are less likely to influence social variables and political stability in recipient countries because of the insignificant role played by SAPs on economic growth and inflation. Nonetheless, Abouharb and Cingranelli's (2006, 2007) research on SAP effects on human rights proves that SAPs have significant effects, in the negative sense, on social variables and political stability in recipient countries.

Other scholars argue that different types of SAPs will have different effects on recipient country's political stability. In making this argument Smith and Vreeland (2006) categorize SAPs as need-based, discretionary, and inherited. Need-based SAPs are IMF programs to governments that have no access to alternative external sources of financing. Discretionary-based SAPs are IMF programs that political leaders accept to finance structural economic reforms. Inherited-based SAPs are IMF programs that political leaders inherit from prior administrations. Smith and Vreeland (2006) find that in democracies, inherited and discretionary SAPs help political leaders survive because they can blame previous administrations for the negative effects of SAPs as well as claim that prior administrative commitments now compel them to deal aggressively with pressing economic problems. Need-based SAPs, however, can have a negative impact on democratic leader's political survival since under conditions of mounting economic crisis these leaders must accept the negative externalities of SAPs as a condition for receiving funding from the IMF. However, in autocracies, need-based SAPs are conducive to political leaders' survival because the programs strengthen the leader's position by distributing loan benefits to the core supporters of the regime. Nonetheless, inherited and discretionary SAPs decrease the likelihood of political survival since the level of funding that is associated with these programs severely limit the dictators ability to "distribute spoils" or patronage to supporters (Smith and Vreeland 2006).

Moreover, SAPs hurt urban population more and so urban riots and demonstrations are more likely to ensue (Walton and Ragin 1990). Empirical research shows strong links between SAPs and mass demonstrations (Walton and Ragin 1990; Herring and Esman 2001; Abouharb and Cingranelli 2007). It is noteworthy most demonstrators "are drawn from the urban poor (shantytown dwellers, unemployed youth, street vendors) and the working class

(unions)" (Walton and Ragin 1990, 877). For example, in the beginning of 2012 in Nigeria, there were mass urban strikes and protests immediately following the government's deregulation of fuel prices, which forced President Goodluck Jonathan to reinstate the fuel subsidy in a few days (BBC 2012a, 2012b). The reason of mass urban protests following SAPs is that urban dwellers are more likely to be negatively affected by austerity measures such as cutting domestic subsidies, currency devaluation, and public-sector reforms (Walton and Ragin 1990; Gupta et al. 2000). For instance, currency devaluation increases the price of imported foods, which will hurt the urban poor disproportionately if they rely on imported foods for daily consumption (Gupta et al. 2000).

While some scholars have studied the effects of SAPs on recipient governments' political stability, others have examined their effects on human rights. Advocates of the "Washington Consensus" assert that rapid economic liberalization prescribed by SAPs promote both economic development and democracy. Since greater levels of economic development and democratic governance are necessary for the establishment of human rights, it is expected that SAPs should increase recipient governments' respect for human rights. However, empirical research challenges the assumptions of the "Washington Consensus" and shows that IMF-sponsored SAPs exert a negative effect on recipient governments' respect for physical integrity rights and worsen social rights as well as economic rights and the rights of workers (Franklin 1997; Camp Keith and Poe 2000; Abouharb and Cingranelli 2006, 2007). These researchers argue that the implementation of SAPs increases relative derivation and the public's general grievance against the state. As a result, governments' perception of domestic threat increases, which in turn increases the probability of the state's repression of domestic dissent (Abouharb and Cingranelli 2007, 2006, 2009; Franklin 1997; Camp Keith and Poe 2000).

In arriving at their results, Abouharb and Cingranelli (2006, 2007, 2009) utilized a two-step selection model that analyzed data for a sample of 131 countries from 1981 to 2003. They report that SAPs have a negative impact on physical integrity rights, measured by freedom from torture, political imprisonment, extra-judicial killing and disappearances, in recipient countries. SAPs also have a negative effect on worker rights, and on economic and social rights. Their research also shows that there is a selection effect for those countries that receive SAPs loans. Countries that experience economic crisis and whose governments respect the human rights of their citizens are more likely to get IMF loan agreements. However, once these governments implement the conditions of the SAP loan agreement they repress domestic dissent against SAP conditionalities (Abouharb and Cingranelli 2004, 2009). Extending this research, Bartilow and Ke (2010) develop a counter-intuitive argument, which shows that under the stress of an SAP loan agreement democracies are more likely to repress the human rights of their citizens when implementing program conditionalities.

2.2 Armed Civil Conflict and Structural Adjustment

Since political repression and the violation of human rights may contribute to the outbreak of civil conflict (Regan and Norton 2005), it is worthwhile to ask whether SAPs increase the likelihood of armed civil conflict. The impact of SAPs on armed civil conflict is of substantial importance to the study of international political economy and international security.[19] In addition, to humanitarian disasters such as refugees and internally displaced persons (IDPs), armed civil conflict impose huge costs on economic development, social trust, political stability, health and education, and regional security (Collier et al. 2003;

[19] Civil conflict, in a very broad sense, may include peaceful demonstrations, riots, and civil war. However, this research focuses on armed civil conflict, that is, the armed struggle between the government and rebel groups. The operational definition of armed civil conflict will be discussed in Chapter 4, the methodology section.

Ghobarah, Huth, and Russett 2003; Murdoch and Sandler 2004; Humphreys and Weinstein 2006). Given the economic and humanitarian costs of armed civil conflict, the IMF since 1995 has extended its SAP programs to post-conflict countries to facilitate their reconstruction and economic development. Seventeen countries received IMF loans for post-conflict reconstruction from 1995 to 2009 (IMF 2011). The Republic of Congo, for example, accepted an IMF's long-term SAP – the Extended Structural Adjustment Facility (ESAF) in 1998, after it ended its civil war in 1997 (IMF 1998).

Anecdotal evidence suggests that a relationship between SAPs and armed civil conflict is deserving of scholarly attention. Tajikistan implemented an IMF SAP in 1996 when civil war broke out two years later (IMF 1997a). Do SAPs increase the probability of the onset of armed civil conflict? And if so, under what conditions will SAPs lead to armed civil conflict? Specifically, by what causal mechanism could SAPs increase the likelihood of armed civil conflict in recipient countries?

Research by Abouharb (2005) and Abouharb and Cingranelli (2007) and Hartzell, Hoddie, and Bauer (2010) have attempted to answer these questions through large-N investigations of the relationship between SAPs and armed civil conflict. These studies all support the proposition that SAP-induced grievance results in the onset of armed civil conflict. Specifically, the negative socio-economic and human rights effects of SAPs that scholars have documented increase the probability of armed civil conflict in countries that receive IMF loans. Based on the SAP grievance-induced civil conflict perspective, Abouharb (2005) argues that the implementation of liberal economic reforms creates economic hardship and a sense of relative deprivation that is caused by rising unemployment, raising living costs, and decreasing levels of disposal income - all of which contributes to the onset of armed civil conflict. In their research Abouharb and Cingranelli (2007) report that the

economic austerity measures that are associated with SAPs increase the incidence of rebellion, represented by demonstrations and riots against recipient governments, which ultimately increase the probability of armed civil conflict.

In their extension of the SAP grievance-induced civil conflict thesis, Hartzell, Hoddie, and Bauer (2010) argue that SAPs create losers in recipient countries because the conditionalities that are attached to these programs facilitate a regressive distribution of wealth and income that significantly advantages capital over labor and the poor. IMF SAPs increase the likelihood of civil war because governments who implement these programs are less capable of compensating or suppressing those who have been disadvantaged by liberal economic reform. Midtgaard, Vadlamannati, and Soysa (2013) have recently challenged these arguments, showing that the reported positive effect of SAPs on civil war is simply an artifact of how civil war is defined and measured. By changing the operationalization of civil war to 25 battle deaths as defined in Armed Conflict Data Set, the impact of IMF programs on the armed civil conflict onset turns from positive to negative.

To date, the work by Abouharb (2005) and Abouharb and Cingranelli (2007), Hartzell, Hoddie, and Bauer (2010) and Midtgaard, Vadlamannati, and Soysa (2013) represent bourgeoning research on a timely but still under studied issue. However, the SAP grievance-induced proposition that informs the current research and the response of its critics is more narrative than it is theory. If SAPs always require that recipient governments implement austerity measures that reduce incomes and increase economic hardships, then it is expected that grievance should result in civil war for most countries that are recipients of IMF funding. However, descriptive statistics from this study's cross-national data for 162 countries from 1992 to 2009 show that SAPs are associated with the onset of armed civil conflict in only

40% of the cases.[20] This suggests that the SAP grievance-induced civil conflict proposition does not explain variation across countries where the implementation of SAP conditionality is associated with the outbreak of armed civil conflict in some countries but not in others. In this study I argue that SAP-induced grievance alone is not enough to explain the onset of armed civil conflict. The theory that I advance integrates SAP induced grievance proposition with the ethno-political characteristics of recipient countries to better explain variation in armed civil conflict that occurs across countries.

In their review of the extant literature, Steinwand and Stone (2008) argue that the new direction in SAP research should focus on the characteristics of recipient countries as well as the variation in structural adjustment programs to better understand the causal mechanisms of how SAPs are associated with domestic political phenomenon. Motivated by Steinwand and Stone (2008), I argue that SAPs are implemented within the ethno-political context of recipient countries and, as Bartilow (1997) shows, the nature of borrowing governments' domestic ethno-political configurations can strengthen or weaken their bargaining position with the IMF. Given the ethno-political context under which IMF SAPs are negotiated and implemented, this study considers the variation in countries' ethnic characteristics as important factors that interact with SAP implementation, which (as discussed in chapter 3) increases the probability of armed civil conflict in countries that are characterized by ethnic dominance while reducing the probability of armed civil conflict in countries that are characterized by ethnic fractionalization. Furthermore, the SAP grievance-induced civil war proposition does not consider the fact that there are differences in the scope of SAP conditionalities in terms of their fiscal, financial and structural components. In

[20] The 40% association does not imply causality in here. It just describes the variation in the onset of armed civil conflict in recipient countries' SAP loans. Thus it is necessary to examine the countries' characteristics.

this study I conduct robustness tests of my theory and also consider how variation in the scope of SAP conditionalities and their interactions with the ethno-political characteristics of borrowing countries may have different effects on the probability of armed civil conflict.

The empirical findings, in the extant literature, which support the SAP grievance-induced civil war proposition utilizes a proxy indicator that measures SAP implementation in terms of the number of years that a country is under an IMF program. However, the number of years that a country is under an IMF program is not the same as the number of years that the program was actually implemented. Existing research has shown that many aspects of IMF conditionalities are never fully implemented by recipient governments (Killick 1996; Dollar and Svensson 2000; Dreher and Jensen 2007). Other researchers report that from 1992 to 1998, only 56% of all IMF programs were successfully implemented (Ivanova et al. 2006). In her research Remmer (1986) reports that the standby programs of the IMF from 1954 to 1984 did not lead to regime instability because SAP conditionalities were not implemented. In acknowledging this limitation Abouharb and Cingranelli (2009, 58) argue that while the proxy measure does not capture whether or not recipient governments fully implement the conditionalities of an IMF program, partial implementation of a program may still be sufficient to generate grievance, relative deprivation and ultimately civil conflict. While there is merit to the logic of this argument there is still a need to develop a measure of SAP implementation that has greater precision. Thus I improve the measurement by constructing SAP indicators based on my coding of IMF materials.

2.3 Towards an Integrated theory of SAPs and Armed Civil Conflict

The theoretical limitations of SAP research that argue that IMF SAPs increase the likelihood of civil conflict present an opportunity to construct a robust theoretical

framework that integrates the SAP induced grievance proposition with the ethno-political characteristics of recipient countries to explain the variation in armed civil conflict that occurs across countries. In chapter 3, I fully develop the study's theory by drawing on insights from theories of ethnic and armed civil conflict. I place these insights into the context of the two-level game metaphor (Putnam 1988) to show how the ethno-political characteristics of recipient governments affect the nature of their bargaining with the IMF and the degree to which conditionalities are stringent or moderate, which in turn shape the ways in which SAP conditionalities are implemented with the resultant effect of inducing armed civil conflict.

Chapter 3

Structural Adjustment Programs, Ethnicity, and Armed Civil Conflict: A Two-Level Game Approach

3.1 Introduction

The negotiation of an IMF loan agreement and the implementation of the attached conditionalities take place within the context of a two-level bargaining game between recipient governments and the IMF (Putnam 1988). These negotiations take place simultaneously at the international and domestic levels, which are characterized, respectively, as Level I and Level II negotiations. Tentative agreements made with the IMF at the international level must have the necessary domestic political support to secure ratification, which allows recipient governments to implement the agreement. The nature of the ratification process varies with regime type. In parliamentary democracies this process is characterized by the legislative voting procedures to accept or reject the conditionalities of an SAP agreement with the IMF. In authoritarian regimes the ratification process is characterized by the level of support for tentative international agreements among coalition members that support and sustain the regime.

In his two-level game analysis of U.S. negotiations with Haiti's military junta for the restoration of democracy, Bartilow (2000, 2001) demonstrated that in the absence of a functioning democratic legislature tentative international agreements made with the U.S. and the international community were conditional on the approval of members of the coalition that supported the regime. Similarly, in his analysis of the bureaucratic-authoritarian regimes in Latin America, O'Donnell (1973) demonstrated that these regimes derived their legitimacy and support from a coalition of high level military and private sector technocrats

working within and outside of the state's bureaucracy. These assessments suggest that while the legitimacy of autocracies is not based on popular democratic support, they derive their legitimacy and support from a coalition of powerful political groups through which tentative international agreements must be domestically approved and ratified.

Since the negotiation of debt simultaneously takes place at the international and the domestic levels, the nature of SAP conditionalities that is an outcome of this process is a function of the convergence of the domestic political preference of recipient governments and the preferences of the IMF. In this chapter, I argue that variation in the policy convergence of the Fund and recipient governments explains variation in the occurrence of armed civil conflict across countries. In developing this argument, I discuss the preferences of the IMF as well as the preferences of recipient governments, which are shaped by the nature of their ethno-political characteristics.

3.2 The Policy Preference of the IMF

The policy preference of the IMF is in part shaped by its institutional mission and by the domestic political realities of recipient governments that implement the Fund's SAP conditionalities (Bartilow 1997). Marxist theorists argue that the conditionality lending practices of the IMF is motivated by the geo-political and economic interest of American hegemony. Since the IMF was created under the post-war conditions of American hegemony, these scholars argue that SAP conditionalities will be harsher for borrowing governments who are not geo-politically allied with the U.S. or whose economic policies are incongruent with the dictates of the free market (Bello, Kinley, and Elinson 1982; Cox 1981; Cox 1987; Payer 1974). Therefore, according to Marxist theorists, the IMF's preference is to reinforce the geo-political and economic interest of American and corporate power (Magdoff 1978,

2000). Functionalist theorists argue that the Fund's SAP conditionality is largely motivated by its Articles of Agreement, which forbids the institution from considering the political or foreign policy orientations of recipient governments in shaping its lending practices. They argue that SAP conditionalities are designed to solve problems that are associated with countries' BOP imbalances and are based on strict adherence to technical economic criteria. And the preference of the IMF is to facilitate global financial coordination that is free from the dictates of politics (Groom and Taylor 1975; Haas 1964; Mitrany 1976, 1948).

Writing in the tradition of the new institutionalism, Bartilow (1997) challenges Marxist and functionalist theories on the basis that both approaches are overly simplistic in their understanding of the factors that motivate the IMF's preference in its lending practices. Inspired by principal-agent theory, Bartilow (1997) argues that the design of SAP conditionality is best understood in terms of the "institutional-political" preference of the IMF. It is institutional in the sense that the Fund's preference is shaped in part by its mission and by its larger constituency of creditor states and commercial banks that supplement IMF financing to recipient governments. The institutional nature of the Fund's priorities is ranked in terms of its first- and second-order preferences. Its first-order preference entails sustaining funding for its operations from creditor states and design loan agreements with stringent conditionalities, which will satisfy the interests of creditors and maintain the confidence of capital markets (Feinberg 1989). If the domestic political constraints of loan recipient governments make it unlikely that loan agreements with stringent conditionalities will be accepted, then the Fund's second-order preference is to sponsor an agreement with moderate conditionalities to limit the contagious effect of countries' debt crisis from contaminating the global economy while ensuring creditors that the repayments of debt will be orderly (Esman 2001, 240; Agenor et al. 1999).

The Fund's preference is political in the sense that its institutional preferences can only be realized if recipient governments are reliable partners in the implementation of SAP conditionalities. Bartilow (1997) has shown that during debt negotiations the IMF considers the domestic political dynamics of recipient governments and assesses how these dynamics may strengthen or weaken the implementation of SAP conditionalities. If IMF negotiators assess that the domestic opposition to the government is hostile to IMF sponsored economic reforms, and if they also assess that in the event that the opposition assumes power that prior loans obligations will not be honored, then the Fund is likely to choose its second-order preference by sponsoring loan agreements with moderate conditionalities. In doing so the negative externalities of SAPs are minimized for the purpose of strengthening the popular legitimacy of the borrowing government with whom the Fund sees as a partner in the implementation of SAP conditionalities.

3.3 Civil War, Ethnicity, and the Policy Preferences of Recipient Governments

When governments fail to provide basic goods and services, rebellion and civil war are likely to ensue (Goldstone 1994). This grievance model (Gurr 1968; MacCulloch 2004) emphasizes how relative deprivation motivates people to carry out armed resistance against the state. Psychological factors such as frustration and anger that are often derived from the gap between expectation and reality, which is a product of relative deprivation,[21] increase the probability for armed civil conflict. While inequality can lead to individualistic deprivation, which is a "feeling of deprivation that develop out of a comparison of one's own situation to others" (Tyler and Lind 2002, 45), the theory that is advanced in this study emphasizes

[21] Runciman (1966) is among the first scholars to consider the concept of relative deprivation.

group deprivation, which are "feelings of deprivation that develop out of a comparison of the situation of one's group relative to another group" (Tyler and Lind 2002, 45).

However, while grievance is important, it is not sufficient for the mobilization of armed civil conflict. To initiate armed struggle against the state, rebel leaders must first solve the collective action problem (Lichbach 1994; Moore 1995; Gates 2002). As Olson (1971) notes, group size is an important element in solving the problem of collective action. A small group is more likely to overcome the collective action problem because its size eliminate the likelihood that group members will free ride. However, increasing the size of the group or increasing the number of groups increases the collection action problem as some members or groups will be tempted to free ride on the efforts of others, thus reducing the ability of the various groups to coordinate against the state (Moore 1995; Collier and Hoeffler 2004; Montalvo and Reynal-Querol 2005).

The ethnic characteristics of polities affect the outbreak of armed civil conflict because of their effects on grievance and the collective action problem. Grievance is the motivation for rebellion and the problem of collective action establishes the opportunity for rebellion. Ethnic fractionalized polities reduce the risk of armed civil conflict since the consociational nature of governance (Lijphart 1969, 1968) that is reflected in these governments makes them less likely to repress and exploit other ethnic communities, thus reducing depravation and grievance (Collier 2001). Moreover, ethnic fractionalized polities reduce opportunities for armed civil conflict because they increase the problem of collective action. In highly fractionalized polities, ethnic communities will be tempted to free ride and increase the coordination cost of rebellion (Collier and Hoeffler 1998; Collier and Hoeffler 2004; Montalvo and Reynal-Querol 2005).

Ethnic dominant polities are more likely to increase the probability of armed civil conflict since the power of the dominant ethnic group that is reflected in these governments provides the group with both the incentive and capability to repress and exploit ethnic minorities, hence increasing ethnic grievance – the motive for armed civil conflict (Collier 2001). Ethnic dominant polities also increase opportunities for armed civil conflict because they reduce the collective action problem by lowering the coordination cost for ethnic minorities to organize armed resistance against the state (Collier and Hoeffler 2004; Montalvo and Reynal-Querol 2005). Hence, governments whose polities are characterized by high levels of ethnic dominance increase the likelihood of armed civil conflict.

However, the ethnic characteristics of recipient governments not only affect the onset of armed civil conflict, but they also shape governments' policy preferences in negotiations with the IMF. The primary preference of governments that face chronic economic crisis that are rooted in mounting debt is to secure external financing from the IMF. Some studies have shown that ethnic fractionalization is negatively associated with economic growth (Easterly and Levine 1997; Alesina, Baqir, and Easterly 1999; Alesina et al. 2003). Ethnically diverse societies are more likely to adopt sub-optimal public policies because ethnic diversity increases the number of rent-seekers and the level of corruption (Mauro 1995). Ethnic fractionalized polities are, therefore, likely to reduce governments' policy consensus on economic reform and as such the preference of these governments is to secure IMF financing where the attached conditionalities are relatively weak. Securing an IMF loan agreement with weak SAP conditionalities increases the likelihood of ratification in constituencies that are increasingly fragmented and rent seeking. And in the absence of an IMF agreement with relatively weak conditionalities, governments whose polities are

characterized by ethnic fractionalization will prefer not having an agreement as opposed to receiving IMF financing for a program that cannot be ratified.

However, the number of rent-seekers and the tendency for governments to adopt sub-optimal public policies are reduced in ethnic dominant societies. Ethnic dominant polities increase governments' policy consensus on economic reform and, consequently these governments are more likely to accept tougher SAP conditionalities in exchange for IMF financing. This is because ethnic group dominance within the institutions of government increases the likelihood that the IMF agreement will have the necessary political support to ensure ratification. In essence, governments whose polities are characterized by ethnic dominance are more likely to prefer receiving IMF financing with stringent conditionalities as opposed to no agreement because ethnic group dominance within the apparatus of the state increases the likelihood that the IMF agreement will be ratified.

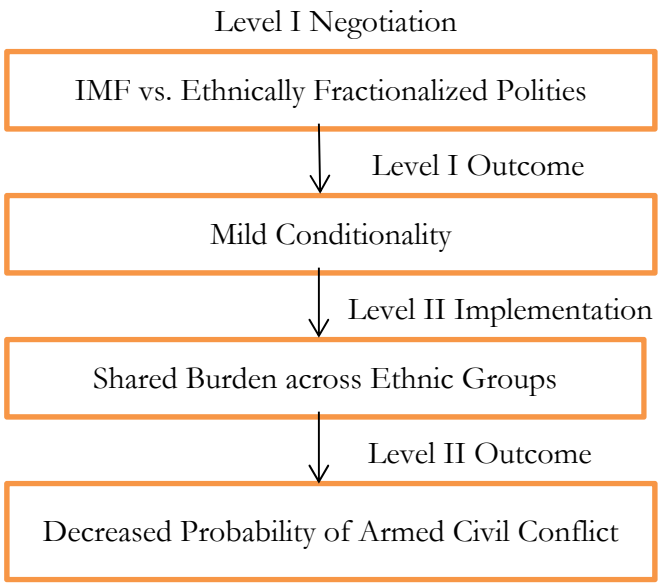
3.4 Two-Level Games: SAPs, Ethnicity, and Armed Civil Conflict

SAP conditionalities are ratified and implemented when the policy preferences or the win sets of recipient governments and the IMF overlaps. Scholars who write in the tradition of bargaining theory often refer to the convergence of policy preferences as the "contract zone" or the bargaining range (Jonsson 2002). International relations theorists refer to policy convergence as "win sets", which is "the set of all possible Level I agreements that would 'win' – that is gain the necessary majority among [recipient governments'] constituencies – when simply voted up or down" (Putnam 1988, 437).

Since IMF SAPs are implemented in polities that are characterized by ethnic politics, the ethno-political characteristics of recipient governments not only shape their policy preference but also determine the size of their win-sets. Figure 3.1 briefly demonstrates the

mechanisms linking SAPs and ethnic fractionalization to armed civil conflict. Polities that are ethnically fractionalized are more likely to have legislatures that are also fractionalized. High degrees of legislative fractionalization breeds rent seeking and policy discord regarding economic reform, which weaken recipient governments at Level II. As a result these governments will have smaller win sets relative to those of the IMF, as they are less likely to secure domestic ratification for tentative SAP agreements made at Level I. However, the small win sets of these governments strengthen their bargaining position vis-à-vis the IMF as they are more likely to forgo an IMF program if they are unable to secure ratification at Level II. It is not in the Fund's institutional interest to have negotiations with

Figure 3.1: Mechanisms Linking SAPs and Ethnic Fractionalization to Armed Civil Conflict



debtor countries end in no agreement as the contagious effects of the debt crisis could have devastating consequences for the global economy. Debtor defaults on loans would financially threaten capital markets and their inability to trade would damage economic

growth and promote recession in other countries (Agenor et al. 1999) . Under these circumstances the Fund is likely to choose its second-order preference by making concessions and moderate the scope of SAP conditionalities to help facilitate ratification in legislatures that are fractionalized (Lehman and McCoy 1992).[22] In doing so, the IMF's policy preference converges with the preference of these recipient governments. Moreover, since high levels of ethnic fractionalization is likely to breed policy discord on economic reform, this also increases the probability that governments will find it difficult to effectively implement even mild SAP conditions and when attempts are made to implement loan conditions, they are more likely to be done in ways that share the burden of economic austerity across different ethnic communities, all of which reduce economic induced grievance and the likelihood of armed civil conflict. This discussion generates the following hypothesis.

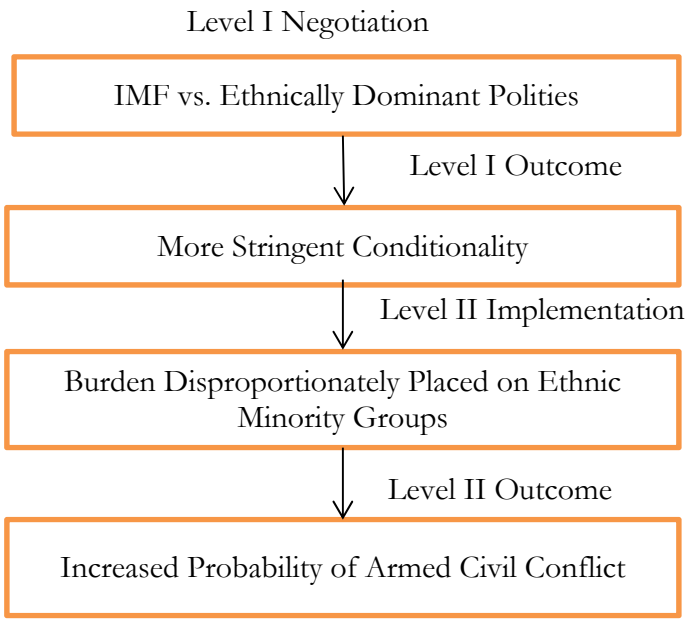
H1: IMF SAPs reduce the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic fractionalization.

Figure 3.2 shows different scenarios in ethnically dominant countries. Policy consensus on economic reform that is shared by a dominant ethnic group within the institutions of the state makes recipient governments strong at Level II. Consequently, these governments will have larger win sets relative to those of the IMF, as they are more likely to secure domestic ratification for SAP agreements made at Level I. The large win sets of these governments, however, weaken their bargaining position vis-à-vis the IMF. The Fund is less

[22] Recall from the discussion of the critics of the IMF that the argument here provides greater theoretical precision in understanding the bargaining conditions that give rise to the claims by Eichengreen (2002, 55) that the IMF is under strong political pressure to lend and "rarely ever says no".

likely to offer concessions and moderate SAP conditionalities since ethnic dominance within the state all but ensures that its program will be ratified. Under this scenario, the IMF's policy preference converges with the preference of the recipient government. By offering the recipient government financing with stringent conditionalities, the Fund realizes its first-order preference and maximizes the interests of its constituency of international creditors. Recipient governments whose polities are characterized by ethnic dominance are more likely to accept stringent SAP conditionalities in exchange for IMF funding because not only are there few obstacles to ratification, but ethnic group dominance reduce policy discord on economic reform, which increases the likelihood that stringent SAP conditionalities will be effectively implemented in ways that disproportionately shift the burden of economic austerity onto ethnic minorities. There are numerous examples of how ethnic politics affects

Figure 3.2: Mechanisms Linking SAPs and Ethnic Dominance to Armed Civil Conflict



the implementation of SAP conditionalities. For example, Mexico's Chiapas rebellion in the 1990s is widely attributed to the ways in which the Mexican government implemented SAP austerity conditions in ways that disproportionately burdened the country's minority indigenous people (Singh 1999). The "IMF riots" in Ecuador is also attributed to the government's implementation of SAP conditionalities, which slashed state subsidies and social services that indigenous Indians disproportionately depend on (Brysk 2001, 216-217). After concluding negotiations with the IMF in 1991, apartheid South Africa's white minority government implemented the fiscal conditions of the SAP in ways that imposed a regressive valued added tax that was disproportionately borne by the country's black population, which subsequently led to a two-day national strike (Bond 2003; Bond 2001).

The policy convergence of the IMF and recipient governments whose polities are characterized by ethnic dominance is likely to increase the onset of armed civil conflict. First, ethnic dominance increases the likelihood that SAP conditionalities will be ratified and effectively implemented in ways that shift the burden of austerity onto ethnic minorities, which increase ethnic grievances and relative deprivation. Second, ethnic dominant polities reduce the collection action problem and make it easier for ethnic minorities to coordinate armed resistance against the state (Collier and Hoeffler 2004; Montalvo and Reynal-Querol 2005). All of which increase the motivation and opportunity for armed civil conflict. This theoretical discussion generates the following hypothesis.

H2: IMF SAPs increase the probability of the onset of armed civil conflict when they are implemented into polities that are characterized by high levels of ethnic dominance.

Chapter 4

Research Design and Methodology

4.1 Countries and Programs in This Study

In this study I build a dataset that is based on my coding of SAP indicators. The IMF programs are coded via the use of the IMF online country information, which includes Letters of Intent, press releases, news brief, program reviews, and staff reports, and the Monitoring of Fund Arrangement (MONA) database (IMF 2013a, 2013b).[23] Following Polity IV's principle, I exclude countries whose population is less than five hundred thousand from the dataset. Since the IMF Letters of Intent is available online starting with the year 1992, the time period in this research is from 1992 to 2009, the last year that data is available to the public from the IMF. A possible limitation of this research is that 18 years of data may not produce sufficient variation to study the effects of SAPs on armed civil conflict. However, if the interaction between SAP implementation and the characteristics of countries ethnic politics explains the conditions under which the onset of armed civil conflict is likely in some countries but not in others, then future research should examine this relationship by extending the study's temporal domain beyond 2009.

Countries in the Study

There are 162 countries and 342 IMF programs in the dataset. Table 4.1 presents countries with SAPs in terms of regions, types, and years. There are one hundred countries

[23] The country information on the website of the Fund includes letters of intent, which describe the policies the government intends to implement in order to receive the IMF loans. Besides the Letters of Intent, I also use news brief, press release, program reviews, and MONA data to do the coding given that sometimes the Fund does not upload the Letters of Intent online for certain programs. For example, there are no Letters of Intent available for Egypt during this period. Hence MONA data and press release provide complementary information.

with SAPs. The fourth column of the Table shows that the total number of years that a country receives SAPs ranges from 1 to 17 years.[24] During the period of study, the longest IMF program has continued for seventeen years while the average duration of SAPs is five years.

Table 4.1 Countries (Population More Than 500 Thousand) with SAPs

Country	Region	SAPs	Years
Afghanistan	South Asia	PRGF	3
Albania	Eastern Europe	ESAF / PRGF / EFF	12
Algeria	North Africa and The Middle East	SBA / EFF	3
Argentina	Latin America and The Caribbean	SBA / EFF	13
Armenia	Eastern Europe	SBA / ESAF / PRGF	12
Azerbaijan	Eastern Europe	SBA / ESAF / EFF / PRGF	8
Bangladesh	South Asia	PRGF	4
Benin	Sub-Saharan Africa	ESAF / PRGF	16
Bolivia	Latin America and The Caribbean	SBA / ESAF / PRGF	12
Bosnia and Herzegovina	Eastern Europe	SBA	6
Brazil	Latin America and The Caribbean	SBA	7
Bulgaria	Eastern Europe	SBA / EFF	13
Burkina Faso	Sub-Saharan Africa	ESAF / PRGF	16
Burundi	Sub-Saharan Africa	PRGF	5
Cambodia	Southeast Asia	ESAF / PRGF	7
Cameroon	Sub-Saharan Africa	SBA / ESAF / PRGF	15
Cape Verde	Sub-Saharan Africa	SBA / PRGF	6
Central African Republic	Sub-Saharan Africa	SBA / ESAF / PRGF	8
Chad	Sub-Saharan Africa	SBA / ESAF / PRGF	12
Colombia	Latin America and The Caribbean	SBA / EFF	7

[24] Since the "years" measures the duration of SAPs, a country which receives SAPs at the end of the time period, i.e. 2009, will be coded 0 year. For example, when Comoros received an IMF program in 2009, the year would not be coded 1 until 2010.

Table 4.1 (continued)

Country	Region	SAPs	Years
Congo, DR of	Sub-Saharan Africa	PRGF	3
Congo, Republic of	Sub-Saharan Africa	SBA / ESAF / PRGF	8
Costa Rica	Latin America and The Caribbean	SBA	2
Cote d'Ivoire	Sub-Saharan Africa	ESAF / PRGF	5
Croatia	Eastern Europe	SBA / EFF	5
Czech Republic	Eastern Europe	SBA	1
Djibouti	Sub-Saharan Africa	SBA / ESAF / PRGF	8
Dominican Republic	Latin America and The Caribbean	SBA	6
Ecuador	Latin America and The Caribbean	SBA	3
Egypt	North Africa and The Middle East	SBA / EFF	3
El Salvador	Latin America and The Caribbean	SBA	7
Equatorial Guinea	Sub-Saharan Africa	ESAF	2
Estonia	Eastern Europe	SBA	8
Ethiopia	Sub-Saharan Africa	ESAF / PRGF	8
Gabon	Sub-Saharan Africa	SBA / EFF	9
Gambia	Sub-Saharan Africa	PRGF / ESAF	7
Georgia	Eastern Europe	SBA/ ESAF/ PRGF	12
Ghana	Sub-Saharan Africa	ESAF / PRGF	11
Guatemala	Latin America and The Caribbean	SBA	2
Guinea	Sub-Saharan Africa	ESAF / PRGF	15
Guinea-Bissau	Sub-Saharan Africa	ESAF / PRGF	4
Guyana	Latin America and The Caribbean	ESAF / PRGF	12
Haiti	Latin America and The Caribbean	SBA / ESAF / PRGF	6
Honduras	Latin America and The Caribbean	ESAF / PRGF	13
Hungary	Eastern Europe	SBA	4
Iceland	Western Europe	SBA	1
Indonesia	Southeast Asia	SBA / EFF	6
Iran	North Africa and The Middle East	SBA	4
Jamaica	Latin America and The Caribbean	EFF	4
Jordan	North Africa and The Middle East	SBA / EFF	10
Kazakhstan	Central Asia	SBA / EFF	7
Kenya	Sub-Saharan Africa	ESAF / PRGF	12

Table 4.1 (continued)

Country	Region	SAPs	Years
Korea	East Asia	SBA	3
Kyrgyzstan	Central Asia	SBA / ESAF/ PRGF	15
Laos	Southeast Asia	ESAF / PRGF	8
Latvia	Eastern Europe	SBA	10
Lesotho	Sub-Saharan Africa	SBA / PRGF	6
Liberia	Sub-Saharan Africa	PRGF /EFF	1
Lithuania	Eastern Europe	SBA / EFF	7
Macedonia	Eastern Europe	SBA / ESAF / PRGF	10
Madagascar	Sub-Saharan Africa	ESAF / PRGF	13
Malawi	Sub-Saharan Africa	SBA / ESAF / PRGF	13
Mali	Sub-Saharan Africa	ESAF / PRGF	17
Mauritania	Sub-Saharan Africa	ESAF / PRGF	17
Mexico	Latin America and The Caribbean	SBA	3
Moldova	Eastern Europe	SBA / EFF / PRGF	13
Mongolia	East Asia	ESAF / PRGF / SBA	12
Mozambique	Sub-Saharan Africa	ESAF / PRGF	13
Nepal	South Asia	ESAF / PRGF	7
Nicaragua	Latin America and The Caribbean	ESAF / PRGF	15
Niger	Sub-Saharan Africa	SBA / ESAF / PRGF	15
Nigeria	Sub-Saharan Africa	SBA	1
Pakistan	South Asia	SBA / ESAF / EFF / PRGF	12
Panama	Latin America and The Caribbean	SBA / EFF	4
Papua New Guinea	Oceania	SBA	3
Paraguay	Latin America and The Caribbean	SBA	5
Peru	Latin America and The Caribbean	SBA / EFF	16
Philippines	Southeast Asia	SBA / EFF	6
Romania	Eastern Europe	SBA	12
Rwanda	Sub-Saharan Africa	ESAF / PRGF	11
Senegal	Sub-Saharan Africa	ESAF / PRGF	12
Serbia	Eastern Europe	SBA / EFF	5
Sierra Leone	Sub-Saharan Africa	ESAF / PRGF	12
Slovakia	Eastern Europe	SBA	1
Sri Lanka	South Asia	SBA / PRGF / EFF	2
Tajikistan	Central Asia	SBA / PRGF / ESAF	10
Tanzania	Sub-Saharan Africa	ESAF / PRGF	10
Togo	Sub-Saharan Africa	ESAF / PRGF	4
Turkey	North Africa and The Middle East	SBA	11
Uganda	Sub-Saharan Africa	ESAF / PRGF	12
Ukraine	Eastern Europe	SBA / EFF	9
Uruguay	Latin America and The Caribbean	SBA	10
Uzbekistan	Central Asia	SBA	2

Table 4.1 (continued)

Country	Region	SAPs	Years
Venezuela	Latin America and The Caribbean	SBA	1
Vietnam	Southeast Asia	SBA / ESAF / PRGF	7
Yemen	North Africa and The Middle East	SBA / EFF / ESAF / PRGF	5
Zambia	Sub-Saharan Africa	ESAF / PRGF	14
Zimbabwe	Sub-Saharan Africa	SBA / ESAF / EFF	5

In addition, Table 4.2 shows countries without SAPs. There are 62 such countries in the dataset.

Table 4.2: Countries (Population More Than 500 Thousand) without SAPs

Country	Region
Angola	Sub-Saharan Africa
Australia	Oceania
Austria	Western Europe
Bahrain	North Africa and The Middle East
Belarus	Eastern Europe
Belgium	Western Europe
Bhutan	South Asia
Botswana	Sub-Saharan Africa
Canada	North America
Chile	Latin America and The Caribbean
China	East Asia
Comoros	Sub-Saharan Africa
Cyprus	Eastern Europe
Denmark	Western Europe
Eritrea	Sub-Saharan Africa
Fiji	Oceania
Finland	Western Europe
France	Western Europe
Germany	Western Europe
Greece	Western Europe
India	South Asia
Iran	North Africa and The Middle East

Table 4.2 (continued)

Country	Region
Ireland	Western Europe
Israel	North Africa and The Middle East
Italy	Western Europe
Japan	East Asia
Kuwait	North Africa and The Middle East
Lebanon	North Africa and The Middle East
Libya	North Africa and The Middle East
Luxemburg	Western Europe
Malaysia	Southeast Asia
Mauritius	Sub-Saharan Africa
Morocco	North Africa and The Middle East
Myanmar	Southeast Asia
Namibia	Sub-Saharan Africa
Netherlands	Western Europe
New Zealand	Oceania
Norway	Western Europe
Oman	North Africa and The Middle East
Portugal	Western Europe
Qatar	North Africa and The Middle East
Saudi Arabia	North Africa and The Middle East
Singapore	Southeast Asia
Slovenia	Eastern Europe
Solomon Islands	Oceania
Somalia	Sub-Saharan Africa
South Africa	Sub-Saharan Africa
Spain	Western Europe
Sudan	Sub-Saharan Africa
Suriname	Latin America and The Caribbean
Swaziland	Sub-Saharan Africa
Sweden	Western Europe
Switzerland	Western Europe
Syria	North Africa and The Middle East
Thailand	Southeast Asia
Timor-Leste	Southeast Asia
Trinidad and Tobago	Latin America and The Caribbean
Tunisia	North Africa and The Middle East
Turkmenistan	Central Asia
United Arab Emirates	North Africa and The Middle East
United Kingdom	Western Europe
United States	North America

Table 4.3 shows countries with and without IMF programs broken down by regions. Sub-Sahara African countries constitute 36% of countries with SAPs. This is followed by countries in Latin America and the Caribbean and Eastern Europe, which comprise 20% of the 100 countries with SAPs respectively. The countries of the former Soviet Bloc in Eastern Europe, the Baltic rim (i.e. Latvia, Estonia, etc.), and the region of Caspian Sea (i.e. Azerbaijan, Armenia, etc.) are coded under the category of Eastern Europe.

Table 4.3: Breakdowns of Regions with and without SAPs

Region	Country With SAPs		Country Without SAPs		All Country	
	Number	Frequency	Number	Frequency	Number	Frequency
East Asia	2	2%	2	3.23%	4	2.47%
Southeast Asia	5	5%	5	8.06%	10	6.17%
South Asia	5	5%	2	3.23%	7	4.32%
Central Asia	4	4%	1	1.61%	5	3.09%
Oceania	1	1%	4	6.45%	5	3.09%
North Africa and the Middle East	6	6%	13	20.97%	19	11.73%
Sub-Saharan Africa	36	36%	10	16.13%	46	28.40%
Latin America and the Caribbean	20	20%	3	4.84%	23	14.20%
Eastern Europe	20	20%	3	4.84%	23	14.20%
Western Europe	1	1%	17	27.42%	18	11.11%
North America	0	0%	2	3.23%	2	1.23%
Total	100	100%	62	100.00%	162	100.00%

Note: The countries of former Soviet bloc in Eastern Europe, Baltic rim (i.e. Latvia, Estonia, etc.), and the region of Caspian Sea (i.e. Azerbaijan, Armenia, etc.) are coded under the category of Eastern Europe

IMF Programs in This Study

Figure 4.1 shows the distribution of type of SAPs from 1992 to 2009. The program duration of the Stand-by-Arrangements (SBA) is between one to two years. The program duration of the Extended Fund Facilities (EFF) is three years. ESAF means enhanced structural facility, which was first established in 1987, is intended to address the BOP problems of low-income countries. The Poverty Reduction and Growth Facility (PRGF), is aimed at reducing poverty was recently replaced by Extended Credit Facility (ECF).[25] As Figure 4.1 demonstrates, PRGFs accounted for more than half - 57.41% - of all SAPs during the period of study. SBAs accounted for 28.39% of all SAPs. EFFs and ESAFs are the less-frequently-adopted programs accounting for 5.68% and 8.52% of SAP programs respectively.[26]

Figure 4.2 shows the distribution of IMF programs across years. The variation and the median duration of PRGFs are greater than the other types of SAPs. More important, this study contributes to extant research by developing better measurement of SAP implementation. Unlike previous research which measures SAP years, I pay more attention to the degree of implementation of SAPs and I have used original IMF sources to develop the dataset. Following Ivanova et al. (2006), I measure SAP implementation in terms of the number of program waivers that the IMF grants to recipient governments. Increases in the number of waivers are indicative of the lack of program implementation. Since this indicator captures the extent to which SAP conditionalities are actually being implemented, it is a vast

[25] ECFs are taken as PRGFs in the research since in most time period of this dataset, the Fund uses the term of PRGF.

[26] A few programs are combinations of ESAF-EFF, PRGF-EFF, or PRGF-ESAF. I collapse the programs into ESAF and PRGF.

improvement over the proxy indicator that is featured in the extant literature. I discuss the details of the SAP indicators following the estimation procedure in the next section.

Figure 4.1 The Distributions of Types of SAPs

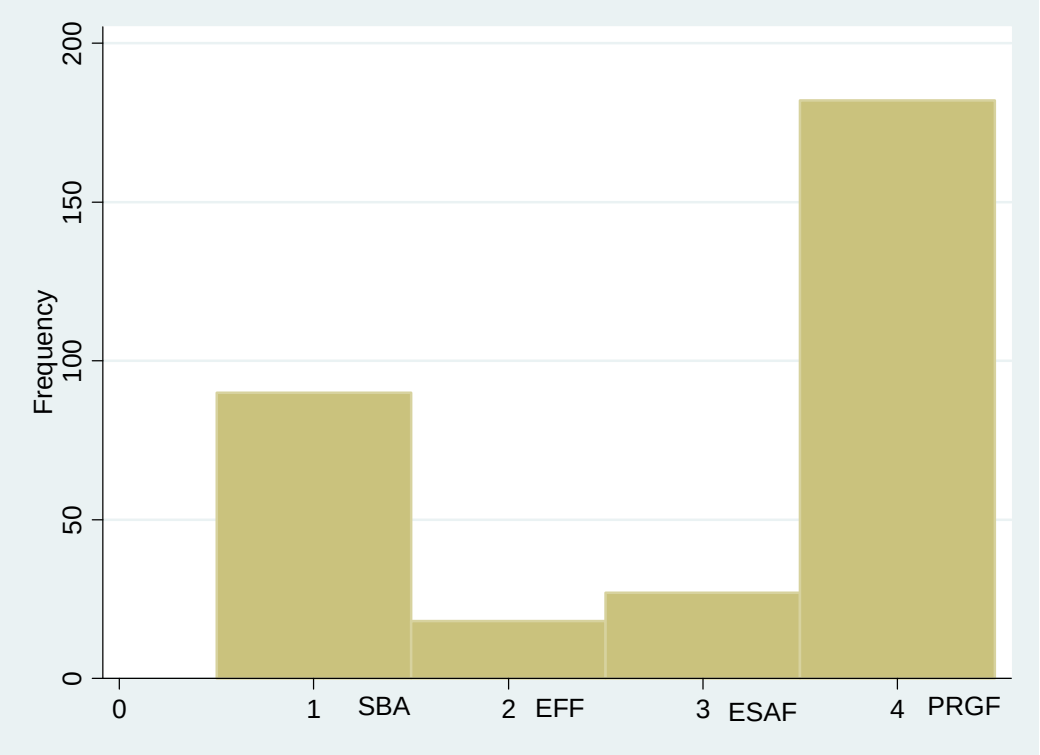
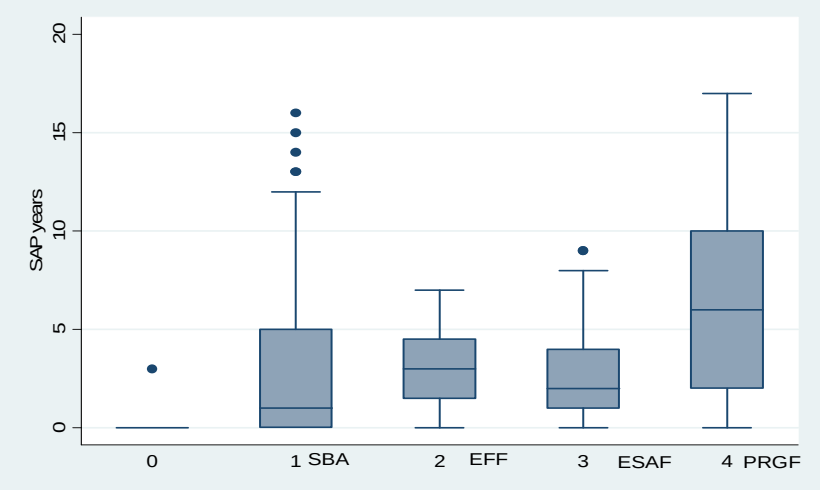


Figure 4.2: The Distributions of IMF Programs (SAP Types) across SAP Years



4.2 The Estimation Procedure

Following the estimation procedure that is featured in existing research on the political economy of IMF lending, this research employs a series of two-stage models to test the theory that is advanced in this study (Abouharb and Cingranelli 2007, 2004, 2009, 2006; Vreeland 2003; Hartzell, Hoddie, and Bauer 2010). The use of these estimation methods makes it possible to disentangle the impact of SAPs on armed civil conflict from recipient countries' prior attributes that may also have an impact on the onset of armed civil conflict (Collier 1991). Single stage estimators that are featured in existing cross-national studies of armed civil conflict (Barbieri and Reuveny 2005) assume a unidirectional causal relationship and cannot address the possibility that SAP loan agreements and the implementation of the attached conditionalities are endogenous to the onset of armed civil conflict. Given this problem, the application of single stage estimators will generate inconsistent parameter estimates (Gujarati 1995), making it necessary to use two-stage models to address issues of

endogeneity, selection and randomization (Achen 1986; Heckman 1988; Przeworski and Vreeland 2000; Vreeland 2002, 2003).

However, while there is consensus in the literature on the importance of two-stage estimators in studying the IMF, different types of estimators have been utilized. These range from the Heckman Selection estimator (Vreeland 2003), two-stage estimator with the use of predicted values (Abouharb and Cingranelli 2007) to the bivariate probit estimator (Hartzell, Hoddie, and Bauer 2010). The Heckman estimator addresses selection effects by combining estimates of two equations. The first equation examines the selection mechanism, and the second equation estimates the correlation between the selection equation and the regression coefficients from the first equation (Heckman 1988). However, following Abouharb and Cingranelli (2007, 86) and Hartzell, Hoddie, and Bauer (2010) the Heckman model is not utilized in this study because the dependent variable in the first stage equation (entering into an SAP loan agreement) is different from the dependent variable in the second stage equation (the onset of armed civil conflict).

The econometric literature describes the nature of the relationship between the receipt of an SAP loan agreement and the onset of armed civil conflict as fully observed. This means that the onset of armed civil conflict is possible in countries regardless of whether they enter or did not enter into an SAP loan agreement. There are many countries that did not enter into an SAP agreement but experience the onset of armed civil conflict. These cases highlight the nature of a fully observed relationship. On the other hand, a partially observed relationship is one where the dependent variable in the second stage is conditional on the dependent variable occurring in the first stage (Abouharb and Cingranelli 2007, 85-86). For example, students must first enter into an academic program before they can subsequently graduate or dropout. States must first enter into wars before they can win

or lose them. Companies must first enter the market place before they can subsequently realize profits or losses (Heckman 1979). The onset for armed civil conflict is not conditional on countries' entering into an SAP agreement. Therefore, the methodological consequences of a fully observed as opposed to a partially observed relationship means that the Heckman Selection estimator where the dependent variable in the second stage is conditional on the occurrence of the dependent variable in the first stage are not present in the relationship that is analyzed in this study. It is for this reason that the Heckman estimator is not used in this study. The theoretical argument that is advanced in this study suggests that the process of entering into an SAP loan agreement and the subsequent impact on the onset of armed civil conflict are linked in ways that are fully observed. To adequately analyze the fully observed nature of the data and to ensure the robustness of the finding of this research, this study utilizes a number of two-stage estimators that are featured in the existing literature.

Following Abouharb and Cingranelli (2007), in the chapters 5 and 6, the data is first analyzed via a two-stage estimator that includes the predicted value from the first stage equation. The first stage equation estimates the probability of entering into an SAP loan agreement. Predicted values are generated from this first stage equation, which denotes the selection effects of entering into an SAP loan agreement. The predicted value (the IMF selection effect) is included in the second stage equation, which estimates the onset of armed civil conflict. The underlying logic of this technique is to control for the effect of possible selection bias (in the first-stage equation) on the onset of armed civil conflict (in the second-state equation). In this research I include variables in the first-stage equation (the IMF selection effect) that are repeatedly utilized in previous research (Abouharb and Cingranelli 2007; Vreeland 2003; Hartzell, Hoddie, and Bauer 2010). However, since the two-level game

metaphor informs the theory of this study, I introduce two additional political variables – *political constraints* and *legislative fractionalization* – that capture the level of domestic constraints that not only affect the likelihood of SAP ratification but also determine the relative win-sets of borrowing governments vis-à-vis the IMF, which ultimately affect the probability of entering into an IMF loan agreement.

There are, however, limitations with the two-stage (predicted values) technique. First, the inclusion of the IMF selection effect variable from the first stage equation into the second stage equation could produce standard errors that are not reliable. Second, while the inclusion of the IMF selection effect variable accounts for endogeneity between entering into an SAP agreement and the onset of armed civil conflict, the technique does not account for the possible endogeneity between one of the study's key variable – *implementation of SAP* – and the onset of armed civil conflict.

Following Hartzell, Hoddie, and Bauer (2010), I address some of these methodological limitations and in doing so assess the robustness of the study's findings by also analyzing the data via a bivariate probit estimator. The bivariate probit estimator consists of a system of two univariate probit estimators that are simultaneously linked. Estimates are produced for two potentially correlated binary outcomes. These are the binary decisions of governments to enter or not to enter into an SAP loan agreement with the IMF and the binary outcome for the onset of armed civil conflict. The assumption of the bivariate probit estimator is that the random error terms in the univariate probit equations are correlated. And correlation between the error terms suggests that the effects of unobserved variables in the model are not random. Bivariate probit corrects any correlation that exists between the error terms and eliminates the effect that the nonrandom selection of countries that enter into SAP loan agreements have on the onset of armed civil conflict. The

difference that remains in estimating the probability of armed civil conflict between countries that entered into SAP agreements with the IMF and those that did not, can be credited to the effect of the IMF's SAP. In correcting for endogeneity, selection and randomization the standard errors that are produced by the bivariate probit estimator are more reliable than those produced by the two-stage (predicted values) technique. However, the bivariate probit estimator still does not account for the possible endogeneity between the *implementation of SAP* and the onset of armed civil conflict.

Finally to address the limitations of the two-stage (predicted values) and bivariate probit models, the data is also analyzed via an instrumental variable probit (ivprobit) estimator. The advantages of the ivprobit estimator is that it not only addresses endogeneity between entering into an SAP agreement and the onset of armed civil conflict, but also endogeneity between the study's measure of SAP implementation and the onset of armed civil conflict. To address these problems the ivprobit estimator that is utilized includes some novel features. Since the predicted probability of entering an SAP loan agreement (the IMF selection effect) from the first stage equation is included in the model, the ivprobit estimator takes advantage of the replication properties of the Jackknife procedure to produce reliable standard errors (Wu 1986). I include in the model the variable – *government corruption* – that instrument for the variable SAP implementation. I argue that government corruption is correlated with SAP implementation, but uncorrelated with the onset of armed civil conflict.[27] There have been a number of instances where IMF loans have ended up in the personal bank accounts of government officials and the SAP conditions were never implemented. For example, in 1980 the IMF loaned Haiti $22 million and within weeks, $20 million was withdrawn from the government's bank accounts. Approximately $4 million was

[27] The correlation coefficient between government corruption and armed civil conflict is -.12.

reported to have been diverted to Haiti's secret police - the notorious Tonton Macoutes, and the remaining $16 million disappeared into Duvalier's personal accounts without any attempt to implement the conditions that the loan supported (Schubert 2009). In 1997 the IMF froze lending to the Kenyan regime of Daniel arap Moi citing the pervasive corruption in implementing the expected program conditionalities (Dunphy 1997). Government corruption is an index that ranges from 0 (very corrupt) to 10 (very clean). The variable is adopted from Transparency International's Corruption Perceptions Index (TI 2013).

The remainder of this chapter discusses the variables used in the first stage equation. This is followed by a discussion of the variables used in the second stage equation, which test the study's central hypotheses. The chapter concludes with a discussion of Ghana and Rwanda – countries that are illustrative historical examples of the theory that is advanced in the study.

4.3 The First-Stage Equation Variables

The Dependent Variable

The dependent variable in the first-stage (the selection stage) is the *probability of entering into an SAP loan agreement*, which is a dummy variable that is coded 1 if a country has entered into an SAP agreement in any given year or coded 0 if the country has not. The data for this variable was coded from the IMF's online country information, which includes Letters of Intent, program review, staff reports, and press releases, and the Monitoring of Fund Arrangements (MONA) database (IMF 2013a, 2013b). What factors explain the probability of entering into an IMF loan agreement? The existing literature has shown that economic and political attributes of recipient countries affect the likelihood of initiating an SAP agreement (Przeworski and Vreeland 2000; Abouharb and Cingranelli 2007; Hartzell,

Hoddie, and Bauer 2010). Table 4.4 summarizes the operationalization of the economic and political variables that predict countries entering into an SAP loan agreement.

Table 4.4 Control Variables in the First Stage Equation - Entering into an SAP Loan Agreement

Variable	Operationalization	Source
Economic Variables		
GDP growth	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars.	WDI
Trade openness (log)	The sum of exports and imports of goods and services as a percentage in a country's GDP, log value	WDI
Inflation	Consumer price index, annual percentage	WDI
External debt	Total external debt owed to nonresidents repayable in foreign currency, goods, or services as a percentage of Gross National Income (GNI)	WDI
Political Variables		
Democracy	Regime type measured by Polity2, ranging from -10 (most authoritarian) to 10 (most democratic)	Polity IV
Presence of Armed Civil Conflict	The presence of armed civil conflict	UCDP / PRIO
Legislative Fractionalization	The probability that two deputies picked at random from the legislature will be from different political parties.	DP12012
Political Constraint	The number of independent branches of government (executive, lower and upper legislative chambers) with veto power over policy changes.	POLCON Data set

Economic Variables

Existing research finds that *GDP growth* has a negative impact on the likelihood of entering into an SAP agreement. Countries that experience high levels of growth are less likely to enter into a SAP loan agreement with the IMF (Bird and Rowlands 2001; Vreeland

2003; Abouharb and Cingranelli 2007; Hartzell, Hoddie, and Bauer 2010). Abouharb and Cingranelli (2007) find that countries that are highly integrated into the global economy are less likely to enter into an SAP agreement with the IMF. The level of *trade openness* captures this variable, which is measured in terms of the total sum of countries' exports and imports as a percentage of their gross domestic product (GDP).

Prior research shows that the level of *inflation*, which is measured by the consumer price index, affects the likelihood of entering into an SAP agreement. Given its institutional mission to stabilize and arrest the contagious effects of countries' debt, IMF programs attempt to reduce the level of inflation, which is a by-product of recipient countries' BOP crisis (Vreeland 2003). Therefore, along with GDP growth and openness to global trade, the level of inflation in recipient countries is included in the first-stage equation. The level of *external debt*, which measures central governments' external debt as a percentage of Gross National Income (GNI)[28] is also included in the first-stage equation. Existing research shows that the burden of external debt has a positive impact on countries entering into an SAP agreement (Przeworski and Vreeland 2000; Vreeland 2003; Abouharb and Cingranelli 2007). The data that measures the economic variables were taken from the World Bank's World Development Indicators online database (World Bank 2013).

Political Variables

The variable *democracy* is included in the first-stage equation. Scholars argue that since democracies, relative to autocracies, are more integrated into the global economy they are more sensitive to market pressures and consequently they are more likely to enter into an SAP program to achieve economic stability (Adsera and Boix 2002). Leeds (1999) and

[28] Gross National Income (GNI) was previously called Gross National Product (GNP) by the Bank.

Martin (2000) argue that democratic accountability and the institutionalization of cooperation allow democracies as opposed to autocracies to send clear and credible signals regarding their willingness to cooperate. The political characteristics of democratic regimes relative to autocracies increase the certainty of other actors in the international system regarding the likelihood that democratic leaders will implement international agreements (Martin 2000). These political characteristics are not limited to democracies in advanced industrial countries but as Dollar and Svensson (2000) have shown they also extend to democracies in developing countries who are more likely to implement the SAP conditions of international financial institutions.

The arguments of all these scholars suggest that democracies are more likely to enter into an SAP loan agreement with the IMF. The *Democracy* variable is adopted from the Polity IV database (Marshall, Gurr, and Jaggers 2010). The variable is a 21-point continuous indicator that ranges from -10 (consolidated autocracy) to 10 (consolidated democracy). The incidence of armed civil conflict, which measures the degree to which recipient countries are prone to conflict, is also included in the first-stage equation. Some scholars argue that countries that are least prone to civil conflict are more likely to enter into an SAP agreement (Abouharb and Cingranelli 2007). The variable is measured in terms of the *Presence of Armed Civil Conflict* in recipient countries of IMF loans. It is a dummy variable which is coded 1 if there are any ongoing armed civil conflicts in a year or 0 without any conflicts. The variable is adopted from the UCDP/PRIO database (Gleditsch et al. 2002).

The theory that is advanced in this study is couched in the context of the two-level game metaphor. The study's theory emphasizes how the nature of recipient governments' domestic politics affects their international bargaining with the IMF, which ultimately shapes the strength of SAP conditionalities that are intended for implementation. I argue that

recipient governments, whether their polities are characterized by ethnic fractionalization or ethnic dominance, will receive loan agreements from the IMF albeit for different reasons and with conditionalities that differ in scope. And this explains why SAPs are associated with armed civil conflict in some countries but not in others. The implementation of weak SAP conditionalities under conditions of ethnic fractionalization is expected to reduce the likelihood of armed civil conflict while in ethnic dominant polities the implementation of SAPs that are robust in scope is hypothesized to increase the likelihood of armed civil conflict. I have argued in Chapter 3, that while domestic constraints and impediments to SAP ratification will be greater in polities that are ethnically fractionalized, these constraints will strengthen the government's bargaining position vis-à-vis the IMF, which will ultimately weaken SAP conditionality. On the other hand, polities that are characterized by ethnic dominance are likely to face fewer domestic impediments to SAP ratification. Consequently, these regimes will be in a weaker bargaining position vis-à-vis the IMF and are more likely to receive SAP conditionalities that are stringent. The variables *political constraints* and *legislative fractionalization* are included in the first-stage equation as they capture the relative domestic political constraints under which recipient governments negotiate with the IMF.

The measure of *political constraints* identifies the number of independent branches of government with veto power over policy changes in 234 countries in the years 1800 to 2012. Each additional veto point or a branch of government that is controlled by a party different from other branches provides a diminishing effect on governments' ability to implement policy change. As the number of actors with independent veto power increases, the level of political constraints increases. The variable is adopted from the Political Constraint Index data set (Henisz 2002). The variable *legislative fractionalization* measures the probability that two deputies that are randomly picked will be from different political parties. The data is adopted

from the *Database of Political Institutions* (DP1) and covers the period 1975 to 2012 (Beck et al. 2001; Keefer and Stasavage 2003; Keefer 2010, 2012). It is expected that governments who negotiate under conditions of high levels of *political constraints* and *legislative fractionalization* are likely to enter into an SAP agreement because IMF conditionalities will be sufficiently mild to secure ratification.

4.4 The Second-Stage Equation Variables

The Dependent Variable

The dependent variable in the second stage is the *onset of armed civil conflict*. This indicator is a dichotomous variable where 1 indicates the onset of armed civil conflict in each country-year and 0 indicates no occurrence of armed civil conflict. It is important to note that this variable is different from the presence of armed civil conflict, which is utilized in the study by Abouharb and Cingranelli (2007). The onset of armed civil conflict refers to the outbreak of new-armed civil conflict, while the presence of civil conflict can simply be the continuation of an existing civil conflict. The dependent variable is adopted from the Uppsala Conflict Data Program/Peace Research Institute of Oslo (UCDP/PRIO) Armed Conflict Database (Gleditsch et al. 2002). UCDP/PRIO defines armed civil conflict as "a contested incompatibility that concerns government or territory or both where the use of armed force between two parties results in at least 25 battle-related deaths. Of these two parties, at least one is the government of a state" (Gleditsch et al. 2002, 618-619; Strand 2006).

The Correlates of War (COW) project uses 1000 battle-related deaths as its threshold for civil war. Following Gleditsch et al. (2002, 617), the COW civil war data was not utilized in this study due to its practical and statistical limitations. In practice the high threshold of

1000 battle-related deaths per year eliminates longstanding armed civil conflicts such as Basque separatist conflict and Northern Ireland conflict from being included in the COW database. Second, because of this high threshold statistical analyses of civil conflict in relatively short time periods will lack enough data. In their summary of this argument Gleditsch et al. (2002, 617) note:

> "While it may seem intuitively reasonable to include the Basque conflict, for instance, it has not accumulated enough deaths to qualify by even the most inclusive of the COW thresholds, 1,000 battle-deaths for the entire conflict. The Northern Ireland conflict, which broke out in 1969, exceeded 25 annual battle deaths every year during the period 1971–93, and again in 1998, has claimed more than 3,000 casualties altogether, but does not qualify for the stricter COW threshold of more than 1,000 deaths in a single year. Apart from the apparent anomaly of excluding such well-known conflicts from a dataset on armed conflict, there is a statistical reason why a lower threshold is useful. As multivariate models of conflict become more fully specified, there are simply 'not enough wars' for statistical analyses over shorter periods of time. Extending the analysis to a very long time period in order to get enough data raises several problems: Are the theoretical explanations equally reasonable for the whole period? Do variables like 'degree of democracy' and 'economic development' means the same thing in 1825 as in 1985? Dividing the material into periods of more reasonable length, on the other hand, may produce insignificant results. Lowering the threshold for inclusion will yield more conflicts and thus more flexibility (Gleditsch et al. 2002, 617)."

The Primary Explanatory Variables

The interaction term *SAP implementation*ethnic fractionalization* - is created to test the first hypothesis,[29] which predicts that under conditions of ethnic fractionalization, SAP implementation will reduce the likelihood of armed civil conflict. The interaction term *SAP implementation*ethnic dominance* - is also created to test the second hypothesis,[30] which predicts

[29] Since the variation in SAP conditionality may have different effects on the probability of armed civil conflict, four additional interaction terms are also created to test the robustness of the study's first hypothesis. These variables are: *SAP conditions*ethnic fractionalization, SAP structural conditions*ethnic fractionalization, SAP fiscal conditions*ethnic fractionalization,* and *SAP financial conditions*ethnic fractionalization*.

[30] Given the possibility that variation in SAP conditionality may have different effects on the probability of armed civil conflict, four additional interaction terms are also created to test the

that under conditions of ethnic dominance, SAP implementation will increase the likelihood of armed civil conflict.

Ethnic Fractionalization

The variable *ethnic fractionalization* is adopted from the Ethno-Linguistic Fractionalization (ELF) dataset coded by Fearon and Laitin (2003, 78), which measures the "probability that two randomly drawn individuals in a country are from different ethno-linguistic groups". This variable ranges from 0.004 to 1. The greater the value of this variable indicates high levels of ethnic fractionalization.

The main issue concerning the measurement of ethnic diversity is the definition and operationalization of ethnic groups. Traditionally scholars relied on language and national origin as the major criteria for defining ethnic groups. For example, Easterly and Levine (1997) adopted this method to measure ethnic diversity in their research on economic growth and ethnic division. However, a serious problem arises when we define ethnicity mainly by language and origin. Some groups, such as the Jews, are deemed as ethnic groups without speaking the same language (Fearon 2003, 200). Hence the ELF dataset defines ethnicity based on the criteria which include not only language and national origin, but also shared culture and history, homeland, and members' consciousness of their identity (Fearon 2003, 201).

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robustness of the study's second hypothesis. These variables are: *SAP conditions*ethnic dominance, SAP structural conditions*ethnic dominance, SAP fiscal conditions*ethnic dominance,* and *SAP financial conditions*ethnic dominance.*

Ethnic Dominance

The variable *ethnic dominance* indicates how dominant the largest ethnic group is in a country. It is also adopted from the ELF dataset of Fearon and Laitin (2003). The variable measures the "share of the population belonging to the largest ethnic group" (Fearon and Laitin 2003, 78). This variable ranges from 0.4% to 99.8%. While Collier and Hoeffler (2004) employ a dummy variable based on the major ethnic group to indicate ethnic dominance, this research prefers the continuous variable measuring the population percentage of the largest ethnic group for a better interpretation of the interactive terms. Nonetheless, I still use a dummy variable of ethnic dominance as alternative measurement in the robustness checks.

SAP Implementation

Proxy indicators are used in existing research to measure SAP implementation. One such proxy measures the amount of funds drawn from the IMF as a proportion of the amount of funds that could be drawn in a particular year. If recipient governments drew less than 80% of this total, then they were evaluated as not fully implementing the provisions of the SAP loan agreement (Killick 1996). This measure has been heavily criticized for being limited on a number of dimensions (Bird and Willett 2004). The essential limitation of this proxy is that it assumes that the partial draw down was a function of the loan recipient government's non-compliance with the IMF's program conditionalities. However, in some instances loan recipient governments may not use the entire loan because of significant improvements in the economy or in other instances governments will negotiate SAP programs for precautionary reasons and have no intentions of drawing down the loan (Abouharb and Cingranelli 2009). In some cases even when loan recipient governments have

not implemented the program, the IMF will disburse the loan because it believes that significant progress has been made or it may disburse the loan for political reasons (Bird and Willett 2004; Stone 2004).

Given the limitations of this measure there has been a bourgeoning consensus on the use of an alternative proxy indicator that measures SAP implementation in terms of the number of years that a country is under an IMF program (Abouharb and Cingranelli 2007, 2009; Vreeland 2003; Hartzell, Hoddie, and Bauer 2010). However, since many aspects of IMF conditionalities are never fully implemented by loan recipient governments (Killick 1996; Dollar and Svensson 2000; Dreher and Jensen 2007), the number of years that a country is under an IMF program is not the same as the number of years that the program was actually implemented. While the proxy does not capture whether or not recipient governments fully implement the conditionalities of an IMF program, partial implementation of a program may still be sufficient to generate grievance, relative deprivation and ultimately armed civil conflict (Abouharb and Cingranelli 2009).

While there is merit to this argument, to adequately test the theory that is advanced in this study requires developing a measure of SAP implementation that has greater precision.[31] Following Ivanova et al. (2006) and Pop-Eleches (2009), the IMF program reviews are used to code and measure *SAP implementation* in terms of the number of program waivers that the IMF grants to loan recipient governments when there are deviations during the implementation of SAP conditionalities.[32] Increasing number of waivers indicates the

[31] In addition to the central explanatory variable that is developed in this study, the number of years that a country is under an IMF program is also used to test the robustness of the empirical results.
[32] There are three categories of SAP conditions. The first is prior actions (PAs), which represent the measures the borrower must adopt prior to the approval of the loan. The second is performance criteria (PC), denoting the policies, which must be made before the disbursements of each loan. The third is structural benchmarks (SBs). Therefore, the most important conditions for the

lack of program implementation. The SAP implementation variable ranges from -16 (no program implementation) to 0 (full program implementation). The index is constructed by counting the number of SAP program waivers from IMF's program reviews, staff reports, press releases, and the MONA database (IMF 2013a, 2013b).[33] In this dataset 41% of all IMF programs were fully implemented and 59% were partially implemented or altogether suspended. Since this variable captures the extent to which SAP conditionalities are actually being implemented, it is a significant improvement over existing indicators that is featured in the extant literature.

The Number of SAP Conditions

To test the robustness of the theory that is advanced in this study, the *number of SAP conditions* is an alternative measure that is developed by coding the *IMF's Letters of Intent* (Woo 2013). Since this variable does not fully capture the extent to which countries actually implement the conditions, it therefore suffers from the same limitations as the indicator that measures the number of years that a country is under an IMF program. However, like Vreeland (2003) and Abouharb and Cingranelli (2009), I argue that while the variable does not capture whether or not recipient governments fully implement the conditionalities, partial implementation may still be sufficient to generate grievance, and relative deprivation – essential ingredients for armed civil conflict. The *number of SAP conditions* tests whether increases in the number of economic reforms, under conditions of ethnic fractionalization and ethnic dominance, affect the likelihood of armed civil conflict. The variable is an

implementation of PCs, which require waivers (IEO 2007). To code the variable *SAP waivers*, I use information from IMF Country Report, which presents specific waivers of performance criteria.

[33] IMF program implementation ranges from -16 (no program implementation), -15 (program slippage or program suspension), -14 (program delays), -13 (the maximum number of program waivers) and 0 (no waivers or full program implementation).

aggregate of the total number of conditionalities within an IMF program. I code the variable from IMF's Letters of Intent (IMF 2013a). For countries entering into IMF SAPs, these conditions range from a minimum of 6 to a maximum of 53, with a mean of 23.

Disaggregating SAP Conditionalities

To further investigate the robustness of this study's theory, the measure *SAP conditionalities* test whether variation in SAP conditionalities, under conditions of ethnic fractionalization and ethnic dominance, affect the likelihood of armed civil conflict. The variable is constructed form the *IMF's Letters of Intent* by disaggregating SAP conditionalities into three areas: *structural conditions*, *fiscal conditions*, and *financial conditions*. The variable *SAP structural conditions* represents policy measures intended for structural reforms such as wage cuts, privatization, and deregulation. The variable *SAP fiscal conditions* represents policy measures that are intended to reform the public sector by reducing government debt and increasing the ratio of government revenues to GDP. The variable *SAP financial conditions* represents policy measures that are intended to reform countries' financial sectors through strengthening bank systems, rearranging the currency board, and addressing interest rates flexibility.

Similar to the measure - the *number of SAP condition,* these variables do not fully capture the extent to which countries actually implement the various SAP conditions. Consequently, they suffer from the same limitation as the indicator that measures the number of years that a country is under an IMF program. However, regardless of the imprecision in operationalizing these variables, I argue as do Vreeland (2003) and Abouharb and Cingranelli (2009), that partial implementation of these conditions may still generate grievance and relative deprivation – the seeds for armed civil conflict. At best the operational

imprecision in the construction of these variables will likely underestimate their impact on armed civil conflict and thus produce conservative estimates.

Control Variables

Table 4.5 summarizes control variables that are used in the second-stage equation that predicts the probability for the onset of armed civil conflict. Civil war scholars have consistently identified *GDP per capita* (in constant 2000 U.S. dollars), *GDP growth, trade openness, population density, mountainous terrain, regime durability, democracy, democracy squared, primary commodity exporter and oil exporter* to exert an effect on the probability for the onset of armed civil conflict.

Table 4.5: Control Variables in the Second-Stage Equation - The Onset of Armed Civil Conflict

Variable	Operationalization	Source
GDP per capita (log)	Gross Domestic Product (GDP) divided by midyear population, log value, in constant 2000 US dollars	WDI
GDP growth	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars.	WDI
Trade openness (log)	The sum of exports and imports of goods and services as a percentage in a country's GDP, log value	WDI
Population density	People per square kilometers of land area	WDI
Percent mountainous terrain (log)	Estimated percentage mountainous terrain, log value	Fearon and Laitin (2003)
Regime durability	The duration of the country being autocratic or democratic respectively	DPI
Democracy	Regime type measured by Polity2, ranging from -10 (most authoritarian) to 10 (most democratic)	Polity IV
Democracy squared	Squared value of Polity2	Polity IV
Primary commodity exports	GDP percentage of merchandise exports in food, fuel, and ores and metal exports	WDI
Oil exporter	Dummy, coding 1 when over 1/3 export revenues from fuel	Fearon and Laitin (2003)

Civil war scholars have demonstrated that declining levels of *per capita GDP* (economic development) and economic growth increase grievance (MacCulloch 2004; Hegre, Ostby, and Raleigh 2009) and decrease state capacity (Fearon and Laitin 2003), which increase the likelihood of armed civil conflict. Furthermore, economic development affects the opportunity for rebellion. High levels of per capita GDP make recruitment difficult for rebel groups (Collier and Hoeffler 2004). Civil war scholars have shown that high levels of integration into the global economy, which is measured by the variable *trade openness* reduce relative deprivation and grievance and hence reduce the likelihood of armed civil conflict (de Soysa 2002; Barbieri and Reuveny 2005). It is also shown that high levels of *population density* increase the likelihood of armed civil conflict since the abundance of human resources makes recruitment easier for rebel groups (Collier and Hoeffler 2004; Fearon and Laitin 2003; Hegre and Sambanis 2006). These variables are taken from the World Development Indicators (WDI) online database (World Bank 2013).[34]

Civil war scholars argue that geographical factors also affect the likelihood of armed civil conflict. The variable, *percent mountainous terrain*, is expected to increase the likelihood of armed civil conflict since it decreases states' capability to suppress dissent and provides rebels with relatively secure bases and areas from which to attack and retreat from government forces (Fearon and Laitin 2003; Hegre and Sambanis 2006). This variable was adopted from Fearon and Laitin (2003). The variable *regime durability*, which measures the stability of regimes, also affects the likelihood of armed civil conflict. Increasing levels of *regime durability* decrease the likelihood of armed civil conflict (Abouharb and Cingranelli 2007). This variable was adopted from the Database of Political Institutions (DPI) (Beck et al. 2001; Keefer and Stasavage 2003; Keefer 2010, 2012).

[34] *Population density* is calculated by population/land. Indicators of population and land are all from the WDI.

The level of democracy affects the likelihood of armed civil conflict. *Democracy* is adopted from the Polity IV dataset (Marshall, Gurr, and Jaggers 2010). It is a 21-point continuous variable ranging from -10 (consolidated autocracy) to 10 (consolidated democracies). The variable also captures political authority structures that are often referred to as anocracies. Polity measures for incoherent autocracies range from -6 to 0, and measures for incoherent democracies range from 1 to 6. However, there is an inverted-U relationship between the level of democracy and armed civil conflict (Muller and Seligson 1987; Hegre et al. 2001; Goldstone et al. 2010). Consolidated autocracies and consolidated democracies are less likely to experience armed civil conflict, while armed civil conflict is far more prevalent amongst anocracies – incoherent autocracies and incoherent democracies (Hegre et al. 2001; Mason 2003; Gates et al. 2006). In addressing this problem, civil war scholars include in their models the variable *Democracy squared,* which is the squared value of *democracy*.

In explaining the determinants of armed civil conflict, civil war scholars include in their models the variable, *primary commodity exports*, which proxies greed. According to the greed model, countries that are rich in natural resources are more likely to experience armed civil conflict because the abundance of natural resources provides economic incentive to rebel and capture rents that come from the country's natural resources (Collier and Hoeffler 1998; de Soysa 2002; Collier and Hoeffler 2004; Collier, Hoeffler, and Soderbom 2004; Collier 2007).[35] There are six categories of primary commodities based on the Standard International Trade Classification (SITC): 1) SITC 0 -- food and live animals; 2) SITC 1 – beverages and tobacco; 3) SITC 2 – crude inedible materials except fuels; 4) SITC 3 –

[35] Since SAP conditionalities affects countries' exchange rate, primary commodity exports will also be affected. Therefore, including primary commodity exports in the model may underestimate the effect of SAPs on armed civil conflict. However, the correlation test shows that the correlation coefficients between SAP variables and *primary commodity exports* range from 0.12 to 0.14. The low correlation assures that controlling for *primary commodity exports* will not underestimate the predictive effects.

mineral fuels, etc. 5) SITC 4 – animal and vegetable oils, fats, and waxes; 6) SITC 68 – nonferrous metals such as silver and copper (Fearon 2005, 491). The variable *primary commodity exports*, is created as an aggregate of countries' primary commodity exports of food, fuel, ores and metals exports (World Bank 2013).[36] The data was calculated from indicators taken from the WDI online database. However, existing research report mixed findings on primary commodity exports' effect on the outbreak of armed civil conflict. While Fearon and Laitin (2003) find that the variable has no statistically significant effect on armed civil conflict, other researchers find that the variable is positively associated with armed civil conflict (de Soysa 2002; Collier and Hoeffler 2004). Since Fearon and Laitin (2003) find that oil exports has a positive effect on civil war onset, I follow their model specification and include *oil exporter* into the second stage equation. The variable is a dummy variable and is coded 1 for oil exporting countries and 0 otherwise.[37]

4.5 The Statistical Models

The theoretical model can be rewritten as a system of binary regression equations. As discussed earlier, various two-stage probit estimators are used to analyze the data. The second stage equations test the first and second hypotheses, which are the interactive effects of *SAP implementation*ethnic fractionalization*, and *SAP implementation *ethnic dominance* on the onset of armed civil conflict. These are followed by the study's control variables. Since the dependent variables at both stages are dichotomous and the data are cross-national and over time, there is the possibility of temporal dependence in the observations. To control for the

[36] To measure greed, which is looting as a motivation for rebellion, primary commodity exports is calculated as a percentage of GDP.
[37] Oil exporter is a country whose revenues from fuel exports is more than a 1/3 of its export (Fearon and Laitin 2003).

temporal dependence, cubic splines are utilized in all the models (Beck, Katz, and Tucker 1998). The main models are as follows:

First Stage Equation

Entering into an SAP Agreement = $\alpha + \beta_1$GDP growth + $\beta_2$trade openness
$+\beta_3$inflation + $\beta_4$external debt
$+ \beta_5$armed civil conflict presence
$+\beta_6$democracy
$+\beta_7$Government political constraint
$+ \beta_8$Legislative fractionalization + ε

Second Stage Equation: Ethnic Fractionalization

Onset of Armed Civil Conflict = $\alpha +\beta_1$SAP implementation + $\beta_2$ethnic fractionalization
$+\beta_3$SAPimplementation*ethnic fractionalization
$+\beta_4$Predicted Value (IMF Selection Effect)
+ Control Variables +ε

Second Stage Equation: Ethnic Dominance

Onset of Armed Civil Conflict = $\alpha + \beta_1$SAP implementation + $\beta_2$ethnic dominance
$+ \beta_3$SAPimplementation*ethnic dominance
$+ \beta_4$Predicted Value (IMF Selection Effect)
+ Control Variables +ε

4.6 Illustrative Historical Analysis

While large-N quantitative analysis is able to establish statistical inference between the study's central explanatory variables of interest, in chapters 7 & 8, I explore in more detail the causal mechanisms between SAPs, ethnicity, and the probability of armed civil conflict by using Ghana and Rwanda as comparative illustrative examples of my theory. With more than 100 linguistic and cultural groups (Berry 1994) and an ethno-linguistic

fractionalization score of 0.85, Ghana is highly ethnically fractionalized. The implementation of SAPs into Ghana's ethnic fractionalized polity is not associated with armed civil conflict. By contrast, in Rwanda, Hutu dominance over the Tutsi and Twa (Pygmy) ethnic groups accounts for 84% of the population. And the country's ethno-linguistic fractionalization score of 0.18 is indicative of low ethnic fractionalization. However, the implementation of SAPs into Rwanda's ethnic dominant polity is associated with armed civil conflict.

In addition to exploring in more detail the causal mechanisms between the central explanatory variables, the historical analyses will also provide opportunity to examine alternative theoretical explanations that account for the variation of armed civil conflict in Ghana and Rwanda. Juxtaposed to the theory that I have advanced in this study, the historical analysis will allow me to evaluate the explanatory power of alternative theories.

Chapter 5

IMF SAPs, Ethnic Fractionalization, and Armed Civil Conflict

5.1 Introduction

This study uses the metaphor of the Two-Level game to integrate theories of civil war, ethnic politics, and the politics of structural adjustment to explain variation across countries where the implementation of SAP conditionality is associated with the outbreak of armed civil conflict in some countries but not in others. In this chapter, I will discuss the results that test the hypothesis: *IMF SAPs reduce the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic fractionalization.*

This chapter is organized as follows: I will first discuss the results from the first-stage equation that predicts the probability of countries entering into an SAP agreement with the IMF. This is followed by a discussion of the results from the second-stage equation that predicts the probability of armed civil conflict once countries implement the conditions that are attached to SAP loan agreements. And as discussed in chapter 4, three different two-stage econometric estimators are used to test the hypothesis. I then use alternate measures of SAP implementation which disaggregate SAP conditionality to test the theory. I present the summation of main findings following the discussion of alternative measures. Then I conduct the robustness checks of the empirical results. And since the theory is robust to these alternative measures the discussion of these results is placed in the end of the chapter.

5.2 First-Stage Equation: Entering into an IMF SAP Loan Agreement

The first-stage results from the two-stage probit estimator predicting which governments will enter into an IMF SAP loan agreement can be found in Table 5.1.

Table 5.1: First-Stage Estimates Predicting Entering into an IMF SAP Loan Agreement

	Model 5.1a (Temporal dependence not controlled)	Model 5.1b (Temporal dependence controlled)
Economic and Financial Factors		
GDP growth	-.025***	-.028***
	(.008)	(.008)
Trade openness (log)	-.158*	-.143*
	(.082)	(.085)
Inflation	-.000	-.000
	(.000)	(.000)
External Debt	.002***	.001**
	(.001)	(.001)
Political Factors		
Presence of armed civil conflict	-.202*	-.185*
	(.106)	(.110)
Democracy	.017 *	.018*
	(.009)	(.009)
Government political constraints	-.276	-.316
	(.261)	(.270)
Legislative fractionalization	.516***	.456**
	(.193)	(.198)
Temporal Dependence		
Years since last SAP initiation		.275**
		(.124)
Constant	-.550	-.821**
	(.370)	(.386)
N	1504	1504
LR χ^2	38.24	91.67
Prob > χ^2	.000	.000
Pseudo R-Squared	.028	.067
Log pseudolikelihood	-694.026	-638.738

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors are parentheses.

Columns 5.1a and 5.1b, respectively, present the results without and with temporal dependence. In either model, all of the economic and political variables with the exception

of inflation and government political constraints are statistically significant. Countries that experience high levels of GDP growth and openness to international trade are less likely to enter into an SAP agreement with the IMF. This is not surprising since countries who experience high levels of economic growth and have instituted liberalized trade policies (Lawrence 1996) are less likely to generate public sector deficits or external balance of payments deficits, which would require financial intervention from the IMF. However, as expected, countries with increasing external debt are more likely to enter into an IMF SAP loan agreement, confirming conventional wisdom that the IMF is a lender of 'last resort' for many countries caught in the debt crisis. Countries that are experiencing armed civil conflict are less likely to enter into an IMF SAP agreement, which logically suggest that states place a higher priority in responding to domestic security threats than they do in responding to economic challenges that are associated with debt.

Democracies are more likely to enter into an IMF SAP loan agreement to resolve debt crises. This finding is consistent with the theoretical predictions of some international relations scholars. These theorists argue that since democracies are more likely to make credible commitments, they are more likely to enter into an SAP agreement with the IMF to resolve financial problems associated with debt (Martin 2000; Leeds 1999; Dollar and Svensson 2000). This finding is also consistent with the predictions of globalization theorists. These theorists argue that democracies are more likely to enter into an SAP agreement because democratic leaders preside over economies that are highly integrated into the global economy and, relative to autocracies, these leaders face greater pressure from capital markets to expedite the necessary economic reforms to restore investor confidence and resolve market uncertainties that are associated with debt (Eichengreen and Leblang 2008).

As I argued in chapter 3, countries with fractionalized legislatures are more likely to

enter into an SAP loan agreement with the IMF because the very nature of their fractionalization gives them a bargaining advantage in negotiations with the Fund. An SAP agreement with stringent conditionalities is unlikely to be ratified by a fractionalized legislature. Consequently, the IMF is likely to revert to its second-order institutional preference and will offer a loan program with mild conditionalities that attempt to limit the contagious effects of countries' debt crisis while facilitating ratification in a fractionalized legislature. Therefore, this increases the probability that governments whose legislatures are fractionalized will enter into an SAP loan agreement with the IMF.[38]

5.3 Second-Stage Equation: Predicting the Onset of Armed Civil Conflict

The second stage results can be found in Table 5.2. Column 5.2a presents the base model results without the IMF's financial intervention. High levels of ethnic fractionalization increase the likelihood of armed civil conflict in the base model. This is consistent with the finding of Regan and Norton (2005). The reason could be that the cost of punishment for participating in armed civil conflict in ethnically fractionalized countries is relatively low. Hence ethnic fractionalization increases the incentives of participating in armed civil conflict (Esteban and Ray 2008).[39] Furthermore, population density, countries that are oil exporters, and countries with mountainous terrain all increase the probability for the onset of armed

[38] See Appendix 2 for the first difference of significant variables in the first stage.

[39] Note that there is no consensus on the relationship between ethnic fractionalization and armed civil conflict. Although ethnic fractionalization could increase incentives of joining armed civil conflict, it is possible that ethnic fractionalization could make rebellion against governments more difficult because the coordination cost of rebellion across ethnic groups is relatively high and the pool for rebel recruitment is restricted (Collier and Hoeffler 1998; Collier and Hoeffler 2004; Montalvo and Reynal-Querol 2005). Hence it is understandable that some research finds there is no significant relationship between ethnic fractionalization and civil war (Fearon and Laitin 2003; Collier and Hoeffler 2004).

Table 5.2: Second-Stage Estimates Predicting the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	Model 5.2a Base Model	Model 5.2b SAP Implementation
SAP implementation*		-.087**
Ethnic fractionalization		(.044)
SAP implementation		.068**
		(.029)
Ethnic fractionalization	.953***	.224
	(.279)	(.545)
GDP per capita (log)	-.205***	-.179*
	(.068)	(.097)
GDP growth	.036**	.027
	(.017)	(.023)
Trade openness (log)	-.359***	-.379**
	(.120)	(.151)
Population density	.000***	.000
	(.000)	(.000)
Percent mountainous	.085*	.125*
terrain (log)	(.046)	(.068)
Regime durability	.006	-.009
	(.004)	(.012)
Democracy	.016	.031
	(.014)	(.021)
Democracy squared	-.002	-.000
	(.003)	(.004)
Primary commodity	-.010***	-.006
exports	(.003)	(.004)
Oil exporter	.746***	.782***
	(.229)	(.298)
Years since last armed	-.053	-.037
civil conflict onset	(.108)	(.144)
IMF selection effects		-2.782**
		(1.083)
Constant	.981	1.728
	(.668)	(1.065)
N	1949	943
Wald χ^2	96.83	69.99
Prob > χ^2	.000	.000
Pseudo R squared	.192	.258
Log pseudolikelihood	-227.571	-134.200

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses.

civil conflict – findings that are consistent with existing research (Fearon and Laitin 2003; Fearon and Laitin 2000). For population density, this finding confirms that the concentration of population provides rebels with necessary people resources. With respect to oil exporter, the finding is consistent with previous research that armed civil conflict is more likely to break out in countries when their export revenues coming from oil exceed one third (de Soysa 2002; Fearon and Laitin 2003; Barbieri and Reuveny 2005; Humphreys 2005). High levels of economic growth also increase the probability for the onset of armed civil conflict. While this finding maybe inconsistent with our intuitive expectations, it is important to note that countries may experience armed civil conflict when economic growth increases (Gallman 1992).[40] Moreover, Collier (2007) has argued that slow or moderate levels of economic growth may also increase the likelihood of armed civil conflict, which suggest that the variable maybe curvilinear.

By contrast, High levels of per capital GDP and openness to international trade reduce the probability for the onset of armed civil conflict. Economic globalization could increase government capacity and reduce opportunity costs of armed civil conflict (de Soysa 2002). Primary commodity exporting countries are less likely to experience the onset of armed civil conflict – a finding that is consistent with the mixed results that this variable has produced in the literature (Fearon 2005).[41] All other variables fail to rise to the level of statistical significance.[42]

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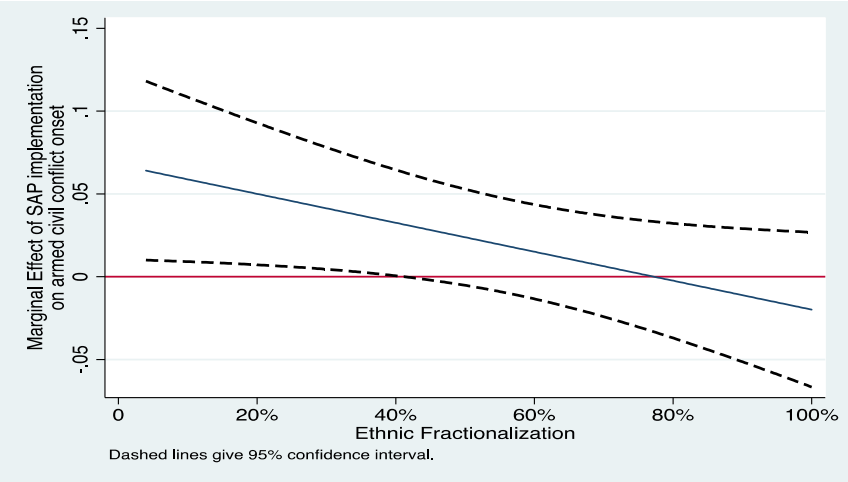
[40] For example, economic growth in the United States increased before the onset of civil war (Gallman 1992).

[41] Note there is no consensus on the impact of primary commodity exports on armed civil conflict. While some studies find there is no significant relationship between primary commodity exports and armed civil conflict (Elbadawi and Sambanis 2002), other studies find curvilinear relationship between them (Collier and Hoeffler 1998; de Soysa 2002; Hegre 2002; Collier and Hoeffler 2004). And Reynal-Querol (2002) finds the positive relationship existing only for non-ethnic civil conflict. See Ross (2004) for a nice review.

[42] See Appendix 3 for the first difference of the significant control variables in the second stage.

Column 5.2b presents the results of the IMF's financial intervention in ethnically fractionalized polities. The study's hypothesis is supported by the results. *SAP implementation* (the constitutive element of the interaction term) increases the probability for the onset of armed civil conflict. However, the fact that the coefficient for the interaction term - *SAP implementation*Ethnic fractionalization* – is statistically significant and negative, this increased effect diminishes with the implementation of SAPs. Figure 5.1 graphs the marginal effect of SAP implementation on the onset of armed civil conflict. I use technique developed by Boehmke (2008) to graph the marginal effect in this research. The solid sloping line indicates how the marginal effect of SAP implementation on the onset of armed civil conflict changes with increasing levels of ethnic fractionalization. 95% confidence intervals around the line allow us to determine the conditions under which SAP implementation has a statistically significant effect on the onset of armed civil conflict. And they have a statistically significant effect whenever the upper and lower bounds of the confidence intervals are both above (and below) the zero line. And as theoretically predicted the increased effect of SAP implementation (the constitutive element of the interaction term) declines as ethnic fractionalization increases. Once the level of countries' ethnic fractionalization surpasses 79%, SAP implementation decreases the probability for the onset of armed civil conflict.

Figure 5.1 Marginal Effect of SAP Implementation and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization



In Table 5.2.1 I present the first difference of the interaction impact between SAP implementation and ethnic fractionalization on armed civil conflict onset by employing CLARIFY (Tomz, Wittenberg, and King 2003) to do the calculation. The interaction variable means the effect of SAP implementation on the onset of armed civil conflict is conditional on the value of ethnic fractionalization. I use the mean of ethnic fractionalization (0.48) and the index of 0.8 (the marginal-effect threshold indicated by Figure 5.1) to demonstrate the SAP impact. As Table 5.2.1 shows, in non-oil exporting countries, the impact of SAP implementation (moving from its minimum to maximum value) on the onset of armed civil conflict is 16% when ethnic fractionalization is at its mean (0.48). When ethnic fractionalization is 0.8 (around the threshold), the impact of SAP implementation on the onset of armed civil conflict is decreased to -0.3%, which is consistent with the theory's prediction that SAP implementation in highly ethnically-fractionalized countries is less likely

to lead to the outbreak of armed civil conflict. On the whole, the percentage change of probabilities is -102%. In oil-exporting countries, the reduction of probabilities is 114% (from 0.065 to -0.009). This means SAP implementation in countries with an ethnic fractionalization index of 0.8 is one time less likely to have the onset of armed civil conflict compared to SAPs in countries with an average ethnic fractionalization. Again, the statistical results confirm the hypothesis that SAP implementation decreases the likelihood of the onset of armed civil conflict when ethnic fractionalization increases.

Table 5.2.1 First Difference: the Impact of the Interaction between SAP Implementation and Ethnic Fractionalization on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 5.2b SAP Implementation (oil exporter=0)		Model 5.2b SAP Implementation (oil exporter=1)	
Ethnic Fractionalization	.48 (mean)	.80 (threshold)	.48	.80
First Difference: SAP implementation	.16	-.003	.065	-.009
First Difference Change		-102%		-114%

Note: The first difference is calculated by moving SAP Implementation from its minimum to maximum with Ethnic Fractionalization moving from its mean to its threshold while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

5.4 Estimates from the Bivariate Probit Model

To address the limitations of the two-stage (predicted values) probit model, I analyze the data via a bivariate probit estimator. Table 5.3 presents the bivariate probit estimates for SAP implementation on the onset of armed civil conflict under conditions of ethnic fractionalization. Estimates for the first-stage equation - *Entering into an IMF SAP Loan*

Table 5.3: Bivariate Probit Estimates: SAP Implementation and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	SAP Implementation
The Onset of Armed Civil Conflict	
SAP implementation*Ethnic fractionalization	-.078*
	(.046)
SAP implementation	.036
	(.035)
Ethnic fractionalization	.299
	(.609)
GDP per capita (log)	-.180
	(.094)
GDP growth	.041*
	(.022)
Trade openness (log)	-.327**
	(.150)
Population density	.001
	(.000)
Percent mountainous terrain (log)	.109
	(.068)
Regime durability	-.008
	(.011)
Democracy	.028
	(.020)
Democracy squared	.000
	(.004)
Primary commodity exports	-.006
	(.004)
Oil exporter	.827***
	(.281)
Constant	.822
	(1.076)
Entering into an IMF SAP Loan Agreement	
GDP growth	-.035***
	(.012)
Trade openness (log)	-.245**
	(.118)
Inflation	-.001
	(.000)
External debt	.003**
	(.001)

Table 5.3 (continued)

	SAP Implementation
Armed civil conflict incidence	-.372*
	(.207)
Democracy	.021*
	(.011)
Government political constraints	-.283
	(.327)
Legislative fractionalization	.704**
	(.284)
Constant	-.555
	(.536)
N	943
Log pseudo-likelihood	-460.036
Wald test of rho=0: χ^2 (1) = 4.275	Probability > χ^2 = .039

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses are adjusted for clustering over countries. Temporal dependence variables included in the analysis but not reported.

Agreement are consistent with those reported in the previous two-stage (predicted values) probit model. GDP growth, openness to international trade, and the presence of armed civil conflict reduce the likelihood of entering into an IMF SAP loan agreement. External debt and democracies increase the likelihood of entering into an SAP loan agreement with the IMF. And consistent with the results reported in the two-stage (predicted values) probit model, fractionalized legislatures increase the likelihood of countries entering into an IMF SAP agreement. This finding is again consistent with the argument that factionalized legislatures gives governments a bargaining advantage in debt negotiations with the IMF.

Estimates for the second-stage equation – the *Onset of Armed Civil Conflict* supports the hypothesis. While ethnic fractionalization and SAP implementation (the constitutive elements of the interaction term) fail to rise to the level of statistical significance, the coefficient for the interaction variable *SAP implementation*Ethnic fractionalization* is statistically

significant and negative. Openness to international trade reduces the probability for the onset of armed civil conflict while oil-exporting countries increase the likelihood of armed civil conflict.

The Wald likelihood ratio test indicates that $\rho \neq 0$, which means that the null hypothesis that the error terms for the first-stage and second-stage equations are uncorrelated can be rejected. This indicates that the bivariate probit estimator is appropriate for correcting the endogenous relationship between entering into an IMF SAP loan agreement and the onset of armed civil conflict.

5.5 Estimates from the IV Probit Model

While the bivariate probit estimator has its advantages, I am still concerned that one of the main variables – *SAP implementation* – is endogenous with the onset of armed civil conflict. To address this possibility, as discussed in chapter 4, I analyze the data using an IV probit model in which I use *Government Corruption* as an instrument for *SAP implementation*. And since the predicted value from the first-stage equation (IMF selection effects) is included in the model to account for endogeneity between the onset of armed civil conflict and entering into an SAP loan agreement, I incorporate the replication properties of the Jackknife procedure to produce efficient standard errors. Table 5.4 presents estimates that once again support the hypothesis. *SAP implementation* (the constitutive element of the interaction term) increases the probability for the onset of armed civil conflict. But since the interaction term - *SAP implementation*Ethnic fractionalization* – is significant and negative, the increased effect of the constitutive element diminish with increasing levels of ethnic fractionalization. While ethnic fractionalization (the other constitutive element of the interaction term) reduces the probability for the onset of armed civil conflict, most of the

control variables fail to rise to the level of statistical significance. The Wald test of exogeneity of the instrumented variable is insignificant and indicates no rejection of the null hypothesis that there is no endogeneity between SAP implementation and the onset of armed civil conflict, suggesting that the IV probit model is appropriate to estimate the data.

Table 5.4: IV Probit Estimates: SAP Implementation and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	SAP Implementation
SAP implementation * Ethnic fractionalization	-.485**
	(.093)
SAP implementation	.325***
	(.058)
Ethnic fractionalization	-.4.533***
	(1.376)
GDP per capita (log)	-.027
	(.116)
GDP growth	.016
	(.019)
Trade openness (log)	-.178
	(.195)
Population density	.000
	(.000)
Percent mountainous terrain (log)	.015
	(.073)
Regime durability	.002
	(.010)
Democracy	-.018
	(.024)
Democracy squared	-.001
	(.003)
Primary commodity exports	-.004
	(.003)
Oil exporter	.453
	(.310)
IMF selection effects	-1.488
	(1.159)
Constant	3.759***
	(0.815)
N	943
Wald test of exogeneity: χ^2 (1) = 3.44	Probability > χ^2 = .103

Note: * P<.10, ** P<.05, *** P<.01. Jackknife standard errors in parentheses. Temporal dependence variables included in the analysis but not reported.

5.6 Alternative Measures: Aggregating and Disaggregating SAP Conditionalities

In this section I test the hypothesis by using alternate measures of SAP implementation. I consider whether variation in the type of SAPs under conditions of ethnic fractionalization will reject the hypothesis or whether such variation or alternate measurement specifications will have different effects on the onset of armed civil conflict.

Table 5.5 presents estimates of the second-stage of the two-stage (predicted values) probit model of the interactive effects of SAP conditions and ethnic fractionalization on the onset of armed civil conflict. Model 5.5a presents estimates for the total number of SAP conditions that recipient governments are expected to implement and models 5.5b, 5.5c and 5.5d, respectively, present estimates for the number of Structural, Fiscal and Financial conditionalities. And with the exception of *Fiscal* conditions, the results support the hypothesis and are consistent with the results that use the more precise measure – *SAP implementation*. In model 5.5a, increases in the total number of SAP conditions and ethnic fractionalization (the constitutive elements of the interaction term) both increase the probability for the onset armed civil conflict. However, the fact that the coefficient for the interaction term - SAP Conditions*Ethnic fractionalization – is statistically significant and negative, the increased effect of the constitutive elements diminish as ethnic fractionalization increases.

This pattern repeats itself for Structural, and Financial conditionalities and is demonstrated by the marginal effect of the various SAP conditions on the onset of armed civil conflict as shown in figures 5.2a, 5.2b and 5.2c. In figure 5.2a, increases in the total number of SAP conditions decrease the probability for the onset of armed civil conflict when ethnic fractionalization is greater than 90%. In figure 5.2b, increases in the total number of structural conditions decrease the probability for the onset of armed civil conflict

Table 5.5: Second Stage of the Two-Stage (predicted values) Probit Estimates: SAP Conditions and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	Model 5.5a SAP Total Number of SAP Conditions	Model 5.5b SAP Structural Conditions	Model 5.5c SAP Fiscal Conditions	Model 5.5d SAP Financial Conditions
SAPconditions*Ethnic fractionalization	-0.041*			
	(0.023)			
SAP conditions	.035**			
	(.015)			
SAP structural conditions*Ethnic fractionalization		-.067*		
		(.040)		
SAP structural conditions		.060**		
		(.025)		
SAP fiscal conditions*Ethnic fractionalization			-.139	
			(.089)	
SAP fiscal conditions			.092	
			(.056)	
SAP financial conditions*Ethnic fractionalization				-.353*
				(.205)
SAP financial conditions				.258**
				(.113)
Ethnic fractionalization	1.714***	1.638***	1.503***	1.617***
	(.528)	(.508)	(.473)	(.459)
GDP per capita (log)	-.124	-.137	-.149*	-.135
	(.092)	(.093)	(.090)	(.089)
GDP growth	.024	.024	.025	.029
	(.023)	(.023)	(.022)	(.023)
Trade openness (log)	-.352**	-.355**	-.329**	-.352**
	(.148)	(.150)	(.148)	(.143)
Population density	.001**	.001**	.001*	.001*
	(.000)	(.000)	(.000)	(.000)
Percent mountainous terrain (log)	.137*	.132*	.156**	.143**
	(.070)	(.070)	(.071)	(.070)
Regime durability	-.006	-.006	-.005	-.006
	(.012)	(.012)	(.011)	(.012)
Democracy	.028	.029	.032	.027
	(.020)	(.020)	(.021)	(.021)
Democracy squared	-.001	-.002	-.002	-.001
	(.004)	(.004)	(.004)	(.004)

Table 5.5 (continued)

	Model 5.5a SAP Total Number of SAP Conditions	Model 5.5b SAP Structural Conditions	Model 5.5c SAP Fiscal Conditions	Model 5.5d SAP Financial Conditions
Primary commodity exports	-.007* (.004)	-.007* (.004)	-.007* (.004)	-.007 (.004)
Oil exporter	.751*** (.290)	.758*** (.290)	.732** (.290)	.734** (.294)
Years since last armed civil conflict onset	.074 (.156)	.066 (.156)	.083 (.157)	.087 (.155)
IMF selection effects	-2.852*** (1.043)	-2.911*** (1.048)	-2.725 (1.007)	-2.724*** (1.036)
Constant	.079 (1.031)	.250 (1.016)	.272 (1.041)	.145 (.989)
N	969	969	969	969
Wald χ^2	71.28	77.12	69.91	64.89
Prob > χ^2	.000	.000	.000	.000
Pseudo R squared	0.257	0.259	0.245	0.252
Log pseudolikelihood	-135.318	-134.941	-137.435	-136.274

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses.

Figure 5.2a: The Marginal Effect of the Total Number of SAP Economic Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

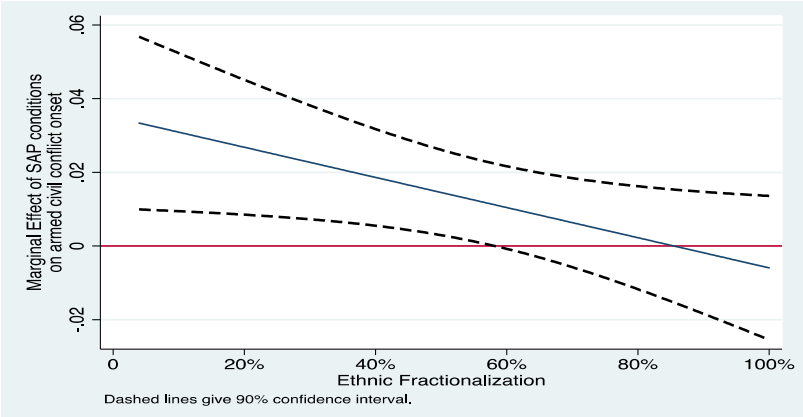


Figure 5.2b: Marginal Effects of SAP Structural Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

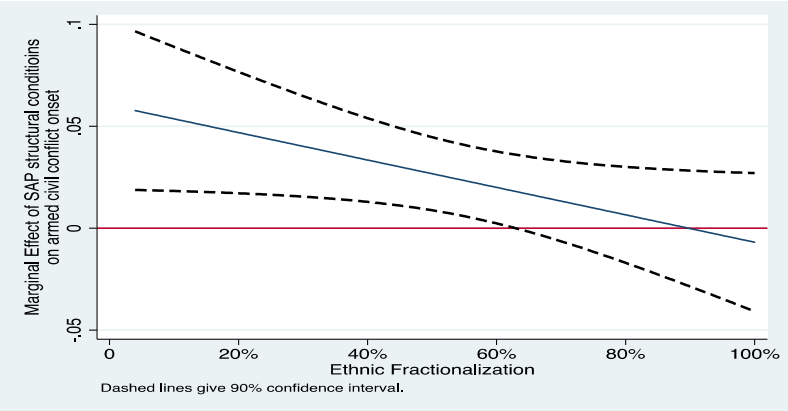
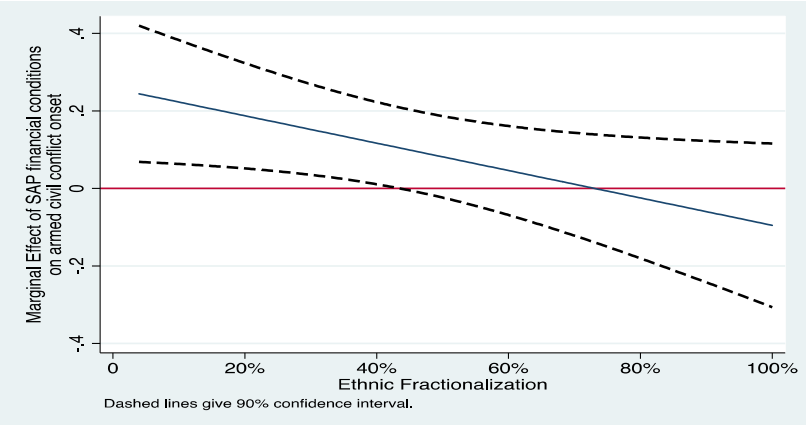


Figure 5.2c: Marginal Effects of SAP Financial Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization



when ethnic fractionalization is greater than 95%. In figure 5.2c, increases in the total number of financial conditions decrease the probability for the onset of armed civil conflict when ethnic fractionalization is greater than 75%.

In all the models, the control variables population density, mountainous terrain and oil exporting countries all increase the likelihood of armed civil conflict onset. Openness to international trade consistently reduces the likelihood of armed civil conflict while GDP per-capita reduces the likelihood for the onset of armed civil conflict in the model for *Fiscal* conditions.

Table 5.5.1 presents the first difference of the interaction effect between SAP conditions and ethnic fractionalization. In non-oil exporting countries, when ethnical fractionalization is 0.48 (mean), the impact of SAP conditions (moving from minimum to maximum value) on the onset of armed civil conflict is 5.7%. But the impact is reduced to 0.5% in countries with an ethnic fractionalization index of 0.9 (around the threshold identified in Figure 5.2a). Overall, the percentage change of probabilities is -91% (from 0.057 to 0.005). In oil exporting countries, the reduction of probabilities is 93% (from 0.166 to 0.011). This is to say, the likelihood that SAP conditions in countries with an ethnic fractionalization index of 0.9 have armed civil conflict onset is roughly 90% less than those in average ethnically fractionalized countries.

Table 5.5.2 presents the first difference of the interactive impact between SAP structural conditions and ethnic fractionalization. In non-oil exporting countries, the effect of SAP structural conditions (moving from minimum to maximum value) on the onset of armed civil conflict is 9.3% when ethnic fractionalization is 0.48 (mean). However, the effect is decreased to 1.2% when ethnic fractionalization is 0.95 (around the threshold identified in Figure 5.2b). As a whole, the percentage change of probabilities is 87% (from 0.093 to 0.012). In oil exporting counties, the reduction of probabilities is 90% (from 0.234 to 0.023). This means the effect of SAP structural conditions on the outbreak of armed civil conflict in

highly ethnically fractionalized countries (with an index of 0.95) is about 90% less than those in average ethnically fractionalized countries.

Table 5.5.1 First Difference: the Impact of the Interaction between SAP Conditions and Ethnic Fractionalization on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 5.5a SAP Conditions (oil exporter=0)		Model 5.5a SAP Conditions (oil exporter=1)	
Ethnic Fractionalization	.48 (mean)	.90 (threshold)	.48	.90
First Difference: SAP Conditions	.057	.005	.166	.011
First Difference Change	-91%		-93%	

Note: The first difference is calculated by moving SAP Conditions from its minimum to maximum with Ethnic Fractionalization moving from its mean to its threshold while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

Table 5.5.2 First Difference: the Impact of the Interaction between SAP Structural Conditions and Ethnic Fractionalization on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 5.5b SAP Structural Conditions (oil exporter=0)		Model 5.5b SAP Structural Conditions (oil exporter=1)	
Ethnic Fractionalization	.48 (mean)	.95 (threshold)	.48	.95
First Difference: SAP Structural Conditions	.093	.012	.234	.023
First Difference Change	-87%		-90%	

Note: The first difference is calculated by moving SAP Structural Conditions from its minimum to maximum with Ethnic Fractionalization moving from its mean to its threshold while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

Table 5.5.3 presents the first difference of the interaction effect between SAP financial conditions and ethnic fractionalization. In non-oil exporting countries, the impact of SAP financial conditions (moving from minimum to maximum value) on the onset of armed civil conflict is 3.4% in ethnically fractionalized countries with an index of 0.48 (mean). But when ethnic fractionalization is 0.75 (around the threshold identified in Figure 5.2c), the impact is decreased to 0.4%. Overall the reduction of probabilities is 88% (from 0.034 to 0.004). In oil-exporting countries, the reduction of likelihoods is 85% (from 0.104 to 0.016). All of this means the impact of SAP financial conditions on the outbreak of armed civil conflict in countries with an ethnic fractionalization index of 0.75 is about 90% less than those in average ethnically fractionalized countries.

Table 5.5.3 First Difference: the Impact of the Interaction between SAP Financial Conditions and Ethnic Fractionalization on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 5.5d SAP Financial Conditions (oil exporter=0)		Model 5.5d SAP Financial Conditions (oil exporter=1)	
Ethnic Fractionalization	.48 (mean)	.75 (threshold)	.48	.75
First Difference: SAP Structural Conditions	.034	.004	.104	.016
First Difference Change	-88%		-85%	

Note: The first difference is calculated by moving SAP Financial Conditions from its minimum to maximum with Ethnic Fractionalization moving from its mean to its threshold while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

Given that the number of SAP conditions does not tell us precisely to what extent the conditionalities are implemented, the statistical significance of most of the SAP condition variables confirms the argument that partial implementation could still have impact on recipient countries, though the effects of SAP conditions are less significant than those of SAP implementation. More important, disaggregating the variable of SAP conditionality gives us an opportunity to compare the effects of SAP policy in different areas. While structural conditions and financial conditions have significant effects in recipient countries, fiscal conditions are insignificant.

A possible explanation could be that implementing fiscal conditions brings about higher political costs. Research shows that SAP implementation is strongly affected by recipient governments' political calculations. If the political costs of implementing certain SAP policy are greater than the political benefits, recipient governments have strong incentives of noncompliance (Akonor 2006). Fiscal conditions that focus on reducing government debt and increasing government revenues (such as cutting expenditures and raising tax rates) are most likely to be poorly implemented in borrowing countries. For example, in the 1990s the Ghanaian government had great difficulty in implementing its fiscal targets, but it had no problem of meeting the targets of financial conditionality (Hutchful 2002, 216-217). Also, recipient governments only have limited resources to carry out SAP policy. Compared to structural conditions which emphasize privatization and deregulation and financial conditions which aim at reforming banks and interest rate system, fiscal conditions may consume more resources and thus rank low in the governments' order of preference among all the areas of SAP policy.

5.7 Bivariate Probit Estimates for the Alternative Measures

Using the alternate measure of SAP implementation, Table 5.6 presents bivariate probit estimates that provide additional test of the hypothesis. Model 5.6a presents estimates of the total number of conditions that recipient governments are expected to implement and models 5.6b, 5.6c and 5.6d, respectively, present estimates for the number of Structural, Fiscal and Financial conditionalities. Estimates for the first-stage equation - *entering into an IMF SAP loan agreement* – is consistent with all the previous econometric models used in this chapter. In all models GDP growth and openness to international trade reduce the probability that governments will enter into an SAP loan agreement with the IMF. The presence of armed civil conflict reduces the probability of entering into an SAP agreement in models 5.6c and 5.6d, respectively. In all models, high levels of external debt, democracies and governments with fractionalized legislatures are more likely to enter into an SAP agreement with the IMF. All other variables fail to rise to the level of statistical significance.

With the exception of models 5.6c and 5.6d (fiscal and financial conditions), estimates for the second-stage equation - *the onset of armed civil conflict* - are also consistent with estimates produced by the two-stage (predicted values) probit model and supports the hypothesis that is tested in this chapter. In all models, ethnic fractionalization (the constituent element of the interaction term) increases the probability of armed civil conflict. However, in models 5.6a and 5.6b, since the coefficients for the interaction terms - SAP conditions*ethnic fractionalization and SAP structural conditions*ethnic fractionalization – are statistically significant and negative, the increased effect diminishes as SAP conditions are implemented. In all models, oil exporting and densely populated countries with mountainous terrain increase the probability of armed civil conflict. And consistent with previous finding

in this chapter, GDP growth increases the probability of armed civil conflict in only model 5.6d. In all models, openness to trade reduces the probability for armed civil conflict and with the exception of model 5.6d; primary commodity exporting countries reduce the probability of armed civil conflict. And again, in all models the Wald likelihood ratio test indicates that the null hypothesis that the error terms for the first-stage and second-stage equations are uncorrelated can be rejected. This suggests that estimating the data via the bivariate probit model is appropriate to correct the endogenous relationship between entering an SAP agreement and the onset of armed civil conflict.

Table 5.6: Bivariate Probit Estimates: SAP Conditions and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	Model 5.6a Total Number of SAP Conditions	Model 5.6b SAP Structural Conditions	Model 5.6c SAP Fiscal Conditions	Model 5.6d SAP Financial Conditions
The Onset of Armed Civil Conflict				
SAP conditions*Ethnic fractionalization	-.042*			
	(.024)			
SAP conditions	.026			
	(.017)			
SAP structural conditions*Ethnic fractionalization		-.071*		
		(.042)		
SAP structural conditions		.047*		
		(.027)		
SAP fiscal conditions*Ethnic fractionalization			-.154	
			(.101)	
SAP fiscal conditions			.048	
			(.067)	
SAP financial conditions*Ethnic fractionalization				-.380
				(.234)
SAP financial conditions				.187
				(.136)
Ethnic fractionalization	1.816***	1.774***	1.574***	1.720***
	(.530)	(.515)	(.481)	(.476)
GDP per capita (log)	-.102	-.100	-.133	-.102
	(.088)	(.088)	(.085)	(.086)
GDP growth	.036	.035	.034	.038*
	(.022)	(.022)	(.021)	(.023)
Trade openness (log)	-.278*	-.276*	-.278*	-.276*
	(.150)	(.152)	(.146)	(.146)
Population density	.001**	.001***	.001**	.001**
	(.000)	(.000)	(.000)	(.000)
Percent mountainous terrain (log)	.143**	.140**	.148**	.152**
	(.069)	(.069)	(.069)	(.069)
Regime durability	-.007	-.007	-.007	-.007
	(.011)	(.011)	(.011)	(.011)
Democracy	.019	.018	.023	.019
	(.020)	(.020)	(.019)	(.020)
Democracy squared	-.001	-.001	-.001	-.001
	(.004)	(.004)	(.004)	(.004)

Table 5.6 (continued)

	Model 5.6a Total Number of SAP Conditions	Model 5.6b SAP Structural Conditions	Model 5.6c SAP Fiscal Conditions	Model 5.6d SAP Financial Conditions
Primary commodity exports	-.007*	-0.007*	-.007*	-.007
	(.004)	(0.004)	(.004)	(.004)
Oil exporter	.836***	.847***	.843***	.819***
	(.284)	(.285)	(.285)	(.284)
Constant	-.731	-.729	-.306	-.735
	(.980)	(.973)	(.981)	(.955)
Entering into an IMF SAP Loan Agreement				
GDP growth	-.020*	-.021*	-.020*	-.020*
	(.012)	(.012)	(.012)	(.012)
Trade openness (log)	-.333***	-.330***	-.346***	-.338***
	(.109)	(.109)	(.110)	(.110)
Inflation	-.003	-.003	-.003	-.003
	(.003)	(.003)	(.003)	(.003)
External debt	.005***	.005***	.004***	.005***
	(.001)	(.001)	(.001)	(.001)
Armed civil conflict incidence	-.274	-.262	-.327*	-.292*
	(.174)	(.170)	(.181)	(.176)
Democracy	.024**	.024**	.024**	.024**
	(.011)	(.011)	(.011)	(.011)
Government political constraints	-.094	-.093	-.107	-.091
	(.320)	(.321)	(.320)	(.320)
Legislative fractionalization	.445*	.445*	.444*	.437*
	(.257)	(.258)	(.256)	(.257)
Constant	-.128	-.144	-.056	-.099
	(.499)	(.496)	(.505)	(.501)
N	969	969	969	969
Log pseudo-likelihood	-503.243	-503.237	-503.414	-503.321
5.6a: Wald test of rho=0:	χ^2 (1)	=4.540	Prob > χ^2	=.033
5.6b: Wald test of rho=0:	χ^2 (1)	=4.960	Prob > χ^2	=.026
5.6c: Wald test of rho=0:	χ^2 (1)	=5.028	Prob > χ^2	=.025
5.6d: Wald test of rho=0:	χ^2 (1)	=4.751	Prob > χ^2	=.029

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses are adjusted for clustering over countries. Temporal dependence variables included in the analysis but not reported.

5.8 Main Findings Summation

After using different econometric estimators, the empirical findings in this chapter consistently support the hypothesis that *IMF SAPs reduce the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic fractionalization.* The large-n empirical support for this hypothesis corroborates instances where the ethnically induced legislative weakness of governments strengthens their bargaining position in SAP negotiations with the IMF. These governments were then able to secure concessions on both program conditions and program implementation, all of which served to reduce the likelihood of armed civil conflict.

For example, Kenya's ethnically fractionalized polity was an essential element in the government's ability to secure not only moderate SAP conditions during its 1980 to 1984 loan agreements with the IMF and the World Bank, but also considerable concessions when it failed to implement many aspects of the program. Paul Mosley notes that the "dominance of racial issues in economic policy making" (Mosley, Harrigan, and Toye 1991, 301) partly explains the conditionality concessions that the Kenyan government received from the IMF and the World Bank. In terms of trade liberalization, the Kenyan government was given a 'free hand' in the actual phasing of the liberalization process. In terms of agricultural pricing policies, the SAP conditionalities required the government to set prices that were equivalent to world prices. However, while the Kenyan government complied with this condition, it had long been the policy of the government and so there was no meaningful stringency that was attached to this condition (Mosley, Harrigan, and Toye 1991, 287-288).

Mosley concludes that Kenya is an example of a government that lacked the political inclination to implement even mild SAP conditions and ultimately got away with a high level of slippage in implementing program conditionalities. By the end of the adjustment period

only four of the nine conditions had been fully implemented, two were partially implemented and three were not. The World Bank estimated a slippage rate of 44%. This rate of slippage is significant since the gravity of Kenya's debt crisis and the country's difficulty in securing alternate sources of financing should have made the government compliant with the cross-conditionalities of the IMF and the World Bank (Mosley, Harrigan, and Toye 1991, 289). However, given the fact that SAP negotiations took place under domestic conditions of high levels of ethnic fractionalization, I argue that the Fund's lending to Kenya was motivated by its second-order institutional-political preference (Bartilow 1997), which was to offer an SAP program that could both address and limit the contagious effect of Kenya's debt while sufficiently moderating the scope of SAP conditionalities to facilitate ratification through the country's ethnically fractured legislature. The nature of the IMF's institutional-political preference that shaped its lending practices towards the Kenyan government explains why Kenya's slippage in its program implementation went largely unpunished (Mosley, Harrigan, and Toye 1991, 289), which consequently reduced the level of economic deprivation, ethnic grievance and the probability of armed civil conflict.

5.9 Robustness Checks: SAP Years and Ethnicity

To further test the robustness of the hypothesis I also utilize the standard measure of SAP implementation – the number of years that a country is under an IMF program as well as an alternate measure of ethnic fractionalization, adopted from the *Atlas Narodov Mira's*, which was published by Soviet ethnographers in 1964. This measure relies on language to define ethnic groups and at times included groups that were distinguished by race and national origin (Fearon 2003, 196). I coded SAP years from IMF's online country

information and the MONA database (IMF 2013a, 2013b). The data of alternative measurement of ethnic fractionalization is from Fearon and Laitin (2003).

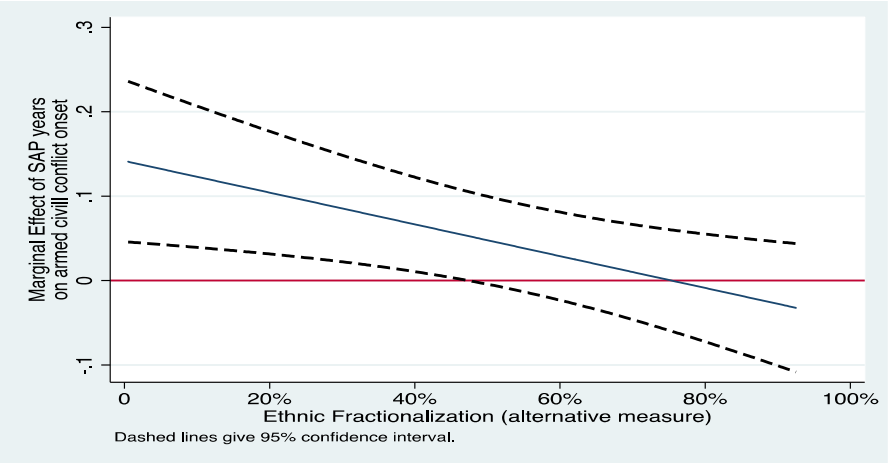
Table 5.7 presents estimates of the interactive effects of SAP years and the alternate measure of ethnic fractionalization on the onset of armed civil conflict. The hypothesis is again supported by the results. SAP years and ethnic fractionalization (both constitutive elements of the interaction term) increase the probability of armed civil conflict onset. But since the coefficient for the interaction term - SAP Years*ETHNICFRACAL – is statistically significant and negative, the increased effects of the constitutive elements diminish with the number of years that countries participate in an SAP under conditions of ethnic fractionalization. Figure 5.3 graphs the marginal effect of the number of years that countries are under an IMF SAP loan agreement on the onset of armed civil conflict. The increased effect of the constituent elements declines as ethnic fractionalization increases. Once the level of countries' ethnic fractionalization surpasses 78%, increases in the number of years that countries' are under an SAP program decrease the probability for the onset of armed civil conflict.

Table 5.7: Second Stage of the Two-Stage (predicted values) Probit Estimates: SAP Years and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization

	SAP Years
SAP years*ETHNICFRACAL (alternative indicator of ethnic fractionalization)	-.188**
	(.085)
SAP years	.142***
	(.052)
ETHNICFRACAL	1.616***
	(.436)
GDP per capita (log)	-.075
	(.113)
GDP growth	.020
	(.026)
Trade openness (log)	-.426***
	(.144)
Population density	.001*
	(.000)
Percent mountainous terrain (log)	.083
	(.055)
Regime durability	-.001
	(.015)
Democracy	.024
	(.022)
Democracy squared	-.002
	(.004)
Primary commodity exports	-.005
	(.004)
Oil exporter	.737**
	(.318)
Years since last armed civil conflict onset	.018
	(.161)
IMF selection effects	-2.759***
	(1.061)
Constant	.199
	(1.124)
N	1159
Wald χ^2	100.59
Prob > χ^2	.000
Pseudo R squared	.253
Log pseudolikelihood	-160.828

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses.

Figure 5.3: Marginal Effect of SAP Years and the Onset of Armed Civil Conflict under Conditions of Ethnic Fractionalization



5.10 Robustness Checks Summation

Regardless of the econometric models used to estimate the data or the incorporation of alternate measurement specifications of the central explanatory variables the hypothesis found repeated confirmation. Variation in SAP measurement did not produce different effects for the onset of armed civil conflict. Instead such variation provided repeated confirmation that under conditions of ethnic fractionalization the implementation of SAP conditionalities reduces the probability for the onset of armed civil conflict. On the whole, SAPs in highly ethnically fractionalized countries are about one time less likely to have the onset of armed civil conflict than those in average ethnically fractionalized countries.

Chapter 6

IMF SAPs, Ethnic Dominance, and Armed Civil Conflict

6.1 Introduction

The empirical evidence presented in the previous chapter supports the hypothesis that under conditions of ethnic fractionalization the implementation of IMF SAP loan agreements reduces the probability for the onset of armed civil conflict. This chapter presents results that test the hypothesis: *IMF SAPs increase the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic dominance.* In discussing these results this chapter is similar to chapter 5 in its organizational structure. One notable exception is that since estimates from the first of the two-stage (predicted values) probit model have already been discussed in chapter 5 it is redundant to discuss them again. Instead, the discussion of the empirical results will begin by discussing the results form model's second-stage, which predicts the onset of armed civil conflict.

6.2 Second-Stage Equation Estimates: Predicting the Onset of Armed Civil Conflict

The second stage results for SAP implementation in ethnic dominant countries can be found in Table 6.1. Column 6.1a presents the base model results without the financial intervention of the IMF. Ethnic dominance reduces the likelihood of the outbreak of armed civil conflict. The reason could be that the punishment cost of joining armed civil conflict is relatively high in ethnically dominant countries. Moreover, GDP per-capita, openness to international trade and primary commodity exporting countries also reduce the probability for the onset of armed civil conflict. Densely populated countries and countries with mountainous terrain and oil exporting countries increase the probability for the onset of armed civil conflict. Not only are these results consistent with those reported in the previous

Table 6.1: Second-Stage Estimates Predicting the Onset of Armed Civil conflict under Conditions of Ethnic Dominance

	Model 6.1a Base Model	Model 6.1b SAP Implementation
SAP implementation*		.086**
Ethnic dominance		(.042)
SAP implementation		-.033
		(.028)
Ethnic dominance	-.733***	.073
	(.283)	(.536)
GDP per capita (log)	-.231***	-.215**
	(.067)	(.096)
GDP growth	.035**	.025
	(.017)	(.022)
Trade openness (log)	-.371***	-.426***
	(.119)	(.152)
Population density	.000**	.000
	(.000)	(.000)
Percent mountainous	.080*	.114*
terrain (log)	(.045)	(.066)
Regime durability	.007	-.006
	(.004)	(.012)
Democracy	.016	.035*
	(.014)	(.021)
Democracy squared	-.002	.000
	(.003)	(.004)
Primary commodity	-.010***	-.006
exports	(.003)	(.004)
Oil exporter	.740***	.793***
	(.227)	(.297)
Years since last armed	-.062	-.045
civil conflict onset	(.108)	(.144)
IMF selection effects		-2.949**
		(1.094)
Constant	2.176***	2.290**
	(.597)	(.917)
N	1949	943
Wald χ^2	90.69	67.02
Prob > χ^2	.000	.000
Pseudo R squared	.183	.248
Log pseudolikelihood	-229.955	-135.997

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses.

chapter, but also they are consistent with those reported in the extant civil war literature (Fearon and Laitin 2003; Fearon 2005, 1998), which suggests that the study's empirical investigation rests on a robust statistical platform. All other variables fail to rise to the level of statistical significance.

Column 6.1b presents the results of the IMF's financial intervention in ethnic dominant polities. The hypothesis is supported by the results. While SAP implementation and ethnic dominance (the constitutive elements of the interaction term) fail to rise to the level of statistical significance, the coefficient for the interaction term - SAP implementation*Ethnic dominance – is statistically significant and positive.

Figure 6.1 graphs the marginal effect of SAP implementation on the onset of armed civil conflict under conditions of ethnic dominance. Once the level of countries' ethnic dominance surpasses 38%, SAP implementation increases the probability for the onset of armed civil conflict. The control variables GDP per capita, openness to international trade and the IMF selection effect (the predicted value from entering into an IMF SAP loan agreement) reduce the probability for the onset of armed civil conflict. Countries with mountainous terrain and oil exporting countries increase the probability for the onset of armed civil conflict. All other variables fail to rise to the level of statistical significance.

Figure 6.1: Marginal Effect of SAP Implementation and the Onset of Armed Civil conflict under Conditions of Ethnic Dominance

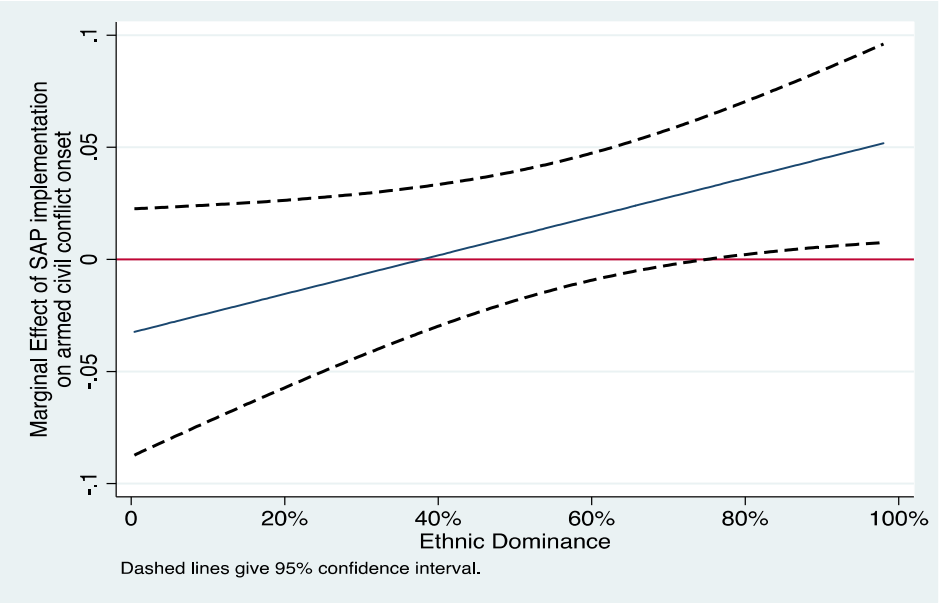


Table 6.1.1 presents the first difference of the interaction impact of SAP implementation and ethnic dominance on the outbreak of armed civil conflict. Recall that the impact of SAPs on the onset of armed civil conflict is conditional on the value of ethnic dominance. I use the ethnic dominance index of 0.40 (around the threshold identified in Figure 6.1) and its mean 0.64 to demonstrate the effect. In non-oil exporting countries, the impact of SAP implementation (moving from minimum to maximum value) is 0.2% in countries that ethnic dominance is 0.40. However, the SAP impact increases to 1.5% in countries that ethnic dominance is 0.64 (mean). The increase of probability is 650% (from 0.002 to 0.015). In oil exporting countries, the increase of likelihoods is 757% (from 0.007 to 0.06). In other words, SAP implementation in average ethnically dominant countries is about seven to eight times more likely to have the outbreak of armed civil conflict than SAPs in countries that ethnic dominance is 0.40. Overall, the results confirm the hypothesis that IMF

SAPs increase the probability of the onset of armed civil conflict when ethnic dominance increases.

Table 6.1.1 First Difference: the Impact of the Interaction between SAP Implementation and Ethnic Dominance on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 6.1b SAP Implementation (oil exporter=0)		Model 6.1b SAP Implementation (oil exporter=1)	
Ethnic Dominance	.40 (threshold)	.64 (mean)	.40	.64
First Difference: SAP implementation	.002	.015	.007	.060
First Difference Change	650%		757%	

Note: The first difference is calculated by moving SAP Implementation from its minimum to maximum with Ethnic Dominance moving from its threshold to its mean while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

6.3 Estimates from the Bivariate Probit Model

In addressing the limitations of the two-stage (predicted values) model, I analyze the data via a bivariate probit estimator. Table 6.2 presents the bivariate probit results for SAP implementation on the onset of armed civil conflict under conditions of ethnic dominance. The estimates for the equation - *Entering into an IMF SAP Loan Agreement* - are also consistent with those reported in the Two-Stage (predicted values) Probit model. GDP growth, openness to international trade, and the presence of armed civil conflict reduce the likelihood of entering into an IMF SAP loan agreement. External debt, democracies and

Table 6.2: Bivariate Probit Estimates of SAP Implementation and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

	SAP Implementation
The Onset of Armed Civil Conflict	
SAP implementation*Ethnic dominance	.074*
	(.044)
SAP implementation	-.052*
	(.030)
Ethnic dominance	-.039
	(.589)
GDP per capita (log)	-.213**
	(.092)
GDP growth	.039*
	(.022)
Trade openness (log)	-.366**
	(.150)
Population density	.000
	(.000)
Percent mountainous terrain (log)	.096
	(.067)
Regime durability	-.006
	(.011)
Democracy	.032
	(.020)
Democracy squared	.000
	(.004)
Primary commodity exports	-.006
	(.004)
Oil exporter	.834***
	(.279)
Constant	1.420
	(.863)
Entering into an IMF SAP Loan Agreement	
GDP growth	-.035***
	(.012)
Trade openness (log)	-.249**
	(.118)
Inflation	-.001
	(.000)
External debt	.003**
	(.001)
Armed civil conflict incidence	-.383*
	(.211)
Democracy	.021*
	(.011)

Table 6.2 (continued)

	SAP Implementation
Government political constraints	-.282
	(.326)
Legislative fractionalization	.705**
	(.284)
Constant	-.54
	(.539)
N	943
Log pseudo-likelihood	-461.999
Wald test of rho=0: χ^2 (1) = 4.246	Probability > χ^2 = .039

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses are adjusted for clustering over countries. Temporal dependence variables included in the analysis but not reported.

countries with fractionalized legislatures increase the likelihood of entering an SAP agreement. Estimates for the equation - *the Onset of Armed Civil Conflict* - support the hypothesis. While SAP implementation (the constituent element of the interaction term) reduce the probability for the onset of armed civil conflict and ethnic dominance (the other constituent element in the interaction term) is not statistically significant, the coefficient for the interaction variable *SAP implementation*Ethnic dominance* is significant and positive. While the control variables GDP growth and oil exporting countries increase the probability for the onset of armed civil conflict; GDP per capita and openness to international trade reduce the probability for the onset of armed civil conflict. Since wealthy countries and countries that are open to international trade flows reduce the probability for the outbreak of armed civil conflict, these findings confirm relative deprivation theories of civil war (Macours 2006; Runciman 1966). And similar to the results that are reported in the previous chapter, the Wald test indicates that the null hypothesis that the error terms for the first and second stage

equations are uncorrelated can be rejected. This suggests that entering into an IMF SAP loan agreement is endogenous to the onset of armed civil conflict.

6.4 Estimates from the IV Probit Model

While the bivariate probit estimator has its advantages over the two-stage (predicted values) probit model, estimates in the previous chapter showed that the variable – *SAP implementation* – is endogenous with the *Onset of Armed Civil Conflict*. And as discussed in chapter four, I address this problem by analyzing the data via an instrumental variable probit estimator in which *Government Corruption* instruments for *SAP implementation*. Since the predicted value from the first stage equation - *Entering into an IMF SAP Loan Agreement* - (the variable IMF selection effect) is included in the model to account for endogeneity between the onset of armed civil conflict and entering an SAP agreement, I employ the replicating properties of the Jackknife procedure to produce efficient standard errors.

In table 6.3 the hypothesis that is tested in this chapter is again supported by the estimates produced by the IV Probit model. *SAP implementation* (the constitutive element of the interaction term) decreases the probability for the onset of armed civil conflict while *ethnic dominance* (the other constituent element of the interaction term) increases the likelihood for the onset of armed civil conflict. However, since the interaction term - *SAP implementation*ethnic dominance* – is significant and positive, the decreased effect of *SAP implementation* diminish with increasing levels of ethnic dominance. In both models most of the control variables fail to rise to the level of statistical significance. With the exception of GDP per-capita and openness to international, which both reduce the probability for the onset of armed civil conflict, all other control variables fail to rise to the level of statistical

Table 6.3: IV Probit Estimates of SAP Implementation and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

	SAP Implementation
SAP implementation* Ethnic dominance	.529***
	(.093)
SAP implementation	-.366***
	(.058)
Ethnic dominance	5.513***
	(1.337)
GDP per capita (log)	-.266**
	(.083)
GDP growth	.021
	(.017)
Trade openness (log)	-.351**
	(.171)
Population density	-.001
	(.000)
Percent mountainous terrain (log)	.023
	(.063)
Regime durability	.004
	(.010)
Democracy	.020
	(.020)
Democracy squared	-.001
	(.003)
Primary commodity exports	-.002
	(.003)
Oil exporter	.242
	(.361)
IMF selection effect	-1.206
	(1.260)
Constant	-1.206
	(1.552)
N	943
Wald test of exogeneity: χ^2 (1) = 3.51	Probability > χ^2 = .061

Note: * P<.10, ** P<.05, *** P<.01. Jackknife standard errors in parentheses. Temporal dependence variables included in the analysis but not reported.

significance. And again as in previous models, the Wald test of exogeneity of the instrumented variable is statistically significant, indicating that the null hypothesis that there is no endogeneity between *SAP implementation* and the onset of armed civil conflict can be rejected.

6.5 Alternate Measures: Aggregating and Disaggregating SAP Conditionalities

In this section I test the hypothesis by using alternate measures of SAP implementation. As in the previous chapter, I consider whether variation in the type of SAP conditionality under ethnic dominance will reject the hypothesis or whether such variation or alternate measurement specifications will have different effects on the onset of armed civil conflict.

Table 6.4 presents estimates of the second-stage of the two-stage (predicted values) probit model of the effects of SAP conditionalities on the probability for the onset of armed civil conflict under conditions of ethnic dominance. Model 6.4a presents estimates for the total number of SAP conditions that governments are expected to implement and models 6.4b, 6.4c and 6.4d, respectively, present estimates for the number of Structural, Fiscal and Financial conditions that are attached to the IMF's SAP loan agreements. And with the exception of *Fiscal* conditions, the results support the hypothesis. In model 6.6a, while the total number of SAP conditions (the constitutive element of the interaction term) fail to reach statistical significance, ethnic dominance (the other constitutive element) decreases the probability for the onset armed civil conflict. However, the coefficient for the interaction term – Total Number of SAP Conditions*Ethnic Dominance – is statistically significant and positive.

Table 6.4: Second Stage of the Two-Stage (predicted values) Probit Estimates: SAP Economic Conditions and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

	Model 6.4a. Total Number of SAP Conditions	Model 6.4b SAP Structural Conditions	Model 6.4c SAP Fiscal Conditions	Model 6.4d SAP Financial Conditions
SAP conditions*Ethnic dominance	.039*			
	(.021)			
SAP conditions	-.011			
	(.014)			
SAP structural conditions*Ethnic dominance		.065*		
		(.038)		
SAP structural conditions		-.015		
		(.024)		
SAP fiscal conditions*Ethnic dominance			.125	
			(.090)	
SAP fiscal conditions			-.061	
			(.062)	
SAP financial conditions*Ethnic dominance				.406*
				(.209)
SAP financial conditions				-.185
				(.156)
Ethnic dominance	-1.416***	-1.356***	-1.178***	-1.341***
	(.493)	(.481)	(.446)	(.433)
GDP per capita (log)	-.162*	-.173*	-.187**	-.177**
	(.091)	(.092)	(.088)	(.088)
GDP growth	.022	.022	.023	.027
	(.022)	(.023)	(.022)	(.023)
Trade openness (log)	-.393***	-.397***	-.366**	-.393***
	(.149)	(.151)	(.148)	(.145)
Population density	.001*	.001*	.001	.001
	(.000)	(.000)	(.000)	(.000)
Percent mountainous terrain (log)	.126*	.121*	.144**	.129*
	(.068)	(.068)	(.069)	(.069)
Regime durability	-.004	-.004	-.003	-.004
	(.012)	(.012)	(.011)	(.012)
Democracy	.032	.033	.036	.032
	(.020)	(.020)	(.021)	(.021)
Democracy squared	-.001	-.001	-.002	-.001
	(.004)	(.004)	(.004)	(.004)

Table 6.4 (continued)

	Model 6.4a. Total Number of SAP Conditions	Model 6.4b SAP Structural Conditions	Model 6.4c SAP Fiscal Conditions	Model 6.4d SAP Financial Conditions
Primary commodity exports	-.007* (.004)	-.007* (.004)	-.007* (.004)	-.007 (.004)
Oil exporter	.775*** (.290)	.783*** (.290)	.751*** (.291)	.741** (.292)
Years since last armed civil conflict onset	.064 (.156)	.076 (.156)	.074 (.157)	.082 (.155)
IMF selection effects	-3.032*** (1.054)	-3.088*** (1.059)	-2.879*** (1.017)	-2.903*** (1.048)
Constant	2.355*** (.902)	2.444*** (.912)	2.276*** (.877)	2.361*** (.881)
N	969	969	969	969
Wald χ^2	69.25	76.46	65.68	62.07
Prob > χ^2	.000	.000	.000	.000
Pseudo R squared	0.246	0.249	0.234	0.242
Log pseudolikelihood	-137.225	-136.736	-139.433	-137.935

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses.

A similar pattern is observed for Structural, and Financial conditionalities and is demonstrated by the marginal effect of the various SAP conditions on the onset of armed civil conflict as shown in figures 6.2a, 6.2b and 6.2c. In figure 6.2a, increases in the total number of SAP conditions increase the probability for the onset of armed civil conflict when ethnic dominance is greater than 30%. In figure 6.2b, increases in the total number of structural conditions increase the probability for the onset of armed civil conflict when ethnic dominance is greater than 25%. In figure 6.2c, increases in the total number of financial conditions increase the probability for the onset of armed civil conflict when ethnic dominance is greater than 45%. In all the models, the control variables population density,

mountainous terrain and oil exporting countries all increase the likelihood for the onset of armed civil conflict. With the exception of model 6.4d, primary commodity exports and openness to international trade consistently reduce the likelihood of armed civil conflict. In all models, the IMF selection effects (predicted value from the first stage equation) reduce the likelihood for the onset of armed civil conflict while GDP per capita reduces the likelihood for the onset of armed civil conflict in the model for *Fiscal* conditions.

Figure 6.2a: The Marginal Effect of the Total Number of SAP Economic Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

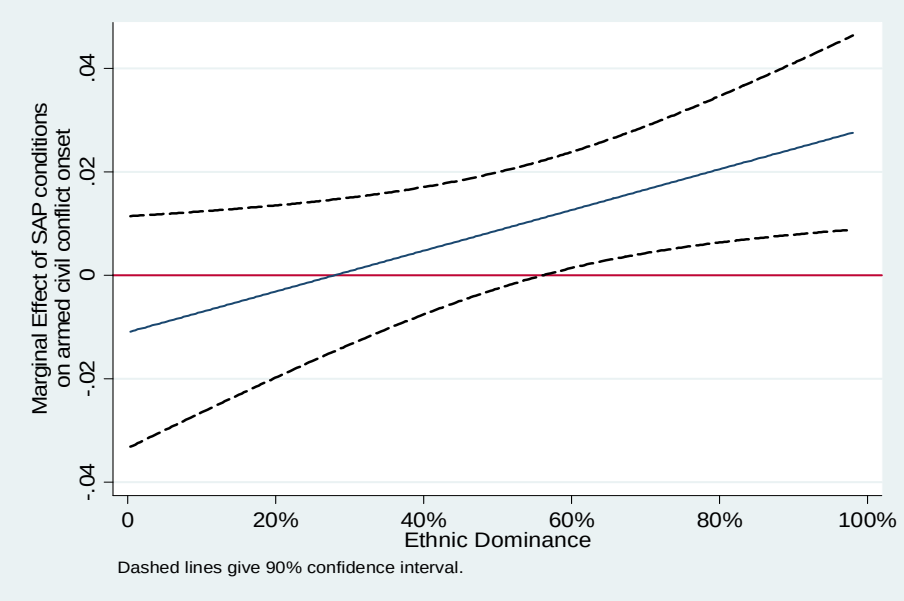


Figure 6.2b: Marginal Effects of SAP Structural Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

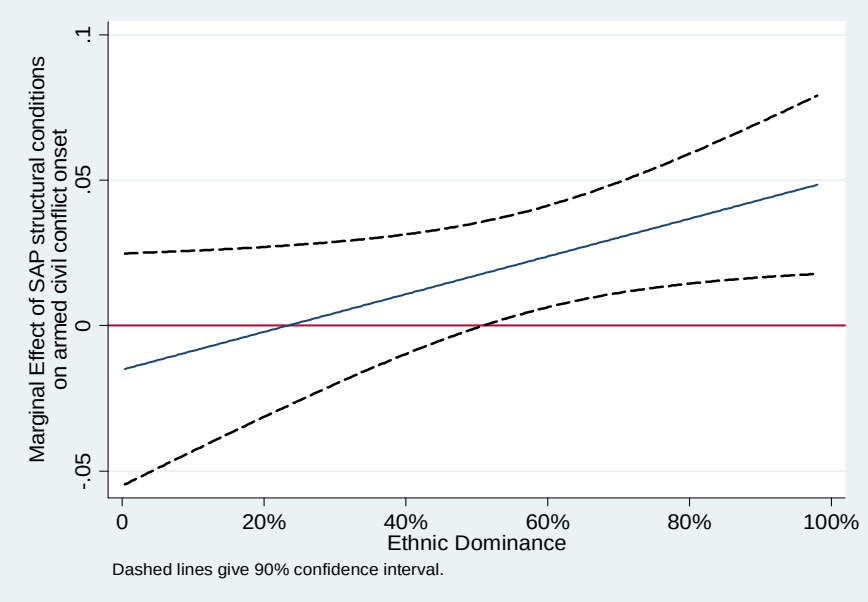


Figure 6.2c: Marginal Effects of SAP Financial Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

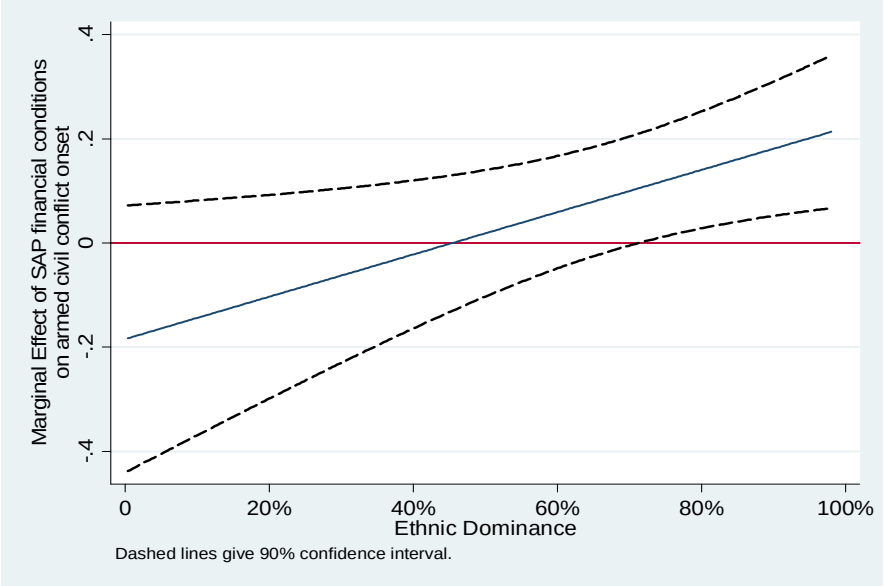


Table 6.4.1 presents the first difference of the interaction impact of SAP conditions and ethnic dominance on the outbreak of armed civil conflict. In non-oil exporting countries, the impact of SAP conditions (moving from minimum to maximum value) on the onset of armed civil conflict is 0.7% in countries that ethnic dominance is 0.30 (around the threshold identified in Figure 6.2a). When ethnic dominance is 0.64 (mean), the impact of SAP conditions is increased to 5.2%. Overall the increase of probability is 643% (from 0.007 to 0.052). In oil exporting countries, the increase of probability is 680% (from 0.02 to 0.156). That is to say, SAP conditions in average ethnically dominant countries are roughly six or seven times more likely to have the onset of armed civil conflict than SAPs in countries that ethnic dominance is 0.30.

Table 6.4.1 First Difference: the Impact of the Interaction between SAP Conditions and Ethnic Dominance on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 6.4a SAP Conditions (oil exporter=0)		Model 6.4a SAP Conditions (oil exporter=1)	
Ethnic Dominance	.30 (threshold)	.64 (mean)	.30	.64
First Difference: SAP Conditions	.007	.052	.020	.156
First Difference Change	643%		680%	

Note: The first difference is calculated by moving SAP Conditions from its minimum to maximum with Ethnic Dominance moving from its threshold to its mean while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

Table 6.4.2 presents the first difference of the interaction impact between SAP structural conditions and ethnic dominance on the outbreak of armed civil conflict. In non-oil exporting countries, the effect of SAP structural conditions (moving from minimum to maximum value) on the onset of armed civil conflict is 1.4% in countries that ethnic dominance is 0.25 (around the threshold identified in Figure 6.2b). When ethnic dominance increases to its mean 0.64, the effect of SAP structural conditions is also increased to 8.3%. As a whole, the increase of probabilities is 493% (from 0.014 to 0.083). In oil exporting countries, the increase of probabilities is 567% (from 0.033 to 0.22). This means SAP structural conditions in average ethnically dominant countries are roughly five or six times more likely to have the outbreak of armed civil conflict than SAPs in countries that ethnic dominance is 0.25.

Table 6.4.2 First Difference: the Impact of the Interaction between SAP Structural Conditions and Ethnic Dominance on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 6.4b SAP Structural Conditions (oil exporter=0)		Model 6.4b SAP Structural Conditions (oil exporter=1)	
Ethnic Dominance	.25 (threshold)	.64 (mean)	.25	.64
First Difference: SAP Structural Conditions	.014	.083	.033	.220
First Difference Change	493%		567%	

Note: The first difference is calculated by moving SAP Structural Conditions from its minimum to maximum with Ethnic Dominance moving from its threshold to its mean while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

Table 6.4.3 presents the interaction effect between SAP financial conditions and ethnic dominance on the outbreak of armed civil conflict. In non-oil exporting countries, the impact of ethnic financial conditions (moving from minimum to maximum value) on armed civil conflict onset is 0.6% in countries that ethnic dominance 0.45 (around the threshold identified in Figure 6.2c). When ethnic dominance increases to 0.64 (mean), the impact of SAP financial conditions is increased to 2.8%. Overall the increase of likelihoods is 367% (from 0.006 to 0.028). In oil exporting countries, the increase of probability is 429% (from 0.017 to 0.09). That is to say, SAP financial conditions in average ethnically dominant countries are about four times more likely to have the outbreak of armed civil conflict than countries that ethnic dominance is 0.45.

Table 6.4.3 First Difference: the Impact of the Interaction between SAP Financial Conditions and Ethnic Dominance on Armed Civil Conflict Onset (Second Stage), Probit Model.

	Model 6.4d SAP Financial Conditions (oil exporter=0)		Model 6.4d SAP Financial Conditions (oil exporter=1)	
Ethnic Dominance	.45 (threshold)	.64 (mean)	.45	.64
First Difference: SAP Financial Conditions	.006	.028	.017	.090
First Difference Change	367%		429%	

Note: The first difference is calculated by moving SAP Financial Conditions from its minimum to maximum with Ethnic Dominance moving from its threshold to its mean while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

In sum, SAP conditionalities, the partial measurement of SAP implementation, also lead to significant impact on the outbreak of armed civil conflict in borrowing countries. Moreover, the effects of SAP conditions vary in terms of structural, fiscal, and financial policy. While most of SAP conditions have significant effects in ethnically dominant countries, SAP fiscal conditions are not significant. This finding again confirms the effect of SAP fiscal conditions in ethnically fractionalized countries. As I explain it in the previous chapter, the possible reason could be that SAP fiscal policy, which is aimed at reducing debts and increasing government revenues, is the most difficult to be implemented in recipient countries. This implies that borrowing countries have to rank SAP conditionalities in order of preference when they only have limited resources to carry out IMF policy.

6.6 Bivariate Probit Estimates for Alternative Measures

In Table 6.5 the bivariate probit model is used to test the hypothesis by considering whether variations in SAP conditionalities, under conditions of ethnic dominance, will have different effects on the onset of armed civil conflict. Model 6.5a presents estimates of the total number of SAP conditions that recipient governments are expected to implement and models 6.5b, 6.5c and 6.5d, respectively, present estimates for the total number of Structural, Fiscal and Financial conditionalities.

Estimates for the first-stage equation - *entering into an IMF SAP loan agreement* – is consistent with all the previous econometric models used in this chapter. In all models GDP growth and openness to international trade reduce the probability that governments will enter into an SAP loan agreement with the IMF. The presence of armed civil conflict

Table 6.5: Bivariate Probit Estimates: SAP Economic Conditionalities and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

	Model 6.5a Total Number of SAP Conditions	Model 6.5b SAP Structural Conditions	Model 6.5c SAP Fiscal Conditions	Model 6.5d SAP Financial Conditions
Armed Civil Conflict Onset Equation				
SAP conditions*Ethnic dominance	.039*			
	(.022)			
SAP conditions	-.021			
	(.015)			
SAP structural conditions*Ethnic dominance		.066*		
		(.039)		
SAP structural conditions		-.031		
		(.026)		
SAP fiscal conditions*Ethnic dominance			.129	
			(.103)	
SAP fiscal conditions			-.116	
			(.078)	
SAP financial conditions*Ethnic dominance				.415*
				(.239)
SAP financial conditions				-.276
				(.186)
Ethnic dominance	-1.505***	-1.481***	-1.253***	-1.433***
	(.492)	(.515)	(.453)	(.447)
GDP per capita (log)	-.137	-.134	-.167**	-.141*
	(.086)	(.087)	(.083)	(.085)
GDP growth	.034	.034	.033	.036
	(.022)	(.022)	(.021)	(.022)
Trade openness (log)	-.315**	-.315**	-.311**	-.314**
	(.150)	(.152)	(.146)	(.148)
Population density	.001**	.001**	.001*	.001**
	(.000)	(.000)	(.000)	(.000)
Percent mountainous terrain (log)	.131*	.128*	.135**	.137**
	(.068)	(.067)	(.067)	(.068)
Regime durability	-.005	-.005	-.005	-.005
	(.011)	(.011)	(.011)	(.011)
Democracy	.021	.021	.026	.022
	(.020)	(.020)	(.019)	(.020)

Table 6.5 (continued)

	Model 6.5a Total Number of SAP Conditions	Model 6.5b SAP Structural Conditions	Model 6.5c SAP Fiscal Conditions	Model 6.5d SAP Financial Conditions
Democracy squared	-.001	-.001	-.001	-.001
	(.004)	(.004)	(.004)	(.004)
Primary commodity exports	-.007*	-0.008*	-.007*	-.007*
	(.004)	(0.004)	(.004)	(.004)
Oil exporter	.865***	.877***	.871***	.834***
	(.284)	(.285)	(.286)	(.283)
Constant	1.607*	1.572*	1.720**	1.551*
	(.840)	(.856)	(.795)	(.837)
Entering an SAP Agreement Equation				
GDP growth	-.020*	-.020*	-.020*	-.020*
	(.012)	(.012)	(.012)	(.012)
Trade openness (log)	-.334***	-.331***	-.348***	-.339***
	(.110)	(.109)	(.110)	(.110)
Inflation	-.003	-.003	-.003	-.003
	(.003)	(.003)	(.003)	(.003)
External debt	.005***	.005***	.005***	.005***
	(.001)	(.001)	(.001)	(.001)
Armed civil conflict incidence	-.278	-.265	-.333*	-.297*
	(.177)	(.172)	(.184)	(.179)
Democracy	.024**	.024**	.024**	.024**
	(.011)	(.011)	(.011)	(.011)
Government political constraints	-.093	-.091	-.106	-.090
	(.320)	(.321)	(.319)	(.320)
Legislative fractionalization	.444*	.444*	.442*	.435*
	(.258)	(.258)	(.257)	(.257)
Constant	-.124	-.142	-.048	-.094
	(.501)	(.497)	(.507)	(.503)
N	969	969	969	969
Log pseudo-likelihood	-505.522	-505.428	-505.659	-505.307
6.5a: Wald test of rho=0:	χ^2 (1)	=4.456	Prob > χ^2	=.035
6.5b: Wald test of rho=0:	χ^2 (1)	=4.862	Prob > χ^2	=.028
6.5c: Wald test of rho=0:	χ^2 (1)	=5.009	Prob > χ^2	=.025
6.5d: Wald test of rho=0:	χ^2 (1)	=4.656	Prob > χ^2	=.031

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses. Temporal dependence variables included in the analysis but not reported.

reduces the probability of entering into an SAP agreement in models 6.5c and 6.5d, respectively. In all models, high levels of external debt, democracies and governments with fractionalized legislatures are more likely to enter into an SAP agreement with the IMF. All other variables fail to rise to the level of statistical significance.

With the exception of model 6.5c (fiscal conditions), estimates for the second stage equation - *the onset of armed civil conflict* - are also consistent with estimates produced by the two-stage (predicted values) probit model and supports the hypothesis. In all models, ethnic dominance (the constituent element of the interaction term) decreases the probability for the onset of armed civil conflict. However, in models 6.5a, 6.5b, and 6.5d the coefficients for the interaction terms – Total Number of SAP conditions*ethnic dominance, and SAP structural conditions*ethnic dominance and SAP financial conditions*ethnic dominance – are statistically significant and positive. In all models, oil exporting and densely populated countries, and countries with mountainous terrain increase the probability of armed civil conflict. Increases in GDP per-capita reduce the probability of armed civil conflict in models 6.5c and 6.5d, respectively. Again, these findings are consistent with those reported by previous econometric models used in this chapter. As reported in the previous chapter the Wald likelihood test, in all the models, indicates that the error terms for the first-stage and second-stage equations are uncorrelated and therefore the null hypothesis can be rejected. This again confirms that estimating the data via the bivariate probit model is appropriate to correct endogeneity between entering an SAP agreement and the onset of armed civil conflict.

6.7 Main Findings Summation

Empirical evidence from different econometric estimators supports the hypothesis that *IMF SAPs increase the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic dominance.* To be sure, there are alternate theoretical explanations of how IMF SAP loan agreements increase the likelihood for the onset of armed civil conflict. Patronage-crisis explanations argue that the conditionalities that are attached to IMF SAP loan agreements increase the probability of armed civil conflict because they reduce recipient governments' ability to pay patronage to their clients. In his analysis of this phenomenon among Sub-Saharan African countries, Stedman (1996, 243) argues that "economic conditionality cut at the heart of the patrimonial state." Since SAP austerity measures severely cut public sector spending, this results in the state's inability to provide side payments to their clients. Some scholars argue that IMF induced reductions in patronage weakens the state, making it more vulnerable to political crisis due to its increased inability to manage grievances that stem from the negative effects of SAP conditionalities (Herbst 1990), which increases the probability of social unrest and armed civil conflict. Other scholars argue that SAP conditionalities severely restrict the expansion of domestic lines of credit, which limits patronage flows to government officials (Fearon 1988), which undermines regimes' internal support and weaken their ability to repel insurgent challengers.

The causal mechanism that links the reduction of state patronage to the onset of armed civil conflict remains largely unclear. Is it the reduction of patronage to government officials that triggers the probability for armed civil conflict? Or is it the reduction of patronage to clients outside the state that increases the probability for armed civil conflict? If the former were the case, then it is also plausible to expect that IMF conditionalities would make recipient governments more transparent and therefore, reduce, not increase the

probability of armed civil conflict. If the latter is the case, then the reduction of state patronage means that more resources under the IMF program are available for private sector investment, which is likely to increase per-capita income, an outcome that most likely reduces the probability of armed civil conflict. Moreover, patronage-crisis explanations do not account for variation across countries where civil war does not occur in state where IMF SAP conditionalities reduce the size of the public sector.

The theory that is advanced in this study provides a stronger and empirically supported explanation of the causal mechanisms under which the implementation of SAP conditionalities will increase the probability for the onset of armed civil conflict in some countries but not in others.

6.8 Robustness Checks: SAP Years and Ethnicity

The number of years that a country is under an IMF program and an alternate measure of ethnic dominance is used to provide the robustness test of the hypothesis. I use Fearon and Laitin (2003)'s ethno-linguistic data to calculate an alternate indicator for ethnic dominance. The variable takes the value of 1 if one single ethnic-linguistic group comprises 55% of the population or greater.[43] In Table 6.6, estimates for the second-stage equation support the hypothesis. While ethnic dominance (the constitutive element of the interaction term) decreases the probability for the onset of armed civil conflict and SAP Years (the other constitutive element) is not statistical significant, the coefficient for the interaction term - SAP Years*Ethnic Dominance – is statistically significant and positive. Figure 6.3 graphs the marginal effect of the number of years that countries are under IMF loan programs on the onset of armed civil conflict for changing levels of ethnic dominance. Once

[43] A similar approach is taken by Collier and Hoeffler (2004).

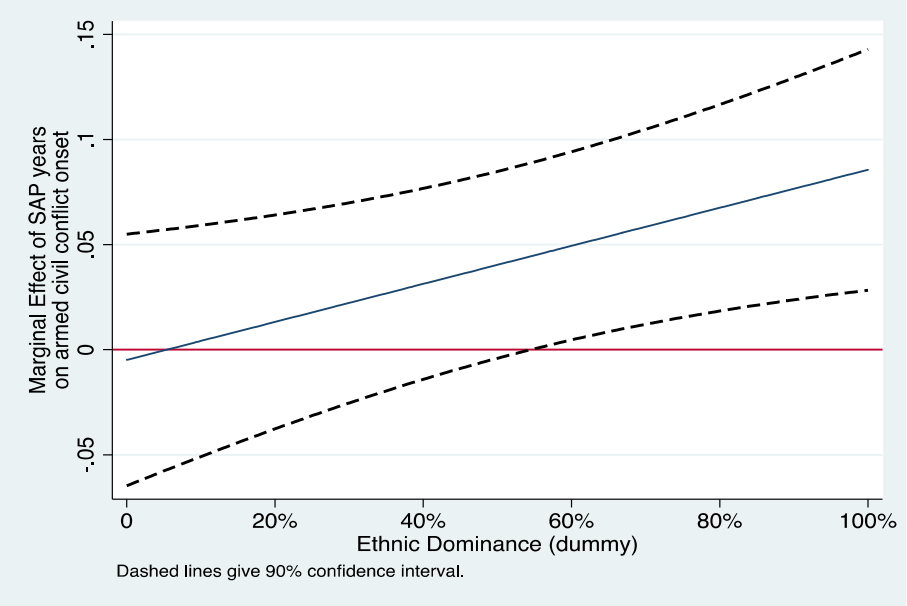
the level of countries' ethnic dominance surpasses 55%, increases in the number of years that countries' are under an SAP program increase the probability for the onset of armed civil conflict. The control variables openness to international trade, the IMF selection effect (the predicted value from the first stage equation) and primary commodity exporting countries reduce the probability for the onset of armed civil conflict. Oil-exporting countries and countries with mountainous terrain increase the probability for the onset of armed civil conflict. All other variables fail to rise to the level of statistical significance.

Table 6.6: Second Stage of the Two-Stage (predicted values) Probit Estimates: SAP Years and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance

	SAP Years
SAP years*Ethnic dominance (dummy)	.090*
	(.046)
SAP years	-.005
	(.036)
Ethnic dominance (dummy)	-.609***
	(.198)
GDP per capita (log)	-.133
	(.090)
GDP growth	.014
	(.021)
Trade openness (log)	-.359**
	(.142)
Population density	.001
	(.000)
Percent mountainous terrain (log)	.099*
	(.054)
Regime durability	-.003
	(.011)
Democracy	.029
	(.018)
Democracy squared	-.002
	(.004)
Primary commodity exports	-.007*
	(.003)
Oil exporter	.684***
	(.256)
Years since last armed civil conflict onset	.013
	(.130)
IMF selection effects	-3.365***
	(1.028)
Constant	1.754**
	(.872)
N	1159
Wald χ^2	88.12
Prob > χ^2	.000
Pseudo R squared	.228
Log pseudolikelihood	-166.142

Note: * P<.10, ** P<.05, *** P<.01. Robust standard errors in parentheses. Temporal dependence variables included in the analysis but not reported.

Figure 6.3: Marginal Effect of SAP Years and the Onset of Armed Civil Conflict under Conditions of Ethnic Dominance



6.9 Robustness Checks Summation

This section considered whether the finding is robust enough to support the hypothesis. Regardless of the econometric model used to estimate the data or including into the alternate measurement specifications, the hypothesis found repeated confirmation. SAP years did not produce different effects on the probability for the onset of armed civil conflict. Instead the measurement of SAP years provided repeated confirmation that under conditions of ethnic dominance the implementation of SAP policy increases the probability for the onset of armed civil conflict. In non-oil exporting countries, SAP implementation in countries with average ethnic dominance is seven times more likely to have the onset of armed civil conflict than those in countries with low ethnic dominance. In oil-exporting

countries, SAP implementation with average ethnic dominance is eight times more likely to have the onset of armed civil conflict than those with low ethnic dominance. For SAP conditions, the likelihood of having the onset of armed civil conflict in counties with average ethnic dominance is four to seven times greater than in countries with low ethnic dominance.

Chapter 7

Structural Adjustment Programs and Absence of Armed Civil Conflict in A Highly Ethnically Fractionalized Country: Ghana

7.1 A Review of Theory and Introduction

The theory in Chapter 3 argues that the effect of SAP implementation on the outbreak of armed civil conflict is conditional on the ethnic characteristics of borrowing countries. From a two-level game perspective, the IMF is more likely to agree on less stringent conditionality with ethnically fractionalized countries because these regimes have relatively smaller win-sets with the Fund. It is more difficult for ethnically fractionalized countries to reach consensus on economic reform because of the greater number of rent seekers and the tendency to adopt sub-optimal public policies.

However, the weak domestic position of the recipient government resulted from ethnic fractionalization grants it stronger bargaining position at the international level when facing the IMF. When the Fund realizes that the ethnically fractionalized government will have a hard time selling stringent conditionality to its domestic public, it has to adopt its second-order preference to avoid no agreement. Thus the IMF could limit the contagious effects of countries' debt crisis and ensure the repayments of the debt. In so doing, the IMF offers the borrowing country moderate conditionality for carrying out SAPs. Hence the policy preferences of the IMF and the recipient government converge and the ethnically fractionalized country will get less stringent conditionality. Furthermore, due to its weak domestic position, the ethnically fractionalized government is more likely to implement the conditionality across different ethnic groups so that the burden of austerity will be shared. All of these reduce relative deprivation and the likelihood of armed civil conflict onset. This

is the first hypothesis in Chapter 3: *IMF SAPs reduce the probability for the onset of armed civil conflict when they are implemented in polities that are characterized by high levels of ethnic fractionalization.*

Quantitative analyses in Chapter 5 confirm the first hypothesis. This chapter intends to deepen our understanding of the causal mechanism via using the method of historical analyses to examine the ethnicity of Ghana and its structural adjustment programs with the IMF. Due to its significant improvement on macroeconomic indicators, Ghana has been a model country praised by the IMF since it entered into SAPs with the Fund and Bank in 1983. Critics argue that Ghana's economic performance is a result of huge inflow of foreign aid (Boafo-Arthur 1999, 52).[44] Nonetheless, with the average aid per capita ratio of $35 in Africa (excluding Nigeria) in mind, Ghana's aid per capita ratio was just $27.5 in 1987, although it increased significantly from $13.3 in 1981 (Herbst 1993, 132).

As a highly ethnically fractionalized country, one thing that stands out for Ghana's SAP experience since 1983 is the absence of armed civil conflict. Ghana has been regarded as one of the most peaceful countries in Africa (Ghana 2011a).[45] To be sure, Ghana is not a paradise in which all kinds of ethnic violence are absent. There have been inter- or intra-ethnic violence in Ghana, particularly in its northern region, if we define ethnic conflicts as "people mobilise to fight other people on the basis of ethnic identity" (Sulemana 2009, 112). However, the ethnic violence in the northern region dos not meet the criteria of armed civil conflict defined in this study, in which one side involved in the conflict must be the government of a state (Gleditsch et al. 2002, 618-619; Strand 2006). Most inter- or intra-ethnic violence in Ghana's northern region are caused by issues of land ownership, chieftaincy rivalry, or demanding adjudication rights due to the colonial legacy (Boaten 1999;

[44] The total amount Ghana received from external donors between 1983 to 1998 was around $8 billion (Appiah-Opoku 1998).
[45] Ghana ranked 42 out of 153 countries in the 2011 Global Peace Initiative (Ghana 2011a).

Jonsson 2007, 2009; Sulemana 2009).[46] Those regional conflicts did not translate into armed civil conflicts against the government (Jonsson 2009).

Specifically, Ghana avoids armed ethnic conflict when it began to implement SAPs in the 1980s and started the democratic transition in the early 1990s (Asante and Gyimah-Boadi 2004). As aforementioned, ethnic rivalry and tensions, which can be intensified by SAPs, do exist in Ghana (Adekanye 1995). For example, in the 1950s the independence movement in Ghana was organized along different ethnic groups (Agyeman-Duah 1987). And there has been irredentist tendency among the Ewe people, who have also been in constant rivalry with the Ashanti (Asante and Gyimah-Boadi 2004). There have been clashes between Kokomba farmers, Gonja people, and the Dagomba as well (Frimpong 1994; Adekanye 1995, 364).[47] However, Ghana has been successful in steering clear of armed civil conflict during the implementation of SAPs and the process of democratization. The absence of armed civil conflict in a highly ethnically fractionalization country implementing SAPs makes Ghana a good case for the historical analysis.

In the following sections the study demonstrates that the highly ethnic fractionalization in Ghana leads to the situation that the government always has to seek other ethnic groups as alliance (Asante and Gyimah-Boadi 2004). That makes the government relatively weak at the domestic level. Hence the government was able to gain concessions from the Fund when negotiating SAP conditionality at the international level by using the argument of avoiding possible domestic instability (Kraus 1991a; Martin 1991). On the other hand, while the Fund's first order preference is to offer the recipient governments financing with stringent conditionality, it has learnt Ghana's domestic hostility toward the

[46] For example, the Dagbon conflict in 2002 was caused by intra-Dagbon rivalry for chieftaincy (IRIN 2006).

[47] The clash over land in 1994 was so severe that the Ghanaian government had to use army to restore order (Adekanye 1995, 364).

Fund from past experience during which Ghanaian government had to abort IMF programs as a result of domestic opposition (Hutchful 2002). Therefore the Fund adopted its second-order preference of avoiding no agreement and limiting contagious effect of debt crisis and reached agreement with Ghanaian government on less stringent conditionality. Moreover, the structural adjustment programs affect all the ethnic groups in Ghana. In other words, the government implemented SAPs in a way that all the ethnic groups shared the burden of SAPs. The government also set up some programs, such as the Programme of Actions to Mitigate the Social Costs of Adjustment (PAMSCAD), as an attempt to reduce negative effects of SAPs. Thus relative deprivation was relatively low. As a result there was no direct ethnic grievance against the government (Asante and Gyimah-Boadi 2004).

Given that the quantitative analyses cover the time period of 1992-2009, the historical analysis of Ghana focuses on the 1980s, particularly for its entering structural adjustment programs in 1983. I choose to emphasize Ghana in the 1980s due to the following factors. First, the entrance into SAPs with IFIs in the 1980s marks a turning point in Ghana's experience of dealing with IFIs, compared to its aborted SAP attempts before 1983. The SAP negotiations in this period represent the origin of Ghana's SAPs in later years, and they paved the way for negotiating SAPs with IFIs after Ghana began the democratic transition in 1992. Actually Ghana's track record of implementing SAPs in the 1980s strongly influences the IMF's attitudes toward SAPs with Ghana in the 1990s and 2000s (Akonor 2006). Hence this time period provides better illustration of the two-level game metaphor in explaining the negotiations between Ghanaian government and the IMF. Second, Ghana became a democratic regime from 1992, but Rawlings and his party won two elections in 1992 and 1996 until they were defeated in 2000 (Akonor 2006). Although technocratic interests had to submit to democratic interests in the process, financial

technocrats from the old regime still dominated until the late 1990s (Hutchful 2002). This assures the continuation of policy attitudes on both sides.

Third, the fact that the Rawlings government in the 1980s was an authoritarian regime does not undermine the illustrative strength of the time period of 1980s. As the theory in this research indicates, the Rawlings government in the 1980s could use its domestic weakness, the ethnic fractionalization, to gain bargaining advantage at the international level when negotiating with the IMF. When Ghana moved to democracy, Ghanaian government should have more bargaining advantages at the international level due to its democratic restraints at the domestic level. For instance, in 1997, Rawlings's answer to the question of program slippage, which was raised by the Deputy Managing Director of the IMF, was simply "democracy" (Hutchful 2002, 218). In other words, democratic restraints increase rather than decrease the theoretic power of ethnic fractionalization in a two-level game. Fourth, Ghana had SAPs with both the IMF and the World Bank. Before 1986 the Fund provided roughly 60% of the loans Ghana received, comparing to 14% given by the Bank (Herbst 1993). It was the Fund's opinion that dominated in the 1980s. And from late 1980s and early 1990s, the World Bank's advice gained more weight (Martin 1991; Herbst 1993). Since this research examines the effect of IMF SAPs, focusing on the 1980s during which the Fund dominates in the loan arrangement would be more appropriate for the analysis.

In the following sections I first review the historical background of Ghana and its ethnical composition. Then I examine IMF SAPs and ethnicity in Ghana from a two-level game perspective. Given that theory suggested in this research is not the only factor which could influence the onset of armed civil conflict, I also explore alternative explanations suggested by the competing theoretical camp, the symbolic politics theory, which focuses on

the role of factors like ethnic myths, ethnic hatred, and chauvinistic mobilizations. While there have been ethnic myths and hatred existing between some ethnic groups, chauvinistic mobilizations are generally absent because the government's rhetoric has been ethnic inclusiveness instead of ethnic discrimination. Rather than undermining the strength of this study's theory, the symbolic politics theory enhances our understanding of ethnic situations in Ghana.

7.2 Historical Overview and Ethnicity in Ghana

Ghana, the country located in West Africa, has a population around 25 million in 2013 (CIA 2013).[48] The multi-ethnic Ghana gained independence from Britain in 1957 (Herbst 1993). Distorted colonial economy and continuous mismanagement in economy policy since the independence led post-colonial Ghana to frequent military interventions in civilian governments and deep economic crisis in the late 1970s (Rothchild 1991; Herbst 1993; Hutchful 2002). Table 7.1 shows political regimes in Ghana from 1957 to 1993, which was characterized by three republics and five military regimes (Agyeman-Duah 1987; Berry 1994; Brydon and Legge 1996; Ofuatey-Kodjoe 1999). Since 1993 Ghana began the process of democratization and entered into the Fourth Republic.

The years following independence was the First Republic led by Nkrumah. The Nkrumah government adopted the import substitution industrialization (ISI) strategy to achieve modernization (Hutchful 2002). The state's intervention in the economy steadily increased since the government applied import restrictions and overvalued its currency to deal with foreign exchange crisis in 1961 (Herbst 1993). The ISI strategy and state-led modernization failed to bring about economic growth in Ghana. Worse, domestic economic

[48] Note that the population of Ghana was around 14 million in late 1980s (Ninsin 1991), and increased to 20 million in year 2000 (Asante and Gyimah-Boadi 2004).

policy employed by three civilian governments and the corruption of military regimes were to blame for the continuous decline of economic performance (Herbst 1993; Brydon and Legge 1996; Hutchful 2002). For instance, GDP capita was reduced by 19.7% from 1970 to 1980 (Hutchful 2002). The average annual decline of real GDP per capita from 1976 to 1982 was 3.4% (Herbst 1993). Cocoa exports, which is the main export of Ghana, dropped by 40% from 1975 to 1981. The main culprit for this reduction of cocoa exports, despite increasing cocoa world prices, was Ghana's overvalued currency, which decreased Ghana's share of global cocoa market by 12% in the decade of the 1970s (Herbst 1993). At the same time, all the major manufacturing and agricultural production declined sharply (Hutchful 2002, 6).

Table 7.1 Political Regimes from 1957 to 1993 in Ghana

Political Regimes	Years
Independence	1957
First Republic: Nkrumah Regime	1960-February 1966
The National Liberation Council (military regime)	1966-1969
Second Republic: Busia Years	1969-1971
The National Redemption Council (military regime)	1972-1975
Supreme Military Council	1975-1979
Armed Forces Revolutionary Council	June1979-September 1979
Third Republic: Limann Years	September 1979-December 1981
Rawlings Era	1982-January 1993

Source: Adapted from Berry (1994): Ghana: A Country Study.

It is noteworthy that Ghana's economy at the time of independence was one of the best performers in Africa. Its GDP per capita in 1957 was equivalent to that of South Korea. But after the mismanagement of economic policy for more than twenty years, Ghana dropped to a middle-ranking economy in Africa in 1982 (Herbst 1993). It was against this

background that Flight Lieutenant Jerry Johan Rawlings seized power through the second coup in December 31, 1981 and formed the Provisional National Defence Council (PNDC) as the government center. The PNDC led by Rawlings started SAPs with the IMF since 1983 and continued the programs for the 1980s until Ghana began the democratic transition and Rawlings was democratically elected again in 1993. Before I examine the PNDC and IMF SAPs, it is necessary to briefly discuss the ethnicity in Ghana in order to gain a better understanding of Ghanaian domestic politics.

Ethnicity in Ghana

Ghana is a highly ethnically fractionalized country with an ELF index of 0.85.[49] Table 7.2 shows the ethnic composition in Ghana. It is noteworthy that although the Akan is the largest ethnic group with a population percentage of 49.1%, it comprises of 19 sub-ethnic groups with 14 of them having population percentage lower than 2%. Asante is the largest sub-ethnic group in Ghana, with a population percentage of 14.8%. Actually it is the fact that no single sub-ethnic group in Ghana exceeds 15% makes Ghana's ethnicity highly fractionalized (Gyimah-Boadi and Asante 2003; Asante and Gyimah-Boadi 2004). The problem for the Akan is that all of its sub-ethnic groups are not ethnically cohesive. As a result of ethnic rivalry, many of Akan's sub-ethnic groups usually side with non-Akan ethnic groups in domestic politics, other than allied with the Asante, which is the largest among the

[49] The alternative index of ethnic fractionalization gives Ghana an index of 0.71.

Table 7.2 Ethnic Composition in Ghana

Ethnic Groups	Sub-Ethnic Groups	Population	Percentage
Akan			49.10%
	Asante	14.80%	
	Fante	9.90%	
	Boron/Bono/Brong/Banda	4.60%	
	Akyem	3.40%	
	Akwapim	2.90%	
	The other 14 groups with percentage lower than 2%	13.50%	
Mole Dagbani			16.50%
	Dagomba	4.30%	
	Dagarte (Dagaba)	3.70%	
	Namnam (Nandom)	2.40%	
	Kusasi	2.20%	
	The other six groups with percentage lower than 2%	3.90%	
Ewe			12.70%
Ga Adangbe			8%
	Adangbe	4.30%	
	Ga	3.40%	
	Ga-Dangme, not specified	0.30%	
Guan	With eighteen groups each lower than 2%		4.40%
Gurma			3.90%
	Kokomba	2.70%	
	The other six groups with percentage lower than 2%	1.20%	
Grusi	With six groups each lower than 2%		2.80%
Mande-Busanga	With four groups each lower than 1%		1.10%
Others			1.50%

Source: Adapted from Asante and Gyimah-Boadi (2004): Ethnic Structure, Inequality and Governance of the Public Sector in Ghana. Based on the 2000 census.

Akan (Asante and Gyimah-Boadi 2004). For example, there has been historical tension between the Asante and the second largest sub-ethnic group of the Akan, the Fante. The two groups belonged to two empires in the 18th century (Asante and Gyimah-Boadi 2004). Hence one important feature of Ghanaian domestic politics is that no government can rule without seeking other ethnic/sub-ethnic groups as alliance. For example, Hilla Limann's People's National Party (PNP) won the 1979 presidential election because of "the party's ability to project itself as national party" (Asante and Gyimah-Boadi 2004, 64). The cross-ethnic coalitions in domestic politics are flexible and often shift in patterns (Ofuatey-Kodjoe 1999; Asante and Gyimah-Boadi 2004). The languages of Ghana, as a reflection of its ethnic fractionalization, are divided into ten sub-groups (Vehnamaki 1999). Although the people who can speak Akan constitute a little bit over 50% of the population (Kropp-Dakubu 1988), the real situation is more complicated give that there are more than 100 dialects in Ghana (Vehnamaki 1999).[50]

It is noteworthy that demographic changes could affect the outbreak of civil conflict, especially when the population growth is unequal between different ethnic or religious groups (Goldstone 2002). For example, one factor contributing to the onset of Lebanese civil war in 1975 was that Shia's population grew faster than Sunnis and Maronites in the preceding years, which broke the balance of power between different groups (Pape and Feldman 2010, 197). Table 7.2.1 presents the changes of ethnic compositions in Ghana from 1960 to 2010. Given that there were no ethnic data published in Ghana's 1970 and 1984 censuses (Asante and Gyimah-Boadi 2004), the table presents major ethnic groups' population percentages in 1960, 2000, and 2010 respectively. Ghana's population grew from

[50] Besides ethnic and language groups, the religious groups in Ghana are composed of Christians (69%), Muslims (16%), and Animists. Many of Christians are the Akan and they live mostly in the Southern Ghana. There are a lot of Muslims living in the North (Asante and Gyimah-Boadi 2004).

6,726,815 in 1960 to 24,223,431 in 2010. The population growth rates between 1970 and 2000 were from 2.4% to 2.7% (Ghana 2011b). Of the nine major ethnic groups, Akan and Gurma grew a bit faster than other groups, while Ga Adangbe's population percentage decreased.

Table 7.2.1 Changes of Ethnic Compositions in Ghana (1960—2010)

Ethnic Groups	Population		Percentages
	1960	2000	2010
Akan	44.1%	49.10%	47.5%
Mole Dagbani	15.9%	16.50%	16.6%
Ewe	13%	12.70%	13.9%
Ga Adangbe	8.3%	8%	7.4%
Guan	3.7%	4.40%	3.7%
Gurma	3.5%	3.90%	5.7%
Grusi	2.2%	2.80%	2.5%
Mande-Busanga	/	1.10%	1.1%
Others	/	1.50%	1.6%
Total Population	6,726,815	18,912,079	24,223,431

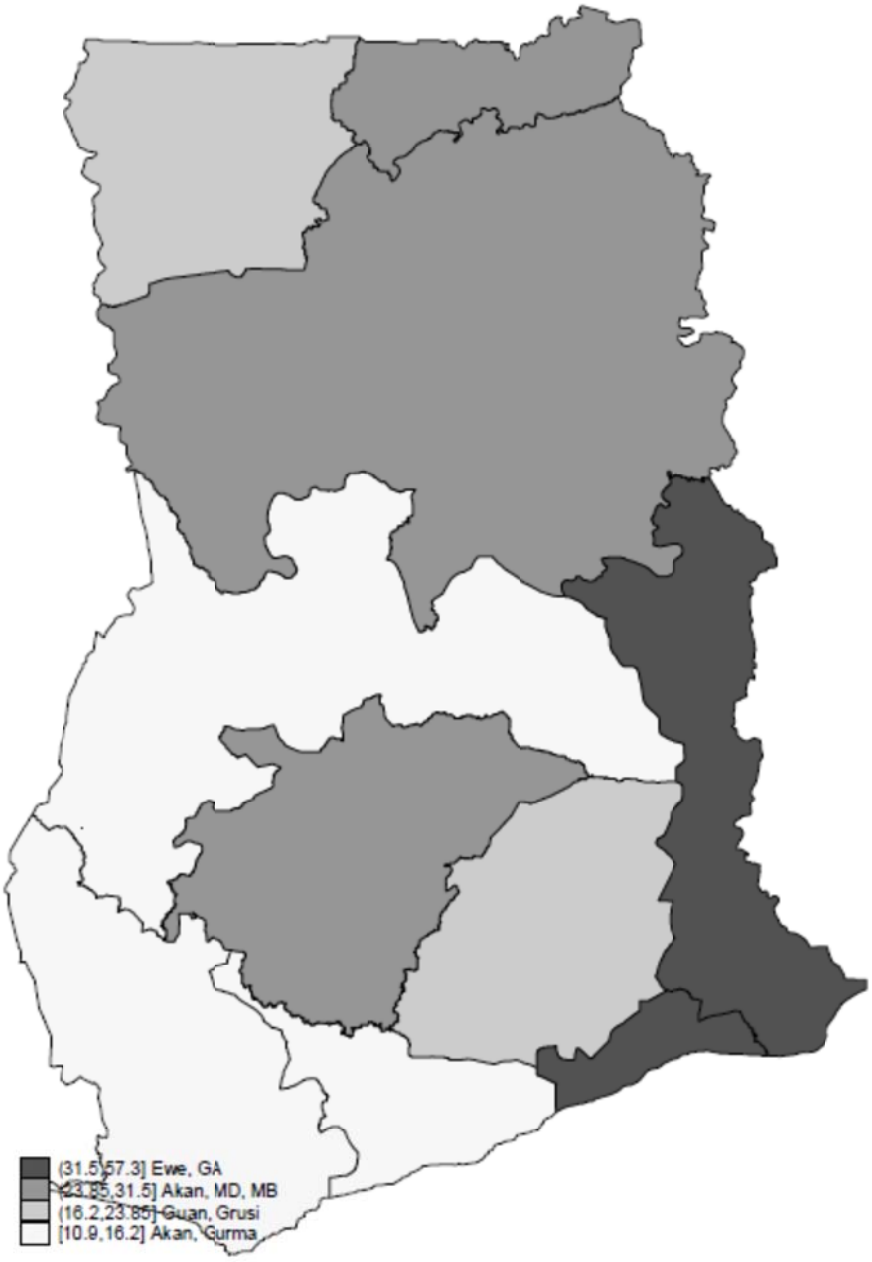
Source: Adapted from Asante and Gyimah-Boadi (2004): Ethnic Structure, Inequality and Governance of the Public Sector in Ghana. Based on Ghana's 1960 and 2000 censuses. And from Ghana's 2010 census (Ghana 2012).

Geography also makes some regions associated with certain ethnic groups, which intensifies the sense of ethnic rivalry. Research shows the importance of how different ethnicities are geographically dispersed. Ethnicity geography, or the geographical concentration of ethnic groups could be linked to civil conflict and violence (Horowitz 1985; Young 2002; Toft 2003; Fearon and Laitin 2011; Bhavnani and Choi 2012; Christin and Hug 2012). Figure 7.1 shows the ten administrative regions of Ghana. Figure 7.2 demonstrates

Figure 7.1 Ten Administrative Regions of Ghana

Source: CIA (2007): Ghana Administrative Division Map.

Figure 7.2 Ethnicity Map of Ghana



the ethnic distribution. There are 28.7% of the Akan and 29.1% of the Mande-Busanga living in the Ashanti region, 57.3% of the Ga-Adangbe in the Greater Accra region, 47.2% of the Ewe in the Volta region, 55.8% of the Gurma and 31.5% of the Mole-Dagbani in the Northern region, 27.2% of the Mande-Busanga in the Upper East region, 20.5% of Grusi in the Upper West, 18.9% of Guan in the Eastern region, 16.2% of Akan in the Western and 14.1% of them in the Central region, and 10.9% of Gurma in the Brong-Ahafo, (Asante and Gyimah-Boadi 2004). Because nearly half of the Ewe live in the Volta region, which shares the border and common history under the UN Trusteeship with Togo, there is irredentist tendency among the Ewe (Asante and Gyimah-Boadi 2004). Economically speaking, the southern part of Ghana is more developed than the northern part. All of which play a role in Rawlings' PNDC government and IMF SAPs. To which I turn the next section.

7.3 SAPs and Ethnicity: A Two-Level Game

The Rawlings Coup: Prelude to the SAPs with the IMF

Lieutenant Jerry Rawlings came to power through the coup in December 31 1981. It was the second coup Rawlings launched within two years. In June 1979 Rawlings led a coup overthrowing the Supreme Military Council (SMC) and sentenced several leaders of the SMC to death in the name of fighting corruption. However, Rawlings expressed no interest in staying in power at that time and the Armed Forces Revolutionary Council (AFRC) he formed lasted only three months until September when the democratically elected Hilla Limann took over from him (Herbst 1993; Berry 1994). The economic situation under the Limann government did not get better. For example, cocoa exports, the pillar of Ghana's foreign exchange revenue, fell by 21% from 1979 to 1981/1982. The mineral production index dropped by 8% from 1980 to 1981.The real producer price index declined by 33%

from 1979 to 1981 (Kraus 1991a). As a matter of fact, Ghana's economy was in the collapse when Rawlings seized power via his second coup.

Given the grave economic crisis Rawlings and his PNDC military government had to face, it was no wonder that the PNDC government's rhetoric at the beginning was marked by populism. It was the political populism and neo-Marxist ideology of the PNDC that gained support from workers, college students, and left-wing intellectuals (Rothchild 1991; Herbst 1993). During 1982, the PNDC government launched campaigns against corrupted elites and adopted dependency theory to make economic policy (Gyimah-Boadi and Rothchild 1982; Ahiakpor 1985; Chazan 1991). However, as the populist mobilization and call for self-reliance did not improve the economy, Rawlings had to turn to pragmatism to solve Ghana's economic crisis (Rothchild 1991). During several national speeches in the late 1982 Rawlings repeatedly emphasized the dire economic situation of Ghana and implied the need to change (Hutchful 2002). Finally, after an attempt to seek financial aid from the Soviet Union failed, the PNDC government expelled the anti-IMF left camp and went to the IMF (Hutchful 2002).

The SAP Negotiations and Ethnicity: The Game at Level I and II

The purge of anti-IMF radicals left the PNDC with only one member from the north of the country. The ethnic composition of the PNDC after additions and departures of members was five Akans and three Ewes (Asante and Gyimah-Boadi 2004). The Akans is not a homogenous ethnic group and its sub-ethnic groups often ally with non-Akans. For example, the Asantes and the Fontes, the two largest sub-ethnic groups of the Akans, always vote in different ways in elections due to their historical rivalry (Asante and Gyimah-Boadi 2004). Given the ethnic fractionalization among the Akans and Rawlings' half-Ewe

background,[51] the PNDC was perceived as a Ewe-Volta-region-based government (Herbst 1993; Asante and Gyimah-Boadi 2004). Therefore Rawlings' base of support was narrow either in terms of ethnic composition or political ideology (Herbst 1993).

Moreover, the PNDC members held no united attitudes towards SAPs and made "contradictory statements" on negotiating with the IMF (Hutchful 2002, 37). The disadvantage of Rawlings government, that was, its narrow base of support at Level II (the domestic level), gave the PNDC bargaining advantage at Level I (the international level) when it negotiated with the IMF. Ghanaian officials spoke of possible political instability which may be resulted from severe SAP conditionality when they negotiated with the IMF (Martin 1991, 239). And IMF officials acknowledged that IMF residents in Ghana had to respond to Ghanaian officials' requirement to be "more sensitive to social and institutional constraints" (Hutchful 2002, 152). The Fund also noticed the pressure the government must face from the history of Ghana's failed attempts to carry out IMF programs. Thus the Fund had to adopt its second-order preference to grant Ghana some concessions. As a result the PNDC government got less stringent conditionality from the Fund (Kraus 1991a, 1991b; Martin 1991). It is no wonder that "Ghana's negotiators……were lauded for their negotiating skills and their courage in 'facing down' the IMF (Hutchful 2002, 39).

The Negotiations

When the PNDC understood the futility of its populist measures to rescue its economy and there were no feasible alternatives for financial assistance, it turned to the BWIs to attract aid dollars. The PNDC's Economic Advisory Committee prepared the negotiations with proposals which included measures such as devaluation, increasing price of

[51] Rawlings is half Ewe and "allegedly half Scottish (MRG 2007).

cocoa, cutting government deficits, removing some subsidies, and charging fees for education and health care (Kraus 1991a, 125). However, there were disputes between the Fund and the PNDC when the IMF prepared the letter of intent. The Fund disregarded the data provided by Ghana and came up with its own estimates on financial and fiscal figures in late 1982 and early 1983 (Martin 1991). Of seven areas in disagreement, the Fund and the PNDC each won in two areas. The disputes in the remaining three areas were solved by improved economic performance in later years.

First, in the areas of removing subsidies and liberalizing trade, although the PNDC government did not want to see price increase dramatically, the Fund preferred increasing prices of fertilizer, gasoline, and consumer goods. The PNDC government finally succumbed and removed subsidies gradually. In later negotiations, the government also agreed on the liberalization of trade (Martin 1991).

Second, in the areas of exchange rate and monetary policy, while the Fund insisted on tight credit ceilings in order to bring down inflation, the PNDC feared that stringent policy would cause harm on private sectors. Moreover, the PNDC preferred an auction mechanism for gradual devaluations (Martin 1991). The PNDC at last gained concessions from the Fund in both areas by establishing an auction mechanism for devaluation and getting relaxed monetary targets. Although the reasons contributing to the Fund's concessions partly lie on the Bank's allying with the PNDC on certain issues, PNDC's argument for stability played an important role. For example, the PNDC argued that stringent austerity policies would result in political instability in Ghana (Martin 1991, 239). Given the domestic perception of the PNDC as a Ewe-based government and the highly ethnic fractionalization in Ghana, the government with a narrow base of support would definitely draw ferocious oppositions to negotiating SAP conditionality with the Fund. The

PNDC members did not hold a united position on how to solve Ghana's economic crisis. While the technocrats sympathized with the IMF policy, the left-wing members hated the intervention of BWIs in Ghana's economic activity (Hutchful 2002). The unpopularity of IMF conditionality resulted in an attempted coup in mid-1983 opposing Rawlings' SAP program with the IMF (Hansen 1987).

The IMF also learned the lessons from Ghana's failed attempts to implementing the Fund's programs in the past. There were three attempts to devaluate Ghana Cedi in 1966, 1971, and 1978 respectively. The result of the 1966 devaluation was that the National Liberation Council (NLC) led by military officers had to suspend its program with the IMF after massive domestic protests. The 1971 devaluation and privatization policy led to the overthrow of the second republic, the Busia government, by the army in the following year. Then the military regime SMC again abandoned the devaluation policy in 1978 due to fierce domestic oppositions (Herbst 1993; Boafo-Arthur 1999; Hutchful 2002). PNDC's domestic weakness gave it a strong bargaining position at Level II. The IMF had to adopt its second-order preference of sponsoring SAPs with less stringent conditionality and containing the contagious effect of economic crisis. Actually a success story of borrowing countries implementing SAPs is in BWIs' interest (Boafo-Arthur 1999).

The PNDC and the Fund also disagreed about privatizing state-owned enterprises (SOEs), cutting budget deficits, and reducing imports. The PNDC did not accept the Fund's requirements of privatization, lower budget deficits, and cutting import levels until Ghana's economy improved in late 1980s (Martin 1991). Therefore the conditionality Ghana received for its SAP with the IMF in 1983 was moderate. The Fund generally got 90%-95% of its planned targets agreed with recipient governments in sub-Saharan African countries for its

SAPs. By contrast, the proportion of agreed quantitative targets in Ghana's SAPs was just 80%-85% (Martin 1991, 239).

The Convergence of Win-Sets: Agreement on SAPs

In 1983 the PNDC and the IMF reached agreement on the Economic Recovery Program (ERP), which was later a part of Ghana's structural adjustment programs. It is noteworthy the conditions for this SAP were less than twenty (Martin 1991). From the perspective of the Rawlings government, it was a "victory" that the PNDC managed to turn its domestic weakness into bargaining strength when facing the IMF and gained concessions (Annobil 1983; Hutchful 2002, 39). Besides the World Bank assistance of 65 million, Ghana got the IMF loan of 359 million special drawing rights (SDR), which was added by a pending inflow of further 120 million SDR (Rothchild 1991, 7). In addition, the Fund brought strong financial and technical expertise to support Rawlings government's programs (Kraus 1991b, 34).

The aim of the ERP, i.e. SAP, was to increase manufacturing productivity and exports in order to achieve economic development (Rothchild 1991).The adjustment policies included in the agreement were: reforming exchange rates via devaluation; increasing interest rates to boost savings; imposing credit ceilings to fight inflation; raising prices of crops and cocoa to strengthen agricultural output; improving transportation infrastructure; expanding energy resources, and so on (Agyeman-Duah 1987; Kraus 1991b). Of all the adjustment measures, the key element and the most difficult part was the exchange rate reform via devaluation (Herbst 1993; Bello, Cunningham, and Rau 1999). Domestic opposition aside, from 1983 on, Ghana has been under SAPs with the Fund and the Bank. Table 7.3 from Martin (1991, 236) summarizes Ghana's SAPs between 1983 and 1990 with the IMF. Within

eight years of the 1980s, there were three Stand-by Agreements (SBAs) amounting to 500.3 million SDR, one Extended Fund Facility (EFF) with the amount of 245.4 million SDR, one Structural Adjustment Facility of 129.86 million SDR, and one Enhanced Structural Adjustment Facility with a total of 368.1 million SDR. In the negotiations for the following SAPs in the 1980s, Rawlings' PNDC government was quite good at convincing the Fund to "tailor conditions to national circumstances" (Martin 1991, 250). For example, the PNDC managed to redesign the rules of foreign exchange auction and devaluate the currency at a controlled gradual pace to reduce the negative impact. Although there were bitterness and "adjustment fatigue" among PNDC officials when program slippage in 1986 led the Fund to suspend the program loan disbursement, the Fund's preference was to have the SAPs with the PNDC implemented instead of aborted (Martin 1991, 249; Herbst 1993).

Table 7.3 IMF SAPs from 1983 to 1990 in Ghana

IMF SAPs	Years	Amount (special drawing rights, in million)
Stand-by Agreement	1983-1984	238.50
Stand-by Agreement	1984-1986	180.00
Stand-by Agreement	1986-1987	81.80
Extended Fund Facility	1987-1990	245.40
Structural Adjustment Facility	1987-1990	129.86
Enhanced Structural Adjustment Facility	1988-1990	368.10

Sources: Martin (1991): Negotiating Adjustment and External Finance: Ghana and the International Community, 1982-1989. See its Table 13.1 on page 236.

The Implementation of SAPs in Ghana

With the implementation of SAPs Ghana's economic performance based on macroeconomic indicators did improve. But there were a wide range of ensuing negative effects on socioeconomic areas such as health and education. Given the ethnic

fractionalization in Ghana and the narrow base of Rawlings' government, all ethnic groups in Ghana shared the burden of SAP negative impact. Although grievance resulted from SAP implementation was pervasive, there was no direct ethnic hatred based on relative deprivation against the government. Ethnic tensions could be high during some time, but armed ethnic conflict aiming to overthrow the government was absent when the PNDC implemented SAPs.

Ghana's economy under IMF SAPs was a success story in terms of macroeconomic indicators (Gibbon 1992) . For instance, exports were doubled in 1985 (Agyeman-Duah 1987). GDP grew around between 5% and 6% from 1984 to 1991. Inflation was tamed and declined by 90% between the early 1980s and 1991 (Boachie-Danquah 1992; Konadu-Agyemang 2000). Agricultural production increased by 3.6% and industrial output increased by 10.3% in 1988. Domestic savings increased by 36% from 1987 to 1988. The budget was balanced in 1986 and there was BOP surplus in 1987 (Rothchild 1991).

Macroeconomic improvement aside, the implementation of SAPs in Ghana led to negative socioeconomic impact. The increase of minimum wage lagged far behind the extent of devaluation (Agyeman-Duah 1987). Fees for social services such as primary health care and school books were introduced or raised (Weissman 1990). There were increases of 150% for water fees, 365% for postal tariffs, 1000% for electricity from 1983 to 1984 (Herbst 1991, 177). SAPs hit the urban poor particularly hard (Chazan 1991). With the cost of living rising dramatically, around 50000-60000 workers were laid off when the PNDC government carried out the civil service reform (Kraus 1991a; Bello, Cunningham, and Rau 1999). The economy gained growth at the expense of uneven income distribution (Weissman 1990; Chazan 1991; Konadu-Agyemang 2000). For example, 94% of gross cocoa income was concentrated in one third of cocoa farmers, compared to two thirds of cocoa farmers who

only received 6% of the income (Weissman 1990). The structural adjustment programs also imposed the burden on external debt as its ratio to GDP increased by nearly 60% from 1980 to 1995 (Konadu-Agyemang 2000).

However, the Rawlings government implemented the SAPs in a manner that all ethnic groups shared the burden of SAP costs. All groups in Ghana were affected by the austerity measures (Asante and Gyimah-Boadi 2004). Recall that the PNDC was perceived as a Ewe-based regime. Nearly half of the Ewes live in the Volta region, but there was no evidence that the Volta region was less affected by SAPs. More important, the IMF SAPs focused on increasing cocoa exports, which without doubt benefited cocoa farmers (Chazan 1991). This means the main beneficiary of SAP cocoa policy is the Akans because nearly one third of them live in the Ashanti region which grows most of cocoa in Ghana (Herbst 1993). This is particularly important in terms of ethnic politics given that the rivalry between the Ewes and the Asantes is consistently present in Ghanaian domestic politics (Asante and Gyimah-Boadi 2004).[52]

Since one of SAP objectives was to improve primary commodity exports, regions in the south that produce cocoa, timber, and minerals, such as the Ashanti, Brong-Ahafo, Accra, and Western regions, arguably benefited more from SAPs than historically underdeveloped Northern, Upper West, and Upper East regions (Songsore 2001; Asante and Gyimah-Boadi 2004). In other words, there were spatial disparities under SAPs (Konadu-Agyemang 2000; Hutchful 2002). For the regional distribution of ethnic groups, 55.8% of the Gurma live in the Northern region, 27.2% of the Mande-Busanga live in the Upper East region, and 20.5% of the Grusi live in the Upper West region. Nonetheless, the population percentages for the Gurma, Grusi, and Mande-Bsuanga are only 3.9%, 2.8%, and

[52] An example of the Asante vs Ewe rivalry is the Busia (who is an Asante) government dismissed all but one senior Ewe officers in the Army (Asante and Gyimah-Boadi 2004).

1.1% respectively. The ethnic dimension of spatial disparities under SAPs may be more salient for the Mole-Dagbani because they contribute to 16.5% of the population and 31.5% of them live in the Northern region, 22% of them in the Upper East region, and 14.4% of them in the Upper West region (Asante and Gyimah-Boadi 2004).

In order to reduce spatial disparities and negative impact of SAPs, the Rawlings government, which had a narrow base of support and needed alliance due to Ghana's ethnic fractionalization, launched the Programme of Actions to Mitigate the Social Costs of Adjustment (PAMSCAD) in 1987 (Ninsin 1991; Rothchild 1991; Herbst 1993; Boafo-Arthur 1999; Hutchful 2002; Asante and Gyimah-Boadi 2004). The PAMSCAD was aimed at compensating the disadvantageous groups for SAP negative effects through projects related to community service, employment assistance, and basic social services (Hutchful 2002). Although there were criticisms of tight funding and unsatisfactory implementation due to bureaucratic problems for the PAMSCAD (Ninsin 1991; Rothchild 1991; Hutchful 2002), it is still noteworthy that with 84 million dollars committed to the PAMSCAD, the disadvanted groups in the Northern and Upper East/West regions were the targeted groups for government assistance to address their grievances under SAPs (Asante and Gyimah-Boadi 2004). In addition, the Rawlings government introduced the Public Investment Programme (PIP) which also intended to alleviate the grievances of the Northern and Upper East/West regions by focusing on employment generation (Asante and Gyimah-Boadi 2004). One compensation, for example, was to extend the electricity grid from Brong-Ahafo in the south to the north (Anyemadu 1993; Asante and Gyimah-Boadi 2004). Effective or not, the Rawlings government at least sent a clear signal through these programs to the disadvantageous groups that the government was responsive to their grievances and made

attempts to compensate them for their loss under SAPs either in a direct way or through indirect spillover effects (Herbst 1993; Asante and Gyimah-Boadi 2004).

Furthermore, the narrow base of support forced the Rawlings government to adopt flexible strategy in the implementation of SAPs. Changing the rule of the auction mechanism for foreign exchange is an example of flexible implementation (Martin 1991). The PNDC government also managed to implement SAPs at a gradual pace to mitigate fierce domestic oppositions. With the implementation rate ranging between 55% and 63% (Toye 1992; Haggard and Webb 1993; Vehnamaki 1999), the PNDC government did not lay off civil servants until 1986 (Kraus 1991a). The dismissal of 29052 public-sector workers in 1989 was also far below the IMF target of 45000 (Kraus 1991a). All of these explain the absence of armed civil conflict in Ghana when the government implemented SAPs.

7.4 Alternative Explanations

The historical analysis of Ghana shows the domestic weakness resulted from highly ethnic fractionalization gave the PNDC government the bargaining advantage to gain concessions when it negotiated with the IMF on SAP conditionality and avoid armed conflict when it implemented IMF SAPs. While the theory in this research belongs to the rational choice school which focuses on the role of incomplete information, bargaining issues, opportunity costs, and economic grievances or greed in influencing armed civil conflict, the symbolic politics theory that represents the competing theoretical camp, i.e. constructivism, emphasizes the impact of emotional motivations (Young 1979; Horowitz 1985; Kaufman 2001, 2006a). The symbolic politics theory argues that a few factors are necessary and sufficient for the onset of armed civil conflict, which are ethnic myths, ethnic fear, ethnic hatred, mobilization opportunity, security dilemma, and chauvinistic

mobilizations (Kaufman 2001, 2006a, 2006b; Grigorian and Kaufman 2007). Of all the factors, ethnic myths are used to justify ethnic hatred. And symbols are employed in mass mobilizations by serving as "emotionally charged shorthand reference to a myth" (Kaufman 2001, 16). From the perspective of the symbolic politics theory, ethnic myths, fear, and hatred do exist between some ethnic groups in Ghana. Nevertheless, the opportunities of chauvinistic mobilizations against the government are not usually present because Ghanaian governments' official rhetoric has been ethnic inclusiveness instead of institutional discrimination.

Ethnic Myths, Fear, and Hatred

Most of inter- or intra-ethnic violence is concentrated in Ghana's northern region, which is sparsely inhabited by 17-20 ethnic groups (Pul 2003; Jonsson 2009; Sulemana 2009). Ethnic stereotype, fear, and hatred did exist at least for four major ethnic groups in the northern region: the Konkomba, Dagomba, Gonja, and Nanumba. The root of ethnic hatred among these groups lies in the colonial policy of classifying ethnic groups in the north by chieftaincy. The British colonial government regarded ethnic groups with hierarchical structures superior to ethnic groups without chiefdom.[53] Hence ethnic groups without chiefdom, such as the Konkomba, "were put under the jurisdiction and administration of chiefly groups", like the Dagomba, Gonja, Nanumba, and Mamprusi (Jonsson 2009, 509). In order to govern the northern region by indirect rule, the colonial authority appointed the chiefs as government officials from 1932 (Jonsson 2007). To make things worse, ethnic groups without chiefdom were called minorities and chiefly groups called majorities, regardless of the fact that the "minority group", the Konkomba, had more population than

[53] Ethnic groups without centralized political structures generally respect the role of their spiritual figures (Jonsson 2007).

"majority groups" such as the Gonja, Nanumba, and Mamprusi (Brukum 2002; Jonsson 2009).

Ethnic discrimination against "minorities" could be seen in the ethnic stereotype held by chiefly groups which describes "minorities" as "slave" or "people with tails" (Jonsson 2009, 515). The Konkomba traditionally lived in the eastern region of the north, which was once British Togoland. Thus chiefly groups viewed the Konkomba as alien (Jonsson 2007, 2009). The ethnic myth held by chiefly groups was that the Konkomba were criminals from Togo finding a safe haven in Ghana (Boaten 1999). The myth of the Konkomba as invaders and outsiders was demonstrated in leaflets in 1993 which forged the Konkomba's independence claims for "western Togoland" (Jonsson 2009, 514). For the Konkomba, most of them are relatively affluent yam farmers (Boaten 1999). Their hatred toward the chiefly groups was represented by the ethnic stereotype that the chiefly groups were lazy but gained material benefits by taxing the Konkomba (Sulemana 2009). By contrast, the ethnic stereotype held by the chiefly groups was that the Konkomba were landless people since they were "invaders" (Jonsson 2007, 2009).

Chauvinistic Mobilization

Ethnic myths and hatred aside, the necessary factor of chauvinistic mobilizations for the symbolic politics theory was not present given that the government's rhetoric has been ethnic inclusiveness. Thus the regional inter-ethnic hatred did not translate into mobilization against the government. Certainly ethnic mobilization exists in Ghana's politics. However, note that Ghana is a highly ethnically fractionalized country. In order to win in national politics, political parties always have to build multi-ethnic coalitions (Asante and Gyimah-Boadi 2004). Successive Ghanaian governments' official rhetoric has been ethnic

inclusiveness instead of institutional discrimination against certain ethnic groups. Beginning from the first republic, the Nkrumah government prohibited political parties from organizing along ethnic groups. In the second republic, the Busia government attempted to ethnically manipulate the army by removing most of the Ewe officers. It was quickly criticized as a "tribal government" (Asante and Gyimah-Boadi 2004, 73). The third republic gained lessons from the second republic's ethnic policy and had to balance the ethno-regional composition of its government. For the Rawlings government, the official rhetoric of its populist revolution was social justice for all the people (Chazan 1991). There may be a gap between official rhetoric and reality. However, the Rawlings government did attempt to address the poverty of the north by establishing institutions to encourage direct political participation in local affairs' decision-making process. The PNDC government also improved the infrastructure programs in the north (Asante and Gyimah-Boadi 2004, 121-122). More important, unlike Rwanda's Hutu government which excluded its minority (the Tutsi) from working in the public sector, the official principle for employment in the civil service in Ghana, for example under the PNDC government, has been meritocracy rather than institutionalized discrimination. Hence for both the government and ethnic groups in the north, chauvinistic mobilizations against each other were not present.

7.5 Summation

The historical analysis of Ghana's structural adjustment programs in the 1980s shows that in a highly ethnically fractionalized country like Ghana, the government could turn its domestic weakness resulted from ethnic fractionalization into bargaining advantage at the international level when it negotiated SAPs with the IMF. Consequently the government would gain concessions from the Fund and get relatively mild conditionality.

Given the ethnic fractionalization Ghana's ruling government had to seek alliance from other ethnic groups. The government's narrow base of support forced the government to implement IMF SAPs in a manner that all ethnic groups shared the burden of austerity policy. Furthermore, the government had to adopt flexible strategy to implement SAPs gradually. Thus there was no direct ethnic grievance towards the government as a result of SAP implementation. Certainly the role of ethnic fractionalization, bargaining issues, and economic grievances from a two-level game perspective are not the only factors explaining the absence of armed civil conflict when Ghana implemented SAPs. The symbolic politics theory provides explanations from another perspective. While ethnic myths and hatred existed between some ethnic groups in Ghana's northern region, chauvinistic mobilizations against the government were absent because the government's rhetoric and policy have focused on ethnic inclusiveness instead of institutionalized discrimination against certain ethnic groups. Rather than undermining the theoretical strength of this study, the symbolic politics theory enhances our understanding of armed civil conflict and Ghana's ethnic politics.

Chapter 8

Structural Adjustment Programs and Armed Civil Conflict in A Highly Ethnically-Dominant Country: Rwanda

8.1 A Review of Theory and Introduction

The theory in Chapter 3 argues that SAP effects on the outbreak of armed civil conflict vary with recipient countries' ethnic characteristics. In Chapter 7 I use Ghana as an example to examine SAP effects on armed civil conflict in ethnically fractionalized countries. While SAPs decrease the probability of armed civil conflict onset in highly ethnically fractionalized countries, they impose positive impact on armed civil conflict in countries characterized by high levels of ethnic dominance. Ethnically dominant countries are strong at the domestic level and thus have larger win sets. The domestic strength of borrowing governments weakens their bargaining position at the international level. The IMF is more likely to insist on stringent conditionality to realize its first-order preference and satisfy its constituency of international creditors. On the other hand, the borrowing governments characterized by high levels of ethnic dominance are more likely to accept the stringent conditionality and put the burden of implementing austerity measures disproportionately on the shoulder of ethnic minorities. Hence the second hypothesis argues that IMF SAPs increase the likelihood of armed civil conflict onset in countries with high levels of ethnic dominance.

Quantitative models employed in Chapter 6 confirm the second hypothesis. In this chapter I examine SAPs in Rwanda and the outbreak of armed civil conflict. As a Hutu-dominant country since its independence in 1962, Rwanda had been a model country in the eyes of western development community until civil war broke out in 1990 and culminated in

the genocide of 1994 (Uvin 1998, 46). However, Rwanda's relatively well-managed economy faced great challenges in the late 1980s due to food shortage and sharp declines in world coffee prices. To solve the agricultural and economic crises, Rwanda had to enter into SAP negotiations with the IMF and the World Bank for financial assistance. Consistent with the prediction of the theory, the Hutu-dominant government that was generally viewed as strong and effective possessed a weak bargaining position at the international level. The negotiations were "long and difficult" (Cart 1995, 475; Uvin 1998, 57). As a result, the austerity measures Rwanda had to implement were really harsh.

In June 1990 Rwanda agreed to SAP conditionality imposed by the IMF and the Bank and civil war broke out in October. Although the timing of civil war did not fully line up with SAP implementation (the SAP conditions were not finalized and implemented until November 1990), the fact that the rebel group, the Rwandan Patriotic Front (RPF), launched the attack right after the government negotiated SAPs with the BWIs shows that entering into SAPs sends a signal of debilitating government and could trigger armed civil conflict. In other words, entering into SAPs in some cases is sufficient to lead to armed civil conflict in recipient countries. The theory may underestimate SAP impact on armed civil conflict in ethnically dominant countries. In the following sections I first review the historical background of Rwanda and its ethnic politics. Then I examine SAPs and ethnicity in Rwanda from a two-level game perspective. To fully investigate reasons contributing to the onset of civil war, I also explore competing factors suggested by symbolic politics theory in explaining ethnic war.

8.2 Historical Overview and Ethnicity in Rwanda

Rwanda is "the land of thousand hills" (Waller 1993, 3).[54] As a landlocked country in central Africa, an area of 26,338 square kilometers and a population of 7 million in the early 1990s made Rwanda one of the most densely populated countries in Africa (Storey 1999; Prunier 1995; Uvin 1998; Storey 2001).[55] The land has been inhabited by three ethnic groups: the Hutu, the Tutsi, and the Twa (pygmy). In 2013 the World Factbook of CIA estimated the Hutu comprise 84% of the population, the Tutsi 15%, and the Twa 1% (CIA 2013). Note that the Rwandan government did not publish ethnic information in its 2002 census after the 1994 genocide (Verpoorten 2005). Table 8.1 presents the changes of ethnic compositions of Rwanda from 1978 to 1991. The population of Rwanda increased from 4,819,317 in 1978 to 7,099,844 in 1991. The annual growth rate of population was 3% from 1985 to 1990, which put a lot of pressure on environmental scarcity (Percival and Homer-Dixon 1996). As Table 8.1 indicates, the Hutu's population percentage increased from 90% in 1978 to 91.1% in 1991, while the Tutsi's share decreased from 9.5% in 1978 to 8.4% in 1991. However, the Tutsi population may have been under-reported in the 1991 census (Prunier 1995; Verpoorten 2005). First, some Tutsi self-identified as Hutu in the census to avoid discrimination and persecution. Second, the Habyarimana government was allegedly manipulative of the ethnic information to maintain a low quota for Tutsi's public service and school enrollment (Prunier 1995, 264; Verpoorten 2005, 332). Scholars' estimation for Tutsi's population percentage was 12% in April 1994, in contrast to the official figure of 9% (Prunier 1995, 264).

[54] Most of the hills range from 4900 to 6500 feet (Uvin 1998, 185).
[55] The population is around 12 million in 2013 (CIA 2013).

Table 8.1 Changes of Ethnic Compositions of Rwanda, 1978-1991

Ethnic Groups	Percentage	Distribution
	1978	1991
Hutu	90%	91.1%
Tutsi	9.5%	8.4%
Twa and Others	0.5%	0.5%
Total Population	4,819,317	7,099,844

Source: Adapted from U.S. Bureau of Census (1980, 125), Verpoorten (2005, 335), and King (2013, 87).

As aforementioned, ethnicity geography has an impact on armed civil conflict. The geographic concentration of ethnic groups is linked to civil conflict and violence (Horowitz 1985; Young 2002; Toft 2003; Fearon and Laitin 2011; Bhavnani and Choi 2012; Christin and Hug 2012). For the two main ethnic groups in Rwanda, the Hut and Tutsi, there are generally no regions exclusively inhabited by one ethnic group. In other words, the Hutu and Tutsi are neighbors (Destexhe 1995; Akresh, Verwimp, and Bundervoet 2011, 785). Figure 8.1 shows the administrative regions of Rwanda in the 1990s. There were twelve provinces before the Rwandan government reorganized them into five administrative regions after the genocide. Table 8.2 presents the regional population distribution by ethnicity in 1991. Of the eleven provinces presented in the table, only three provinces had a Tutsi population below 3%. All of the three provinces, Byumba, Gisenyi, and Ruhengeri, were located in the north and northwest of the country. The population percentages of Tutsi in the three provinces were 1.5% in Byumba province, 2.9% in Gisenyi province, and 0.5% in Ruhengeri province respectively.

Figure 8.1 Administrative Map of Rwanda in the 1990s

Source: CIA (2013): The World Factbook 2013-14.

Table 8.2 Regional Population Distribution by Ethnicity in Rwanda in 1991

Prefecture	Percentage Distribution				Total Population
	Hutu	Tutsi	Twa	Others	
Butare	82.0	17.3	0.7	0.0	753,868
Byumba	98.2	1.5	0.2	0.0	775,935
Cyangugu	88.7	10.5	0.5	0.3	551,565
Gikongoro	86.3	12.8	0.8	0.1	465,814
Gisenyi	96.8	2.9	0.3	0.1	731,996
Gitarama	90.2	9.2	0.6	0.1	848,027
Kibungo	92.0	7.7	0.2	0.1	648,912
Kibuye	84.8	14.8	0.4	0.0	469,494
Rural Kigali	90.8	8.8	0.4	0.1	905,632
City Kigali	81.4	17.9	0.3	0.4	221,806
Ruhengeri	99.0	0.5	0.4	0.1	766,795
Total	91.1	8.4	0.4	0.1	7,099,844

Source: Verpoorten (2005, 335). See its Table 1 on page 335, based on Census of Rwanda 1991.

There is no academic consensus on the origins of the two major ethnic groups Hutu and Tutsi, but the general understanding is that the Hutu arrived in Rwanda first and the Tutsi may come from Ethiopia or northern Africa afterwards (Newbury 1988; Mullen 1995; Pottier 1995; Prunier 1995; Mamdani 1996; Hintjens 1999; Storey 1999).[56] Despite the difference in arrival time, the Hutu and the Tutsi speak the same language and share similar cultural traditions (Destexhe 1995; Prunier 1995; Van Hoyweghen 2000; Pottier 2002; Storey 2012). Interethnic marriages are also common in Rwanda (Destexhe 1995; Prunier 1995).[57]

Table 8.3 shows political regimes from the eighteenth century to 1994 in Rwanda. In the eighteenth century a Tutsi kingdom expanded its territory to include most part of

[56] It seems the earliest group that arrived in the land of Rwanda is the forest inhabitants , the Twa (Pottier 2002, 12).

[57] Generally children born to interethnic marriages will be identified with their fathers' ethnic group (Destexhe 1995).

Rwandan land. Nonetheless, some small Hutu kingdoms still remained in the northwest and southwest of Rwanda until European colonists arrived in the late nineteenth century (Prunier 1995). German colonists ruled Rwanda from the late 1890s, but German impact on Rwanda's political life was negligible because they did not make any important plans regarding Rwanda's economic and political development (Mwakikagile 2012). During World War I Belgium took over from Germany in Rwanda. The Belgian colonization began in 1916 and ended in 1962 when Rwanda finally gained independence (Prunier 1995; Hintjens 1999).

Table 8.3 Political Regimes from 1700s to 1994 in Rwanda

Political Regimes	Years
The Tutsi Kingdom	1700s – 1890s
German Colonization	1890s -1916
Belgian Colonization (Tutsification)	1916-1962
Independence	July 1 1962
First Republic (Hutu President Kayibanda)	1962-1973
Second Republic (Hutu President Habyarimana)	July 1973 – April 1994

Sources: Waller (1993); Prunier (1995); Mwakikagile (2012).

Belgian rule imposed the most significant impact on Rwanda's ethnic politics given that the colonial government adopted a "divide-and-rule" strategy resulted from racial identification, which favored the Tutsi over the Hutu. Belgian colonists viewed the Tutsi superior to the Hutu and the government policy was discriminated against the Hutu. During the Belgian colonization political power was concentrated in hands of Tutsi elites (Prunier 1995; Mwakikagile 2012). From 1926 to 1933 the colonial government started to issue identification cards based on racist stereotypes which regarded the physical features of Tutsi as "tall, thin" and Hutu as "shorter and stockier" (Prunier 1995; Hintjens 1999; Pottier 2002; Kaufman 2006b; Mwakikagile 2012). It is noteworthy that the physical differences between

the Hutu and the Tutsi were artificially made and the ethnic distinction reflected social class divisions (the Tutsi raising cattle and the Hutu farming the land) instead of racial differences (Destexhe 1995; Prunier 1995; Hintjens 1999). As a matter of fact, Belgians had to adopt personal property rather than physical differences as the criteria to issue identification cards because it was too difficult to identify the Tutsi from the Hutu solely based on physical features. People who owned more than ten head of cattle were categorized as the Tutsi (Hintjens 1999; Barnett 2002).

Belgian ethnic policy broke the ethnic political balance maintained under the Tutsi kingdom in which district chiefs were always one Hutu (responsible for farming), one Tutsi (responsible for collecting taxes on cattle), and one army chief assigned by the king (Pottier 2002). The ethnic labels and institutional discrimination against the Hutu imposed by the colonial government greatly heightened inter-ethnic tensions and hatred. Ethnic issues had become increasingly salient in Rwandan political and economic life (Newbury 1998). Then during the late 1950s' independence movement in Rwanda, Belgium began to support the Hutu at the expense of the Tutsi. Two reasons contributed to the change of policy in the colonial government. First, racist ideology was no longer popular among the post-war Belgian political officials. Second, the Tutsi elites supported pan-Africanism which was viewed as anti-Western ideology in the Cold War (Waller 1993). Thus in the following independence elections, the Hutu won as the majority of the population.

The independence elections from 1959 to 1962 were accompanied by inter-ethnic killings and sent 600,000-700,000 Tutsi refugees into neighboring countries (Andersen 2000). The first republic led by President Kayibanda claimed its legitimacy based on majority rule and promoted a Hutu-ruling rhetoric. The Tutsi were institutionally discriminated against under the new regime. For example, the Tutsi were not allowed to work in the government

and their number of entering into higher education was tightly restricted (Prunier 1995; Newbury 1998; Uvin 1998; Storey 1999). The Kayibanda years were characterized by authoritarianism and corruption. In July 1973 the army chief Habyarimana launched a coup d'état to depose Kayibanda. Since then Rwanda entered into the period of the second republic led by Habyarimana until his assassination in 1994 (Waller 1993; Prunier 1995).

8.3 SAPs and Ethnicity: A Two-Level Game

The Habyarimana Years: Prelude to the SAPs

Unlike Kayibanda who was from the south of Rwanda, Habyarimana came from northern Rwanda and relied on "Akazu" (meaning little house), a ruling clique formed by relatives of Habyarimana's wife, to manage the government. Since most of the "Akazu" members were from northern Rwanda, the regime derived its legitimacy from historical Hutu kingdoms in this region (Uvin 1998; Gasana et al. 1999; Hintjens 1999; Storey 2001). The Habyarimana years before mid-1980s were regarded as stable and peaceful (Prunier 1995). Habyarimana attempted to reduce ethnic tensions by loosely implementing Kayibanda's discrimination policy (Newbury 1998). The Tutsi still faced official discrimination in public sectors,[58] but they can succeed in private sectors as long as they did not "mess around with politics" (Prunier 1995, 74; Newbury 1998).

Moreover, Rwanda's economic performance under the Habyarimana regime before the mid-1980s was generally good compared to most African countries (Uvin 1998). It was called "Switzerland of Africa" (Hintjens 1999, 244). The inflation in the late 1970s and early

[58] The official discrimination against the Tutsi under the Habyarimana regime can be demonstrated with the following facts: in the public sector, there were only one Tutsi officer in the army and one Tutsi cabinet member. Also, only 2.9% of Parliament members were Tutsi (Prunier 1995, 75).

1980s was controlled below 4% (Chossudovsky 1996). Its GDP per capita grew at an annual 2% rate in the 1970s and its average GDP per capita throughout the 1980s was USD317 (at 1995 dollars) (Ndikumana 2001). It is noteworthy that Rwanda's GDP per capita in the mid-1980s was as the same level as China's (Prunier 1995, 78).

However, after the mid-1980s Rwanda witnessed an economic downturn. From 1985 to 1992, the real world price of coffee decreased by 72% (Storey 1999). Given that coffee was farmed by 70% of Rwanda's peasants and contributed to more than 80% of Rwanda's foreign exchange revenues, the collapse in world coffee price dealt a huge blow to Rwanda's economy. Its foreign exchange earnings decreased by 50% and its external debts increased twice in the late 1980s (Chossudovsky 1996; Woodward 1996; Andersen 2000). In 1980 foreign debts constituted only 6% of Rwanda's GNP. In 1990 due to the impact of coffee crisis it increased to 32% (Uvin 1998). The Habyarimana government was unable to pay farmers at previous coffee prices. As a result, farmers' earnings decreased by 20%, though the coffee production increased by 40% in the late 1980s (Waller 1993; Andersen 2000).

The dramatic decline of coffee prices was not the only economic crisis the Habyarimana government had to cope with. There was also an agricultural crisis due to chronic land pressure (Pottier 1993; Mullen 1995; Uvin 1998; Storey 2001). As aforementioned, Rwanda was one of the most densely populated countries in Africa. Its population density for farm land was 422 inhabitants per square kilometer in the late 1980s and early 1990s, the highest in Africa (Waller 1993, 18). From 1980 to 1989, Rwanda's population grew by 37%, and its practical population density increased by 35% at the same time (Prunier 1995, 4). The lack of land combining droughts and sweet potato disease finally led to food shortages (Uvin 1998; Andersen 2000; Storey 2001). It was against the backdrop

of economic and agricultural crises that the Habyarimana government entered into SAP negotiations with the Fund and the Bank.

SAPs, Ethnicity, and Onset of Civil War

Two-Level Game and SAP Packages

As an ethnically-dominant regime, the Habyarimana government was powerful in Rwanda's domestic politics. The regime's official rhetoric emphasized its representation of the majority of the population and the rural masses (Newbury 1998, 15). The government's dominance in Rwanda's political and economic life reflected in areas including restricted internal migration and labor activity (Uvin 1998). The powerfulness and effectiveness of the Habyarimana government were well known among western development communities (Hintjens 1999). The country under Habyarimana government was viewed as "well organized" and 'unified" (Ford 1993, 179; Uvin 1998, 46). In the eyes of BWIs, the country was politically stable and effectively managed (Uvin 1998, 44).

From a two-level game perspective, the strength of the Habyarimana government at Level II would put it in a weak bargaining position at Level I. The Fund and the Bank were well aware of Habyarimana government's domestic strength and were more likely to insist on stringent conditionality to achieve their first-order preference. First, there had been a long history for the BWIs dealing with Rwanda. The BWIs took an approving attitude towards Rwandan government regarding its political stability before the civil war broke out (Storey 2001, 370). Second, the first mission sent by BWIs in order to help solve the economic crisis arrived in Rwanda in November 1988 (Chossudovsky 1996, 939). And BWI reports reflected their awareness of Rwandan government's domestic strength by mentioning the "ethnic and socioeconomic homogeneity of the country" (Uvin 1998, 44).

The result was that the process of negotiating SAPs for the Habyarimana regime was "long and difficult" (Cart 1995, 475; Uvin 1998, 57). When the Fund and the Bank started to intervene in Rwanda's economic crisis in late 1988, there were two plans to help Rwanda. Plan A was mild in terms of conditionality and involved no strategic changes in Rwanda's economic policies. Nevertheless, the bargaining disadvantage at Level II left Rwanda with "no choice" but to accept Plan B, the structural adjustment programs aiming at large-scale macroeconomic reforms (Chossudovsky 1996, 939; 2003). Different from Ghana's negotiators who was "lauded for their negotiating skills and their courage in 'facing down' the IMF" (Hutchful 2002, 39), Rwanda's weak bargaining position at the international level led to the question of "who rules Rwanda" raised at the domestic level (Pottier 2002, 22).

The ESAF program sponsored by the IMF amounted to SDR 30.6 million (Uvin 1998, 58).[59] The conditions attached to the SAPs were stringent in terms of scope. First, harsh devaluations of Rwandan franc had to be carried out. Unlike Ghana which gained concessions from the IMF to establish an auction mechanism for currency devaluation, Rwanda had to surrender its autonomy to the Fund. The Rwandan franc was devaluated twice at steep rates, first time 50% followed by another 15% due to failure of the first devaluation to increase coffee exports (Waller 1993, 33; Chossudovsky 1996, 939; Storey 1999, 47).[60] The sharp devaluations instantly increased inflation and decreased living standards. For example, right after the first devaluation, the consumer price index rose dramatically by 1800.2% (Chossudovsky 1996, 939). Opposite to the BWI forecast of 28%

[59] The final disbursement of the amount was SDR 8.7 million. There was also US dollars 60 million disbursed (out of committed US dollars 90 million) by the World Bank (Uvin 1998, 58; Storey 1999, 48). With other donors Rwanda received US dollars 216 million in 1990 and 375 million in 1991 (Andersen 2000, 448).

[60] According to Chossudovsky (1996, 939), the first devaluation rate was 50%. For Waller (1993, 33) the figure was as high as 67%. And for Storey (1999, 47) the rate was 40%.

inflation in the first year of implementing SAPs, Rwandan citizens had to pay 50% more for basic living goods and 67% more for medical needs (Waller 1993, 33).

Second, while Ghana managed to get the IMF relax monetary targets for its structural adjustment programs, the monetary policy subscribed by Rwanda's SAPs was very tight. The Fund imposed strict requirements on rising interest rates and controlling credit ceiling. (Sellstrom and Wohlgemuth 1996, 39; Storey 1999, 47). With respect to fiscal policy, Rwanda was required to carry out wide-range fiscal reforms which included cutting government expenditures, removing subsidies to coffee farmers and state-owned enterprises (SOEs), and increasing taxes by the rates between 6% and 10%. As a result, desperate coffee farmers uprooted at least 3,00,000 coffee tress in 1992 due to the elimination of coffee subsidies (Chossudovsky 1996, 939).

Third, the austerity measures of structural adjustment policy were stringent in terms of privatization and deregulation. The government's price control mechanism was deregulated. Import restrictions were agreed to be aborted as part of the trade liberalization. Most SOEs would be privatized. The requirement of privatization was so harsh that the pace of privatization was fast rather than gradual (like Ghana). All the privatization was demanded to take place by June 1991 and unemployment ensued. Moreover, free-market approaches were introduced to deal with agricultural problems. And fees were charged for basic health and education services (Storey 1999, 47-48). The stringent austerity measures greatly destabilized local food markets and "health and education collapsed under the brunt of IMF-imposed" SAPs (Chossudovsky 1996, 939). For instance, there were a 21% increase of malaria cases after Rwanda implemented IMF SAPs because of cutting health expenditures and there was an overall decline in school enrollment due to the introduction of school fees (Chossudovsky 1996, 939). In summary, stringent austerity measures imposed by SAPs not

only failed to solve Rwanda' economic crisis but also aggravated ethnic tensions between the Hutu and the Tutsi (Chossudovsky 1996, 2003). And all of which paved the way for the outbreak of civil war.

Onset of Civil War

Civil war broke out on October 1, 1990 when the rebel group, the Rwandan Patriotic Front (RPF) which was formed in 1988, launched attacks from Rwanda's northern border with Uganda(Prunier 1995). Although the whole SAP package had not been finalized and implemented until November 1990 (Andersen 2000, 448), the Habyarimana government already agreed with the Fund and the Bank on many sections of the structural adjustment programs in June (Hintjens 1999; Pottier 2002). In particular, decisions on the most difficult part the SAP packages, the devaluation policy, was made up in September (Chossudovsky 1996; Storey 2001). Hence the theory may underestimate the impact of SAPs on the outbreak of armed civil conflict in ethnically-dominant countries because civil war broke out in Rwanda during the last stage of negotiations, a few weeks before the implementation. Although the timing of civil war onset did not fully line up with SAP implementation, the impact of SAPs on armed civil conflict can still be demonstrated in two aspects. First, the RPF took the economic and political crises that the Habyarimana government was undergoing as "a signal to start their attacks" (Andersen 2000, 444). In this sense negotiating and entering into SAPs sends a salient signal of debilitating government and could trigger civil war like implementing SAPs. The rebel leaders met with affluent Tutsi businessmen in the summer of 1990 discussing political and economic affairs in Rwanda. They were persuaded that any blow to the regime could succeed due to the weakening strength of the

government in the face of crisis (Prunier 1995). There was no better signal than negotiating SAPs that could show the fragility of the government during the crisis.

Second, the RPF may launch the preemptive attacks in anticipation of unfair burdens which could be imposed on the Tutsi resulted from implementing SAPs. Given that the discrimination against the Tutsi was institutionalized in the post-independence Rwanda, the Tutsi's experience with western-sponsored programs had been ethnical exclusion. For example, Rwanda started the Mutara Agricultural Development Projects sponsored by the International Development Association (IDA) between 1974 and 1987. The projects were aimed at giving farmers land to exchange for their adoption of agricultural techniques promoted by the development agency. However, "ethnic favoritism" was pervasive during the 13 years of the projects (Uvin 1998, 121). The Tutsi was ethnically excluded from the project benefits and it was the Hutu who gained from the projects in terms of infrastructure and job creation (Lemarchand 1982; Uvin 1998).

Moreover, the RPF advocated for the return of the Tutsi refugees to Rwanda, which involved the land issues. The Tutsi had every reason to worry about the land problems with the implementation of SAPs due to the land concentration problem under the Habyarimana regime since the 1980s. Land was concentrated in the hands of people who worked in the government. Since the Tutsi was excluded from jobs in public sectors, the land was actually concentrated in the hands of Hutu elites (Uvin 1998). It is noteworthy that anti-Tutsi sentiment was especially strong in the northern region of Rwanda, in which the hometown of President Habyarimana was located (Uvin 1998). Hence the Tutsi hold no optimism for the land issues if the Habyarimana government implemented SAPs. The RPF's appealing to the Tutsi could be demonstrated from its recruitment during the implementation of SAPs. At the beginning of civil war, the RPF had a force of around 2500 fighters (Prunier 1995, 93).

As the war dragged on and the SAP was implemented at the same time, the RPF recruitment increased to 5000 fighters in 1991, 12000 in 1992, and 25000 in 1994 (Prunier 1995, 117). The direct cause of the growing rebel recruitment was the persecution of the Tutsi after the RPF attacks. As a revenge, there was a massacre of 500-1000 Tutsi one week after the onset of civil war (Andersen 2000, 444). The Habyarimana regime also increased repression of the Tutsi (Storey 2001, 367). For instance, the government arrested more than 9000 Tutsi as a response to the rebel attacks (Newbury 1998). Nonetheless, the rapidly growing recruitment lasted until 1994, which overlapped with the implementation of SAPs. Uncertainty, insecurity, and grievances felt on the Tutsi side during SAP implementation undoubtedly contributed to the rebel recruitment.

8.4 Alternative Explanations

There are many factors contributing to the outbreak of armed civil conflict. With respect to ethnic war, two early theories in international relations focus either on ancient hatred between ethnic groups or the trend towards conflict during the transition to modernization. However, the two theories cannot explain variations in the historical cases (Kaufman 2006b). So two competing theoretical camps, i.e. rational choice and constructivism, attempt to explain the onset of civil war from different perspectives. For the rational choice theory, the outbreak of civil war was the result of incomplete information, bargaining issues, commitment problems, opportunity costs, and economic grievances or greed. For constructivism, the onset of ethnic war builds on socio-psychological factors such as relative status and emotions (Fearon and Laitin 2000; Kaufman 2006b). The theory in this research which emphasizes the bargaining between the IMF and the government at Level I and Level II, economic grievances due to the SAPs, and rational calculations of the

government and the rebel group belongs to the rational choice camp. The symbolic politics theory, which was briefly discussed in Chapter 7, represents the competing explanation from the constructivist camp.

According to the symbolic politics theory, rationality alone cannot explain the onset of ethnic war. Rather, emotional motivations play a very important role in ethnic war (Young 1979; Horowitz 1985; Kaufman 2001, 2006a). For armed civil conflict to break out between ethnic groups (one side must be the government in this research), several factors must be present: ethnic myths; ethnic fear of each other; mobilization opportunity; mass hostility; chauvinistic mobilizations; and security dilemma (Kaufman 2001, 2006a, 2006b; Grigorian and Kaufman 2007). In the symbolic politics theory, a myth is "a belief held in common by a large group of people that gives events and actions a particular meaning" (Edelman 1971, 14; Kaufman 2001, 16). It is irrelevant whether or not ethnic myths are true. Their role is to justify the ethnic hatred and superiority. Symbols are needed for mass mobilization in ethnic war. A symbol is "an emotionally charged shorthand reference to a myth" (Kaufman 2001, 16). Although the symbolic politics theory cannot explain the variation of ethnic policy in Rwanda, it provides valuable insight into the onset of civil war in Rwanda in terms of ethnic myths and fear.[61] After all, ethnic hostility, security dilemma, and elite manipulation are all necessary for the outbreak of armed civil conflict (Kaufman 1996, 2006a, 2006b). In this sense, the symbolic politics theory enhances our understanding of civil war in Rwanda instead of undermining the theory in this research because of the possibility of bridging the rational choice theory with constructivism in explaining civil war.[62]

[61] The symbolic politics theory is better at predicting Rwanda's genocide in 1994 rather than its civil war in 1990 (Kaufman 2006b).
[62] See Fearon and Laitin (2000) for bridging the gap between rational choice and constructivism.

Ethnic Myths in Rwanda

There had been a strong presence of ethnic myths in Rwanda's social and political life since colonial times. The Hutu and Tutsi all had collective myths on their ethnic identity. Both groups' narratives on their ethnic identity emphasized racial differences between the Hutu and the Tutsi (Kaufman 2006b). Given that the Tutsi were the latecomer in the land of Rwanda, the Hutu viewed the Tutsi as invaders (Newbury 1998; Hintjens 1999; Kaufman 2006b). The Hutu adopted ethnic narratives that regarded themselves as the "sons of the soil" (Hintjens 1999, 254). Since the Belgian colonists used the racist ideology to grant power and privilege to the Tutsi at the expense of the Hutu, the Tutsi viewed themselves as superior to the Hutu in terms of intelligence and hardworking ethics (Prunier 1995; Uvin 1998; Hintjens 1999; Kaufman 2006b).

The myth of Tutsi superiority was so deeply embedded in both groups' psychology that even the post-independence Hutu viewed the Tutsi as winners (Des Forges 1995; Newbury 1998). For example, while the majority of successful businesspersons in Rwanda were the Hutu, the popular narratives for both Hutu and Tutsi were that the Tutsi were good at business, regardless of the fact that most Tutsi were peasants (Storey 1999). By contrast, the Hutu adopted ethnic narratives that stress the "Hutu solidarity" to counteract the myth of Tutsi superiority (Lemarchand 1970, 285; Kaufman 2006b, 71).

Ethnic Fear and Hatred in Rwanda

The institutional discrimination against the Hutu during colonial times and the reverse discrimination against the Tutsi after the independence led to widespread hatred between the Hutu and the Tutsi. For the Tutsi, the fear was persecution and genocide under

a Hutu-dominant government. Since the 1960s, Hutu portrayed the Tutsi in an inhuman way by calling the Tutsi "cockroaches" (Destexhe 1995, 28; Kaufman 2006b, 71-72). Given that cockroaches must "be crushed" (Destexhe 1995, 28), Tutsi' fear of Hutu was deep rooted. Note that following Rwanda's independence, there was the killing of about 30000 Tutsi (Uvin 1997, 96; Kaufman 2006b, 72). And throughout the years the estimated number of Tutsi refugees in neighboring countries reached around 600,000-700,000 (Andersen 2000). During the Kayibanda government's repression of Tutsi in the 1960s, around 18000 Tutsi were killed. Meanwhile, murderers of Tutsi politicians got away and no prosecution was filed (Prunier 1995, 56). With respect to the Hutu, their fear was losing power. Since Rwanda's neighboring country Burundi was still under the control of the Tutsi and there was mass killing of the Hutu from 1965 to 1972 in Burundi (Kaufman 2006b), Hutu's fear of Tutsi regaining power in Rwanda was real and persistent.

While the symbolic politics theory is correct in elaborating the role of myth-and-symbol-based ethnic fear and hostility in the outbreak of civil war, it cannot explain the timing of civil war onset in Rwanda. The rebel group, the RPF was formed in 1988, but it launched the civil war in October 1990 during which the negotiation of the SAPs was at its last stage. In light of the factor of chauvinistic mobilizations, there is no evidence that both the Hutu and the Tutsi resorted to the chauvinistic rhetoric right before the civil war broke out.[63] In particular, the symbolic politics theory cannot explain the policy variations of ethnic politics (Fearon and Laitin 2000). In other words, culture alone cannot explain the variation of ethnic conflicts (Grigorian and Kaufman 2007). For example, the Habyarimana government from 1973 to the mid-1980s did attempt to relax ethnic tensions between the Hutu and the Tutsi. One of the government measures was to assign 10% quota for the Tutsi

[63] The chauvinist mobilizations were evident before the Rwandan genocide in 1994 (Kaufman 2006b).

in civil service and education (Waller 1993; Newbury 1998; Andersen 2000). Effective or not, at least the official stance during this period was not chauvinistic. The Habyarimana government's rhetoric was that it represented " all rural country" (Newbury 1998, 15). That is to say, the symbolic politics theory does not undermine the strength of this research's theory in explaining the Rwanda civil war in 1990.

8.5 Summation

The historical analysis of Rwanda's structural adjustment programs in the 1990s demonstrates that ethnically-dominant countries like Rwanda would face bargaining disadvantage at the international level when negotiating with the IMF because the Fund would more likely insist on its first-order preference to satisfy its international creditor constituency when it faces a government which dominates at the domestic level. As a result it was difficult for the Hutu-dominant Habyarimana government to gain concessions from the Fund and the austerity measures prescribed by the SAP packages were stringent. The civil war in Rwanda broke out in October 1990, which was the last period of the SAP negotiations. That means the theory in this research may underestimate the effect of SAPs on the outbreak of civil war in ethnically-dominant countries because the rebel group RPF responded to the signal of negotiating SAPs, which revealed deteriorating capacity of the government, by launching preemptive attacks.

The grievances resulted from SAP implementation shows Tutsi's worries about persecution in the process of SAP implementation were warranted. While the theory explains the onset of Rwandan civil war in 1990 from perspectives of two-level game and economic grievances, the symbolic politics theory provide insights into the outbreak of civil

war by introducing the factors of ethnic myths, ethnic fears, and mass hostility. However, the strength of this research's theory in explaining Rwanda's civil war in 1990 is not undercut due to the weakness of the symbolic politics theory in explaining the timing of civil war and variations of ethnic policy.

Chapter 9

Structural Adjustment Programs, Ethnic Characteristics, and Armed Civil Conflict: Theoretical and Policy Implications

9.1 Contributions to Extant Research and Summary of Main Findings

This study examines the IMF SAP impact on armed civil conflict in borrowing countries. Extant research cannot explain the variation of IMF effects on armed civil conflict in recipient countries. Why does the implementation of IMF SAPs lead to armed civil conflict in some countries but not in others? To solve the puzzle this research contributes to the extant literature by taking the variations in recipient countries' characteristics, SAP conditionality, and implementation into account. These issues were raised by Steinwand and Stone (2008) in their review of SAP studies to propose a new research agenda. By doing so, this study makes the following theoretical and empirical contributions to extant research.

Theoretical Contributions

This research adopts a two-level game perspective to build the theoretical framework in answering the research question of why there are variations in the onset of armed civil conflict when borrowing countries negotiate and implement IMF SAPs. While extant literature focuses on the grievances resulted from IMF SAPs, it cannot explain why some countries experience the outbreak of armed civil conflict when implementing SAPs and others do not. This study provides a causal mechanism by illuminating the role played by the bargaining between the IMF and borrowing governments. It shows that both the IMF and recipient governments' preferences matter for SAP conditionality. The theory in this research argues that the impact of IMF SAPs on the outbreak of armed civil conflict

depends on the borrowing countries' ethnic characteristics. Ethnically fractionalized countries are more likely to get moderate conditionality from the IMF due to their domestic weakness and the austerity measures are more likely to be implemented across different ethnic groups, which will reduce relative deprivation resulted from SAPs. By contrast, ethnically dominant countries are more likely to get stringent conditionality from the IMF due to their domestic strength and ethnic minorities are more likely to disproportionately bear the costs of austerity measures. Hence the hypotheses in Chapter 3 predict that IMF SAPs will decrease the likelihood of armed civil conflict onset in highly ethnically fractionalized countries but increase the likelihood of armed civil conflict onset in highly ethnically dominant countries.

Empirical Contributions

One of the main weaknesses of previous research is the measurement of SAP implementation. The indicator of SAP years that was adopted in most research cannot fully capture the extent of SAP implementation. In this research I develop SAP indicators by using IMF materials (Letters of Intent, press release, program reviews, and the MONA database) to code SAP waivers and the scope of conditionality, which will reflect the extent of SAP implementation more accurately. I also further disintegrate SAP conditionality into structural, fiscal, and final conditions to see if the effects of SAPs vary across different conditions. Moreover, I employ three kinds of statistical models to examine the hypotheses. The two-stage model corrects for the possible selection bias when the IMF negotiates SAPs with the borrowing government. The bivariate probit model corrects for the potentially correlated binary outcomes. And the ivprobit model is used to address the endogeneity problem. All the improvements on the measurement of IMF SAPs and statistical models are

helpful in advancing our understanding of the relationship between IMF SAPs and armed civil conflict.

Main Findings

Of all the indicators coded to measure IMF SAPs in this research, the SAP implementation variable consistently gains statistical significance among all the three kinds of models. In Chapter 5, the statistical results confirm that SAP implementation decreases the likelihood of armed civil conflict onset in highly ethnically fractionalized countries. In Chapter 6, the empirical results support the second hypothesis that SAP implementation increases the probability of armed civil conflict onset in borrowing countries characterized by ethnic dominance. Furthermore, most of the SAP conditionality variables, except the fiscal condition variable, are also statistically significant. The finding on the variation of SAP effects across SAP conditionality is interesting. The reason for the insignificance of SAP fiscal conditions may be attributed to the difficulty in implementing fiscal policy to improve government revenues. Recipient governments only have limited resources to implement SAP policy. The most difficult part of the structural reform may not rank high in borrowing countries' order of preferences. Finally, the robustness checks that adopt the alternative variable SAP years confirm the statistical evidence.

In Chapters 7&8, historical analyses demonstrate how SAPs will bring different impact on countries with various ethnic characteristics. For highly ethnically fractionalized countries like Ghana, the Rawlings PNDC government was successful at negotiating a less stringent SAP package and gaining some autonomy when implementing SAPs. The SAPs were implemented based on flexible strategy and at a gradual pace. Therefore SAP implementation caused no direct grievances against the government. For highly ethnic

dominant countries like Rwanda, the Hutu-dominant Habyarimana government had to swallow the stringent conditionality attached to the structural adjustment programs after long and difficult negotiations with the Fund and Bank. The rebel group RPF responded to SAP negotiations, which sent a signal of deteriorating capacity of the government, by launching preemptive attacks. This means the theory in this research may underestimate the trigger effect of SAPs on armed civil conflict since the attack happened a few weeks before the implementation of SAPs.

9.2 Theoretical Implications for Future Research

This study demonstrates the importance of taking into consideration the preferences of IMF and recipient governments and variations in SAP implementation and conditionality in exploring the impact of IMF SAPs on the outbreak of armed civil conflict. More important, borrowing countries' domestic characteristics, in this study it is ethnicity, will influence the bargaining strength of recipient governments and how the governments implement SAPs. All of these factors will affect the likelihood of armed civil conflict onset.

The theoretical implication is that future research should further investigate the effects of recipient countries' domestic characteristics in the relationship between SAPs and armed civil conflict. A few other domestic factors could also affect the bargaining advantage of the borrowing government at the international level and how it will implement SAPs at the domestic level. For example, different regime types could vary in their bargaining advantage and implementation of SAPs. Democratic regimes and authoritarian regimes have different audience costs at the domestic level and thus would face different bargaining situations at the international level.

Furthermore, political systems could play a role in the interaction between IMF and borrowing government. For instance, the negotiation and implementation of SAPs would differ in parliamentary and presidential systems. Borrowing countries with different political systems would face different likelihoods of armed civil conflict onset when they implement SAPs. Parliamentarism is a system of "mutual dependence" because on the one hand the government needs the support of the parliament and on the other hand the chief executive of the government has the power to dismiss the parliament (Stepan and Skach 1993, 3). Therefore parliamentary systems may have bargaining advantage at the international level when they negotiate SAPs with the Fund. Additionally, parliamentarian governments are more inclusive than presidential governments (Lijphart 1994). It means the costs of austerity measures may be more evenly shared under parliamentary systems. As a result, parliamentary systems implementing SAPs may be less likely to experience armed civil conflict onset than presidential systems.

9.3 Policy Implications for IMF Structural Adjustment Programs

In January 2013, the Fund for the first time acknowledged that it underestimated the negative impact of austerity measures on economic growth when handling the Eurozone financial crisis because the underestimated fiscal multipliers led to forecast errors (Blanchard and Lieigh 2013).[64] Meanwhile, the Fund faces competition from the proposed BRICS (Brazil, Russia, India, China, and South Africa) Development Bank which was devised as an alternative to the IMF (Beniwal 2013). The findings of this research do not blame the IMF for the SAP effects on armed civil conflict onset because it is the recipient government which decides the way of implementing SAPs. Also, the first aim of attaching conditions to

[64] Also See the Guardian's report <IMF to 'Admit Mistakes' in Handling Greek Debt Crisis and Bailout> (Elliott and Smith (The Guardian) 2013).

SAPs is to prevent moral hazard (Vreeland 2003). However, the Fund could improve its policy planning for its structural adjustment programs to make austerity measures less prone to causing armed civil conflict in borrowing countries.

The key policy implication of this research is that recipient governments should gain some autonomy in determining the phases of implementing SAPs because local situations vary across countries. Local participation should be included in designing SAPs to make the programs more credible (Esman 2001). More important, a gradual pace is preferable for the implementation of SAPs, particularly in ethnically dominant countries. Ghana's experience shows that it is likely to reduce the outbreak of armed civil conflict when the recipient government gradually implements austerity measures and relieves the pain resulted from SAP conditionality by focusing on the disadvantaged groups. This research also shows SAP effects vary across different conditions. Thus "sequencing matters" because borrowing countries with a weak economy have less capacity for bearing the negative impact resulted from SAPs (Economist 2012b, 88). Reforms on different kinds of markets, such as product and labor markets, should be sequenced based on local preferences and conditions. Additionally, the Fund should not insist on unnecessary stringent conditionality. This is not to say the Fund should always disburse loans based on moderate conditionality. Nonetheless, some austerity measures in dealing with economic crises may be "panic-driven" and will cause unnecessary suffering in borrowing countries (De Grauwe and Ji 2013). If armed civil conflict breaks out in borrowing countries and the recipient governments are unable to repay the debt, the Fund could not satisfy its international constituency.

Last, the Fund should broaden its policy mindset by paying more attention to human development indicators rather than focusing narrowly on economic indicators such

as economic growth. For example, Bangladesh has made great achievements in improving the poor's welfare, although its economic growth has been stagnant. The central reason is the work of microfinance institutions and non-governmental organizations (NGOs) in empowering the poor (Economist 2012a). The Fund already emphasized the importance of social programs. But the amount committed to such programs is generally paltry compared to the whole SAP packages. It will benefit the recipient government's economy in the long term if the Fund increases financial support for the disadvantaged groups and pushes for more cooperation with NGOs in the future.

Appendix 1: Variables and Data Sources

The First-Stage Equation: Dependent Variable

Entering into SAP Agreement:
A dummy variable that is coded 1 if a country has entered into an SAP agreement in any given year or coded 0 if the country has not. Data is coded from IMF's online country information ((IMF 2013a), which includes Letters of Intent and press releases, and the MONA database (IMF 2013b).

The First-Stage Equation: Independent and Control Variables

GDP Growth:
Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregated are based on constant 2000 U.S. dollars. Data is adopted from the World Development Indicators (WDI) of the World Bank (World Bank 2013).

Trade Openness (log):
The sum of exports and imports of goods and services as a percentage in a country's GDP, log value. Data is adopted from the World Development Indicators (WDI) of the World Bank (World Bank 2013).

Inflation:
Consumer price index, annual percentage. Data is adopted from the World Development Indicators (WDI) of the World Bank (World Bank 2013).

External Debt:
Total external debt that are owned to nonresidents repayable in foreign currency, goods, or services as a percentage of Gross National Income (GNI). Data is adopted from the World Development Indicators (WDI) of the World Bank (World Bank 2013).

Democracy:
Regime type measured by Polity2, ranging from -10 (most authoritarian) to 10 (most democratic). The data is from the Polity IV database (Marshall, Gurr, and Jaggers 2010).

Presence of Armed Civil Conflict:
The incidence of armed civil conflict. It is coded 1 if there are any ongoing armed civil conflicts in a year or 0 without any conflicts. The data is from the Uppsala Conflict Data Program / Peace Research Institute of Oslo (UCDP/PRIO) (Gleditsch et al. 2002).

Legislative Fractionalization:
The probability that two deputies picked at random from the legislature will be from different political parties. The data is from the Database of Political Institutions (DPI) (Beck et al. 2001; Keefer and Stasavage 2003; Keefer 2010, 2012).

Political Constraint:
The number of independent branches of government (executive, lower and upper legislative chambers) with veto power over policy changes. The data is from the Political Constraint Index (POLCON) dataset (Henisz 2002).

The Second-Stage Equation: Dependent Variable

Onset of Armed Civil Conflict:
A dummy variable with 1 indicating the onset of armed civil conflict in each country-year and 0 indicating no occurrence of armed civil conflict. The data is from the UCDP/PRIO dataset (Gleditsch et al. 2002).

The Second-Stage Equation: Independent Variables

Interaction Terms between SAP Variables and Ethnic Variables:
There are ten interaction terms.

SAP Implementation:
The reverse of the counting of program waivers. Increasing number of waivers indicates the lack of program implementation. The variable ranges from -16 (no program implementation), -15 (program slippage or suspension), -14 (program delays), -13 (the maximum number of waivers), to 0 (full program implementation). The data is coded from the Fund's country information, which includes Letters of Intent, program reviews, staff reports, and press releases, and the MONA database (IMF 2013a, 2013b).

Number of SAP Conditions:
Total number of conditionalities attached to IMF SAPs. For countries entering into SAPs, the minimum conditions attached to the SAP is 6, and the maximum number is 53. The data is coded from the Fund's Letters of Intent (IMF 2013a).

SAP Structural Conditions:
Disaggregating the number of SAP conditions by counting the number of conditionalities attached to the structural reforms such as privatization and deregulation.

SAP Fiscal Conditions:
Disaggregating the number of SAP conditions by counting the number of conditionalities attached to the fiscal area such as reducing government debt and increasing revenues.

SAP Financial Conditions:
Disaggregating the number of SAP conditions by counting the number of conditionalities attached to the financial area such as financial sector reforms.

Ethnic Fractionalization:
The variable measures the "probability that two randomly drawn individuals in a country are from different ethno-linguistic groups" (Fearon and Laitin 2003, 78). The variable ranges

from 0.004 to 1. The data is from the Ethno-Linguistic Fractionalization (ELF) dataset (Fearon and Laitin 2003).

Ethnic Dominance:
The variable measures the "share of the population belonging to the largest ethnic group" (Fearon and Laitin 2003, 78). The variable ranges from 0.4% to 99.8%. The data is from the ELF dataset (Fearon and Laitin 2003).

The Second-Stage Equation: Control Variables

GDP per Capita (log):
Gross Domestic Product (GDP) divided by midyear population, log value, in constant 2000 U.S. dollars (World Bank 2013). The data is from the World Bank's WDI database.

GDP Growth:
Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars (World Bank 2013). The data is from the World Bank's WDI database.

Trade Openness (log):
The sum of exports and imports of goods and services as a percentage in a country's GDP, log value (World Bank 2013). The data is from the World Bank's WDI database.

Population Density:
People per square kilometers of land area. The variable is calculated by population/land. Indicators of population and land are all from the World Bank's WDI database (World Bank 2013).

Percent Mountainous Terrain (log):
Estimated percentage mountainous terrain, log value. The data is from Fearon and Laitin (2003).

Regime Durability:
The duration of the country being autocratic or democratic respectively. The data is from the DPI (Beck et al. 2001; Keefer and Stasavage 2003; Keefer 2010, 2012).

Democracy:
Regime type measured by Polity2, ranging from -10 (most authoritarian) to 10 (most democratic). The data is from the Polity IV database (Marshall, Gurr, and Jaggers 2010).

Democracy Squared:
Squared value of the variable Democracy (polity2).

Primary Commodity Exports:
GDP percentage of merchandise exports in food, fuel, and ores and metal exports. The variable is calculated from the WDI indicators (World Bank 2013).

Oil Exporter:
A dummy variable that is coded 1 when a country's export revenues from fuel exceed 1/3 of its total export. The data is from Fearon and Laitin (2003).

Instrumental Variable for SAP Implementation

Government Corruption:
An index ranges from 1 (very corrupt) to 10 (very clean). The data is from Transparency International's Corruption Perceptions Index (TI 2013).

Robustness Checks Variables

SAP Years:
The number of years that a country is under an IMF SAP. The data is coded from IMF's online country information (IMF 2013a).

ETHNICFRACAL:
Alternative measurement of ethnic fractionalization based mainly on languages to define ethnic groups. The data is from Fearon and Laitin (2003).

Ethnic Dominance (dummy):
Alternative measurement of ethnic dominance. A dummy variable coded 1 if one single ethno-linguistic group comprises 55% of the population or greater. The variable is calculated from data of Fearon and Laitin (2003).

Appendix 2: First Difference for the Significant Variables in the First Stage of the Two-Stage Selection Models: Factors Influencing SAP Initiation (Probit Regression), 1992-2009

	Model 5.1b (armed civil conflict incidence=0)	Model 5.1b (armed civil conflict incidence=1)
Economic and Financial Factors		
GDP growth	-.642***	-.592***
Trade openness (log)	-.111*	-.091*
External Debt	.243**	.215**
Political Factors		
Armed civil conflict Incidence	-.039*	-.039*
Democracy	.076*	.076*
Legislative fractionalization	.104**	.085**
Temporal Dependence		
Years since last SAP initiation	.888**	.884**

Note: The first difference is calculated by moving one independent variable from its minimum to maximum while holding all other independent variables constant at their means. The dummy variable, armed civil conflict incidence, is held at 0 (the left column) and 1 (the right column).

Appendix 3: First Difference of the Significant Control Variables in the Second Stage of the Two-Stage Selection Models

	Model 5.2b (oil =0)	Model 5.2b (oil =1)	Model 5.5a (oil =0)	Model 5.5a (oil=1)
SAP implementation	.079**	.226**		
SAP conditions			.290**	.486**
Ethnic fractionalization			.102***	.281***
GDP per capita (log)	-.039*	-.139*		
Trade openness (log)	-.057**	-.190**	-.053*	-.165**
Population density			.105**	.231**
Percent mountainous terrain (log)	.025*	.096*	.028*	.100*
Primary commodity exports			-.031*	-.119*
Oil exporter	.075***	.075***	.068***	.068***
IMF selection effects	-.045**	-.172**	-.049***	-.171***

Note: The first difference is calculated by moving one control variable from its minimum to maximum while holding all other variables constant at their means. The interaction variable is held at their means' product. The dummy variable, oil exporter, is held at 0 (the left column) and 1 (the right column).

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