AN ANALYSIS OF THE FEASIBILITY OF PEACE IN UGANDA

by

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B.Sc., Mount Allison University, 1998

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ABSTRACT

Post-war societies have a 40 percent chance of conflict onset directly following the war. This paper utilizes a post-war case study, Uganda, to analyse the future feasibility of war recurrence. An empirical model is applied to obtain a quantitative measure of the risk of war onset. The model is followed up with a qualitative study of alternative variables. Limitations of the quantitative and qualitative techniques applied were reduced through the combined analysis. The joint analysis allowed a comprehensive understanding of the root causes and sustainability of the civil war, and highlighted variables in post-war Uganda that would impact the feasibility of war. The feasibility hypothesis of this paper was confirmed: the risk of war onset in present day Uganda is high. War recurrence is not inevitable; however, policy and development programmes must be tailored to increase the feasibility of peace in Uganda.

Keywords: Civil War; Collier; Uganda; Lord Resistance Army.
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<th>Description</th>
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<tbody>
<tr>
<td>CH</td>
<td>Collier-Hoefflier</td>
</tr>
<tr>
<td>CAR</td>
<td>Central African Republic</td>
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<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
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<td>FPA</td>
<td>Final Peace Agreement</td>
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<td>ICC</td>
<td>International Criminal Court</td>
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<tr>
<td>IDP</td>
<td>Internally Displaced People</td>
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<tr>
<td>LRA</td>
<td>Lord Resistance Army</td>
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<tr>
<td>NRA</td>
<td>National Resistance Army</td>
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<tr>
<td>OLT</td>
<td>Operation Lighting Thunder</td>
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<tr>
<td>PCE</td>
<td>Primary Commodity Exports</td>
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<tr>
<td>PRDP</td>
<td>Peace, Recovery and Development Plan</td>
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<tr>
<td>SWAY</td>
<td>Survey of War Affected Youth</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNLA</td>
<td>Uganda National Liberation Army</td>
</tr>
<tr>
<td>UPDA</td>
<td>Uganda Peoples Democratic Army</td>
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1: INTRODUCTION

Since 1945, more than 20 million lives have been lost and 67 million people displaced because of civil war (Sambanis 2004, 259). Over the past 60 years, civil wars have been more damaging, longer lasting and more frequent than international wars (Collier 2009, 1). Human suffering resulting from war is magnified by the onslaught of disease, famine and internally displaced people; however, the greatest tragedy of war is the loss of life. Widespread destruction of post-war economies has seen: the degradation of physical, human and social capital, the collapse of economic growth and the flight of capital, increases in unemployment and illegal economies, the weakening of institutions and the decreased capacity of the state (Ohiorhenuan and Stewart 2008, xl). In addition to the economic destruction, pre-war grievances are often exacerbated during the conflict and perceived injustices are intensified. This paper will utilize Uganda as a case study to emphasize the volatility of post-war societies.

Since independence in 1962, Uganda has been no stranger to violent conflicts. The most recent civil war lasted for two decades, ending in 2006 (Blattman and Annan 2009, 106). The war was fought between the Ugandan government and the Lord Resistance Army (LRA) rebel group. Signs of peace are now evident in Uganda – for example, large percentages of displaced people have returned to their villages and children have stopped commuting to urban centres at night to avoid abduction, referred to as ‘night commuting’.
Nevertheless, people remain wary of peace, as war by its very nature creates conditions for vicious cycles of violence.

It is crucial that preventing the recurrence of war become a top priority for key stakeholders concerned with development in post-war societies. Post-war Uganda is volatile due to the complexity of the issues the society is trying to address. Policy and programme regimes must be designed and tailored to Uganda’s unique conflict legacies. It is internationally accepted that the LRA is a ruthless and criminal rebel group (Allen 2005). It is essential that the Ugandan government and international actors be committed to the eradication of the LRA – their camps, top commanders and military arms. This focus must be combined with the reintegration and rehabilitation of ex-combatants and internally displaced people (IDP). In addition, economic recovery and the reduction of regional and intra-regional inequalities must be a high priority. Even if significant advances occur in post-war development, it does not eliminate the risk of war recurrence in Uganda. Post-war societies have extraordinary constraints resulting from the conflict and are more vulnerable than countries that have experienced extended peace.

The aim of this paper is to determine the future feasibility of war in Uganda. Vicious cycles of violence are central to the core hypothesis of this paper. Due to economic factors and perceived inequalities, the recurrence of war is hypothesised to be high in present day Uganda. During the analysis, the root causes of the war will be highlighted, the sequence of events that prolonged the war will be detailed and the negative spin-offs that resulted from the war will
be clarified. The literature on civil war and its relevance to Uganda will be examined, including the most significant and competing schools of thought: greed versus grievance. Economic factors (i.e. greed) and perceived inequalities (i.e. grievance) are the most significant variables in post-war Uganda and they are the two distinct and opposing ideologies in the literature on civil war. The purpose of this paper is not to join the greed versus grievance debate. However, the methodology of this paper will utilize both schools of thought.

A well known empirical model will be analysed and the results combined with alternative variables, independent of the model, to analyse the feasibility of war in Uganda. This analysis will demonstrate that greed and grievances are interrelated and often reinforce each other, resulting in confirmation of the hypothesis of this paper: that the feasibility of war in present day Uganda is high.
2: OVERVIEW

Uganda is an ideal case to examine the feasibility of war in a post-war society. It was selected based on its violent history, the recent termination of its civil war, the type and scale of that war and the very real potential for the wars recurrence.

2.1 Background

Uganda has a population of 32,709,865 people. It has the youngest population in the world, with 50% under the age of 14 (World Bank 2009). Its developmental indicators are amongst the worst in the world: the human development index ranks Uganda 157th out of 182 countries, and the human poverty index ranks Uganda 91st out of 135 countries (Human Development Report 2009, 145, 179). At the same time, Uganda has been experiencing unprecedented growth for the past twenty years; economic reforms and political stability in southern Uganda have been credited with this success (Toft 2010, 96-113). This growth has not been equally distributed, as the south is significantly more developed and prosperous than the north. In addition to historical inequitable divisions favouring the south, it has also benefited from peace, better infrastructure and higher productive agriculture over the past 20 years (Lake and Eads 2009).
Ethnic divisions have characterized violence in the past. Ethnically diverse, Uganda has over 10 minority tribes. The Acholi tribe, located in northern Uganda, is the seventh largest ethnicity, representing 4.7% of the population (World Factbook 2010, under "people"). The Acholi people have been the predominant victims of the civil war. They have been disproportionately targeted by the LRA and have suffered large-scale abductions and massacres. As a result, the Acholi people account for the largest percentage of people living in IDP camps.

2.2 Historical Context

Uganda was colonised by the British in 1894 and remained a colony until independence in 1962. The highest priority was the formation of an effective administration that could levy tax to offset the financial cost of colonial rule (Byrnes 1992, under “colonial era”). Indirect rule was the colonial political strategy for Uganda and this necessitated the collaboration with a Ugandan liaison (Tuck 2006, 245). The Buganda kingdom, located in southern Uganda, was the largest and most prosperous kingdom prior to colonization (Toft 2010, 99). It was an obvious choice for a liaison relationship with Britain. The British, with limited manpower, took full advantage of the pre-colonial superiority of Buganda and collaborated with the chiefs of the kingdom. In exchange for their alliance and support, the chiefs were designated as tax collectors and held jobs in the colonial administration. The British introduced cash crops, specifically cotton, and the dominant Buganda territory disproportionally reaped the economic benefits. The British sought to balance Buganda power by
establishing the government’s military force in the north (Byrnes 1992, under “colonial era”). In 1958, five years prior to independence, it was reported that Buganda and the eastern province were responsible for roughly 80 percent of the country’s gross income (Toft 2010, 99). This north-south division persisted after independence, creating a unique situation of a dominant military sector in the north and an economically powerful south. The colonial legacy of economic and political inequality should not be understated; it set the stage for turmoil and political unrest that has continued into the new millennium.

Scholars typically argue that Uganda’s violent past is due to ethnic and regional competition for political control of the state (Toft 2010, 98). Post-independence politics in Uganda has been dominated by the growing tension between the south and the north, resulting in politically motivated violence. There has not been a single peaceful transition of power since independence. The first Prime Minister, Milton Obote, was ousted by Idi Amin in 1971. The Amin regime from 1971 to 1979 was particularly barbaric. It is estimated that 300,000 lives were lost under Amin’s rule. The predominant targets for violence were focused in northern Uganda, specifically the Acholi tribe (Toft 2010, 96-113). Forced removal of political regimes would continue until the last successful coup d’état in 1986, when Yoweri Museveni ousted Okello Lutwa. Museveni remains in power today.

Initially the north was made subservient to the south by colonial rule. Subsequently, the people of the north were victims of massacres and brutality by the Amin regime and most recently suffered barbaric atrocities at the hands of
The LRA (Toft 2010, 108-109). The LRA has created unimaginable terror, including massacres, mutilation, rape, abduction, and looting in northern Uganda. It is also indirectly responsible for the internal displacement of millions of Ugandans, with the main victim being the Acholi tribe.

### 2.3 History of the LRA

The roots of the LRA and Joseph Kony, the leader of the LRA, can be traced back to the last coup d’état in 1986. In 1986, the north went from political and military power under Okello to losing all power under Museveni. The previous military, the Uganda National Liberation Army (UNLA), was comprised of an Acholi majority. From historical experience with the Amin regime, the Acholi were fearful of the new regime. As a result, the UNLA fled into southern Sudan when Museveni took power. In March 1986, with the common goal of reclaiming power of Uganda, the exiled UNLA and other rebel groups joined forces in Sudan to form the Uganda People’s Democratic Army (UPDA). But by early 1989, because of defeats, demoralization and an offer of amnesty by the new government’s army, the National Resistance Army (NRA), the UPDA was disbanded. Despite the fall of the UPDA, there were several key players who refused to lay down arms and instead retreated to southern Sudan where they would later join forces with Joseph Kony. Kony, combined with a growing supply of soldiers, began the rebellion that would last for the next 20 years (Doom and Vlassenroot 1999, 13-16).

The LRA has proven to be a very ruthless and resilient army. Throughout the last civil war, voluntarily recruited soldiers were extremely rare. It is
estimated that 60,000 youth were abducted to fill out the ranks of the LRA from 1995 to 2004 (Blattman and Annan 2009, 106). The LRA is effectively an army of children. Once abducted, cruel forms of indoctrination followed and many children were forced to bear arms and commit murder. To ostracise abductees and to decrease the likelihood of escape, many children were forced to commit violent crimes against their own families, friends and community members. Brainwashing tactics such as spiritual ceremonies were performed and Kony was portrayed as having spiritual powers. Kony defined himself as a spiritual leader and argued that he was reinforcing the Ten Commandments at a time of crisis in Uganda (Doom and Vlassenroot 1999, 23). Every form of coercion that would transform abductees into rebels was used by the LRA, likely explaining their resilience.

A statement by Keen, a scholar in the civil war literature, depicts the evolution of the LRA perfectly, “increasingly, civil wars that appear to have begun with political aims have mutated into conflicts in which short-term economic benefits are paramount” (Keen 1998, 12). Initially, the LRA’s goals were to be victorious in toppling Museveni and regaining political power. Although the LRA, now fighting outside the Ugandan border, still claims to support these political agendas, their actions say otherwise (Harbom and Wallensteen 2010, 503). The LRA is more likely to be fighting for survival.
3: LITERATURE REVIEW

The sustainability and root causes of civil war are heavily debated topics in the literature on armed conflict. The two distinct positions with which many scholars align are the greed and grievance explanations. On the one hand, the rational choice school of thought sees people as making decisions based on calculated cost and benefits. In armed conflict terms, if it is economically rational to join a rebel group it is perceived as a better alternative than not joining. On the other hand, the political economy school of thought argues that people are motivated to rebel by socio-economic and political inequalities. The motivation to join a rebellion is increased if people perceive the inequality to be severe enough that change is necessary. The methodology is also different between the two positions. The greed position is often the product of quantitative statistical analyses. For example, economic incentives can proxy measurable values, such as Gross Domestic Product (GDP), and can therefore be statistically analysed. The grievance position is often the product of social qualitative analyses. Grievance-based scholars argue that social relations are difficult to proxy and fragmentation indices used in empirical models, such as an ethno-linguistic index, fail to capture reality and variation (Cramer 2002, 1845).

Historically, the grievance explanation had dominated the civil war literature. However, the perspective role of economic incentives in armed conflict catalyzed new research and by the late 1990s greed theory was gaining
momentum. Rational choice theory scholars like Hirshleifer (1994) and Grossman (1991) pioneered research on conflicts in the early 1990’s. Keen (1997, 67) contributed to the growing literature in 1997 arguing that war is not ‘simply about winning’, but that economic costs and benefits of conflict are evaluated and the decision to participate is a rational choice.

Paul Collier and Anke Hoeffler’s work has had an immeasurable effect on the civil war literature (Collier & Hoeffler, 1998, 2004; Collier, Hoeffler & Rohner, 2009). Their work is heavily referenced and has propelled the greed explanation to the forefront of the debate. Their work has been controversial and criticized, yet has been credited with stimulating a plethora of new research in the literature. Collier and Hoeffler’s conclusions were unequivocal and direct: “... grievance-based explanations of civil war are so seriously wrong” (Collier 2000, 96). Their position was strengthened by Fearon and Laitin’s (2003, 75) assertion that socio-economic and political inequalities are too common to distinguish them as the causes of civil war. Many scholars align themselves to an ‘either-or’ position regarding the ‘greed versus grievance’ debate.

In reaction to the greed position, new grievance-based research emerged. The objective of much of the new research was to dispel greed scholars’ conclusions, predominately those of Collier and Hoeffler, and to reassert the role of the grievance-based explanations and to define how inequality mattered (Cramer, 2003; Stewart 2000). Grievance-based scholars, such as Cramer (2002), Stewart (2000) and Ellingsen (2000), argue that inequalities remain a significant factor for the onset of civil war. Common circumstances unite
insurgent groups – including ethnicity, religion, language, class and geographical divisions – providing the framework for group identity and collective action. Economic incentives are not discredited in the literature; however, the extent and impact of the role of economic incentives in war is challenged. Cramer (2003) argues that proxies used in empirical applications are unsatisfactory for the proposed behaviour. He states, “... rational choice theories of conflict typically lay waste to specificity and contingency, that they sack the social and that even in their individualism they violate the complexity of individual motivation, razing the individual down to monolithic maximizing agents” (Cramer 2002, 1846). Stewart (2000) argues that horizontal inequalities provide the basis for inter-group animosity and that inequalities among political, economic and social groups create the foundation for civil wars. Ellingsen (2000) sees multiethnicity as a significant factor in intra-country conflict and concludes that a country’s political regime and socio-economic level are important factors in predicting conflict. Furthermore, Cramer (2003) argues that economic inequality is an important factor in explaining conflict, although he emphasizes that it is not so much the extent but the kind of inequality that matters. Case studies have been used as a tool for many scholars; Cramer (2003, 408) analysed the root causes of conflict in Rwanda and concluded: “highly specific forms of inequality were central to Rwanda’s horrific recent history”.

The greed versus grievance polarization has served a functional purpose of sharpening the debate and encouraging new research. However, the analysis of this paper will show that “the conceptual distinction between greed and
grievance is not in fact terribly useful, either in explaining the motivation or persistence of civil wars” (Berdal 2005, 689). This paper is strengthened by the analysis of greed and grievance variables in the future feasibility of war in Uganda.
4: THEORETICAL CONTEXT

There is an extensive collection of theoretical work produced on civil war. Some of the most renowned are Paul Collier and Anke Hoeffler’s empirical studies of civil wars. The role of economic incentives in armed conflict was relatively new in the late 1990’s and Collier and Hoeffler’s work was very controversial. Previously, the civil war literature was dominated by political science and its grievance-based explanations. Collier and Hoeffler published the first version of the Collier-Hoeffler (CH) model in 1998, followed by a second in 2004 and the latest in 2009 (Collier & Hoeffler, 1998, 2004; Collier, Hoeffler, & Rohner, 2009). Their work has evolved significantly over the past 10 years. The evolution is attributed to advances in available data and the need to respond to criticisms of the model. In addition, incremental five-year periods were added to each successive model.

4.1 Economic Models

Collier and Hoeffler’s 1998 paper, ‘On Economic Causes of Civil War’, set the foundation for the follow-up models. The paper focused on investigating whether economic variables play a role in civil war. The model consisted of four independent variables – per capita income, primary commodity exports, ethno-linguistic fractionalization and population. The dependent variable was a combined measure of war onset and duration. The economic variables measured the opportunity cost of a rebellion and were found to be statistically
significant. However, the most interesting result was the statistical insignificance of the ethno-linguistic variable, long thought to be conflict-enhancing by economists and political scientists alike. The insignificant results of ethno-linguistic fractionalization challenged the most commonly believed root cause of civil war in the literature.

‘Greed and Grievance in Civil War’ (2004) was the follow-up paper. The quality and quantity of the data were improved and new variables were added. Duration was eliminated from the dependent variable because new research (Collier and Hoeffler 2004, 564) indicated that the onset of war is determined by different variables than the duration of war. The focus evolved from investigating the role of economic incentives in armed conflict to defining the motivation for rebellion. Collier and Hoeffler separated the variables that proxy greed from the variables that proxy grievances. They concluded that rebellions are motivated greater by greed over grievance explanations.

In response to criticism and to advance their work further, Collier, Hoeffler and Rohner (2009) published the latest version of the model, ‘Beyond Greed and Grievance: Feasibility and Civil War’ in 2009. Their work evolved from defining the motivation to focusing on the feasibility of a rebellion, arriving at their ‘feasibility hypothesis: that where a rebellion is feasible it will occur’ (Collier, Hoeffler and Rohner2009, 2). The new model extended the scope of civil wars examined from 1995-1999 to 2000-2004. Along with previously analysed variables, three new variables were introduced: geography, the proportion of young men in the population and former French African colonization. Collier
Hoeffler and Rohner (2009) acknowledge that trigger events and leadership have not been considered; however, a wide variety of political, sociological, geographical and historical variables are accounted for and systematically deleted if found insignificant.

The CH model (2009) will be used in the analysis of the feasibility of war in Uganda. The variables tested in the model are expanded on below. The model includes three economic variables, five historical and polity variables, and four social composition variables.

The economic variables are: *GDP per capita, growth of GDP per capita and primary commodity exports* (PCE). *GDP per capita* is a proxy for the opportunity cost of a rebellion; a lower level of national income is expected to result in an increased risk of civil war. *Growth of GDP per capita* is a proxy for the opportunity cost for rebel recruitment, growth implies job creation and is expected to increase the opportunity cost of rebelling and decrease the risk of civil war. *Primary commodity exports* is a proxy for a country’s richness in natural resources. A rise in exports is expected to increase the opportunity for rebel predation of resources, which will increase the financial security of the rebel group\(^1\).

The historical and polity variables are: *democracy, post-cold war, peace, previous war and former French African colony*. *Democracy* is a proxy for the

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\(^1\) There is an inverted U-shaped relationship between PCE and conflict. The CH model results show that PCE risk of dependences peaks at 25% of GDP and because of the U-shaped relationship, the risk decreases if the percentage fluctuates from the 25% peak. To capture this relationship, the square of PCE was added as a variable and found to be negative and significant.
extent of political rights. It is measured by the Polity IV dataset, an index that ranges from 0 (autocratic) to 10 (fully democratic). Democracy was found insignificant and eliminated from the core model. Post-cold war is a proxy for the effect the end of the cold war had on global conflicts. It is measured as a binary variable that recorded 0 (from 1965 to 1990) and 1 (for 1995 and 2000). Post-cold war was found insignificant and eliminated from the core model. Peace is a proxy for the legacy of war effects. It is measured by the number of years since the end of the last civil war. Previous war is a proxy for any unobserved fixed effect that might have precipitated the initial war. It is measured as a dummy variable and was found insignificant and eliminated from the core model. Former French African colony is a proxy for an external de-facto security guarantee. Military feasibility is expected to increase in countries with no security guarantee. It is measured as a binary variable that recorded 0 (for non French African colonies) and 1 (for French African colonies).

The social composition variables are: proportion of young men, population, geography and social fractionalization. Proportion of young men is a proxy for the availability of potential recruits. Young men are disproportionally the targets of rebel recruitment – a prime example of this is the recruitment tactics of the LRA. It is measured as a proportion of young men aged 15 to 29 years in the total population. An increased military feasibility is correlated with a higher proportion of young men. A Population rise is expected to increase the risk of conflict. The CH model found small marginal effects of population increases to the risk of civil war. These results are most easily interpreted as
economies of scale in basic functions of the state, such as security. It is measured as a natural logarithm of the total population. Geography is a proxy for a safe haven for rebel forces and is measured by the proportion of a country’s terrain that is mountainous. The hypothesis is that higher percentages of mountainous terrain result in increased risks of military feasibility. Social fractionalization is a proxy for ethnic and religious diversity. It combines the ethno-linguistic fractionalization index and the religious fractionalization index to capture the possible cross-cutting of ethnic and religious diversity. 2 Collier and Hoeffler’s previous paper (2004) found ethnic fractionalization to have ambiguous effects; however, the model (2009) now shows social fractionalization to significantly increase the risk of conflict. The authors tested additional variables outside the core model, but found that “none of the measures of inequality were significant” (Collier, Hoeffler and Rohner 2009, 16).

4.2 Critiques of Model

The latest CH model was published in 2009 and has yet to receive feedback in the literature. Nevertheless, an evaluation of the model (2009) will be attempted during the analysis of this paper. The critiques of the previous models (1998 and 2004) will also be detailed and addressed.

The most significant criticism of the CH model is related to ambiguous interpretations of the proxies used (Fearon and Laitin 2003; Cramer 2002). The CH model’s proxies were argued to have more than one interpretation, and were therefore empirically and conceptually fragile. For example, Fearon and Laitin

2 Collier and Hoeffler’s core model is detailed in Appendix A
(2003) agreed with Collier and Hoeffler’s results regarding the insignificance of inequality on the onset of civil war; however, they did not agree that an economic variable, such as GDP per capita, could proxy for an opportunity for building a rebel organization (Fearon and Laitin, 76). Instead, Fearon and Laitin (2003) argued that per capita income is a better proxy for state administration, military and police capabilities. Ambiguous interpretations of proxies will lead to different and possibly conflicting policy recommendations. Collier, Hoeffler and Rohner (2009) have attempted to address the ambiguous interpretations with the addition of three new variables – former French African colony, proportion of young men and geography. They argue that the new variables are most readily interpreted as feasibility (Collier, Hoeffler and Rohner 2009, 22).

A second criticism is the omission of political, cultural and strategic factors from the CH model (Cramer 2002). It is argued that the ethno-linguistic index used to proxy social fragmentation is static and it fails to capture reality and variations (Cramer 2002, 1845). However, from the first version of the CH model, Collier and Hoeffler have not wavered in their conclusion that grievances based on inequality were insignificant. The analysis of this paper will indicate that political, cultural and strategic factors are relevant to the civil war in Uganda and therefore disagree with Collier, Hoeffler and Rohner’s conclusion that grievances based on inequality are insignificant. A further criticism is the dependent variable and the difficulties in coding civil war onset and termination (Sambanis 2005, 374). In the case study of Uganda, certain time-periods are coded as ‘no war’ by the CH dataset. At the same time, the CH model indicates
a high predicted probability of war. Sambanis argues that the predictive accuracy of the CH model is reduced by measurement errors in the dependent variable (Sambanis 2005, 304). The Ugandan case study indicates this criticism is still valid in the 2009 CH model.

A final criticism, the one identified through the analysis of this paper, is the use of country data instead of region specific data. The latest civil war in Uganda has occurred predominantly in northern Uganda; however, the CH model uses only national data. The use of national data in a country experiencing a regionalized war with high political, economic and social inequalities has resulted in significant discrepancies between the CH model predictions and the actual conflict history in Uganda.

For the case study of Uganda, the use of country data and the irrelevance placed on grievance-based variables are the most significant concerns with using the CH model to determine the future feasibility of war in Uganda. The detailed description of the actual conflict dynamics and the addition of the alternative variables will reduced these concerns. Instead of sole reliance on the CH model for the feasibility of war in Uganda, the model is used as a tool to conduct the analysis.
5: METHODOLOGY

The hypothesis concerns the feasibility of civil war in Uganda. A combination of quantitative and qualitative methodologies will be used to analyse Uganda’s position. The foundation of the paper is an empirical analysis of a cross-country economic model. An analysis of alternative variables will build on and reinforce the empirical model. A case study of Uganda and primary and secondary literature sources will be used to analyse the alternative variables. The methodology will be divided up into two sections: The Collier-Hoeffler model section and the alternative variables section.

The latest version of the CH model, ‘Beyond Greed and Grievances’ (Collier, Hoeffler, and Rohner 2009), will be used to carry out the empirical analysis. The model’s dependent variable is civil war onset over a five-year period. Civil war onset is coded as a binary variable (‘0’ for no war and ‘1’ for war). The risk is analysed by using a logit regression resulting in a predicted probability. The war onset data are extracted from the updated versions of the Correlates of War project and the Armed Conflict Dataset (Gleditsch 2004; Harbom and Wallensteen 2010). The Correlates of War definition is based on four characteristics: 1000 battle deaths in a given year, organized military action, active involvement of the national government and effective resistance (Gleditsch 2004, 231-236). The latest revision of the Correlates of War dataset covers up to 2001, while the most recent Armed Conflict Dataset covers from 2002 to 2009.
The Armed Conflict Dataset is classified based on number of deaths and timeframes. The three categories are: ‘minor’ (greater than 25 battle deaths a year); ‘intermediate’ (greater than 25 battle deaths a year and a total conflict history of 1000 battle deaths); and ‘war’ (greater than 1000 battle deaths a year) (Gleditsch et al. 2002, 619). An onset of war was recorded in the CH model only if the Armed Conflict Dataset categorized an event as a ‘war’; therefore, no war was coded for ‘intermediate’ and ‘minor’ categorizations.

The CH model uses a global dataset to examine the probability for a country to experience war onset in five-year periods from 1965-1969 to 2000-2004. The Uganda data will be extracted from the model and used to get a predicted probability for risk of war onset for five-year periods from 1985 to 2004. The CH model is only extended to 2004; therefore, five-year periods after 2004, 2005-2009 and 2009-2013, will be out-of-sample predictions. Data for the five-year periods after 2004 will be collected from the same reference sources as the CH model. Out-of-sample predictions are necessary because the hypothesis of this paper is centred on the feasibility of war in present day Uganda. It is possible to use 2009-2013 as a five-year period because of the methodology employed by the CH model and the assumption that values from 2009 would not significantly vary from 2010. Firstly, the CH model, to reduce problems of endogeneity, uses the values from the first year of the five-year period to calculate the predicted probability for that period³. For example, the model uses values from 1985 to obtain a predicted probability of war onset from 1985-1989.

³ Growth of GDP per capita is the exception: it uses the average of the five-year period prior to the new time-period, which still allows for the inclusion of 2009-2013.
Therefore, it is assumed that the integrity can remain intact, even though 2013 is in the future. Secondly, 2010-2014 aligns with the time-period framework of the CH model; however, the latest data available are for 2009. It is assumed that the predicted probability for 2009-2013 will not vary significantly from that for 2010-2014. This prediction is justified by comparing the results for 2008-2012 to 2009-2013. The predicted probability of war onset for 2008-2012 is 48.2%, only 1.2% higher than 2009-2013.

The empirical analysis will be divided into three subsections: 1985-2004 – the period that coincides with the civil war in Uganda; 2005-2009 – the period that coincides with many peace milestones in Uganda; and 2009-2013 – the period that coincides with the latest data available. The predicted probabilities for each period will be evaluated against the actual conflict dynamics. The dependent variable will also be compared to the model’s predicted probability for each time-period. Any discrepancies will be highlighted and examined further.

The predicted probability for 2009-2013 will be used as a platform for the analysis of the alternative variables section. Through a review of primary and secondary sources on Uganda, key alternative variables, independent of the model, were identified. These variables are: terms of peace, regional and intra-regional inequalities, the activity of the LRA, developments in neighbouring countries and property rights. The relationship of these variables in post-war Uganda will be considered and their impact on the feasibility of war qualitatively evaluated.
6: ANALYSIS

Significant peace milestones have been reached in northern Uganda over the past four years. This has occurred despite the fact that the political, economic and social climate is extremely volatile. Post-war reconstruction is universally difficult and many of Uganda’s challenges are not unique. However, the post-war environment in Uganda is unique, and its policies must be tailored to its specific dynamics. It is crucial that all actors involved in post-war reconstruction understand the full dynamics of the war – before, during and after – so their actions and policies are effective and ultimately create an environment of sustainable peace (Ohiorhenuan and Stewart 2008, xvii-xix).

The political, economic and social climate in Uganda will be analysed and compared to the theoretically significant variables of the CH model. Together, they will attempt to answer the research question: is war feasible in Uganda? At the same time, the analysis will show how the CH model and the alternative variables are interrelated, and how together they enhance the understanding of the dynamics of war and peace in Uganda.

6.1 Empirical Strategy

The empirical strategy employed in this paper is based on the latest version of the CH model (Collier, Hoeffler, and Rohner 2009). In the literature, the exact start date of the civil war between the LRA and the Ugandan
government is ambiguous. This is just one of the many challenges associated with statistical data on civil wars. The majority of the literature references 1986/1987 as the period when violence between the LRA and the Ugandan government began (Doom and Vlassenroot 1999, 22; Van Acker 2004, 337). However, it is imperative for an economic model to have structured and unbiased data for the dependent variable. The Correlates of War dataset has identified the occurrences of civil war in Uganda as: 1966, 1980-1988, 1996-2001 (Collier, Hoefler and Rohner 2009, 7). The Armed Conflict Dataset has identified civil war in Uganda from 2002 to 2009 as: 2002-2003 ‘intermediate’ (Gleditsch et al. 2002, 634), 2004 ‘war’ (Harbom and Wallensteen 2005, 633), 2005 ‘intermediate’ (Hogbladh, Harbom, and Wallensteen 2006, 629) and 2006-2009 as ‘minor’ (Harbom and Wallensteen 2010, 507). Therefore, 2004 is the only year that the CH model classified a war onset from 2002 to 2009.

6.1.1 1985-2004

This section will focus on five-year periods from 1985 to 2004. This time-period corresponds to the closest five-year periods that coincide with the civil war between the LRA and the Ugandan government. With the benefit of history, the predicted probabilities can be compared to the actual conflict recorded. In addition, the case study enables the sequence of political, social and economic events over time to be analysed against the variables in the CH model.

4 Initially the armed conflict dataset did not classify 2008 at all. The 2009 update changed the 2008 classification to ‘minor’.
Since independence in 1962, Uganda has been riddled with coup d’états, barbaric regimes and massive political and social unrest. The coup d’état in January 1986 saw the NRA under Museveni take control of Kampala, marking a political and economic turning point for Uganda. Unfortunately, this era of peace and economic development was concentrated in the south, while civil war has continued to plague the north (Toft 2010, 96-113). The inequalities between the north and the south and the regionalization of the civil war emphasize the need for region-specific data and analysis. The CH model’s predicted probability for the risk of war onset for the time-periods of 1985-1989, 1990-1994, 1995-1999 and 2000-2004 are 64.9%, 57.9%, 44.0% and 39.6%, respectively. This decrease is due, in large part, to the economic growth of the south. This is reflected in the two economic variables in the model – GDP per capita and growth of GDP per capita. Ironically, the highest probabilities during these time-periods correspond with calmer times in northern Uganda and the lower probabilities with escalated violence there (Jackson 2002, 40-45).

The war was in its infancy in 1986/1987; Kony and the LRA were involved in small-scale violence, but were relatively unsuccessful in any real offensive. In 1991, the Ugandan government mounted a successful counter-insurgence called ‘Operation North’. The counter-insurgency, combined with declining local support, produced the perfect opportunity to end the violence; however this opportunity was missed. The Ugandan government changed its policy regarding Operation North resulting in a weakened but not eliminated LRA. Regardless of the missed opportunity, there was a reduction in violence throughout 1992 and
1993 and this gave an illusion of peace to northerners. This illusion was not unwarranted as peace talks had taken place, and if it were not for the financial and military support of the Sudanese government for the LRA, peace would have likely been a reality. In 1994, the government of Sudan allocated territory for the LRA to set up base camps, located strategically near the border of Uganda. It also provided military arms, supplies and training. Sudan’s support for the LRA was in response to the Ugandan government’s financial and military support for the Sudan People’s Liberation Army (SPLA), a rebel group from southern Sudan fighting the Sudanese government. Simultaneous to the support by the Sudanese government, the government of Uganda gave the LRA an ultimatum to disarm or face retaliation. The support of Sudan and the Ugandan government's ultimatum resulted in discontinued peace talks. The LRA retaliated; a tactic that would become a trademark response to unsuccessful military offensives, and a new phase of the war ensued. Massacres of an unprecedented scale were carried out and random and violent abductions escalated and became the main source of recruitment. The Acholi tribe were now the disproportionate target of the violence (Jackson 2002, 29-52).

As the millennium approached, the war continued. This period was marked by increased action by the Ugandan government, greater global awareness and renewed international commitments. In 1999, the governments of Uganda and Sudan signed the Nairobi Agreement; they each agreed to sever ties with the rival rebel movements (Jackson 2002, 43-44). The extent to which this took place is questionable (Toft 2010, 96). In 2000, to lure abducted rebels
out of the bush and weaken the LRA, the Ugandan government offered amnesty to all LRA fighters who were not top commanders. In 2002, with permission from Sudan, Uganda launched a military offensive, dubbed ‘Operation Iron Fist’, against the LRA. Operation Iron Fist’s goal was to capture and destroy the LRA and base camps in southern Sudan. The LRA retaliated with escalated violence (Angucia 2009).

The war started to gain much-needed global awareness because of the scale and type of violence inflicted by the LRA, the long duration of the war and the work of humanitarian organizations, such as Invisible Children and Resolve Uganda. Museveni requested the International Criminal Court (ICC) to investigate Kony and the LRA top commanders for crimes against humanity (Allen 2005, ii). Museveni’s unprecedented move in 2003 highlighted the need for international help.

The actual history of the conflict from 1985 to 2004, described above, will now be compared with the results of the CH model. The LRA’s escalation of violence in the mid 1990’s is inversely related to a predicted probability decrease of 13.7% – from 57.9% in 1990-1994 to 44% in 1995-1999. The decreased probability makes sense in relation to the model; the GDP per capita grew by 15.8% – from $181 in 1990 to $215 in 1995 – and the last war onset was coded for 1988 (World Bank 2009; Collier, Hoeffler and Rohner 2009, 7). However, the models’ results were not indicative of the actual environment in northern Uganda during that time. Massacres, thousands of abductions and tens of thousands of internally displaced people were the on-the-ground realities (Ehrenreich 1997, 2-
An increased predicted probability would be expected as violence escalated with the start of the new millennium. Despite the expected increase, the predicted probability decreased by 4.4% – from 44.0% in 1995-1999 to 39.6% in 2000-2004.

The CH model’s predicted probability decreased by 25.3% during the 20 years that coincided with the war – from 64.9% in 1985-1989 to 39.6% in 2000 – as shown below in Figure 6.1. At the same time, the violence in northern Uganda increased consistently from 1985 to 2004. The deadliest years of the conflict, 1996-2004, correlate with the lowest predicted probabilities (Blattman and Annan 2009, 106). The CH model has been accurate in predicting violence, but the ebbs and flows of the violence seem to be lost in the model for Uganda during this time period.

Figure 6.1 The Collier-Hoeffler Model Results: 1985-1989 to 2009-2013

Source: World Bank, 2009
The dependent variable and the predicted probabilities are also contradictory for two of the four time-periods analysed in this section. The CH data has coded war for 1985-1989 and 2000-2004 and it has coded no-war for 1990-1994 and 1995-1999. The predicted probabilities for war onset and the dependent variable of war onset are depicted together in Figure 6.1. Zinn (2005, 89) calculated a 20% threshold for the CH model’s predicted probability. Zinn (2005, 89) states, “The Collier Hoeffler (CH) model of civil war onset considers a country to be “at risk” for civil war if the country is predicted to have around 20 percent or greater chance of civil war in the given five-year period”. However, the CH model’s predicted probabilities have all been greater than the 20% threshold. Sambanis argues that classifying a conflict is difficult and that measurement error can contribute to inaccurate coding of war in the CH model (Sambanis 2005, 304).

During the 20-year civil war, the economy in Uganda was expanding but not equitably. People in the north were not experiencing the economic growth of the south. To the contrary, they were being displaced from their only source of income, their land. Regional inequalities were significant. For example, the deadliest years of the war, 1996 to 2004, are correlated with growth of GDP per capita in Uganda of 2.4% and 4.8% for 1995-1999 and 2000-2004 respectively. Regional data would have reflected the actual economic environment of the war-torn region. If the regional data were included in the CH model, the discrepancy between the predicted probability and the actual conflict history would have been reduced. Regionalization of the civil war in Uganda is a large part of the noted
discrepancies. But as I will show in section 6.2, variables not included in the CH model also contributed to the discrepancies – the support of the Sudanese government to the LRA, the scale and type of the LRA activity and the regional inequality.

6.1.2 2005-2009

The 2005-2009 period represents the transition from war to peace in Uganda. The time period is an out-of-sample prediction of the CH model. Data are extracted from the same sources used by the model. The predicted probability for 2005-2009 is 54.9%. Ironically the higher probability coincides with the first sustainable signs of peace since the war began.

In 2006, for the first time in 20 years, life in northern Uganda resembled peace. People started the slow process of returning to their villages and land. IDP camps and reintegration centres began to close and night commuting ended. Most importantly, people felt a sense of security and started to rebuild and focus on the future. Peace talks, initiated in 2006, are credited with the peace experienced in northern Uganda (Muggah 2009, 233). Part of the Cessation of Hostilities Agreement, the first agreement negotiated, was physical relocation of members of the LRA out of Uganda (Cessation of Hostilities Agreement 2006). The Final Peace Agreement (FPA), however, was never signed and the peace process was discontinued in November 2008. Two weeks later, on December 14, 2008, the government of Uganda launched a military offensive. The LRA retaliated with escalated violence in the Democratic Republic of Congo (DRC), Central African Republic (CAR) and Sudan. Although 2005 to 2009 was a time
of peace and security in Uganda, the activity of the LRA in the surrounding countries was worrisome (Wondenberg et al. 2009).

The LRA’s decreased violence in the mid-2000s is inversely related to a predicted probability increase of 15.3% – from 39.6% in 2000-2004 to 54.9% in 2005-2009. The large differences in the probabilities are due to a decrease in the growth of GDP per capita and more significantly, an increase in primary commodity exports. Yet again, the predicted probability varies from the actual conflict history and the dependent variable.

As we have seen in the analysis from the 1990’s, the predicted probabilities and the actual state of the dependent variable do not support each other. The Armed Conflict Data downgraded the conflict classification from ‘war’ in 2004 to ‘intermediate’ in 2005 and ‘minor’ in 2006-2009 (Hogbladh, Harbom, and Wallensteen 2006; Harbom and Wallensteen 2010). In Uganda, 2005-2009 was a time of peace and security, and no war onset had been coded; therefore the dependent variable is aligned with the actual conflict dynamics, but the predicted probability is still contradictory. The primary commodity exports variable used to proxy the ability to finance a conflict might account for some of the noted discrepancy. The primary commodity exports increased from 5.72% of GDP in 2000-2004 to 11.3% of GDP in 2005-2009 in Uganda (World Bank 2009). Keeping all other variables equal, this change results in a 10% increase in the predicted probability. Primary commodity exports in Uganda are predominately made up of food exports and northern Uganda has few known natural resources (World Bank 2009; Doom and Vlassenroot 1999, 7). It is entirely possible that
increases in primary commodity exports in Uganda may not have the same effect on risk-of-war onset as an environment rich in lucrative extractable resources, such as diamonds and oil. Fearon and Laitin (2003, 87) support the possibility that the primary commodity exports proxy does not apply to Uganda. Fearon and Laitin agree with Collier and Hoeffler's (2009) general argument that insurgency is more feasible if sources of financing are readily available; however, they disagree that primary commodity exports are a good proxy for available finances. Primary commodity exports consist of fuel, agricultural products and ores and metals. Fearon and Laitin (2003, 87) argue that items that are hard to exploit are not good measures for financing potential, unlike minerals or contraband that can reward small effort with large profits. In 2008, ores and metal, and food exports were 2% and 63%, respectively, of total merchandise exports in Uganda (World Bank 2009). Therefore, the increases in primary commodity exports experienced in Uganda in 2008 may have skewed the predicted probability and created an inaccurate prediction of violence.

6.1.3 2009-2013

Similar to 2005-2009, 2009-2013 is an out-of-sample prediction. As well, the time-period variance from the model will be assumed not to affect the integrity of the results. 2009 represents the latest data available from the same references as the CH model. The predicted probability for 2009-2013 is 48.2%. Peace and security in northern Uganda are correlated with a probability decrease of 6.7% – from 54.9% in 2005-2009 to 48.2% 2009-2013. The decrease is mostly produced by increased economic growth and four years of peace. For the
first time in this analysis, the predicted probability is aligned with the actual conflict dynamics. At the same time, the model does not code war for 2009. The dependent variable is partly aligned with the predicted probability in that the decreased probability indicates a lower risk of war onset; however, the probability is still significantly higher than the 20% threshold set out by the model and is therefore contradictory.

The CH model predicted a 48.2% probability of Uganda being ‘at risk’ of war onset from 2009 to 2013. This result will be the platform leading into the alternative variables section. The values of the variables used to obtain the predicted probability for 2009-2013 are detailed for a comprehensive understanding of present day Uganda. The values for Uganda in 2009 are: GDP per capita of $357, growth of GDP per capita of 3.36%, primary commodity export as a percentage of GDP of 22.6%, and population of 32,709,865 people (World Bank 2009). The values that have remained constant for Uganda in the CH model are: 12.9% of young men in the population, a social fractionalization of 65.1%, 9.4% mountainous region, and a non-French African colony (Collier, Hoeffler, and Rohner 2009, see "data source in Appendix B").

It is imperative that the CH model and its economic ‘greed’ variables not be taken as infallible. The above analysis has shown inaccuracies in the model for Uganda and has highlighted the need to analyse variables outside the model. At the same time, Collier and Hoeffler have statistically shown that the variables in the CH model are significantly correlated with war onset in a global context. The challenge is that their model is probabilistic and not deterministic. The
anomalies discussed above related to Uganda make generalization in the model's application difficult.

6.2 Alternative Variables

There are many systemic problems that confront post-war northern Uganda. First, war by its very nature destabilizes a country, and in Uganda's case, the regionalization of the war has significantly divided the country. In 2005, 60.7% of the people in the northern region of Uganda lived below the poverty line, compared to 16.4% of people in the central region (Uganda Bureau of Statistics, 2005, 60). The concentration of conflict in northern Uganda has exacerbated the pre-war regional inequalities. If ignored, past grievances will crossbreed with new and future grievances, increasing the feasibility of war (Finnstrom and Atkinson 2008, 3). Therefore, it is not only important to focus on post-war reconstruction but to understand the predispositions that initiated the war in order to reduce or eliminate them.

In the case of Uganda, dealing with regional inequality between the north and the south will be fundamental to achieving sustainable peace. In addition, intra-regional inequalities must not be ignored. Uganda is unique in that the majority of ex-combatants were abducted as school-aged children. A consequence of this is that significant inequalities exist between non-combatants and ex-combatants in educational levels and income earned (Blattman and Annan 2009, 107-108). Therefore, along with regional inequality, intra-regional inequality between non-combatants and ex-combatants must be considered. Furthermore, people in northern Uganda have been debilitated by life in IDP
camps; many children are orphans and many women widows; many elders, knowledgeable in tribal tradition and cultivation techniques, have died. Uganda has the youngest population in the world, and in northern Uganda there is a generation of children that have grown up in IDP camps and never known sustainable peace (World Fact Book 2010). Finally, land tenure is crucial; people are worried about regaining access to their land. Conflicts have erupted surrounding land claims, highlighting the need to deal with property rights (Finnstrom and Atkinson 2008, 3). The systemic internal problems of post-war Uganda are strong; additionally, external factors must be considered.

External factors, outside the people and life of northern Uganda, also affect sustainable peace. Firstly trigger events, such as elections and referendums, can initiate violence in volatile environments. Politically, there is an upcoming presidential election in February 2011 in Uganda (Lake and Eads 2009). Corruption and scandal have once again marred the election campaign and people remain sceptical about how free and fair the elections will be (Kagenda 2010). Sudan also has a secession referendum scheduled for January 2011, and the south is overwhelmingly expected to vote to secede from the north (Ashworth 2008, 4). If the referendum results in an eruption of violence in Sudan, Uganda will likely be negatively impacted. The actions of the LRA are another external factor that needs to be considered. Even though the LRA rebels remain outside of the Ugandan border, their history, mobility and resilience heightens concerns for sustainable peace. The escalation of violence in neighbouring DRC, CAR and Sudan since late 2008 indicates that the LRA
continues to exist (Wondenberg, Sawyer and Burnett 2010, 3-6). Furthermore, the indefinite postponement of the final peace agreement by the Ugandan government is a factor in sustainable peace. The influence of international actions on sustainable peace is a final external factor that needs to be considered. Specifically, the newly signed bill in the United States (S. Res 1067), the ‘Lord Resistance Army Disarmament and Northern Uganda Recovery Act of 2009’, was implemented in May 2010. The United States is mandated to develop a plan to end the brutality and destruction created by the LRA, including their actions outside Uganda. An international bill dedicated specifically to the destruction of the LRA will focus more external media and international attention on the violence.

Due to the limitations of the research, alternative variables that are believed to have the largest impact on the feasibility of civil war in Uganda will be discussed. These variables are: the terms of peace, regional and intra-regional inequality, the activity of the LRA, the impact of neighbouring countries and property rights. Each variable will be expanded upon below.

6.2.1 Terms of Peace

According to the United Nations Development Programme (UNDP) report in 2008, the most important peace milestones are: the cessation of hostilities and violence, the signing of peace agreements, the start of demobilization, disarmament and reintegration, the return of refugees and IDPs, the establishment of the foundations for a functioning state, the initiation of reconciliation and societal integration and the start of economic recovery
(Ohiorhenuan and Stewart 2008, xviii). Many of these milestones have been or are in the process of being reached in Uganda; however, signing of the Final Peace Agreement (FPA) remains elusive. Generally, armed conflicts usually end in one of three ways: by outright military victory of one party, by a negotiated ceasefire or peace agreement, or by burning out ((Ohiorhenuan and Stewart 2008, 16). There was no military victory and the war definitely did not burn out in Uganda. There was, however, a negotiated ceasefire.

The Cessation of Hostilities Agreement was signed in August of 2006, this opened the lines of communication between the LRA and the government of Uganda (Cessation of Hostilities Agreement 2006). All actors agreed to stop fighting while the peace negotiations were taking place (Ejoyi 2008, 2). The LRA also agreed to relocate outside of Ugandan borders during the process. The physical relocation of the LRA rebels to designated camps in southern Sudan has been the main reason for the peace and security that exists in northern Uganda today. The Cessation of Hostilities Agreement was the first step towards the FPA of the Juba Peace Process. The FPA encompassed seven protocols: the Cessation of Hostilities Agreement and its six addenda, the Comprehensive Solutions, the Accountability and Reconciliation Agreement, the Permanent Cease-fire Agreement, the Disarmament, Demobilisation and Reintegration Agreement, the Implementation and Monitoring Mechanisms Agreement and the Implementation Schedule (Muggah and Baare 2009, 233-234). Unfortunately, the FPA was not signed. Numerous deadlines passed, and it became apparent that Kony was not going to sign the agreement. The last deadline, also an
ultimatum for Kony, was November 30, 2008. In a final ‘bush’ meeting on November 29, 2008, Kony was still trying to renegotiate the FPA, specifically the controversial ICC indictments (Peace Process 2009, under “November 1-30, 2008”). In 2005, the ICC put out an arrest warrant for Kony and the four top commanders (Muggah and Baare 2009, 234). The ICC indictments are argued to have brought Kony to the negotiation table; however, it has also been cited as the most significant factor in why the FPA was not signed (Ejoyi 2008, 3). The Juba Peace Process was postponed indefinitely in December 2008.

Although the FPA was not signed, significant achievements were made during negotiations, primarily, the negotiated relocation of the LRA. At present, the LRA have not returned to Uganda; however, the Cessation of Hostilities Agreement was breached by both parties when the Ugandan government launched a military offensive in late 2008 and the LRA retaliated with violence. The geographical separation is now less of a deterrent for renewed violence than during the peace negotiations. Other major achievements include the serious commitments agreed to during the peace negotiations by the Ugandan government.

6.2.2 Regional Inequalities

Inequality does not occur overnight; it has deep historical roots. Northern Uganda was subservient to the south from colonialism through independence and it remains so today. The political, social and economic inequalities have provided the platform for regional animosity in Uganda. Inequality is at the core of the grievance explanation. Various scholars, e.g. Stewart (2000), Ellingsen
(2000) and Cramer (2002), argue that it is the perceived inequitable differences that create grievances large enough to mobilize citizens to fight for change. Gurr (1970, 596), an influential scholar in the civil war literature, states:

“The greater the deprivation an individual perceives relative to his expectations, the greater his discontent, the more widespread and intense is discontent among members of a society, the more likely and severe is civil strife.”

The north remains the poorest region in the country, significantly lagging behind in all developmental indicators. The Human Development Index (HDI) is comprised of three variables: life expectancy, adult literacy and gross enrolment in school, and income. The HDI for northern regions is 0.35 compared to the national rate of 0.45 (Boyce and O'Donnell 2007, 22). Additional developmental indicators are depicted in Table 6.1 below.

### Table 6.1 Regional and National Development Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>National</th>
<th>Northern</th>
<th>Central</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poverty head count (%)</strong></td>
<td>2002</td>
<td>38.8%</td>
<td>63%</td>
<td>22.3%</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>31.1%</td>
<td>60.7%</td>
<td>16.4%</td>
</tr>
<tr>
<td><strong>Human Development Index (HDI)</strong></td>
<td>2001</td>
<td>0.45</td>
<td>0.35</td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Literacy rates - &gt;10 years of age (%)</strong></td>
<td>2005</td>
<td>69%</td>
<td>59%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Maximum education in household (years)</strong></td>
<td>2002</td>
<td>8</td>
<td>6.5</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Public expenditure per household (USH)</strong></td>
<td>2002</td>
<td>26,663</td>
<td>14,332</td>
<td>32,455</td>
</tr>
</tbody>
</table>

*Source: (Boyce and O'Donnell 2007, 343)*

According to the Peace Recovery and Development Plan (PRDP) for northern Uganda, the region has been marginalised from central institutions, it is poorly represented in government and it experiences imbalances in public investments (Government of Uganda 2007, 24). Inequalities have mobilized
people in Uganda in the past and will continue to do so if change does not occur (Jackson 2002, 29).

Interestingly, the macroeconomic climate of Uganda has been labelled as a success story in the UNDP report. Uganda has “... changed dramatically for the better, underpinned initially by prudent macroeconomic stabilization policies, sustained broad based growth and enhanced governance...” (Ohiorhenuan and Stewart 2008, 155). Prior to the military coup d’état in 1986, annual inflation was at 120%, and GDP per capita was at just 59% of its 1971 level (Toft 2010, 104). Museveni, under the NRA, had popular support on his side and was able, with the help of the World Bank, to implement strict macroeconomic policies. These changes have resulted in drastic improvements to Uganda's macroeconomic stability, including the experience of sustained growth and stable inflation rates. These results are shown in the following Figure 6.2.

Figure 6.2 Uganda: GDP Growth and Inflation, 1984-2009
The concentration and devastation of the fighting in the north – the looting and burning of villages, the destruction of businesses, schools and churches, the abductions of children, and the massacres – have had limited impact on regions outside northern Uganda. Inequality and war can be a vicious cycle. Past grievances have multiplied during the war and will be reinforced if progress towards resolving them is not evident. The Ugandan government acknowledged the regional inequalities in the Comprehensive Solutions Agreement. The agreement has many clauses directly related to addressing inequality. Following are examples of the language used and a sample of commitments agreed upon:

5.0 Ensuring Equal Opportunities

... the elimination of inequalities and discrimination against any individual or group of persons on the ground of ethnic origin, social or economic standing, gender, disability, or political opinion.

10.0 Strategy for Recovery

Facilitate the further development and adoption of the Northern Uganda Peace, Recovery and Development Plan. (Comprehensive Solutions Agreement 2007)

All parties recognize that inequality must be addressed for sustainable peace to occur, and although the FPA was not signed, it is important that the Ugandan government be held accountable to these commitments. As argued by Azam (2001, 429), “the system of redistribution within and among groups is the key to creating the solidarity links between them, and its breakdown is liable to
trigger political violence”. The PRDP was part of the Comprehensive Solutions Agreement, it was developed to address the complex issues of post-war Uganda and was launched in 2007 (Government of Uganda 2007). The PRDP has four objectives: the consolidation of state authority, the rebuilding and empowering communities, the revitalization of the economy and the building of peace and reconciliation (Government of Uganda 2007, viii). The objectives will be achieved through 14 priority programmes, such as the police enhancement program, the return and resettlement program, and the infrastructure rehabilitation program (Government of Uganda 2007, viii). Results of the plan are still premature; however, they will impact feasibility of war in Uganda.

6.2.3 Intra-regional Inequalities

An entire generation has grown up surrounded by fear. It has been educated in carrying arms and violent conflict, never knowing the feeling of peace and safety. New intra-regional inequalities have emerged between non-combatants and ex-combatants. Voluntary recruitment into the LRA was rare during the previous civil war; abduction was the dominant recruitment tactic. Results from an extensive research experiment, the Survey of War Affected Youth (SWAY), revealed an educational and economic inequality between ex-combatants and non-combatants directly correlated to the previous civil war. On average ex-combatants were found to have nine months less schooling than non-combatants. This is correlated with the nine month average time abducted children spent with the LRA. The LRA disproportionately targeted youth aged 12 to 14; this correlates to school years when children learn to read and write in
Uganda. A nine-month loss in education does not seem excessive; however, it has resulted in substantial economic consequences. Ex-combatants’ wages are one-third less and they are half as likely to be engaged in skilled labour as non-combatants. These results increase the longer the abductees were away (Blattman and Annan 2009, 108).

The existing inequality lowers the opportunity cost of joining a rebellion for ex-combatants. If Uganda does relapse into civil war, voluntary recruitment has the potential to be higher than seen in the previous war. Non-transferable skills obtained by ex-combatants in the last rebellion, such as techniques in armed warfare, will increase this voluntary participation potential.

6.2.4 LRA Activity

The relocation of the LRA in 2006 resulted in the establishment of camps in southern Sudan and northeastern DRC. The number of rebels still in the LRA is unknown. Recent estimates are anywhere from 200 to 1000 people (Wondenberg, Sawyer and Burnett 2010, 16; BBC 2010). Regardless of this discrepancy, since 2008 the LRA have managed to murder, abduct and loot across three different countries. After the Ugandan government discontinued the peace process at the end of November 2008, it immediately launched a military offensive, Operation Lightning Thunder (OLT), in December 2008 (Wondenberg, Sawyer and Burnett 2010, 3-6). The LRA rebels retaliated with unprecedented violence on civilians. The murderous rampage, dubbed ‘the Christmas massacres of 2008’, resulted in 865 deaths and 160 abductions. Throughout 2009 the LRA reign of terror resulted in 1096 civilian deaths, 1638 abductions
and 282,661 people displaced in the DRC alone (Wondenberg et al. 2009, 4-7; Wondenberg, Sawyer and Burnett 2010 3-6).

There are major discrepancies between reports by the government’s army and humanitarian organizations. Thus far, no unbiased research has been published regarding the recent atrocities. The government of Uganda claims that the OLT insurgency has weakened the LRA, while humanitarian organizations claim that it was a failure (Wondenberg, Sawyer and Burnett 2010, 3-6; Museveni 2009). Either way, the LRA remain active in the DRC, CAR and Sudan. Collier, Hoeffler and Rohner refer to Kony as ‘irrational’, and they compare Kony and the LRA to a freak religious organization, a cult, rather than to an organization of political opposition (Collier, Hoeffler, and Rohner 2009, 5). Kony still claims to be fighting for the rights of the Acholi. The LRA actions speak louder than words; their goal is survival (Harbom and Wallensteen 2010, 503). The LRA’s past and present actions and their resilience increase the feasibility of war in Uganda.

6.2.5 Neighbouring Countries

Of all countries that border Uganda, Sudan has had the largest impact on the recent civil war. The financial and territorial support the Sudanese government initiated in 1994 invigorated a weakened LRA. Their support was likely the single most important reason for the long duration of the war. However, due to Sudan’s initiation and mediation of the Juba Peace Process, it has also played an integral role in the recent peace being experienced in northern Uganda (Ejoyi 2008, 2).
The upcoming referendum in Sudan has the potential to affect Uganda, as renewed violence in Sudan would likely have adverse consequences for Uganda. Countries with 'bad neighbours' are likely to experience negative consequences, as is clear in the experience of the DRC, CAR and Sudan with the LRA (Collier 2007, 57).

6.2.6 Property Rights

It is well known that secure property rights are instrumental in development. People are not going to invest if it is possible that their investment will be lost or expropriated. It has been estimated that two million people have been displaced over the course of the war in Uganda (Roberts et al. 2009, 227). They were placed in crowded IDP camps where their survival depended on humanitarian assistance. It is not surprising that conflicts have since developed regarding land tenure claims. The property rights institutions in Uganda have facilitated corruption and erroneous claims. The majority of the land ownership is under customary tenures. The customary law is not codified or written down and the tenancy is not always clear (Lake and Eads 2009).

The identification of land tenure issues in the Comprehensive Solutions Agreement is a positive sign. The agreement has six clauses that address: environmental degradation of the land during the war, compensation for land used in IDP camps, consultation laws about selling of community land, and rules for expropriation and compensation of land.
This case study has illuminated the alternative variables that have contributed to the feasibility of war in Uganda. The six variables, to varying degrees, have all had an effect on the future feasibility of war in Uganda. All variables, with the exception of the terms of peace and the ambiguous affect of Sudan, have increased the future feasibility of war in Uganda. The high-predicted probability for 2009-2013 combined with the increased feasibility expected from the alternative variables creates an extremely volatile environment in Uganda, specifically northern Uganda.
7: DISCUSSION

According to the feasibility hypothesis of the CH model (2009), civil war is feasible in present day Uganda and it will therefore occur. At a risk of 48.2%, Uganda far exceeds the 20% threshold set out in the model (Zinn 2005, 89). According to the CH model, Uganda has exceeded the risk threshold since the first time-period analysed in 1965-1969 (Collier, Hoeffler, and Rohner 2009, see "data source in Appendix B"). For Uganda to fall below the threshold, using 2009 as the base year, the GDP per capita and growth of GDP per capita would have to double, the population would have to decrease to 1985 levels, the primary commodity exports would have to decrease by 20% and Uganda would need to remain at peace for 6 more years. Yet, despite the odds, for the past four years Uganda has remained at peace.

The CH model has the advantage of social-science methodology; it is well suited to statistical analysis and provides tangible conclusions. However, it is also limited to probabilistic statements rather than detailing the actual conflict dynamics. There were several limitations of the CH model for Uganda. The most significant was the country-specific instead of region-specific data, specifically the use of national GDP per capita and growth of GDP per capita values. The economy of Uganda has been expanding since 1985, which is reflected in increased GDP per capita and constant growth of GDP per capita. The positive expansion of the south has been strong enough to compensate for
the depressed economy in the north; therefore, the true economy of the war torn region is not reflected in the CH model for Uganda. The economic variables’ integrity was affected by national data; however, so was the geography variable. Northern Uganda is flat. The mountainous regions of Uganda are on the southeastern border of Uganda and Kenya, and on the southwestern border of Uganda and Rwanda/DRC. Therefore, even though the mountainous terrain contributed to the predicted probability in the CH model, it was not a factor in the war in northern Uganda. The regionalization of the war has been a major factor in the noted discrepancies between the CH model and the actual conflict dynamics. The omission of grievance-based variables was another serious limitation of the CH model for Uganda. Social fragmentation was included as a static index that measured the ethnic and religious diversity. It did not address the significant contribution of the social, economic and political inequalities within Uganda on the risk of war onset. There were strong grievances against the state, coupled with a history of significant inequalities between the north and the south, that contributed to the onset of the civil war in Uganda. These grievances need to be considered when examining the feasibility of war. The third limitation concerns measurement errors of the dependent variable. Four separate time-periods resulted in contradictions between the dependent variable and the predicted probabilities – 1990-1994, 1995-1999, 2005-2009 and 2009-2013\(^5\).

The coding of 2009 as ‘minor’ by the armed conflict dataset is an example that highlights the measurement difficulties in coding violence in the CH model.

\(^5\) See Figure 6.1
The 2009 classification is based on the ‘Christmas massacres’ of 2008-2009 by the LRA (Harbom and Wallensteen 2010, 501). The fighting, destruction and the casualties were concentrated in the DRC while Uganda was experiencing peace; however, the incompatibility is still claimed to be between the LRA and the Ugandan government and was therefore coded as violence in Uganda. A significant measurement error would occur if the violence in the DRC escalates to a ‘war’ classification and is coded in Uganda. Finally, all of the five-year periods analysed, with the exception of 2009-2013, resulted in an inverse relationship between the predicted probabilities and the actual conflict dynamics. Even though the model has predicted a high risk of war onset for the entire time-period of analysis, it is expected that the predicted probabilities would follow the direction of the violence experienced. This discrepancy is due to the use of country-specific data and the exclusion of alternative variables – the Sudanese government support for the LRA, the activity of the LRA and the generic nature of the primary commodity exports variable. Although the limitations of the model proved to be significant, the key findings of the model cannot be ignored: “economic characteristics matter: namely, the level, growth, and structure of income” (Collier, Hoeffler, and Rohner 2009, 24). The detailed analysis of the actual conflict dynamics of Uganda has complemented the quantitative analysis of the CH model and has therefore mitigated the impact of its limitations and ensured a more comprehensive understanding of the feasibility of war.

The results from the alternative variables analysis agree with the CH model’s conclusion that war is feasible in present day Uganda. The alternative
variables section focused on the most significant factors that have affected this feasibility. Firstly, the terms of peace between the Ugandan government and the LRA were not ideal. However, the Juba Peace Process resulted in the relocation of the LRA and the Ugandan government’s agreement to the implementation of many serious commitments defined in the documents. The Juba Peace Process has decreased the future feasibility of war in Uganda. Secondly, grievances based on regional inequalities contributed to the initial onset of war in 1985/1986 (Jackson 2002, 47). These inequalities were magnified and multiplied throughout the war and will significantly increase the feasibility of war in present day Uganda. Thirdly, the new economic inequality between non-combatants and ex-combatants has lowered the opportunity cost of joining a rebellion for ex-combatants. The inequality is not likely to be a root cause or trigger event for renewed violence; however, the lower opportunity cost of recruitment of ex-combatants has the potential to sustain and escalate the violence if Uganda relapses into war. Therefore, intra-regional inequality will increase the sustainability and consequently the feasibility of war in Uganda. Fourthly, while the actions of the LRA are unpredictable, its history, mobility, persistence and resilience increase the feasibility of war. Fifthly, neighbouring countries, specifically Sudan, have had an ambiguous effect on war in Uganda. Sudan will likely remain an influential factor in the future feasibility of war. Lastly, disputes over property rights have erupted in Uganda. Tension surrounding land claims are high as millions of people relocate from IDP camps back to their land.
Powerful grievances have resulted and will increase the feasibility of war in present day Uganda.

An extremely volatile environment exists in northern Uganda, due to a low national income, a high level of social fractionalization, a young and growing population, no external security guarantee, significant social, political and economic inequalities, strong grievances based on land tenure, and potential interferences by its neighbouring countries. Although the risk of civil war is high, there are factors that have lowered this risk in Uganda: the unprecedented growth experienced by the economy over the past 20 years, the four years of sustained peace, the relocation of the LRA rebels, the growing international attention directed towards violence in Uganda, and the serious commitments made by the Ugandan government to address regional inequalities and the post-war environment in northern Uganda.

An analysis based solely on the CH model would have reached a similar conclusion to the combined analysis: Uganda’s is at high risk of war recurrence. However, the policy recommendations would be significantly different. The CH model would have ignored the very real grievance-based root causes, as well as trigger events and specific conflict dynamics unique to Uganda.

The feasibility of war in Uganda is high; however, unlike Collier, Hoeffler and Rohner’s hypothesis, it does not mean that war is inevitable. Real peace and reconstruction in northern Uganda will significantly depend on the Ugandan government’s delivery on their commitments identified in the negotiated peace
agreements, as well as a continued commitment to economic growth and development in all of Uganda.
8: CONCLUSION

Economic incentives and financial and military feasibility have not been the only or even the primary cause of civil war in Uganda; rather, they have interacted with socioeconomic and political grievances, fear and trigger events to cause and sustain the war. Although the economic model provides deceptively precise and impressive statistics – for example, Uganda has a 48.2% chance of returning to war from 2009 to 2013 – it does very little to tell us about the actual conflict dynamics.

The value added from considering variables, regardless of greed or grievance explanations, has provided an in-depth understanding of the variables that effect war feasibility in Uganda. It also provides striking evidence for the necessity of rethinking the greed versus grievance debate. The results of this analysis will challenge those who hold one of the two distinct positions to remove their research blinders and consider alternative paradigms. A case-specific approach has enabled a comparative assessment of the empirical model and alternative explanations, combining both agendas for a more accurate picture of the root causes and sustainability of war in Uganda.

Lessons learned from the combined analysis can be transferred to other case studies. The root causes and sustainability are unique to Uganda; however, the methodology of considering merit in greed and grievance explanations will contribute to better-informed policy responses. According to the
CH model and alternative variables, war is feasible and highly probable in Uganda. The Ugandan government needs to reconsider its strategy; over the past two decades, multiple military offensives have occurred and none have eliminated the LRA. It is also imperative that the Ugandan government be held accountable to the commitments detailed in the PRDP and the FPA, realization of these commitments will significantly decrease the feasibility of war. At the same time, policy directed towards economic development will increase the opportunity cost of rebellions and lower the military and financial feasibility of war. The international community also needs to create more awareness and advocate stronger for resources to help end this reign of terror. Post-war economies are complex and have extraordinary constraints imposed on them. Designing policy tailored to the specific dynamics of Uganda will be instrumental in increasing the feasibility of peace in Uganda.
## APPENDIX A: COLLIER AND HOEFFLER’S CORE MODEL REGRESSION ANALYSIS

### Table 8.1 A Feasibility of Civil War Logit Regression Analysis

<table>
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<td>(3.69)***</td>
<td>(3.69)***</td>
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<td>Primary commodity Exports (PCE)</td>
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<td>(3.78)***</td>
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<td>(2.72)***</td>
<td>(2.71)***</td>
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<td></td>
<td>(1.52)</td>
<td>(1.51)</td>
<td>(1.54)</td>
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<td>Ln population</td>
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<td>(2.76)***</td>
<td>(2.76)***</td>
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<td>(1.48)</td>
<td>(1.48)</td>
<td>(1.46)</td>
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<td>Log Likelihood</td>
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<td>-188.68</td>
<td>-188.72</td>
<td>-188.8</td>
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Note: Logit regressions, dependent variable: war start. Absolute value of z statistics in parentheses. Asterisks (*, **, *** ) indicate significance at the 10%, 5%, and 1% level, respectively. All regressions include an intercept (not reported.)
APPENDIX B: DATA SOURCES

Collier and Hoeffler’s data for the 2009 CH model is published on Hoeffler’s website at http://users.ox.ac.uk/~ball0144/research.htm

Data sources used for the out-of-sample predictions, as well as data extracted from the World Development indicators references are below:

**Economic Growth and GDP per Capita**

World Development Indicators (WDI) data for GDP per capita to calculate the annual growth rates (World Bank, 2009). The data are measured in constant 2000 US dollars (World Bank 2009).

**Population**

World Development Indicators (WDI) data for total population (World Bank 2009).

**Primary Commodity Exports**

The data on primary commodity exports and GDP were obtained from the World Bank. Export and GDP data are measured in current US dollars.

**Social, Ethnolingualistic, and Religious Fractionalization**

Ethnic fractionalization is measured by the ethno-linguistic fractionalization index. The religious fractionalization index measures this probability for different
religious affiliations. Social fractionalization index is calculated as the product of the ethno-linguistic fractionalization and the religious fractionalization. Data source: Fearon and Laitin (2003).

**Warstarts**

The Armed Conflict Database (Gleditsch et al. 2002) and can be found on: http://www.prio.no/page/CSCW_research_detail/Programme_detail_CSCW/9649/45925.html (12 July 2006).

**Young Men**

We define this variable as the proportion of young men aged 15–49 of the total population (%). Data Source: UN Demographic Yearbook 2005
REFERENCE LIST


