Capital Punishment
How Economic Geography Shapes Low-capability Warfare

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Statement of Originality

This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes. I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Charles Butcher
For my wife.
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Abbreviations

ACLED Armed Conflict Location Event Dataset
ADFL Alliance of Democratic Forces for the Liberation of Congo
AFL Armed Forces of Liberia
AFRC Armed Forces Revolutionary Council [Sierra Leone]
AK-47 Automat Kalashnikova 1947
AMISOM African Union Mission in Somalia
ANC African National Congress [South Africa]
APC Armoured Personnel Carrier
BG Buhaug and Gates [2002 Publication and Data]
BR Buhaug and Rod [2006 Publication and Data]
CBD Central Business District
CDF Civil Defence Force [Sierra Leone]
CIA Central Intelligence Agency [United States]
CINC Composite Index of National Capability
COW Correlates of War
CSCE Conference on Security and Cooperation in Europe
DRC Democratic Republic of Congo
ECOMOG Economic Community of West African States Cease Fire Monitoring Group
ECOWAS Economic Community of West African States
EDACS Event Data Project on Conflict and Security [Free University of Berlin]
EO Executive Outcomes
EPDRF Ethiopian People’s Democratic Revolutionary Front
EPLF Eritrean People’s Liberation Front
EU Expected Utility
FAA Armed Forces of Angola
FAC Armed Forces of the Democratic Republic of Congo
FANT National Army of Chad
FAPLA Popular Armed Forces for the Liberation of Angola
FAR Armed Forces of Rwanda
FARC Revolutionary Armed Forces of Colombia
FAZ Armed Forces of Zaire
FDP Forcibly Displaced Populations [Dataset]
FLEC Front for the Liberation of the Enclave of Cabinda
FNLT National Forces of Liberation [Burundi]
FNLA National Front for the Liberation of Angola
GCP Gross Cell Product
GDP Gross Domestic Product
GEE Generalised Estimation Equation
GNUT Transitional Government of National Unity [Chad]
GSG Ghurkah Security Guards
ICC International Criminal Court
ICU Islamic Courts Union [Somalia]
IDP Internally Displaced Person
IMF International Monetary Fund
INPFL Independent Patriotic Front of Liberia
JEM Justice and Equality Movement [Sudan]
KB Kalyvas and Balcells [2010 Publication and Data]
LDF Lesotho Defence Force
LIMCO Liberian Iron Mining Company
LPC Liberia Peace Council
LRA Lord’s Resistance Army [Uganda]
LURD Liberians United for Reconciliation and Democracy
MFDC Democratic Forces of Casamance Movement [Senegal]
MID Militarised Interstate Dispute
MLC Movement for the Liberation of Congo
MLE Maximum Likelihood Estimation
MPLA People’s Movement for the Liberation of Angola
NATO North Atlantic Treaty Organisation
NCO Non-Commissioned Officer
NDPVF Niger Delta People’s Volunteer Force
NPFL National Patriotic Front of Liberia
NPRC National Provisional Ruling Council [Sierra Leone]
NRA National Resistance Army [Uganda]
OAU Organisation of African Unity
OLS  Ordinary Least Squares
PALIR  Army for the Liberation of Rwanda
POLISARIO  Popular Front for the Liberation of Saguia el-Hamra and Rio de Oro
RCD  Rally for Congolese Democracy
RCT  Rational Choice Theory
RENAMO  Mozambique National Resistance
RFDG  Rally of Democratic Forces of Guinea
ROC  Republic of Congo
RPF  Rwandan Patriotic Front
RPG  Rocket Propelled Grenade
RSLMF  Republic of Sierra Leone Military Forces
RUF  Revolutionary United Front
SACU  Southern African Customs Union
SADC  Southern African Development Community
SCPS  Societe Centrafricaine de Protection et de Surveillance
SMC  Standing Mediation Committee [ECOWAS]
SNA  Somali National Army
SNA  Somali National Alliance [rebel group]
SNC  Symmetric Non-Conventional Warfare
SNM  Somali National Movement
SIPRI  Stockholm Peace Research Institute
SPLM  Southern People’s Liberation Movement [Sudan]
TFG  Somali Transitional Federal Government
TPLF  Tigray People’s Liberation Front
TWP  True Whig Party [Liberia]
ULIMO  United Liberation Movement of Liberia for Democracy
UN  United Nations
UNAVEM  United Nations Verification Mission in Angola
UNHCR  United Nations High Commissioner for Refugees
UNITA  National Union for the Total Independence of Angola
UNITAF  United Task Force [United States]
UNOCI  United Nations Operation in Cote d’Ivoire
UPDF  Ugandan People’s Defence Force
US  United States of America
<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>USC</td>
<td>United Somali Congress</td>
</tr>
<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
</tr>
<tr>
<td>VIF</td>
<td>Variance Inflation Factor</td>
</tr>
<tr>
<td>WNBF</td>
<td>West Nile Bank Front [Uganda]</td>
</tr>
<tr>
<td>WSLF</td>
<td>Western Somali Liberation Front</td>
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<tr>
<td>ZANU</td>
<td>Zimbabwean African National Union</td>
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Synopsis

In 2008, nearly half of Africa’s civil wars were ‘low-capability’, that is, conflicts without the tanks, artillery and jet-aircraft we associate with modern warfare. Although depictions of teenagers with AK-47s stealing aid supplies, looting diamonds and brutality civilians are popular, we know little about the logic of combat in places such as Sierra Leone, Liberia and Somalia. This thesis advances our knowledge by articulating a theory of military strategy in low-capability civil wars. I argue that low-capability civil wars are defensive wars. Due to the inability of governments and insurgents to conduct offensive operations, the costs of capturing territory are far greater than holding it. Based on this theory, I predict that economic geography structures where battles are fought and when foreign states intervene in low-capability civil wars. Results from a quantitative analysis of African civil wars from 1960-2008 and a case study of the Liberian civil war show that the incidence and concentration of fighting around ‘point resources’, especially capital cities, is higher in low-capability civil wars when compared to the more familiar ‘conventional’ and ‘guerrilla’ civil wars. Foreign states also time their deployments with decisive battles over economically valuable areas in low-capability warfare, a pattern not observed in conventional or guerrilla warfare.
Volume I
Chapter One

Introduction: Military Strategy, Economic Geography and Low-capability Warfare

On August 6th 2010, as the final words were put to this thesis, Al-Shabaab insurgents withdrew from positions in Mogadishu they had occupied for nearly four years. The Somali Transitional Federal Government (TFG) and an African Union peacekeeping force (AMISOM), whom Al-Shabaab had been fighting for control of the city, cautiously moved into the vacated areas. The withdrawal was strange and surprised some observers. Al-Shabaab controls most of Southern Somalia and had besieged the TFG and AMISOM in a small enclave near the presidential palace. Surely Al-Shabaab were on the verge of victory? What was the reason for what one spokesperson described as a ‘change of tactics’ from the positional defence of territory in Mogadishu to a guerilla war in the countryside? As Richard Lough observed, ‘retreat from the Somali capital Mogadishu signals an acceptance that it cannot militarily defeat a government propped up by foreign muscle and firepower’. Somalia’s TFG and AMISOM successfully utilised a military strategy dating back to Pericles and Frederick the Great that, according to the findings of this thesis, is commonly deployed in Africa’s low-capability civil wars. This strategy is what military historian Hans Delbruck described as the ‘strategy of exhaustion’.

Ernest Hemmingway’s For Whom the Bell Tolls opens with the protagonist, Robert Jordan, encamped with Republican guerillas in the forests of the Sierra de Guadarrama mountains. Jordan is an American in Spain during the civil war, fighting as part of the ‘international brigades’. Hemmingway’s novel follows Jordan as he and a handful of local peasants prepare to sabotage a bridge held by Franco’s army. Much of Jordan’s experience is typical of guerilla warfare – the hiding, the waiting, the ever-present threat of detection and capture, and the assault – brief and violent. At one

3 Ibid
point in the novel, however, from inside a cave, Jordan recalls a decisively different form of battle:

‘the fascists had attacked and we had stopped them on that slope in the gray rocks, the scrub pines and the gorse of the Guadarrama hillsides. We had held along the road under the bombing from the planes and the shelling when they had brought their artillery up and those who were left at the end of that day had counterattacked and driven them back’.4

These two images - of the silent, pensive guerrilla and the battalion charging across an open field through artillery and rifle fire - dominate our understanding of warfare in civil war. Striking in their contrast, these images reflect a traditional distinction between ‘guerrilla’ and ‘conventional’ warfare.

By the mid 1990s, however, what appeared to be a ‘new’ form of warfare had emerged, popularised in films such as Black Hawk Down and Blood Diamond. Instead of the peasant guerilla or the uniformed infantryman, war was the object of badly organised teenagers in Reebok pumps toting AK-47s, stealing aid supplies, looting diamonds and brutalising civilians. Warfare in Somalia, Liberia, the Democratic Republic of Congo, Haiti and Georgia seemed to defy the existing frames of reference and more closely resembled a A Clockwork Orange writ-large than the ordered battlefields of the Spanish or American civil wars. Indeed this ‘new’ form of warfare attracted a proliferation of labels including, ‘new-old’, ‘primitive’, ‘pre-modern’, ‘criminal’, and ‘post-modern’, usually coupled with the assertion that modern conflicts were incomprehensible within existing, Clausewitzian, military theory, if indeed they could be labeled ‘wars’ at all.5

Conventional and guerrilla warfare boast of a long theoretical heritage. Prominent among these figures is the work of Carl von Clausewitz, a Prussian soldier and author who lived in the 18th and 19th centuries. Clausewitz contended that organised violence in war was, at least in part, purposive and directed towards political goals. He famously claimed that war ‘was the continuation of politics by other means’ and observed that a rival’s capacity to use organised violence must be disabled before

5 One the earliest proponents of the ‘new wars’ thesis was Mary Kaldor. See Mary Kaldor, New and Old Wars (Stanford: Stanford University Press, 2007).
political preferences can be imposed. Military strategies are directed towards disarming the enemy and are, in a substantive way, rational. Choices of when, where and how to fight are designed to maximise the chances of realising political goals, based upon the information available to a commander at the time. As such, the logic of organised violence was sufficiently apprehensible for Clausewitz to form testable, and broadly scientific, theories of military strategy in war. Through this simple framework we understand the logic of battle well - armchair strategists can reconstruct why Napoleon lost at Waterloo or why the Viet Cong attacked at Long Tan. But the apparent fluidity and chaos of warfare after the Cold War has defied, for the most part, a similar understanding of ‘the strategies and tactics’ utilised in Somalia, Liberia and Sierra Leone.\(^6\) Research is generally at a loss when explaining the rationale behind fighting in much of the ‘third world’ and especially in Africa. Two arguments have muddied the waters: (1) that the logic of ‘new wars’ is alien to the works of Clausewitz and (2) that ‘new’ forms of warfare are fundamentally illogical, with opportunism, caprice and drug-induced rage in place of strategy.\(^7\)

Mary Kaldor, for example, argued that, unlike the organised and disciplined national armies of 19\(^{th}\) and 20\(^{th}\) century Europe, the ‘new wars’, waged by ethnically motivated paramilitary organisations, defy Clausewitz’s framework. Kaldor’s work focused on the Bosnian civil war and she concluded that any distinction between the military, the state and a population is simply irrelevant when analysing ‘armies’ whose very *raison d’etre* is not to fight other ‘armies’ but ‘cleanse’ territory by sowing fear and terror.\(^8\) She writes that ‘if war is still perceived in Clausewitzian terms then the new warfare is incomprehensible except in terms of ‘anarchy’ or ‘primitivism’.\(^9\) Kaldor’s is not the only research arguing that ‘new wars’ slip through the clutches of traditional strategic theory. Donald Snow states that ‘new-old’ wars are ‘apolitical and self-justifying’ marked by ‘chaos, savagery and pointlessness’\(^10\)

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\(^7\) For a review of this literature, see ibid, Pg 7.

\(^8\) Kaldor, *New and Old Wars* Pg 9.


with an ‘absence of clear military objectives’.\textsuperscript{11} Van-Creveld states that much of the ‘new war’ is ‘elemental’ in a ‘Hobbesian sense’ and represents an end in itself rather than a means to political objectives.\textsuperscript{12} For Enzensberger, ‘what gives today’s civil wars a new and terrifying slant is the fact that they are waged without stakes on either side, that they are wars \textit{about nothing at all}’.\textsuperscript{13} John Keegan, in his history of warfare, argued that ‘primitive wars’ ‘are fed by passions and rancours that do not yield to rational measures of persuasion or control: they are apolitical to a degree for which Clausewitz made little allowance’.\textsuperscript{14} Munkler argues that ‘to exaggerate a little: the new wars conduct themselves; those who take part in them are conducted’.\textsuperscript{15} Holsti states the proposition most clearly:

‘The symbolic manifestations of war transformation are clear: in wars of the ‘third kind’ there are no fronts, no campaigns, no bases, no uniforms, no publicly displayed honours, no points d’appui, and no respect for the territorial limits of states. There are no set strategies and tactics. Innovation, surprise and unpredictability are necessaries and virtues. The weak must rely on guile, and often crime, to raise funds for bombings, assassinations and massacres.’\textsuperscript{16}

If these claims are true, then there is no use developing a theory of military strategy in ‘new wars’, at least not with recourse to Clausewitz’s framework of war as a ‘continuation of politics by other means’. Where there is no ‘rationality’ there can be no strategy. Battles will come and go with the desires of individual commanders and be directed towards myriad shifting goals, limiting scholars to observation and commentary. These views, however, have come under increasing criticism. Mueller argues that the ‘irrationality’ of actors in Rwanda and Bosnia is overstated and these conflicts were fought by quite ‘conventional’ armies.\textsuperscript{17} Smith writes that, ‘the fact is that all war, be it ‘low intensity’ or otherwise, is inherently the same and can therefore be understood, in its entirety, within a paradigm in which war is an extension of

\textsuperscript{15} Herfried Munkler, \textit{The New Wars} (Oxford: Polity, 2005) Pg 33.
\textsuperscript{16} Holsti, \textit{The State, War, and the State of War} Pg 36.
Policy, where the act of violence is intended to fulfill our will.\(^{18}\) It is not the ‘nature’ of war that varies, Smith argues, but the tactics, a point I take up in more detail in Chapter 2.\(^{19}\) Isabelle Duyvesteyn noted large numbers of organised fighters engaged in pitched battles in Somalia and Liberia observing a distinction between combatants and non-combatants.\(^{20}\) Like Smith, Duyvesteyn argues that considering sub-state actors as military organisations capable of strategic thinking is not an enormous conceptual leap.\(^{21}\) According to her research, ‘both warlords and bandits can use military strategies, such as irregular or conventional war’.\(^{22}\) Munkler argues that Europe’s Thirty Years War and Hans Delbruck’s ‘strategy of exhaustion’ bear similarities to the conduct of ‘new wars’. He noted that in some circumstances ravaging an enemy’s resource base is a more effective strategy than seeking the annihilation of their forces and that ‘new wars’ should not be conflated with irrationality on this account.\(^{23}\) Munkler’s observation is a crucial one, and something I expend and develop upon in Chapter 2. Researchers also tend to ignore that foreign states play a decisive role in ‘new wars’, as was the case in Somalia and Sierra Leone. Are these actors ‘irrational’ too? Can we understand their actions as ‘a continuation of politics by other means’? Indeed, Kaldor implies that we can as foreign states continue to perceive new wars in ‘Clausewitzian terms’.\(^{24}\) What then is it about sub-state military organisations that renders them so alien to the same understanding?

Downplaying the capacity of military theory to understand ‘new wars’ has the net effect of stripping researchers of the very tools capable of rendering it comprehensible and observations that ‘new wars’ are not so alien to the classic military strategists and providing thoughtful, but fragmented connections to this theory, does not go far enough. We still have no theory capable of explaining the differences in strategy that seem to so clearly demarcate fighting in Somalia during the 1990s from Spain in the

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\(^{19}\) Ibid., Pg 50.


\(^{21}\) See also Errol Henderson and J. Singer, "New Wars" and Rumours of "New Wars", *International Interactions* 28, no. 2 (2002).

\(^{22}\) Duyvesteyn, 'The Concept of Conventional War and Armed Conflict in Collapsed States,' Pg 66.

\(^{23}\) Munkler, *The New Wars* Pg 36.

\(^{24}\) Kaldor, 'Introduction,' Pg 19.
1930s. Nor do we have a theory capable of producing testable, and comparative, hypotheses.

Only recently, in the work of Stathis Kalyvas and Laia Balcells, along with Adam Lockyer, have researchers systematically considered the strategy and tactics of what I label ‘low-capability’ warfare. Kalyvas agrees that ‘new wars’ defy a dichotomy between ‘conventional’ and ‘guerrilla’ warfare but contends that little is ‘new’ about them. Emphasising the ‘newness’ of warfare since the end of the Cold War obscures continuity in the motivations, finance and tactics of actors in civil war. Moreover, claims of the novelty and criminality of contemporary civil war tend to be based on journalistic accounts that ‘quote uncritically city dwellers and members of pro-governmental organisations’ with interests in representing dissenters as bandits and outlaws. Like Kalyvas, Brzoska argues that the ‘new wars’ concept lacks methodological rigor. How can we identify a ‘new war’? Do we code a ‘new war’ based upon the methods of fighting, the motivations of combatants, or the year a conflict started? Without answers to these questions the comparative study of ‘new wars’ is destined to rely upon selective evidence from a heterogeneous collection of cases.

Kalyvas and Balcells show that ‘new’ warfare is actually what they call ‘symmetric non-conventional warfare’ (SNC) and distinct from conventional and guerrilla warfare. Contrary to the ‘new wars’ thesis, SNC warfare dates back to medieval Europe, was uncommon during the Cold War, and re-emerged with the fall of the Berlin Wall and collapse of the Soviet Union. Lockyer adopts this tripartite division into what he labels ‘conventional’, ‘guerrilla’ and ‘irregular’ warfare. In this thesis I label as ‘low-capability warfare’ what Kalyvas and Balcells called ‘symmetric non-

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27 One study has used the end of the Cold War to code 'new wars'. See Erik Melander, Magnus Oberg, and Jonathan Hall, 'Are 'New Wars' More Atrocious? Battle Severity, Civilians Killed and Forced Migration Before and After the End of the Cold War,' European Journal of International Relations 15, no. 3 (2009).
29 See Adam Lockyer, 'The Dynamics of Warfare in Civil War,' Civil Wars 12, no. 1&2 (2010).
conventional warfare’ and Lockyer ‘irregular warfare’. While the three labels are analytically interchangeable, I believe low-capability warfare to be the most accurate. As this thesis shows further on, ‘symmetric non-conventional warfare’ is, in an important sense, ‘conventional’, while ‘irregular’ warfare is easily confused with ‘guerrilla’ warfare.

Low-capability warfare is distinguished from conventional and guerrilla warfare by the relative military capabilities available to governments and insurgents and the resultant empirical patterns of combat. Both governments and insurgents have ‘high’ capabilities in conventional warfare. For Kalyvas and Balcells this means the ability to deploy heavy weapons in battle, especially mobile armour and heavy artillery. Discernible front lines and major ‘set piece battles’ are the empirical ‘fingerprints’ of conventional warfare. When military capabilities are unbalanced, that is, the government wields a superiority in conventional warfare that rebels cannot match, guerrilla warfare results. Clashes tend towards difficult terrain, rural areas and border sanctuaries from which rebels can harass government forces and retreat to relative safety. Low-capability warfare emerges when both the government and the insurgency can deploy only small or light arms, ranging from revolvers to automatic weapons, mobile anti-tank devices and mortars. ‘Unmistakable’ front lines (usually in the form of roadblocks) combined with a ‘confused’ and fluid pattern of fighting are the empirical hallmarks of low-capability warfare.

Developing replicable coding criteria capable of demarcating conventional and guerrilla warfare from low-capability warfare is an important advance and opens the way to testing hypotheses embedded in the ‘new wars’ literature. However, our ability to generate new hypotheses is limited by the paucity of theory on military strategy in low-capability civil wars. Both Lockyer and Kalyvas and Balcells claim to advance such a theory. Kalyvas and Balcells argue that ‘the relative balance of power between contending forces determines the war-fighting strategies of the respective sides’ and state that a lack of mobile armour and heavy artillery explains the divergent military

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30 Kalyvas and Balcells, 'International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict,' Pg 419.
32 Lockyer, 'The Dynamics of Warfare in Civil War,' Pg 93-94.
tactics and strategy deployed in low-capability conflicts. However, the authors are more successful in articulating how the balance of power connects with military strategy to produce empirical patterns in guerrilla and conventional warfare than they are with low-capability warfare. We see guerilla warfare, for example, because in some circumstances, a rebellion is too weak to openly fight the government (balance of power) so they disband into small and lightly armed groups and make use of difficult terrain to negate the government’s advantage in conventional warfare (strategy). As such, fighting tends towards rural areas (empirics). When it comes to ‘low-capability warfare’, however, the authors provide vignettes from Congo-Brazzaville and Somalia describing the ‘confused’ pattern of fighting but little explanation of what strategy links the ‘low’ military capabilities of actors with the ‘confused’ fighting. Put somewhat crudely, Kalyvas and Balcells provide the bread for the sandwich but not the meat.

Lockyer states that there are two ‘principles’ of low-capability ‘strategy’. Both government and insurgent actors attempt to ‘capture territory and avoid battles of annihilation’ in offense, while they ‘attempt to hold and defend territory and population’ in defence. Urban warfare is likened to ‘severe gang violence’ and ‘confused street battles’. Rural offensives resemble ‘trickles’ as belligerents advance along a path of least resistance. The Revolutionary United Front (RUF) in Sierra Leone is instructive: ‘the RUF captured territory through a third form of offensive strategy, that is, capturing territory and asserting its control over populations by advancing into unprotected space’. Empirically, a proliferation of ‘weak fixed’ fortifications, especially roadblocks, create the aforementioned ‘unmistakable frontlines’.

Yet, there is little guidance as to why or when belligerents attempt to capture territory and avoid battles of annihilation nor as to why and when belligerents choose to defend

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34 Ibid, Pg 418.
35 Adam Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts' (University of Sydney, 2009) Pg 65.
36 Ibid, Pg 66.
37 Ibid.
38 Ibid.
Chapter One - Introduction

territory. While it is tempting to say that ‘moving into unprotected space’ is an offensive strategy the more important factor seems to be the retreat of the defending actor. In the example of Sierra Leone, the question seems not to be why the RUF would move into towns that the government abandoned (of course they would, unless they suspected an ambush) but why the government would retreat in the first place? Moreover, there is a contradiction here. If the dominant defensive strategy is to protect territory and population how can a ‘trickling’ pattern, based on the retreat of government soldiers, be observed? Why are some areas left unprotected whilst others are defended? If, as Jomini argued, strategy reflects decisions of ‘where, when and how to move’ military forces, then a theory of strategy that cannot account for this variation is deficient. Without an understanding of why belligerents avoid battles of annihilation or adopt positional defence we cannot say where and when they will behave in this way. Indeed, we cannot say much more than that belligerents will ‘avoid battles of annihilation’ in offense and ‘sometimes retreat and sometimes defend’ in defence, which really, is not a theory of strategy but a series of empirical observations.

We are left with a puzzle. While there are empirical regularities to the conduct of low-capability warfare, we have no theory to explain them. Moreover, the existing patterns seem contradictory. What explains the division between urban and rural operations observed by Lockyer? How can we have unmistakable front lines and ‘trickling’ patterns at the same time? What is the logic that underpins where and when belligerents in low-capability warfare choose to fight and how does this differ from conventional and guerrilla warfare? It is to this puzzle that the present thesis contributes. My main contention is that the military strategies of domestic and foreign actors in low-capability warfare are deeply influenced by the economic geography of a conflicted state. This argument is based upon a simple conjecture: resources matter because low-capability conflicts are defensive. Capturing territory is more costly than holding it when poorly organised belligerents arm themselves with light weapons. Actors utilise what Hans Delbruck called a ‘strategy of exhaustion’ to exploit the advantages of defensive warfare, deny resources to rivals and obtain the best bargaining position in peace negotiations. Empirically, I predict that economic

geography plays a powerful role in structuring where governments and insurgents choose to fight and when foreign states choose to intervene. Fighting in low capability warfare gravitates towards economically valuable areas, and, as they do, the incentives increase for foreign states to leverage their military advantage in a pitched battle over a shared objective and play kingmaker in future political negotiations.

Strategy in low-capability warfare contrasts with strategy in conventional and guerilla warfare. An enemy’s offensive military capabilities, rather than economic resources, are the target of military operations in conventional warfare. As Thomas Schelling observed, only after the ‘power to capture’ is eliminated can political and economic objectives be realised. Or, as Kaldor puts it, ‘the aim has to be disarmament of the opponent in order to achieve the political objective, otherwise there is always a danger of counter-attack’. Oil reserves, agricultural land or a foreign capital may be the end-goal, but so long as an enemy retains a capacity to re-capture territory, the focus of operations must be the enemy’s army. Fighting does not correlate well with economic geography in these circumstances. As pitched battles are no more or less likely near valuable resources, the timing of deployment is unrelated to economic geography in conventional warfare. Insurgents are outgunned in guerrilla warfare and the government can, in most cases, protect its most economically valuable areas. ‘Counter-insurgency’ in a foreign country is costly and, unless for the highest geopolitical objectives, I predict that foreign intervention in guerrilla warfare is both unlikely and unrelated to the economic geography of a conflicted state.

As such, the thesis speaks to two further bodies of literature: the role of economic geography in civil war and the motivations of foreign interveners. Each of these research clusters is discussed in the following section.

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41 Thomas Schelling, Arms and Influence (New Haven: Yale University Press, 2008) Chapter 1, "The Diplomacy of Violence".
42 Kaldor, New and Old Wars Pg 23.
Economic Geography and Civil War

Scholars have hinted at a link between low military capabilities, economic variables and military outcomes. When the British Department for International Development describes ‘factional wars’ (including those in Liberia, Somalia and Sierra Leone), for example, it implicitly links ‘low-tech’ wars to economics:

‘Factional wars are fluid by nature. There is rarely a defined front line and fighting is frequently opportunistic rather than strategic. Warfare is low-tech and small arms are the main weapons. Such wars are not costly and can easily be sustained without external support. Frequently these conflicts move rapidly from the original cause to revolve around the exploitation of commercial, mineral and natural resources’.43

Kaldor and Duffield assert that rebels in ‘new wars’ can plug-in to the globalised economy in a way that was impossible during the Cold War.44 What Duffield terms ‘network wars’ are contests over the ‘networks to realise wealth and provision violence’.45 Newman argues that ‘new wars’ ‘give rise to competition over natural resources and illegal commercial entrepreneurship.’ 46 David Keen has argued that ‘economic violence’ (that is, violence in pursuit of economic gain) is most likely in ‘weak states’.47 Keen, like Kaldor and Duffield, points to the end of the Cold War as marking a paradigm shift in the relationship between economics and violence. Rebellions now ‘resort to brutality in a bid to... de-populate resource-rich areas’ in the absence of superpower support.48 Some studies argue that changing objectives rather than changing strategies explain the salience of economics to organised violence after the Cold War. ‘Ideologically’ motivated rebels cultivated popular support during the Cold War while rebellions motivated by greed, profit or short-term gains eschew and

45 Duffield, Global Governance and the New Wars: The Merging of Development and Security Pg 190.
48 Ibid., Pg 34.
abuse local communities after it. According to the *Small Arms Survey*, the National Union for the Total Independence of Angola (UNITA) shifted from a long-term to a short-term gains-seeking rebellion with the end of the Cold War, a change that apparently explains their increasing willingness to fight over diamond-mining areas.49

Although an interesting link between economic geography and conflict geography in ‘low-tech’ warfare or ‘new wars’ is identified by the literature, hypotheses have not been formalised, nor integrated with a theory of strategy and empirically tested.50 Research into the economics of civil wars has focused primarily on how natural resources motivate and finance rebellion, rather than how their spatial distribution structures patterns of fighting.51 Nonetheless a recent body of literature, much of it from the Centre for the Study of Civil War at Uppsala University, considers how the spatial distribution of economic resources affects a number of military outcomes. Philippe le Billion has consistently advocated for a geographically sensitive approach to the study of economics and war, as have Buhaug and Lujala.52 In a seminal article published in 2002, Buhaug and Gates established links between the presence of natural resources and the size of a conflict zone (measured as the proportion of a country embroiled in fighting) and between the objectives of a rebellion (whether or not the aim was to secede from a larger country) and the distance at which fighting occurred form the capital.53 Buhaug and Gates’s study sparked a raft of further and more sophisticated investigation. Raleigh and Hegre looked at whether population

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51 See, for example, Paivi Lujala, 'Deadly Combat over Natural Resources: Gems, Petroleum, Drugs, and the Severity of Armed Conflict,' *Journal of Conflict Resolution* 53, no. 1 (2009), Michael Ross, 'What Do We Know about Natural Resources and Civil War?,' *Journal of Peace Research* 41, no. 3 (2004). Lujala, Rod and Thieme have found that hydrocarbons increase the length of conflicts over control of the state, but not of secessionist conflicts. Pavi Lujala, Jan Ketil Rod, and Nadja Thieme, 'Fighting Over Oil: Introducing a New Dataset,' *Conflict Management and Peace Science* 24, no. 3 (2007): Pg 254. Ross finds that oil increases the chances of a separatist conflict by increasing the value of sovereignty to a dissenting group. Michael Ross, 'A Closer Look at Oil, Diamonds and Civil War,' *Annual Review of Political Science*, no. 9 (2006): Pg 289. Diamonds and Forest Resources have also been specifically analysed. Siri Camilla Aas Rustad et al., 'Foliage and Fighting: Forest Resources and the Onset, Duration and Location of Civil War,' *Political Geography* 27, no. 9 (2008).
clusters correlate with battle agglomerations. Using the Armed Conflict Location Event Dataset (ACLED, discussed in Chapter 3) the authors found that areas of high population density experience more armed conflict events than areas with dispersed populations, partly, they argue, because these areas ‘are particularly valuable for both rebels and the government’. 54 Cities solve coordination problems and provide a condensed source of recruits and ‘taxation’ revenue. Despite this promising analysis and innovative use of geographically disaggregated data, the sample was restricted to Central Africa and did not factor military variables into the analysis. Of the 8 conflicts analysed only 1 was predominantly a low-capability conflict (Congo-Brazzaville). Problems inherent in the ACLED database including large differentials in cross-case coverage and urban bias may also have influenced the results. In a similar analysis of Sub-Saharan Africa, Ostby, Nordas and Rod found that absolute and relative poverty within regions increased the chances of fighting in that area. 55 Hegre, Ostby and Raleigh found the opposite – that richer areas were more likely to experience fighting. Their study, however, was restricted to the Liberian civil war and the authors acknowledge that a balance of power in favour of the rebels loosened the strategic constraints normally faced by insurgents and likely accounts for this finding. 56 Buhaug et al conducted a global study of conflict outbreak with high resolution grid cells and found that ‘pockets of higher relative wealth within very poor countries are more likely to see conflict outbreaks’.57 The authors, however, did not examine the geographical scope/incidence of conflict. Buhaug, Lujala and Gates find that conflicts fought far from the capital city are likely to last longer, while conflicts over resources are shorter. 58 Ross hypothesised that natural resources might lead to higher intensity


57 Halvard Buhaug et al., 'It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location,' Journal of Conflict Resolution Online First, no. 23 May (2011): Pg 21. The authors also found that conflicts were more likely to break out near to the capital – a somewhat surprising finding given the common image of warfare emerging in peripheral regions.

conflicts as belligerents engage in ‘resource wars’, an idea that finds some support in relation to diamonds and hydrocarbon resources located inside a conflict zone.\(^{59}\) Buhaug and Rod (2006) provide the empirical study closest to the aims of this thesis. By dividing the African continent into 100km by 100km grids the authors found that separatist conflicts were more likely to be fought far from the capital in areas with poor road networks, close to an international border and away from resources. Conflicts over control of the state, however, were more likely to be fought near to the capital, around diamond deposits and in areas with a developed road network.\(^{60}\) Their analysis is suggestive that different ‘types’ of conflict may be influenced in different ways by the underlying economic geography.

Whilst these studies point us towards a connection between economic geography and the location of fighting in civil war, none have yet examined whether this pattern is more salient in different types of ‘warfare’. Indeed the reported findings are somewhat contradictory. In some studies wealthier areas are more likely to be subjected to combat, whilst in others, poor areas are. What accounts for this variation? Why might areas of relative wealth be more likely to experience fighting in Liberia, but less likely in Africa taken more broadly? In addition, there are some wars that are neither motivated by, nor are their military operations structured by, economics. As Herbst cites, it is problematic to think that a desire to loot South Africa’s diamonds motivated Nelson Mandela and the African National Congress. In some rebellions, economics simply do not appear to structure the fighting, such as in contemporary Niger, or Mali. Finally, as Angstrom points out ‘why, if economics are that important, is fighting often fierce around symbols of national power such as the capital city or the presidential palace?’\(^{61}\) Clearly economics are more salient in some circumstances than others, but research has not established what those circumstances are.

\(^{59}\) Ross, 'How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases,' Pg 46.,
Lujala, 'Deadly Combat over Natural Resources: Gems, Petroleum, Drugs, and the Severity of Armed Conflict,' Pg 67.
\(^{61}\) Angstrom, 'Introduction: Debating the Nature of Modern War,' Pg 12.
Foreign Intervention

Finally, the thesis argues that foreign actors are sensitive to warfare types when considering deployment in a civil war. Insofar as different ‘types’ of warfare exhibit different spatial patterns of fighting, and domestic belligerents adopt different strategies, the timing and strategy of foreign interveners will also differ. There is a substantial body of research into foreign intervention in civil wars. Studies have examined the effects of intervention and there exists a large body of case study and prescriptive literature, particularly since the end of the Cold War. A small but growing number of quantitative researchers focus on the causes of intervention in internal conflict – of primary interest here.

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62 For a general review of the literature see Patrick Regan, 'Interventions into Civil Wars: A Retrospective Survey with Prospective Ideas,' Civil Wars 12, no. 4 (2010).
65 Regan argues that “at the core, there is a relative paucity of broadly cross-national research into interventions into civil wars, relative in the sense that this type of policy option does not get the intellectual attention that, say, the onset of civil war does”. Regan, 'Interventions into Civil Wars: A Retrospective Survey with Prospective Ideas,' Pg 467.
International media and domestic institutions,\textsuperscript{66} ex-colonial relationships and alliance patterns have been found to influence the probability of military intervention,\textsuperscript{67} as have past relations of amity or enmity.\textsuperscript{68} So too, the material power of an intervener\textsuperscript{69} and the proximity to a target\textsuperscript{70} alter the proclivity to intervene. Findings suggest that ethnic affinities increase the probability of cross-border intervention\textsuperscript{71} and differently structured international systems affect the frequency and objectives of intervention.\textsuperscript{72}

More recently, researchers have incorporated strategic elements, examining the role of geopolitical rivalries,\textsuperscript{73} alliance dynamics and\textsuperscript{74} previous deployments.\textsuperscript{75} Kathman has argued that foreign states are careful to consider the potential for regional contagion when deciding to intervene.\textsuperscript{76}

Dynamic and time-variant aspects of conflict processes have not received the same attention. Battle intensity and humanitarian concerns receive the most sustained

\textsuperscript{66} Charles Kegley and Margaret Hermann, 'Putting Military Intervention into the Democratic Peace,' \textit{Comparative Political Studies} 30, no. 1 (1997).


\textsuperscript{71} Deepa Khosla, 'Third World States as Interveners in Ethnic Conflicts: Implications for regional and International Security,' \textit{Third World Quarterly} 20, no. 6 (1999).


\textsuperscript{75} Jacob D Kathman, 'Civil War Diffusion and Regional Motivations for Intervention,' \textit{Journal of Conflict Resolution} Published online July 7, 2011 (2011).
focus. More recently, Gent has shown that foreign states time their intervention for maximum impact by waiting until rebels and governments reach a rough military parity. Kaw is perhaps the only author to test how changes in the geography of fighting provoke intervention. In her research it was found that threats to major cities and economic and political centres tended to provoke Soviet intervention. Kaw limited her sample to the Soviet Union, however, and included both inter-state and intra-state conflicts.

From the United Fruit Company in Guatemala to the ‘coltan’ of the Democratic Republic of Congo, economics appears to play a powerful role in motivating foreign intervention. Hans Morgenthau wrote in 1967 that natural resources provided incentives to meddle in another’s internal affairs. Michael Ross, in his investigation of the causal mechanisms linking natural resources with the onset and intensity of civil wars, came to the same conclusion. Yet, Findely and Mitchell recently observed that ‘with few exceptions... extant research ignores that role of economic factors, especially natural resources’. They argue that lootable resources (such as diamonds and gold) are associated with the onset of intervention because states desire access to them, either to offset the costs of deployment, gain access to a profitable market or protect an existing one. Fordham observed that ‘most recent quantitative analyses of intervention do not include economic variables at all’ and finds that while security concerns typically explain the United States’s (US) deployments in foreign

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82 See Ross, 'How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases.'
84 Findley and Mitchell, 'Lootable Resources and Third-Party Intervention into Civil Wars,' Pg 4.
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wars, the definition of a security threat is mediated by the pattern of extending security guarantees to trading states.\textsuperscript{85} Yoon has suggested that valuable resource endowments increase the ‘expected gains’ for foreign states.\textsuperscript{86} An earlier study found that higher levels of imports, exports and foreign investment did not increase the chances of US intervention in third world internal wars.\textsuperscript{87}

There are a number of problems with the existing literature. ‘Economics’ is conceptualised primarily as inter-state trade or the presence of natural resources, reflecting the interest of scholars in the profits to be obtained from intervention. Scholarship has not examined whether the proximity of fighting to resources influences the probability of intervention, nor whether economic variables are more important in a sub-set of conflicts. Firstly, it is unlikely that states use internal rebellions as a ‘cover’ for their financial interests when rebels are not actually fighting in the areas that resources are located. It is hard to imagine Uganda supporting a rebellion fighting the Democratic Republic of Congo (DRC) on the Atlantic coast. Secondly, the costs of intervention, and therefore the net profits available to foreign actors vary with different ‘types’ of warfare. No amount of coltan will offset the costs of keeping a large mechanised army fighting in a foreign country for months or years on end. Zimbabwe’s intervention in the DRC, for example, (often held up as the paragon of an opportunistic, greed motivated foreign adventure) spent $US 200 million in the first two years of its deployment (a figure compounded by the fact that Zimbabwe had to pay for imports in $US, the cost of which skyrocketed when the Zimbabwean dollar became virtually worthless), further crippling an already free-falling economy.\textsuperscript{88} Michael Nest argues that in this ‘most likely’ of cases, a desire to access DRC’s resources did not motivate the original deployment and Zimbabwe’s financial returns from the intervention were very modest.\textsuperscript{89}

\textsuperscript{88} Sandra J Maclean, 'Mugabe at War: The Political Economy of Conflict in Zimbabwe,' \textit{Third World Quarterly} 23, no. 3 (2002): Pg 522.
\textsuperscript{89} Michael Nest, 'Ambitions, Profits and Loss: Zimbabwean Economic Involvement in the Democratic Republic of Congo,' \textit{African Affairs} 100, no. 400 (2001).
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conflicts, when compared to conventional warfare, may offer higher profits due to the lower deployment costs. That said, the study of economics and intervention has placed too much emphasis on profits and not enough on strategy. States do not have to profit directly from resources for them to play a primary role in motivating intervention. Insofar as resources increase the ability of a rival to wage war they are of interest to foreign countries. If, by protecting key sources of revenue to an allied party, a foreign state increases the chances of their side winning, then there is a strategic motivation to intervene when these resources are threatened. As I aim to show in the forthcoming chapters, the incentive to defend valuable resources from rival military organisations, be they rebels or governments, is especially high in the defensively skewed, low-capability civil wars.

Summary and Outline of the Thesis

Recent research has taken the important step of moving from ambiguous labels and concepts to replicable coding criteria for what this thesis labels ‘low-capability warfare’. Our knowledge of military strategy in low-capability warfare, however, remains limited, and the ability to explain empirical patterns and predict new relationships is truncated. Conspicuous among these relationships is a hypothesised differential in the role that economics plays in structuring where and when fighting occurs in ‘weak states’, ‘new wars’ or ‘network wars’. At present, the connection is undertheorised and untested empirically. Despite the importance of international actors in ‘new wars’ we do not yet understand whether and how the strategies of foreign actors differ, if at all, when compared to the modern traditional or ‘old’ images of conventional and guerrilla warfare. The preceding literature review has left us with a number of puzzles. What military strategies are belligerents like to deploy in low-capability warfare? How do these strategies differ, if at all, from those of conventional and guerrilla warfare? Are economic variables more likely to feature in the strategies of poorly armed and organised belligerents, and why? Does the hypothesized link between low-tech warfare and fighting over economically valuable areas hold up to empirical scrutiny? Do foreign actors intervene differently in low-capability warfare?
The remainder of the thesis investigates these questions. Chapter 2 outlines a theory of military strategy in low-capability warfare. In an environment bereft of heavy weapons where belligerents have a poor capacity to organise and supply soldiers, light automatic and semi-automatic weapons enable the effective defense of small land areas, even for a vastly outnumbered military actor. Positional defense of economically valuable sites (where an opponent has the greatest incentive to attack) with the intent of denying resources to a rival whilst luring them into a conventional battle for which they are ill-equipped is a utility maximising strategy in this context. Foreign states hold a ‘trump card’ in low-capability warfare – the capacity for conventional offense – that is most effective when domestic actors commit to open, conventional warfare. When fighting converges on valuable areas in low-capability warfare, this opens the window for foreign states to play their trump card.

Chapter 3 discusses the methodological advantages of testing these hypotheses within the sample of African civil wars. Africa’s economic history and geography allows the researcher to hold the spatial distribution of resources ‘constant’ whilst varying the type of warfare. Capital cities are a crucial ‘point resource’ for many African rulers and hypotheses developed in Chapter 2 are recast with reference to Africa’s capitals. Specifically, Chapter 3 predicts that Africa’s capitals are at a higher risk of experiencing fighting in low-capability warfare when compared to conventional and guerrilla warfare. Fighting also concentrates around Africa’s capitals and correlates well with the economic geography of the state experiencing low-capability warfare. Chapter 3 also predicts that the probability of foreign states deploying soldiers in low-capability warfare is systematically related to the distance of fighting from the capital city – a relationship not expected in conventional or guerrilla warfare. As a sample of civil wars Africa is a ‘hard test’ for the theory and minimises the effects of intra-cluster correlation. Chapter 3 then details the methodology utilised in Chapters 4-7 and justifies the use of logistic and OLS regression. Specification of dependent, independent and control variables are included in this section.

Chapter 4 shows that low-capability warfare is roughly six times more likely to experience fighting in the capital, other variables, including the number of military personnel, being equal. A replication of Buhaug and Rod’s 2006 study shows that regions near to Africa’s capitals are more likely to experience fighting in low-
capability warfare – a relationship absent in conventional and guerrilla warfare. With caveats, Chapter 5 demonstrates that low-capability warfare experiences a higher proportion of fighting in the centre of power when compared to conventional and guerrilla warfare. Visual analysis reveals that the correlation between economic geography and clusters of fighting is higher in low-capability warfare when compared with conventional and guerrilla warfare. Chapter 6 finds that the distance of fighting from Africa’s capitals is powerfully related to the chances of foreign intervention in the sample of low-capability conflicts. Intervention in guerrilla and conventional warfare, motivated primarily by geopolitical rivalries and alliance commitments, shows no systematic tendency towards the capital city.

Chapter 7 investigates the plausibility of causal mechanisms linking economic geography, conflict geography and foreign intervention with a ‘most likely’ case of the Liberian civil war. President Samuel Doe and the Armed Forces of Liberia (AFL) relied heavily on a ‘strategy of exhaustion’ to defend Monrovia from the National Patriotic Front of Liberia (NPFL). Doe’s decision to fall back and defend the capital was made in response to his perceptions of the low organisational and material capability of the NPFL and the central importance of Monrovia in the war-aims of the NPFL. Nigeria deployed as the ‘battle for Monrovia’ unfolded, believing that a small conventional force could expel the NPFL from Monrovia, defend the city, and allow Nigeria to hold the ‘trump card’ in peace negotiations.

Taken together, the thesis shows that economics and military strategy are intimately connected in low-capability warfare. Economics shapes where and when combatants in a civil war will engage in battle and strategic decisions at the domestic level have profound implications for military decisions at the international level.
Chapter Two

Military Strategy in Low-capability Warfare

This chapter outlines a theory of military strategy in low-capability warfare. When governments and insurgents lack the organisational and logistical capacity to coordinate the ‘thrusts’ and manoeuvres familiar to conventional warfare and are armed with light automatic weapons, the advantages of defence eclipse those of offense. Defending a position is easier than capturing it. A ‘strategy of exhaustion’ structured around areas of high economic value exploits the attritional advantages of defence and denies resources to an opponent with pressing needs to recruit and arm soldiers. Fighting is more likely to occur and concentrate around valuable locations as a result. Foreign actors prefer to deploy during conventional battles and as such are sensitive to the geography of conflict. Fighting over resources is a trigger for foreign intervention in low-capability warfare, but not in guerrilla or conventional warfare.

This chapter proceeds as follows. ‘Economic geography’ is defined as the spatial distribution of resources valuable to a military campaign. Any theory of military strategy is built upon distinctions between warfare, strategy and tactics. As Kalyvas explains, ‘a proper analysis of civil war onset and dynamics requires a focus on the interaction of rebel and state strategies (and their underlying capacities)’. Accordingly, I define warfare as the empirical pattern of fighting in a civil war. ‘Types’ of warfare are the product of military strategies selected by individual commanders. Choices of strategy are informed by the tactical options available to commanders and their perceptions of the enemy’s tactical options. Put simply, strategies are a function of relative capability. I argue that there are four ‘ideal type’ tactical options: conventional offense, conventional defence, irregular offense and irregular defence. Using this typology and Kalyvas’s theory of ‘warfare types’ I identify four dominant strategies in civil war. A ‘strategy of annihilation’ targets the enemy’s offensive military capacity with a combination of conventional offensive and defensive tactics. ‘Counter-guerrilla’ (or counter-insurgency) strategy is a modified version of the strategy of annihilation. A guerrilla strategy relies on irregular offense.

and defence. A ‘strategy of exhaustion’ makes use of conventional defensive tactics and irregular offensive tactics and is prevalent in low-capability warfare. With this fourfold division I develop hypotheses connecting the location of fighting and triggers of foreign intervention with economic geography, especially high value to space areas, or ‘point resources’.

Economic Geography

Economic geography is defined as the spatial distribution of resources valuable to belligerents in a civil war. Valuable resources are those that the improve military position of either the government or insurgency. Commodities capable of increasing recruitment or loyalty and procuring weapons are valuable in this regard. Natural resources are one way in which the value of a location is increased. As authors such as Le Billion and David Keen have documented, natural resources were crucial to the survival of insurgencies in Cambodia, Sierra Leone, Afghanistan and Angola. Gems, cannabis, opium and even future mining concessions can be exchanged for weapons or used to induce defection and recruit soldiers. Governments too, especially in Africa, sometimes rely upon the sale of natural resources to recruit, train and arm the military. Natural resources are not distributed evenly within a country and some locations are more valuable than others. Non-natural resources also shape ‘economic geography’. Major cities, ports, airports and trading hubs offer substantial opportunities for resource accumulation. Trade between cities and the countryside can be ‘taxed’. Concentrations of people offer the potential of high returns and low

4 As the Alliance of Democratic Forces for the Liberation of the Congo (ADFL) did in 1997.
collection costs as city-dwellers tend to be wealthier and their higher density lowers the infrastructural costs of physically collecting revenue. Looting wealthy areas is a commonly used method for ‘paying’ soldiers. For example, Charles Taylor’s 1996 offensive in Monrovia was labelled ‘Operation Pay Yourself’. Humanitarian aid unloaded at airports such as Juba in Southern Sudan or sea ports such as Mogadishu or Monrovia were important revenue sources for fighters in those countries. Even the cultural representation of territory can enhance its economic value to belligerents in a civil war. In Chapter 3, I show that the social construction of capital cities as the repository of sovereignty allows organisations physically controlling that territory to cash in, quite literally, on the resources available to ‘states’ playing the ‘game’ of international relations. Each country has an economic geography that includes its natural resource endowments, population concentrations and social representations of territory.

**Warfare**

‘Warfare’ is the empirical pattern of combat observed over a given spatial and temporal domain. As the introduction briefly discussed, Kalyvas has identified three ‘types’ of warfare in civil wars: conventional, guerrilla and what he labels symmetric non-conventional warfare, but I will label ‘low-capability warfare’. Put another way, three combat patterns are distinct enough to facilitate categorisation. According to Kalyvas and Balcells, different forms of warfare emerge depending upon the comparative ‘technology of rebellion’ available to belligerents – specifically the ability and willingness to deploy heavy artillery and armour. When a rebellion is

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8 See, for example, the account provided by Richard Dowden in Richard Dowden, *Africa: Altered States, Ordinary Miracles* (London: Portobello Books, 2009) Pg 172.
10 While Kalyvas does not actually define ‘warfare’ in “Warfare in Civil Wars”, when describing his three types of warfare, he focuses on the empirical patterns such as face to face battles and their absence. Stathis Kalyvas, 'Warfare in Civil Wars,' in *Rethinking the Nature of War*, ed. Isabelle Duyvesteyn and Jan Angstrom (Abingdon: Frank Cass, 2005), Pg 90.
11 As was argued in the Introduction to this thesis, low capability warfare is a more accurate label. Symmetric non-conventional warfare is, in an important way, ‘conventional’. Scholars working with Kalyvas’s theory and in the field of ‘new wars’ generally agree that the distinguishing feature of such wars is the low-military capabilities at the disposal of belligerents.
12 Kalyvas, 'Warfare in Civil Wars,' Pg 91.
able to challenge the state with heavy armour and artillery, conventional warfare results and is identifiable by its clear front lines, fortifications and ‘set-piece battles’. Examples include the Nigerian civil war of 1967-1970 and the Spanish civil war. When governments have a monopoly of conventional firepower, insurgents often choose speed, stealth, harassment, surprise and sabotage to wear down the government, what we commonly know as guerrilla warfare. Guerrilla warfare (or irregular warfare) can be identified by a lack of set-piece battles, no front lines and a profligacy of hit-and-run attacks, usually in rural areas. Conflicts in El Salvador (1979-1991) and Nepal (1996-2006) are illustrative. When both the government and rebellion are ‘unable (or, in a few cases, unwilling) to deploy an organised military response against poorly equipped insurgents’ ‘low-capability warfare’ results. Examples include Lebanon in 1958, Cyprus in 1963 and Liberia from 1989-2003. Kalyvas and Balcells argue that ‘low capability warfare’ was uncommon during the Cold War due to vast amounts of heavy weaponry doled out to allies of the Soviet Union and the United States. Warfare was pushed up into the ‘conventional’ and ‘guerrilla’ categories with the ready availability of conventional weapons. Instances of low-capability warfare were more frequent as the flow of heavy weapons declined with the collapse of the Soviet Union (see Chapter 3). Low-capability warfare is identifiable by a lack of set-piece battles but the presence of front lines (usually in the form of ‘roadblocks’). Keen notes that in Liberia ‘warlords avoided pitched battles and concentrated instead on stealing from civilians, recruiting followers partly by promising them profit’. In Congo-Brazzaville, Liberia and Sierra Leone ‘clashes tend[ed] to break off before one side sustain[ed] heavy casualties’. Figure 2.1 locates low-capability warfare in relation to conventional and guerrilla warfare.

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13 Ibid, Pg 90.
15 Kalyvas, 'Warfare in Civil Wars,' Pg 91.
17 Lockyer, The Dynamics of Warfare in Civil War,' Pg 93-94.
18 Keen, The Economic Functions of Violence in Civil Wars Pg 28.
19 Adam Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts' (University of Sydney, 2009) Pg 66.
What then, causes types of ‘warfare’? What generates the divergent patterns of fighting in civil wars? While the relative ‘technology of rebellion’ might help us predict what types of warfare will emerge it tells us little about why divergent empirical patterns emerge, and, in turn, what other patterns we might expect to see. Warfare is caused by the confluence of strategy selected by multiple commanders. Different empirical patterns emerge because belligerents choose different military strategies. ‘Conventional’ warfare emerges when two actors choose strategies based on force concentration. Front lines form because both actors choose to concentrate at a particular location. During the First World War, front lines stabilised in the north east of France. Following a month-long offensive through Belgium, the advancing Germans inadvertently split near the town of Marne and the retreating French and British troops saw an opportunity to attack the German flanks. As the French and British counter-attacked, the Germans dug in, believing they could hold their existing territorial gains. Joint decisions of Germany, Britain and France ‘caused’ front lines to solidify near Marne. ‘Guerrilla’ warfare emerges because (usually) insurgencies

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20 Kalyvas and Balcells, 'International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict,' Pg 418.

21 Or, as Lockyer writes, is ‘a function of the strategies employed by the contending belligerents’. Lockyer, 'The Dynamics of Warfare in Civil War,' Pg 91.

adopt a strategy of force dispersion. Concentrating for a conventional battle in the face of superior firepower will, in the vast majority of cases, end in annihilation. Empirically we see few front lines and a proliferation of ‘hit and run’ attacks. But what military strategies ‘cause’ low-capability warfare? Why do we see few face to face confrontations but ‘unmistakable’ front lines? Clearly the answer to this question turns on what purposes military strategies serve and how they are composed.

Civil wars emerge in a ‘domestic bargaining environment’ where a government and a sub-state group disagree over policy. Combatants may dispute the political status of an ethnic group, the ideological posture of the government, or, more typically, the distribution of state resources. Often it is a combination. General Okujwu led a rebellion to separate ‘Biafra’ from the Federal Republic of Nigeria and create a new state for the mainly Igbo people of the region in 1967. The distribution of oil revenues, however, was central to the rebellion. Even the most ‘nihilistic’ of insurgencies have some policy issue at stake. The RUF in Sierra Leone, the epitome of apparently senseless rage and violence represented, in part, a backlash against a distribution of state revenues (primarily from diamond sales) that excluded sections of the country, especially the rural poor in the south and east. That the leaders of the RUF wished pocket and distribute those revenues themselves, to ‘feed at the trough’ as Bayart argued, does not change the fact that a political disagreement lay at the centre of the rebellion.

Combat is a calculated gamble to improve one’s bargaining position. By inflicting casualties, capturing strategic points or communicating resolve, organised and


purposive violence is the primary means through which political objectives are realised in wartime. Clausewitz wrote that war is ‘an act of force to compel our enemy to do our will’ and that ‘policy’ ‘will permeate all military operations and in so far as their violent nature will admit it, will have continuous influence on them’. With absolute military victory comes the power to impose policy on the vanquished. Actors seek battlefield gains to maximise concessions in a peace deal where absolute victory is not possible, recalling Mao’s famous dictum of ‘talk/fight, talk/fight’. Settling for greater access to resources rather than complete control is common. Although the RUF sought to oust the government from Freetown, its leader, Foday Sankoh, settled for an appointment as chairman of Sierra Leone’s diamond commission. An insurgency seeking political independence might wish for complete separation but settle for a degree of political autonomy, as occurred during the first Sudanese civil war in 1972.

Strategy is the ‘calculated’ part of the gamble - a decision-maker’s recipe for victory. Colin Gray argues that strategy is ‘the bridge that relates military power to political purpose’ and Fruhling that strategies are ‘theories about victory’. Such a definition has etymological legitimacy, as the greek strategos or strategiea can mean ‘a campaign, generalship or the general’s office’.

30 De Rouen Jr and Sobek argue that some insurgencies do not initiate rebellion with military victory in mind, but make continued fighting so costly for the government that they sue for peace. Cunningham, Mason and Fett argue that the willingness of actors to concede on policy outcomes is largely a function of the ability to inflict costs (presently and into the future) and change the balance of power. See, for example, James Fearon, 'Rationalist Explanations for War,' *International Organization* 49, no. 3 (1995). DeRouen(Jr) and Sobek, 'The Dynamics of Civil War Duration and Outcome,' Pg 306. Mason, Wiengarten, and Fett, 'Win, Lose or Draw: Predicting the Outcome of Civil Wars,' Pg 550.
31 Gent, ‘Going in When it Counts: Military Intervention and the Outcome of Civil Conflicts.’
32 Dowden, *Africa: Altered States, Ordinary Miracles* Pg 304.
33 Barbara Walter, 'The Critical Barrier to Civil War Settlement,' *International Organization* 51, no. 3 (1997): Pg 355. Walter points out that settlements in civil wars are unlikely when compared to interstate wars because of the inability for participants to make credible commitments. In her argument, Third-party guarantors account for much of the stability of negotiated settlements. See also, Roy Licklider, 'The Consequences of Negotiated Settlements in Civil Wars, 1945-1993,' *The American Political Science Review* 89, no. 3 (1995).
Tactics

If strategy is the recipe, what are the ingredients? Fruhling argues that strategies are constructed from the ‘bottom-up’ with military systems (capabilities) and tactics at its base. Lieber concurs, arguing that ‘the feasibility of strategic offense and defence depends on the success of operational and tactical offense and defense’. Clausewitz stated that ‘all strategic planning rests on tactical success alone… this is in all cases the fundamental basis for the decision.’ Tactics are defined as the use of soldiers in individual battles. As Duyvesteyn highlights, although guerrilla warfare is commonly understood as a ‘strategy’ it ‘signifies a tactic of war’. Quincy Wright states that ‘the management of military operations in direct contact with the enemy in order to win battles is called “tactics”’ and the US Marine ‘Warfighting’ field manual that ‘in war, tactics focus on the application of combat power to defeat an enemy force in combat at a particular time and place’.

‘Combat power’ can be applied in four ‘ideal’ ways falling along two dimensions. Firstly, tactics are either conventional or irregular emphasising force concentration or dispersion respectively. Secondly, tactics are either offensive or defensive, emphasising manoeuvre or immobility. Military decision makers combine these tactical categories in varying quantities, places and times to form military strategies. Figure 2.2 outlines these relationships. The following section looks in more detail at each category and the requirements for their deployment.

38 Kier Lieber, ‘Grasping the Technological Peace: The Offense-Defense Balance and International Security,’ International Security 25, no. 1 (2000): Pg 74. It should be noted that this thesis sidelines the ‘operational’ level of war. ‘Operations’ refer to campaigns, often in different theatres. Many of the low-capability civil wars discussed here have just one campaign and one theatre. For simplicity, what is usually a threefold distinction had been collapsed into two: strategy and tactics. See Stephen Biddle, ‘Strategy in War,’ PS: Political Science and Politics 40, no. 3 (2007).
Conventional Offense and Defence

Conventional tactics, in general, rely on force concentration. As Venturinus articulated in the 18\textsuperscript{th} century, ‘the art of the commander consists of manoeuvring his forces in such a way as to concentrate the largest number of men at the decisive point’.\textsuperscript{43} Quincy Wright stated that ‘operations of war have always had the object of concentrating a greater military force than the enemy at a given point, the control of which is regarded as important’.\textsuperscript{44} Force concentration, force economy, simplicity, manoeuvre, and surprise are principles expounded in US military doctrine today.\textsuperscript{45} Both World Wars, and many interstate wars were dominated by the use of conventional tactics, although, as Smith points out, even during these wars, irregular tactics were deployed as well.\textsuperscript{46}

\textsuperscript{43} As cited in, Van-Creveld, \textit{The Transformation of War}  Pg 95.
\textsuperscript{44} Wright, \textit{A Study of War}  Pg 310.
\textsuperscript{45} Corps, \textit{Warfighting}.
Conventional offense directs concentrations of firepower at the enemy’s weak-points, usually labelled ‘pushes’ or ‘thrusts’ to break front lines and expose logistic and communications networks.\textsuperscript{47} Blitzkrieg, the pincer movement, and encirclement are all examples of conventional offensive tactics. Napoleon was an expert at tying down part of an enemy’s force in one location while he attacked at another, usually the flank closest to communications.\textsuperscript{48} Tricking the enemy into dispersion where the attacker will concentrate is a common tactic. For example, in 371 B.C at the battle of Leuctra the Theban Commander Epaminodas loaded his left hand flank with forty-eight ranks of phalanx, as compared to the traditional eight in Greek military doctrine. The phalanx ‘crashed’ through the left flank and Sparta ‘suffered the heaviest defeat in their history’.\textsuperscript{49}

Mobility is a necessary condition for offense. As Glaser and Kaufmann argue ‘only offense inherently requires mobility; a force that cannot move cannot attack, and a defender that can hold its positions need not move’.\textsuperscript{50} Jervis concludes that ‘any forces that for various reasons fight well only within their own soil in effect lack mobility and are therefore defensive’.\textsuperscript{51} Proponents of the offense/defence balance theory in International Relations argue that some technological developments, especially in mobility, have enhanced the relative power of the tactical offense. Advancements enabling the evasion or destruction of fortifications feature heavily in Van Evera’s catalogue of factors enhancing the offense.\textsuperscript{52} So too, command and logistical capacity is necessary for offense. Van Creveld writes that:

‘before a commander can even start thinking of manoeuvring and giving battle, of marching this way and that, of penetrating, enveloping, encircling, of annihilating and wearing down, in short of putting

\textsuperscript{47} Lockyer, ‘Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts’ Pg 60. The US Army Field Manual for Operations states that offensive operations seek to ‘seize, retain and exploit the initiative’. F-M 3-0 Operations, (Washington D.C: Department of the Army, 2001) Para 4-13.
\textsuperscript{48} Smith, ‘Strategy in an Age of Low-Intensity Warfare.’
\textsuperscript{49} Van-Creveld, The Transformation of War Pg 114.
\textsuperscript{52} Motorised armour used during the Second World War allowed for rapid strikes at weak-points in an enemies lines. Stephen Van Evera, Causes of War: Power and the Roots of Conflict (New York: Cornell University Press, 1999) Pg 160.
into practice the whole rigormorale of strategy, he has – or ought – make sure of his ability to supply his soldiers’. 53

Conventional defence inverts conventional offense. Instead of predicting where the enemy is weak and striking there, defence aims to predict where the enemy will gather their strength and concentrate there. As Clausewitz writes, ‘what is defence in conception? The warding off a blow. What is then its characteristic sign? The state of expectancy or of waiting for this blow… by this sign alone can the defensive be distinguished from the offensive in war’. 54 As Tarr argues, defence is the concentration of military force in anticipation of an assault ‘to repel attack, to protect people and property, and to minimise damage by the attacker’. 55 Quincy Wright states that ‘the defensive depends upon the best means of dealing with the enemy’s offensive’. 56 The use of fortifications and static structures (such as trenches) are commonly associated with defensive tactics.

Material and organisational requirements for conventional defence are less demanding than conventional offense. 57 Communications and logistical lines are more compact and difficult to break. Defenders have time on their side, and ‘holding on to something is easier and requires less effort than taking it away’. 58 Or, as Robert Jordan, the protagonist from Hemmingway’s *For Whom the Bell Tolls*, put it, ‘it is one thing to hold positions. It is another thing to attack positions and take them and it is something very different to manoeuvre an army in the field’. 59 Effective defence can be conducted without high levels of coordination between units (although defence is certainly enhanced by effective coordination). Once soldiers are entrenched in fortifications, little further manoeuvre is required. Fewer resources are expended upon


56 Wright, *A Study of War* Pg 314.


58 Van-Creveld, *The Transformation of War* Pg 111.

transport and logistics as supply lines contract. As Jervis has pointed out, advancing armies usually consist of ‘soft’ targets and lack fortification, meaning defensive tactics can be successful without heavy weapons. This is especially the case where the adversary also lacks heavy weapons and armour. A war waged primarily with small arms is likely to favour the defender, other things being equal.

Irregular Offense and Defence

Irregular tactics utilise force dispersion. Offensive operations are small-scale and fast. Defensive concentrations are avoided to minimise the chances of single, decisive defeats. Irregular tactics have prevailed in over half of civil wars since 1946\(^{60}\) such that scholars have conflated intra-state war with guerrilla war.\(^{61}\) Like conventional tactics, irregular tactics are ‘as old as warfare itself’ and have been theorised for many years.\(^{62}\) Lawrence of Arabia, Mao Zedong and Che Guevera were pillars in the theory of insurgency, and the ideas go back as far as Sun Tsu.\(^{63}\)

Irregular offense involves small-scale attacks on concentrations of enemy soldiers, infrastructure, or civilians with highly mobile units. Che Guevara, for example, described how hit and run tactics can be used to sabotage garrisons, lines of communication and infrastructure.\(^{64}\) Attacks, spread widely and sustained over time, wear down the opposition by imposing costs upon its military and economic infrastructure and creating the perception that, unless concessions are agreed to, the costs will continue to be imposed.\(^{65}\) Griffiths writes that ‘the mind of the enemy and the will of his leaders is a target of far more importance than the bodies of his troops’.\(^{66}\) Conspicuous terror has long been tactic in guerrilla warfare. Insurgents rarely control population centres and atrocity is one means of cowing populations and

\[^{60}\] Kalyvas and Balcells, 'International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict,' Pg 423.
inducing defection (mass killing is also related to counter-insurgency). Kalyvas has shown that both insurgent and government actors made strategic use of atrocities in Algeria, Greece and Vietnam.

Not all armies can conduct irregular offense. Conventional offense requires a balance of fragmentation into smaller units for tactical flexibility with the ability to centralise control of those units. A commander cannot conduct conventional offensive manoeuvres without the capacity to direct multiple units towards a single point in time and space. Irregular offense maximises on the tactical flexibility at the expense of centralised control and seeks to exploit the differential in adaptability. Mao Zedong stated that:

‘In guerrilla warfare, small units acting independently play the principal role, and there must be no excessive interference with their activities. In orthodox warfare, particularly in a moving situation, a certain degree of initiative is accorded to subordinates, but in principle, command is centralised. This is done because all units and all supporting arms in all districts must coordinate to the highest degree. In the case of guerrilla warfare, this is not only undesirable, it is impossible.’

Small, independent units have lower logistical requirements. Guerrillas are generally parasitic on government stocks, local populations and where available, foreign patrons, for recruits, foodstuffs, weapons and ammunition. Theft from government arms depots, for example, is a common method of procurement. Rumour has it that Malian rebels from the Popular Movement for the Liberation of Azawad staged their first raid with a single Kalashnikov. As more weapons were looted from government stocks, their ability to attack larger garrisons with heavy and more sophisticated weaponry increased. Mao wrote that guerrillas must depend ‘for their sustenance primarily upon what the locality affords’ and ‘we have a claim on the output of the

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71 Tse-Tung, *Guerrilla Warfare* Pg 51.
arsenals of London as well as Hanyang, and what is more, it is to be delivered to us by the enemy’s own transport corps. This is the sober truth, not a joke’.72

Retreat and dispersion are the hallmarks of irregular defensive tactics. Mao wrote that ‘there is in guerrilla warfare no such thing as a decisive battle; there is nothing comparable to the fixed, passive defence that characterises orthodox war’73 and ‘in general, guerrilla units disperse to operate’.74 Various descriptions of guerrillas as ‘gas-like’ or ‘cloud-like’ emphasise the importance of stealth and dispersion.75 Irregular defence requires that there be some place that soldiers can disperse without being overrun by the superior military strength of their opponent. Rough terrain such as mountains and jungles restrict the ability to concentrate soldiers, armour and artillery and neutralise tactical advantages in open warfare. The Chinese Communists found refuge from Chiang Kai-shek’s Nationalist army in the loess caves of Pao An in 1933.76 An Afghani Taliban commander asserted that ‘our military tactic is to control a district centre, kill the government soldiers there, and withdraw to our mountainous strongholds, where it would be very difficult for the government to pursue us’.77 Border sanctuaries serve the same purpose. Seth Jones found that external support, especially from across the border in Pakistan, was fundamental to the survival and success of insurgencies in Afghanistan since 1979.78 North Vietnamese support was crucial to insurgents in Laos, Cambodia and South Vietnam. Ethiopian and Ugandan support sustained the Sudan People’s Liberation Movement (SPLM) in Southern Sudan, while South African assistance allowed UNITA to challenge the Angolan government for decades. As Laitin and Fearon argue ‘insurgency is favoured by rough terrain, rebels with local knowledge of the population superior to the government’s and a large population. All three aid rebels in hiding from superior government forces. Foreign base camps, financial support and training also favour insurgency’.79

72 As cited in Griffiths, 'Introduction,' Pg 24.
73 Tse-Tung, On Guerrilla Warfare Pg 52.
74 Ibid, Pg 102.
75 Van-Creveld, The Art of War: War and Military Thought Pg 208.
76 Griffiths, 'Introduction,' Pg 18-19.
77 Seth Jones, Counter Insurgency in Afghanistan (Santa Monica: RAND Corporation, 2008) Pg 51.
78 See generally, ibid.
In summary, military theory has established four rough tactical categories. ‘Conventional offense’ involves judicious force concentration and manoeuvre where ‘Conventional defence’ combines force concentration with immobility, often assisted by trenches, bunkers and fortification. ‘Irregular offense’ utilises fragmented but constant sabotage, ambush and ‘terrorist’ attacks. This is usually, although not always as we will see, combined with ‘irregular defence’: the use of rugged terrain, sympathetic populations and dispersion to minimise casualties and make it difficult for the enemy to strike a decisive blow. Figure 2.3 outlines these categories.

**Figure 2.3 – A Typology of Military Tactics**

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<thead>
<tr>
<th></th>
<th><strong>Conventional</strong></th>
<th><strong>Irregular</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Offense</strong></td>
<td>Force concentration and manoeuvre</td>
<td>Force dispersion and manoeuvre</td>
</tr>
<tr>
<td><strong>Defence</strong></td>
<td>Force concentration and fortification</td>
<td>Force dispersion and retreat</td>
</tr>
</tbody>
</table>

Strategies are dynamic and change over time. For example, Mao’s three-stage ‘guerrilla strategy’ envisaged a transformation of tactics over time and space in response to perceived changes in relative military capabilities. The ‘first stage’ of Mao’s recipe for expelling the Japanese from China in the 1930s involved the use of irregular offensive and irregular defensive tactics. China could not hope to match the conventional strength of the Japanese army and were therefore required to disperse and harass. Mao foresaw, however, that at some point during the ‘first phase’ of guerrilla operations the Japanese would overextend in China’s vast territory. He wrote:

‘the enemy will be forced to fix certain terminal points to his strategic offensive, owing to his shortage of troops and our firm resistance and upon reaching them he will stop his strategic offensive and enter the stage of safeguarding his occupied areas’.  

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As Japan’s relative offensive capacity declined with stretching supply and front lines, the tactical emphasis would shift from conventional offense to conventional defence. At this point Mao articulated a tactical change from the ‘strategic defensive’ to the ‘strategic stalemate’ where Chinese troops would engage in ‘frontal defence against the enemy’ in combination with widespread guerrilla offensives.\(^81\) China could concentrate on ‘consolidating’ its territory and ‘systematically improving fighting techniques [and] reform the armed forces’. Like Japan, however, the Chinese guerrillas were ‘not yet adequately equipped technically’\(^82\) and lacked the capacity for conventional offense, so Mao argued that irregular tactics should dominate in attack. Mao saw this ‘strategic stalemate’ as the most destructive period of a war. While both sides are capable of holding their respective territories, in the ‘guerrilla contested zones’ violence would be unrelenting. In the final phase, when China had created a conventional army with offensive capacity in excess of Japan’s defensive capacity the ‘strategic offensive’ would liberate occupied Chinese cities.\(^83\) Put another way, insurgents utilise a strategy involving a staged tactical metamorphosis from irregular offense and irregular defence to irregular offense and conventional defence and finally to conventional offense and conventional defence. Transitions are to be made in response to changes in relative military capabilities. Transition from stage one to stage two could only be made when Japan’s conventional offensive capacity was stretched, otherwise static defences would be overwhelmed. Transition from stage two to stage three could only take place when the Chinese developed a conventional offensive capacity capable of challenging the Japanese. Recent scholarship has suggested that, in reality, insurgencies have grave difficulties overcoming the ‘poverty trap’ involved in transitioning through these stages, but the theory of ‘revolutionary war’ elucidates the utility of understanding strategies as tactical combinations over time and space.\(^84\)

If these are the ‘ingredients’ of military strategy, what determines when they are used, and in what quantities? What variables influence whether a commander will rely more

\(^{81}\) Ibid.
\(^{82}\) Ibid.
\(^{83}\) Ibid, Point 38.
\(^{84}\) That said, Mao was cognizant of the requirement for international assistance when transitioning from a guerrilla to a conventional armed force. For a discussion of the ‘poverty trap’ and civil war see Lockyer, ‘Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts’ Pg 121.
heavily on conventional or irregular tactics, or a mix? As Mao’s illustration suggested, relative military capabilities, understood as functions of the aforementioned typology of tactics are the crucial factor in this equation.

Capacity for conventional offense and defence, whilst improved by aspects such as firepower, logistics and coordination, is ultimately a relative concept. Even a poorly organised government armed only with light automatic weapons will calculate that it possesses a substantial offensive (and defensive) capacity when facing off against a rebellion armed only with spears and rocks. For the sake of simplicity, however, let us imagine that there are two types of military organisation: those armed only with light automatic weapons (such as AK-47, or Automat Kalashnikova 1947, assault rifles) and those with the capacity to organise and deploy heavy artillery and mobile armour. Also assume that one side does not vastly outnumber the other. Figure 2.4 details the dominant military strategy for governments and insurgents based upon the balance of capabilities between those actors. When both sides have the capacity to coordinate and deploy armour and artillery a ‘strategy of annihilation’ is likely. To win the war, each side must eliminate the opponent’s conventional offensive capacity. When one side possesses only light weapons and their opponent can deploy armour and artillery a guerrilla/counter-guerrilla strategy is adopted and the empirical characteristics of guerrilla warfare emerge. When the state and an insurgency cannot deploy heavy weapons the dominant strategy is one of ‘exhaustion’. As I argue in the following section, the defensive advantages of automatic weapons against disorganised and light armed opponents fighting in the open are so great that a strategy of annihilation will likely result in the annihilation of the party adopting it. Instead, belligerents scramble to hold the most valuable sites, exploit the advantages of defence in those zones and sue for the best peace deal possible. Each of these strategies is discussed in more detail below, taking note of what role economic geography is expected to play in the operations of domestic actors and foreign states.

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85 Thankyou to Associate Professor Ben Goldsmith for highlighting the relativity of offensive capacity.
Chapter Two – Military Strategy in Low-capability Warfare

Figure 2.4 – Dominant Military Strategies by Relative Capabilities

<table>
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<tr>
<th>Military Technology of the Rebellion</th>
<th>High</th>
<th>Low</th>
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<tr>
<td>Military Technology of the State</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>Strategy of Annihilation (Conventional Warfare)</td>
<td>Counter-Guerrilla/Guerrilla (Guerrilla Warfare)</td>
</tr>
<tr>
<td>Low</td>
<td>Guerrilla/Counter-Guerrilla (Government ousted, possible return to guerrilla warfare)</td>
<td>Strategy of Exhaustion (Low-Capability Warfare)</td>
</tr>
</tbody>
</table>

Strategy of Exhaustion and Low-Capability Warfare

Low capability warfare is, at first sight, a paradox. Towns and villages exchanging hands with ‘dizzying rapidity’ and front lines that ‘could shift fifty or one hundred kilometres in a day’ give the impression of a fundamentally offensive war. However, the important strategic decisions are defensive. Hans Delbruck argued that military history and theory had focused on the uses of organised violence for disabling an enemy’s fighting ability, or what he called a ‘strategy of annihilation’, at the expense of a second strategy, the ‘strategy of exhaustion’. Exhausting the enemy through attrition and positional defence in areas of high value to a rival for the ends of, not absolute victory, but a favourable political settlement is the essence of this strategy. On the one hand, the difference between a strategy of annihilation and a strategy of exhaustion is one of objectives. Destroying an opponent’s army is the object of ‘annihilation’ whilst ‘exhaustion’ seeks the more modest goal of forcing concessions at the negotiating table. Delbruck wrote that:

86 For one description of the fighting in Sierra Leone, see Lansana Gberie, *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone* (London: Hurst, 2005) Pg 79.
87 United Nations Development Office for Somalia (UNDOS), *Study on Governance in Gedo Region*, (Nairobi: United Nations Development Programme (UNDP), 1998), Pg 75, As Cited in Lockyer Pg 93
'one may not so much place his hopes on completely defeating the enemy as on wearing him out and exhausting him by blows and destruction of all kinds to the extent that in the end he prefers to accept the conditions of the victor, which in this case must always show a certain moderation'.

Yet, there is a fundamental tactical difference between the strategy of annihilation and the strategy of exhaustion. A strategy of exhaustion relies more heavily, indeed, in some cases, exclusively, on defensive tactics, whist, as is discussed further on, the strategy of annihilation combines conventional offensive and defensive tactics in more even quantities. Many scholars have observed the connection between ‘exhaustion’ and defensive tactics. Clausewitz saw that in some circumstances, especially when an opponent loses attacking strength over distance (as is the case with the logistically limited armies) ‘the remaining force is just enough to maintain a defence and wait for peace’. According to Van Creveld, a defensive strategy cannot achieve outright military victory but hope to ‘win by attrition: that is he can hope to hold out, husbanding his forces and using such opportunities to inflict losses until the other side gives up’. Craig writes that this ‘limited warfare’ was adopted when ‘annihilation was impossible, either because the political aims or political tensions involved in the war were small or because the military means were inadequate to accomplish annihilation’.

Exhaustion is most likely to be adopted when the advantages of defence eclipse those of offense. That is, a strategy of exhaustion has higher expected utility when the costs of capturing territory are much greater than the costs of holding it, or, as Delbruck noted ‘in view of the strength of the tactical defence’. Delbruck made precisely this point in his *History of the Art of War within the Framework of Political History*. During the Middle Ages ‘the power of the defence grew vis-à-vis the offense’ and ‘princes as well as cities were concerned with insuring their own security with

90 Van-Creveld, *The Transformation of War* Pg 111.
fortifications’. He saw, for example, that a strategy of exhaustion was useful against the limited logistics of the Swiss infantry in the 16th century:

‘When the Swiss descended from their mountains into the surrounding regions, they naturally had no other principle than to seek out the enemy as fast as possible and to attack and defeat him. But this very same principle could be turned against them. It was known that they always wished to return home soon; it was also always difficult for national leaders to obtain the pay for them over a long period. Therefore, if one succeeded in avoiding their attack and outlasting them in unassailable positions, one could hope to win the campaign without risks and without battle’.  

Delbruck argued that during the Thirty Years Wars ‘strategy’ was determined by ‘the numerous fortified cites and the armies that were always numerically weak in comparison to the large areas involved’. He goes on to write that the armies of this period were ‘too small, too awkward in their tactics, and too unreliable in their composition to be able to carry out the basic principles [of annihilation] in their conduct of war. They stood fast in front of positions that were impregnable for their tactics’. He describes how Frederick the Great relied upon a positional defence when ‘the strategic attack was not capable of dominating the situation forcefully and continuously in one move’. Pericles abandoned the Athenian countryside to the Peloponnesian-Boeotian League and retreated back to Athens from which he relied upon a kind of, naval, irregular offense – ‘landing first here and then there and suddenly appearing, bringing to the enemy in the countryside the same or even greater destruction than the enemy was accomplishing in Attica’. Craig goes on to note that ‘in certain periods of history, because of political factors or the smallness of armies, it [exhaustion] has been the only form of strategy that could be employed.’ Munkler argues that a strategy of exhaustion was adopted in the Thirty Years War because ‘it was seldom possible to seize the enemy’s strongholds, castles and walled cities, the

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94 It should be noted that when Delbruck writes of commanders avoiding battle, he usually means avoiding commitment to a pitched, offensive battle. Holding out in fortifications does not count as making battle in his view. Delbruck, *History of the Art of War Within the Framework of Political History: Volume 4, The Modern Era* Pg 294-95.
95 Ibid, Pg 298.
96 Ibid, Pg 421.
97 Ibid, Pg 305.
99 Craig, 'Delbruck: The Military Historian,' Pg 342.
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aim was to devastate the countryside by attacking villages and burning down farms.’ 100 Indeed Delbruck noted that a strategy of exhaustion can be especially effective in conflicts where recruitment is based upon economic incentives. As he writes, ‘the wars with mercenary armies are in the most outstanding sense economic wars, for the armies have no basis at all but the economic one. From Machiavelli to Frederick, therefore, we hear the repeated saying that he who has the last taler in his pocket wins the war’. 101

Domestic Actors in Low-Capability Warfare

Annihilation is difficult in low-capability warfare. Somewhat ironically, small and weak government and insurgent actors, most vulnerable to swift destruction, are the least capable of inflicting it. Light and small arms such as automatic rifles, mortars, land mines, grenades, rocket propelled grenades (RPGs) and handguns are preponderant. 102 Small arms are widely available and cheap. Michael Klare wrote in 2004 that ‘while a new tank can cost $1 to $2 million and a new jet fighter costs $25 million or more, perfectly useable surplus AK-47 assault rifles can be obtained in many parts of the world for as little as $15’. 103 More commonly, AK-47 rifles sell for between $100 and $400. 104 Human Rights Watch recorded that Al-Shabaab insurgents were armed with ‘60, 80, 81, or 82mm mortars, rocket propelled grenades, B-10 recoilless rifles, Zu-23 and Zu-50 anti aircraft guns, and various other small arms’. 105 Mark Huband observed that the NPFL, attempting to oust President Samuel Doe from his stronghold in Monrovia, were armed with AK-47s and 1944 and 1945 vintage Beretta sub-machine guns. 106 Before the American landing in Lebanon in 1958,

102 Munkler, The New Wars Pg 57.
104 Larry Kahaner, AK-47: The Weapon that Changed the Face of War (New Jersey: John Wiley and Sons, 2007) Pg 93.
commanders observed that Lebanese rebels were ‘lightly armed’. The ‘Ninjas’, a militia group in the 1997 Congo-Brazzaville war ‘lacked arms and equipment’. Research by the Small Arms Survey describes how, during a rebellion against the Presidency of Charles Taylor in Liberia from 2000-2003, ‘both government and rebel forces relied extensively on light weapons’ including light and medium machine guns, Chinese-made AK-47s, and RPGs. Rebels from the Liberians United for Reconciliation and Democracy (LURD) possessed ‘a wide variety of small arms and light weapons, from AK-47 assault rifles and M16 rifles to DSHK 12.7 mm heavy machine guns and SA-7 surface-to-air missiles’. In the Central African Republic the relatively well armed Presidential Guard units of successive rulers have ‘tended to be outfitted with Kalashnikov assault rifles, AA-52 light machine guns, and rocket propelled grenades’.

Chief of the Prussian military staff, Helmuth von Moltke observed the defensive advantages of light, rapid-fire weapons in 1865 when he wrote that ‘the attack of a position is becoming notably more difficult’. Lieber writes that ‘in the age of the breech-loading rifle, no combination of bravery or superior numbers could overcome the problem of attacking frontally over open ground’. Twentieth century advances in small arms, especially the mass production of light, cheap, sub-machine guns such as the AK-47 are likely, other things being equal, to have increased the capacity to defend territory. Light and small arms, machine guns, automatic weapons, mines, and mortars are all anti-personnel weapons, that is, they are most effective against massed infantry. An AK-47 assault rifle can fire up to 600 rounds per minute, a rate comparable to mounted machine guns used in the First World War. AK-47 rifles (and their variants) are lightweight, easy to use and allow poorly trained soldiers to deliver devastating volumes of fully-automatic fire at short ranges (under about 100m

110 Ibid, Chapter 6, "Sourcing the Tools of War", Pg 166-67.
113 Ibid.
114 Kahaner, AK-47: The Weapon that Changed the Face of War Pg 2.
and about 400m for semi-automatic fire). As Kahaner writes ‘even the youngest boys barely able to hold the rifle could spray bullets and hit a human target’. These weapons are most effective in ambushes and positional defence against a lightly armed frontal assault. Portability and high rate of fire at close range allow assailants to surprise and quickly annihilate small body of soldiers. However, it is exceedingly difficult to capture a defended position (especially, as we will see, when the capacity for coordination and logistics are low) given the volume of fire that automatic weapons can deliver.

Charles Taylor’s fortunes in the Liberian civil wars (1989-1996, 2000-2003) briefly illustrate this point. When he invaded with the NPFL on Christmas eve 1989 (see Chapter 8 for a more detailed analysis of this conflict) Taylor attacked ‘unprotected towns instead of fighting government forces head-on’. His tactic was successful in the countryside, which the government (armed also with light automatic weapons) chose not to defend. Talyor, however, encountered serious difficulties when attacking the fixed positions around Monrovia and his assault stalled. Seven years later Taylor was sworn in as President of Liberia. By 2000 he was facing a Guinean-sponsored rebellion in the north west. LURD rebels used the same tactics as Taylor and faced the same difficulties. Armed primarily with automatic weapons, RPGs and mortars, LURD enjoyed initial successes in the countryside but had grave difficulties ousting President Taylor from his fortified positions in Monrovia. Although Taylor’s military capabilities had deteriorated due to his policy of ‘keeping the Liberian military fractured and divided, making him unable to mount an appropriate defence’ he was successfully able to defend the city’s outskirts. Itano observes that:

‘Neither side appeared to have the military capacity to take and hold any of the three bridges [that link central Monrovia to the northern suburbs] and it seemed the bulk of the fighting was conducted by poorly trained teenage and child soldiers, many stoned and drunk, shooting across the bridges’.

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116 Kahaner, *AK-47: The Weapon that Changed the Face of War* Pg 80.
117 Ibid, Pg 76.
119 Ibid.
Instead of a frontal assault, LURD resorted to indiscriminate mortar attacks on the capital to force the resignation of Taylor.\textsuperscript{120} Without the intervention of troops from the Economic Community of West African States (ECOWAS) in August 2003 ‘the stalemate could have lasted indefinitely’.\textsuperscript{121} Throughout the conflict LURD rebels and government soldiers seemed unwilling (or perhaps unable) to frontally assault defended positions. Displays of superior firepower rather overrunning the enemy tended to decide the outcome of battles. Brabazon described a typical encounter as follows:

‘Contacts are always initiated with RPG-7 grenades, fired with limited collateral effect but inflicting substantial psychological damage, and followed by PKM and AKM [PK and AK machine gun] fire. Neither government forces nor LURD fighters will initiate major contacts without a substantial number of RPG grenades. Major fire-fights directed against defended positions usually last for a maximum of four hours before one side either succeeds or has to withdraw to replenish ammunition… Major battles fought at close quarters will typically yield no more than a dozen casualties in total’.\textsuperscript{122}

Offensive or defensive advantages conferred by improvements in firepower can be mitigated by improvements in logistics and coordination. As Van Creveld writes, ‘creating the greatest war-making potential involved more than mobilising all available resources: above all else, it was an exercise in meshing those resources with each other until they formed a single, coherent whole’.\textsuperscript{123} Cohen notes that the radio is as important as the ‘superior armour, guns or engines’ when explaining the success of German Panzer divisions against the French in World War Two.\textsuperscript{124} Offensive advantages of mobile armour so successfully exploited by the Wehrmacht in Poland during 1939 and France in 1940 were muted by the end of World War Two as the Allies and Axis powers successfully learned to use armoured divisions in defence.\textsuperscript{125} Israel deployed tanks in defensive formations during the 1973 conflict over the Golan Heights.\textsuperscript{126} The Rwandan Patriotic Front (RPF) conducted a successful conventional

\textsuperscript{120} Survey, \textit{Small Arms Survey 2005: Weapons at War} Pg 183-84.
\textsuperscript{121} Itano, ‘Liberating Liberia: Charles Taylor and the Rebels who Unseated Him,’ Pg 3.
\textsuperscript{123} Van-Creveld, \textit{The Transformation of War} Pg 102.
\textsuperscript{126} Ibid, Pg 182-83.
military campaign to drive the genocidal Armed Forces of Rwanda (FAR) out of Kigali and across the border into the Democratic Republic of Congo ‘with an arsenal composed merely of mortars, rocket propelled grenades, and, primarily, what one American arms specialist described to me [Philip Gourevitch] as ‘piece of shit’ second hand Kalashnikovs’. 127 Paul Kagame, leader of the RPF, stated that ‘the problem isn’t the equipment… the problem is the men behind it’. 128 Indeed the RPF gained a reputation when fighting in the DRC for both extreme brutality, and the effective use of well coordinated, but lightly armed, units in conventional assaults, especially when compared with their Ugandan allies who deployed large numbers of tanks and heavy artillery. Lieber argues that improvements in tactical coordination, not in firepower, were able to overcome the defensive advantages of machine guns during the First World War. He writes:

‘it was the German army’s decision in 1917 to introduce new “infiltration tactics” that provided a real tactical solution to the stalemate of trench warfare. These tactics called for a brief surprise artillery bombardment aimed at disrupting narrow weak points in the enemy line, followed by the quick penetration by small independent groups of storm troops who were to bypass points of strong resistance and advance as far as possible. The Germans employed infiltration tactics with great success in late 1917 and, especially, in the spring of 1918 with the famous Ludendorff offensives’. 129

So too, logistical capacity can even the playing field. Historically, requisition and foraging have sustained soldiers on campaign. Even Napoleon, noted for his advances in logistical capacity 130 wrote ‘to know how to draw supplies of all kinds from the country you occupy… makes up the large part of the art of war’. 131 Foraging, however, restricted manoeuvres to major towns and rivers where supplies were obtainable from markets or large quantities of foodstuffs and ammunition could be easily transported. Sieges required enormous logistical ‘tails’ as the surrounding countryside was quickly exhausted. 132 The dominance of defensive warfare before

127 As cited in Kahaner, *AK-47: The Weapon that Changed the Face of War* Pg 97.
128 As cited in ibid.
130 Van-Creveld, *Supplying War: Logistic from Wallenstein to Patton* Pg 61.
1560 in Europe can be partly explained by the difficulties in supplying soldiers for long periods in distant lands. Improvements in logistics increased the mobility, reach, and endurance of fighting bodies, and insofar as they have, increased the offensive capacity of armies. Introduction of the magazine system in the 16th and 17th centuries, for example, afforded advancing armies a ‘certain freedom to choose the direction of their movement’. Palmer argues that Republican France’s construction of a professional ‘requisition’ corps that accompanied the advancing soldiers constituted a ‘revolution’ and explains much of France’s military success during the late 18th and early 19th century. Railroads were a major advance in logistical capacity, allowing commanders to deploy and re-deploy thousands of soldiers and their supplies over long distances.

However, it is precisely in the areas of coordination and logistics that combatants in low-capability warfare are deficient. Although Kalyvas focuses on the available weaponry, there is a high correlation with poor organisational and logistical capacity. Holsti argues that ‘rather than highly organised armed forces based on strict command hierarchy, [new] wars are fought by loosely knit groups of regulars, irregulars, cells, and not infrequently by locally based warlords under little or no central authority’. The Small Arms Survey noted that in Liberia, Cote d’Iviore and Sierra Leone ‘only infrequently, are fighters persuaded or coerced into launching large-scale assaults on government troops to procure or defend territory’. The ‘Coyoces’ in Brazzaville, according to Bassanguissa-Ganga, ‘lacked a really effective organisation and logistical supply’ and had received only ‘basic’ military training. The ‘Mambas’ had only ‘one week’s training before being sent into battle’. The ‘Cobras’ were prone to fracture because ‘each Cobra recruit recognised only the authority of his immediate patron rather than the wider hierarchy’. Many militia members fighting in Brazzaville originated from the country and ‘rival leaders could not easily use their

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134 Van-Creveld, Supplying War: Logistic from Wallenstein to Patton Pg 9, 36.
135 Paret, Napoleon and the Revolution in War. Pg 125
138 Bazenguissa-Ganga, ‘The Spread of Political Violence in Congo-Brazzaville,’ Pg 42.
139 Ibid, Pg 43.
140 Ibid, Pg 42.
own militias to invade enemy positions since many militiamen had only an imperfect knowledge of the city’. In Lebanon, during 1958, insurgents were ‘dispersed into bands’ of between 400 and 2000 soldiers and ‘there was no central leadership… each group owed its loyalty only to its individual leader’. The United Nations noted in Somalia that ‘supply-lines were ad-hoc to non-existent, relying mostly on looting’. Vinci notes of Somalian armed groups that:

‘the militias have a relatively decentralised power structure. This is partially because of the nature of the clan system, in which there is little application of discipline in the Western sense… ambushes are the most common form of attacks since they demand that the militia be brought together for only a short period and promise looting after the attack’.

Van de Walle notes that children, commonly used as soldiers in low-capability warfare, can be ‘devastating’ in ambushes but ‘do not understand conventional military strategy and tend to treat war like a street game’.

Governments that fight civil wars with light and small arms also tend to lack coordination and logistics. As Lock describes ‘the logistical capabilities of [African] national armed forces often do not cover the entire territory’. Soldiers of the Republic of Sierra Leone Military Force (RSLMF) were, in 1991, ‘under-equipped and poorly-trained or were not motivated enough for a decisive battle’. ‘Runners’ were used instead of radios to co-ordinate attacks. One aid worker interviewed by David Keen stated that:

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141 Ibid, Pg 53.
143 As cited in Kalyvas and Balcells, ‘International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict,’ Pg 419.
147 Gberie, *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone* Pg 67.
148 Ibid, Pg 73.
'The rebels sent a message saying that they would attack Kailahun on Holy Saturday... We thought the army would quell it. But soldiers told us they had only four rounds [of ammunition] and were fleeing to Guinea'.

According to Gberie, a recruitment drive in Sierra Leone in the early 1990s 'produced little more than a uniformed rabble which acted and looked much like the rag-tag rebels they were sent to fight'. Brigadier Richards of the United Kingdom, when he arrived in Freetown in May 2000, noted that the RSLMF had 'appalling logistic and communications problems' and 'needed to be rebuilt into a manoeuvre force that could confront the RUF directly'.

Many governments deliberately excoriate the organisational coherence and logistical capacity of their armed forces to reduce the probability of coups. By the late 1980s President Siad Barre of Somalia 'viewed the officers [of the army] as either his personal clients or as his personal foes' and commenced a program of 'divide and rule', installing military officers based on ethnic-kinship rather than competence. An elite paramilitary core of Mareehans and Darod, especially the Hangash (military intelligence), the Darbarjebinta (military counterintelligence) and the 'red berets' (military police) backstopped Barre’s regime. Charles Taylor, leader of the NPFL, pursued precisely the same strategy by creating a multitude of paramilitaries including: the Special Security Unit, Security Operations Division, ‘Demon Force’, Joint Security Forces, National Bureau of Investigation, Anti-terrorist Brigade, Anti-terrorist Unit and ‘Charlie’s Angels’. Similar patterns are observable in Congo-Brazzaville, Sudan, Zaire/DRC and the Central African Republic.

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149 As cited in Keen, Pg 82
150 Gberie, A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone Pg 64.
151 Andrew Dorman, Blair's Successful War: British Military Intervention in Sierra Leone (Surrey: Ashgate, 2009) Pg 42.
154 Ibid.
157 Van-de-Walle, 'Contemporary African Warfare.'
Defensive advantages of light automatic weapons will dominate where organisational and logistical capacities are also low.\textsuperscript{159} Low-capability warfare fits this description well. Delbruck’s ‘strategy of exhaustion’ is more useful to combatants than a strategy of annihilation or a counter-insurgency campaign. Armed forces will suffer heavy losses when attempting to capture fixed positions and counter-insurgency, as Thom writes, is a tall order for any army, let alone the least capable of them:

‘aggressive, multiple field operations with little short term payoff that must be sustained over long periods of time to achieve the ultimate goal. This requires good logistic support, mobility, maintenance, training in small unit tactics, good leadership, especially at the junior officer and NCO [non-commissioned officer] levels, and an ability to integrate military intelligence with field operations’.\textsuperscript{160}

It is in these areas of command, control and supply that belligerents in low-capability warfare are deficient. Governments and insurgents obtain more utility by holding areas of high bargaining value and waiting for a peace deal than seeking out and destroying the enemy’s military forces. Johnson saw that a similar calculation underwrote strategy in early modern Europe:

‘Because of the nature of armies of that time [prior to the French Revolution] – their mercenary character and dependence on magazines for supply for instance – for practical reasons it was simply not possible for commanders to launch them on campaigns of annihilation’.\textsuperscript{161}

Already, we can begin to make sense of existing empirical observations. Actors fortify positions and set up front lines, because, based upon an assessment of the adversary’s poor offensive capacity and their own capacity to defend positions against frontal assaults, this is an effective way of controlling territory. Sustained and decisive set-piece battles, however, are rare because neither side possesses the capacity to break their opponent’s front lines. The ‘trickling’ strategy identified by

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\textsuperscript{160} As cited in ibid, Pg 363.

Lockyer is not a strategy in its own right, it is a product of (usually) government actors retreating and leaving territory unoccupied for the insurgency to control.

The crucial strategic decision for commanders in low capability warfare is ‘which ones [pieces of territory] to neglect and which ones to select.’ Economic geography plays a fundamental role in this decision. Areas of high economic value to space, or what Le Billion describes as point resources, are cost effective locations for positional defence. Minerals, oil and some alluvial diamond deposits are examples of point resources. Connections with international trading networks and symbolic values also render ports and capital cities as ‘point resources’. There are three reasons why point resources are likely sites for fortification and defence. Firstly, holding areas of economic value opens the possibility (this is not always realised) of exploiting that resource for finance and weapons. Money can purchase the loyalty of soldiers and buy cheap weapons on the international market. Vinci notes that, in Somalia:

‘in the absence of economic incentives, such fighters [warlord militias] may move their loyalty to another patron, set up an economic enterprise of their own, or even rebel against the patron. As one aid worker put it, “all is well if the militias are getting paid… if not, they would run, setting up their own checkpoints etc”. Consequently, the reliance on economic incentives deepens a reliance on sustainable resource exploitation’.  

This goes for government soldiers as well. Like insurgents, governments can purchase cheap weapons and create incentives for fealty. As Reno notes in Zaire/DRC, ‘independent commanders have used the lack of patronage as an excuse to oblige disgruntled soldiers to pursue private interests’. Russell found that defection from the military is a key variable determining the effectiveness of insurgent groups. Insofar as governments can reduce defection rates with material rewards they are in a strong bargaining position in any future negotiations.

162 Van-Creveld, The Transformation of War Pg 115.
163 Le Billion distinguishes between dispersed and point resources. Taking up a large land area and requiring some form of coordinated and local labour to exploit, agricultural produce is an example of a diffuse resource. Point resources, on the other hand, are immobile, can be directly extracted and are typically of high value. Le-Billion, 'The Political Ecology of War: Natural Resources and Armed Conflicts.'
164 Vinci, 'An Analysis and Comparison of Armed Groups in Somalia,' Pg 83.
Secondly, a ‘strategy of exhaustion’ is largely a strategy of denial. Even if resources cannot be directly converted into military capacity, blocking this opportunity to a rival will pay off when they are dependent upon material incentives to recruit and maintain soldiers in the field. Research has shown that allegiance in poorly trained and poorly disciplined military organisations, where armies lack an *espirit de corps* or institutionalised loyalty, is often a function of the ability to pay and resource soldiers.\(^{167}\) As Herbst identifies, economic incentives are most effective in wars against ‘weak states’ and a strategy centered on denying economic opportunities to a rival is most likely to be effective in this context. Insurgents of the ANC or the Zimbabwean African National Union (ZANU) could not credibly promise their followers immediate financial rewards when fighting the minority-ruled South African or Rhodesian states. A capable military opponent is simply able to keep resource-rich areas out of reach. Ideology and indoctrination are more effective in circumstances where rebels will be required to endure years of hardship, suffering and, possibly, death.\(^{168}\) In contrast, lower combat demands and more credible commitments enable weaker insurgencies fighting weaker states to rely upon material reward for recruitment and reduce defection rates. So too, Claire Metelits argues that fighting over resources is strategic and rational and weaker rebel groups are more likely to fight over resources to ensure their survival.\(^{169}\) Like the enemies of the Swiss infantry in the 16\(^{th}\) century, holding out in impregnable positions while the opponent is starved of resources can bring victory through attrition, in this case, financial attrition.

Finally, defending point resources offers the best chance of exploiting defensive advantages and imposing unacceptable costs upon a rival. A strategy of exhaustion is most likely to ‘exhaust’ if soldiers defend an area where the enemy is likely to attack. At heart, ‘exhaustion’ involves denying someone else what they want most and, as such, requires knowledge of what the enemy wants and what is the most effective way of getting it. For the aforementioned reasons, both sides have incentives to control

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\(^{167}\) Herbst, ‘Economic Incentives, Natural Resources and Conflict in Africa.’
\(^{168}\) Ibid, Pg 270.
areas of high value to space and defending these regions affords best chances of inflicting casualties in a defensive battle.

This observation lies at the heart of strategy in low-capability warfare. Governments are in a strong initial position. They nominally control a country’s territory and may select the areas to fall back and defend. Holding the country’s most valuable sites, knowing full well that an insurgency must endure a high, and perhaps unacceptable, rate of attrition to capture them, increases the government’s chances of survival and obtaining concessions in a peace deal. Conventional defensive tactics will prevail in areas of high economic value to space, or point resources. Outside of these areas, belligerents rely upon irregular offense and defence in an attempt to inflict casualties whilst avoiding pitched battles over areas of secondary importance.

**Foreign Actors in Low-Capability Warfare**

When (if at all) to intervene in a dynamic civil war process is a key strategic decision for foreign actors. Stephen Gent, for example, has shown that intervention occurs when the balance of power between governments and insurgents is roughly even. An injection of exogenous force has the greatest marginal impact on the outcome of a war at this point. Foreign states, in most cases, possess a superior capability for conventional offense when compared to combatants in low-capability warfare. National armies are, usually, designed to fight other, heavily armed, national armies, not ‘rag-tag’ militias and a small injection of firepower can be decisive. Herbert Howe, discussing the effectiveness of the private security firm Executive Outcomes in Angola and Sierra Leone states that:

'A small but highly skilled force may tilt the balance of power in domestic wars by acting as a ‘force multiplier’ for existing assets. This is especially true in many third-world conflicts, where the insurgents lack significant military strength and a defining ideology... A limited amount of reliable air

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170 This is based on Gent’s assumption that the relationship between the balance of military capabilities and the probability of that party winning the war can be modelled as a logistic function. Increases in military capabilities at either extremes of the function (i.e when the balance of power is highly uneven) result in proportionally smaller increases in the probability of that actor winning or losing a war than if those resources were increases towards the middle of the function (i.e when the balance of power is closer to even). See, Gent, 'Going in When it Counts: Military Intervention and the Outcome of Civil Conflicts,' Pg 718.
support (transport, reconnaissance or combat) is surprisingly cost-effective, given most insurgencies lack of counter fire'.

However, conventional offense works best against an opponent committed to fighting in the open. While heavy weapons, armour and air support can be devastating against an exposed and concentrated low-tech army, these assets are comparatively weak when deployed against an opponent utilising irregular tactics. Max Boot argues that America’s technological advantage ‘decreases considerably when its troops have to deploy for peacekeeping or counter-insurgency operations which leave them exposed to low-tech ambushes’. Foreign states, therefore, will be sensitive to the tactics employed by domestic belligerents in a civil war. Foreign states are deterred from intervention when insurgents (and governments) deploy irregular tactics as the advantage in conventional offense cannot be fully realised. When domestic actors commit to open warfare, foreign states will be tempted to use their conventional offensive capabilities to inflict a decisive defeat upon their rival. Recall that the previous section predicted a spatial differentiation of tactics in low-capability warfare. In areas far from ‘point resources’ fighting is dominated by irregular tactics while combatants are more likely to use conventional tactics in battles over point resources. Insofar as this is true, foreign states will exhibit a preference for intervention as fighting approaches point resources and the probability of a pitched, conventional, battle increases. Indeed, foreign states can infer from the presence of a pitched battle in low-capability warfare that the object of fighting is of high value to both sides. Recall that in low-capability warfare, belligerents have incentives to avoid pitched battles. The payoffs for capturing a piece of territory must be substantial in order to offset the higher costs associated with attacking a fixed position when defending actors have an advantage. Deploying soldiers when domestic combatants commit to a battle over ‘point resources’ in low-capability warfare offers outside states the chance to inflict a decisive defeat upon their rival party and hold a section of territory valuable to both sides. Domestic actors will have extreme difficulty re-capturing these areas and be forced to the negotiating table where the intervening country can play ‘kingmaker’.

Open warfare also reveals information about the relative warfighting strength and resolve of both sides. U.S intervention in the Dominican Republic, for example, responded to ‘the ebb and flow of rebel fortunes’ as the battle of Santo Domingo unfolded.173 British decision-makers observing the Biafran war in Nigeria hesitated to act ‘until the military situation became clarified’ at the battle of Ore in September-October 1967 where it became clear that the Nigerian Federal Government could win on its own and that arms and finance would do the job.174 Cuba intervened with nearly 20,000 soldiers in the Ethiopian civil war after the Battle of Harar where Ethiopia showed it could defend cities from the Somali National Army (SNA) but would have difficulty expelling the SNA alone.175 When actors in low-capability warfare demonstrate their inability to conduct sophisticated offensive manoeuvres and deploy heavy firepower, foreign states can assume that the short-term costs and risks associated with any deployment will be low. Once a position is captured the likelihood of being outmanoeuvred and suffering catastrophic losses is minimal. Admiral Jeremiah of the United States Army observed that in Somalia ‘the security problems consisted of ‘technicals’ [pick-up trucks with automatic weapons mounted on them] and marauding teenagers, none a match for organised ground troops’.176 US Ambassador Edward Perkin stated that ‘a clear show of force and a demonstrable willingness to use it should be pressed on the “smallest bully on the block”’.177

We should observe, therefore, that foreign states prefer deployment when their rival in a civil war commits to a conventional battle. If, as the preceding analysis of battle-dynamics suggested, pitched battles in low-capability warfare gravitate towards high-value to space areas then we can predict that the probability of foreign intervention increases as fighting gets closer to these locations.

In summary, belligerents in low-capability warfare utilise a ‘strategy of exhaustion’ based upon the use of conventional defensive tactics around point resources and

176 Walter S Poole, *The Effort to Save Somalia* (Washington D.C: Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, 2005) Pg 11.
177 Ibid, Pg 15.
irregular offensive and defensive tactics outside of these areas. Point resources are attractive locations for conventional defensive tactics as a rival has the highest incentives to capture them. The spatial differentiation of tactics in low-capability warfare produces distinct empirical patterns. Fighting is more likely to occur and concentrate around economically valuable areas whilst dispersed fighting will prevail elsewhere. Foreign states time their interventions with fighting over economically valuable territory to exploit advantages in conventional warfare and play ‘kingmaker’. Figure 2.5 summarises the tactical profile of a ‘strategy of exhaustion’ used in low-capability warfare and the predicted relationships between economic geography and the actions of domestic and foreign actors.

![Figure 2.5 – Strategic Profile and Predictions, Low-Capability Warfare](image)

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<thead>
<tr>
<th>Strategy</th>
<th>Primary Tactical Choices</th>
<th>Predictions</th>
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<tbody>
<tr>
<td>Conventional Offense</td>
<td>Conventional Defence</td>
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<tr>
<td>Irregular Offense</td>
<td>Irregular Defence</td>
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### Strategy of Annihilation and Conventional Warfare

Governments and insurgents have the capacity to deploy heavy weapons in conventional warfare. Positional defence alone is predictable and the concentrated force is vulnerable to the offensive capabilities, especially the heavy artillery and air-power, of a rival. Eliminating or disarming the threat posed by an enemy’s conventional offensive capacity is the overriding objective in conventional warfare and even if goals are fixed points (such as a piece of territory or a fortification) the risk to those positions posed by heavy weapons and mobile armour must be minimised.\(^{178}\)

\(^{178}\) Smith, *On Clausewitz: A Study of Military and Political Ideas* Pg 95.
Hans Delbruck argued that where belligerents possess a high level of offensive capacity, the dominant strategy is of ‘annihilation’. Battles are directed towards neutralising the enemy’s capacity to make war. Delbruck is worth quoting at length on this point:

‘The natural principle of strategy is… assembling one’s forces, seeking out the enemy’s main force, defeating it, and following up the victory until the loser subjects himself to the will of the victor and accepts his conditions, in the most extreme case even to the point of occupying the entire enemy country… This then, and not a geographical point, an area, a city, a position, or a depot, is the object of attack. If one side has succeeded, as the result of a great tactical victory, in destroying the enemy armed forces physically and spiritually to such an extent that they can fight no longer, the victor extends his as broadly as he considers appropriate for his political purpose’.

Moran writes that victory in conventional warfare ‘cannot be gained by pushing the enemy around, or even by pushing him away. It requires that his powers of resistance be broken and disorganised, so that he confronts the possibility that, at some point in the future, he may become defenceless.’ Clausewitz, for example, wrote that ‘if the forces are destroyed – in other words, overcome and incapable of further resistance – the country is automatically lost. On the other hand, loss of the country does not automatically entail destruction of the forces; they can evacuate the country of their own accord, in order to reconquer it more easily later on’. As an example of the ‘strategy of annihilation’, in the Six Day War of 1967, Israel, left just 2% of its air force at home to defend against a possible attack by Syria and Jordan, while it concentrated its 98% firepower on Egypt. Once Egypt was defeated, Israel then concentrated its forces against Syria and Jordan. Insofar as it is the capacity to deploy, manoeuvre and supply heavy weapons and concentrations of soldiers that constitutes a threat, it is these capabilities that must be neutralised. Through a combination of conventional defensive and offensive tactics a ‘strategy of annihilation’ aims to

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outmanoeuvre an opponent, strike with an overwhelming concentration of force, and alter the balance of capabilities such that a threat is no longer posed.\footnote{Craig, 'Delbruck: The Military Historian,' Pg 345.}

As Delbruck stated, we would not expect economic geography to structure the pattern of fighting in conventional warfare. The very predictability of defending valuable areas makes this strategy dangerous when facing an opponent with offensive capacity. Capturing a vital resource, such as when the German army drove to the oil-fields of the Caucuses in 1941, may be an objective, but in order to capture those resources an opposing army must be defeated. As Van Creveld writes, the ‘shortest line [to an objective] is also the most likely one, and therefore, filled with the carcasses of those who take it. The shortest line is where our opponent will concentrate his forces, thus turning it into the longest one and frustrating our plans’\footnote{Van-Creveld, \textit{The Transformation of War} Pg 11.} When Napoleon possessed a large army, it was this army, not Paris that defined, when the war was ‘finished’. Indeed Clausewitz specifically links his ‘centre of gravity’ in war to the strength of the belligerents. He writes that ‘In 1814... even the capture of Paris would not have mattered if Bonaparte still had a sizeable army behind him, but the fact his army had been largely eliminated, the capture of Paris settled everything in 1814 and 1815’.\footnote{As cited in Marika Landau-Wells, 'Capital Cities in Civil Wars: The Locational Dimension of Sovereign Authority,' in \textit{Crisis States Occasional Papers} (London School of Economics and Political Science: Development Studies Institute, 2008), Pg 15.}

Interestingly, Clausewitz saw capital cities, a key feature of any state’s economic geography, as the ‘centre of gravity’ in internal wars due to the lower military capabilities at the disposal of belligerents.\footnote{Smith, \textit{On Clausewitz: A Study of Military and Political Ideas} Pg 135.}

Where both sides possess a capacity for conventional offense, the location of fighting will be driven by many diverse factors: physical, rather than economic geography, insofar as it restricts or enables a body of force to manoeuvre and concentrate firepower. Valleys and mountain passes limit manoeuvrability and speed, exposing ground troops to ambush. Roads and bridges are crucial to the movement of mechanised armies. Major battles occurred near the cities of Faya-Largeau in northern Chad and Jijiga in eastern Ethiopia, in part, because of their status as ‘gateway towns’ or road-junctions from which tanks and mobile artillery could move on major population centres. Predicted and observed movements of an enemy force can
determine the location of battle. Exposed communications and supply lines, for example are tempting, high-payoff locations for attack.\textsuperscript{187} Locations where an opponent is unlikely to defend make effective sites for rapid offensive drives. German Panzer divisions attacked through the Ardennes because French defences were concentrated along the Maginot line further south and France did not believe that an attack was possible thought the forest.\textsuperscript{188} Recall that the battle of Marne in the First World War was not ‘caused’ by the economic value of the town, nor even because of its physical geography, but because the German line inadvertently split.

If pitched battles in conventional warfare exhibit no systematic gravity towards areas of economic importance we would not expect foreign intervention to correlate with fighting over these areas. Foreign states still prefer intervention in decisive battles but these battles are likely to occur away from areas of economic importance. In conventional warfare, the costs of intervention are higher. Soldiers require both defensive capacity to repel attacks from a rival capable of conventional offense and an offensive capacity to manoeuvre and destroy that opposition. With higher costs, we would expect higher stakes to provoke intervention. Figure 2.6 outlines the strategic profile and predictions for conventional warfare.

\begin{figure}[h]
\centering
\caption{Strategic Profile and Predictions, Conventional Warfare}
\begin{tabular}{|c|c|c|}
\hline
\textbf{Strategy} & \textbf{Primary Tactical Choices} & \textbf{Predictions} \\
\hline
 & Conventional Offense & Conventional Defence & Irregular Offense & Irregular Defence & Economic Geography and Fighting & Economic Geography and Intervention \\
\hline
Strategy of Annihilation & ✓ & ✓ & & & Uncorrelated & Uncorrelated \\
\hline
\end{tabular}
\end{figure}

\textsuperscript{187} Moran, 'Geography and Strategy,' Pg 127.
Guerrilla Strategy, Counter-Insurgency and Guerrilla Warfare

A bifurcation of strategy occurs in guerrilla warfare. While insurgents adopt a guerrilla strategy, the government adopts a counter-insurgency strategy. A guerrilla strategy relies on irregular offense and defence to wear down the government and either build one’s forces for a conventional challenge or obtain a favorable peace agreement. Yoweri Musveni noted, in the early stages of the National Resistance Army (NRA) campaign in Uganda, that ‘loss of territory is, at this stage, of no consequence. In our case the more important consideration is the preservation and expansion of our forces by avoiding unnecessary casualties and destroying the enemy’s means of making war’. Alfonso Dhlakama, leader of the Mozambique National Resistance (RENAMO) stated that ‘we are waging war to demoralise and the lower the profile of the enemy... Our aim is not to win the war militarily, but to force the Frelimo government to accept our conditions’. The US Army Counter Insurgency Field Manual states plainly that ‘a thinking enemy is unlikely to choose to fight U.S forces in open battle’ due to its preponderance of offensive military strength.

Counter-insurgency shares similarities with a ‘strategy of annihilation’ albeit against a smaller, weaker and more mobile adversary. Counter-insurgents use territorial defence to ‘protect’ villages in the ‘front line’ and sever information, recruitment and supply to insurgents. As Lockyer writes, ‘counter-guerrilla strategies adopted by incumbents may attempt to isolate the guerrillas from their social support base and deny them readmission, tempt or force them out of cover and into a direct confrontation, or annihilate the social base from which the insurgency operates’. Forced displacement is a common tactic to achieve this end. British counter-insurgency strategy made use of, what they labeled, ‘concentration camps’ during the

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193 Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts' Pg 62.
occupation of Palestine in the 1930s. When insurgents are isolated or in the open, counter-insurgents use manoeuvre warfare and force concentration (often on a much smaller scale than in conventional warfare) to eliminate the guerrilla’s fighting ability. These offensive tactics are ‘unusual within a conventional context’ but the high level of coordination, manoeuvre and firepower required (often involving helicopters) places offensive counter-insurgency operations closer to conventional offense than irregular offense.

We would not expect a high correlation between economic geography and the location of fighting in guerrilla warfare. Governments are substantially stronger and can usually defend the majority of the state’s economically valuable areas. Fighting is most likely to occur in peripheral communities, areas of rough terrain and border regions where insurgents find sanctuary. As Seth Jones argued in relation to Afghanistan, ‘the counter-insurgency in Afghanistan will be won or lost in the communities of rural Afghanistan, not in urban centres such as Kabul’. During Nepal’s civil war (1996-2006) rural villages of Western Nepal suffered the highest levels of Maoist and government violence.

So too, the probability of foreign intervention will not be correlated with the distance of fighting from economically valuable areas. Like conventional warfare, the stakes must be high for an outside state to either support an insurgency against a government with superior military capabilities or support a government that retains a military advantage over an insurgency in the first place. There are, however, a number of circumstances in which guerrilla warfare might become internationalised. Strong rivalries can tempt states into supporting foreign insurgencies as a ‘low cost’ method of inflicting costs. US support for the Northern Alliance post September 11, or the Rwandan interventions in Zaire/DRC from 1996 are examples. Such interference

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194 W.F. Abboushi, 'The Road to Rebellion: Arab Palestine in the 1930s,' *Journal of Palestine Studies* 6, no. 3 (1977): Pg 35.
195 Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts' Pg 62.
196 Jones, *Counter Insurgency in Afghanistan*.
on the side of the rebels can activate a network of inter-state rivalries and induce counter-interventions from states seeking to protect their allies, rebuff a rival, or deter aggression. US soldiers initially deployed in South Vietnam, for example, to communicate resolve to North Vietnam, not the Viet Cong. The Sudan intervened in support of President Kabila of the DRC to counter Ugandan intervention, not because of any particular amity with the government of the DRC. Foreign states might also intervene to close down a border sanctuary in a ‘joint operation’ with a neighbor, such as when Malaysia intervened in the Thai civil war and when Namibia assisted the Angolan government clearing UNITA rebels from the Namibian border. Either way, the timing of intervention in guerrilla warfare is not primarily related to the distance from point resources. Figure 2.7 outlines the strategic profile and predictions associated with guerrilla warfare.

**Figure 2.7 – Strategic Profile and Predictions, Guerrilla Warfare**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Primary Tactical Choices</th>
<th>Predictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conventional Offense</td>
<td>Conventional Defence</td>
</tr>
<tr>
<td></td>
<td>Irregular Offense</td>
<td>Irregular Defence</td>
</tr>
<tr>
<td>Guerilla</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Counter-Insurgency</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Conclusions**

This chapter opened by defining economic geography and distinguishing between warfare, strategy and tactics. Types of warfare are the empirical consequences of military strategies chosen by governments and insurgents in a civil war system. Strategies are a ‘recipe for victory’ composed of four tactical ingredients – conventional offense, conventional defence, irregular offense and irregular defence – utilised over particular spatial domains and particular periods of time. Perceptions of
relative military capabilities drive the selection of tactical ‘ingredients’. Looking at low-capability warfare though through this framework revealed that belligerents have low conventional offensive capacity whilst retaining the ability to conduct positional defence. A ‘strategy of exhaustion’, focused upon a country’s most economically valuable sites, allows belligerents to deny their opponent resources for arms and recruitment whilst maximising on the advantages of defence over offense. Three predictions were made thereupon. Firstly and secondly: battle is more likely and concentrates around point resources in low-capability warfare but not in conventional or guerrilla warfare. Thirdly, the probability of foreign intervention is related to the distance of fighting from these point resources in low capability warfare. This is not the case in conventional and guerrilla warfare. Figure 2.8 summarises the main features of military strategy in low-capability, conventional and guerrilla warfare. It is to the testing of these hypotheses that the thesis now turns.

Figure 2.8 – Strategic Profiles and Predictions

<table>
<thead>
<tr>
<th>Warfare</th>
<th>Strategy</th>
<th>Primary Tactical Choices</th>
<th>Economic Geography and Fighting</th>
<th>Economic Geography and Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Capability</td>
<td>Exhaustion</td>
<td>✓ ✓</td>
<td>Correlated</td>
<td>Correlated</td>
</tr>
<tr>
<td>Conventional</td>
<td>Annihilation</td>
<td>✓ ✓</td>
<td>Uncorrelated</td>
<td>Uncorrelated</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>Guerrilla (Insurgency)</td>
<td>✓ ✓</td>
<td>Uncorrelated</td>
<td>Uncorrelated</td>
</tr>
<tr>
<td></td>
<td>Counter-Insurgency (Government)</td>
<td>✓ ✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter Three

Hypotheses and Methods

When small and light arms prevail as the technology of war, Chapter 2 predicted that economic geography plays a central role in the military strategies of domestic and foreign actors. Fighting over valuable areas is more likely to occur, more likely to concentrate and more likely to trigger foreign intervention in low-capability warfare when compared with conventional and guerrilla warfare. Testing these predictions is not straightforward. Economic geography varies enormously between states. Rural Bangladesh is very different to urban and commercial Lebanon. Bangladesh and Lebanon are different again to the sparse cities and copper mines of the Democratic Republic of Congo. Moreover, the same types of resources can be differently valued across states. Angola and Sierra Leone export diamonds, but they are less important to Angola than they are to Sierra Leone. And economic geography is dynamic. Although Liberia possesses few diamond deposits of its own, smuggling Sierra Leonean gems out of Liberia en-route to the jewelers of Antwerp funded the regime of Charles Taylor. How could we possibly make predictions about the location of fighting or the triggers of foreign intervention in such diverse states and circumstances? How can the economic geography within a sample be kept roughly ‘constant’ while varying the type of warfare experienced in that territory? Much of this chapter is devoted to answering this question.

Similarities in the economic geography of Sub-Saharan African states create a sample of observations within which to test the hypotheses of Chapter 2. Capital cities are prime real estate. A norm connecting physical (that is, military) control of the capital city with international recognition as a ‘state’ multiplies the economic value of these locations. Controlling Kinshasa or Mogadishu is more lucrative to rulers and their challengers than controlling whole provinces or regions. Proceeds from economic and military aid, the ability to ‘legally’ sell resources and tax trade at the main ports eclipse the benefits of, and involve few of the costs and risks associated with, garnering revenue from the countryside. We have, therefore, something of a natural experiment. Although the incentive structure remains broadly constant over the 1960-
2008 period, the nature of warfare does not. Africa has experienced conventional, guerrilla and low-capability warfare.

This Chapter proceeds as follows. How rules for international recognition morph capital cities into ‘point resources’ by conditioning access to the benefits of sovereignty upon physical control is first discussed. Norms have a powerful effect in Africa because domestic opportunities for acculturation are limited. Specific hypotheses about the location and concentration of fighting, in addition to the timing and strategy of foreign intervention, conclude the first section. More technical aspects of methodology are then discussed. Overall, the thesis combines quantitative analysis of battle location, battle concentration and foreign intervention in African civil wars from 1960-2008 with a single case study of the Liberian civil war. Key variables such as low-capability warfare, battle location and foreign intervention are defined and operationalised along with control variables and the unit of analysis. Logistic and Ordinary Least Squares (OLS) regression are justified as appropriate techniques for statistical analysis. Their main strengths and limitations are discussed. Visual analysis plays an important role in this research and the utility of mapping the spatial dimensions of war is discussed. Finally, the utility of a single case study to test the plausibility of causal mechanisms is explained.

Sovereignty Norms and Control of the Capital City

In international relations ‘sovereignty’ is a collection of norms or rules for recognising actors with supreme authority and the prerogatives and behavioral expectations of those actors. Since the end of the Second World War, ‘states’ controlling a parcel of territory, such as ‘Russia’ or ‘China’ or ‘Australia’, are recognised as sovereign. Sovereigns have special privileges that ‘non-state’ actors like Hezbollah or Microsoft do not. States vote at the United Nations (UN), they make trade-deals with other countries and, most importantly, in the eyes of other states, can legitimately make laws to govern and control people within their borders. It is, however, easy to forget that states did not always monopolise sovereignty and the contemporary inter-state configuration emerged from a peculiar set of environmental,

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commercial and political circumstances present in early modern Europe. Since sovereignty is attributed by some to others the answer to, ‘who is to be recognised as a sovereign and who is not’, is socially constituted. Norms are, to put it crudely, what states ‘normally’ do and change depending upon the implicit or explicit consensus and behavior of other sovereigns. Sovereignty was functionally divided along religious, economic and juridical lines in Europe before the treaty of Westphalia in 1648 and for some time after. Barons, ecclesiastical authorities and city-states exercised various degrees of political control. Non-European peoples have long organised political authority in overlapping ways. Sovereignty existed to the extent that rulers could establish control of populations or induce vassalage relations in much of pre-colonial Africa. A dynamic and fluid collection of allegiances characterised sovereignty at the periphery of this system. Sovereignty norms shifted in the late 1950s and early 1960s to afford colonies the full set of sovereign prerogatives, regardless of their territorial control. Jackson contrasts ‘positive sovereignty’ with ‘negative sovereignty’. European rulers recognised as ‘states’ only those organisations physically capable of controlling their territories before the decolonisation movement. The ‘winds of change’ that swept through Africa, Asia and the Middle-East, however, ushered in a ‘negative’ sovereignty regime that de-coupled international recognition from effective territorial control.

Scholars continue to debate the extent to which norms circumscribe the activities of states. Hinsley argues that sovereignty, while it does not have a physical ‘existence’, influences the behaviour of actors in the world. Philpott argues that changes in the ‘rules’ of international relations correlate with changes in the behavior of states, often in ways contrary to their material interests, and often by re-defining what is in a state’s ‘interest’. On the other hand, Krasner argues that sovereignty is an example of

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2 Ibid.
5 In general, we actually know very little about the underlying ‘rules’ for recognising sovereignty, how they change, and how they influence the calculations of actors.
‘organised hypocrisy’.  

While all players agree to the rules, none actually abide by them, especially the prescription that states refrain from meddling in each other’s internal affairs.

Sovereignty norms influence civil wars by outlining the criteria that an actor, be it a government or an insurgency, must fulfil in order to have the best chance at international recognition as a ‘state’. These criteria, this guide-book, influences strategic behavior because organisations recognised as states can access benefits that ‘outlaw’ organisations cannot, or have more difficulty with. Sovereignty is a ‘ticket of general admission to the international arena’, where the full range of international relations [is] reserved for those who possess globally recognised sovereignty. As RBJ Walker argues, sovereignty is the boundary between being ‘inside’ and ‘outside’, the difference between ‘normal’ transactions and ‘criminal’ acts.

Sovereignty’s benefits are many and its costs few. Natural resources can be ‘legally’ exploited (either by the state or by private enterprise) with lower transaction costs and greater security of tenure. UNITA rebels in Angola, for example, attracted a UN arms embargo in the 1990s to curb the trade of diamonds for weapons while the government, using oil revenues to finance its re-armament, did not. Multi-national companies prefer to contract and trade with recognised states than insurgencies. Commerce with insurgencies and warlords carries the risk international opprobrium and product boycotts. De Beers, a diamond trading company, and Nokia, a mobile phone company, both suffered from alleged links to the trade in ‘blood diamonds’ and ‘coltan’ (tantalum) respectively. Duffield writes that recognition ‘confers legitimacy in relation to the integration of economies to the global market-place’ and ‘the formal

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13 Krasner, *Sovereignty: Organized Hypocrisy* Pg 16.
recognition of sovereignty is an important way in which global markets control and exploit natural resources’.  

The right to make valid agreements with international institutions and other states ‘offers the possibility for rulers to secure external resources’ generally unavailable to rebels.  

Military assistance to an internationally recognised government attracts less condemnation than the same support for an insurgency because states can legally enter into contracts with other states. In fact, as Reno points out, sovereignty can be ‘sold’. Numerous countries proclaimed their allegiance to either the communist or capitalist blocs (and sometimes both) in exchange for military hardware, military training programs, budgetary aid and, sometimes, combat soldiers during the Cold War. Sovereignty remains a valuable commodity after the Cold War. Governments have contracted private security companies such as Executive Outcomes (EO) or the Ghurkha Security Guards (GSG) to prosecute their internal wars. Policy positions can be exchanged with international institutions and states. Unlike insurgencies, rulers can enact (or pretend to enact) democratic reforms or economic liberalisation and expect financial assistance from lending organisations such as the International Monetary Fund (IMF) and World Bank.

Kranser notes a host of additional benefits such as diplomatic immunity and immunity from prosecution by outside states or organisations for acts committed within a country’s territorial jurisdiction, although the International Criminal Court (ICC) is changing this. Recognition may alter the calculations of domestic competitors ‘by signaling to constituents that a ruler may have access to international resources, including alliances and sovereign lending’. Millions in frozen Libyan assets were released to the Libyan rebels when states rescinded their recognition of Colonel Ghaddafi’s regime in Tripoli. Unrecognised actors are not precluded from these benefits. Insurgencies trade with multi national companies and attract military aid.

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19 Ibid, Pg 18.
Unrecognised governments, such as Taiwan, can enjoy diplomatic immunity. Hong Kong is a member of the World Bank while not being a sovereign country. It is generally, however, seen as exceptional or illegitimate for these events to occur and on average it is easier for a recognised government to access the benefits of sovereignty than an unrecognised entity.

Being accepted into the coterie of states increases the pool of resources available to an actor. In a civil war, both insurgencies and governments will look to give themselves the best chance of becoming, or remaining, sovereigns. Norms provide guidance on how other states will respond to the dynamics of a civil war and, insofar as they do, also provide information upon how a domestic rival seeking to obtain sovereignty is likely to act. In a universe where only leaders that win elections are recognised as heads of state, for example, a different strategy must be developed than in a universe where physical control over a symbolic land-area is sufficient. Governments might risk large and expensive armed forces to protect and provide social services to the majority of the population where controlling, obtaining the support of, or intimidating people can deliver electoral victory and the spoils of office. On the other hand, knowing that the enemy has only to obtain physical control of a particular piece of territory, a leader may adopt a lower-risk, lower-cost, strategy of relying on a smaller military force. He or she may restrict military operations to the important site rather than risk being outflanked in a defence of peripheral communities.

So what is the norm for recognising sovereigns? Why are some actors attributed the status of ‘governments’ while others are ‘non-state actors’, ‘insurgencies’ or ‘terrorists’? Krasner argues that ‘recognition is extended to entities, states with territory, and formal juridical autonomy’. But how do we define what is a ‘state’ with the quality of sovereignty and what is not? Krasner’s definition begs the question. States are sovereign and sovereignty is attributed to states, a tautology that is exposed in the context of civil war. When the state has bifurcated, how does the international community decide which is the legal government and who is an ‘outlaw’? How is sovereignty apportioned when an insurgency controls territory and ‘acts’ as a state by establishing institutions and delivering public services such as the

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Revolutionary Armed Forces of Colombia (FARC), or Hezbollah in Southern Lebanon? UNITA controlled much of south-eastern Angola for decades but has never held sovereignty. The government of Angola has not, until recently, controlled all of its territory, yet has retained international recognition.

Landau-Wells identifies four principles: democratic legitimacy, ‘institutional norms and behaviour’, measures of effective control and political interests. Democratic legitimacy offers that only the winners of ‘free and fair’ elections should be handed sovereign power. Where an ‘institutional norms and behaviour’ norm operates, respecting human rights might be a path to sovereignty. Controlling the greatest amount of territory affords recognition over and above correct behaviours or democratic legitimacy in a world where an ‘effective control’ norm dominates. States may simply not recognise governments they oppose and recognise those they favour. Krasner argues that no single principle ‘has ever been consistently applied’.

Landau-Wells disputes this. She argues that physically controlling the capital city is a globally recognised and practiced necessary, but not sufficient, condition for sovereignty. Other factors, such as political expediency, may deny organisations that hold capital cities sovereign status (such as Taiwan or Sierra Leone in 1997) but these are the exceptions that prove the rule. Capital cities are the locus of international recognition because they are ‘usually seen by detached observers as in some sense representative of its state and its characteristics’. The capture of a foreign capital has long been associated with ‘victory’ in war and features in the works of military historians such as Friedrich von Bernhardi and Carl von Clausewitz, and practitioners such as Antoine-Henri Jomini, general in the armies of both Tsar Alexander I and Napoleon.

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22 Marika Landau-Wells, ‘Capital Cities in Civil Wars: The Locational Dimension of Sovereign Authority,’ in Crisis States Occasional Papers (London School of Economics and Political Science: Development Studies Institute, 2008), Pg 3.  
23 As appears to have been the case in Côte d’Ivoire when the UN and ECOWAS refused to recognise Laurent Gbagbo after losing an election to his rival Alassane Ouattara.  
24 Krasner, Sovereignty: Organized Hypocrisy Pg 15.  
25 Landau-Wells, ‘Capital Cities in Civil Wars: The Locational Dimension of Sovereign Authority,’ Pg 11.  
26 Sutcliffe, as cited in ibid, Pg 15.  
27 Ibid.
From research by Landau-Wells and Jeffrey Herbst it is fairly clear that this ‘locational dimension of sovereign authority’ has operated in Africa. It can be described as a ‘strong norm’ in Africa, largely because most states have had material interests in sustaining it. Delegates at the inaugural Organisation of African Unity (OAU) conference in 1960 debated among a number of principles for international recognition. Criteria such as the ‘will of the majority’ and the extent of effective control were genuinely considered but rulers settled on the idea that physical control of the capital was sufficient\textsuperscript{28} because ‘the greatest point in common among those who attended the OAU summits [was] that they control the capital cities’.\textsuperscript{29} Herbst writes that the OAU charter implied that ‘if an African government is in control of the capital city, then it has the legitimate right to the full protection offered by the modern understanding of sovereignty’.\textsuperscript{30} Rulers with variable control of their peripheries were, at least in the eyes of other states, afforded legal jurisdiction (or a free hand) over that territory. Clapham recalls the image of ‘letterbox sovereignty’ whereby the person opening official letters in the presidential palace was considered in the eyes (and the pocketbooks) of the international community to be the ruler of a sovereign state, with all the perks of access to international markets, resources, aid and legitimacy, despite the fact he or she rarely controls much beyond that building.\textsuperscript{31}

This principle has been routinely practiced. During 1975 when the People’s Movement for the Liberation of Angola (MPLA), National Liberation Front of Angola (FNLA) and UNITA were battling for control the country, James III writes that, the ‘MPLA leaders realised that if they could maintain firm control of Luanda until independence, the other movements would become ‘outlaws’ rather than competing centres of power’.\textsuperscript{32} When Charles Taylor, leader of the NPFL, claimed that because he controlled 90% of Liberia (but not the capital Monrovia) it was his right to assume control of the state, nobody recognised his claim – not even his


\textsuperscript{29} Foltz as cited in ibid, Pg 111. The exception to this was recognition of Biafra in the Nigerian civil war. However, it was resolved firmly in favour of the principle identifying control of the capital city as the prerequisite for sovereignty after Biafra was defeated by the federal government.

\textsuperscript{30} Ibid, Pg 110.


foreign backers.uro Laurent Kabila of the Alliance of Democratic Forces for the Liberation of Congo (ADFL) was only recognised when he and his soldiers entered the capital Kinshasa.  

More recently, Human Rights Watch observed that ‘Somalia’s Transitional Federal Government (TFG), which formed in 2004, is recognised by the United Nations and almost all key foreign powers as the legitimate government of Somalia, but it controls only a small section of southern Mogadishu centred on the port, airport, and presidential palace’.  

Whether this norm is strongest in, or exclusive to, Africa is debated. It may be, as Herbst argues, that African states faced particular challenges controlling their peripheries at independence. Landau-Wells traces the principle back to ancient China and Rome, and it is likely, although unstudied, that it operates in the rest of the world. The Mujahadeen were only recognised as the sovereign government of Afghanistan once they captured Kabul in 1992, for example. That said, it must be kept in mind that norms, as social conventions, are dynamic and change over time as the interests of states change. It is entirely possible that the African Union’s campaign to withhold recognition from aspiring rulers who come to power through military coups (essentially, physical control of the capital) is a deliberate attempt to re-engineer sovereignty norms. Many African rulers now have interests in de-coupling recognition from physical control of the capital because, in the absence of patronage resources available during the Cold War, it is precisely this outcome that rulers and their allies are vulnerable to.  

Nonetheless, changing perceptions of what is a ‘best chance’ for realising sovereignty is a slow process and controlling the capital, has, for the vast majority of Africa’s history as a sovereign state system, afforded actors the highest probability of assuming sovereignty. In a system where recognition confers substantial payoffs that are unavailable or more difficult to procure as a non-recognised entity, any norm that territorially affixes international recognition has the profound effect of increasing the value of that piece of territory. Capital cities are valuable above and beyond their

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33 Mallet, “Family Problems”, West Africa, 6-12 August 1990, 2236  
34 Landau-Wells, ‘Capital Cities in Civil Wars: The Locational Dimension of Sovereign Authority,’ Pg 7-8.  
intrinsic worth for this reason. As Landau-Wells identifies, belligerents in civil wars have shown no compunction over physically destroying the capital in order to capture it.\textsuperscript{36} Mogadishu, Monrovia and Beirut are just three examples. Norms make it more likely that military strategy will centre on controlling capital cities by raising the expected utility of doing so. The extent to which norms influence strategic behaviour, however, will vary according to how sovereign benefits compare with domestic opportunities for revenue accumulation. Where benefits contingent upon recognition eclipse independent revenue sources, norms profoundly influence the strategies of belligerents in a civil war. Where there is little else of value, access to the resources of the international community is game-changing. The following section argues that Sub-Saharan Africa’s economic geography fits this description well.

\textbf{Sub-Saharan Africa’s Economic Geography}

Every incumbent or aspiring ruler wants to be recognised as a head of state. But obtaining the benefits concomitant with sovereignty takes on additional proportions when those resources make up a high level of available resources. Put another way, capturing the ‘market’ for sovereignty is decisive where that market is more lucrative than domestic ‘markets’. Snyder and Bhavnani argue that the mere presence of resources does not make them an object of fighting. Rather, it is the ‘context of institutional and economic constraints on their [the ruler’s] ability to earn revenue’ that determines the salience of resources in the calculations of actors.\textsuperscript{37} Keen writes that ‘when the resources actually commanded by either a regime or a rebel leadership are small compared with those available in areas of conflict, economically motivated violence is particularly likely’.\textsuperscript{38} The aim of this next section is to show that many of Africa’s states rely heavily upon sovereign benefits to stay in power and accumulate wealth – a condition created by an inability or unwillingness to tax peasant production. Revenues from taxing international trade, exploiting natural resources (often with the assistance of multinational companies) and external aid have crowded

\textsuperscript{36} Landau-Wells, ‘Capital Cities in Civil Wars: The Locational Dimension of Sovereign Authority,’ Pg 13.
the treasury of African governments, certainly since the colonial period and perhaps earlier.

**Pre-Colonial Africa**

Taxing trade and selling natural resources were important revenue generators for pre-colonial African polities. As Duignan and Gann write, Africans lived in:

> ‘small scale, non-monetised, subsistence societies, with simple technologies, limited division of labour and only a few specialised craftsmen… there was no need for an entrepreneurial class, men who could mobilise capital, co-ordinate complex methods for production, and supply a wide market’.  

Directly taxing land or peasant producers, as occurred during the rise of European states, was not cost-effective. Inter-continental trade, often between Africa, North Africa and the Middle East, funded the rise of cities and kingdoms such as Timbuktu in modern day Mali and Kano in modern day Nigeria. Rulers also made money from selling precious metals, and most infamously, from selling slaves. In fact, many pre-colonial African kingdoms became dependent upon selling these ‘natural’ resources as demand for slaves boomed in Europe and North America. Slave trading enabled coastal kingdoms to monopolise the possession of guns and ‘extract from its peoples the slaves they needed to purchase more guns and maintain their standard of living’.

**Colonial Africa**

European colonisation re-structured Africa’s economies to the interests of European traders. Capital cities were created as a gateway, often on the coast, for the export of raw materials and the import of manufactures. As the majority of international trade transitioned through these cities, customs duties offered high returns for relatively low levying costs. As Herbst writes ‘rather systematically, Europeans created capitals that moved power towards the ocean and away from the interior centres of power that

40 Herbst, States and Power in Africa: Comparative Lessons in Authority and Control Pg 39-40.
41 Duignan and Gann, 'The Pre-Colonial Economies of Sub-Saharan Africa,' Pg 39.
Africans had slowly created and that had managed to exert control over parts of their surrounding territories’. Colonial states imported capital and facilitated trade, but did so in ‘foreign-controlled enclave[s] attached to the industrial trading partners, bestowing few benefits on the indigenous economy, but adversely affecting traditional production, agricultural and industrial, and established social relations’. Selling cash-crops and minerals, particularly gold, diamonds, copper and iron ore was the mainstay of the colonial state. Hut taxes, poll taxes or head taxes (i.e. taxes on the rural population), ‘while onerous to the individuals... contributed relatively little in most colonies’. As Kasara writes, European rulers were dependent upon ‘spatially concentrated’ cash-crop production and mineral exploitation whose transport and sale was ‘relatively easy for the government to monitor’ at the main ports. Colonial states also became increasingly dependent upon transfers from the metropole, or ‘aid’, especially for infrastructure development. Colonial aid was distributed as ‘a direct transfer to the capital’.

Independent Africa

We can see here how the foundations were set for a collection of independent countries dependent upon the benefits of sovereignty. Revenue figures suggest that throughout the independence period, African rulers remained dependent upon taxing international trade, foreign aid and the selling of natural resources. According to Herbst, in 1997, around 45% of government revenue (including grants) in Africa, on average, came from indirect forms of taxation, much of it levied at the main ports. This compared to 37% for Asia, 34% for Latin America and 19% for Eastern and Central Europe. For example, the Central African Republic drew an average of 47% of government revenues from indirect taxation between 1971 and 1978; Chad drew an average of 58% and Zaire 52%. Even wealthier states such as Cote d’Ivoire still depended heavily upon taxation of imports and exports to fund its regimes. Between

43 Herbst, States and Power in Africa: Comparative Lessons in Authority and Control Pg 16.
46 Ibid, Pg 100.
48 Herbst, States and Power in Africa: Comparative Lessons in Authority and Control Pg 116.
49 Ibid, Pg 121.
1978 and 1986 an average of 39% of revenues derived from indirect taxation and around one-quarter from import taxes alone. Ghana, Sierra Leone, Senegal, Guinea-Bissau, Chad, Burundi, the Central African Republic and Rwanda took between 50% and 65% of revenues, on average, from indirect taxation, over the same period.\textsuperscript{50} Somalia took an average of 76% between 1978 and 1983 during the war with Ethiopia when we might have expected direct taxation receipts to rise.\textsuperscript{51}

An IMF study of taxation structure in Sub-Saharan Africa from 1990-1995 paints a similar picture. While South Africa took 10% of Gross Domestic Product (GDP) in taxation on individuals, of the 40 Sub-Saharan Africa countries surveyed by the IMF, 80% took between 0% and 2%, representing somewhere between 3% and 10% of taxation revenue. States such as the Central African Republic, Zaire, Sudan, Sierra Leone, Rwanda and Guinea-Bissau took less than 1% of GDP, and in the extreme case of Zaire, only 0.31% of GDP as taxation on individuals.\textsuperscript{52} Though Angola took a respectable 70% of income from direct taxation, a whopping 96% of that was on oil companies. African countries tend to have large rural populations and high proportions of agriculture to GDP (for example, around 20% in Guinea and Nigeria, over 30% in the Central African Republic, Mozambique, Chad, Rwanda and Cote d’Ivoire, over 40% in Guinea-Bissau, Sierra Leone, Sudan and Uganda, and 58% in Zaire) and the IMF study tells of a profound inability or unwillingness to tax the majority of citizens and economic activity.

Selling natural resources remained a crucial source of foreign exchange for independent African states. Foreign exchange allowed rulers with low levels of domestic industrialisation to purchase imports capable of placating key constituencies (primarily in the capital cities). Reflecting the intimate connection between controlling the capital, being recognised as a head of state and selling natural resources, Ngaruko and Nkrumziza observe that in Burundi, coffee production

\textsuperscript{50} Statistics were compiled from the \textit{Yearbook of National Accounts Statistics}, United Nations, New York. Yearbooks from 1960-1989 were consulted.
\textsuperscript{51} Based upon the argument that international war stimulates the rise of direct taxation. See Cameron Thies, 'The Political Economy of State-Building in Sub-Saharan Africa,' \textit{Journal of Politics} 69, no. 3 (2007).
accounted for 90% of foreign exchange earnings between 1972 and 1992, yet in Burundi’s Fifth Five-Year Plan, 98% of gross fixed capital formation was allocated ‘to a geographical area made up of Bujumbura and its surrounding areas and the southern province of Bururi, out of the fifteen provinces of the country’. Burundi’s leaders used resources from the countryside to shore up control of the capital, which allowed it to continue ‘legally’ selling those resources.

Clapham argues that throughout the independence period, foreign aid was a lucrative and ‘robust’ revenue stream that ‘kept many governments solvent’. As Reno remarks, ‘sovereign status could be used to attract aid from outsiders that filled in for absent domestic political resources’. Robert Jackson argued in 1990 that many African states were created and sustained by the international community, not by domestic capacity. Power was a function of international factors, especially the market for ‘allies’ or policy positions, rather than domestically cultivated authority and control. Rulers accessed substantial disbursements of economic assistance by playing off the superpowers during the Cold War. As Arnold writes, ‘recipients came to regard aid as an additional source of finance that gave them considerably more political room in which to manoeuvre’. Four percent of Africa’s GDP came in foreign aid in 1980. This rose to 10% by 1989. Donor states were not too fussy about how aid was spent during the Cold War, so long as it maintained a semblance of ‘stability’. The West lost its appetite for disbursing unfettered aid as the Cold War ended, but, as Figure 3.1 shows, substantial amounts were still available into the 1990s and 2000s. Rulers could sell policy ‘reform’, especially economic and political liberalisation, instead of ‘communist’ or ‘capitalist’ alignment. Although the aim of financial institutions and foreign affairs departments may have been to promote

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55 Herbst, States and Power in Africa: Comparative Lessons in Authority and Control Pg 124.
57 See Jackson, Quasi-States: Sovereignty, International Relations and the Third World.
60 Arnold, Africa: A Modern History Pg 772.
democratisation and economic development, one unforeseen consequence was to perpetuate a system of high payoffs for being a recognised head of state.\footnote{David Roodman, ‘Net Aid Transfers Dataset (1960-2008),’ Centre for Global Development (2010).}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure31.png}
\caption{Net Overseas Development Assistance to Sub-Saharan Africa, 1960-2008}
\end{figure}

Aid, natural resources and indirect taxation dominated state treasuries largely because of the poverty of peasant agriculture. Rulers in Africa have been unable or unwilling to develop and commercialise peasant agriculture to the extent that it creates domestic markets and viable sources of revenue independent of recognition as a head of state, perhaps because such emphasis was placed on control of the capital. Bratton argues that ‘state elites in Africa... succeeded in directing peasant production only within bounded and privileged pockets of the countryside’.\footnote{Michael Bratton, ‘Peasant-State Relations in Postcolonial Africa: Patterns of Engagement and Disengagement,’ in State Power and Social Forces: Domination and Transformation in the Third World, ed. Joel Migdal, Atul Kohli, and Vivienne Shue (Cambridge: Cambridge University Press, 1994), Pg 251.} Boone argues that the costs associated with coaxing peasants to abandon subsistence crops, of which 60% - 70% their time was spent producing, were too high.\footnote{Goran Hyden, Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry (Los Angeles: University of California Press, 1980) Pg 25.} Some states were disengaging from the rural sector by the 1980s and into the 1990s. Only 5% of government expenditure
was allocated to the rural sector in Ghana in 1977 despite agriculture being the mainstay of the economy. 64 In Congo-Brazzaville in 1987, ‘agricultural services accounted for just 2% of official expenditures’. 65 Bierschenk and de Sardan observed in 1997 that ‘the absence of the state in rural areas of the Central African Republic is so striking that the position in certain respects has almost reached the level of caricature’. 66 Farmers, even farmers cultivating cotton cash-crops, were irregularly taxed by village authorities. 67 At one village agglomeration in 1994 the state predicted 369,200 CFA Francs in taxation on market-stalls. They received 14,500. The authors concluded that ‘the state is very limited as to what it can do when it comes to institutionalised regulation of the local level in rural areas’. 68 Zaire presents the extreme case. Earnings from agriculture constituted 61% of government revenue in 1973, but by 1978 had fallen to 28% and by 1990 just 11%. 69 Where, in 1972, spending on agriculture stood at 29.3% of the budget, by 1992 it had fallen to 2%. Only 15% of the road network inherited from the Belgians remained intact in 1985. 70 Across Africa agricultural output actually fell by 0.2% per year in the 1960s and 1.4% per year in the 1970s. 71 Eighty-five percent of Africa’s wealth was produced by just 5% of its geographical area in 1975. 72

Rural producers, outside areas of cash-crop production, generated little surplus for predatory states to appropriate. Africa’s agricultural sector was roughly as industrialised in the mid 1990s as it was in 1960, 73 despite 70% of Africa’s population living in rural areas. Africa’s value-added per agricultural worker was the lowest in the world at just $277 (compared with $393 for South Asia, $347 for East Asia and $1753 for Europe and Central Asia). Cereal production only marginally improved

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67 Ibid, Pg 460.
68 Ibid, Pg 462.
69 Ibid, Pg 462.
70 Ibid, Pg 462.
71 Ibid, Pg 462.
72 Ibid, Pg 462.

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from 1960-1995 and fell way behind other regions at 947kg per hectare. East Asia produced 4070kg of cereal per hectare, Europe and Central Asia, 1701kg, and South Asia 2125kg. Africa’s fertiliser consumption was the lowest in the world in 2007 at just 9kg per hectare compared to 140kg for South Asia, 276kg for East Asia and the Pacific and 44kg for Europe and Central Asia.74

As Herbst summarises ‘the spatial structure of revenue, and thus of the state itself, is very much as during the colonial period: concentrated in the capital and the other areas of the country where it is easy to tax’.75 Clapham states that ‘since control of government provides the opportunity to cream off sums of money vastly greater than any that could be gained through economically productive activity, the pressure to control the state – and the disincentive to relinquish that control – is overwhelming’.76 As Williams identifies, in Sierra Leone, ‘exclusion [from the fount of state resources] literally meant death by attrition’.77 By linking control of the capital to economic value, we can begin to understand the puzzle put by authors such as Jan Angstrom who wonder at the fierce fighting over ‘symbols of national power’ in so-called ‘resource wars’.78 Sovereignty norms make capitals and presidential palaces economically valuable far beyond what can be looted from them. In Africa we would expect that controlling the capital city, because of its very high relative economic value, will dominate military strategy.

**Final Hypotheses and Conclusions**

African states that have experienced civil war from 1960-2008 are ‘capital heavy’. Power derives primarily from recognition as a sovereign. We can understand capital cities as ‘point resources’ which, due to the poverty and inability to draw revenue from peasant production, dominate economic geography. Economic geography varies

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74 These figures are actually dragged up by South Africa’s relatively low rural population (around 40-50%), high fertiliser use (around 500kg per hectare) and industrialisation (over 100 tractors per square kilometre although this has been rapidly dropping to around 40 in 2008). South Africa’s cereal yield is well over 1000 kg (and from 2000 onwards upward of 2000kg) per hectare.
75 Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control* Pg 126.
considerably outside of Africa, with states taking far higher proportions of revenue from taxation on agriculture (in South Asia for example) or on industry and the earnings of individuals (as in Europe). It is difficult to specify the precise importance of capital cities in these circumstances, but it is likely that they matter far less. In addition, while the norm tying control of the capital city to recognition as a sovereign is ‘strong’ in Africa due to the material incentives rulers have had in sustaining it, this is not necessarily the case elsewhere. While we can keep the economic geography of states experiencing civil war roughly constant (‘capital heavy’) the type of warfare can be varied.

Africa is a ‘hard test’ for the theory. All actors have incentives to focus their military strategies around controlling the capital city given its economic importance, regardless of the technology prevailing in a war-system. Were low-capability warfare to show an higher risk of fighting around valuable areas, for example, we could be increasingly confident that the technology of rebellion is related to military outcomes. Finally, Africa’s distribution of warfare-types differs substantially from the rest of the world (see Chapter 4). Just three conflict years were characterised by low-capability warfare outside of Africa, in Haiti in 1989, 1991 and 2004, making up less than 1% of the sample. Low-capability warfare makes up roughly 20% of the sample within Africa. Guerrilla warfare constitutes up 92% of the non-African sample and 58.6% of the African sample. Conventional warfare accounts for roughly 8% of the non-African sample and 20% of the African sample. With the current coding criteria (discussed in this chapter) any study of low-capability warfare is essentially a study of African civil war. Given Africa’s unique economic geography, statistical results for low-capability warfare will reflect the African sample while results for conventional or guerrilla warfare will reflect the characteristics of non-African regions. Regional correlations rather than differences in warfare may plausibly account for the findings in this situation. It may be the case, for example, that while we observe a connection between the distance of fighting from capital cities and the chances of military intervention in low-capability warfare, this relationship actually holds for all African conflicts, but, because Africa makes up such a large proportion of low-capability warfare and such a low proportion of guerrilla and conventional warfare this finding shines through in the results but does not reflect the causal process described in Chapter 2.
Chapter Three – Hypotheses and Methods

Hypotheses in Chapter 2 can be re-stated with specific reference to Africa’s economic geography. The three hypotheses are detailed below:

**H1: Capital cities are at a higher risk of experiencing fighting in low-capability warfare than in guerrilla or conventional warfare**

**H2: Fighting will concentrate around capital cities in low-capability warfare, but not in guerrilla or conventional warfare.**

**H3: The probability of military intervention in low-capability warfare increases as the distance of fighting from the capital city decreases. The probability of military intervention in conventional and guerrilla warfare is unrelated to the distance of fighting from the capital city.**

It is to the more technical aspects of how these hypotheses are tested that the chapter now turns.

**Research Design**

Hypotheses 1-3 are tested with a ‘mixed-methods’ approach combining multivariate regression analysis of Africa’s civil wars from 1960-2008 with a ‘most likely’ case study of the Liberian civil war. A rational choice framework and a positivist epistemology underpins the analysis. This section looks firstly at the benefits and limitations of rational choice theory and quantitative analysis. Logistic and OLS regression, specifications of dependent, independent and control variables are then discussed in line with the specific analytic methods of Chapters 4, 5 and 6. Chapter 7 is a case study of the Liberian civil war and this research design section concludes with a discussion of how single case studies can complement quantitative research.

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Rational Choice Theory

Rational choice theory (RCT) is used heuristically to conceptualise military decision-making. Embedded within RCT is the principle of Expected Utility (EU). EU emerged from microeconomics, was formalised in the 1940s and 1950s by von Neumann and Morgenstern (1944) as a descriptive and normative theory of human decision-making. EU theory offers a framework for understanding why one risky choice is selected over some other risky choice. In essence, decision makers weigh the probability of outcomes occurring, the value of those outcomes, and choose the course of action with the highest net ‘expected utility’, or worth.

A number of assumptions underpin EU. Firstly, decision-makers have stable and ordered preferences. Secondly, these preferences are ‘transitive’ - they have value such that if there are three preferences A B and C, if A is preferred to B then A is also preferred to C. Thirdly, decision-makers weigh up the value of choices by multiplying the probability an outcome occurring by its utility and add the net utility of outcomes together. That is, the relationship between probabilities and outcomes is multiplicative and the relationship between net values is additive. Fourthly, in a ‘lottery’ (any risky choice) all probabilities in the equation must up to 1 (i.e. one of the projected outcomes must occur). Finally, decision-makers will ‘always select the strategy that yields the highest expected utility’.

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82 Ibid.
84 Grant and Van Zandt, “Expected Utility”, Pg 22-27
85 Or that it is certain that one of the events specified in the lottery will occur. Neumann and Morgenstern, Theory of Games and Economic Behaviour Pg 18. See also, Mesquita, 'The Contribution of Expected Utility Theory to the Study of International Conflict,' Pg 631. and Schoemaker, 'The Expected Utility Model: Its Variants, Purposes, Evidence and Limitations,' Pg 537.
Chapter Three – Hypotheses and Methods

As an example of EU theory, consider a situation where a person has a choice between accepting 1 apple \( U_{a1} \) for certain (option 1 or EU\(_{O1}\)) or a 50% chance of receiving 3 apples \( U_{a2} \) and a 50% chance of getting no apples \( U_{a0} \) (option 2, or EU\(_{O2}\)). Assuming that three apples is preferred to one apple is preferred to no apples (or \( U_{a3} > U_{a1} > U_{a0} \)) and the utility of 1 apple is one, the utility of 3 apples is three and the utility of no apples is 0, then the expected utility equation would be:

\[
EU_{O1} = 1(U_{a1})
\]

\[
= 1(1)
\]

\[
= 1
\]

\[
EU_{O2} = p(U_{a2}) + (1-p)(U_{a0})
\]

\[
= 0.5(3) + 0.5(0)
\]

\[
= 1.5
\]

Because \( EU_{O1} < EU_{O2} \), according to EU theory, EU\(_{O2}\), the risky option, is chosen.

In most real-world situations, people don’t know the underlying probability of an outcome occurring. Unlike a coin-toss or a card-game, most, if not all probabilities in military decision-making are shrouded in uncertainty.\(^{87}\) Savage (1954) argued that while probabilities may not be objectively known, people make subjective estimates.\(^{88}\) Probabilities need not be accurate; they are simply what the decision-maker believes ‘given what was known’ at the time.\(^{89}\) Bruce Bueno de Mesquita


\(^{89}\) Mesquita, ‘The Contribution of Expected Utility Theory to the Study of International Conflict,’ Pg 632. von Neumann and Morgenstern stated, different to the above view, that while probability has been understood as a ‘subjective concept’ they interpret it be a numerical reflection of ‘frequency in long runs’. Neumann and Morgenstern, Theory of Games and Economic Behaviour Pg 19.
argues that decision-makers do not necessarily process information as the formal model of EU suggests, but ‘act as if they do’.90

RCT is a useful heuristic for modeling military decision-making. Firstly, we want to know why some leaders choose tactical combinations over other tactical combinations in the context of war. That is, we want to know why one risky choice is selected over another risky choice, dovetailing nicely with the focus of EU.91 Secondly, and perhaps more importantly, decisions about where and when to fight are inherently strategic, that is, ‘each individual makes her decision based upon the probable decisions of others’.92 Chapter 2, for example, argued that the decision of a government to adopt a positional and defensive strategy around the capital city in low-capability warfare was based largely on the belief that the most rational strategy for an insurgency was to attack the capital. RCT provides a consistent framework to ascertain ‘rational’ courses of action for two actors and deduce how knowledge of one actor’s utility-maximising choice alters the choices of another. As Levi argues, in strategic situations ‘the decision-maker simply assumes common knowledge of rationality, that is, the decision-maker assumes that other decision-makers are also instrumentally rational and will thus make the same inferences from the same information’.93 If decision-makers believed that rivals were inherently irrational, unpredictable or operated according to variable decision-making processes, developing testable hypotheses of strategic behavior would be near impossible. Thirdly, RCT facilitates the development of causal mechanisms linking dependent and independent variables that are explicitly stated and can be falsified. Chapter 7 tests the casual mechanisms in Chapter 2. Finally, assuming rationality in military decision-making is a useful starting point for analysis. Warfare introduces strong incentives for actors to be ruthlessly calculating about how best to achieve their goals.

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The costs for not maximising utility can be terminal, resulting in regime overthrow and often death.

RCT has come under criticism. Vertsberger argues that cognitive and cultural factors distort the decision-making process in systematic ways. Time pressure, stress, ambiguity, vividness, loss-aversion, risk-propensity and cultural identity all trigger ‘unconscious bias’. People tend, for example, to focus on the most-vivid aspects of a crisis and those predicted to occur very soon, cordoning off the more abstract or long-term causes and factors. According to Vertsberger, failure to incorporate longer-term, less salient aspects of a problem biases military interventions towards narrow, incremental and short-term missions that may lower rather than increase the chances of realising long-term strategic goals. Robert Jervis has argued that ‘images’ - stereotypes or powerful analogies such as the ‘Vietnam syndrome’ or the ‘Mogadishu line’ – lead to systematic exclusion of information from the decision-making process and can result in sub-optimal choice selection. How ‘framing effects’ - the tendency for people to take risks when faced with a potential loss while acting conservatively when faced with potential gains – alter the decisions of foreign military intervention has been tested in an experimental setting.

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96 Ibid, Pg 50.


Insights from research into socio-cognitive biases have been applied to the study of international relations and incomplete information, time pressure, ambiguity and stress are all features of military decision-making. However, the difficulty is in distinguishing between competing causal stories. For example, foreign states might avoid deploying soldiers while fighting is in the countryside in low-capability warfare because there are few pitched battles in which to exploit their advantage in conventional offense. It may be the case, however, that foreign states are ‘ambiguity averse’ and without knowledge of belligerent’s relative strength the costs for an intervention cannot be fixed. Likely the answer is both but we cannot tell from statistical results and, as Jack Levy counsels, given the parsimony of RCT it remains the superior explanation. Although I do not analyse the potential contribution of ‘prospect theory’ and ‘bounded rationality’ in the statistical study, I do test the plausibility of Chapter 2’s causal mechanisms with a case study of the Liberian civil war.

This thesis makes a number of assumptions in line with RCT. I first assume that the leaders of governments and insurgencies have the capability to make and implement choices. Initially this might seem questionable as the allegiance of the military elite and front-line soldiers can be variable. Nonetheless, most presidents and insurgent leaders effectively command sections of a military apparatus (in African conflicts this is often an ethnically coterminous ‘presidential guard’ whose fate is tied to the fate of the government) and though this level may not correlate perfectly with ‘on paper’ military strength, it provides decision-makers with agency on the battlefield. I also assume that heads of state wish to both stay in power and physically survive. Military strategies are designed in response to these two objectives.


Quantitative Analysis

Chapters 4, 5 and 6 use multivariate regression analysis to test hypotheses 1-3. Quantitative analysis offers the researcher leverage in a number of important areas. Firstly, the hypotheses make predictions about behaviour regardless of a decision-maker’s cultural or historical background. That is, the hypotheses are specifically cross-national to which a large-N study is well suited. Were the thesis to rely upon a small number of more in-depth case studies we could rightly question whether the findings were as general as the hypotheses claim. Secondly, in studies of civil war onset and foreign intervention, statistical analysis allows the researcher to include the full range \(^{102}\) of ‘non-cases’ in their sample, that is, observations where the outcome of interest did not occur. Instances of no fighting in the capital, low concentrations of fighting in the capital and no foreign intervention are included alongside those cases where these events occurred. Provided that the sample is correctly defined, selection bias can be minimised. \(^{103}\) Including ‘non-cases’ also allows the researcher, with the assistance of statistical analysis techniques, to put numerical values on the confidence with which a null hypothesis (usually that there is no relationship between a dependent and independent variable) can be rejected. P-values less than 0.05 are conventionally held as ‘significant’ enough to reject the null hypothesis, but it must be kept in mind that this number is arbitrary. What it reflects is that we can be 95% confident that, were we to observe a different universe of cases, we would observe the same relationship.

Statistical analysis allows researchers to quantify the extent to which changes in an independent variable induce changes in a dependent variable. This is typically expressed as a coefficient indicating how much a single unit increase in the independent variable changes the numerical value of the dependent variable (discussed further on). The strength of a variable of interest can be compared with other, competing, independent variables. Case-study methods have more difficulty in quantifying the likelihood that findings will hold in a wider universe of cases and how strong a relationship is when compared to competing hypotheses (there are

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\(^{102}\) Or very close to the full range, depending upon the specification of the unit of analysis and dependent variable.

\(^{103}\) See, for example, David Collier and James Mahoney, ‘Research Note: Insights and Pitfalls: Selection Bias in Qualitative Research,’ *World Politics* 49, no. 1 (1996).
weaknesses to quantitative research that qualitative methods can improve upon, discussed further on in this chapter).

Finally, the ability to control for competing explanations is an important advantage. Hypotheses 1-3 posit specific and independent effects for the role of military technology in shaping battle location/concentration on the one hand and the relationship between conflict geography and foreign intervention on the other. There are, however, many variables that affect the hypothesised outcomes, some of which are correlated with the explanatory variable. For example, we would expect that smaller states have a higher probability of fighting near to the capital because there is, quite simply, less space in which to fight. Quantitative techniques allow for the numerical impacts of these variables to be accounted for and the independent impacts of a variable of interest to be distilled.

There are numerous methods of multivariate regression analysis. Selecting the correct modelling technique for the data, especially the specification of the dependent variable, is essential as an inappropriate statistical method can produce misleading results. The selection of specific modelling techniques for Chapters 4 and 5 and 6, along with specifications of the dependent, independent and control variables are discussed in the following section.

**Chapter 4**

Chapter 4 tests whether low-capability warfare places Africa’s capital cities at a higher risk of experiencing fighting. Two tests are conducted. Firstly, logistic regression analysis is used to estimate the effect of warfare type on the annual risk of fighting within 25km of the capital. Secondly, the 2006 study by Buhaug and Rod is replicated with their spatially disaggregated data of fighting in African civil wars split into conventional, guerrilla and low-capability warfare. This section progresses by discussing the unit of analysis and the specification of key dependent, independent and control variables. As the dependent variable is modelled dichotomously, logistic

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regression analysis is an appropriate statistical technique and is discussed in detail here.

**Unit of Analysis**

The unit of analysis in Chapter 4 is an annual period of fighting between a government and an insurgency in a situation of civil war (referred to hereafter as a conflict year). Differentiating ‘civil war’ from other forms of political violence, such as riots and protests, is not straightforward and since the definition of what is a ‘civil war’ sets the universe of cases, different databases can produce divergent results. Existing databases vary along two dimensions: their annual or total death threshold and the period of ‘peace’ required before a civil war has ended. In the Correlates of War (COW) dataset, 1000 battle-related deaths must occur over a twelve month period, the government must be an active military participant and the rebellion must be an intra-state group militarily capable of inflicting casualties on the government (at least 5% of the total casualties). Sambanis relaxes the assumption of 1000 battle deaths per year to 1000 battle deaths over the course of the conflict, obviating the need to code what are clearly the same civil war as different civil wars. For example, the COW data codes the Maoist insurgency in Nepal starting in 2001 before a ‘second’ Maoist insurgency starts in 2003. In Sambanis’s data the war begins in 1996 and escalates. Regan requires just 200 total battle related deaths and at least 100 per year to qualify as a civil war. The PRIO/Uppsala dataset has the lowest death threshold (although fairly strict criteria on what counts as a battle-related death) at just 25 per year. Civil war is defined in this thesis, ala the PRIO/Uppsala dataset, as ‘fighting between an internationally recognised government and a militarily organised party within the borders of that state where the use of armed force between two parties results in at least 25 battle-deaths’.

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Chapter Three – Hypotheses and Methods

There are two reasons why the Uppsala/PRIO conflict database was selected. Firstly, higher death thresholds may exclude some ‘small wars’. For example, the war in the Central African Republic from 2001 to 2003 exhibited the hallmarks of low-capability warfare - especially the low level of military technology and coordination available to the government and insurgents. However, the small numbers, poor organisational and logistical capacity and few heavy weapons precluded the belligerents from inflicting a high number of casualties, discounting the case from classification as a ‘civil war’ in the COW data. Higher death thresholds risk systematically excluding those cases the thesis is most interested in.

Secondly, (and more related to Chapter 6) foreign states may intervene before a conflict reaches the 1000 or 200 battle-death threshold. Excluding these cases also excludes a number of military interventions (including, again, the Central African Republic or Lesotho) motivated by the same kinds of processes as interventions in larger civil wars. Early interventions, or intervention in low-capability warfare, might be more effective than interventions later in a conflict or in higher capability warfare, thus excluding these cases though they are examples of both low-capability ‘civil war’ and ‘foreign military intervention’. Finally, the Uppsala Armed Conflict database has a sensitive dyadic setup, coding numerous simultaneous conflicts between the government and different sub-state actors. War between the MPLA government of Angola and the Cabinda-based Front for the Liberation of the Enclave of Cabinda (FLEC) and war between the MPLA and UNITA rebels are coded separately, adding spatial and temporal specificity to the types of warfare experienced. Warfare between UNITA and Angola from 1992-1994 was conventional while warfare between Angola and FLEC was guerrilla. UCDP/PRIO data also cover the post-cold war period to 2008.

The database begins at 1960 when the UN passed resolution 1514 stating that ‘all peoples have the right to self determination’ and that ‘inadequacy of political, economic, social and educational preparedness should never serve as a pretext for delaying independence’.¹⁰⁹ European states rapidly decolonised their African

¹⁰⁹ United Nations General Assembly Resolution 1514 (X), United Nations Declaration on Granting of Independence to Colonial Peoples and Countries. As cited in Philpott, Revolutions in Sovereignty: How Ideas Shaped Modern International Relations Pg 35.
dependencies and the African state system was born. ‘Sub-Saharan Africa’ excludes the Arab states of North Africa, (Morocco, Algeria, Tunisia, Libya, and Egypt) but includes the island states of Comoros, Madagascar, Sao Tome and Principe and Mauritius.\textsuperscript{110} As Herbst argues, North African states have a different social, economic and political history, largely due to their integration with the European state system.\textsuperscript{111} Some insurgencies have been collapsed together where they are geographically contiguous and have similar aims. These are all low-level insurgencies experiencing guerrilla warfare that are highly unlikely to experience fighting near to the capital or foreign intervention. Such cases reduce the standard errors by multiplying irrelevant observations and have been collapsed to minimise this risk of false positives. There are no examples of low-capability or conventional warfare that have been collapsed in this way. Coups, as defined in a 2009 study by Halvard Buhaug, have been excluded from the sample because they ‘constitute a fight between two parts of government and have little to do with geography’.\textsuperscript{112} Coups, by definition, emerge in the capital city and the location of fighting is linked to the onset of war rather than its evolution. There are 402 observations of African conflict years from 1960-2008.\textsuperscript{113}

**Dependent Variable**

Chapter 4 uses a binary variable denoting whether a conflict year experienced fighting within 25km of the capital city. This variable, along with two further binary variables denoting fighting within 5km and 50km of the capital (the results of which are not reported but used to check robustness) are derived from a ‘minimum distance of conflict from the capital city’ dataset developed for this thesis and discussed below.

Research into the geographic dimensions of civil war has enjoyed increased attention over recent years (see the introduction to this thesis). Since Buhaug and Gates 2002

\textsuperscript{110} This includes the states of West Africa, Equatorial Africa, East Africa and Southern Africa.

\textsuperscript{111} Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control* Pg 11.


\textsuperscript{113} And 940 observations of conflict years outside of Africa. Although these are not included in the analysis, they can be observed through the dataset provided in accompaniment to this thesis.
study, scholars have investigated where civil wars begin and where they concentrate and have relied upon three datasets for minimum distance from the capital data – Buhaug and Gate’s 2002 study (hereafter referred to as BG), the Uppsala/PRIO Geo-Referenced Conflict Dataset and ACLED.

Existing datasets are not suitable for the present study. While BG and Uppsala/PRIO data date back to the end of World War Two, data is aggregated at the individual ‘civil war’, not the annual dyad. Conflict locations, however, change over time. War between Ethiopia and the Tigray People’s Liberation Front (TPLF), for example, is coded with a minimum distance of 0km from Addis Ababa in the BG data. For over a decade, however, the war was fought hundreds of kilometers away in the north-west. The original BG data was also inaccurate for some cases and while more recent data published by Buhaug, Gates and Lujula improves upon the original, it remains time-invariant.

Research into conflict geography has been greatly assisted by the development of ACLED. ACLED is useful because the unit of analysis is a single battle-event - a more accurate basis on which to locate the distance of fighting from a capital city. The closest individual battle to the capital can be identified for each year and a dataset constructed thereupon. Recently scholars have made use of Geographical Information Systems (such as ARCGIS) to analyse the factors that place certain locations at risk of fighting. ACLED is discussed in detail further in this chapter as it informs the analysis of battle concentration. For the purposes of constructing minimum distance dataset, however, ACLED suffers from two problems. Firstly, ACLED includes battle-events that result in no casualties. Without intensity figures it is impossible to ascertain the battles that indicate an insurgent ‘threat’ to the capital and what battles were infiltrations or terrorist attacks. This is a major problem for a thesis seeking to understand the circumstances under which capitals are militarily threatened with a concentrated rebel assault, not which capitals are more susceptible to terrorist related

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116 Largely the product of using circles to model irregularly battle zones, but this practice is no longer used.
117 See Buhaug, Gates, and Lujala, 'Geography, Rebel Capability and the Duration of Civil Conflict.'
violence. Secondly, ACLED systematically covers only the years 1997-2009 and excludes a number of important cases from the Cold War (such as the Katanga secession and ‘Simbas’ rebellion) and the early post Cold War period (Somalia and Liberia).

Proximity of battle from the capital city has been measured by taking the minimum distance over the civil war year ‘as the crow flies’ between the nearest battle point and the central business district of the capital city. A battle point is defined as the location where twenty or more deaths were sustained in a confrontation between security forces and insurgents. This definition is designed to exclude terrorist attacks and massacres which do not necessarily indicate insurgent military strength. The location of rebel ‘headquarters’ or ‘base’ is used as the reference point where twenty deaths did not occur in a single incident. An ‘as the crow flies’ measurement has the advantage of being comparable across different historical periods and states. This comes at the expense, however, of distortions resulting from differences in road quality, rebel and government capabilities and terrain. Nonetheless, this is one advantage of restricting the sample to cases with similar political and economic history. Road networks throughout Africa tend to deteriorate the further one travels from the political centre. Chad and Angola’s road networks, for example, will be more alike than Angola and Colombia’s.

From this raw distance variable three binary variables were constructed denoting whether fighting came within 50km, 25km and 5km of the capital city during a conflict-year. For the purposes of Chapter 4, it is more appropriate to use a binary variable than the raw continuous variable. Conflict distances vary for a number of reasons, not all indicative of an insurgent group advancing upon the capital. It may be the case, for example, that a mountain range allows insurgents to strike closer than would otherwise be the case and conflict location in this instance would have little to do with military strategy and everything to do with the idiosyncrasies of geography. A binary variable provides a tighter link between the causal mechanism and the statistical indicator. If conflict comes within 25km the reason is likely to be either that the government has chosen to fight there or the insurgency is strong enough to continuously strike. Secondly, a dichotomous specification is unlikely to suffer from urban bias. The further one moves from the capital the more likely it is that some
battles may not have been recorded. It may be the case, for example, that while a battle occurring 600km from the capital was recorded in primary sources, a battle 500km from the capital actually occurred but was never recorded. It is improbable that a battle resulting in 20 deaths occurring within 25km of the capital would be overlooked in primary sources. The dichotomous specification means we can, with a high degree of confidence, say that when a conflict year is recorded with no fighting in within 25km of the capital, then it did not occur.

Data was sourced from *Keesings Contemporary Archives, The New York Times, Reuters Newswires* and various secondary sources. Existing data and publications, primarily from Buhaug and Gates’s ‘The Geography of Civil War’ in the *Journal of Conflict Resolution*, and the Uppsala Conflict Site Dataset were used to cross-check some distances.

**Modeling Technique**

Because the dependent variable is dichotomous, logistic regression is an appropriate technique for multivariate statistical analysis. Logistic regression allows the researcher to investigate whether, and by how much, an independent variable or set of independent variables affects the probability of a certain outcome occurring. Regression results quantify the risk of that outcome occurring (in this case, fighting near to the capital city) and the contributions of independent variables to that risk.

While linear regression can be used for binary response data, it sometimes results in nonsensical probabilities (above 1) on extreme values of the independent variables. Logistic regression deals with this problem by transforming the linear function into a logistic function. The logistic function is specified in Equation 1:

118 Stathis Kalyvas, 'The Urban Bias in Research on Civil Wars,' *Security Studies* 13, no. 3 (2004).
119 'Uppsala Conflict Data Program,' *Uppsala University Department of Peace and Conflict Research* (2011/05/03).
121 Ibid, pp 6-7.
Chapter Three – Hypotheses and Methods

**Equation 1 – The Logistic Function**

\[ F(z) = \frac{1}{1+e^{-z}} \]

Where ‘z’ is any range of numbers. When \( z = -\infty \), \( F(z) = 0 \) and when \( z = \infty \), \( F(z) = 1 \). The range of the logistic function is therefore between 0 and 1. The logistic function is an ‘S’ shaped curve and incorporates an element of nonlinearity into the analysis.

In logistic regression, ‘z’ is an approximation of the effect of independent variables understood as the cumulative sum of a constant ‘c’ and coefficients (\( b_1 \) through to \( b_k \) where there are \( k \) independent variables) multiplied by the value of the independent variable (‘x’). The value of ‘z’ in a logistic regression equation can be written as Equation 2:

**Equation 2 – ‘z’ in Logistic Regression**

\[ z = b_1x_1 + b_2x_2 + \ldots + b_kx_k + c \]

The probability of an outcome occurring, ‘P(X)’ is therefore the logistic function with estimates of the sum of the values of \( k \) independent variables substituted for ‘z’. More formally, the probability function is outlined in Equation 3.

**Equation 3 – The Logistic Regression Model**

\[ P(X) = \frac{1}{1 + e^{-(b_1x_1 + b_2x_2 + \ldots + b_kx_k + c)}} \]

124 Klienbaum and Klien argue that this is well-suited to epidemiological research as it implies a ‘threshold level’.  
126 Ibid.
If the values of the coefficients (b’s) for the independent variables and the quantities of the independent variables (x’s) are known, we can work out the probability (P(X)) of the outcome of interest occurring.\footnote{Ibid, Pg 10.}

Studies will often report findings in terms of the ‘odds’ of an event occurring and many authors describe the logistic model in its ‘logit’ form, not the probability form specified in Equation 3.\footnote{Ibid, Pg 17.} Odds are ‘the ratio of the probability that some event will occur over the probability the same event will not occur’.\footnote{Ibid, Pg 18.} The logit form is equation expressed in terms of odds, or more specifically the natural logarithm of the odds of the event of interest occurring (log-odds, or just ‘logit’).\footnote{Ibid, Pg 19. 
\cite{Menard2002} Pg 13.}

The logit of (P(X)) is a function of values on a set of independent variables specified in equation two as ‘z’.\footnote{Menard, \textit{Applied Logistic Regression Analysis} Pg 13.} After algebraic transformation, the logistic regression equation is as specified in Equation 4. Equation 4 is only a transformation of Equation 3 expressed in terms of odds. It is not fundamentally different.

\begin{equation*}
\text{Equation 4 – The Logit Form of the Logistic Regression Equation}
\end{equation*}

\[
\ln\left[\frac{P(X)}{1-P(X)}\right] = b_{1x1} + b_{2x2} + b_{kxk} + c
\]

or:

\[
\text{logit} \ (P(X)) = b_{1x1} + b_{2x2} + b_{kxk} + c
\]

The parameters of the independent variables, ‘b’, are estimated using the data-set and the maximum likelihood estimation technique (MLE). As Kliennbaum and Klien write, logistic regression uses ‘the data-set to estimate [the values of] the unknown parameters’ or ‘fit’ the model to the data.\footnote{Klienbaum and Klein, \textit{Logistic Regression: A Self Learning Text} Pg 9, 104.} MLE is used in logistic regression because it better handles non-linearity in the functional form and is flexible to nominal, ordinal and continuous independent variables.\footnote{Ibid, Pg 105.}
MLE estimates a value for the independent variables in logit(Y) and then re-estimates until the change in the ‘fit’ (measured as the log-likelihood function)\textsuperscript{134} of the model to the data is small. As Menard writes, ‘the solution for the logistic regression model is found by beginning with a tentative solution, revising it slightly to see if it can be improved, and repeating the process until the change in the likelihood function from one step of the process to another is negligible’.\textsuperscript{135}

Practically, there are two types of MLE estimation – conditional and unconditional. Unconditional estimation ‘is preferred if the number of parameters in the model is small relative to the number of subjects [cases]’.\textsuperscript{136} The models in this thesis include over 10,000 cases and 15-18 parameters in Chapter 6 and 402 cases with 10-13 parameters in Chapter 4. Unconditional MLE is preferred and the default technique used by STATA 12, the software of choice for this thesis.

**Assumptions and Problems**

Logistic regression makes no assumptions about the distribution of errors.\textsuperscript{137} Residuals in logistic regression, however, are used ‘to identify cases for which the model works poorly or cases that exert more than their share of influence on the estimated parameters of the model’.\textsuperscript{138}

Logistic regression models assume that independent variables are not correlated with one another. Unreliable and erratic coefficients for individual variables and misleading estimates of statistical significance can occur when multicollinearity is present.\textsuperscript{139} While bivariate correlation analysis can identify collinearity between single independent variables, it cannot identify this phenomena between groups of independent variables. As Allison argues, multicollinearity is best identified by running a linear regression with the independent variables in the model and a continuous dependent variable (not a variable already in the model). Because the linear model calculates the collinearity diagnostics between independent variables

\textsuperscript{134} Which is basically a measure of the unexplained portion of variance in the model. Ibid, Pg 111.
\textsuperscript{135} Menard, *Applied Logistic Regression Analysis* Pg 114.
\textsuperscript{137} Menard, *Applied Logistic Regression Analysis* Pg 83.
\textsuperscript{138} Ibid, 13.
\textsuperscript{139} Ibid, Pg 81.
only, it does not matter which dependent variable is used.\textsuperscript{140} Variance Inflation Factors (VIF) and tolerance statistics provide a measure of the extent to which each independent variable exhibits multicollinearity problems.\textsuperscript{141} VIFs above 2.5 are considered problematic for logistic regression. Very small tolerance values are also problematic.

Regression models assume that the probability of an event occurring is a function of the coefficients multiplied by their values on the independent variable, all \textit{added} together. It may be the case, however, that a variable has a different effect when in one category or another. In this case the relationship is multiplicative. As Menard writes ‘non-additivity occurs when the change in the dependent variable depends on the value of one of the other independent variables’.\textsuperscript{142} Interaction terms can test whether the effect of one variable on the probability of an outcome occurring is dependent on the value of a second independent variable. However, as Menard writes, detecting non-additivity is not ‘straightforward’ and the choice for the researcher is to ‘assume’ the additive model, test for ‘intuitive’ interaction effects or test for all interaction effects.\textsuperscript{143} Given the relatively small number of outcome observations in this thesis, testing for all possible interaction effects is not viable. It would likely result in the inclusion of a large number of interactions per model. Each variable increases the standard error of other variables and may make statistically significant variables appear insignificant.

While the logistic regression model can handle some non-linearity, the assumption remains that the effect of the independent variable on the dependent variable is essentially linear. Some independent variables might affect the dependent variable in different ways depending on the value of the independent variable itself.\textsuperscript{144} Where we expect there to be a non-linear relationship between an independent and dependent variable the independent variable can be transformed using mathematical functions that suit the hypothesised relationship (such as the natural log to model an effect that diminishes with higher values).

\textsuperscript{140} Ibid, Pg 86.
\textsuperscript{141} S Landau and B Everitt, \textit{A Handbook of Statistical Analyses Using SPSS} (Florida: Chapman, 2004) Pg 244.
\textsuperscript{142} Menard, \textit{Applied Logistic Regression Analysis} Pg 63.
\textsuperscript{143} Ibid, Pg 65.
\textsuperscript{144} Ibid, Pg 63.
Chapter Three – Hypotheses and Methods

Some cases may be influential, and if theoretically exceptional, may bias the results.\(^{145}\) We can identify influential cases with two indicators – leverage statistics and residuals. Leverage statistics measure the influence that each case has on the parameters produced by the model and thus identifies cases that ‘exert more than their share of influence on the estimated parameters of the model’.\(^{146}\) Residuals measure the difference between the predicted probability and the observed outcome, thus identifying cases that the model predicts poorly.\(^{147}\) The larger the distance, the greater the value of the residual.\(^{148}\) Removing outlying cases is generally not recommended. However, for hypothesis testing, influential cases should be removed and the regression re-run to observe whether these cases account for the findings. In Chapters 4, 5 and 6, outlying observations were identified with a scatter-plot of leverage/residual values by the country identification variable.

Many studies of international behavior assume that the ‘risk’ of an event occurring is independent of the time that something has ‘survived’. In studies of civil war, the probability of witnessing fighting in the capital may be more or less likely at different points in a conflict’s life-span and more or less likely depending upon whether fighting occurred near the capital in the preceding year. Beck, Katz and Tucker propose two solutions – firstly using a complementary logit link instead of a normal logit link and including variables controlling for time dependence.\(^{149}\) The authors argue that for studies where the probability is generally low, as is the case in this thesis, then results generated from a normal logit link are no different to those generated by a complementary logit link.\(^{150}\) A normal logit is link is therefore used. The authors, however, strongly recommend controlling for the effects of time by either using count variables, splines, or more recently, the time cubed method (see ‘Control Variables’ in this chapter).

\(^{146}\) Menard, *Applied Logistic Regression Analysis* Pg 63.
\(^{147}\) Ibid, Pg 71.
\(^{148}\) Ibid, Pg 80.
\(^{150}\) Ibid, Pg 1286.
Logistic regression analysis assumes that observations are ‘independent’ of one other. That is, the value of a variable in observation $x$ does not influence the value of that same variable in observation $y$. However, with cross-sectional panel data this assumption is questionable and values within a cluster may be correlated, having the effect of inflating standard errors and returning inaccurate estimates of statistical significance.\footnote{See, for example Honghu Liu, 'Robust Standard Error Estimates for Cluster Sampling Data: A SAS/IML: Macro Procedure for Logistic Regression with Huberization.'} When this problem is serious, variables may appear to be significant when they are not. For example, it may be, for some unobserved reason, that the probability of fighting near Mogadishu in Somalia is much higher than in other civil wars and that this cluster of observations bias the results. Intra-cluster correlation does not affect the coefficient estimates. Using robust standard errors and clustering them around the relevant ‘nest’ of observations can minimise the problem of intra-cluster correlation. In Chapter 4, robust standard errors were clustered around the government-insurgent dyad. Because Chapter 7 is modeling the decision of a foreign state to intervene in the civil war of another state, the relevant nest is the foreign intervener – civil war dyad. Random-effects and Generalised Estimation Equations (GEE) were also run as robustness checks to ensure that intra-cluster collinearity is not biasing the results.

This thesis is more interested in theory-testing rather than prediction, although the results from this research increase our predictive capacity. Key statistics for theory-testing are the significance (p) values of each independent variable and the size of the coefficients (B). ‘Fit’ statistics such as r-squared values are not as relevant. As Menard writes, models can ‘fit’ the data well, yet be poor at prediction.\footnote{Menard, \textit{Applied Logistic Regression Analysis} Pg 32.} \footnote{NJD Nagelkerke, 'A Note on a General Definition of the Coefficient of Determination,' \textit{Biometrika} 78, no. 3 (1991).} Fit statistics in logistic regression are also less reliable than those in OLS regression.\footnote{Menard, \textit{Applied Logistic Regression Analysis} Pg 34. See also Gary King, 'How Not to Lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science,' \textit{American Journal of Political Science} 30, no. 3 (1986): Pg 669, Footnote 6.} Additionally, stepwise procedures are not well suited to theory-testing as they capitalise ‘on random variations in the data and produce results that tend to be idiosyncratic and difficult to replicate in any sample other than the sample they originally obtained’.\footnote{Menard, \textit{Applied Logistic Regression Analysis} Pg 34. See also Gary King, 'How Not to Lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science,' \textit{American Journal of Political Science} 30, no. 3 (1986): Pg 669, Footnote 6.}
P-values reflect the statistical significance of the relationship between an independent variable $B_k$ and a dependent variable $x$. When p values are low (conventionally under the critical value of 0.05) the null hypothesis that there is no relationship can be rejected with 95% certainty. In other words, we can be 95% certain that $x$ has a relationship with $B_k$.\textsuperscript{155} It should be noted that statistical significance may indicate a mathematical relationship between variables without implying any causal relationship.\textsuperscript{156}

Logistic regression can also indicate how, and by how much variable $B_k$ effects the probability of observing $X$ (the outcome). Regression coefficients have negative or positive sign that indicate whether a 1 unit increase in $B_k$ increases or decreases the log-odds of observing $X$. The size of the coefficient also reflects the strength of the relationship. When this coefficient is exponentiated, it gives a numerical indication of how much a one unit increase in the variable $B_k$ will increase the odds of $X$ occurring (Exp(B)).

Coefficients can be used to calculate the probability of the event occurring for a given case, or to construct an equation to observe how changes in the value of the independent variable affect the probability of an outcome occurring. Roncek describes this process as follows:

‘finding the predicted probability of being in the category of interest requires choosing a specific value of each independent variable, multiplying it by the appropriate coefficient, summing the products and the constant, and exponentiating the sum to obtain the numerators which is then divided by the results of 1 plus the numerator’.\textsuperscript{157}

In algebraic terms, the probability of the outcome of interest occurring is specified in Equation 5:

\textsuperscript{155} Menard, \textit{Applied Logistic Regression Analysis} Pg 37.
\textsuperscript{156} Ibid.
\textsuperscript{157} Dennis W. Roncek, 'Using Logit Coefficients to Obtain the Effects of Independent Variables on Changes in Probabilities,' \textit{Social Forces} 70, no. 2 (1991): Pg 514.
Equation 5 – Equation to Obtain the Probability of an Outcome in a Given Case

\[ P(X) = \frac{1}{1 + e^{-(b_1x_1 + b_2x_2 + \ldots + b_kx_k + c)}} \]

This equation is the same as Equation 3. By using Equation 5 we can manipulate the value of the independent variables and observe their effect on the probability of military intervention or fighting in the capital. However, to do so, Roneck recommends using ‘substantive’\textsuperscript{158} cases. For a regression equation with continuous variables, a useful case is one exhibiting an ‘average’ probability of the outcome occurring (of say fighting occurring in the capital). This represents a constant baseline against which the effects of variables can be compared as the strength of the effect is not going to vary with the shape of the curve as it would if cases were assessed starting from different points on the curve.\textsuperscript{159} In addition to this, STATA estimates the average marginal effect of variables of interest, that is, how much, on average, a one unit increase in the independent variable changes the probability of an event occurring.

**Independent Variable**

Whether a conflict year experienced low-capability, guerrilla or conventional warfare is the dependent variable. To date, Kalyvas and Balcells (KB) provide the only existing dataset and coding procedure on warfare type, which, with caveats, provides a reasonable test of the theory presented in Chapter 2. KB base their coding technique on what actors are physically capable of doing, that is, on relative military capabilities, by recording the ‘technology’ available to each actor. Conventional warfare is coded ‘where both incumbents and insurgents used heavy weapons (artillery and armour)’\textsuperscript{160}. Guerrilla wars were coded where the insurgency utilised light weaponry and the government heavy weaponry. Low-capability warfare was coded when both the government and the insurgency utilised light weapons (i.e lacked

\textsuperscript{158} Ibid, Pg 511.
\textsuperscript{159} Ibid, Pg 515.
armour and artillery). The authors looked only at the first year of a conflict. Three binary variables were constructed from this data denoting whether a conflict year experienced low-capability, guerrilla or conventional warfare. A ‘1’ indicates the presence of a warfare-type and a ‘0’ the absence.

Reliance on light weapons (such as AK-47s) captures a core element of low offensive capacity discussed in Chapter 2. KB’s coding procedure, however, does not include a measurement of coordination or logistical capacity. While this is not a problem for conventional and guerrilla warfare, it poses a potential issue for low-capability warfare. Governments and insurgents must ‘use’ heavy weapons to be coded as conventional or guerrilla warfare, suggesting a commensurate ability to coordinate and supply. If both a government and an insurgency rely upon light weapons but the government is superior in coordination and logistics, however, its offensive capacity will be higher than the ‘technology’ would let on. KB’s data is a useful measure of low offensive capacity insofar as a reliance on light weapons also correlates with poor logistical and command abilities. Chapter 2 suggested that in African civil wars this correlation is high. Chapter 5 visually analyses battle concentrations in low-capability, guerrilla and conventional warfare (discussed below) and does suggest that Guinea and Uganda may be marginal cases in this respect.

KB use the Sambanis civil war dataset. For reasons mentioned earlier, this database was less appropriate for the thesis than the UCDP/Prio dataset. While most of the cases from 1960-2003 cross over, some additional cases needed coding, especially from 2004-2008. See the Appendix for a case list.

Only variables indicating whether a conflict year experienced low-capability or guerrilla warfare were included in the regression models. Conventional warfare is the default category. Guerrilla warfare is asymmetric and likely exhibits a low risk of fighting in the capital as the government can keep an insurgency at bay with its superior military resources. Both conventional and low-capability warfare are symmetric. It is of greater theoretical interest to observe whether the location of

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161 Ibid., Appendix, Pg 1
162 KB do note that Uganda is a marginal case of low-capability warfare.
fighting contracts around the capital city as offensive capabilities decline in a symmetrical system.

There are a number of problems with the KB data. Warfare types change over time within an individual civil war. War between the Western Somali Liberation Front (WSLF) and the government of Ethiopia changed from guerrilla in 1976 to conventional in 1977 and 1978 and then back to guerrilla by 1979. KB obscure this temporal dynamism and introduce a degree of measurement error by only coding the first year of conflict. Secondly, the KB variable does not distinguish between the offensive capabilities of domestic actors and their foreign backers. For example, it is possible that Guinea-Bissau is coded as a conventional war due to the intervention of Senegal and Guinea. Lockyer shows that foreign intervention often induces changes in warfare.

Hypotheses in Chapters 4 and 5 were re-tested using an alternative proxy of conventional offensive capabilities based upon the imports of heavy weapons. Heavy weapons transfers (hereafter ‘arms transfers’) are one measure of the offensive capabilities in a war-system. The Stockholm Peace Research Institute (SIPRI) maintains data on the import of conventional weapons from 1950 to the present. There are a number of advantages to using the SIPRI data as a robustness check. Firstly, the values vary annually, incorporating a level of temporal dynamism. Secondly, the SIPRI data include only heavy weapons such as armour, heavy artillery, jet aircraft, transport aircraft and attack helicopters. Heavy weapons confer offensive advantages upon a belligerent with the ability to deploy them in combat. By focusing solely on heavy weapons, an ‘arms transfers’ variable captures an important element of ‘conventional offensive capacity’.

SIPRI’s measurement is initially confusing, but well-suited to the purposes of the thesis. Arms transfers are measured in constant 1990 $US and do not denote financial

164 See Adam Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts' (University of Sydney, 2009).
165 For access to the database, see “SPIRI arms transfers Database”, http://www.sipri.org/databases/armstransfers, last accessed, 2 September 2010
value but ‘volume’. Recording the financial worth would, according to SIPRI, ‘underestimate military equipment given away or sold at a discount’ and SIPRI have constructed the variable to reflect ‘the military implications of arms transfers’. SIPRI calculates the market value of transferred weapons by using a ‘core index’ of weapon-types and can be interpreted to mean that for a transfer of \( x \) worth of military equipment the effect would be \( y \) across historical contexts.

A rolling average variable was constructed to control for reverse causality. Arms may be transferred in response to the location of a civil war. Foreign backers may supply heavy weapons as the military position of a government falters, for example. Heavy weapons may also take time to become operational on the battlefield and their effects may not be felt until sometime after the transfer. ‘Arms transfers’ denotes the average volume of heavy weapons received by the state facing civil war in the preceding three years. So, in the case of Liberia, when the civil war broke out in 1989, the variable reflects the value of heavy weapons received in 1986, 1987 and 1988 divided by three. In 1990 it reflects the arms transfers of 1987, 1988, and 1989 and so on. The rolling average variable was then log-transformed to reflect the fact that small levels of conventional weapons are likely to have a disproportionate effect on military strategy and warfare than the same injection at higher levels. In a conflict dominated by small arms the inclusion of an attack helicopter or heavy artillery can be decisive. In a war where the government already possess 100 artillery pieces, one more will not have the same effect. In this case the government has probably already chosen a ‘strategy of annihilation’ or ‘counter-insurgency’.

From the continuous ‘arms transfers’ specification a dichotomous variable was constructed denoting ‘low’ arms importers and ‘high’ arms importers. Conflict years in which the rolling average took a value of less than $10 million were coded as ‘low-capability conflicts’ while those years where the government imported $10 million or more were coded as ‘high’ capability conflicts.

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166 For a discussion of the coding mechanisms, see “Explanation of the TIV tables”, http://www.sipri.org/databases/armstransfers/background/explanations2_default, last accessed 2 September 2010.
Control Variables

Variables influencing both the type of warfare that may emerge in a given conflict and the probability of seeing fighting near to the capital may confound any relationship between these variables. Variables that satisfy these criteria or have been included in previous studies of the geography of civil war have been included as controls and are described below.

Buhaug and Gates found that the goals of an insurgent movement were ‘the single strongest predictor’ of conflict location.¹⁶⁷ Wars over control of the state were fought substantially closer to the capital city than wars over the separation of territory. Kaufmann has also theorised that ‘ethnic’ wars, or wars of secession, are more likely to be fought conventionally as ‘victory depends on physical control of the disputed territory, not on appeals to members of the other [ethnic] group’.¹⁶⁸ A dummy variable sourced from the Uppsala conflict database was included denoting whether the war was fought over control of the state apparatus (‘2’) or control of a piece of territory (‘1’).

According to Buhaug and Gates, smaller states will, by definition, fight their wars closer to the capital city.¹⁶⁹ Smaller states may also be at a higher risk of low-capability warfare. Rulers, nervous to the reality that only a small armed force is required to seize power, may deliberately strip their military of offensive capacity. In Sierra Leone, for example, 1971 riots in Freetown ‘alerted’ President Siaka Stevens to the possibility that small groups of dissidents could topple his regime. In response, Stevens fragmented the RSLMF and denied them equipment and training.¹⁷⁰ To control for this effect, the land area of the state in conflict, measured in square kilometers, has been included. Data was taken from the Central Intelligence Agency (CIA) World Factbook.¹⁷¹ Very small countries are likely to be at a proportionally

¹⁶⁹ Buhaug and Gates, 'The Geography of Civil War,' Pg 427.
higher risk of fighting in the capital than larger countries and the variable has been log-transformed to account for this.

Beck Katz and Tucker counsel researchers to ‘take time seriously’ in multivariate statistical analysis. The risk of fighting near a capital city may be more likely early on in a conflict, when previous research has shown that insurgencies try to score a quick military victory.\textsuperscript{172} Alternatively, it may be that insurgencies find it easier to strike later in a war as the government is ground down. Keen, for example, predicts that fighting over domestic resources intensifies over time as rebels and governments expend their existing stocks of finance and armament.\textsuperscript{173} Katz also notes that controlling for time ‘picks up’ the effects of omitted variables and increases statistical accuracy, but he counsels caution when interpreting the results of temporal variables.\textsuperscript{174} The ‘time cubed’ method was used to control for non-linear effects of time on the probability of fighting within 25km of the capital.\textsuperscript{175}

Beck, Katz and Tucker also argue that sometimes the risk of an event occurring will be related to if and when the event last occurred.\textsuperscript{176} The probability of civil war being fought in the capital is likely related to where the last bout of fighting occurred. We might expect that one year of fighting in the capital increases the chances of the next year experiencing the same event, an effect that may be acute in low-capability warfare as fighting stalemates around valuable areas. The natural logarithm of the time in years since the last bout of fighting in 25km was included as a robustness check. If a ‘sieges’ variable were to explain any increased probability associated with low-capability warfare, while it would not falsify hypothesis 1, because stalemates in the capital were one predicted effect, we would be required to look in more depth at those cases accounting for the result.

\textsuperscript{173} Keen, \textit{The Economic Functions of Violence in Civil Wars} Pg 43.
\textsuperscript{174} Nathaniel Beck, 'Time is not a Theoretical Variable,' \textit{Political Analysis} 18, no. 3 (2010): Pg 294. See also David B Carter and Curtis S Signorino, 'Reply to "Time is not a Theoretical Variable"," \textit{Political Analysis} 18, no. 3 (2010).
\textsuperscript{175} David Carter and Curtis Signorino, 'Back to the Future: Modelling Time-Dependence in Binary Data,' \textit{Political Analysis} 18, no. 3 (2010): Pgs 19-20. The ‘time cubed’ method is as effective as cubic splines, easier to interpret, and makes no assumptions about where the ‘knots’ are, that is, on the range of time values we would expect patterns to change.
\textsuperscript{176} Beck, Katz, and Tucker, 'Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable,' Pg 1271-72.
Offensive military capacity is a combination of both the number of soldiers at the command of an actor and the ability to arm, train, supply and coordinate those soldiers. Separating these aspects allows us to ascertain whether something about the technology, logistical and command capabilities induces variation in conflict location independent of the number of soldiers. To this end, the number of military personnel maintained by the government during a conflict year was included in the model. Data were taken from the National Material Capabilities Dataset and log-transformed. Increasing the number of soldiers in the military from 1000 to 10,000 is likely to substantially lower the probability of fighting within 25km from the capital. Increasing the size of the military from 100,000 to 110,000 will have only a marginal impact on an already low probability.

Years of higher battle intensity are more likely to be fought near the capital but do not necessarily reflect the strategic decisions of belligerents to adopt a positional defence in these locations. Perhaps low-capability warfare experiences episodic bouts of high-intensity fighting, as rebels drive for the centre of power, followed by lulls in which the rebellion must recuperate and re-gather its strength. Conventional and guerrilla warfare may exhibit ‘smoother’ casualty rates and a higher incidence of fighting near the capital in low-capability warfare may reflect the requirement for rebels to strike hard over short periods of time rather than stalemates engineered by defending forces. Kalyvas and Balcells found that, when controlling for the effects of duration, low-capability warfare is more intense than conventional or guerrilla warfare. Intensity also allows us to control for years where the probability of fighting in the capital might be low because belligerents choose not to engage in major hostilities.

Lacina et al define ‘battle deaths’ as deaths, civilian and military, resulting from violence inflicted in contested combat, differentiated from one sided violence (such as genocide and mass-killing) and war-related deaths from disease and

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177 Data from the National Material Capabilities Dataset, Meredith Sarkees and Frank Wayman, *Resort to War: 1816-2007* (CQ Press, 2010).
Chapter Three – Hypotheses and Methods

malnourishment. The dataset covers the entire post-World War Two period, from 1946-2005. Data for 2006-2008 was taken from the Uppsala Conflict Database. The variable was log-transformed.

The lower costs of defeating a lightly armed government may increase the chances of rebels receiving the support of foreign soldiers. Insurgencies capable of garnering foreign support stand a much better chance of overthrowing the incumbent than those required to rely upon domestic resources. Without controlling for these correlations, any association between low-capability warfare and the threat to Africa’s capitals may be spurious. When an insurgency received the support of regular soldiers from a foreign county the conflict year was coded with a (1) and (0) otherwise. Data were taken from the Pearson and Baumann and Kisangani and Pickering Datasets (see ‘military intervention’ in the section on Chapter 7).

Le Billion, Kaldor and Keen have all suggested that natural resources are more important to government and rebel finances since the end of the Cold War. As Ross notes, ‘there is strong evidence that longstanding rebel groups in Angola and Cambodia began to rely on resource looting after the Cold War’s end caused them to lose their superpower funding’. As domestic resources become more important to finance military operations, so their salience in military strategy may increase. In fact, Lujala, Gledistich and Gilmore find a stronger link between secondary diamond mining and the incidence of civil war from 1985-1999 when compared with 1960-1984. A binary variable was included indicating whether the conflict year occurred during the Cold War (0) or afterwards (1). The post cold war period begins at January 1, 1989.

180 'Uppsala Conflict Data Program.'
182 Michael Ross, 'What Do We Know about Natural Resources and Civil War?,' Journal of Peace Research 41, no. 3 (2004): Pg 349.
Chapter 5 runs five logistic regression models. Model 4.1 is a baseline and includes all control variables but the ‘sieges’ control. Model 4.2 is the same as 4.1 but includes a control for sieges. Model 4.3 includes a control for the post Cold War period. Model 4.4 tests the hypothesis without South Africa in the sample. Model 4.5 tests the log-transformed ‘arms transfers’ variable as an alternative to the dummies for guerrilla and low-capability warfare. A number of robustness checks were conducted but not reported in Models 4.1 – 4.5. Where appropriate these are discussed in Chapter 4. Replication data and script files for STATA can be found in the CD included with this thesis.

Replicating Buhaug and Rod

Buhaug and Rod’s (BR) 2006 research is, at the time of writing, the only spatially disaggregated study of civil war location covering all countries in Sub-Saharan Africa. While more recent studies have been published by Raleigh and Hegre (2009), and Buhaug et al (2011) they either do not cover the entire Sub-Saharan region or examine conflict outbreak rather than incidence. Replicating the BR study is an important robustness check and provides leverage on a number of important questions. Models 4.1 - 4.5 test whether fighting is more likely to occur near capital cities when low-capability warfare is compared with conventional warfare. Put another way, the models test whether low-capability warfare is a determinant of fighting near to the capital. With the BR data we can test whether the distance of an area from the capital city is correlated with conflict location. Is fighting more likely to occur in locations near to the capital in low-capability warfare when compared with locations far from the capital? We can then compare the answer to this question with the correlates of conflict location in conventional and guerrilla warfare.

Buhaug and Rod divided the African continent up into 100km x 100km grids and tested whether factors such as the distance from diamond deposits, road density, population density and the distance from the capital increased the chances of a grid square experiencing fighting between 1970 and 2001. They found that wars over control of the state were more likely to be fought near capital cities and diamond resources. Chapter 5 replicates this study by testing the correlates of conflict location in low-capability, conventional and guerrilla warfare over control of the state.
Replication data was downloaded from the Uppsala/PRIO Centre for the Study of Civil War website. A variable was added indicating whether the grid space (each grid space was assigned a country in the original data) experienced low-capability, guerrilla or conventional warfare. BR’s logit models of conflict incidence were then re-run within these three samples. The following control variables (all log-transformed in the original study) included in the 2006 study were included in these models: distance from the capital, distance from petroleum reserves, distance from diamond deposits, distance from an international border, road density and population density. A binary variable denoting whether a grid cell was of a different language group to those in the capital was also included. Finally, the BR spatial lag, controlling for the likelihood that conflict in one cell will induce conflict in neighboring cells was included. Robust standard errors were clustered around the country-code. The proportion of mountainous terrain and proportion of forested terrain were not included due to collinearity issues, but their inclusion does not substantively change the results.

**Chapter 5**

Chapter 5 tests the hypothesis that, compared to conventional and guerrilla warfare, battles concentrate in and around capital cities in low-capability warfare. Independent and control variables are the same as Chapter 4 with a modification to the dependent variable. OLS regression estimates the effect of warfare on the proportion of battles that occur in the capital city during a conflict year. Spatial analysis then compares the geographic distribution of fighting in low-capability, conventional and guerrilla warfare, with the geographic distribution of economic value. Spatial analysis can substantially increase our confidence in the statistical results and its contribution to the thesis is discussed here.

**Unit of Analysis**

The unit of analysis in this chapter is the same as Chapter 4 – the conflict year.
**Dependent Variable**

During a given year of civil war, governments and insurgents will engage in a certain number of military confrontations. The percentage of those battles that occur in the capital city forms the dependent variable in the OLS regression models. ACLED (discussed earlier) use individual battles as the unit of analysis and record where the battle occurred. If a battle occurred in the capital city, as identified by ACLED, it was marked with a ‘1’, otherwise a ‘0’ was marked. Dividing the number of battles within an annual period marked with a ‘1’ by the total number of battles for that year gives the percentage of battles that occurred in the capital city.

Raleigh et al define an individual battle event as ‘a violent interaction between two politically organised armed groups at a particular time and location’.\(^\text{184}\) Typically, these events occur between governments and a rebelling sub-state group in the context of civil war, but ACLED also includes data for protests, riots and one-sided violence against civilians. Battle-intensity criteria are patchy and the ACLED authors do not specify how long individual battles last. ACLED codes along a variety of criteria, including the ‘type’ of event. Observations coded as ‘headquarters or base establishment’, ‘non-violent rebel presence’, ‘rioting/protesting’, ‘violence against civilians’ and ‘non-violent transfer of control’ are excluded from the present analysis. Observations coded as ‘battle – no change of territory’, ‘battle – rebels control location’ and ‘battle – government regains control’ are included.\(^\text{185}\) Only battles where the government (either the police or the military, including specialist divisions such as presidential guards) was a combatant were included. Fighting between factions of a rebellion or between warring sub-state groups tell us nothing about the interaction of government and insurgent military strategies.

There are a number of problems with ACLED. Information regarding ‘battles’ are mostly sourced from media reports, especially foreign media sources. Yet, as Kalyvas argues, foreign media personnel are based primarily in capital cities. Coverage of the war in Bosnia, for example, focused on events in Sarajevo because it was here that


\(^{185}\) For more detailed definitions, see ibid, Pg 6-7.
most correspondents were located.\textsuperscript{186} It may be the case that numerous battles have occurred in the African countryside that never get reported in Mogadishu or Monrovia. ACLED covers some conflicts better than others. Due to the availability of information, coverage of the Afghan civil war after 2001 is excellent, while the coverage of the war in Congo-Brazzaville is poor. Within Africa, coverage of Uganda is better than Congo-Brazzaville and coverage of Somalia is better again. Finally ACLED have complete coverage only of the 1997-2009 period and the sample for Chapter 5 is thus restricted.

Urban bias presents the most challenging issue. A systematic relationship may exist between the type of warfare and the reporting of fighting in the countryside. Conventional warfare involves large, identifiable concentrations of soldiers engaging along front lines. In low-capability warfare, where the numbers of soldiers are smaller, where there are few artillery pieces or concentrations of armour, it is possible that comparatively fewer battles are reported in the countryside than are reported near the capital. While we might observe a higher proportion of battles near to the capital city, this could reflect the tendency for journalists to cover events near the political centre and not the true spatial distribution of fighting. There is little that can be done about this problem when measuring the proportion of battles that occurred in the capital city. ACLED remains the most comprehensive dataset and there are very few alternative sources of information on battle-events other than media sources (or digests of media sources).\textsuperscript{187} Quantitative results in Chapter 5 must therefore be interpreted with this limitation in mind.

Visual analysis plays an important role at this point. While it is possible that the capital/countryside distribution is skewed by urban bias it is less likely that foreign media would fail to report a spatially concentrated series of battles in the countryside, regardless of the type of warfare. Thus, if we observe a concentration of battle in the capital, but only dispersed battles in the countryside, we can be more confident that spatial differentials were not the product of urban bias. If a battle of similar

\textsuperscript{186} Kalyvas, 'The Urban Bias in Research on Civil Wars.'
\textsuperscript{187} There is EDACS, but its coverage includes only Somalia at present. See The Event Data Project on Conflict and Security (EDACS), (The Free University of Berlin, [cited 20 February 2011]); available from http://www.sfb-governance.de/teilprojekte/projekte_phase_1/projektbereich_c/c4The_EDACS/index.html.
proportions had occurred in the countryside, it is likely the media would have reported it. For these ends, the ACLED data were imported into SpatialKey software and mapped to observe battle concentrations. Visual analysis techniques are discussed in more detail below.

The problem of cross-case coverage poses less of a problem. Although some cases have better coverage than others, the proportions of conflict experienced in the capital city remain comparable. Differences in cross case coverage would be a problem if the individual battle were used as a unit of analysis. Countries with better coverage have hundreds more battle observations recorded and drive the statistical results. If one country experiencing low capability warfare and a high proportion of fighting in the capital city received better coverage of its ‘battles’ we might observe a statistically significant relationship but we would be right to question whether the results reflected idiosyncrasies of one or two well-documented cases.

**Modelling Technique**

The proportion of fighting occurring in the capital city is a continuous variable and logistic regression is not an appropriate modelling technique. OLS regression is better-suited to estimating the effects of independent variables upon continuous dependent variables. There are a number of important differences between logistic and linear regression, especially in functional form and assumptions.

OLS regression fits a linear equation to the data\(^\text{189}\) taking the form of \(y = c + b_1x_1\) where \(y\) is the value of the dependent variable, \(x\) is the value of the independent variable, \(b\) is the coefficient and \(c\) the constant.\(^\text{190}\) In linear regression, ‘\(b\)’ is the slope of the linear equation – larger values indicate that changes in the independent variable induce larger changes in the value of the dependent variable. The constant is the intercept of the line, or where the line crosses the x-axis when \(y = 0\). Instead of MLE, linear regression uses the OLS method to fit data to an equation line. OLS minimises

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\(^{188}\) As it is in Raleigh and Hegre, 'Population Size, Concentration, and Civil War: A Geographically Disaggregated Analysis.'

\(^{189}\) In logistic regression, a logarithmic equation is fit to the data.

the value on the sum of the squared values of distances from the fitted line to the individual data points and selects that equation as the best ‘fit’ for the model.\textsuperscript{191}

\textbf{Assumptions and Problems}

Many of the assumptions in logistic regression apply to OLS regression. OLS regression has a higher tolerance for multicollinearity when compared to logistic regression, but VIF values over 10 are problematic. OLS regression assumes both linearity in the relationship between dependent and independent variables and additivity between independent variables. Because the ‘fit’ of the model is based upon the distances between an equation line and individual observations, outliers can have substantial impact on the results. Like logistic regression these should be investigated to ensure they do not bias the results.

OLS regression assumes that the error terms are normally distributed, that is, the variance is constant across the sample (logistic regression makes no assumptions about the distribution of errors).\textsuperscript{192} As Hinton explains, if residual values are random (recalling that the residuals are the distance between the predicted and actual values for each data point) then there is no unexplained systematic variation in the model.\textsuperscript{193} When a sample violates this assumption it is heteroscedastic. For example, it might be that the model ‘fits’ better at low values on the dependent variable (i.e the residual variance is lower) but at higher levels the fit is poor (residual variance is high). This is systematic variance in the residuals. Heteroscedasticity does not bias the coefficients but can, when severe,\textsuperscript{194} lead to misleading standard errors and mistaken inferences.\textsuperscript{195}

Beck and Katz observe that time-series cross sectional data (the observation of a number of units over periods of time) will likely violate these assumptions. Firstly, the error generating processes for different units are likely to vary, thus violating the

\begin{itemize}
\item \textsuperscript{191} Ibid, Pg 325.
\item \textsuperscript{192} Ibid, Pg 328.
\item \textsuperscript{193} Ibid, Pg 327.
\item \textsuperscript{194} Paul D Allison, \textit{Multiple Regression: A Primer} (Thousand Oaks: Sage, 1999) Pg 128.
\item \textsuperscript{195} Nathaniel Beck and Jonathan Katz, ‘What to do (and not to do) with Time-Series Cross-Sectional Data,’ \textit{American Political Science Review} 89, no. 3 (1995): Pg 636.
\end{itemize}
assumption that the variance of the errors is constant.\textsuperscript{196} For example, the errors generated by the model for the Liberian civil wars are likely to be correlated and have a different variance to the errors generated from the Somalian civil wars. In addition, OLS standard errors for panel data can be misleading as within-group observations are not independent of one another. For example, the conflict location in Liberia is likely related to the conflict location in the year preceding it. Both the assumption of error independence and constant variance are violated. Beck and Katz have created an adjusted calculation of standard errors for time-series cross sectional data. Beck and Katz standard errors are reported to minimise the effects of heteroscedasticity and spatial and temporal correlation.\textsuperscript{197}

Output from OLS regression are easier to interpret than logistic regression. Coefficients reflect the increase or decrease in the dependent variable that results from a one unit increase in the independent variable. P-values are interpreted in the same way as logistic regression.

\textit{Independent Variable}

‘Warfare type’ is the same as Chapter 4. The country and year of conflict are matched with the ‘type’ of warfare experienced during that year and coded accordingly.

\textit{Control Variables}

Control variables are the same as Chapter 4.

\textit{Specific Models}

Chapter 5 runs four OLS regressions. Model 5.1 estimates the effects of warfare on the proportion of battle within the capital city with all cases and control variables. Analysis of the residuals reveals four outliers, Guinea-Bissau in 1998 and 1999, the Central African Republic in 1997 and Lesotho in 1998. Chapter 5 discusses these cases in greater detail, but for the moment, Model 5.2 re-tests the results with outliers

\textsuperscript{196} Ibid.
\textsuperscript{197} Ibid.
removed from the sample. Model 5.3 tests the log-transformed ‘arms transfers’
variable against the proportion of fighting in the capital. Model 5.4 repeats the process
with the ‘low arms importer’ binary variable in place of the log-transformed ‘arms
transfer variable’.

**Visual Analysis**

The second part of Chapter 5 is a bivariate spatial analysis of the correlation between
concentrations of fighting and concentrations of resources. There are three
components: battle location data, spatially disaggregated resource data and
geographic imaging software used to overlay the two datasets on a map of Africa.
Battle location data was sourced from ACLED, discussed earlier in this chapter.
ACLED provide latitude and longitude coordinates for the location of individual
battles allowing us to ‘count’ the number of battles that occurred in particular
locations within a country.

Spatially disaggregated resource data was sourced from the G-econ project at Yale
University. G-econ data divides the world into 1° latitude x 1° longitude grid spaces
and provides estimates of the gross product output by each individual cell.198 ‘Gross
Cell Product’ (GCP) gives an idea of the economic value of regions and has recently
been incorporated into the study of civil wars.199 GCP is calculated using data from
government and industry sources. There is considerable variation in the quality. Data
from North America and Europe is of higher quality and reliability than data from
Africa. Much of the data for cells in Africa was calculated using census material and
tends to reflect population distributions. Mineral resources are the exception. National
accounts and corporate reporting procedures make these estimations more reliable. In
Africa, therefore, areas of high economic productivity displayed by G-Econ tend to
reflect population centres and mineral production.200 Population clusters and mineral
resource production were predicted to be of high economic value to governments and
insurgents in the context of civil war, and, although we must show some caution when

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199 See, for example Halvard Buhaug et al., 'It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location,' *Journal of Conflict Resolution* Online First, no. 23 May (2011): Pg 11.
200 Nordhaus et al., 'The G-Econ Database on Gridded Output: Methods and Data,' Pg 12.
using G-econ, the higher quality data reflect core concerns of this thesis. Cross-sectional data is available for 1990, 1995, 2000 and 2005. I have used the 1990 GCP scores to minimise any bias resulting from changes in economic geography resulting from civil war or the anticipation of civil war.

Both ACLED and G-econ data were overlaid onto a map of the African continent using Spatialkey software, a web-based program for visualising quantitative material. Graphics displayed in Chapter 5 were produced with the following method. Firstly, the pared ACLED data were imported into Spatialkey. The option to create a ‘heatmap’ based upon the number of battles in a locality was selected. Black areas indicate battle concentrations, that is, areas where a proportionally higher number of battles occurred. White and blank areas indicate localities where relatively few battles, or no battles, occurred. The G-econ data was then imported into Spatialkey and a heat map was constructed based upon the GCP score for a given cell. Red areas indicate high economic production. Filters were then used to produce individual maps by country and warfare-type to reduce bias resulting from differentials in case coverage. For example, if Africa as a continent is mapped, a conflict concentration emerges around Bujumbura in Burundi and Goma in eastern DRC, reflecting the excellent coverage of those cases. Pictures of battle concentration and resource concentration for each case were exported and collated according to whether the conflict was coded as conventional, guerrilla or low capability warfare. Latitude and longitude coordinates are more accurate in the ACLED data and the resolution of the G-econ data is too high to obtain meaningful and accurate comparisons of battle concentration and resource concentration for very small countries. In the following cases, only the battle concentrations are shown: Rwanda, Burundi, Lesotho, Guinea-Bissau and Sierra Leone.

We can ascertain whether fighting in low-capability is more likely to concentrate in capital cities by comparing conflict concentrations with conventional and guerrilla warfare. Maps displayed in Chapter 5 also allow us to correlate areas of battle concentration with areas of high economic value. To the extent that the black and red areas of the map cross-over, we can say the correlation is high. If they do not cross over at all, we can say the correlation is low. Visual analysis provides insight into a number of questions. Does low-capability warfare exhibit concentrations of fighting
in the capital when compared to fighting that has occurred in the countryside? Are the patterns of battle concentration appreciably different for conventional and guerrilla warfare? Visualised data also facilitate the categorisation of differently structured cases of low-capability warfare and assist with theory refinement. Do some cases exhibit a singular concentration of fighting in the capital city or are there competing concentrations in the countryside? If so, do these competing concentrations correlate with places of economic importance and support the theory of military strategy in low-capability warfare? If they do not, why do governments fight in the countryside if not for defending sites of economic importance?

Chapter 6

Chapter 6 tests hypothesis 3 - that the chances of military intervention are inversely related to the distance of fighting from the capital city in low-capability warfare. Logistic regression is used to estimate the effect of conflict geography on the probability of foreign states deploying soldiers in the samples of guerrilla, conventional and low-capability warfare. The following section discusses the unit of analysis, dependent, independent and control variables for these models.

Unit of Analysis

Potential interveners are added to the conflict year database in Chapter 6, making the unit of analysis an annual dyad between a potential intervener and state experiencing civil war (referred to hereafter as an ‘intervention dyad’). While dyadic analyses of intervention in civil war are a recent addition to literature, they have been used extensively in studies of interstate war. Findley and Teo recommend a dyadic setup, arguing that ‘neither the actor nor the phenomenon-centric approach is

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complete on its own… [an] integration of both facets paints a clearer and more vivid picture of the civil war intervention process’. 203

Only ‘politically relevant’ dyads from 1960-2003 are included in the sample. A proliferation of irrelevant observations (observations with little or no chance of intervention occurring, say Papua New Guinea intervening in the Liberian civil war) can bias the standard errors and report misleading p-values. Politically relevant states are those: within the ‘region’ as defined by the Uppsala conflict database, contiguous to the conflicted state, former colonial powers, superpowers, major powers, and Cold-War allies. One observation of intervention was excluded by this definition – Canada’s deployment of soldiers in Somalia in 1992. Constitutional bans on the projection of military force excludes Japan and Germany from the sample. By definition, states cannot consider intervening in their own civil wars as they are not external actors, and these observations have been removed.

**Dependent Variable**

Hedley Bull defined intervention as ‘dictatorial or coercive interference by an outside party or parties, in the sphere of jurisdiction of a sovereign state, or more broadly of an independent political community’. 204 But, as Hoffman argues, this definition is ‘practically the same as that of international politics in general from the beginning of time to the present’. 205 Rosenau claimed to overcome this imprecision by defining intervention as ‘convention-breaking’ activity directed at the authority structures of a target state’. 206 Yet, making convention-breaking a necessary condition for intervention risks tautology. One of the main ‘conventions’ in international relations is non-intervention, meaning that we record an intervention when it breaks the convention of non-intervention. Of course this begs the original question, what is intervention? As Little writes, ‘a definition of “intervention” wide enough to take in

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203 Findley and Teo, 'Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,' Pg 829.
all the meanings attached to the word will be masked by imprecision’. 207 Vincent simply argues that ‘intervention’ probably has no ‘analytically useful essence’. 208

As a result, empirical studies have operationalised dependent variables differently. There has been, for example, a tendency to aggregate economic and military intervention209 or to treat the deployment of soldiers and the dispatch of military hardware as comparable forms of intervention.210 Miller aggregates all four of these categories into a quantitative scale, assuming there is an underlying numerical relationship between the sending of weapons to an insurgency to the deployment of soldiers in support of that insurgency to the sending of weapons to a government and so on. 211 While these definitions might increase observations on the dependent variable, it does so at the expense of unrealistically assuming that independent variables have constant effects for different types of interventions.212 Because of its overt nature, and subsequently the low level of plausible deniability, governments consider the deployment of troops as a different category of intervention to the provision of finance and arms.

While acknowledging the conceptual debate, and that perhaps it cannot be resolved, I define military intervention in restricted terms to avoid the methodological problems mentioned above. Military intervention is defined as ‘the movement of [at least 200] regular troops or forces of one country into the territory…of another country, or forceful military action by troops already stationed by one country inside another in the context of some political issue or dispute’. 213 The definition includes ‘advisors’ that take part in, or lead, combat operations, but excludes the use of aerial or naval

210 Lemke and Regan, 'Intervention as Influence,' Chapter 3 "The Decision to Intervene", Regan, Civil Wars and Foreign Powers: Outside Intervention in Intra-State Conflict.
211 Miller, 'External Military Intervention in Civil Wars: A Quantitative Study of the Initiation and Escalation of Third-Party State Interventions,' "Appendix".
212 Most analyses do not include neutral intervention. Some state clearly that they have excluded it. See for example, Charles Kegley Jr and Margaret Hermann, 'Putting Military Intervention into the Democratic Peace: A Research note,' Comparative Political Studies 30, no. 78 (1997): 79.
bombardment that does not entail the same level of cost (in terms of casualties and domestic political repercussions) as the deployment of regular soldiers. Military forces must participate in, interpose between, or use assets to influence the progress or outcome of internal conflict. This definition includes a range of actions from direct combat to the guarding of infrastructure. UN-interventionism is not included because of its unique decision-making process and calculations of costs and benefits. The thesis is, to the best of my knowledge, the only quantitative study of foreign troop deployments in civil wars. Data (including the direction of intervention) was collected from databases complied by Pearson and Baumann and Kinsangani and Pickering.

Although Findley and Teo argue that ‘distinguishing between interventions for and against either the government or opposition forces clarifies important theoretical expectations and better mirrors how interventions take place in reality’, the theory in Chapter 2 makes no claims about the type of intervention expected. Presumably the disincentives for intervening when conflict is in the countryside during low-capability warfare apply to all actors, regardless of their targeted party, as do the incentives for intervention when conflict reaches the capital.

Only the first intervention in each year was coded. A dichotomous operationalisation means that once a state has intervened, until it has withdrawn, it is impossible for it to ‘intervene’ again. Thus, the observations where the potential intervener has

214 Frederic S Pearson and Robert A Baumann, 'International Military Intervention, 1945-1988' [computer file], in Centre for International Studies (University of St Louis, Ann Arbor, 1992), Pg 5. According to Pearson and Baumann, advisors ‘are not considered intervener, unless they engage in, lead, or direct (at the frontlines) active combat’. Troops stationed in the territory of another state ‘are not considered interveners unless they arrive in the midst of a political dispute or unless they leave the base to take some forceful action in the case of a dispute’. Pg 5. The deployment of ground troops also is overt and more public than air or naval bombardment. Aerial bombardment can also be concealed and plausibly denied, raising questions as to whether the universe of military interventions has been identified. For example, the Pearson and Baumann database does not record Soviet Bombardment of Herat in Afghanistan before troops were deployed to protect Baghram airport in July 1979 (which is coded at the intervention onset date) or the invasion in December 1979. It is possible there are a large number of aerial operations that have escaped the broad historical record and databases of military interventions See Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts'.

215 States contributing troops receive economic benefits for their contributions thus altering the cost-benefit calculations.

216 Emizet F Kinsangani and Jeffrey Pickering, 'International Military Intervention, 1989-2005' [computer file], (Kansas State University, Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor], 2007), Pearson and Baumann, 'International Military Intervention, 1945-1988: Coding Notes.'

217 Findley and Teo, 'Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,' Pg 829.
undertaken intervention and continues intervention (as the Soviet Union did in Afghanistan for example) have been removed. Angola was ‘open’ to Cuban intervention in 1975, but not again until 1990. Cases of intervention missed by the database were added, such as the Angolan intervention into Congo-Brazzaville in 1997. Intervention is coded as a dichotomous variable indicating its presence (1) or absence (0). Because the outcome variable is dichotomous, logistic regression is appropriate. Standard errors were clustered around the potential intervener – civil war dyad to minimise the effects intra-cluster correlation. Random effects and generalised estimation equations were also run as alternative means of controlling for intra-cluster collinearity.

**Independent Variable**

For the most part, this variable is the same as that described for Chapter 4. Instead of the dichotomous specification, however, the natural log of the continuous variable was used. There are two reasons for this choice. Chapter 2 argued that both the predicted and actual occurrence of fighting in the capital will trigger intervention. Outside states may use the distance of conflict from the capital as a proxy for the probability of a pitched battle occurring. Thus, a dichotomous variable indicating whether conflict was within 25km or 50km of the capital might obscure interventions that occurred at 55km or 60km that were actually triggered by a predicted battle for the capital. Secondly, it is probably mistaken to assume that a linear relationship exists between the distance of fighting from the capital and the probability of intervention. If fighting moves from 500km to 400km from the capital (i.e movement in the countryside) we might expect this change to have a lower impact on the probability of intervention than if conflict moved from 150km to 50km. Although the unit-change is the same, movement in the countryside can be due to many different factors (such as the entry or exit of different factions) while a drive close to the capital reflects a concentrated effort to capture it. Movement from 500km to 400km does not necessarily represent an impending conventional battle whereas 150km to 50km is more likely to. A non-linear variable is more appropriate for modelling this relationship. To that end, the natural log (a logarithm to the base e) of the ‘distance from the capital’ was constructed from the linear specification. This relationship is shown in figure 3.2. While moving from 1km to about 150km from the capital results
in a 5-unit change the same net movement from 500-650km results in less than a 1-unit change.

**Figure 3.2 – The Natural Log of the Distance From the Capital**

There is a subtle difference between measurements in Chapter 4 and Chapter 6. While the minimum distance of a conflict over an entire year may be very close to the capital, it is possible that an intervener deployed soldiers *before* the fighting reached this minimum distance. Reverse causality is a problem in this case. Intervention might cause fighting to move closer to the capital (see Chapter 4). To account for this, during a year where intervention occurs, the distance is measured as the nearest battle within 2 weeks prior to the date of intervention.
Control Variables

Mitchell conceptualised intervention decision-making as a combination of ‘push’ and ‘pull’ factors.\(^{218}\) Push factors create demand for intervention and are largely encompassed by the ‘factors within the disputed state’. Findely and Teo describe these as ‘phenomena’ based factors. Pull factors include international linkages and characteristics of the potential intervener. Findley and Teo understand these as ‘actor’ based factors. More recent scholarship has shown that strategic variables such as alliances and rivalries play a role in motivating foreign military intervention.\(^{219}\)

Control variables in Chapter 6 account for these potentially confounding factors.

States are not created equal. Some countries have the capabilities to undertake foreign military deployments and others do not. Research shows that more powerful states are more likely to intervene in civil wars.\(^{220}\) The Composite Index of National Capability (CINC) provides one measure of a state’s material capabilities. CINC is produced by the COW Project and is an aggregation of six indicators of a state’s material capability: military personnel, military expenditures, total population, urban population, iron and steel consumption and energy consumption.\(^{221}\) CINC has been criticised for extrapolating missing data and overemphasising the military dimensions of power (although the database does incorporate aspects of economic power). However, most data interpolations were made for cases before 1960 and a focus on military power is relevant for this study, as the decision to deploy troops is very much a military one.

Every state is the centre of their own security complex radiating outwards from their borders. A dense web of affective and material connections render the actions of proximate states central to security considerations. As Gleditsch writes ‘the


sensibilities and vulnerabilities of countries to other actors and institutions in the
global arena are affected by closeness, as proximity shapes actor’s incentives to
engage in various conflictual and cooperative behaviours’.222 Previous research has
demonstrated that proximity is an important factor in military intervention.223

The Gleditsch and Ward Minimum Distance Database was adopted for the thesis.224
The Minimum Distance Data records ‘the shortest distance between the two closest
physical locations for every pair of independent polities between 1875 and 1996’.225
The measurements are capped at 950km reflecting the fact that ‘states that are more
than 1000km apart can hardly be considered geographically close’.226 In addition, it is
unlikely that capital-capital distances matter as much as the minimum distance
between states. Warfare in border regions of a disrupted state may be extremely close
to the territory of another state, though their capitals may be distant.227

Croco and Teo argue that geopolitical dimensions, such as alliance behaviour, should
be incorporated into dyadic models of intervention onset.228 Mitchell observed that
civil wars often become internationalised ‘through a process by which one external
party… acts in support of one of the parties to the internal conflict. This often brings
about a counter-intervention or counter-involvement by another party acting in
support of the other side’.229 Balch-Lindsay, Enterline and Joyce have also argued
that ‘the impact of third-party interventions on the evolution of intra-state conflicts is
often a function of the involvement of other third parties’.230 Recent work by Findley

222 Kristian Gleditsch and Michael Ward, ‘Measuring Space: A Minimum-Distance Database and
223 Frederic S Pearson, ‘Geographic Proximity and Foreign Military Intervention,’ *The Journal of
Conflict Resolution* 18, no. 3 (1974). Findley and Teo, ‘Rethinking Third Party Interventions into Civil
Wars: An Actor Centric Approach,’ Pg 836, Alexis Heraclides, ‘Secessionist Minorities and External
Involvement,’ *International Organization* 44, no. 3 (1990), Deepa Khosla, ‘Third World States as
224 Gleditsch and Ward, ‘Measuring Space: A Minimum-Distance Database and Applications to
International Studies.’
225 Ibid, Pg 744.
226 Ibid, Pg 745.
227 Ibid, Pg 743. A log-transformed variable was used in the model reported in Chapter 6, but it was
not significant while the linear and capped variable was.
228 The authors also suggest that alternatives to the dyadic units of analysis be adopted, although none
are suggested. Sarah Croco and Tze Kwang Teo, ‘Assessing the Dyadic Approach to Interstate Conflict
Pg 15-16.
229 Mitchell, ‘Civil Strife and the Involvement of External Parties,’ Pg 167.
230 Balch-Lindsay, Enterline, and Joyce, ‘Third Party Intervention and the Civil War Process,’ Pg 617.
and Teo has demonstrated that the presence of one intervener increases the probability of further intervention.\textsuperscript{231} Examples readily come to mind: Cuban intervention in Ethiopia was triggered by a Somali invasion of the Ogaden region in 1977 and Libyan intervention in 1979 was designed to help defend Idi Amin against a Tanzanian invasion.\textsuperscript{232}

For each state considering intervention in the dataset, a dummy variable is used to indicate whether, during that conflict year, a state with whom the potential intervener had an ongoing rivalry assisted the insurgency or government with regular soldiers or military hardware. Rivalry data were sourced from Giehl and Goertz. Data for the military support provided to governments and insurgents was sourced from Regan’s military intervention dataset.\textsuperscript{233}

A potential intervener may use civil war as an opportunity to destabilise a rival. On the other hand, states may be more likely to militarily support a government with whom they have a long record of stable, peaceful relations. Research by Findley and Teo show that rivalries decrease the probability of intervention on the side of the government, and, where rivalry is low, increase it.\textsuperscript{234} Peace years were obtained from the COW dataset available through EuGene software and based on the Militarised Interstate Disputes data (MID).\textsuperscript{235} MID data records instances where states threaten the use of, or deploy, military assets against one another. Years of peace following a recent military encounter are more likely to effect the probability of intervention than changes between states with a long history of non-violence. The peace years variable was log-transformed to account for this.

\textsuperscript{231} Findley and Teo, 'Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,' Pg 830.
\textsuperscript{232} Cuba, for example, refused to directly intervene in the Eritrean conflict because it was an ‘internal’ Ethiopian affair Keith Somerville, Foreign Military Intervention in Africa (London: St Martin’s Press, 1990) Pg 178.
\textsuperscript{234} Findley and Teo, 'Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,' Pg 831.
Former colonial powers have cited ‘obligation’ as a justification for military intervention and existing studies find that colonial ties increase the probability of military intervention. Colonial powers maintain important economic, political and military links that may make intervention more likely. Within Africa, the transfer of power to independence-era leaders was comparatively peaceful and many colonies chose to maintain strong relations with their former colonisers. A ‘former colony’ has been coded where a state was once a dependency or ‘colony’ of the potential intervener. Data was sourced primarily from secondary sources, especially Arnold’s *Africa: A Modern History.*

Alliance commitments are an important motivation for military intervention. Findley and Teo’s study estimates that the presence of a defence alliance increases the hazard of intervention by 3 times. Defence pacts indicate close political and military ties. Foreign powers will be more likely to support an ally facing insurgency than another state with whom ties are not as close. Data was sourced from the COW Formal Alliance database. A defence pact has been coded where what is defined in the data as a ‘defence alliance’ (as opposed to a non-aggression treaty or an entente) is present between two states. Dates of accession and abrogation are also available. In a year where an alliance was partially present, the alliance is coded as present over the year. Defence pacts concluded following an intervention were not coded as being present. The data covers the period from 1816-2000.

It is difficult to imagine Cuba intervening in Angola or Ethiopia were they not allies in the Cold War. Where the potential intervener and the conflicted country were co-

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239 Findley and Teo, ‘Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,’ Pg 832.

members of either the capitalist or Soviet bloc these observations were attributed a value of ‘1’ and ‘0’ if they were not. Data were sourced from secondary sources.

Adekeye Adebajo has argued that self-styled identities as regional hegemons make it more likely that Nigeria and South Africa will project force abroad. As he writes, ‘Nigeria’s foreign policy is closely tied to the military’s image of the country as a regional giant and its own role in protecting and defending this image’.241 Regional hegemons provide ‘public goods’ to neighboring states, making them more likely to lead or initiate military interventions in foreign countries. Nigeria and South Africa have been coded as ‘regional hegemons’ and this variable is included in the models.

Authors such as Ross and Morgenthau have argued that resource wealth provides incentives to support insurgents or protect incumbents by increasing the payoffs and offsetting deployment costs.242 Yoon has used descriptive statistics to suggest that resources play a role in motivating intervention in African conflicts. Pearson and Baumann have done so with internal conflicts more broadly.243 Despite much attention in the literature on civil war, however, analysis of the systematic role of resources in motivating intervention is missing from the quantitative literature. Resources, especially diamonds, have been linked to a number of interventions. Zimbabwe’s 1998 intervention in the DRC is widely reputed to have been motivated by the expectation that military costs would be offset by mining and logging concessions.244 Ross cites that Charles Taylor’s support for the RUF was designed to access Sierra Leone’s diamond fields. Decision-makers in Uganda and Rwanda believed that deployment costs in the DRC could be offset by resource looting.245

245 Ross, ‘How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases,’ Pg 57.
Buhaug, Gates and Lujula collated a dataset identifying ‘all conflicts that took place in areas with secondary gemstone mining’ and a variable that ‘takes the value of 1 in all conflict years with significant secondary gemstones production’. Secondary diamonds are more easily extracted than kimberlite (industrial) diamonds and are those hypothesised to have motivated intervention in Africa’s wars. With the same methodology the authors constructed a variable denoting the presence of hydrocarbons in a conflict zone, a non-lootable resource. Both variables are included in the statistical models.

The length of time that a war has endured affects the probability of military intervention. Findley and Teo show that the underlying hazard of intervention (not specifically military intervention) is high in the early years of a civil war. States may avoid conflicts where the cycle of violence and mistrust is firmly entrenched and precludes a quick solution. Alternatively, enduring conflicts may impose unacceptable security risks for surrounding states. As with Chapter 4 and 5, the ‘time squared’ method was preferred to control for temporal dynamics.

Previous studies have shown that a ‘humanitarian crisis’ increases the probability of military intervention. Refugees and internally displaced persons (IDPs) impose costs upon neighbouring states and create demand that ‘something be done’. The extent of a humanitarian crisis was proxied by the number of IDPs produced by the conflict. Data were sourced from the Political Instability Task Force’s ‘Forcibly Displaced Populations’ (FDP) dataset and the United Nations High Commissioner for Refugees’s (UNHCR) statistical database. The FDP dataset has a number of missing observations, particularly for the years 1975 and 1979. Missing data were only filled where other secondary sources or Keesings and the New York Times established an approximate number of IDPs, or where the missing observation was

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247 Buhaug, Gates, and Lujala, ‘Geography, Rebel Capability and the Duration of Civil Conflict.’
248 Findley and Teo, ‘Rethinking Third Party Interventions into Civil Wars: An Actor Centric Approach,’ Pg 836.
249 Lemke and Regan, ‘Intervention as Influence.’
250 Regan, ‘Choosing to Intervene: Outside Interventions in Internal Conflicts,’ Pg 767.
bookended by complete observations. In the latter case, the mean of the two surrounding observations was imputed. While this reduces precision, the overall accuracy of the statistical study is improved due to the inclusion of many observations on the dependent variable (1975 and 1979 were popular years for military intervention, although none of the observations occur in low-capability warfare). In a small number of countries, multiple civil wars occurred over the observed period. Where literature did not directly establish the civil war producing the most IDPs, intensity was used as a guide. In most cases this was fairly unambiguous as the year under question witnessed a very high and a very low intensity war (such as the war in Angola where the government was fighting the much stronger UNITA insurgency and a low-level guerrilla war in Cabinda). Where the intensity was more equal, the IDPs figures were halved.

Stronger rebels are more likely to strike the capital and researchers have converged on the expectation that foreign states intervene in civil wars with stronger rebels. States do not waste resources in a fight that their favoured party will win anyway, and do not waste resources by having to defend a defeated organisation. 253 Empirically these studies show that ‘the marginal effect of an increase in capabilities is greatest when the two states have similar capabilities than when one side has a great advantage’ and that ‘if the targeted party is significantly stronger than the opposing party, there will be no intervention’. 254 The balance of power between rebels and the government is already incorporated into the definitions of guerrilla, conventional and low-capability warfare, but it is worth including a more detailed measurement. A variable reflecting the relative strength between the government and insurgency broadly controls for this alternative hypothesis regarding the timing of foreign intervention. Data was sourced

253 Interestingly, studies into decision-making in dynamic systems have also used expected utility theory to predict that the optimum moment for intervention is when system deterioration has reached a point where it is unlikely to self-correct (i.e. the deterioration is not a false alarm) but with enough time to adjust the strategy once an intervention had begun. Jose Kerstholt, 'Decision-Making in a Dynamic Situation: The Effect of False Alarms and Time Pressure,' Journal of Behavioral Decision Making 8 (1995), Jose Kerstholt, 'The Effect of Information Costs on Strategy Selection in Dynamic Tasks,' Acta Psychologica 94 (1996), Jose Kerstholt, 'The Effect of Time Pressure on Decision-Making Behavior in a Dynamic Task Environment,' Acts Psychologica 86 (1994), Jose Kerstholt and Jeroen Raaijmakers, 'Decision Making in Dynamic Task Environments,' in Decision-Making: Cognitive Models and Explanations, ed. Rob Ranyard, W. Ray Croizer, and Ola Svenson (London: Routledge, 1997).

from Cunningham’s 2008 publication measuring the comparative fighting capacity of
governments and insurgencies. From this data, I have used the ‘rebstrength’ variable.
A score of ‘1’ on the index indicates that the insurgency was ‘much weaker’ than the
government. A score of ‘5’ indicates that the rebellion was ‘much stronger’ than
the government and ‘3’ is parity.

Incompatibility and land area are included as control variables. Their specification is
the same as in Chapter 4.

Initially, three models were run. Model 6.1 tests the effects of changes in the location
of fighting on the probability of foreign military intervention within the sample of
low-capability warfare. Models 6.2 and 6.3 repeat this method in the samples of
guerrilla warfare and conventional warfare respectively. Models 6.4 and 6.5 repeat the
test within the sample of ‘low arms importers’ and ‘high arms importers’.

Chapter 7

Chapter 7 is a focused case study of the Liberian civil war from 1989-1990. From the
statistical models, Liberia emerged as a ‘most likely’ case for a relationship between
low-capability warfare, battle location, concentration and foreign intervention.
Liberia’s wars are often cited as an archetypal example of the ‘new wars’. Monrovia
(the capital city) was subject to an extended siege from 1990 onwards and the onset of
this siege correlated with a Nigerian-led intervention by the Economic Community of
West African States Cease Fire Monitoring Group (ECOMOG). On a quantitative
level the Liberian civil war is a good case to test the theory of low-capability warfare
developed in Chapter 2.

Qualitative Methods

What can a single ‘most likely’ case study tell us that we cannot already deduce from
the quantitative work? Case studies address two problems with quantitative methods.

255 See David E. Cunningham, Kristian Skrede Gleditsch, and Idean Salehyan, 'It Take Two: A Dyadic
Analysis of Civil War Duration and Outcome,' *Journal of Conflict Resolution* 53, no. 4 (2009).
256 Gent, ‘Going in When it Counts: Military Intervention and the Outcome of Civil Conflicts.’
While statistical models are capable of controlling for confounding effects, their efficacy is only as good as the quality of data used. The ‘garbage in, garbage out’ problem is a serious one. This is especially the case when dealing with cross-national data from Africa, which can be unreliable and, at times, unavailable. In addition, most cross-national data, from GDP to measurements of National Material Capabilities, the size of armed forces and battle-related deaths come in, at best, annualised form. Control variables can only be as effective as the sensitivity of their measurement. If, for example, a foreign intervention occurred in the July of a given year, it might be straightforward to identify the closest location of fighting to the capital at this point, but how can we know how many people had been killed in battle half-way through the year? Considerable ambiguity already exists over measuring the number of battle-related deaths that have occurred in a year, let alone finer divisions of measurement. Perhaps the conflict was not very intense in the early months of the conflict and intensified after the intervention. While the relationship imputed by the model might show that higher levels of conflict intensity increased the probability of intervention, the causality may actually be in reverse. The best a statistical model can do in this case is use the aggregate annualised measurement to ‘control’ for intensity.

Case studies allow for a finer ‘unit of analysis’ than one year. Researchers can focus in and out of key moments and observe whether a causal relationship is plausible. George and Bennett argue that process tracing is a method ‘less prone to some kinds of measurement error because it can intensively assess a few variables along several qualitative dimensions, rather than having to quantify variables across many cases’. Lieberman argues that ‘given the potential for problems of endogeneity and poor data in statistical analyses carried out at the country-level of analysis, statistical results alone rarely provide sufficient evidence of the robustness of a theoretical model.’ A case study can intensively follow the values of key independent variables over time and analyse why changes in their value affect changes in the outcome variable. Mahoney writes that case studies and quantitative analysis do different things:

258 Lieberman, ‘Nested Analysis as a Mixed-Method Strategy for Comparative Research,’ Pg 442.
259 John Gerring, ‘What is a Case Study and What is it Good For?’, *American Political Science Review* 98, no. 2 (2004): Pg 347.
studies seek to tell us why particular outcomes happened in specific cases; statistical studies try to estimate the average effects of variables of interest’.  

Secondly, statistical models have an embedded casual mechanism mediating the relationship between variable A and variable B.  

Put another way, most statistical analyses provide a large number of ‘data-set observations’ but no ‘causal process observations’.  

A causal mechanism is a ‘physical, social or psychological process’ that links an independent variable to an outcome.  

It is very rare in political science for authors to postulate a relationship between A and B without at least speculating on what causes the relationship. Sambanis, for example, sees the quantitative work in civil war onset suffering from ‘measurement error, unit heterogeneity, model misspecification, and a lack of clarity about causal mechanisms’. He suggests specifically that ‘such studies often overlook information about the causal pathways that link individual or group behaviour with the outbreak of civil war’.  

Ross criticises the literature linking civil war onset to natural resources when he says that ‘general, cross-national studies often suggest causal mechanisms but provide little evidence to back them up’.  

Statistical studies can be ‘right for the wrong reasons’. This thesis posited that the empirical outcomes tested in Chapters 4, 5 and 6 were the result of conscious military strategies composed by state and rebel leaders. While the quantitative analysis might show a correlation between low-capability warfare and the probability of fighting near to the capital city, how do we know that the outcome is part of an intentional strategy on behalf of military decision-makers? Numerous authors have identified a strong correlation between democratic dyads and a lower probability of going to war.  

Causality, however, has been located in pacific

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261 Ibid, Pg 142.
262 Lieberman, 'Nested Analysis as a Mixed-Method Strategy for Comparative Research,' Pg 441.
263 George and Bennett, *Case Studies and Theory Development in the Social Sciences* Pg 117.
265 Ibid.
266 Ross, 'What Do We Know about Natural Resources and Civil War?,' Pg 340.
267 Sambanis, 'Expanding Economic Models of Civil War Using Case Studies,' Pg 260.
norms, high volumes of trade, cross-national capitalist elites and high levels of economic development.269

George and Bennett argue that ‘process tracing’ is a potentially ‘powerful’ method ‘for testing theories about causal mechanisms’.270 As the authors argue:

‘The process tracing method attempts to identify the intervening causal processes – the causal chain and causal mechanism – between an independent variable (or variables) and the outcome of the dependent variable’.271

Lieberman recommends that large-N studies employ a ‘nested’ small-N study into their work to dig behind the correlation and ‘test’ the model at the level of causality. He argues that the ‘plausibility of observed statistical relationships’ and ‘prospects of making valid causal inferences in cross-national and other forms of comparative research’ can be improved with an ‘integrated strategy... drawing on the distinct strengths of two important approaches’.272 However, we should not go too far in championing the ability of case studies (especially single case studies) to ‘prove’ a causal relationship. As George and Bennett argue, ‘process-tracing’ is useful for confirming or identifying ‘spurious correlations that may apply from statistical comparison’.273 In combination with a supportive statistical relationship a single case study can, at best, allow the researcher to say that a posited causal mechanism is plausible. It might be the case that our causal mechanism operates only in that one case – and especially if it is a ‘most likely’ case. For example, while a strong correlation may emerge in the cross-national statistical analysis and we might find that fighting in Monrovia was plausibly caused by a decision to pull up and fortify the capital, we could not say whether this same casual mechanism was likely to apply in Congo-Brazzaville or Chad. We could just say that it was plausible. However, were we to find that our causal mechanism was not supported by the ‘most-likely’ case, then we could, with confidence, say that out causal mechanism was misspecified. Or as George and Bennett write, theories can be ‘disproved’ with a most-likely case

269 See, for example, Erik Gartzke, 'The Capitalist Peace,' American Political Science Review 51, no. 1 (2007).
270 George and Bennett, Case Studies and Theory Development in the Social Sciences Pg 129.
271 Ibid, Pg 206.
273 George and Bennett, Case Studies and Theory Development in the Social Sciences Pg 222.
study.274 Those things said, a strong cross-national correlation and a supportive case study increases our confidence that the empirical patterns are broad and the casual mechanism plausible. For this ‘model testing’ approach ‘on-line’ or cases ‘well predicted by the statistical model’ are useful cases to select.275

The case study seeks to answer two questions:

1. Was the incidence and concentration of fighting in Monrovia in 1990 the product of joint decisions by the NPFL and Samuel Doe’s government to focus their military strategies on controlling or defending the city? Did these actors focus their strategies on Monrovia (a) because of its economic value and (b) because of assessments that the enemy lacked of offensive capacity?

2. Did Nigeria intervene when fighting reached Monrovia because they perceived that the conventional offensive capability could be exploited in a conventional battle for the capital? Did Nigeria refrain from intervening when conflict was in Liberia’s countryside because of the perceived high costs of counter-insurgency? Was Nigeria’s military strategy primarily ‘defensive’ and based around taking and holding the capital city?

To address the questions, the case study looks for two things. Firstly, the composition of a military strategies designed to attack/defend Monrovia and exploit advantages in defence. Evidence suggesting, for example, that President Samuel Doe did not stage a retreat to Monrovia to lure the NPFL into a conventional battle, or that a retreat was conducted for reasons other than to exploit a marginal military advantage in conventional defense would count contrary to the theory in Chapter 2. Secondly, the chapter seeks evidence for how changes in the distance of fighting from the capital city affected the decision to intervene. Evidence to suggest that Nigeria chose not to intervene when conflict was in the countryside and perceived that a conventional strike while insurgents were investing Monrovia was a cost-effective strategy is considered supportive evidence. Additionally, if Nigerian soldiers appeared unwilling to fight outside of Monrovia this is considered evidence supporting the idea that

274 Ibid, Pg 122.
military strategy was based heavily around defensively controlling Monrovia. Evidence suggesting that Nigeria and ECOMOG had no military strategy, or vigorously engaged in counter-insurgency in the Liberian countryside would be considered contrary evidence. Evidence was sourced mostly from secondary sources, although some primary sources such as the BBC World Service, Reports to the U.S Congress, and *West Africa* magazine were consulted.

**Conclusion**

This chapter has outlined a framework to test hypotheses 1-3. By restricting the sample to African civil wars we can, broadly, hold economic geography ‘constant’ whilst varying the types of warfare. Sovereignty norms morph capital cities into lucrative revenue sources. Sovereign benefits eclipse opportunities for domestic revenue accumulation in many African states. Based upon the theory in Chapter 2, it was hypothesised Africa’s capital cities are at a higher risk of experiencing fighting in low-capability warfare when compared to conventional and guerrilla warfare. So too, fighting is predicted to concentrate in Africa’s capitals when the military technology available to belligerents is low. Finally, as fighting in Africa’s civil wars moves closer to the capital city, it was predicted that, in low-capability civil war, the chances of foreign states deploying soldiers will increase. This relationship was not expected in conventional or guerrilla warfare. Mixed methods are used to look for both large N correlation and small N causation. Within the quantitative chapters, logistic and OLS regression are used where appropriate and the models are structured to ensure that confounding variables are accounted for and distortions from factors such as intra-cluster correlation and heteroscedasicty are minimised. Visualisation of where fighting has concentrated in African civil wars from 1997-2008 helps to increase our confidence in cross-national statistical findings and refine the correlation between low-capability warfare and fighting over economic resources. A case study of the first Liberian civil war from 1989-1990 complements the weaknesses of quantitative analysis, especially measurement error and the difficulties of testing causal mechanisms or generating ‘causal process observations’ from cross-national statistical data. The remaining chapters of this thesis show the results of this analysis.
Chapter Four

Empirics I: Low-capability Warfare and the Risk of Fighting in Africa’s Capitals

We should observe two things if economic geography structures the pattern of fighting in low-capability warfare: (1) Africa’s capital cities are at a higher risk of experiencing fighting when compared to conventional and guerrilla warfare and (2) the risk of combat is higher in regions near to the capital city when compared with regions in the countryside. A quantitative analysis of African civil wars from 1960-2008 and replication of Buhaug and Rod’s 2006 study provide evidence in support of these propositions. Low-capability warfare is more common after the Cold War and the opening section of the chapter correlates this change with a contraction of fighting around Africa’s capitals. Logistic regression analysis then shows that the threat to an African capital is six times higher in low-capability warfare when compared to conventional warfare, other things being equal. Replication of Buhaug and Rod shows that regions near the capital are more likely to experience fighting in low-capability warfare, a pattern less distinct in conventional and guerrilla warfare.

Bivariate Analysis

Figure 4.1 charts the distribution of warfare types in Africa from 1960-2008. Guerrilla warfare is the most common empirical pattern of fighting, accounting for over half of Africa’s conflict years. Conventional and low-capability warfare each make up roughly 20% of the sample. Immediately, this puts paid to the idea that all African states fight ‘new wars’. In the majority of Africa’s conflicts the government wielded conventional firepower in excess of that available to an insurgency, like the rest of the world. If we jump ahead to Figure 4.2, guerrilla warfare still accounts for roughly half of Africa’s conflict years after the Cold War. Governments in Mali, Niger, Senegal, Ethiopia, Angola, Rwanda, Burundi and Uganda have all deployed heavy armour, artillery and air support, forcing insurgents to base their strategies on irregular tactics. For example, 4500 troops of the Senegalese army, including an armoured battalion with air-support, have confronted the Democratic Forces of Casamance Movement
(MFDC) in the south-western corner of Senegal. The MFDC operate from and along the forested and porous border with Guinea-Bissau (often accused of supplying the rebels) armed ‘largely’ with AK-47 assault rifles and RPG-7 rocket propelled grenade launchers. MFDC military operations have consisted of ‘hit and run attacks on Senegalese forces and… of armed robberies of shops and vehicles, sometimes in combination’. Fighting between the government and MFDC was confined largely to the Ziguinchor region in south-west Senegal (see Chapter 5). These tactics and empirical patterns are not dramatically different from civil wars in Nepal, El Salvador or Guatemala.

Guerrilla warfare is, however, more common outside of Africa, making up 92.4% of the sample. Africa’s wars are much more likely to be fought ‘symmetrically’ that is, in situation where both sides can deploy heavy weapons, or neither can. Conventional warfare is roughly three times more likely in Africa when compared to the rest of the world. Most striking is the extreme rarity of low-capability warfare outside of Africa. There are just three observations from 1960-2008, all from the same country - Haiti in 1989, 1991 and 2004. Haiti exhibits the empirical characteristics of low-capability warfare described in Chapter 2. Fighting has consistently occurred and concentrated in the capital, Port au Prince, and foreign states have preferred intervention when fighting descended upon the capital. For example, military and police units in the northern town of Gonnaives mutinied in 2004 and further units from central Haiti joined the rebels. President Astride buttressed his rule with paramilitary forces, especially the chimères, prior to the 2004 rebellion. Astride put up very little resistance in the countryside. As Carey notes:

‘The one-month-long uprising, the largest in Haiti’s two centuries of independence, involved very little combat. It was catalysed by the Cannibal army, which had defected from being an Astride-sanctioned paramilitary of several hundred in the country’s third largest city, Gonnaives’.

United States Marines along with French and Canadian soldiers deployed in Port au Prince to evacuate the president and establish a foothold for the UN-mission to follow. According to
Colin Powell, the US feared a ‘bloodbath’ in Port au Prince as the mutinous paramilitaries prepared to face off against Astride’s paramilitaries.\(^6\) Economically, Haiti is similar to many African states, exhibiting a high proportion of GDP consumed by agriculture and a dependence upon foreign aid. Two-thirds of Haitians are engaged in subsistence farming and half of the annual budget in 2010 came from outside sources, although this figure may reflect earthquake-related assistance.\(^7\) That said, Haiti was the recipient of over $4 billion in foreign aid from 1990 - 2003 and Buss and Gardner state that ‘since 1944, when the Roosevelt administration began its aid program, Haiti has relied heavily upon on-again, off-again foreign assistance from the United States and the International Community’.\(^8\) Overall, Figure 4.1 reflects the comparative military weakness of African governments, many of which, like Astride, rely upon paramilitary forces for regime security. More African governments do not possess (or cannot deploy) heavy weapons in combat and, when they can, are not strong enough to monitor and quickly destroy heavy weapons in possession of insurgents. Insurgents have a wider strategic window in Africa and can, on more occasions than insurgents in the rest of the world, make use of conventional offensive and defensive tactics.

*Figure 4.1 – Frequency and Proportion of Conflict Years by Warfare Type*

<table>
<thead>
<tr>
<th>Warfare Type</th>
<th>Africa Frequency</th>
<th>Africa Percentage</th>
<th>Rest of the World Frequency</th>
<th>Rest of the World Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Capability</td>
<td>79</td>
<td>19.7%</td>
<td>3</td>
<td>0.3%</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>235</td>
<td>58.6%</td>
<td>846</td>
<td>92.4%</td>
</tr>
<tr>
<td>Conventional</td>
<td>84</td>
<td>20.9%</td>
<td>67</td>
<td>7.3%</td>
</tr>
</tbody>
</table>


Figure 4.1 obscures considerable temporal variation in Africa’s experience of warfare. As the availability of heavy weapons and external support has changed, so too have the strategies employed by combatants. Just 4% of conflict years from 1960-1988 were classified as ‘low-capability’. From 1989-2008 this figure rose to 32% - an eight-fold increase. Nearly half of all conflict years in 2008 were marked by the absence or non-use of heavy weapons. In contrast, the incidence of conventional and guerrilla warfare is on the decline. Twenty-three percent of conflict years during the Cold War saw governments and insurgents deploy heavy weapons in battle. This has fallen to 18% since 1989, a 22% decline. There was not one ongoing conventional civil war in Africa in 2005, the first time since 1995 and 1974 before that.\(^9\) This is a surprising development, and does not simply indicate that fewer states possess heavy weapons. Governments and insurgents may be increasingly reluctant to use them. Foreign countries, especially France, have taken to restraining the use of heavy weapons in combat by domestic actors in civil wars with the potential effect of making a ‘slow burning’ strategy of exhaustion more preferable to a strategy of annihilation that runs the risk of intense civilian casualties and the determined intervention of foreign powers. The change in objective and strategy may reflect increasing pressure to protect civilians from armed attacks, on the one hand, and the vulnerability of artillery pieces and tanks to the low-risk strategy of using air power instead of ground troops. France, for example, ‘attacked heavy artillery and armoured vehicles at Mr. Gbagbo’s residence and presidential offices’ in Cote d’Iviore in 2011. Indeed, UN Security Council Resolution 1975 called for the United Nations Operation in Cote d’Ivoire (UNOCI) to protect civilians and specifically to ‘prevent the use of heavy weapons against the civilian population’.\(^10\) Although outside of Sub-Saharan Africa, North Atlantic Treaty Organisation (NATO) forces in Libya have specifically targeted Colonel Gaddafi’s heavy weapons.\(^11\) Guerrilla warfare has experienced the largest proportional decline but remains the most frequent form of combat in the post Cold War system. Seventy-two percent of conflict years from 1960-1988 in Africa experienced guerrilla warfare. This has fallen to 50% since 1989, a decline of 30%.

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\(^11\) Ibid, Pg 845.
Why were higher capability forms of warfare more prevalent during the Cold War? In 96% of conflict years from 1960-1988 the government was able to field heavy weapons. Since 1989 this has fallen to 68%. Clearly the answer turns on how governments obtain and deploy heavy weapons. Tanks, aircraft and artillery were readily available for rulers willing to ally with (and manipulate the anxieties of) the communist or capitalist blocs during the Cold War.12 Coker, in 1981, cited that the West perceived ‘southern Africa as a vast chessboard on which the Soviet Union can move its pieces at will’.13 As head of the African Bureau in 1975, Nathaniel Davis reminisced, ‘the secretary [of state, Henry Kissinger] would freely acknowledge, I believe, that he saw Angola as part of the US-Soviet relationship, and not as an African problem’.14 Copson argues that, in Somalia, ‘the U.S security assistance program... was motivated by the Cold War and U.S strategic interests in the Indian Ocean, the

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Persian Gulf, and the approaches to the Suez canal’. 15 Lock estimates that by 1979 Africa received $5 billion in military assistance per year. 16

Foreign advisors also trained personnel in the operation of conventional weapons and in some cases operated the weapons themselves. 17 East Germany and the USSR had deployed 1700 combat advisors in addition to 700 tanks, 600 Armoured Personnel Carriers (APCs) and 118 combat aircraft in Ethiopia by the mid 1980s. 18 Buzan writes, ‘superpower security dynamics made a substantial impact on Africa even though the resources committed were fairly small’. 19 US defence analyst William Thom wrote in 1981 that African forces ‘are growing in size, sophistication, and combat capability’ and ‘can now sustain warfare for a longer period over a larger area’. 20 He saw that even the intangible ‘morale, discipline, leadership, and levels of training’ were on the improve. 21

Military support usually favored the government, forcing insurgencies to rely upon irregular tactics. RENAMO succeeded in isolating Maputo (the capital) from the rest of the country by the mid-1980s but were unable to make a conventional drive to capture the capital so long as Russian, Cuban and East German weapons and training and Zimbabwean, Tanzanian and at

17 A number of African leaders used foreign assistance and training to co-opt select factions of the military and reduce the need to develop an indigenous military capacity. President Sassou-Nguesso of Congo-Brazzaville, for example created a “presidential guard” trained, successively, by Cuban, Moroccan, and Israeli advisors’. John Clark, 'Petro-Politics in Congo,' *Journal of Democracy* 8, no. 3 (1997): Pg 63. This was part of a widely utilised strategy whereby rulers stripped their military forces of conventional capacity to reduce the probability of coups occurring. Rulers had little incentive to develop large, well trained armed forces given the poverty of the countryside and the generally low probability of inter-state war. Indeed Wang finds that states that were able to attract military aid were also less likely to experience coups. Welch places more emphasis on economic variables, but the two are linked. He writes that before the sharp increase in coups from 1965–1967 Africa went though a period of economic decline, part of which involved a decrease in primary commodity prices. Urban discontent at this economic decline provided the impetus for the military to rebel. T.Y Wang, 'Arms Transfers and Coups d'Etat: A Study on Sub-Saharan Africa,' *Journal of Peace Research* 35, no. 6 (1998). Claude E Welch, 'Soldier and State in Africa,' *The Journal of Modern African Studies* 5, no. 3 (1967): Pg 319-20. See Kisangani Emizet, 'Explaining the Rise and Fall of Military Regimes: Civil-Military Relations in the Congo,' *Armed Forces and Society* 26, no. 2 (2000): Pg 214, Michael Mann, 'The autonomous power of the state: its origins, mechanisms and results,' *The European Journal of Sociology* 25 (1984), Charles Tilly, 'War Making and State Making as Organised Crime,' in *Bringing the State Back In*, ed. Peter Evans, Dietrich Rueschemeyer, and Theda Skocpol (Cambridge: Cambridge University Press, 1985). For the argument that Africa’s low incidence of inter-state war can account for the atrophy of the domestic state see Jeffrey Herbst, 'War and the State in Africa,' *International Security* 14, no. 4 (1990).
21 Ibid, Pg 38.
one point, Malawian soldiers remained in the country. Brogan argues that ‘Frelimo’s army [the government] was incapable of defeating RENAMO and sweeping the country clear of bandits, but it could defend the capital as long as foreign powers kept it supplied’. 22 Some insurgents were able to procure heavy weapons, usually from neighbouring states or rivals of the governments they threatened. UNITA benefited from South African and US military support and challenged the Soviet-backed government, at times, with a ‘strategy of annihilation’, most famously at the battle of Cuito Cuanavale in 1987-1988 (discussed in more detail below). 23

The availability of low-cost heavy weapons diminished with the US-Soviet rivalry. 24 According to Huband, the end of the Cold War engendered the ‘disappearance of any importance most of Africa may have once have had for the United States’. 25 Figure 4.3 shows a sharp fall in heavy weapons transfers from the United States and USSR to Africa from 1989. 26 Between 1993 and 1997, Africa imported its lowest quantity of arms since 1960. 27

24 Daniel Byman et al., Trends in Outside Support for Insurgent Movements (Santa Monica: RAND, 2001) Pg xiv.
27 Ibid, Pg 15.
Weak and lightly armed insurgent groups that, during the Cold War, fought (or would have been required to fight) lengthy guerrilla campaigns were able to match governments cut adrift from their Cold War patrons. For example, the Somali National Movement (SNM) fought a guerrilla war against the US-backed President Siad Barre from 1982-1988. US military aid was scaled down then removed completely in 1988 as Barre purged the military and relied upon a collection of ‘elite’ and ethnically coterminous paramilitary units to protect his regime. The SNM launched attacks on Butaro and Hargesia in the north, nearly capturing both cities in 1988. Barre obliterated the cities in response and destroyed, according to Compagnon, the SNM’s ‘well-trained militia’ who were replaced with thousands of untrained volunteers. With little time to equip and train them, the SNM organised along clan lines.

and by 1989 two poorly armed and organised militias were battling for control of Mogadishu, the capital.

However, the question remains: does this rise in the incidence of low-capability warfare coincide with a rise in the incidence of fighting in Africa’s capitals? Figure 4.4 charts the incidence and proportion of fighting within 25km of African capital cities from 1960-2008. No African capital experienced fighting during an ongoing civil war from 1967-1974. A maximum of two incidents per year occurred from 1960-1988. Since 1989, the figure has been consistently higher. The proportion of all conflict years that saw fighting within 25km has hovered between about 10% and 40% between 1989 and 2008, with 2008 being the highest recorded year (44%), just above 1998 (43%). Indeed the probability of a capital city being subject to fighting was just 8% between 1960 and 1988. From 1989-2008 this figure jumped to 26%.

*Figure 4.4 – Incidence and Proportion of Fighting within 25km of the Capital City, 1960-2008*

Changes in available military technology and changes in the geography of fighting appear to be connected. Figure 4.5 charts a series of descriptive statistics for the samples of low-capability, conventional and guerrilla warfare. It is rare for fighting to reach the capital in conventional and guerrilla warfare. Just 12% and 10% of conflict years respectively
threatened the capital. Capital cities are at a 47% risk of being attacked every year in low-capability warfare. It takes nearly twice as long for a conventional conflict to reach the capital when compared to low-capability warfare and nearly three times as long for a guerrilla conflict. If a capital is assaulted for the first time during low-capability warfare there is nearly a two in three chance it will be attacked again in the next year. In many cases fighting does not recede to the countryside but stalemates. Brazzaville, Monrovia and Mogadishu were partitioned and besieged for years on end. The chances of repeat attacks are lower in conventional warfare, just one in three. Insurgents with the capacity challenge the government in their seat of power also tend to have the capacity to expel them. For example, President Mobutu and the remnants of his army chose to surrender Kinshasa to advancing rebels after losing the battle of Kenge. The excoriated Armed Forces of Zaire (FAZ) could not match the combined strength of ADFL rebels supported by soldiers, heavy weapons and air support from Rwanda, Uganda and Angola. Repeat attacks are comparatively common in guerrilla warfare. There is a fifty percent chance that the first attack will be followed a second the next year. Burundi’s civil war accounts for much of this increased risk and may reflect the idiosyncrasies of Burundi’s physical and social geography. Mountains to the east of Bujumbura (the capital) and a substantial Hutu population in the suburb of Kinama may explain the ability the National Forces of Liberation (FNL) to consistently shell and occupy the capital despite their material weakness when compared to the government.33

Figure 4.5 – Descriptive Statistics by Warfare Type

<table>
<thead>
<tr>
<th></th>
<th>Low-capability</th>
<th>Conventional</th>
<th>Guerrilla</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Fighting in Capital</td>
<td>47%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Average Time to reach Capital (years)</td>
<td>2.22</td>
<td>4.16</td>
<td>6.5</td>
</tr>
<tr>
<td>Chances of fighting in the Capital in consecutive Years</td>
<td>60%</td>
<td>29%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Thus far, it appears that Africa’s capitals are at a higher risk of fighting in low-capability warfare. A sustained rise in the incidence of low-capability warfare coincides with a sustained rise in the incidence of fighting near capital cities. Low-capability conflicts are more likely to be fought near the capital, threaten the capital earlier, and stalemate more often when compared to conventional and guerrilla warfare. It may be the case, however, that low-capability warfare occurs disproportionately in smaller countries or that rebels seeking to secede choose guerrilla or conventional military strategies. It may simply be that smaller numbers of military personnel, regardless of armament, find it difficult to keep fighting from the political centre. As the methodology chapter noted, multiple regression can control for these confounding factors. Figure 4.6 displays the results of logistic regression analyses detailed in Chapter 3.
<table>
<thead>
<tr>
<th>Variable</th>
<th>(4.1 - base)</th>
<th>(4.2 - sieges)</th>
<th>(4.3 – post cold war)</th>
<th>(4.4 – South Africa)</th>
<th>(4.5 – arms transfers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>low-capability</td>
<td>1.851</td>
<td>1.617</td>
<td>1.406</td>
<td>1.849</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.674)***</td>
<td>(0.627)***</td>
<td>(0.708)**</td>
<td>(0.670)***</td>
<td></td>
</tr>
<tr>
<td>guerrilla</td>
<td>1.275</td>
<td>1.059</td>
<td>1.480</td>
<td>1.275</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.671)*</td>
<td>(0.511)**</td>
<td>(0.685)**</td>
<td>(0.668)*</td>
<td></td>
</tr>
<tr>
<td>incompatibility</td>
<td>1.937</td>
<td>1.490</td>
<td>1.987</td>
<td>1.839</td>
<td>1.760</td>
</tr>
<tr>
<td></td>
<td>(1.377)</td>
<td>(1.223)</td>
<td>(1.394)</td>
<td>(1.399)</td>
<td>(1.314)</td>
</tr>
<tr>
<td>land area (ln)</td>
<td>-0.519</td>
<td>-0.375</td>
<td>-0.354</td>
<td>-0.512</td>
<td>-0.339</td>
</tr>
<tr>
<td></td>
<td>(0.274)*</td>
<td>(0.188)**</td>
<td>(0.266)</td>
<td>(0.273)*</td>
<td>(0.248)</td>
</tr>
<tr>
<td>military size (ln)</td>
<td>-0.963</td>
<td>-0.636</td>
<td>-1.163</td>
<td>-0.948</td>
<td>-0.720</td>
</tr>
<tr>
<td></td>
<td>(0.243)***</td>
<td>(0.210)***</td>
<td>(0.309)***</td>
<td>(0.245)***</td>
<td>(0.344)**</td>
</tr>
<tr>
<td>intensity (ln)</td>
<td>0.313</td>
<td>0.279</td>
<td>0.435</td>
<td>0.309</td>
<td>0.357</td>
</tr>
<tr>
<td></td>
<td>(0.133)***</td>
<td>(0.133)***</td>
<td>(0.135)***</td>
<td>(0.134)***</td>
<td>(0.139)***</td>
</tr>
<tr>
<td>invasion</td>
<td>2.261</td>
<td>1.775</td>
<td>2.241</td>
<td>2.236</td>
<td>1.548</td>
</tr>
<tr>
<td></td>
<td>(0.994)**</td>
<td>(0.892)**</td>
<td>(0.911)**</td>
<td>(0.979)**</td>
<td>(0.686)**</td>
</tr>
<tr>
<td>time</td>
<td>0.313</td>
<td>0.328</td>
<td>0.295</td>
<td>0.314</td>
<td>0.308</td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.183)*</td>
<td>(0.254)</td>
<td>(0.247)</td>
<td>(0.215)</td>
</tr>
<tr>
<td>time squared</td>
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<td>-0.014</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.015)</td>
<td>(0.018)</td>
<td>(0.019)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>time cubed</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>time since last fail (ln)</td>
<td>-1.141</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>post cold war</td>
<td></td>
<td></td>
<td>1.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.622)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>arms transfers (ln)</td>
<td>-0.294</td>
<td>-1.079</td>
<td>-3.624</td>
<td>-0.195</td>
<td>-0.600</td>
</tr>
<tr>
<td></td>
<td>(3.410)</td>
<td>(2.923)</td>
<td>(3.871)</td>
<td>(3.460)</td>
<td>(3.119)</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.934</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.202)***</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
<td>397</td>
<td>367</td>
<td>402</td>
</tr>
</tbody>
</table>

* p<0.1; ** p<0.05; *** p<0.01

Robust standard errors clustered by country
Model 4.1 confirms a number of these suspicions. Secessionist wars are seven times less likely to strike the capital in an average year of combat (although the ‘incompatibility’ variable does not reach conventional levels of statistical significance). We need to keep in mind, however, that rebellions may tailor their objectives to their military capabilities. Buhaug has argued that weaker rebellions are more likely to pursue separatist goals. Controlling the capital is simply out of reach for some insurgents. Small armies and small countries fight closer to the centre of power, corroborating earlier research. Years of high intensity are more likely to occur near the capital. Insurgents supported by the regular soldiers of a foreign army are nine times more likely to strike the capital than those without. Reyntjens, for example, wrote that the ADFL march from Goma to Kinshasa in 1997 ‘was possible only with exceptional logistics in terms of reconnaissance, communication, transport and supply logistics’ provided by Rwanda, Uganda and Angola. Figure 4.7 charts the relationship between time and the threat to a capital city. Most conflicts are at a peak probability (other things being equal) in the 17th year of war before a plateau and peak again in the latter stages of a conflict, although none of the time variables reach statistical significance in the base model. Recall that time variables ‘pick up’ unexplained variation in the model. The second peak between 28-35 years probably reflects the inability of Model 4.1 to explain the late stages of a civil war, say, for example, the capture of Addis Ababa in 1991 by the Ethiopian People’s Democratic Revolutionary Front (EPDRF) after nearly 30 years of conflict. Perhaps a ‘cumulative casualties’ variable would capture the tendency for governments to exhaust their military capabilities over time, although it would be very difficult to distinguish between government casualties and insurgent casualties. As Figure 4.7 shows, the relationship between time and the threat to the capital is not dramatically different when run without control variables. The risk stops rising earlier (at about 7 years) and

36 The base model remains largely unchanged with cubic splines instead of the time squared method. The ‘low-capability warfare’ variable remains significant (b = 2.078, p = 0.003). Also, the time variables are not significant in a model with no other variables.
falls away before rising in unison late in the conflict. This does suggest that there is less unexplained variation in the model for periods early in a conflict.

**Figure 4.7 – Probability of Fighting Within 25km of the Capital by Time (Years)**

Nonetheless, these confounding factors do not account for the increased risk of fighting associated with low-capability warfare, which remains significant at the 0.01 level. We can be 99% confident when rejecting the null hypothesis that no relationship exists between the threat to Africa’s capitals and the ‘type’ of warfare experienced. Change from a symmetric but high capability war-system to a symmetric but low-capability war-system substantially increases the chances of fighting near the centre of power. When compared with conventional warfare the odds of fighting within 25km of the capital city are six times higher.

Results are robust to a number of sensitivity checks. Independent variables have VIF factors under 2, meaning that multicollinearity should not bias the p-values. Model 4.2 includes a ‘stalemate’ control and shows that fighting in Africa’s capitals is ‘sticky’. Once a capital city has ‘survived’ one or two years the chances of a repeat

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37 Variables controlling for temporal correlation do introduce a high level of collinearity into the model, but they only correlate with one another. When these variables are removed low-capability warfare remains significant in the model (sig < 0.001).
episode fall. A one year of respite will halve the odds of another attack. While the ‘stalemate’ variable reduces the coefficient on the low-capability warfare variable from 1.851 to 1.617 these conflicts still have odds of fighting within 25km of the capital that are five times higher than conventional warfare. Additionally, the p-value remains significant at the 0.01 level. Stalemates, such as the siege of Monrovia and repeated attacks on the capital followed by retreats to the countryside, such as in Sierra Leone, explain the increased risk observed in Model 4.1.

Model 4.3 includes a control for the post Cold War period. Recall that Kaldor and le Billion argue that the salience of economic geography in ‘new wars’ is a function of economic globalisation, especially after the Cold War. Model 4.3 partially bears this hypothesis out. Civil wars from 1989-2008 were roughly five times more likely to experience fighting within 25km of the capital. Nonetheless, the coefficient for low capability warfare remains statistically significant at the 0.05 level. Both the coefficient and statistical significance of ‘low-capability warfare’ are largely unaffected if we remove South Africa from the sample due to its higher level of economic development and less ‘capital heavy’ economic geography. Indeed the results hold if we control for GDP per capita as well (sig = 0.021, b= 1.683).

Further robustness checks were conducted but the results are not reported in Figure 4.6. Two observations stand out in a residual scatter plot – cases that the model predicted very poorly – Mauritania in 1976 and 1977. Model 4.1 predicts that secessionist conflicts are fought in the countryside. The Eritrean People’s Liberation Front (EPLF), for example, restricted its campaign to northern Ethiopia even when the government military effort collapsed in 1991, leaving the capture of Addis Ababa to the Tigray People’s Liberation Front (TPLF). Yet, the Popular Front for the Liberation of Sanguia el-Hamra and Rio de Oro (POLISARIO), fighting for independence of the Western Sahara, staged two attacks on Nouakchott, one in 1976 and one in 1977. These attacks, in combination with assaults on the ore mining region of Zouarte, led Mauritania to withdraw from Western Sahara in August 1979.


In turn, Morocco occupied the area. *Ibid*, Pg 84.
targets. Removing this case does not substantively change the results (b = 1.195, sig = 0.009). There was no obvious cluster of cases with very high leverage values, so no model was run removing such cases. Findings are robust if a control for the balance of power between rebels and the government is included (b = 1.739, sig = 0.009). Random effects models and Generalised Estimation Equation (GEE) can minimise problems of intra-cluster colinearity. In a random effects model the ‘low-capability warfare’ variable remains significant at the 0.10 level, (b = 2.039, sig = 0.074). Results are largely unchanged with a binomial logit-link GEE model (b = 1.256, sig = 0.002).\footnote{The results also remain robust if we re-test Model 4.1 in the entire sample of civil wars (b = 1.802, sig = 0.007).}

Model 4.5 includes the natural log of conventional arms transfers instead of the ‘warfare’ variables. Access to heavy weapons is an important explanation of where fighting is likely to occur, a result independent of the size of the military. Low levels of offensive technology in a war-system are associated with a higher level of threat to the capital city. Countries that import nothing in the way of conventional weapons for three consecutive years are at the highest risk of fighting within 25km of the capital. Small inputs of offensive technology quickly dissolve that threat, however. Just $9 million over three years (an average of $3 million per year) reduces the threat by 82%. This result is quite robust. VIF figures are under 2.5 and ‘arms transfers’ remains significant at the 0.01 level when controls for sieges are included, when a post Cold War control is included and when South Africa is excluded. Random effects and GEE models also return results significant at the 0.01 level. Results from Model 4.5 substantially increase our confidence in the robustness of a relationship between the risk of a threatened capital and the military technology at the disposal of belligerents by showing a specific link between offensive technology and the geography of conflict.

How strong is the link between low-capability warfare and the threat to Africa’s capitals? How does it compare to the effects of control variables? With all values set to their means (and binary variables to their modes) the probability of an average first-year conventional civil war experiencing conflict within 25km of the capital city is about 1.2%. A change to low-capability warfare increases the probability of
fighting within 25km to about 7.1%, according to Model 4.1. Comparatively, an invasion increases the probability to 10.4% and changing from a secessionist conflict to a conflict over control of the state would increase the probability to 7.7%. Changing from a conventional to a guerrilla war increases the probability to 4.4%. It would take over 30 years of combat in conventional warfare to reach a 7.1% chance of fighting near the capital. It is difficult to estimate how the number of military personnel and the intensity of conflict compare because changes have differential impacts at varying sections of the scale. However, reducing the size of the military from 8000 to 1000 soldiers would increase the probability of fighting within 25km of the capital to about 7.2%. Increasing the number of battle related deaths from the minimum of 25 to roughly 10,000 during a conflict year will achieve the same effect. Put another way, an 8000 strong army armed with small and light arms facing off against a lightly armed insurgency has about the same chances of seeing fighting within 25km of the capital as 1000 strong, but heavily armed government facing a heavily armed insurgent group.

The course of Angola’s war is a useful illustration of how changes in offensive capacity induce changes in the threat to a capital. Model 4.5 predicts that during 1975 there was a 60.3% chance of Luanda experiencing fighting. We can observe how changes in offensive technology have affected the probability of fighting in Luanda by using the average arms imports during this year ($0 million) as a baseline. Note that calculations do not take into account changes in the size of the military and battle-intensity and are intended only to show the effects of changes in average arms transfers. Figure 4.8 charts the level of arms imported by Angola by the probability of fighting within 25km of Luanda.

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41 This is, roughly, a 2-unit change on the logarithmic scale.
42 Representing, again, roughly, a 6-unit change on the logarithmic scale.
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Figure 4.8 – Probability of Fighting in Luanda vs Arms Imports, 1975-2002

Angola’s civil war began as a rebellion against Portuguese colonial rule. When the Portuguese withdrew in April 1974 it was left to the three main factions, the MPLA, FNLA and UNITA, to form a transitional government before independence, set for November 11, 1975.43 Open warfare erupted in January 1974 despite an accord to this effect.44 Fighters from the MPLA and FNLA were armed primarily with rifles and lacked heavy weapons until mid 1975.45 Fighting centred on the control of Luanda and street battles cost the lives of up to 20,000 people. According to Lockyer, ‘major clashes in rural areas were infrequent’.46 It was not until July 1975 that the FNLA were expelled from Luanda with the assistance of Katangan gendarmeries (refugees from the Katagan province of Zaire).

Angola’s civil war was internationalized from mid-1975. Zaire sent thousands of soldiers to support the FNLA and assist with the (unsuccessful) re-capture of Luanda. The FNLA also received military hardware from China, including armoured vehicles. South Africa supported UNITA with, at various points, South African soldiers,

43 Copson, Africa’s Wars and Prospects for Peace  Pg 42.
44 Adam Lockyer, 'Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources
on the course and nature of the Angolan and Afghan conflicts' (University of Sydney, 2009) Pg 132.
45 Ibid, Pg 140.
46 Ibid, Pg 136.
armour and artillery. The MPLA, entrenched in Luanda, received tanks, fighter jets, heavy artillery (including multiple rocket launchers, the ‘Stalin Organs’) Soviet and Cuban instruction and, by November 1975, Cuban combat troops. The MPLA defeated the FNLA in a series of battles for the town of Caxito (where the FNLA forces were concentrated) culminating in the battle of the Quifangondo valley, just 30 kilometres north of Luanda in late November 1975. The 122mm Stalin Organs were used to devastating effect against the Zairian and FNLA armour and infantry from the high ground overlooking the valley.\(^47\) Foreign assistance continued to the MPLA and UNITA through the late 1970s and into the 1980s, transforming the offensive capabilities of both the government and UNITA. The MPLA created a ‘highly mechanised’ army of 150,000 men.\(^48\) Angola’s conflict morphed from a low-capability conflict centred on Luanda into conventional warfare fought along, with some exceptions, discernible front lines in the countryside. As Polish Journalist Ryszard Kapuściński observed, the ‘war in Angola has changed in character. Until recently it was primarily…fought with light weapons…[but] today it is more and more a war of regular armies and heavy equipment.’\(^49\) UNITA received around $15 million per year from the United States in military assistance during the mid 1980s along with South African weapons and air support (amounting to roughly $66 million in 1980 and $200 million by the mid-1980s).\(^50\) The MPLA received up to $1 billion in Soviet military aid per year, including modern conventional weapons, and retained the services of up to 50,000 Cuban soldiers as a backstop.

The battle of Cuito-Cuavanale was a textbook conventional encounter. Government soldiers (the Popular Armed Forces for the Liberation of Angola or FAPLA) attacked the town of Mavinga in the far south east with $1 billion worth of Soviet weaponry in 1987. Mavinga was an important supply route for South African arms and assistance to UNITA and just 150 miles north of Jamba, UNITA’s headquarters.\(^51\) FAPLA’s offensive, however, was rebuffed by South African intervention and the surviving soldiers retreated to Cuito Cuanvanale, a small garrison town. As Cuito Cuanvanale (and its millions in modern weaponry) was poised to fall, Cuba dispatched 15,000

\(^{47}\) Ibid, Pg 153.  
\(^{48}\) Van-de-Walle, ‘Contemporary African Warfare,’ Pg 299.  
\(^{50}\) Lockyer, ‘Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts’ Pg 175.  
combat soldiers including the elite 50th division that had defeated the South Africans in 1975 and 1976.\footnote{Ibid, Pg 26.} The ensuing battle involved tens of thousands of soldiers on both sides, modern artillery and armour (including the use of accurate South African G5 155mm howitzers and the ‘newly developed’ Oilfant tanks),\footnote{Lockyer, ‘Foreign Intervention and Warfare in Civil Wars: The effect of exogenous resources on the course and nature of the Angolan and Afghan conflicts’ Pg 188-89.} jet aircraft (such as the MiG-23) and attack helicopters (such as the Russian-built MI-24).\footnote{Maier, \textit{Angola: Promises and Lies} Pg 27.} The battle had descended into a stalemate by 1988, but it is important to note that Cuito held little economic or political significance for either side. It was not a major town like Luanda or Huambo and its location as the largest African land battle since El Alamein had everything to do with the retreat of FAPLA and Cuito Cuanavale’s role as a garrison. Movements of military concentrations structured the location of fighting when both UNITA and the MPLA possessed high offensive capabilities, not the economic value of those locations. Luanda did not see fighting during this period, reflecting the low probability of capitals being the focus of military strategy where offensive capabilities are high. Although they may be the final objective, from the perspective of UNITA and South Africa, the MPLA’s offensive fighting capacity had to be destroyed first, and from the MPLA’s perspective, UNITA’s conventional capacity would equally have to be destroyed.

Cuba, the Soviet Union, South Africa and the US disengaged from Angola in 1989 and the offensive capabilities of the MPLA government were reduced under the first Angolan peace accords (the Biscee accord) signed in May 1991. One-hundred and fifty thousand soldiers from UNITA and FAPLA were to be demobilised and folded into a new 50,000 strong national army (the Armed Forces of Angola, or FAA). On the eve of parliamentary and presidential elections in 1992 between the MPLA, led by Eduardo dos Santos, and UNITA, led by Jonas Savimbi, the government had demobilised half of its soldiers. UNITA, however, had demobilised just a quarter and retained around 60,000 soldiers under arms.\footnote{Ibid, Pg 58. Van-de-Walle, ‘Contemporary African Warfare,’ Pg 300.} Logistic difficulties and a precipitous fall in military aid had compounded FAPLA’s offensive problems. The MPLA received over a billion dollars worth of conventional weapons in 1987 and a comparable amount in 1988. Less than $1 million made their way into the country in
1991 and 1992.\textsuperscript{56} Head of the United Nations Verification Mission in Angola (UNAVEM) Lieutenant Colonel Mortlock noted in 1992 that:

\begin{quote}
‘any conventional force, whether European or African, will collapse if it is confined to assembly points and cut off from logistical support... UNITA, as a guerrilla force, can survive much longer because they are trained to live off the land’.\textsuperscript{57}
\end{quote}

The MPLA created paramilitary units in place of a mechanised army. Its ‘ninjas’ were armed mostly with AK-47s and Uzis and probably numbered 20,000.\textsuperscript{58} When war between the MPLA and UNITA restarted in December 1992, Van de Walle noted that:

\begin{quote}
‘without the ability to launch massive conventional assaults as it had in the 1980s, the Angolan army reverted to military strategies indistinguishable from UNITA’s. Only after expensive re-equipping could the army return to conventional offensive action.’\textsuperscript{59}
\end{quote}

UNITA made startling successes in late 1992 and early 1993, holding up to 70% of Angola’s territory and directly threatening Luanda by capturing Caxito, just 35 miles away.\textsuperscript{60} According to Maier, at the height of UNITA’s advance in early 1993 the last government checkpoint north was at Cacuaco, roughly 15 kilometres from central Luanda. The MPLA first concentrated its efforts on holding Luanda (it is estimated that 2000 people were killed in the 1992 ‘battle for Luanda’) and, without the capacity to conduct sophisticated offensive manoeuvres, besiegement was the offensive strategy of choice.\textsuperscript{61} Van de Walle describes the character of what because know as Angola’s ‘war of the cities’:

\begin{quote}
‘Across the country, towns and cities have been fought over, pounded to rubble by artillery assault, surrounded by land mines and starved into human degradation... The war in Angola is neither guerrilla warfare nor mechanised field battles, but an amalgam of the two’.\textsuperscript{62}
\end{quote}

\begin{flushright}
\textsuperscript{56} Data available from the Stockholm Peace Research Institute “International Arms Transfers” Database, \url{http://armstrade.sipri.org/armstrade/page/values.php}, accessed 16 May 2011
\textsuperscript{57} As cited in Maier, \textit{Angola: Promises and Lies} Pg 60.
\textsuperscript{58} Ibid, Pg 58.
\textsuperscript{59} Van-de-Walle, 'Contemporary African Warfare,' Pg 301.
\textsuperscript{60} Maier, \textit{Angola: Promises and Lies} Pg 115.
\textsuperscript{61} Van-de-Walle, 'Contemporary African Warfare,' Pg 300.
\textsuperscript{62} Ibid, Pg 301.
\end{flushright}
Van de Walle argues that cities were the target of choice for ‘political rather than strategic or economic importance’ because ‘for both sides, control of big towns represents a claim to legitimacy’. 63 As we have seen it is not easy to separate the political or symbolic value from the economic value. Insofar as they increased the chances of international recognition as sovereigns, either of a united Angola or by partition, cities held both a political and an economic value.

Angola is host alluvial and kimberlite diamond deposits, located mostly in Lunda Norte and the Cuango valley. 64 According to Le-Billion, diamonds played an important role in the 1992-1994 fighting when UNITA enjoyed a ‘sharp military advantage’. 65 Pierce observes that the civil war had ‘passed from being primarily a political conflict, to being a battle over resources, and in particular, diamonds’ by the mid 1990s. 66 UNITA was able ‘to gain control over vast mining areas and capture key mines’ in 1992 67 and the MPLA, lacking the conventional offensive capacity to recapture them, contracted Executive Outcomes (a South African-based private security firm) to re-build FAPLA and assist in re-taking the town of N’talatonda (190km from Luanda as the crow flies), the oil fields of Soyo and the diamond mining areas of Cafunfo in mid July 1994. 68 UNITA had lost the Lunda fields by 1997 and by 2000 the government claimed that UNITA were ‘routed’ from large swathes of diamond mining areas. 69

Angola’s civil war is a neat illustration of how a changes in the technology of rebellion induce changes in military strategy and the geographic pattern of fighting. What was a war fought deep in the Angolan countryside and, at least on the MPLA’s behalf, with a strategy of annihilation, morphed into a war of siege where both the MPLA and UNITA relied upon a ‘strategy of exhaustion’ to lay claim to Angola’s most valuable cities and natural resources. While the belligerents retained a high

63 Ibid.
65 Ibid.
capacity for conventional offense the threat to Luanda remained low. But as their conventional offensive capacity declined, both the MPLA and UNITA focused their military strategies on positional defence against an enemy they believed lacked the capability to oust them. The threat to Luanda (and to Angola’s major cities) increased, as did the threat to high-value to space areas such as the oil fields of Soyo and diamond mines in the east.

**Replicating Buhaug and Rod 2006**

The preceding section has showed that when compared to conventional and guerrilla warfare, low-capability warfare is more likely to be fought near to the capital. But we might still ask, is low-capability warfare less likely to be fought in the periphery? Do governments and insurgents eschew fighting in the countryside in low-capability warfare and how does this compare with the spatial determinants of conflict incidence in conventional and guerrilla warfare? Is there a systematic relationship between the location of an area in proximity to the capital and its chances of experiencing fighting? As the methodology chapter argued, replicating Buhaug and Rod’s spatially disaggregated study of African civil wars allows us some leverage on these questions.

While Buhaug and Rod’s data are low-resolution and do not vary temporally, replicating their study is an important robustness test for the results already reported in this chapter (that do account for temporal variation). Models 4.6 - 4.8 regress the onset of fighting in a grid-space against a battery of spatial variables in the sample of low-capability warfare. This method is then repeated in the sample of countries experiencing guerrilla warfare (Model 4.7) and conventional warfare (Model 4.8). Figure 4.9 displays the results.
Figure 4.9 – Correlates of Fighting Onset in Low-Capability, Guerrilla and Conventional Warfare

<table>
<thead>
<tr>
<th></th>
<th>(4.6 – low-cap)</th>
<th>(4.7 - guerrilla)</th>
<th>(4.8 - conventional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>distance from diamonds (ln)</td>
<td>-1.198</td>
<td>-2.328</td>
<td>-1.597</td>
</tr>
<tr>
<td></td>
<td>(0.477)**</td>
<td>(0.754)*****</td>
<td>(0.479)*****</td>
</tr>
<tr>
<td>road density (ln)</td>
<td>-0.361</td>
<td>0.412</td>
<td>0.732</td>
</tr>
<tr>
<td></td>
<td>(0.150)**</td>
<td>(0.311)</td>
<td>(0.222)*****</td>
</tr>
<tr>
<td>distance from border (ln)</td>
<td>1.493</td>
<td>-0.447</td>
<td>-0.176</td>
</tr>
<tr>
<td></td>
<td>(0.464)*****</td>
<td>(0.138)*****</td>
<td>(0.111)</td>
</tr>
<tr>
<td>distance from petroleum (ln)</td>
<td>-5.420</td>
<td>-0.557</td>
<td>0.966</td>
</tr>
<tr>
<td></td>
<td>(2.215)**</td>
<td>(0.396)</td>
<td>(0.430)**</td>
</tr>
<tr>
<td>distance from capital (ln)</td>
<td>-9.399</td>
<td>-0.087</td>
<td>-1.287</td>
</tr>
<tr>
<td></td>
<td>(4.303)**</td>
<td>(0.544)</td>
<td>(0.659)*</td>
</tr>
<tr>
<td>population density (ln)</td>
<td>0.095</td>
<td>0.403</td>
<td>-0.644</td>
</tr>
<tr>
<td></td>
<td>(0.238)</td>
<td>(0.177)****</td>
<td>(0.325)**</td>
</tr>
<tr>
<td>language difference</td>
<td>5.054</td>
<td>-0.348</td>
<td>-1.371</td>
</tr>
<tr>
<td></td>
<td>(2.592)*</td>
<td>(0.586)</td>
<td>(0.494)*****</td>
</tr>
<tr>
<td>spatial lag</td>
<td>56.454</td>
<td>6.487</td>
<td>9.625</td>
</tr>
<tr>
<td></td>
<td>(22.507)**</td>
<td>(2.461)*****</td>
<td>(2.713)*****</td>
</tr>
<tr>
<td>Constant</td>
<td>83.606</td>
<td>14.593</td>
<td>9.199</td>
</tr>
<tr>
<td></td>
<td>(37.732)**</td>
<td>(6.207)**</td>
<td>(8.392)</td>
</tr>
<tr>
<td>N</td>
<td>219</td>
<td>927</td>
<td>626</td>
</tr>
</tbody>
</table>

* p<0.1; ** p<0.05; *** p<0.01

Note: Robust standard errors clustered by country

Results from models 4.6 – 4.8 suggest that the geographic distribution of conflict incidence varies according to warfare type. Put another way, the ‘risk profiles’ for low-capability, guerrilla and conventional warfare exhibit substantial differences. According to Model 4.1, fighting in low-capability warfare is more likely near the capital city, areas of diamond and petroleum production, and language difference. Fighting is unlikely close to an international border and in areas of high road density.70 The magnetism of capital cities in low-capability warfare is not accounted for by high population densities – capitals seem to become targets for reasons other than controlling these populations. The standout result, however, is the huge coefficient on the spatial lag variable. When one grid cell experiences conflict it substantially raises the chances that its neighbours will also experience conflict. Such rapid contagion might reflect the government’s inability and unwillingness to fight decisive battles outside the capital city and allow free reign to rebels moving in an occupying the unprotected space. It may also reflect the smaller number of cases (219

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70 It should be noted that the population density variable and spatial lag variables exhibit VIF factors under 3, but over 2.5. The results for the distance from the capital hold, albeit at a lower level of statistical significance (sig = 0.081) if just the spatial lag and the distance from the capital are used.
grids and 132 conflict onsets). Overall, the results from Model 4.6 provide an additional level of confidence in the results of Models 4.1 - 4.5. Africa’s economic geography appears to play an important role in structuring where fighting will occur in low-capability warfare.

Guerrilla and conventional warfare exhibit different risk profiles. Guerrilla warfare gravitates towards areas of diamond production and population centres near an international border. Contagion across grid cells is present but this effect is much smaller than in low-capability warfare. A picture of combat over peripheral communities matches many of the empirical characteristics of guerrilla warfare discussed in Chapter 2. Economic geography plays a smaller role in attracting conflict in conventional warfare. Fighting gravitates towards diamond deposits, areas of high road density and the capital city (although the coefficient is much smaller than in low-capability warfare and the p-value higher) and is repelled by population centres, areas of petroleum production and language difference. Again, these findings reflect the picture in Chapter 2. Strategic bottlenecks, like roads, are crucial to the manoeuver and supply of a mechanised army. While major cities might be an objective, the actual fighting occurs away from these areas.

**Conclusion**

Analysis in this chapter suggest a strong link between low-capability warfare and the incidence of fighting in Africa’s capitals - a relationship not explained by the size of armed forces, the intensity of fighting or the smallness of countries. The threat to Africa’s capitals increases as heavy weapons and armour are removed from a war-system. Angola’s civil war served to illustrate this relationship. When transfers of conventional weapons to both UNITA and the MPLA declined, the conflict shifted from a ‘bush war’ over bases and garrisons in the countryside to a ‘war of the cities’, including, at one point, the capital Luanda. Spatially disaggregated data exhibited a similar pattern. Capital cities attract fighting in low-capability warfare to an extent greater than in guerrilla or conventional warfare. On the whole, fighting in low-capability warfare gravitates towards areas of economic importance while more mixed patterns characterised guerrilla and conventional warfare. We have not
established causation, just that there is a conspicuous, powerful, and as yet unexplained statistical connection between fighting in Africa’s capital cities and the presence of low offensive military capacity in a war-system. Evidence in this section was supportive of hypothesis 1. The next chapter investigates the evidence for hypothesis 2.
Chapter Five

Empirics II: Low-capability Warfare and the Concentration of Fighting in Africa’s Capitals

Chapter 2 predicted that if a ‘strategy of exhaustion’ is employed in low-capability warfare then we should observe fighting concentrating around Africa’s capital cities and a high correlation between areas of economic importance and clusters of fighting. This chapter tests these predictions and proceeds as follows. Firstly, a combination of descriptive statistics and OLS regression show, with some caveats, that a higher proportion of battles are fought in the capital city in low-capability warfare when compared to guerrilla and conventional warfare. Although this is the case, the majority of fighting in low-capability warfare still occurs in the countryside. Concentrations of fighting are explored visually to ascertain (a) whether fighting does indeed concentrate in the capital in low-capability warfare and (b) how the strength of this concentration compares with fighting in the countryside. Is fighting in the countryside diffuse as Chapter 2 predicted? If there are competing concentrations do they correlate with areas of high economic value? Does this pattern vary according to the type of warfare? Results from the visual analysis show that 80% of low-capability conflicts exhibit a concentration of fighting in the capital. Just 25% of conventional conflicts and 18% of guerrilla conflicts exhibit the same pattern. Within the sample of low-capability conflicts a division between unipolar and bipolar structures emerges. In half of the bipolar structures, the concentration in the countryside corresponds with areas of paramount economic importance. Overall, the findings of this chapter support hypothesis 2.

The Proportion of Fighting in the Capital City

Are Africa’s capitals subject to a higher proportion of combat in low-capability warfare? According to Figure 5.1 the answer is yes, but only just. Around 18.3% of battles in low-capability warfare occur in the capital city, only slightly higher than the 13.3% for conventional warfare. Guerrilla conflicts exhibit a much lower proportion, just 5%. However, one case, Guinea-Bissau, accounts for the similarity between conventional and low-capability warfare. Bissau (the capital city) was the site of 86% of fighting during 1998 and 91% in 1999. This is the only example of conventional warfare with a proportion above 10%. Low-capability warfare, however, is more evenly distributed with cases between 40% and 60%,
61% and 80% and 81% and 100%. The mean concentration of fighting for conventional warfare is just 1.7% without Guinea-Bissau. If the two highest values in the sample of low-capability warfare are removed the mean drops to 13.65%. As is inevitable when working with a smaller sample size (recall that the data were only available from 1997-2008, not 1960-2008) results may reflect a small number of cases. Guinea-Bissau also fits the category of a ‘low’ conventional arms importer. Offensive capacity was likely to have been limited by the technology at the disposal of President Vieira and General Mane’s followers, even though some tanks and heavy artillery may have been deployed at points in the battle for Bissau. The average level of battle concentration in the capital for low arms importing conflict years was around 17%. For ‘high’ arms importing years the average concentration was 3%.

Figure 5.1 – Battle Concentration by Warfare Type, 1997-2008

<table>
<thead>
<tr>
<th>Warfare Type</th>
<th>Proportion of Battles in Capital</th>
<th>Proportion of Battles in Capital (no Guinea Bissau)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-capability</td>
<td>18.4%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>5.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Conventional</td>
<td>13.3%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Figure 5.4 displays OLS regression results estimating the effect of warfare types on battle concentration. Model 5.1 includes all control variables and all cases. Results show that shifting from conventional warfare to low-capability warfare adds just over 2.5% to the proportion of fighting that occurs in the capital city. A p-value above conventional levels of statistical significance (sig = 0.683) means we cannot reject the null hypothesis. On the other hand, guerrilla warfare tends to concentrate away from the capital city, although again, the variable does not reach conventional levels of statistical significance. A change from conventional to guerrilla warfare reduces the proportion of fighting in the capital by 4.2% - a moderate change considering the average conventional war experiences 13% of fighting in the capital.

Numbers of military personnel and land area are significant at conventional levels in model 5.1. Increasing the government army from 1,000 to 10,000 soldiers reduces the proportion of fighting in the capital by about 6%. A small country such as Sierra Leone will experience an average of 9% more fighting in Freetown than a large country such as the DRC will in
Kinshasa. A significant relationship between time and conflict concentration emerges in models 5.1, 5.3 and 5.4. Twenty-six percent of fighting in an average first-year civil war is predicted to occur in the capital. According to Model 5.1 the proportion falls thereafter only rising again briefly in the 20th year of combat. Rebellions may strike early at the capital but if that bid fails they find themselves increasingly confined to the countryside.

While multicollinearity should not bias the results (as all VIF statistics are below or near to 2) there are four outliers with high levels of concentration in the capital: the Central African Republic in 1997, Lesotho in 1998 and Guinea-Bissau in 1998-1999. Figure 5.2 charts residual values against the Correlates of War country number.

These three outliers share two commonalities – conflict emerged in the capital city rather than approached it from the countryside and a foreign power intervened early and decisively to contain the fighting. Warfare in Guinea-Bissau, Lesotho and the Central African Republic was restricted from evolving and spreading into the countryside in the way a ‘normal’ conflict might, thus accounting for the unusually high proportions of fighting in the capital. For example, in 1996 and 1997 soldiers of the Military of the Central African Republic
mutinied in Bangui and clashed with President Patasse’s Presidential Guard. French soldiers deployed in Bangui and the mutiny was suppressed. It is telling that the re-emergence of conflict from 2001-2003 in the Central African Republic does not exhibit as high residual values. Conflict in these years more closely resembles ‘archetypal’ civil wars as militias and soldiers of Francois Bozize attacked Bangui after marching from across the border in Chad. A faction in the Lesotho Defence Force (LDF) mutinied in mid-September 1998. By the end of the month, soldiers from South Africa and Botswana were combating the mutineers in Maseru, the capital.¹ So too, Senegalese and Guinean troops rapidly intervened to quell a rebellion in Guinea-Bissau. In no other cases from 1997-2008 is quite the same pattern observed.

Model 5.2 removes these exceptional cases. The results are striking.² Moving from conventional to low-capability warfare now adds 10.2% to the concentration of fighting in the capital and the p-value falls below the 0.05 mark meaning we can confidently reject the null hypothesis that there is no relationship between warfare type and battle concentration. Insofar as the Central African Republic, Lesotho and Guinea-Bissau are exceptional and outlying cases, low-capability warfare is marked by a higher proportion of fighting in the capital city.

Model 5.2 demonstrates further important differences from Model 5.1. ‘Army size’ and ‘land area’ are now insignificant. Small countries tend to have smaller armed forces and perhaps because of the lower costs of suppressing hundreds rather than thousands of rebels, tend to attract early foreign intervention (a point taken up in Chapter 6). ‘Time’ is now insignificant. High proportions of fighting in the capital associated with the early years of war seem to be exclusive to these three cases. In fact, without these three cases, the proportion of fighting in the capital increases over time, at least in the short term. Figure 5.3 contrasts the relationship between time and the proportion of fighting in the capital city as derived from Model 5.1 and 5.2, with a starting proportion of 26% (average proportion of fighting in the capital for a first-year war generated from Model 5.1).

² It should be noted that removing these cases does not affect the results reported in Chapter 4. If model 4.1 is re-run excluding these cases the ‘low-capability warfare’ variable remains significant (sig = 0.005).
Figure 5.3 – Fighting in the Capital vs Time (Years)

Figure 5.4 – Models 5.1 – 5.4, Battle Concentration and Low-capability Warfare, 1997-2008
### Chapter Five – Empirics II

<table>
<thead>
<tr>
<th></th>
<th>(5.1 – base)</th>
<th>(5.2 – outliers)</th>
<th>(5.3 – arms transfers)</th>
<th>(5.4 – low arms)</th>
</tr>
</thead>
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<tr>
<td>low-capability</td>
<td>2.574</td>
<td>10.079</td>
<td></td>
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<tr>
<td></td>
<td>(6.303)**</td>
<td></td>
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<tr>
<td>guerrilla</td>
<td>-4.276</td>
<td>5.965</td>
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<tr>
<td></td>
<td>(6.012)</td>
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<td></td>
<td></td>
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<td>incompatibility</td>
<td>6.350</td>
<td>4.924</td>
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<td></td>
<td>(5.747)</td>
<td>(5.472)</td>
<td>(5.401)</td>
<td>(5.387)</td>
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<td>invasion</td>
<td>5.974</td>
<td>11.555</td>
<td>5.019</td>
<td>6.542</td>
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<td></td>
<td>(9.781)</td>
<td>(11.647)</td>
<td>(9.000)</td>
<td>(9.286)</td>
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<td>army size (ln)</td>
<td>-2.635**</td>
<td>-1.374</td>
<td>-2.726</td>
<td>-2.577</td>
</tr>
<tr>
<td></td>
<td>(1.136)</td>
<td>(1.012)</td>
<td>(1.715)</td>
<td>(1.629)</td>
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<td>land area (ln)</td>
<td>-2.686*</td>
<td>-0.371</td>
<td>-2.078</td>
<td>-2.209</td>
</tr>
<tr>
<td></td>
<td>(1.038)**</td>
<td>(0.900)</td>
<td>(0.968)**</td>
<td>(1.046)**</td>
</tr>
<tr>
<td>intensity (ln)</td>
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<td>-0.206</td>
<td>0.568</td>
<td>0.471</td>
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<td></td>
<td>(1.086)</td>
<td>(1.216)</td>
<td>(0.827)</td>
<td>(0.891)</td>
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<td>time</td>
<td>-2.404</td>
<td>1.621</td>
<td>-2.912</td>
<td>-3.119</td>
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<tr>
<td></td>
<td>(1.120)**</td>
<td>(1.296)</td>
<td>(0.819)**</td>
<td>(0.887)**</td>
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<td>time squared</td>
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<td>-0.110</td>
<td>0.159</td>
<td>0.177</td>
</tr>
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<td></td>
<td>(0.065)*</td>
<td>(0.075)</td>
<td>(0.052)**</td>
<td>(0.059)**</td>
</tr>
<tr>
<td>time cubed</td>
<td>-0.002</td>
<td>0.002</td>
<td>-0.003</td>
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<td></td>
<td>(0.001)</td>
<td>(0.001)*</td>
<td>(0.001)**</td>
<td>(0.001)**</td>
</tr>
<tr>
<td>arms transfers (ln)</td>
<td>-1.476</td>
<td></td>
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<td>low arms</td>
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<tr>
<td>constant</td>
<td>57.422</td>
<td>-2.429</td>
<td>45.808</td>
<td>41.707</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.28</td>
<td>0.21</td>
<td>0.27</td>
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</tr>
<tr>
<td>$N$</td>
<td>129</td>
<td>122</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Beck Katz and Tucker panel corrected standard errors are reported in parentheses
Model 5.3 tests the log-transformed arms transfers variable against conflict concentration and Model 5.4 tests the dichotomous specification of the arms transfer variable. Only the dichotomous specification is significant at conventional levels (sig = 0.058). The logged arms transfers variable is not (sig = 0.156). The estimated effects of both variables are moderate. Keeping in mind that an average African state (from 1997-2008) experienced 10% of conflict in its capital, an increase of conventional arms imports from nothing to an average of $10 million over three years will reduce the proportion of fighting in the capital by roughly 3.4%. Moving from a ‘high’ to a ‘low’ level of arms imports increases the proportion of fighting by about 5.8%.

Results from Models 5.1 - 5.4 offer mixed support for hypothesis 2. Two out of the four models displayed a significant correlation between low-capability warfare and the proportion of combat taking place in the capital city. Coefficients in all four models were correctly signed and there is a good case for excluding Lesotho, the Central African Republic and Guinea-Bissau. Insofar as these are exceptional cases, Hypothesis 2 received substantial support. Nonetheless, the preceding analysis revealed a puzzle. Even in low-capability warfare, the majority of fighting in an average conflict occurs in the countryside, about 81.4%. It is entirely possible that while low-capability warfare exhibits a higher proportion of fighting in the capital, it does not concentrate there. Clusters of fighting in peripheral locations may eclipse those in the capital. Visual analysis allows us to compare the proportion of battles that occurred in clusters in the countryside with proportions of battle that clustered in the capital. Visual analysis also allows for an analysis of the more general correlation between battle location and economic geography and it is to this that the chapter now turns.

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3 Specifically we can be about 94% confident when rejecting the null hypothesis in Model 6.4 and 84% confident in model 6.3.
Visual Analysis

Geographic Imaging Software allows us visualise the spatial pattern of fighting. ‘Heat maps’ show locations where governments and insurgents have most frequently engaged in battle (for details of how these maps were constructed, see Chapter 3) and compares these locations with a country’s most productive regions. Red areas indicate areas of high economic value. Black areas indicate concentrations of fighting. Eighty percent of low-capability conflicts exhibit an epicentre of fighting on or near the capital. Within this sample two structures emerge. Unipolar conflicts show a singular epicentre on the capital city with scattered fighting in the countryside. Unipolar conflicts correlate well with countries of a unipolar economic geography. Bipolar conflicts show an epicentre in the capital and a second aggregation in the countryside. In half of these cases the peripheral aggregation correlates with regions of economic importance. Two cases of low-capability warfare did not exhibit a concentration of fighting in the capital (Uganda and Guinea). Just 25% of conventional conflicts showed an epicentre of fighting in the capital and 18% of guerrilla conflicts. Battle concentrations and economic geography do not correlate well in conventional and guerrilla warfare, with the exception of oil and guerrilla warfare. Concentrations around border regions and difficult terrain were more common.

Low-capability Warfare

There are 10 cases of low-capability warfare from 1997-2008. Eight display a concentration of fighting in the capital city. Half of this eight were unipolar and half bipolar. Figure 5.5 charts unipolar, low capability conflicts.

Figure 5.5 - Unipolar Low-capability Warfare
Figure 5.5 and 5.6 (below) show that while the majority of battles in low-capability warfare may occur in the countryside they tend to be diffuse and dispersed when compared to the fighting in the capital. One concentration occurs in the capital city with dispersed fighting in the countryside in Somalia, Congo-Brazzaville, the Central African Republic and Lesotho. This tell us that, in these cases, both government and insurgent actors have committed to a proportionally higher frequency of battles for the capital than for any other land area. Indeed in Somalia, Congo-Brazzaville and the Central African Republic, lone clusters of fighting in the capital have occurred in states where economic value is concentrated in the capital. The correlation between fighting concentration and economic geography is very high in these three countries.

The Republic of Congo (ROC or Congo-Brazzaville) is illustrative. ROC relied heavily on the exploitation of offshore oil resources by foreign companies (especially French companies) before the outbreak of civil war in 1997. Clark describes the ROC as a ‘rentier’ state obtaining ‘income directly from foreign clients’. Oil revenues have ‘consistently’ accounted for around 90% of Congolese export earnings and a ‘large fraction’ of government revenues. Congolese rulers, Denis Sassou-Nguesso in particular (president from 1979-1992, 1997-present), have used these revenues to shore up control of the capital through development projects and the provision of public services. Clark writes that, despite windfall revenues from oil production, Sassou-Nguesso invested ‘virtually nothing in agriculture’. French economic and military aid were also important sources of revenue and regime security. Foreign companies in the Congo have dealt only with recognised governments (that is, organisations that have controlled Brazzaville) and, historically, the only way to cash in on Congo’s most lucrative revenue source was to be recognised as the sovereign. Englebert and Ron observe that this economic structure had profound effects on the spatial distribution of fighting. They argue that ‘the oil

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4 ROC experienced an outbreak of fighting in 1993 as well, but this is not represented in Figure 5.4
7 Clark, The Failure of Democracy in the Republic of Congo Pg 97.
8 Ibid, Pg 100-01.
field’s legal and geographic configuration created incentives for militias to struggle for Brazzaville, the capital, but to eschew protracted rural warfare... the fighting remained centred in the city since it was the only prize worth having’. 9 Until the intervention of the FAA in October 199710 the fighting in Brazzaville had stalemated for four months as fractious militias failed to oust each other from their fortified enclaves. Each side was poorly disciplined and trained, and armed mostly with light weapons.11 Up to five major factions had emerged by October 1997 with many more local ‘self-defence’ groups12 making it ‘difficult to mount any sustained offensive’.13 Indeed many of the militia members were from the countryside and did not know the city well enough to coordinate an assault.

According to Mehler, the Central African Republic ‘survived mostly on selling diamonds and attracting foreign aid’, in an environment of intense ‘zero-sum’ competition for the spoils.14 General Kolingba, president from 1981-1992, recruited members of the Yakomba ethnic group to staff his presidential guard and senior officer positions in the regular army.15 Felix Patasse emerged victorious from elections in 1992 and demoted the Yakomba-based units, creating his own 1,600-strong ‘special forces’.16 He even sent Yakomba-based units away from Bangui (the capital city) and stationed them in the countryside. Patasse’s regime was rocked by a series of army mutinies in 1996, 1997 and 2001 that were only put down with the assistance of foreign soldiers from France and Libya respectively.17 Patasse responded to the unrest by fortifying Bangui with three militia forces known as the Karakos, Balawas and Sarawis, numbering roughly 500 each and armed with

9 Pierre Englebert and James Ron, ‘Primary Commodities and War: Congo-Brazzaville’s Ambivalent Resource Curse,’ Comparative Politics 37, no. 1 (2004): Pg 62, 70.
13 Ibid., Pg 51.
15 Ibid., Pg 130.
16 Ibid., Pg 138.
17 Patasse also received assistance from the Movement for the Liberation of Congo (MLC) an insurgent group based in the Democratic Republic of Congo.
Kalashnikov assault rifles. Subsequently, Patasse created two more militias, the Societe centrafricaine de protection et de surveillance (SCPS), headed by his chauffeur, and an organisation known only by the name of its leader ‘Abdulaye Miskine’. Karakos were based in the ‘Combattant’ district, near the airport. Balawas were based in the Boy-Rabe district, on the primary road into Bangui, while the Sarawis were stationed between the two in the districts of Malimaka, Miskine, Mustapha and Ngouciment. François Bozize, Patasse’s former Army Chief of Staff, entered the Central African Republic from Chad with rebels, mercenaries and some regular Chadian soldiers in 2002. Bozize met virtually no resistance until he reached the outskirts of Bangui, over 400km away. The invaders destroyed villages, murdered and raped civilians on their approach, but the national armed forces did not leave Bangui to meet them in the countryside. Clearly defending the countryside (or the citizens of the Central African Republic) was not part of Patasse’s military strategy.

Somalia is a similar case. Mogadishu outstrips the rest of Somalia in terms of economic value with no competing centres of importance in the countryside. President Siad Barre changed his strategy from fighting in the north to ‘barricading himself and his loyal troops’ in Mogadishu following army purges and the withdrawal of US military and economic assistance to the regime of in 1988. By 1989, he was mocked by the foreign press as the ‘the Mayor of Mogadishu’. Barre was expelled in 1991 and the insurgency fractured along sub-clan lines into the United Somali Congress (USC) led by Ali Mahadi and the Somali National Alliance (SNA) led by Mohammed Farah Aideed. Duyvesteyn argues that both Aideed and Mahadi demonstrated a ‘preoccupation’ with Mogadishu. The city remained besieged and partitioned until the US-led United Task Force (UNITAF) intervention deployed in late 1992. Fighting in Mogadishu continued after the UN withdrew in 1995 and intensified in 2006 with the rise of the Islamic Courts Union (ICU). The ICU were able to capture Mogadishu in 2006, but Ethiopia sent tens of thousands of soldiers

19 Thankyou to Professor Richard Bradshaw for his insights on this matter.
into Somalia to, first, defend the transitional capital of Baidoa and then re-capture Mogadishu. An array of insurgent movements (especially *Al-Shabaab*) have battled the TFG for control of Mogadishu’s suburbs since 2006. Human Rights Watch observed in 2010 that hostilities raged in strategically important areas, including Mogadishu, while much of the rest of Somalia enjoyed relative peace.\(^{23}\) Research into the Somali civil war conducted by the Event Data Project on Conflict and Security at the Free University of Berlin (EDACS) shows that fighting has continuously centred on Mogadishu from 1990 to 2007. Interestingly, EDACS research also shows that foreign actors (UNITAF, Ethiopia and AMISOM) have largely restricted their operations to Mogadishu (for an analysis of foreign intervention in low-capability warfare see Chapter 6).\(^{24}\)

Fighting in Lesotho centred on the capital Maseru. However, Lesotho’s economy differs from Somalia, the Central African Republic and ROC, largely because of its proximity to Africa’s dominant economic power, South Africa. Lesotho’s government depended on taxing remittances from workers in South Africa and customs duties before 1998. When a hydroelectric plant was completed during 1998, selling water to South Africa became an important source of revenues and royalties.\(^{25}\) Reflecting this dichotomy between remittances and customs duties, Lesotho took 11.6% of revenues from taxation on individuals in 1995, higher than many African states, but a further 54% of revenues came from import duties alone. Interestingly, South Africa collects the majority of import duties destined for Lesotho as part of the Southern African Customs Union (SACU), and presumably, would not pass these revenues onto an unrecognised government. So too, only recognised governments can deal in Lesotho’s natural resources, in this case, water. Maseru is therefore a crucial objective for any domestic actor wishing to access these resources. It must be conceded however, that South African norms for recognising governments, rather than international norms, will feature heavily in the strategic calculations of sub-state actors in Lesotho. Again,


\(^{24}\) This map is available from the Event Data Project on Conflict and Security, Free University of Berlin, [http://www.sfbgovernance.de/teilprojekte/projekte_phase_1/projektbereich_c/c4/The_EDACS/index.html](http://www.sfbgovernance.de/teilprojekte/projekte_phase_1/projektbereich_c/c4/The_EDACS/index.html), accessed 26 July 2011.

it is difficult to say whether the fighting centred on Maseru because conflict started there and South African soldiers contained the fighting to Maseru or was the product of strategic calculations on behalf of either the rebels or the government not to fight in the countryside. Initially, the rebellious faction from the LDF fought in Maseru and defended the army barracks and royal palace for two days against Southern African Development Community (SADC) forces. Once expelled from Maseru, however, the retreating rebels chose not to fight.26

Chad, Liberia, Sierra Leone and the Sudan are more complicated cases. Each displays an aggregation of fighting in the countryside and in the capital. In Chad, the Sudan and Liberia the capital-based cluster correlates with the high relative economic importance of the capital city. Although not displayed on the map, Freetown is also a centre of economic power (discussed below) in Sierra Leone. In all four bi-polar structures therefore, one concentration correlates with an area of economic centrality in the capital. Battle clusters in the countryside also correlate with vital areas of government revenue in Sierra Leone. From Figure 5.6 it appears as though Liberia’s second battle concentration does not coincide with a ‘red’ area of economic value. As the proceeding analysis shows, however, Liberia’s economic geography was profoundly influenced by the war in Sierra Leone. For Charles Taylor’s regime, clandestine and criminal networks came to play a more important role in sustaining his rule than did the ‘formal’ economy. Countryside clusters do not correlate with areas of high economic value in Chad and Sudan and it seems that the governments were able to keep fractious rebel groups at bay in the periphery until they either united or obtained enough foreign support to make a more concerted drive. In the latter situation both governments pre-empted a thrust on the capital and pulled back to exploit defensive advantages. Indeed these two civil wars are closely linked, with Chad accused of supporting the Justice and Equality Movement (JEM) in Sudan and Sudan accused of supporting various rebel groups in Chad. Sierra Leone and Liberia are discussed first, followed by Chad and the Sudan.

Figure 5.6 – Bipolar Low- Capability Warfare

Sierra Leone’s heat map is somewhat misleading. ACLED begins halfway through the conflict in 1997 when much of the fighting centred on Freetown. Using an older version of ACLED with data from 1991 to 2000, Sierra Leone has a more distinct bipolar structure. One concentration occurs around Freetown, the other, a weaker one, in the east near the border with Liberia. Civil wars in Liberia and Sierra Leone were deeply interconnected and the political economy of Sierra Leone came to shape the political economy of Liberia’s second civil war (2000-2003). Figure 5.7 shows the concentrations of fighting in Sierra Leone from 1991-2000.

*Figure 5.7 – Battle Concentrations, Sierra Leone, 1991-2000*

Sierra Leone’s war commenced when the RUF, supported from across the border by Charles Taylor’s NPFL attacked towns in March 1991. Sierra Leone’s territory is host to a combination of alluvial and kimberlite diamonds. Alluvial diamonds can often be panned from riverbeds while Kimberlite diamonds are ensconced in layers of volcanic rock and require a higher degree of mechanisation and organised labour to extract.
Political leaders, throughout Sierra Leone’s history, depended heavily on exporting diamonds to fund their regimes. Reno points out that before the rule of President Siaka Stevens (1971-1985) diamond exports made up 30% of national output and 70% of foreign exchange earnings, worth roughly $200 million. Stevens distributed mining contracts in exchange for loyalty among the political and military elite throughout his rule, effectively privatising the industry and creating a ‘shadow state’. Steven’s shadow state had a near monopoly in the commerce of diamonds by the time his successor, Joseph Momoh, took power in 1985. While official diamond exports totalled just $22,000 in 1988, clandestine exports are estimated to have been worth $250 million (more than a quarter of GDP). Diamonds are located in Kono district in the east, which alone accounted for 60% of Sierra Leone’s export earnings in the early 1990s. Koidu, Kenema and Kailahun are important diamond-trading towns. Pujehun district in the South East also became an important mining area as diamond stocks in Kono declined. Aid was a second important source of revenue. Around a quarter of government revenue during the 1970s, and over half during the 1980s, was provided by the international community. As Keen writes, controlling sovereignty remained a valuable asset, even though diamond mining offered alternative paths to enrichment. He writes that:

‘control of the state – in wartime and peacetime – was vital for those seeking to set the ‘rules of the game’ that determined what was to be considered legal and illegal – in practice as well as in theory. Control of the state was also important in securing access to aid (including international loans) and in determining which individuals and social groups would be placed in positions of responsibility that could allow them to exploit the legal or quasi-legal economy’. 

Sierra Leone’s economic structure was bi-polar with control of Freetown and the diamond mining areas of the east forming the most lucrative ‘point resources’.

29 Reno, Warlord Politics and African States Pg 120.
30 Lansana Gberie, A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone (London: Hurst, 2005) Pg 77.
31 David Keen, Conflict and Collusion in Sierra Leone (New York: Palgrave, 2005) Pg 119.
33 Keen, Conflict and Collusion in Sierra Leone Pg 106.
There were strong incentives for the Momoh government to defend the east when the RUF attacked.34 Soldiers of the RSLMF were garrisoned in eastern Sierra Leone before the invasion as part of an ‘anti-corruption drive’ designed to wrest control of diamond production from Steven’s ‘shadow state’.35 Momoh’s attempt to break his predecessor’s trading networks had not been especially successful and the war offered an opportunity to re-establish physical control. Alluvial diamonds also presented a unique threat to the regime because of their fungibility. The NPFL controlled much of the border area between Liberia and Sierra Leone and sought to open a second front against Nigeria who had soldiers deployed in Liberia. Diamonds were traded from Sierra Leone to Liberia in exchange for weapons. Were the rebels able to capture these areas, not only would the government lose control of an important revenue source but much of this could be appropriated by the RUF and converted into military capacity.

Observers have noted that the Government of Sierra Leone fought decisive battles around the diamond-producing areas and Freetown – reflecting the two centres of economic power. Although the RSLMF looted towns, abused civilians and shied away from battle, ‘fighting with the RUF still sometimes took place, particularly in the diamond mining areas’.36 Overall, Keen describes the pattern of fighting during the war as follows:

‘the number of outright battles between properly armed troops remained very low, and the great majority of violent acts were against unarmed civilians. Any battles were largely restricted to the areas with the richest diamond deposits, to the defence of Daru base, and to repelling attacks against the outskirts of Freetown. These were areas the NPRC [National Provisional Ruling Council] top brass and the Tigers [the military junta] in particular, appeared determined to keep hold of.’ 37

Instances of collaboration between the RUF and elements of the RSLMF in diamond mining areas did occur. Keen writes that ‘despite the obvious strategic and economic importance of Koidu as a key town in the diamond economy, government soldiers appear once again to have ‘left the door open’ for the rebels – compounding that

34 In 1992 Captain Valentine Strasser took power in a coup, Strasser was deposed in 1996 by Mohammed Bio and Bio was replaced by the elected Ahmad Tejan Kabbah during the same year.
35 Keen, Conflict and Collusion in Sierra Leone Pg 96.
36 Ibid, Pg 110.
37 Ibid, Pg 121.
failure to secure the area’. Kono district, Koidu and Kailahun were re-captured in 1993, but only after ‘intense’ fighting between the government and the RUF. For individual soldiers at the front, many of whom were recruited from Freetown’s slums, diamonds offered an incentive to defect and although the government’s intent may have been to protect these areas, the success of this ‘enclave’ strategy was compromised. Even the defence of Freetown came close to collapse in 1995 and was rescued by the intervention of Executive Outcomes, a South African mercenary outfit. EO’s orders were to implement what the government had tried and failed – relieve Freetown, capture the Sierra Rutile mines and flush the diamond-mining areas.

Outside of Freetown and the diamond mining areas, soldiers appear to have avoided battle, or collaborated with the RUF in looting operations (the so-called ‘sobels’ – ‘soldiers by day, rebels by night’). Keen writes that:

‘A common pattern was for the government forces to leave arms and ammunition in a particular town for rebel groups (groups that could include restive or deserting soldiers); the ‘rebels’ would then pick up the arms, extract loot from the townspeople (mostly in the form of cash), and then themselves retreat, perhaps also capturing some young people; at this point the government forces would then reoccupy the town and engage in their own looting, usually of property... as well as engaging in illegal mining.’

Sierra Leone’s war fits the theory of low-capability warfare well. Although two competing centres of gravity emerged, this reflected the bipolar structure of Sierra Leone’s political economy.

To an extent, this political economy also explains the structure of Liberia’s second war (from 2000-2003, the first war is discussed in detail in Chapter 7). Although Liberia has few diamond mining areas of its own (located in west Lofa county near the borders of Guinea and Sierra Leone), by 2000, smugglers were conducting a booming trade in ‘blood diamonds’ from Sierra Leone into Liberia where they were on-sold to European markets. Diamonds had assumed a central place in the survival of Charles Taylor’s regime (1997-2003) when the war against LURD commenced in

38 Ibid, Pg 115.
39 Ibid, Pg 116.
40 Ibid, Pg 121.
Chapter Five – Empirics II

1999. According to a Coalition for International Justice report, Taylor received around US $105 million per year in revenue. Taylor had so thoroughly ‘personalised’ the Liberian state that this figure represented the extent of ‘government revenue’. US $40 million a year was obtained from the sale of Sierra Leonean and Liberian diamonds (when subtracting the cuts taken by dealers and smugglers) and constituted the single largest source of revenue. Taylor’s second revenue stream was sourced from selling the ‘perks’ of sovereignty. He gained approximately $20 million a year in taxes on imports of gasoline and rice, charged mostly at the main ports of Monrovia and Buchanan. On top of this, $18 million was obtained from selling passports, the extortion of businesspeople, selling ‘concessions’ for timber or diamond extraction and state owned enterprises. An additional ‘few million dollars a year’ came in aid from Taiwan. In all, diamonds and selling the perks of sovereignty accounted for 76% of revenues. The concentrations of fighting displayed in Figure 5.6 correlate well with Taylor’s revenue streams. No doubt part of LURD’s military strategy was to disrupt Taylor’s revenue from Sierra Leonean and Liberian diamonds and Taylor had strong incentives to defend these areas, which he did in the early stages of the war.

Chad exhibits one concentration around Ndjame na (the capital) with a competing concentration on the border with Sudan – not of great economic importance. In this case it appears as though, when faced with cross border incursions by weak and fractious rebel groups, the government of Idris Deby attempted to confront them on the frontier with Sudan. Deby abandoned the eastern border region and retreated to the capital when large scale attacks were launched (in 2006 and 2008). For example, Rebels of the ‘National Alliance’ (an amalgamation of a ‘dizzying succession of [rebel] groups’) crossed the border into Chad from Hajil in Darfur in 2008. A column of government forces left Ndjame na and engaged the rebels but retreated nearly 800km across the desert soon after, assuming positions again at al-Massagit.

42 Ibid, Pg 17.
43 Ibid, Pg 18.
44 Ibid, Pg 17.
45 ‘Early to War: Child Soldiers in the Chad Conflict,’ (New York: Human Rights Watch, 2007), Pg 11.
just 80km north of the capital. Deby’s soldiers ‘took up defensive positions on main
roads into Ndjamaena from the north and east’ and rebels stormed into the capital and
captured large parts of it at dawn on February 2nd. The National Alliance besieged the
‘heavily fortified presidential complex’ but were unable to break through and
retreated back over the border into Sudan. Gerard Prunier wrote that:

‘The reasons for the rebel failure were military. They were over confident that Deby’s [the president’s]
regime was crumbling and launched their attack with inadequate forces (too few men, no artillery, few
anti-tank weapons and no surface to air missiles) so the ANT [the government armed forces] was able
to take full advantage of their modest military superiority.’

Notable is the lack of artillery and armour. A deficiency in heavy weapons limited the
ability of the National Alliance to capture defended territory, a weakness that the
Chadian government exploited. In fact, President Deby commenced a project to
fortify Ndjamaena with trenches in 2008.

The Sudan case is similar to Chad, albeit more of a surprise given Sudan’s large and
relatively well armed and trained (by Sub-Saharan African standards) military forces.
According to Van de Walle, the government of Sudan utilised a ‘cost-effective’
counter-insurgency method of arming and supporting ‘Janjaweed’ militias to attack
villages in Darfur from 2003 onwards. Sudan appears to have chosen not to use
heavy land-based weapons in its rural counter-insurgency campaign (although aerial
bombing was routinely used). JEM rebels, however, were able to execute a large
attack on Khartoum in May 2008. JEM and Sudanese government forces ‘clashed’ in
western Sudan on May 8th and by the 9th Sudan knew of the planned attack on
Khartoum. A military spokesperson stated that ‘forces from the Justice and Equality
Movement... crossed from Chad through Darfur to Kordofan where they were aiming

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47 Moumine Nagmbassa, “WRAPUP8 Rebels Surround President’s Palace in Chad Capital”, Reuters
Newswires, 2 February 2008
See also Martin Van-de-Walle, ‘Contemporary African Warfare,’ in Restructuring the Global
Military Sector: New Wars, ed. Mary Kaldor and Basker Vanshee (London: United Nations University,
1998), Pg 300.
50 ‘Crackdown in Khartoum: Mass Arrests, Torture, and Disappearances since the May 10 Attack,’
to cause destruction in Khartoum’. Roadblocks were established and bridges into the city from Omdurman (Khartoum’s twin city) were closed. JEM rebels attacked on May 10th with a column of 130 vehicles and 2000 soldiers. Attempts to push towards the presidential palace and the national radio and television building were repelled by government soldiers backed by helicopter gunships, tanks and heavy artillery. The JEM were defeated and retreated across the border into Chad on May 12.

Sudan and Chad’s physical geography may raise the utility of a ‘strategy of exhaustion’ over counter-insurgency in a situation where, were the terrain different, armies of the same size and sophistication may be able to hold rebels in the periphery. Eastern Chad and Western Sudan are mostly open plains with large stretches of desert. Highly mobile (usually on pick-up trucks) and well organised military forces have had success exploiting this tactical mobility. Idris Deby himself, for example, led a devastating campaign against the better armed but less mobile Libyan army during the 1980s. Deby was a commander in Hissane Habre’s army, and as Pollack writes, Habre ‘declined offers for tanks, APCs and heavy artillery and instead requested light armoured cars, trucks, automatic weapons, grenade launchers, recoilless rifles, mortars, antitank weapons, and anti-aircraft weapons’ and relied upon ‘rapid movement and force concentration... the armoured cars and Toyota trucks restored to the Chadians the strategic mobility and tactical manoeuvrability they had lost when they adopted modern infantry weapons, organisation and tactics’. Heavy armour and artillery might be relatively ineffective in Chad and the Sudan’s desert terrain and both Bashir and Deby may have refrained from using them in rural counter-insurgency campaigns for this reason. In a positional, territorial battle, however, these forces can be devastating against lightly armed insurgents. Deby and Bashir sought to negate the advantages of tactical mobility in the countryside by luring insurgents into a ‘battle for the capital’. Moreover they converted the

52 Ibid.
53 Ibid.
insurgent’s strength into a weakness by exploiting the advantages of defence in situations where light weapons dominate.

Figure 5.8 shows two cases that do not fit the theory well. Guinea and Uganda are coded as low-capability warfare but display no concentrations of fighting in the capital. In addition, fighting occurs at a considerable distance from economically valuable areas and, structurally, Guinea and Uganda look much like guerrilla warfare (see below). It is unreasonable to expect all cases to fit the theory, but it is worth briefly exploring why these cases may have deviated. Uganda is not an example of both a low arms importer and low-capability warfare. From 1997-2003 Uganda was classed as a ‘high’ conventional arms importer. For example, Uganda imported $55 million worth of conventional weapons in 1998 including nearly 100 T-55 tanks and 2 Mi-24 Hind attack helicopters. Jane’s weekly noted that Uganda’s army was ‘among the most powerful armed forces in Central Africa’ with ‘skills and experience almost unrivalled in Africa’. It is possible that Uganda did not deploy heavy weapons in its battle against the Lords Resistance Army (LRA) from 1997-2003 because much of its armour was tied up the DRC. Indeed, ‘Operation Iron Fist’, a drive to oust the LRA from their northern Ugandan and Southern Sudanese bases coincided with the return of Ugandan soldiers from the DRC. The Ugandan People’s Defence force (UPDF) also substantially outnumbered the LRA. According to the Uppsala Conflict Database the LRA had a maximum of 6000 soldiers (and a maximum of 4000 according to Cunningham et al) while the Ugandan government commanded the services of at least 30,000 soldiers and potentially double this. In addition, the LRA clearly utilised irregular tactics, including atrocity and kidnapping. The ineffectiveness of Uganda’s conventional drives to ‘finish’ the LRA also attest to

55 ‘Importer/Exporter Tables,’ Stockholm International Peace Research Institute International Arms Transfers Database.
57 In the Alliance between Rwanda and Uganda, it was Uganda who often supplied the armour and heavy artillery.
59 ‘Uppsala Conflict Data Program,’ Uppsala University Department of Peace and Conflict Research (2011/05/03).
use of irregular defensive tactics.\textsuperscript{61} Uganda may represent a marginal case of low-capability warfare where the capacity to supply, organise and control its army imparted a much higher conventional offensive capacity than the technology deployed let on.\textsuperscript{62} In Kalyvas and Balcells’s coding, Uganda is such a ‘marginal’ case and could be re-coded as guerrilla warfare.

Guinea is coded as both a low arms importer and low-capability warfare and does not constitute a ‘marginal’ case. Very little is known about the Rally of Democratic Forces of Guinea (RFDG). Aside from its aims to overthrow President Lasane Conte, its numbers, foreign support and even some its operations are poorly documented. The RFDG initially opened two fronts against the Guinean government in 2000, one near the Liberian border and one near the Sierra Leonean border. According to the Uppsala Conflict Database, RFDG rebels initially posed a threat to the capital city, Conakry:

‘RFDG and RUF (Revolutionary United Front) troops had early victories, launching cross-border attacks from Sierra Leone. Since the attacks happened relatively close to Conakry, the Guinean government troops deployed heavily in the area, eventually managing to push the rebels back across the border.’\textsuperscript{63}

Once this threat was neutralized, the Guinean government moved to repel attacks on villages near the Liberian border and by the end of 2001 attacks had ceased. Like Uganda the lone concentration of fighting in the countryside – around the town of Guekedou near the Liberian border – probably reflects the government’s superiority in numbers and logistical capacity.\textsuperscript{64} The Guinean government possessed a 15,000 person security force in 2000 whilst the highest estimate for the RFDG is around 5000. It is far more likely that the RFDG commanded between 1000-1800 soldiers.\textsuperscript{65}

\textit{Figure 5.8 – Low-Capability Warfare with No Concentration in the Capital}

\textsuperscript{61} Acker, ‘Uganda and the Lord’s Resistance Army: The New Order No-One Ordered,’ Pg 337.
\textsuperscript{62} It should be noted that all the findings reported in these chapters hold if Uganda is removed as a case of low-capability conflict.
\textsuperscript{63} ‘Uppsala Conflict Data Program.’
\textsuperscript{64} Ibid.
\textsuperscript{65} ‘Guinea-Liberia-Sierra Leone: Victims of Transferred Agression,’ \textit{Africa Research Bulletin} 34, no. 9 (2000): Pg 14107.
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Uganda 1997-2003

Guinea, 2000-2001

Kampala

Conakry
Guinea and Uganda provide useful scope conditions for the theory of low-capability warfare. Although the technology deployed may be light and in favour of the defensive, when insurgents are substantially weaker in organisational capacity, logistical capacity or in numbers, the guerrilla/counter-guerrilla bifurcation emerges. Belligerents do not choose a strategy of exhaustion at extreme disparities of military capacity, regardless of technology. It should be noted that all findings reported in Chapters 4 and 5 remain statistically significant if we include a control for the balance of power or remove Uganda from the sample.

**Conventional Warfare**

Although the sample of conventional warfare is much smaller, just four cases, the spatial patterns of fighting and their relationship to economic geography are distinctly different. Multiple, and sometimes contiguous, concentrations occur in the countryside and only one case (Guinea-Bissau) displays a cluster of fighting in the capital. Angola and the DRC exhibit multipolar conflict structures with 3 concentrations in Angola and over 10 in the DRC. Concentrations of fighting are separated from areas of economic importance in Angola, the DRC, and Cote d'Ivoire. Figure 5.9 displays the spatial distribution of fighting and economic value in Africa’s conventional civil wars from 1997-2008.

*Figure 5.9 - Battle Concentrations in Conventional Warfare*
Warfare in the DRC from 1997-2001 is instructive for two reasons. Firstly, conflict between the government of President Mobutu and the ADFL in 1996 and 1997 provides an example of a defensive ‘strategy of exhaustion’ that was abandoned due to the superior offensive capabilities of Mobutu’s opponents. Secondly, this case shows how, in high capability warfare, fighting is unlikely to concentrate around areas of economic importance despite their centrality the objectives of both the government and insurgents. Conflict in the DRC has been extensively described as a ‘resource war’, yet, while resources may have financed the activities of insurgents and the government, they have played a much smaller role in structuring the actual fighting.

The DRC is Africa’s second largest country, roughly the size of Western Europe. As figure 5.9 shows, economically valuable regions are concentrated in Kinshasa and the mining province of Katanga (located in the south eastern corner of the map, Lubumbashi is the capital of Katanga province). President Mobutu Sese Seko (1965-1997) was heavily dependent ‘on exploiting natural resources with the help of outsiders to accumulate wealth’.66 As Reno argues ‘global recognition of the sovereignty of the Zairian state was central to Mobutu’s political strategy, especially as this allowed him to attract diplomatic support and foreign aid’.67 The state-owned Gecamines produced 80% of Zaire’s foreign exchange earnings in the 1980s by selling cobalt, copper and zinc, primarily form Katanga province.68 Exports of copper, cobalt, zinc and diamonds generated $1.15 billion in revenues for Mobutu in 1986. Foreign aid provided another $448 million.69 The copper trade still accounted for nearly one-third of revenues ($892 million) in the early 1990s, roughly the same amount as Overseas Development Assistance ($822 million).70 As foreign aid from France, Belgium and the United States declined during the 1990s, Mobutu leveraged his recognition as the head of state to attract resources and perpetuate his rule. Mobutu struck a deal worth over $1 billion to sell Gecamines to a consortium of South African, French, Canadian and American firms when faced with pressure to

67 Ibid, Pg 39.
68 Ibid, Pg 40.
69 Ibid, Pg 41.
70 Ibid, Pg 44.
privatise.\textsuperscript{71} Mobutu focused his regime survival strategy on controlling Kinshasa and ‘sovereignty’, reflecting his dependency on leveraging international recognition for revenues. Sixty-one out of 92 investment projects were allocated to the capital in 1972.\textsuperscript{72} Young wrote of Zaire that ‘the centralisation of state power in Kinshasa has been accompanied by a pathological concentration of economic resources; the capital is a giant suction-pump drawing wealth out of the hinterland’.\textsuperscript{73} US Assistant Secretary of State for African Affairs George Moose stated in 1993 that ‘there is, in effect, no meaningful extension of government throughout the country’.\textsuperscript{74} Herman Cohen, in a capacity as consultant for the Global Coalition for Africa commented to the US House of Representatives Subcommittee on Africa that:

‘To say Zaire has a government today would be a gross exaggeration. A small group of military and civilian associates of President Mobutu, all from the same ethnic group, control the city of Kinshasa by virtue of the loyalty of the 5,000-man Presidential Guard known as the DSP. This same group also controls the central bank which provides both the foreign and local currency needed to keep the DSP loyal. While the ruling group has intelligence information about what is going on in the rest of Zaire, there is no real government authority outside the capital city’.\textsuperscript{75}

Mobutu’s regime fits the picture of a state heavily dependent upon the recognition of sovereignty to survive. Controlling Kinshasa and Katanga are clearly two crucial revenue-generating zones of the DRC. However, the pattern of warfare is very different to low-capability conflicts. Figure 5.10 is a closer view of where government soldiers in the DRC have engaged in battle.

\textsuperscript{71} Ibid, Pg 54.
\textsuperscript{72} Crawford Young, ‘Zaire: The Unending Crisis,’ \textit{Foreign Affairs} 57, no. 1 (1978).
\textsuperscript{73} Ibid, Pg 176.
\textsuperscript{74} Hearing Before the Subcommittee on Africa of the Committee on Foreign Affairs House of Representatives, One Hundred Third Congress (Washington: U.S Government Printing Office, 1995) Pg 11.
\textsuperscript{75} Ibid, Pg 58.
Fighting in the DRC is more complicated than in Sierra Leone, Somalia and Congo-Brazzaville (to cite just a few examples) and does not correlate well with the economically important regions, especially Kinshasa and Lubumbashi. Most of the fighting is concentrated along a ‘front line’ stretching from Bangui (in the Central African Republic) east towards Goma, near the borders with Rwanda and Burundi, and then down to the town of Pweto on the border with Zambia. There is also a weak concentration on Kinshasa. Combatants in both wars in the DRC were heavily armed with higher logistical and organisational capacity than belligerents in Sierra Leone or Somalia. Successive rebellions enjoyed the support of Rwanda and Uganda, including regular soldiers, armour, heavy artillery and air support. Although President Mobutu found few allies during the first war and was ousted in 1997, his successor, Laurent Kabila, obtained the military backing of Zimbabwe, Angola and Namibia. Angola and Zimbabwe both supplied and operated heavy weapons in the Congo, including attack
helicopters, tanks and air support. Fighting near Kinshasa, on the northern and eastern fronts, and near Pweto are discussed in turn.

**Kinshasa**

Fighting near Kinshasa was not the result of a strategic retreat to defend the capital as in Sierra Leone and Somalia, but of an ambitious blitzkrieg campaign conducted by Rwandan and Ugandan soldiers. What was labeled the ‘Second Congolese War’ began with a mutiny of the 10th battalion and 22nd brigade of the Armed Forces of the Democratic Republic of Congo (FAC) in Bukavu and Goma, in eastern Congo, and simultaneous mutinies in Baraka, Kindu, Kisangani and at two army bases in Kinshasa. Rwanda and Uganda had divorced their erstwhile ally, President Laurent Kabila, in the preceding months and moved to quickly support the mutinies. James Kabere, a Rwandan officer, hijacked a Congo Airlines plane from Goma and flew himself, a few thousand rebels and Rwandan and Ugandan soldiers to Kitona airport near Matadi in the west. Soldiers of the FAC based at Kitona defected to the rebels and the combined Rwandan-Ugandan force advanced on Kinshasa, capturing Aru, Lobutu, Fizi near Katange and Matadi by August 16. Army Chief of Staff Joseph Kabila (Laurent Kabila’s son) based his defensive strategy not on the direct fortification of Kinshasa but ‘prepared for a showdown in the strategic corridor linking Kinshasa and the south Atlantic’. FAC soldiers with air support defended the garrison town of Mbanza-Ngungu, 115km from Kinshasa. Mbanza-Ngungu fell on August 19. The intervention of Zimbabwe, Angola and Namibia, acting under the auspices of the SADC rescued Kabila after the fall of Mbanza-Ngungu. Zimbabweans and Angolans outflanked the rebels (now named the Rally for Congolese Democracy (RCD)) in late August and early September, attacking from Cabinda and Kinshasa with amour, artillery and air support. The SADC intervention force had pushed the rebels back into the Congolese countryside by 1999. A surprise attack, rather than a strategic retreat accounts for the fighting near Kinshasa.

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77 Ibid, Pg 182.
78 Ibid, Pg 182 - 84.
80 Ibid, Pg 25.
This was not the first time that a battle for Kinshasa loomed. The ADFL invaded eastern Zaire on October 18, 1996 with Rwandan military assistance.\textsuperscript{81} Mobutu had denied the FAZ pay, equipment and training in preceding years, excoriating its ability to coordinate and combat the rebels. The FAZ put up little resistance in the east and by December the establishment of a buffer zone 800km long and 100km deep along the border of Rwanda, Burundi and Uganda was complete.\textsuperscript{82} The ADFL decided to advance on Kinshasa in late 1996 and enjoyed rapid success, capturing Kisangani on March 13, 1997. Mbuji Mayi, the diamond capital, was captured on April 4 and it appeared that the FAZ were retreating in preparation for the defence of Kinshasa. United States Ambassador Simpson went to Kinshasa to convince Mobutu not to make a ‘last stand’, fearing a ‘bloodbath’ in Kinshasa.\textsuperscript{83} Prunier cites a secret memo sent to the French government by a retired general Jeannou Lcaze stating that ‘a great battle is about to happen [in Kinshasa] because as the FAZ are retreating they get more compact and able to resist... Contrary to what has happened in Kisangani or Lubumbashi they will not hesitate to oppose a strong resistance to the rebel forces’.\textsuperscript{84} No battle for Kinshasa occurred. Unlike Liberia, Sierra Leone or Chad, the rebels were not armed primarily with light weapons. Nor were they (comparatively) disorganised and logistically deficient. Angola was supporting the ADFL with armour, heavy artillery, jet fighters and attack helicopters by late April. The Angolan army defeated UNITA (fighting on behalf of Zaire’s government) at Kenge, 100km from Kinshasa – the largest battle of the war. President Mobutu fled Zaire soon after and his remaining army retreated across the Congo river into the ROC. A defensive strategy to defend Kinshasa was simply not viable against the combined offensive strength of Angola, Rwanda, Burundi and the rebellion.

\textsuperscript{81}Both Prunier and Reyntjens state that the ‘rebellion’ was firstly a Rwandan operation to deal with refugee camps used by Hutu insurgents to launch raids into Rwanda. Filip Reyntjens, \textit{The Great African War: Congo and Regional Geopolitics, 1996-2006} (Cambridge: Cambridge University Press, 2009) Pg 48.
\textsuperscript{82} Prunier, \textit{Africa's World War: Congo, the Rwandan Genocide, and the Making of a Continental Catastrophe} Pg 130.
\textsuperscript{83} Ibid., Pg 135.
\textsuperscript{84} Ibid.
Chapter Five – Empirics II

**Pweto**

The primary battle concentration in Figure 5.10 occurs around the town of Pweto, near the border with Zambia. Military operations in this region were conducted as part of the Second Congolese War (1998-2001). Most engagements took place between 1999 and 2001 after the Rwandan and Ugandan-backed blitzkrieg on Kinshasa had failed. Lubumbashi and the mining riches of Katanga province were, undoubtedly, the objective for both the government and the RCD. Roads in the east also opened the way to the ‘diamond capital’ of Mbuji Mayi. However, the more proximate objective was the Nzofu bridge, a ‘crucial link in the supply chain’. RCD rebels and their Rwandan allies advanced into Katanga province in 1999, but found the Nzofu bridge protected by Namibian troops. In response, the RCD ‘wheeled’ around to Pweto, ‘determined to advance’. 85 Pweto fell to the RCD in March 1999 and ‘proved devastating for the allied troops since it cut their supply line though the south east’. 86

The FAC and its allies counter-attacked in October 2000. The military strategy pursued by the government (and its foreign backers, including Zimbabwe) 87 sought to confront, outmanoeuvre and annihilate the concentration of Rwandan/RCD soldiers near Pweto, not to statically defend Lubumbashi or the mining areas. So too, RCD rebels and Rwandan and Ugandan soldiers could not exploit Lubumbashi’s wealth (or even deny it to the government) without first degrading the FAC/Zimbabwean force in the area. Pweto had no intrinsic economic value, unlike Kono or Kalihun in Sierra Leone. It was a ‘small fishing village’ over 350km or roughly ‘four days by foot’ from the regional centre of Lubumbashi. 88 President Kabila allocated $20 million in funds for a counter-attack designed to ‘break the back’ of 3000 Rwandan and Burundian troops entrenched a grassy plain by the town of Mutoto Moya 89 where FAC troops and their Zimbabwean allies were camped along 8 miles of trenches and separated by just one mile of ‘no man’s land’. 90 Kaliba commenced his assault with

85 Ngolet, *Crisis in the Congo: The Rise and Fall of Laurent Kabila* Pg 30.
86 Ibid.
87 Although Zimbabwe had reservations about the operation.
89 Ibid.
90 Ibid, Pg 273.
‘long-range artillery, tanks, aircraft and gunboats’. Stearns describes Kabila’s defence of Pweto as follows:

‘with the support of armoured cars and Hawker fighter aircraft from the Zimbabwean army, the Congolese forces overran the enemy trenches and pushed their rivals back to Pepa, a ranching town in the hills some thirty miles away. There, Laurent Kabila’s troops took control of the strategic heights overlooking the town. Zimbabwean bombers pursued and bombed the retreating troops, forcing them to hide during the day and march at night’.

Rwandan and Burundian soldiers counter-attacked by using a ‘light, mobile battalion’ to outflank Kabila’s soldiers whilst maintaining a frontal assault as a distraction. The counter-attack succeeded in dislodging the Congolese and pushing them back to Pweto, threatening Lubumbashi again. Zimbabwean and Angolan forces reinforced between Pweto and Kasenga, stabilising the front-lines. The loss of Pweto on December 6 led eventually to the assassination of President Kabila and the ascension of his son, Joseph, to the presidency. Fighting around Pweto from 1999-2000 shows that while locations of economic value were central objectives to the combatants, in conventional warfare, where opponents retain a capacity for conventional offense, military strategies, even for defensive objectives, are more likely to be fashioned around annihilating the opposition’s offensive strength. As such, the geography of warfare correlates more closely with concentrations of enemy soldiers and strategic supply bottlenecks, rather than the location of resources.

**The North West**

Three, roughly contiguous, clusters of fighting in the north east of Congo do not correlate with any economically important areas identified by the G-econ dataset. These clusters occur around the towns of Genema, near the border with the Central African Republic, Mbandaka further towards Kinshasa and Bokugu further south. A faction of the RCD, the Movement for the Liberation of Congo (MLC) led by the son of a former business associate of President Mobutu, Pierre Bemba, emerged with

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93 Ibid, Pg 274.
Ugandan backing and attacked towns in Equateur province in November 1998. Unlike the south, the north west was not well endowed with natural resources. Bemba’s immediate target was Kinshasa – just down the Congo river. President Kabila, the FAC, and its diverse array of allies did not conduct a positional defence of Kinshasa, but engaged the rebels and Ugandan army in a series of battles over towns in Equateur province. According to Prunier, Ugandans and Chadians did most of the fighting along this front. Chadian soldiers dispatched to assist Kabila were first sent to Gbadolite (Mobutu’s former residence) and then met (and were soundly defeated) by the MLC and Ugandans at Aketia, Buta and Bongo. President Kabila ‘adopted a new strategy’ in January 1999 and flew 1000 FAC soldiers to Bangui in the Central African Republic in an attempt to ‘outflank’ the UPDF/MLC. The FAC counter-attacked and re-captured the towns of Genema, Businga and Libenge. The MLC and UPDF, however, soon recovered and by July 1999 could boast of controlling the entire Equateur province. We can see here that the emergence of a battle cluster in North West Congo had little to do with its economic importance. Although the objective was an economic target, Kinshasa, the MLC and their allies met the FAC and their allies in the countryside. Again, the dominant strategy was not one of exhaustion and positional defence around valuable sites, but of manoeuvre and offense in the hope of striking a decisive blow against the enemy’s concentration of force.

**Goma and the East**

Rwanda, Burundi and Uganda’s security interests account for the concentration of fighting near cities in the east. Rwanda’s initial invasion in 1996 targeted refugee camps near Goma, especially the Mugunga camp, where former members of the Rwandan government and military were organising and conducting raids into Rwanda. Burundi was also fighting an insurgency based partly in neighbouring Congo while Uganda battled the LRA and West Nile Bank Front (WNBF) in eastern

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95 Ngolet, *Crisis in the Congo: The Rise and Fall of Laurent Kabila* Pg 32.
Congo. This concentration is not related to the economic value of Congo’s eastern cities but a cross-border counter-insurgency campaign.  

Guerrilla Warfare

Guerrilla warfare appears to be more straightforward. Two of the 13 cases (15.4%) displayed a concentration of fighting in the capital – Djibouti and Burundi. Djibouti has only three ‘battles’ meaning anywhere on the map would be a concentration. Burundi, however, is not, like Djibouti, a minor outbreak of violence. It is estimated that between 200,000 and 250,000 people have been killed since 1993. Hutu insurgents attacked Bujumbura for the first time in 1991 and attacks have continued to 2008, reflected in the concentration of fighting on Bujumbura and comparatively dispersed fighting in the countryside - contrary to the expectations for guerrilla warfare. Burundi is a ‘capital heavy’ state. Ngaruko and Nkurunziza observe that a Tutsi-led government and bureaucracy have systematically favoured the capital with public and private investment projects. Rulers have leveraged international recognition, obtained by controlling Bujumbura, to appropriate resources from the agricultural sector (often with the assistance of the army) and shore up control of the capital. Public sector jobs have been a ‘major source of accumulation’. Burundi’s Hutu majority are largely excluded from education opportunities and access to public sector rents. There is some evidence to suggest that the Burundian government has pursued a defensive strategy focused on Bujumbura. John Balzar of the Los-Angles Times described Bujumbura in 1995 as a ‘mono-ethnic urban fortress against the rest of the nation’. Burundi’s physical and social geography, however, are equally cogent explanations of the battle-structure in Figure 5.11. Dense forests and hilly terrain just 30km from Bujumbura have provided insurgents with cover and bases.

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99 Ibid, Pg 385-88.  
100 Ibid.  
from which to stage attacks. FNL insurgents shelled Bujumbura with 16mm mortars in August 2002, attacking from the Kabira national forest. Hutu-majority suburbs in Bujumbura, especially Kinama, have also allowed insurgents to operate more freely in the capital than the comparative military technology available to insurgents and the government would otherwise allow.

Concentrations of fighting near an international border are much more common than concentrations in the capital. In 62% of cases a fighting concentration overlaps with, or occurs in close proximity to, an international border (corroborating the replication of Buhaug and Rod reported in Chapter 4). Clandestine, cross-border trade and support is crucial to the survival of insurgent movements in many African countries. The MFDC in Senegal have received and purchased weapons, including AK-47s, anti-personnel and anti-vehicle mines from Guinea-Bissau. So too the SPLM received support from Uganda and Ethiopia. The Army for the Liberation of Rwanda (PALIR) received support from and operated freely across the border in the DRC.

Figure 5.11 - Battle Concentrations in Guerrilla Warfare

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102 Ngaruko and Kkurunziza, 'An Economic Interpretation of Conflict in Burundi,' Pg 379.
104 Ngaruko and Kkurunziza, 'An Economic Interpretation of Conflict in Burundi.'
Chapter Five – Empirics II
Economic geography and battle location correlate well in only two of the cases where data on both variables are available (Angola and Nigeria). A superiority in conventional offense has allowed governments to quarantine valuable areas from persistent fighting in the majority of cases. Nigeria and Angola are conspicuous exceptions and worth investigating further. Nigeria is the world’s 7th largest oil producer. Oil and gas are located primarily in the Niger Delta – the red area on Nigeria’s conflict map in Figure 5.11 – and provide the federal government with 40% of GDP and 70% of revenues.\textsuperscript{105} Angola is second only to Nigeria in oil production. Oil production accounted for 80% of Angolan government revenues during the 1990s, the vast majority coming from offshore drilling in the Cabinda enclave.\textsuperscript{106} Angola has used oil wealth as collateral to obtain finance to fund its war effort, including the purchase of heavy weapons used to defeat UNITA.\textsuperscript{107}

Fighting has concentrated around the Niger Delta and Cabinda enclave, despite the government’s superiority in conventional force, largely because of the high strategic payoffs for attacking pipelines and kidnapping oil workers. If we consider capital cities and oil wealth as ‘point resources’ then there are important differences. Unlike oil, the flow of ‘sovereignty’ cannot be disrupted. Attacking oil pipelines has offered insurgents in Nigeria the dual benefits of striking a blow at the government’s most lucrative revenue source – a blow to strengthen an insurgent group’s bargaining position – and directly appropriating those revenues to purchase weapons and increase the ability to strike again. The Niger Delta People’s Volunteer Force (NDPVF) is implicated in ‘bunkering’ (oil theft) and the on-selling of refined products to local people at prices below the commercial rate.\textsuperscript{108} Networks of pipelines can be difficult to protect from mobile insurgents as they spread over large, and often inaccessible, terrain. FLEC was less successful in actually attacking installations because much of


\textsuperscript{108} Ikelegbe, ‘The Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria,’ Pg 226.
Angola’s oil is located offshore. While Angola’s government has been able to protect the few onshore enclaves that house foreign nationals working with multi-national corporations such as Chevron, FELC has kidnapped workers and attacked company vehicles, mostly likely in an attempt to scare off foreign investment and disrupt government revenues.\(^{109}\) Oil-rich regions may also have above average chances of civil war onset. Knowledge of the disparity between oil profits and local conditions produces grievances and demands for a great share of the revenues. The Niger Delta is one of the least developed regions in Nigeria, despite the oil wealth.\(^{110}\) So too, environmental degradation associated with oil production (and oil theft) can produce the grievances to spark armed conflict.

These exceptions aside, the structure of fighting in guerrilla warfare differs markedly from low-capability warfare. Most conflicts are unipolar, reflecting the limited military capabilities of insurgents. Unlike low-capability warfare, however, the location of these epicentres does not correlate well with areas of economic value and tend towards international borders. Governments have been able to protect their most valuable regions from insurgents.

**Conclusions**

Not all African civil wars are ‘resource wars’. In fact, in just 8 of the 21 cases (38%) from 1997-2008 where data on both economic geography and conflict location were available did a resource concentration overlap with a battle concentration. Importantly, six of these cases were also cases of low-capability warfare. Eighty-precent of low-capability conflicts saw a concentration of fighting in or around the capital city. Only 15% of guerrilla conflicts and 25% of conventional conflicts exhibited the same pattern. Evidence from this chapter also supports the notion that African states are ‘capital heavy’ – economic production is often concentrated in the capital - and OLS regression suggested a link between the military technology and the proportion of fighting occurring in capital cities. Low-capability warfare experiences roughly 10% more of its battles in the capital city when compared to conventional

\(^{109}\) See, for example, “Angolan Offensive May Harm Portuguese Hostages”, *Reuters Newswires*, 3 April 2001

\(^{110}\) Ikelegbe, ‘The Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria,’ Pg 214.
warfare. If wars in Angola and the DRC had been ‘low capability’ rather than conventional, Kinshasa could have expected over 60 more individual battles and Luanda over 200 more. Overall, the findings from this chapter suggest that economic geography correlates well with the pattern of fighting in low-capability warfare.
Chapter Six

Empirics III: Foreign Intervention in Low-capability Warfare

Foreign states hold a trump card in low-capability warfare – the capacity for conventional offense – and a crucial dimension of intervention strategy is in the timing of deployment. Hypothesis 3 predicted that foreign states wait until a ‘battle for the capital’ before deploying in Africa’s low-capability conflicts to rout or intimidate their rivals and play kingmaker in political negotiations. Deployments are also timed with pitched battles in conventional and guerrilla warfare but these battles do not cluster near the capital and foreign intervention was predicted to be no more or less likely as conflict approached these cities. The chapter proceeds as follows. Africa’s history of military intervention is briefly discussed followed by bivariate and logistic regression analysis of the relationship between conflict geography and decisions of foreign intervention. A substantial and statistically significant connection between the distance of fighting from the capital city and the probability of foreign intervention exists within the sample of low-capability warfare, but not conventional or guerrilla warfare. Examples from Sierra Leone, Chad and Ethiopia are used to illustrate how intervention triggers vary with warfare-types.


Foreign intervention is common in Africa’s civil wars.\(^1\) Of the 179 separate deployments in this study, 59% occurred in Sub-Saharan Africa. African states are as frequent interveners as non-African states, contrary to the notion that major powers are most prolific.\(^2\) Of the 106 interventions in Africa, 65% were African states deploying in African civil wars. Even comparatively small militaries can have a decisive impact on outcomes in a civil war in a

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\(^2\) See the study by Khosla for a similar account of intervention activity. Deepa Khosla, 'Third World States as Interveners in Ethnic Conflicts: Implications for regional and International Security,' *Third World Quarterly* 20, no. 6 (1999).
security complex of weak states. Alternative levers of influence such as economic sanctions and the provision of military hardware may also be unavailable to economically poor and atomised regional actors.

The frequency of intervention in African civil wars has increased over time. Table 6.1 shows the number of military interventions in African civil wars per year from 1960-2003.

There are four peaks of intervention activity. The first, from 1975-1980, reflects a spate of Cold War related interventionism in Angola, Ethiopia and Zaire. South African and Zairian support for UNITA and the FNLA in Angola during 1975 and 1976, for example, was matched by more than 10,000 Cuban soldiers assisting the MPLA-led government. Somalia invaded Ethiopia in 1977, ostensibly in support of the WSLF fighting for the independence of the Ogaden region of south-east Ethiopia. Somalia’s invasion was rebuffed by Ethiopia with

3 Raymond Copson, Africa’s Wars and Prospects for Peace (New York: Sharpe, 1994) Pg 113..
4 Most of Africa’s states are more closely integrated with the West and former colonial powers than they are with each other. The efficacy of sanctions depends upon one country being able to deny another country some commodity that is crucial to the target’s economy. This scenario is more likely to be the case between trading partners. See David Baldwin, ‘The Sanctions Debate and the Logic of Choice,’ International Security 24, no. 3 (2000).
assistance from Cuban and South Yemeni soldiers and billions in Soviet military hardware.\(^5\) Two invasions launched from Angola in 1977 and 1978 by Katangan exiles were halted by a combination of Moroccan, French and Belgian soldiers.\(^6\) Interestingly, this flurry of interventionism seems to have coincided with a period of détente between the United States and Soviet Union. The Conference on Security and Cooperation in Europe (CSCE) signed the Helsinki accords in 1975, marking a period of reduced tension between the superpowers. The Helsinki accords included recognition of ‘Europe’s post war frontiers’ and a range of agreements on economic and diplomatic cooperation in addition to declarations on human rights and political freedom.\(^7\) This period ended in December 1979 with the Soviet invasion of Afghanistan.\(^8\)

The second peak occurs between 1990 and 1992 and reflects a very different evolution in security dynamics. States experimented with ‘humanitarian intervention’ as political elbow-room increased at the end of the Cold War.\(^9\) Deployment of the US-led UNITAF in Somalia during 1992 was the most dramatic and symbolic example of a ‘new interventionism’.\(^10\) On the other hand, an increasing indifference of the superpowers and their allies (with the exception, to an extent, of France)\(^11\) allowed African states to play a more prominent role in directing security affairs on the continent.\(^12\) Nigerian intervention in Liberia was a watershed in this regard. Liberia is, historically, a close US ally and benefited from US military and technical assistance during the Cold War. With their ally President Samuel Doe besieged by insurgents and a humanitarian crisis unfolding in July and August 1990, the US refused to intervene. President George Bush Senior famously declared that Liberia was ‘not worth the

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\(^6\) *Africa Research Bulletin*, 14, no. 4, April 1-30, 1977, Pg 4399, 4400


\(^8\) Ibid, Pg 629.


\(^12\) See, for example, Karin Dokken, *African Security Politics Redefined* (New York: Palgrave Macmillan, 2008).
life of a single marine’. West African states, led by Nigeria but including Ghana, Sierra Leone and Guinea, deployed to Liberia in August 1990.

By far the highest annual level of interventionism occurred in 1998. Africa’s ‘Great War’ in the DRC accounts for most of these observations. Soldiers from Rwanda, Burundi, Uganda, the Sudan, Chad, Zimbabwe, Angola and Namibia deployed in the DRC. The peak does not reflect this case alone, however. South Africa and Botswana deployed in Lesotho while Guinea and Senegal deployed in Guinea-Bissau. Non-regional actors are notable absentees from this, Africa’s most prolific year of military involvement in civil wars. Shearer, for example, writes that the ‘absence of non-African involvement or even interest [in the DRC] underscores a break with earlier eras of colonial ambition and Cold War rivalries’.

A peak of similar proportions to 1990-1992 occurs between 2002 and 2003 and marks the re-emergence of non-regional actors. The US, albeit briefly and in small numbers, sent marines to Liberia in 2003. France deployed more decisively and in greater numbers in Cote d’Ivoire in 2002. The African Union dispatched peacekeeping force to Burundi in 2003 to protect members of a transitional government. With the exception of Burundi, these cases reflect an increasing cooperation between powerful non-regional states, usually former colonial powers (or ‘big brothers’ in the case of Liberia) and regional security organisations. France and ECOWAS coordinated their deployment in Cote d’Ivoire.

16 D. Shearer, 'Africa's Great War,' Survival 41, no. 2 (1999).
19 Although the AU mission did eventually morph into a UN mission. A similar hybrid UN-AU mission was established in Darfur in the Sudan. See Alex de Waal, 'Darfur and the Failure of the Responsibility to Protect,' International Affairs 83, no. 6 (2007). And Paul D Williams, 'Military Responses to Mass Killing: The African
ECOWAS benefited from cooperation with the US in Liberia. 20 ECOWAS missions morphed into substantial UN missions in both Liberia and Cote d’Ivoire. Over 10,000 UN soldiers were mandated for deployment in Liberia and Cote d’Ivoire (just under 10,000 actually deployed under the auspices of UNOCI.21

Peaks in Figure 6.1 reflect trends in the evolution of military interventionism in Africa. Intervention was dominated by non-regional powers acting on global security interests during the Cold War. Regional actors were increasingly entangled in security affairs after the Cold War but rarely in cooperation with non-regional powers. Africa’s continental war of 1998 marked the apotheosis of regional interventionism. From (perhaps) September 11 2001, regional and non-regional states have acted collectively and in cooperation with greater frequency.

Across this great variety of actors and security contexts do states tailor their intervention strategies depending upon the types of wars they are facing? More specifically, do we find that states are reticent to intervene in low-capability warfare when fighting is in the countryside? Do states time their interventions to coincide with a battle for the capital?

Figure 6.2 differentiates by warfare-type the frequency and average distance of fighting from the capital city of military interventions. Although guerrilla warfare is by far the most frequent form of combat it is the least likely to experience intervention. Just 0.01% of intervener dyads resulted in deployment. Roughly 1% of low capability and conventional dyads experienced intervention. As Chapter 2 argued, there are substantial deterrents to intervening in guerrilla warfare. Irregular tactics are an implicit concession that insurgents lack the capacity to fight a conventional war. Potential interveners favouring the government will shy away from wasting money and lives in an uncertain and potentially costly counter-

20 Coleman argues that rulers undertake military interventions under the auspices of international and regional institutions to obtain legitimacy. Katharina Coleman, *International Organisations and Peace Enforcement: The Politics of International Legitimacy* (Cambridge: Cambridge University Press, 2007). There were a number of co-operative efforts between extra-regional and regional actors such as the Inter-African Mission to Monitor the implementation of the Bangui Agreements. See Moussounga Itsouhou Mbadinga, ‘The Inter-African Mission to Monitor the Implementation of the Bangui Agreements (MISAB),’ *International Peacekeeping* 8, no. 4 (2001).

insurgency campaign where they cannot exploit their advantages in offense and the
government is likely to win anyway. Interveners favouring the insurgency face high costs to
overcome the government’s military superiority. As the balance of power between the
government and insurgents is more even in low-capability and conventional warfare, actors
favouring the insurgency face lower costs and actors favouring the government can utilise
advantages in conventional tactics.

Figure 6.2 – Descriptive Statistics: Military Intervention and Warfare Type

<table>
<thead>
<tr>
<th>Warfare Type</th>
<th>Frequency</th>
<th>Mean Distance of fighting from the Capital</th>
<th>Mean (in25km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-capability</td>
<td>34</td>
<td>79km</td>
<td>79.4%</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>14</td>
<td>269km</td>
<td>42.8%</td>
</tr>
<tr>
<td>Conventional</td>
<td>51</td>
<td>344km</td>
<td>19.6%</td>
</tr>
</tbody>
</table>

An average intervention in low-capability warfare is deployed 190km closer to the capital
than in guerrilla warfare and more than 200km closer than in conventional warfare. When
fighting is deep in the countryside, intervention in low-capability warfare is very rare. Nearly
80% of intervention occurs within just 25km, substantially higher than the 19.6% for
conventional warfare and 42.8% for guerrilla warfare. From Figure 6.2 it does seem that
foreign states intervene at different points in the conflict process depending upon the
technology of rebellion available to domestic combatants. As with previous chapters, it is
important to control for confounding variables. Perhaps states prefer the lower costs of
intervention in smaller countries and low-capability warfare occurs in smaller countries that
fight their battles closer to the capital. Perhaps, when controlling for these factors, states
prefer to intervene during a ‘battle for the capital’ regardless of warfare-type. Model 6.1 is a
logistic regression analysis of the relationship between the distance of fighting from the
capital and the probability of intervention within the sample of low-capability warfare. Model
6.2 repeats the process in the sample of conventional conflicts and Model 6.3 in the sample of
guerrilla warfare. Model 6.4 re-tests for the presence of a relationship between intervention
and battle location within the sample of ‘low arms importers’. Model 6.5 repeats this test in
the sample of ‘high’ arms importers.
## Chapter Six – Empirics III

### Figure 6.3 – Models 6.1-6.5, Foreign Intervention in Low-capability, Conventional and Guerilla Warfare

<table>
<thead>
<tr>
<th></th>
<th>(6.1) Low-cap</th>
<th>(6.2) Guerrilla</th>
<th>(6.3) Conventional</th>
<th>(6.4) Low Arms</th>
<th>(6.5) High Arms</th>
</tr>
</thead>
<tbody>
<tr>
<td>rival intervention</td>
<td>-15.500</td>
<td>3.145</td>
<td>1.731</td>
<td>2.733</td>
<td>2.368</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(1.133)***</td>
<td>(0.544)***</td>
<td>(0.639)***</td>
<td>(0.832)***</td>
</tr>
<tr>
<td>regional hegemon</td>
<td>2.142</td>
<td>4.547</td>
<td>1.501</td>
<td>2.154</td>
<td>1.670</td>
</tr>
<tr>
<td></td>
<td>(0.692)***</td>
<td>(1.061)***</td>
<td>(0.810)*</td>
<td>(0.442)***</td>
<td>(1.038)</td>
</tr>
<tr>
<td>balance of power</td>
<td>0.067</td>
<td>1.813</td>
<td>0.555</td>
<td>0.621</td>
<td>1.316</td>
</tr>
<tr>
<td></td>
<td>(0.295)</td>
<td>(0.818)***</td>
<td>(0.527)</td>
<td>(0.168)***</td>
<td>(0.412)***</td>
</tr>
<tr>
<td>gems in conflict zone</td>
<td>1.490</td>
<td>0.081</td>
<td>-0.999</td>
<td>-0.002</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>(0.747)***</td>
<td>(1.147)</td>
<td>(0.449)***</td>
<td>(0.399)</td>
<td>(0.443)</td>
</tr>
<tr>
<td>hydros in conflict zone</td>
<td>-4.443</td>
<td>0.824</td>
<td>-0.684</td>
<td>-0.380</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>(1.641)***</td>
<td>(0.998)</td>
<td>(0.512)</td>
<td>(0.412)</td>
<td>(0.414)</td>
</tr>
<tr>
<td>proximity</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.001)***</td>
<td>(0.001)***</td>
<td>(0.001)***</td>
<td>(0.000)***</td>
<td>(0.000)***</td>
</tr>
<tr>
<td>internally displaced</td>
<td>0.005</td>
<td>-0.002</td>
<td>-0.000</td>
<td>0.001</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)***</td>
<td>(0.002)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>distance from capital (ln)</td>
<td>-0.528</td>
<td>-0.327</td>
<td>-0.051</td>
<td>-0.175</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>(0.171)***</td>
<td>(0.206)</td>
<td>(0.082)</td>
<td>(0.077)</td>
<td>(0.109)</td>
</tr>
<tr>
<td>material capabilities</td>
<td>12.090</td>
<td>1.843</td>
<td>-3.303</td>
<td>3.423</td>
<td>-12.540</td>
</tr>
<tr>
<td>former colony</td>
<td>4.784</td>
<td>4.539</td>
<td>2.511</td>
<td>3.595</td>
<td>2.893</td>
</tr>
<tr>
<td></td>
<td>(7.077)***</td>
<td>(1.034)***</td>
<td>(0.526)***</td>
<td>(0.447)***</td>
<td>(0.731)***</td>
</tr>
<tr>
<td>incompatibility</td>
<td>0.364</td>
<td>-0.795</td>
<td>13.608</td>
<td>1.485</td>
<td>0.976</td>
</tr>
<tr>
<td></td>
<td>(1.252)</td>
<td>(1.208)</td>
<td>(0.687)***</td>
<td>(0.746)***</td>
<td>(0.795)</td>
</tr>
<tr>
<td>land area</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.000)*</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)***</td>
</tr>
<tr>
<td>peace years (ln)</td>
<td>0.006</td>
<td>-0.998</td>
<td>-0.436</td>
<td>-0.194</td>
<td>-0.495</td>
</tr>
<tr>
<td></td>
<td>(0.222)</td>
<td>(0.350)***</td>
<td>(0.195)</td>
<td>(0.168)</td>
<td>(0.265)*</td>
</tr>
<tr>
<td>defence pact</td>
<td>1.744</td>
<td>1.154</td>
<td>1.305</td>
<td>1.356</td>
<td>-0.446</td>
</tr>
<tr>
<td></td>
<td>(0.645)***</td>
<td>(1.196)</td>
<td>(0.515)***</td>
<td>(0.360)***</td>
<td>(0.945)</td>
</tr>
<tr>
<td>cold war allies</td>
<td>-14.096</td>
<td>5.597</td>
<td>-0.760</td>
<td>0.141</td>
<td>0.642</td>
</tr>
<tr>
<td></td>
<td>(0.814)***</td>
<td>(1.355)***</td>
<td>(1.096)</td>
<td>(1.024)</td>
<td>(0.918)</td>
</tr>
<tr>
<td>t1</td>
<td>-4.427</td>
<td>0.495</td>
<td>-0.064</td>
<td>-1.573</td>
<td>-0.323</td>
</tr>
<tr>
<td></td>
<td>(1.355)***</td>
<td>(0.893)</td>
<td>(0.292)</td>
<td>(0.567)***</td>
<td>(0.205)</td>
</tr>
<tr>
<td>t2</td>
<td>0.661</td>
<td>-0.084</td>
<td>0.015</td>
<td>0.317</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(0.270)***</td>
<td>(0.149)</td>
<td>(0.048)</td>
<td>(0.124)**</td>
<td>(0.033)</td>
</tr>
<tr>
<td>t3</td>
<td>-0.030</td>
<td>0.002</td>
<td>-0.001</td>
<td>-0.018</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.017)*</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.008)**</td>
<td>(0.001)</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.250</td>
<td>-4.462</td>
<td>-31.128</td>
<td>-5.915</td>
<td>-9.315</td>
</tr>
<tr>
<td></td>
<td>(3.619)</td>
<td>(3.156)</td>
<td>(2.972)**</td>
<td>(1.726)***</td>
<td>(2.427)***</td>
</tr>
<tr>
<td></td>
<td>2,861</td>
<td>10,743</td>
<td>4,531</td>
<td>6,834</td>
<td>11,523</td>
</tr>
</tbody>
</table>

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Robust standard errors clustered by country
Results from Models 6.1 - 6.3 suggest that potential interveners are sensitive to the technological capacity of belligerents in a civil war system. The ‘risk profile’ for low-capability warfare is markedly different from guerrilla and conventional warfare. Regional hegemons, proximate countries, former colonies and members of a defence alliance are the most likely interveners in low-capability warfare. Interventions tend to occur early in a conflict and are triggered by the presence of a humanitarian crisis or fighting over gemstones. Overall, intervention in low-capability warfare is driven by events domestic to the civil war. Internally displaced persons, for example, are not important intervention triggers in guerrilla and conventional warfare. Scholars such as Alex de Walle have argued that foreign states are reluctant to incur high costs to protect civilians and deploying over small areas in circumstances where combatants lack the ability for offense might be an attractive prospect for cost-minimising states. The European Union’s deployment to the DRC (Operation Artemis) reflects this tendency. While feted as a success, Operation Artemis stationed soldiers in a single city against ‘poorly disciplined, badly led and unpredictable’ Mai-Mai militias armed with automatic weapons and grenades. One thousand four-hundred soldiers, eight light tanks, Mirage ground attack aircraft, APCs and two ‘Gazelle’ attack helicopters were able to successfully deter attacks from six different factions vying for control of Bunia. As Miskel and Norton conclude, ‘for all its success, the EU effort involved a very small number of troops in a small geographic area’. Paul Williams notes that the initial African Union deployment to Darfur in 2004 was ‘so tiny it could only cover a fraction of Darfur and protect only a tiny percentage of the population’ and that ‘political preferences played a greater role in this decision than technical capability’.

As predicted, the distance of fighting from the capital city is significantly related to the probability of a foreign state deploying soldiers. As fighting gets closer, the chances increase and movements close to the capital have larger effects. A p-value less than 0.001 indicates that we can be better than 99% confident that these results

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22 Waal, ‘Darfur and the Failure of the Responsibility to Protect,’ Pg 1041.
23 Miskel and Norton, 'The Intervention in the Democratic Republic of Congo,' Pg 9.
24 Ibid, Pg 8.
25 Ibid, Pg 11.
are not the product of random error. Results in Model 6.1 are robust to a number of sensitivity checks. There are four outlying cases where intervention was not predicted but occurred: Tanzania and Uganda’s deployments in Liberia, the United Kingdom’s 2000 deployment in Sierra Leone and Libya’s 2001 deployment in the Central African Republic. Tanzania, Uganda and Libya are outliers because these states intervened in conflicts a long way from their borders in wars with which they had little connection. Uganda and Tanzania deployed in Liberia after a peace agreement between the transitional government and the NPFL stipulating that the Nigerian military presence in the country (12,000 soldiers) be diluted with neutral parties. Cultivating regional allies with an eye to diamond mining is thought to have motivated Libya’s intervention in the Central African Republic. The United Kingdom’s mission to Sierra Leone is an outlier because it occurred so late. The chances of intervention drop off quickly in low-capability warfare yet Britain deployed in the tenth year of conflict. Removing these cases, however, does not affect the significance of the ‘distance from the capital’ variable and the coefficient increases (sig < 0.001, b = -0.814). Respecifying the dependent variable does not change the results. A dichotomous variable indicating whether conflict came within 25km of the capital during the given conflict year (used in Chapter 4) was significant at the 0.001 level (b = 2.427, sig < 0.001). When conflict encroaches upon this zone the chances of intervention increase by 11 times. Indeed some governments seem to be aware of the potential for fighting in the capital to trigger intervention. According to Gerard Prunier the Rwandan government was unhappy with the deployment of French and Belgian soldiers in 1990 in a non-combat status against the RPF:

‘so in order dramatise the perceived gravity of the situation, it staged a fake attack on Kigali by ‘enemy troops’ during the night of 4-5 October. Beginning at 1am, shooting started in the capital, lasting with varying intensity till around 7am. Thousands of shots had been fired, but, miraculously there was not a single casualty and there was very little damage to buildings. The international press were deceived and the French ambassador Georges Matre duly reported ‘heavy fighting in the capital’, thereby achieving the desired effect in Paris’.27

After the ‘battle for Kigali’ France increased its troop commitment to 600 and Zaire intervened to get back in favour with the French and Belgians. A linear specification

of the ‘distance from the capital’ variable is also statistically significant (b = -0.007, sig = 0.024). The findings remain robust if the sample is split into low arms importing states and high arms importing states. Foreign intervention is significantly and inversely related to the distance of fighting from the capital city in low arms importing conflict years. The chances of intervention are unrelated to the distance of fighting from the capital in higher capability conflict years. Not one of the 29 foreign interventions in high arms importing conflict years occurred within 25km of the capital. Sixty-four percent of interventions in low arms importing years occurred within 25km of the capital.

How strong is the effect of a threatened capital on the chances of intervention and how does it compare to other independent variables? A first year low-capability conflict at the mean distance of 156km from the capital city (5.01728 on the logarithmic scale) has a very low probability of intervention – just 0.4%. With all other variables set at their mean values (and dichotomous variables at their mode) moving to within 1km of the capital city’s CBD (representing 65% of a 1 standard deviation decrease) increases the probability of military intervention to 5.4%. The pull of a ‘battle for the capital’ is greater than the obligations ensconced in a defence alliance, which raises the probability to 2.1%, the allure of gemstones in the conflict zone, which raises the probability to 1.7%, or the self-styled responsibilities of being a regional hegemon, which increase the probability to 3.3%. Increasing the level of internally displaced persons by the same magnitude (65% of 1 standard deviation) raises the probability to 3.5%. Some variables, however, do have a much larger effect. Colonial obligations are a powerful motivation to send soldiers abroad, increasing the probability to 33%. Intervention is most likely in the first year of war and drops off rapidly until a small rise at about 10 years. Figure 6.4 shows the effect of time on the probability of intervention in the first 15 years of conflict.
There are a number of potential explanations for the pattern in Figure 6.4. Aydin argues that ‘the timing of civil war intervention is closely associated with the war’s intervention history… States become hesitant and wait for longer periods to take action in civil wars in which interventions that have failed to influence combatant behaviour have been attempted by other states’. 28 Perhaps the preference for early intervention in low-capability warfare reflects the lack of intervention by other states and the paucity of information on the likely success of conflict resolution efforts. In this case the relationship between time and the chances of intervention in Model 6.1 is substantive and reflects learning processes in intervention decision-making. However, it is strange that the same relationship is not present in conventional and guerrilla warfare. It is possible that the speed at which fighting approaches the capital in low-capability warfare forces states to intervene earlier than in conventional and guerrilla warfare (see Chapter 4). For the present analysis it is sufficient to note that the effect

Sierra Leone’s civil war is a useful illustration of the findings in Model 6.1. If we take 1991 as a baseline year where the average probability of intervention was 1.6%, we can see how changes in the distance of fighting from Freetown affected the probability of foreign states deploying.\(^{29}\) We can compare the effect of conflict geography in low-capability warfare with the effect of conflict geography in conventional warfare by using the coefficient extracted from Model 6.2.

**Figure 6.5 - Changes in Probability of Military Intervention in Sierra Leone’s Civil War, Low-Capability and Conventional Warfare**

Changes in the distance of fighting from Freetown, especially changes very close to Freetown, induce substantial fluctuations in the chances of outside intervention. As the fighting comes within 10km, the probability jumps to around 25% in 1997, 1998 and 1999. If we were to imagine that Sierra Leone’s conflict was fought conventionally, the effect predicted by Model 6.2 is much smaller, rising to a

\(^{29}\) The average predicted probability for Sierra Leone in 1991 was obtained by averaging the predicted probabilities of military intervention for all potential interveners during that year.
maximum of 2.2% in these years. For reference, Figure 6.6 shows the predicted probability of Nigerian and Guinean intervention in Sierra Leone with all control variables factored in. Patterns in the movements of predicted probabilities are more important to observe than the numbers themselves. Logistic regression of ‘rare events’ such as military intervention tend to understate the probability of an event occurring.30

**Figure 6.6 – Predicted Probability of Intervention in Sierra Leone’s Civil War**

extracted from Model 6.1

As Chapter 5 discussed, war in Sierra Leone started when the Revolutionary United Front (RUF) attacked towns near the Liberian border in 1991. Nigerian soldiers were stationed in Sierra Leone before 1991 under the auspices of the ECOMOG mission to Liberia (see Chapter 8). Freetown was a garrison for ECOMOG troops and an airbase for Nigerian Alpha jets. Nigeria and Guinea acted quickly to prevent conflict spreading from Liberia into Sierra Leone. Nigerian soldiers guarded installations in Freetown and released soldiers of the RSLMF to fight the RUF. Guinea, also a member of ECOMOG, deployed soldiers to combat the RUF in the east of Sierra

30 Gary King and Langche Zeng, 'Explaining Rare Events in International Relations,' *International Organization* 55, no. 3 (2001): Pg 137.
Leone. While the fighting was far from Freetown in 1991 both the Nigerian and Guinean interventions may reflect the preference for states to intervene early to stamp out nascent rebellions while the military capacity of insurgents is low. That the early fighting focused around the diamond-mining areas of eastern Sierra Leone may also have triggered Guinean intervention to protect these crucial sites of government revenue. It is, however, very difficult to say for sure. It is unlikely, however, that either the Nigerian or Guinean interventions were motivated by the opportunities to profit from diamond mining. As Adebajo argues, rent seeking opportunities for Nigerians were far more lucrative (and comparatively less dangerous) in Nigeria.

Sierra Leone’s east and south were the epicentres of conflict from 1992-1994, over 100km from Freetown. The RUF made rapid gains in 1995 and threatened the gateway villages of Waterloo and Newtown, effectively ‘besieging’ Freetown. The RUF advance correlates with a spike in the probability of foreign intervention in Figures 6.5 and 6.6. No foreign country deployed in 1995 that was not already involved in Sierra Leone, although Nigeria and Guinea dispatched reinforcements in response to the RUF gains.

The RUF’s advance on Freetown was halted by the intervention of private security companies. The National Provisional Ruling Council (NPRC) contracted Ghurkah Security Guards (GSG) to train the RSLMF in counter-insurgency in February 1995. The GSG went into combat against the RUF but its commander, Robert Mackenzie was killed in late February, apparently in cahoots with the RSLMF, and GSG withdrew. The NPRC contracted Executive Outcomes (EO) in May 1995, a collection of former South African, Angolan and Namibian soldiers (with combat experience in the Angolan civil war) for $15 million to push the RUF out of Freetown.

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31 David Keen, Conflict and Collusion in Sierra Leone (New York: Palgrave, 2005) Pg 87.
32 Adekeye Adebajo, 'Mad Dogs and Glory: Nigeria's Interventions in Liberia and Sierra Leone,' in Gulliver’s Troubles, ed. Adekele Adebajo and Abdul Rauuf Mustapha (Scottsville: University of Kwa-Zulu-Natal Press, 2008), Pg 192. Michael Nest also argues that profiteering was not a motivation for Zimbabwe’s initial intervention although it developed as a reason to continue deploying as the war dragged on. Michael Nest, 'Ambitions, Profits and Loss: Zimbabwean Economic Involvement in the Democratic Republic of Congo,' African Affairs 100, no. 400 (2001).
33 Lansana Gberie, A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone (London: Hurst, 2005) Pg 91.
34 Ibid.
and re-capture the mining districts in the east.\textsuperscript{36} EO brought with them three attack helicopters (two M117’s and one Mi-24 Hind) and with the assistance of Nigerians and Guineans, inflicted a series of crushing setbacks on the RUF.\textsuperscript{37} Newly elected president, Tejan Kabbah, could boast of controlling much of Sierra Leone’s territory by 1996. EO demonstrated how a small, well armed and organised injection of conventional force can have a large impact on military outcomes in low-capability warfare. As the fighting moved back into the countryside the demand for foreign intervention decreased again.

A rouge group of officers from the RSLMF attacked the capital in mid-1997 and, in a series of battles, expelled the few hundred Nigerian troops still based in Sierra Leone under a defence pact.\textsuperscript{38} Under the leadership of Major Johnny Paul Komora, the Armed Forces Revolutionary Council (AFRC) invited the RUF into Freetown. RUF fighters ‘poured into the seaside capital and took up strategic positions’.\textsuperscript{39} Nigerian soldiers re-grouped at Lungi airport, just to the north,\textsuperscript{40} and immediately shelled the RUF/AFRC positions in Freetown. An attempt to capture positions inside Freetown failed on May 31 and 300 Nigerians were captured.\textsuperscript{41} By July the Nigerians had deployed 3000 soldiers just outside of Freetown and occasionally shelled the city from land and sea.\textsuperscript{42} Guinea also contributed military contingents and ECOWAS eventually endorsed the intervention.\textsuperscript{43}

ECOMOG forces in Sierra Leone based their military strategy heavily around, firstly, capturing Freetown and then protecting it from being re-captured by the RUF.

\textsuperscript{36} Most EO soldiers come from South Africa’s 32\textsuperscript{nd} Battalion which was used to ‘spearhead’ its destabilisation program in Southern Africa. Many soldiers saw extensive combat in Angola. Howe argues that EO’s military effectiveness comes largely from its ‘force multiplier effect’. EO’s training and intelligence gathering services enhance the existing capabilities of the contracting party. See Herbert Howe, ‘Private Security Forces and African Stability: The Case of Executive Outcomes,’ \textit{The Journal of Modern African Studies} 36, no. 2 (1998): Pg 311, 16-17. For a less sanguine interpretation see David J Francis, ‘Mercenary Intervention in Sierra Leone: Providing National Security of International Exploitation?’, \textit{Third World Quarterly} 20, no. 2 (1999), Gberie, \textit{A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone} Pg 92.

\textsuperscript{37} Gberie, \textit{A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone} Pg 93.

\textsuperscript{38} Ibid, Pg 95.

\textsuperscript{39} Ibid, Pg 101.

\textsuperscript{40} Ibid, Pg 96, 111.

\textsuperscript{41} Ibid, Pg 111.

\textsuperscript{42} Ibid, Pg 112.

‘Operation Sandstorm’ involved 10,000 Nigerian soldiers and members of Sierra Leone’s Civil Defence Forces (CDF), local militias initially formed to protect villages and communities. 44 ‘Sandstorm’ commenced with CDF attacks on AFRC forces throughout the countryside, including the diamond mining areas, to draw the ‘bulk of the People’s Army away from the capital’. 45 On February 12 1998, after a two week battle, ECOMOG ejected the AFRC/RUF from Freetown. One bottleneck along the thin strip of land passing through the towns of Newtown, Hastings and Waterloo constitutes the only land exit from Freetown. ECOMOG did not close off this exit and allowed the RUF/AFRC to escape with many of their weapons intact. One Sierra Leonean soldier fighting with ECOMOG noted that:

‘As we were not fighting against individuals but the idea to restore the democratically elected government of President Kabbah, we were not interested in killing them or capturing them alive but to force them out of power and out of the seat of power. And about 5pm that day [the day of the retreat] we totally abandoned the peninsula road, which was the only route out of the city, and then they evacuated with their forces’. 46

Nigerian soldiers avoided counter-insurgency after the capture of Freetown. Hutchful argues that ‘the very nature of the conflict in Liberia and Sierra Leone placed conventional armed forces in extremely ambiguous and dangerous situations’. 47 Gberie noted that ‘Nigerian ECOMOG troops, who completely lacked counter-insurgency training, failed dismally to pursue the rebels to their hide-outs, preferring conventional onslaughts against towns like Makeni and Kabala’. 48 ECOMOG appeared to have settled for a military stalemate by 1998 and was ‘largely content for the local civil defence force (CDF)... to do most of the fighting.’ 49 ECOMOG did, however, defend the diamond-mining regions. RUF commander Isay Sesay noted in 1998 that ‘I led the troops in the attack on Koidu Town, attacking the enemy at 0600 hours. They [ECOMOG] put up a strong resistance using their four mechanised

44 Gberie, *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone*  Pg 116.
45 Ibid.
46 Keen, *Conflict and Collusion in Sierra Leone*  Pg 218.
48 Gberie, *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone*  Pg 122.
49 As cited in Keen, *Conflict and Collusion in Sierra Leone*  Pg 224.
battalions deployed to defend Kono and its diamonds'. 50 Nigeria suffered a substantial defeat in the battle for Kono and abandoned up to 50% of their arms.51

The RUF/AFRC made rapid advances against the ECOMOG and CDF forces after the Kono defeat and the RUF attacked Freetown for a third time in January 1999. According to Gberie, ECOMOG knew of the planned RUF attack two weeks in advance ‘but chose not to put up resistance’.52 The Nigerian military used its ‘heavy artillery, naval guns and aircraft’ to counter-attack the advancing rebels in central Freetown and was able expel the RUF.53 Spokesman for the Nigerian president, Mohammed Haruna, stated after the battle for Freetown, that ‘the idea is to fortify the place [Freetown], then dialogue... there is no way you can clean up the whole country’. 54

It was the possibility of a fourth attack that provoked the United Kingdom to intervene in May 2000. A Guardian report authored by Ewen MacAskill and Richard Norton-Taylor noted that the British decision to deploy soldiers was taken amidst ‘confused, chaotic and fast-moving background’.55 A ‘panic stricken’ UN report predicting an impending RUF attack on Freetown ‘galvanised’ the decision-makers to take ‘the lead in the defence of Freetown’.56 Dorman writes that, like Nigerian intervention, British intervention in Sierra Leone was triggered by the RUF’s movements towards Freetown and the humanitarian catastrophe such an assault entailed. He notes that in May 2000, ‘it seemed that the RUF were now marching on Freetown and that there was no credible force in their way. It was hardly surprising that memories of the indiscriminate massacre of civilians in Freetown by the RUF were causing fear and panic to spread amongst the civilian population’.57 Williams argued that ‘while in hindsight certain individual reports may have exaggerated the

50 As cited in ibid, Pg 225.
51 Ibid, Pg 221.
52 Gberie, A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone Pg 126.
53 Ibid, Pg 131.
56 Paul Williams, 'Fighting for Freetown: British Military Intervention in Sierra Leone,' Contemporary Security Policy 22, no. 3 (2001): Pg 153..
57 Andrew Dorman, Blair's Successful War: British Military Intervention in Sierra Leone (Surrey: Ashgate, 2009) Pg 69.
immediacy and degree of the threat to Freetown, given the RUF’s atrocities in January 1999 and its increasingly flagrant breaches of Lome, there is no doubt that a significant threat existed’. 58 John Kamphner, in his history of ‘Blair’s’ Wars’ writes that:

‘Acting on military intelligence that Freetown was about to be taken again, Geoff Hoon, the new defence secretary, and [Robin] Cook persuaded Blair that troops should be sent in... But at the Ministry of Defence and Foreign Office nobody was clear on what the actual remit was.’ 59

The British intervention was designed to ‘secure key ground around Freetown and the airport’ and British soldiers soon engaged the RUF in a battle just outside Lungi international airport. 60 Connaughton argues that ‘Operation Palliser’ was an application of the ‘Glass of Water Strategy’ that ‘envisages light forces deploying rapidly so as to be used metaphorically as a glass of water to douse an early fire, thus obviating the need for a massive fire brigade-sized response’. 61 It can hardly be said that by 2000 the war in Sierra Leone was in its ‘early’ stages, but the application of a small conventional force in a strategically crucial area paid large dividends.

Conventional and guerrilla warfare have different risk profiles. Proximate states, former colonies and allies to a defence pact are the most likely interveners, although regional hegemons play a smaller role. Intervention triggers are vastly different. Battle location plays no appreciable role. As was argued in Chapter 2, the location of battle in conventional warfare depends upon the perceptions of a rival commander’s likely course of action and is not predictable by recourse to economic geography. As pitched battles are distributed at distances near and far from the capital, so foreign states intervene at distances near and far to the capital. Moreover, in at least one of the cases where intervention does correlate with a battle for the capital the intervening state believed it was deploying in a low capability conflict. When the second Congolese war began in August 1998, Zimbabwe dispatched 10 senior military officers on a fact-finding mission to ‘assess the situation there’ 62 that did not report

58 Williams, ‘Fighting for Freetown: British Military Intervention in Sierra Leone,’ Pg 153.
60 Dorman, Blair's Successful War: British Military Intervention in Sierra Leone Pg 2.
back before alarming predictions were made that Kinshasa was days from capture.\textsuperscript{63} Zimbabwe dispatched soldiers to Kinshasa as rebels were investing the outer suburbs of the capital. Zimbabwean decision-makers believed that ‘the force threatening Kinshasa was only a rag-tag group of dissidents’ and ‘it was widely assumed that this would be a temporary military expedition lasting no more than three weeks’.\textsuperscript{64} Only 600 soldiers were initially deployed to protect Kinshasa, the ‘embodi[ment of] the legal and sovereign government of the DRC in strategic terms’ and by relieving Kinshasa from the rebel threat, Zimbabwe believed it held the ‘political trump card’ in any future negotiations.\textsuperscript{65} As it emerged that the force threatening Kinshasa was not a ‘rag-tag’ group of rebels but a 10,000 strong force backed by regular Rwandan and Ugandan soldiers, Zimbabwe reinforced and by 1999 its commitment had ballooned to nearly 12,000 soldiers deployed deep in the Congolese countryside.

International rivalries and alliance patterns are more closely correlated with intervention than the geography of civil war. States with a recent history of military posturing or combat are more likely to dispatch soldiers to support a rebellion in a conflicted state than dyads with a history of peace. Neighbouring states use dissent in a rival country as a low-cost method of realising geopolitical goals. Rwanda twice exploited (and orchestrated) mutinies in the DRC as cover for an invasion force. Such intervention, however, often activates a network of alliances and rivalries (which can include non-state actors), triggering counter-intervention. Angola rebuffed Rwanda’s second invasion of the DRC in 1998, in part, because of a perceived closeness between UNITA (the Angolan government’s arch rival) and Rwanda.\textsuperscript{66} Ugandan support for RCD rebels in the same conflict provoked Sudanese support for the Congolese government. Uganda and Sudan shared an enduring rivalry over cross border support for insurgent movements in their respective countries. Cuba’s decision to rebuff South Africa’s invasion of Angola is another good example. Although Angola was a Cold War ally of Cuba, according to Fidel Castro, it was South Africa’s dispatch of 3000 soldiers and armour to overthrow the MPLA government that


\textsuperscript{64} Rupiya, ‘A Political and Military Review of Zimbabwe's involvement in the Second Congo War,’ Pg 94.

\textsuperscript{65} Ibid, Pg 98.

\textsuperscript{66} See Turner, ‘Angola’s Role in the Congo War.’
provoked intervention. He commented that ‘when the invasion of Angola by regular South African troops started on 23 October, we could not sit idle. And when the MPLA asked us for help, we offered the necessary aid to prevent Apartheid from making itself comfortable in Angola’. Results from Model 6.2 suggest that the stakes must be high to trigger intervention in conventional warfare. An opportunity to destabilise a rival, to overthrow an enemy, to protect an ally, or preserve a friendly regime are causes for which states are willing to endure the substantial costs of sending soldiers to fight in a conventional conflict.

Chad’s civil war from 1982-1990 is a useful illustration of the findings in Model 6.2. Table 6.7 charts the predicted probabilities of French intervention in the Chadian civil war alongside the distance of fighting from Ndjamena. Peaks in the probability of intervention are not related to the location of battle relative to Ndjamena. If anything, as the conflict moves further from Ndjamena, the more likely intervention seems to become.

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68 In the BK coding Chad’s war had evolved from guerrilla warfare to conventional warfare by 1980.
Hissene Habre fought his way to power in Ndjamena in 1982, ousting the Transitional Government of National Unity (GNUT). Figure 6.7 shows two peaks of relatively high intervention probability during Habre’s reign, in 1983 and 1986. France deployed soldiers to Chad in support of Habre in both these years and the interventions are worth examining to illustrate some of the differences between intervention triggers and strategy in conventional civil wars as compared to low-capability civil wars.

French intervention was designed to protect Ndjamena from rebel capture on both occasions. However, France could not wait until the fighting directly threatened the capital due to the military capabilities at the disposal of their rivals, especially Libya. Operation Manta, as the 1983 intervention was codenamed, was triggered by the capture of Faya Largeau in the far north of Chad (over 700km from Ndjamena) by the GNUT in late July 1983. From 1982, the GNUT benefited from substantial Libyan military assistance including multiple rocket launchers (Stalin Organs), SAM-7 ground to air missiles and tons of light weapons. This support included 3000 Libyan
regulars backed by heavy artillery, T-55 tanks, and air support by 1983. Faya-Largeau fell to the GNUT forces on June 24th. President Mobutu of Zaire was the first to deploy soldiers on July 3. Mobutu’s army, however, lacked the offensive capacity to confront the Libya-GNUT alliance and the 2000 Zairian paratroopers were used to defend the capital, freeing up Chadian soldiers to move to the front line. The GNUT captured Abeche on July 6th, over 600km from Ndjamen. Habre’s forces (led by the president personally) counter-attacked and had re-captured Abeche and Faya-Largeau by the end of July. Libya then committed 11,000 soldiers, hundreds of T-55 tanks and 80 combat aircraft to the re-capture of Faya-Largeu. The GNUT were able to muster another 5000 infantry for the assault. Roughly 5000 of Habre’s soldiers remained in Faya-Largeau to resist the advance. Habre’s soldiers retreated from Faya on August 10th, unable to withstand the onslaught of Libya’s armour and air-strikes. France announced that it would assist the Chadian government a day prior to the fall of Faya and deployed 3500 soldiers and Jaguar jets in ‘Operation Manta’ – the largest French deployment since the Algerian war.

France intervened during the decisive battle for the strategic town of Faya Largeau and based their strategy on minimising French exposure to battle while targeting where the GNUT-Libyan forces were strongest (their air power) and Habre’s National Army of Chad (FANT) were weakest (their vulnerability to air power). While a small town (less than 10,000 inhabitants) and a long way from Ndjamen, Faya-Largeau was a government stronghold and a ‘gateway’ to roads accessing south of Chad and Ndjamen. As such it was a pressure point for any mechanised army aiming to attack Ndjamen (again, this correlates well with the replication of Buhaug and Rod’s study in Chapter 4). France intervened before the fall of Faya-Largeau to deter Libyan and GNUT forces from rapidly pushing south on Ndjamen. Any intervention needed to be early as Libyan amour, with air support, would rapidly descend upon Ndjamen once the roads were opened from Faya-Largeau. Large, pitched battles in the Chadian countryside also communicated important information to France about the GNUT’s

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69 Zairian soldiers are reported to have engaged in more looting than battle.
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military capabilities and foreign backers. The battles for Faya-Largeau and Abeche involved 20,000 soldiers and modern weaponry. Harbre alone lost 700 dead.\(^{73}\) Libya showed its hand by supporting GNUT insurgents with armour, soldiers and air strikes (the United States were conducting air surveillance over Chad during the 1980s and were heavily involved in convincing the French to intervene). As Pollack argues ‘the size and firepower of the Libyan intervention caused Habre to recognise that the FANT could not hold Ndjamenya without assistance’.\(^{74}\) Indeed, in a very similar situation in 1986 ‘Habre used the size and power of the... Libyan thrusts to convince the French to re-deploy 2000 troops and several squadrons of Jaguars to Chad’.\(^{75}\) According to Burr and Collins, ‘Mitterand [the French President] could not disregard this persistent and unwelcome Libyan invasion… Further, France could not abandon Francophone Africa which had called out for French intervention – it was impossible to abandon France-Afrique, the mystique of General de Gaulle, and most important, the strong and enduring cultural ties between France and Africa’.\(^{76}\)

France was able to construct what it believed to be a low-cost military strategy with a good look at Libyan military capabilities. France wished to avoid provoking a land war with Libya that would incur domestically unpopular casualties in the ‘wastelands’ of Chad. To this end, Operation Manta partitioned Chad along the 16\(^{th}\) parallel, or ‘red line’. France did not fortify the line, choosing instead to punish transgressions with offensive action, as it did in 1986.\(^{77}\) French soldiers also deployed to defend Abeche in the east and supported FANT units with air-support during counter-attacks in 1983 and 1984.\(^{78}\) The location of the ‘red line’ was chosen specifically to keep French forces, FANT forces and Ndjamenya outside of Libya’s air range.\(^{79}\) Had the line been established further south (and France intervened later) their forces and the capital were exposed and vulnerable to Libyan Mirage fighters, Su-22 fighter-bombers and Tu-16 bombers.\(^{80}\) In a conventional civil war, foreign states have the

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\(^{74}\) Ibid.
\(^{75}\) Ibid, Pg 389.
\(^{77}\) Azevedo, *Roots of Violence: A History of War in Chad* Pg 142.
incentive and information to deploy while fighting remains in the countryside. It was France’s rivalry with Libya and the outcome of large battles over small but strategic towns that triggered French intervention, not the proximity of fighting to Ndjamena. France also deployed substantial offensive capacity to re-buff any continued assault by a military force with a level of conventional offensive capacity much higher than the FANT they were supporting. Indeed France’s intervention ‘evened’ the playing field by neutralising an important part of the GNUT-Libyan conventional offensive capacity – air power. Operation Manta was not so much physical defence of the capital city, Ndjamena, but the deployment of offensive capacity in a game of ‘chicken’.

Like conventional warfare, intervention in guerrilla warfare is largely unrelated to the distance of conflict from the capital. The risk profile for guerrilla warfare is similar to conventional warfare. Proximate states, former colonial powers, regional hegemons and states with a recent history of military confrontation are likely interveners. Foreign military intervention by a rival raises the chances of counter-intervention (in this case by over thirty times) and especially if the target state is a Cold-War ally.\(^{81}\) Interveners tend not to deploy when the government has a substantial military advantage. Any state considering military support for an insurgency must consider the additional costs of overcoming the government’s military superiority. As an insurgency increases in strength, the differential between government and insurgent military capabilities decreases, lowering the costs of intervention for foreign states and increasing the chances of success. Often foreign states support an insurgency with weapons first, then send in soldiers when the government actor is weak. For states considering support for the government, it cost-ineffective to risk casualties in a fight the government looks like winning anyway. It is only as insurgents pose a grave threat to the survival of a regime that foreign states send soldiers to fight alongside the government.

Offsetting Somali/Cuban interventions in Ethiopia during 1977 are a typical example of the dynamics in Model 6.3. However, this case also alerts us to the possibility that

foreign intervention can change the type of warfare, in this case from guerrilla to conventional. Obviously there is an extent of measurement error in the KB coding of warfare-type. This is unlikely to affect the results for low-capability warfare as it is difficult to imagine foreign interventions causing low capability warfare, but it may affect the results for conventional and guerrilla warfare. Nonetheless, the basic insights remain. Foreign states are likely to wait for opportunities to utilise their advantage in conventional offense even in guerrilla warfare, opportunities that often correlate with the entry of another foreign power. Figure 6.8 charts the average probability of military intervention in Ethiopia’s war with WSLF extracted from Model 6.2.

*Figure 6.8 – Probability of Military Intervention in Ethiopia’s War with the WSLF, Extracted from Model 6.2*  

![Figure 6.8](image)

Ethiopia and Somalia fought border wars in 1961 and 1964 and, although they refrained from hostilities until 1977, the two countries remained rivals.  

82 The average probability of intervention was calculated by taking the mean value of all predicted probabilities produced by Model 6.3 for the Ethiopian war with the WSLF during the given year.

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it as a Somali region under foreign (Ethiopian) domination and demanded self-
determination for it’. 84 WSLF insurgents had conducted a low-level guerrilla
campaign from the early 1960s for the independence of the Ogaden. Somalia had
sponsored Ogadeni insurgents since 1963, but from 1976 the WSLF enjoyed higher
levels military support from President Siad Barre. 85 Somalia initially provided the
WSLF with light weapons and logistical support at a time when Ethiopia was reeling
from a bloody revolution that overthrew the monarchy of Haile Selassie and installed
the Communist Party (popularly known as the Derg) led (eventually) by Major
Mengistu Haile Mariam. Insurgencies in Eritrea and Tigray had dragged military
resources away from the southern frontier with Somalia. Consequently the WSLF
found success in 1977 conducting raids on police stations, railways and roads.
Although the main garrison towns of Dire Dawa, Harar and Jigiga could not be
captured, by mid 1977 it was estimated that the WSLF controlled 60% of the Ogaden
region. 86

Inspired by the WSLF’s success, Somalia launched a full-scale invasion of the
Ogaden region in July 1977, complete with Soviet tanks, aircraft and artillery.
Roughly 35,000 soldiers from the Somali National Army (SNA), 250 tanks, 300
APCs, 200 pieces of mobile artillery and the Somali Air Force supported an estimated
15,000 WSLF troops. 87 The invasion force moved to attack the less well defended
south and east. Ethiopia’s military were concentrated in the Dire Dawa, Harar, Jijiga
‘triangle’ and ‘gateway to the major urban and industrial centres of Eastern
Ethiopia’. 88 The invaders were initially successful in capturing 350,000 square
kilometres with an ‘offensive strategy based on seizing the initiative and exploiting
the surprise factor’. 89 Only the garrison towns of Dire Dawa, Harar and Jigiga stood in
the way of full control of the Ogaden region by August 8th 1977. Until the Ethiopian
garrisons in these cities could be destroyed, however, the Somalis were vulnerable as
their rapid advance had stretched their supply lines. The Somalis attacked Dire Dawa

86 Adam Lockyer, ‘Opposing Foreign Intervention’s Impact on the Course of Civil Wars: The Ethiopian
Ogaden Civil War, 1976-1980,’ *Referred paper presented at the Australasian Political Studies
87 Ibid, Pg 9.
89 Ibid, Pg 644.
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but were repelled with heavy casualties on August 17th.\textsuperscript{90} Somalia attacked Jijiga in August and throughout September the city changed hands twice before being captured on September 12\textsuperscript{th}.\textsuperscript{91}

In late September, following the defeat at Jijiga, the USSR commenced its mammoth sea and airlift of supplies to Ethiopia. Two South Yemeni armoured battalions were deployed and ‘considerably boosted Ethiopia’s firepower’ at the same time.\textsuperscript{92} Before the Somali invasion, the USSR had agreed to supply the Derg with military assistance (and by February 1978 the US declared it would supply Somalia with arms).\textsuperscript{93} Hitherto, the Ethiopian monarchy was a close ally of the United States and Somalia a recipient of Soviet weapons and advice.\textsuperscript{94} Supplies to the Derg included, eventually, 1500 Soviet advisors, 17,000 Cuban soldiers (that took active part in fighting against the SNA), 300 T-54 battle tanks and 300 artillery pieces.\textsuperscript{95} The first Cuban soldiers arrived in December 1977, increasing to 18,000 by February with ‘their own full gear including armoured cars and T-62 tanks’.\textsuperscript{96} Soviet and Cuban military assistance arrived after the Ethiopian army had looked increasingly able to defend the cities of Dire Dawa and Harar, but unable to expel the invaders. It was during the Ethiopian counter-offensive that Cuban soldiers and Soviet equipment proved invaluable – especially at the re-capture of Jijiga, which is estimated to have involved 75,000 Ethiopian soldiers and 7000 Cubans.\textsuperscript{97} Cuba’s military strategy was fundamentally offensive and designed to push the Somali forces back over the border and out of Ethiopia.

This brief example shows a couple of things. Firstly, guerrilla warfare is more likely to experience intervention when enmeshed in a web of regional and international rivalries. Otherwise, intervention is very rare. Somalia used the intensifying rebellions within Ethiopia and the success of the WSLF’s guerrilla campaign as an opportunity

\textsuperscript{90} Ibid, Pg 646.
\textsuperscript{91} Ibid, Pg 647.
\textsuperscript{92} Ibid, Pg 652.
\textsuperscript{93} Arnold, \textit{Africa: A Modern History} Pg 482.
\textsuperscript{94} A US Congressional Inquiry into aid to the Sellassie regime estimated that by the 1970s this amounted to more than $250 million per year. Ibid, Pg 479.
\textsuperscript{95} Lockyer, ‘Opposing Foreign Intervention's Impact on the Course of Civil Wars: The Ethiopian Ogaden Civil War, 1976-1980,' Pg 9.
\textsuperscript{96} Tareke, 'The Ethiopia-Somalia War of 1977 Revisited,' Pg 656.
\textsuperscript{97} Lockyer, 'Opposing Foreign Intervention's Impact on the Course of Civil Wars: The Ethiopian Ogaden Civil War, 1976-1980.'
to strike at a long-term rival and obtain the Ogaden territory it had so coveted. However, Ethiopia was a key piece on the Cold War chessboard and the intervention of Somalia led the USSR, South Yemen and Cuba to support their ally. However, the example also shows that the motivations for intervention in guerrilla and conventional warfare may be quite similar. War in the Ogaden morphed from a guerrilla to a conventional conflict that opened a window for foreign states to utilise their conventional offensive capabilities. The trigger for Cuban and South Yemeni intervention in this conventional phase of the war was, like the example of Chad discussed earlier, a major battle over a strategic garrison town in the countryside. This helps us explain other interventions in guerrilla warfare such as the French intervention in Chad during 1978. Collins and Burr stated that:

‘Hitherto the fighting had been between mobile columns moving through the Sahara and Sahel with small arms. The government forces at Faya were now confronted by sophisticated heavy weapons – including anti-aircraft artillery and Libyan air cover and logistical support... The French could not ignore Malloum’s pleas for help after such a dramatic defeat. Over 2000 troops of the Force d’Intervention, accompanied by helicopters, Jaguar Jets, and Bruget reconnaissance planes, were rushed to N’djamena. The French established a defensive perimeter from Moussoro to Ati to protect Malloum and the heartland of Chad’. 98

In Ethiopia, as in Chad, large battles for Harar and Jijiga communicated important information both to the Ethiopian regime and its foreign backers about the demand for intervention and the possibility of exploiting advantages in conventional offense.

**Conclusion**

Foreign intervention in low-capability warfare is triggered by factors domestic to the conflicted state. When belligerents lack the ability to use heavy weapons, humanitarian crises, fighting over natural resources and, importantly, the distance of fighting from the capital are systematically related to the chances of intervention. Low-capability warfare offers outside states the opportunity to deploy a small number of soldiers in strategically important areas to capture and defend the ‘trump card’ in any future negotiations. In Africa this ‘trump card’ is often the capital city. Conflict

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geography plays a marginal role in explaining the timing of intervention in higher capability civil wars. Deployment costs associated with combating a militarily sophisticated opponent means the stakes must be commensurately higher. ‘High politics’, including rivalries, geopolitics and the activation of regional and global alliance networks are the more likely triggers of intervention in conventional and guerrilla warfare.
Chapter Seven
Empirics IV: The Liberian Civil War

This chapter tests the plausibility of two casual mechanisms. Does fighting occur and concentrate in Africa’s capital cities because military actors adopt a ‘strategy of exhaustion’ in low-capability warfare to exploit the advantages of conventional defence around the country’s most valuable areas? Do foreign actors intervene when governments and insurgents commit to decisive battles over resources with the belief that advantages in conventional offense can be exploited against belligerents armed primarily with light weapons, and that by controlling the most valuable areas, play ‘kingmaker’ in future negotiations?

Liberia’s civil war from 1989-1990 is a ‘most likely’ case for testing the links between low-capability warfare, fighting in the capital and foreign intervention. Both the Armed Forces of Liberia (AFL) and the National Patriotic Front of Liberia (NPFL) were lightly armed and poorly organised. Liberia was a ‘capital heavy’ state before the outbreak of war, and relied upon leveraging its sovereignty to obtain revenues. Fighting between the AFL and the NPFL concentrated and focused on the capital city, Monrovia, and the siege of Monrovia provoked Nigerian intervention in August 1990. Liberia is a useful case to test for links between the technology of rebellion, fighting in Monrovia and the reasons for Nigerian deployment.

The first section of this chapter describes Liberia’s economic geography and argues that Liberia was an archetypal ‘capital heavy state’. The causal link between fighting in Monrovia and the strategies of the NPFL and AFL is investigated over the period between December 1989 and August 1990. Results suggest that President Samuel Doe sought to exploit the advantages of conventional defence in a positional battle for Monrovia, knowing that Charles Taylor, leader of the NPFL, coveted the city and would have difficulty ousting the AFL. The second casual mechanism linking fighting in Monrovia with Nigeria’s intervention is then examined over the same time period.

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1 Acronyms used in this chapter have been re-stated in full for clarity.
2 As Chapter 5 discussed the war in Sierra Leone changed Liberia’s economic geography. As diamonds were increasingly traded between the NPFL and RUF insurgents, over the border between Liberia and Sierra Leone, they came to play an important role in sustaining Charles Taylor’s regime.
Results suggest that Nigeria avoided intervention whilst fighting was in the countryside, despite the motive and opportunity to deploy. Nigeria dispatched soldiers during the siege of Monrovia to exploit an advantage in conventional offense against the NPFL who lacked the defensive capability to resist and the offensive capability to recapture the city. Like Doe before them, Nigeria relied upon a ‘strategy of exhaustion’ to hold Monrovia - the ‘trump card’ in future negotiations. Both causal mechanisms are judged to be plausible. There are, however, a number of competing and intersecting mechanisms that, while they do not falsify the causal mechanisms of Chapter 2, help explain Nigeria’s intervention and may apply to other cases. What explains the correlation between fighting in Africa’s capitals and the deployments of foreign states can only be resolved with further case-study research.

Liberia’s Economic Geography

Liberia was an archetypal ‘capital heavy’ state before the NPFL invaded from Cote d’Ivoire in December 1989. Liberia’s political and economic history, from its ‘settlement’ to its civil war, is largely a history of Monrovia. Successive leaders compensated for a lack of domestic support by dealing international recognition, obtained by controlling Monrovia, on the global market to attract foreign corporations, tax trade from the main ports and procure loans and aid from the international community. Taxing the incomes and activities of the Liberian population was less important to the state coffers. What follows is a brief political history of Liberia followed by a more detailed history of Liberia’s economic geography.

Liberia’s physical geography can be divided into three belts. The coastal belt is low-lying, flat and stretches about 40km inland where it rises into rolling hills and dense rainforest then ‘abrupt’ low mountains and plateaus.\(^3\) No single ethnic group has dominated Liberian society. The Keppelle constitute around 20% of the population with significant minorities of Bassa, Dei, Gbandi, Geo, Glebo, Gola, Kissi, Krahn, Kuwaa, Loma, Mano, Mandingo, Mende and Vai.\(^4\) Mende and Mandingo also reside


\(^4\) Ibid.
in Sierra Leone and Guinea. Indigenous Liberia comprised of ‘small chiefdoms’, ‘segmentary lineage systems’ and other ‘small chiefdoms based on ruling families’.\(^5\)

**Figure 7.1 – Liberia\(^6\)**

Liberia was never a European colony, unlike most African states. It was, however, ‘settled’ by freed American slaves with the assistance of the American Colonization Society. These freed slaves, or ‘Americo-Liberians’, unified to form the Republic of Liberia in 1847 with its capital in Monrovia (founded in 1822).\(^7\) The True Whig Party (TWP), a coalition of Americo-Liberians, ruled from 1870 until 1980 as a ‘de-facto one party state’ distributing the benefits of office to a select group of family and


political allies. For the most part, they ruled in their own narrow interests and over a small portion of territory limited to Monrovia and other coastal enclaves. The TWP exercised little control over the hinterland until the 1940s. Taxation was irregular and punitive, administered by an army designed to extract resources and quash domestic opposition. The ‘majority of the indigenous population remained outside the settler economy, unaffected by decisions in Monrovia’.

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8 In the early history of Liberia, indigenous Liberians remained outside the state in Monrovia. Chiefs were charged with some taxation duties, but these contributed little to government revenues. Generally, chiefs were given the opportunity to tax their populations, and, so long as they returned a sum to the central government and kept their populations in check, could not expect any harassment from the government. President Edwin James Barclay, for example, declared that chiefs could retain 10% of the taxation they collected from their villages. William Reno, ‘Humanitarian Emergencies and Warlord Economies in Liberia and Sierra Leone,’ *United Nations World Institute for Development Economics Research Working Papers* August, no. 140 (1997): Pg 4. Dalton, ‘History, Politics and Economic Development in Liberia,’ Pg 581-82.


Under President William Tubman (1944-1971), the TWP extended their patrimonial system and governed the interior through a system of administrative divisions run by superintendents (county level), paramount chiefs (tribe level) and clan chiefs (clan level). Local-level administrative units were kept in check with a collection of perks and sanctions (including the use of violence) but retained a large degree of autonomy. As Reno writes, President Tubman created a ‘political alliance of strongmen with himself personally distributing access to state office that clients could convert into private gain in return for loyalty’. Tubman and his successor, William

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12 Map obtained from Google Maps Online, accessed 10 July 2010
13 Clapham, Liberia and Sierra Leone: an essay in comparative politics Pg 73.
14 Ibid, Pg 82.
15 Reno, ‘Humanitarian Emergencies and Warlord Economies in Liberia and Sierra Leone,’ Pg 5.
Tolbert (1971-1980), personalised the state around a network of elites bound by family ties and patronage. TWP policies had created a small but powerful class of Americo-Liberian and indigenous land-owners, civil servants and armed forces personnel by the 1970s whilst excluding the majority of Liberians from access to power and wealth.

Tolbert was overthrown by a military coup in 1980 led by Master Sergeant Samuel Doe, an indigenous Liberian from the Krahn ethnic group. Tolbert’s administration faced a number of crises in the late 1970s, including the deployment of Guinean troops in Monrovia to put down food riots in 1979. Doe promised a departure from the corruption of Americo-Liberian rule and, initially, he enjoyed widespread support. By 1984, however, a popular slogan in Liberia was ‘same taxi, new driver’. Doe ruled until the outbreak of war on Christmas Eve, 1989. Three sources of revenue, all dependent upon controlling Monrovia, have sustained Liberia’s state: taxing trade, concessions to foreign corporations, and international aid.

**Taxing Trade**

Liberia’s declaration of sovereignty in 1847 was partly motivated by the need to legitimise Monrovia’s taxation of goods moving across their borders. Early Liberia relied on ‘customs duties and port and harbour charges’ to remain solvent. J.J Roberts, the first president of Liberia, appealed to the American Colonisation Society that ‘we may give up all hopes of conducting the government successfully – as it can only be sustained by a revenue obtained from imposts’. Reverend Gurley, dispatched by the United States on a data collection mission in 1850, recorded that ‘the annual revenue of the government derived mainly from a six percent ad valorem

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18 Clapham, *Liberia and Sierra Leone: an essay in comparative politics* Pg 7.


20 J.J Roberts, ’Message of President Roberts,’ *African Repository: Published Monthly by the American Colonisation Society* XXVI (1850): Pg 204.
duty on imports, amounted from eight to ten thousand dollars’ or between 57% and 71% of revenues.\(^{21}\)

Taxing trade sustained governments into the 20\(^{th}\) century. US $15million was sourced from ‘customs and external trade taxes’ in 1960, accounting for around 45% of government receipts. Import duties alone accounted for 34% of revenue in 1967, 27.7% in 1969 and 28.2% in 1971.\(^{22}\) The majority of these goods arrived at, and departed from, the Free Port of Monrovia. In total, indirect taxes accounted for between 43% and 49% of revenues between 1967 and 1971.\(^{23}\) It was during the 1950s that Liberia’s ability as a sovereign state to register shipping under a ‘flag of convenience’ became ‘an important source of government revenue’, a practice that continued under the rule of Samuel Doe.\(^{24}\) Clapham argues that governments survived by ‘taxing the movement of goods across their frontiers’ and that money was ‘derived from national sovereignty and control of the state apparatus’.\(^{25}\) He goes on to say that, ‘almost every sector of the economy, apart from subsistence agriculture, depends directly or indirectly on foreign trade and the revenues which it provides’.\(^{26}\)

In contrast, taxation of the domestic population made up a tiny slice of government revenue, reflecting the impoverishment of most Liberians and the substantial up-front costs of extending state-infrastructure and modern agricultural methods to the hinterland. For example, ‘hut’ and ‘development’ taxes levied on the rural population accounted for just US$700,000, or 2% of revenues, in 1960.\(^{27}\)

**Foreign Corporations**

Foreign companies stimulated the imports and exports that generated taxation revenue at the ports and provided direct concessions and rents to Liberian governments. A concession deal with American multinational Firestone Rubber in 1927 was a


\(^{22}\) Clapham, Liberia and Sierra Leone: an essay in comparative politics Pg 135.

\(^{23}\) Ibid.


\(^{25}\) Clapham, Liberia and Sierra Leone: an essay in comparative politics Pg 102.

\(^{26}\) Ibid., Pg 101.

\(^{27}\) Dalton, 'History, Politics and Economic Development in Liberia,' Pg 576.
watershed moment. Firestone became Liberia’s ‘largest employer, taxpayer, and importer-exporter’ and ‘opened a ‘new phase in Liberian history in which national prosperity would increasingly depend on the success of foreign owned private enterprises’. Rubber-related industries accounted for 46% of revenues by the mid 1950s.

The importance of mining increased from the 1950s through to the 1980s and Liberia’s economy grew rapidly in the 1960s and early 1970s on the back of an iron ore boom. A team of American economists described Liberia as a ‘dual economy’ in 1960, consisting of a large but poor sector of subsistence agriculturalists and an ‘enclave economy’ dominated by foreign corporations. Iron ore accounted for over 70% of exports in 1970, and along with rubber and diamonds, constituted 90% of the export sector. Mining and quarrying made up between 20% and 35% of Gross Domestic Product (GDP) between 1970 and 1982. Rubber concessions and taxes on iron ore profits comprised 36% of revenues in 1967, 33% in 1969 and 28% in 1971. Firestone and the Liberian Iron Mining Company (LIMCO) were providing 52% of government revenues in 1979. Taxes on iron ore and rubber made up between 68% and 90% of all direct taxation revenue between 1970 and 1982, demonstrating both the relative value of foreign corporations to government revenues, and the relative poverty of other forms of direct taxation, such as income tax. Exports of primary commodities made up 52% of GDP in 1980, comparable to Angola, Iraq and Saudi Arabia.

29 In the original 1927 deal, Firestone was awarded a 6 year moratorium on tax and rent to the government. However, even after this period, revenues remained depressed and the Liberian government gained little until the Second World War when demand increased for rubber. Arthur Knoll, ‘Harvey S Firestone's Liberian Investment (1922-1932),’ Liberian Studies Journal XIV, no. 1 (1989): Pg 13.
33 Dalton, 'History, Politics and Economic Development in Liberia.'
36 Importantly these states export high-value petroleum related products, which Liberia did not.
President Samuel Doe, like his predecessors, relied upon foreign corporations for revenue.\textsuperscript{37} The Bong Mine venture generated $11.3 million in government revenue from royalties and taxes in 1988 despite being ‘a deficit year with a big loss’.\textsuperscript{38} Doe’s ‘corruption… [and] chaotic tax and investment policies’ resulted in steady economic decline. Iron exports were below 1980 levels by 1985 and companies were repatriating capital, particularly US dollars.\textsuperscript{39} LIMCO shut down in 1989, the National Iron Ore Company in 1985 and Bong Mining in 1988.\textsuperscript{40} In lieu of the big corporations, Doe contracted smaller organisations to exploit natural resources and pay concessions directly to him. Clandestine commerce in portable resources such as diamonds, gold and logs increased.\textsuperscript{41} Israel housed and trained paramilitary squads and operated the largest logging concession in West Africa\textsuperscript{42} in return for ‘reducing Israel’s diplomatic isolation’ and easing some of their concerns about illicit diamond links with Lebanon.\textsuperscript{43} US and British firms were also attracted to Doe’s offer of logging concessions in exchange for cash and military training.\textsuperscript{44}

\section*{International Aid}

Government spending was regularly buttressed by international aid. Americo-Liberian settlers were adroit at manipulating fears of slave trading in return for finance to purchase land from indigenous Liberians and ‘pacify’ tribes of the interior.\textsuperscript{45} Liberia faced revenue crises in 1871, 1906 and 1912, each of which was obviated by an international bail-out package.\textsuperscript{46} The 1912 loan of $1.7 million was remarkable in that it placed the Liberian government in receivership and turned over ‘collection of Liberia’s custom revenues, rubber taxes and head moneys’ to a consortium of

\begin{itemize}
\item \textsuperscript{37} Reno, \textit{Warlord Politics and African States} Pg 84.
\item \textsuperscript{40} Reno, \textit{Warlord Politics and African States} Pg 86.
\item \textsuperscript{41} Ibid., Pg 87.
\item \textsuperscript{43} Reno, \textit{Warlord Politics and African States} Pg 88.
\item \textsuperscript{44} Ibid.
\item \textsuperscript{45} Roberts, 'Message of President Roberts,' Pg 200, Taylor, \textit{The Firestone Operations in Liberia} Pg 6.
\item \textsuperscript{46} Sirleaf, 'The Liberian Economy on April 12, 1980: Some Reflections,' Pg 17,18.
\end{itemize}
American and European administrators. Initially this deal covered 91% of government revenues.

Most of Liberia’s major infrastructure was financed with grants or loans from the United States after the Second World War. Liberia’s international airport, Robertsfield, near Harbel, was built with US money. US grants also financed roads from Monrovia to the airport and into the interior, first to Ganta and then to Saniquelle in Nimba county. The US funded further road developments into the interior in 1951 and 1955 worth around $20 million. The Monrovia Free Port, Liberia’s second main piece of public infrastructure, was constructed with the assistance of lend-lease funds. Foreign borrowing did not decrease as the economy developed from the 1950s to 1980s. Liberia borrowed $90 million between 1950 and 1961 and debt repayments amounted to 90% of government revenue by 1962. Over $650 million in additional debt was accumulated in the 1970s for growing public spending, primarily concentrated in Monrovia. According to one estimate, up to 50% of the budget went to ‘the compensation of employees’ or the maintenance of allegiances through an ‘over bureaucratic’ public sector between 1964 and 1970. ‘General administration’ was the biggest ticket budget-item in the late 1960s and 1970s, outstripping spending on health, education and transportation and accounting for over one-third of expenditures.

Doe found he could combine anti-Libyan and anti-communist rhetoric with the promise of democratic reform to secure US aid. Liberia was the largest per-capita recipient of US assistance in Sub-Saharan Africa by the mid-1980s. The United States contributed half a billion dollars in economic and military aid from 1980 to 1986.

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49 Ibid, Pg 15.
50 Ibid.
51 Sirleaf, 'The Liberian Economy on April 12, 1980: Some Reflections,' Pg 5.
52 Ibid, Pg 18.
54 Jones, 'Economic Adjustment Programs Under Stand-by Arrangements With the International Monetary Fund: Liberia's Experience,' Pg 156.
including up to 4000 M-16 rifles, and is reputed to have constituted around one third of the annual budget. Doe used a substantial proportion creating the ‘Executive Mansion Guard’ and the ‘Special Anti-Terrorist Unit’. James Bishop, American Ambassador to Monrovia, noted that ‘we were basically subsidising the government. Each month we would be running around trying to pay for Liberia’s fuel imports and arranging bridging loans’.

United States support declined as news of Doe’s economic malfeasance, electoral fraud and human rights abuses spread. US aid had fallen precipitously by 1987 and had disappeared by 1988. Doe could no longer access loans from the World Bank, the International Monetary Fund or the Asian Development Bank. The collapse of US aid ‘abruptly and fundamentally weakened Doe’s regime’.

**Figure 7.3 – US Economic and Military Assistance to Liberia, 1946-1989**

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59 Reno, ‘Humanitarian Emergencies and Warlord Economies in Liberia and Sierra Leone,’ Pg 11.

60 As cited in Huband, *The Liberian Civil War* Pg 30.


62 Ibid.
Sovereignty is Liberia’s most valuable asset. Rulers have leveraged international recognition to legitimise the taxation of trade, contract foreign corporations, and garner international aid. Insofar as sovereignty was tied up with control of the capital Monrovia, controlling the capital city was Liberia’s most lucrative ‘point resource’.

**Causal Mechanism 1: Low-Capability Warfare and Fighting in Monrovia**

Can the fighting that reached Monrovia in 1990 be explained by a strategic decision to pull back and exploit the advantages of conventional defence? If so, was this decision based upon a perception of the NPFL’s inability to conduct conventional offensive manoeuvres and the economic value of the capital? Perhaps the fighting in Monrovia can be explained by alternative causal mechanisms. Rather than a strategic decision, it is possible that the location of fighting Monrovia can be explained by a rout of government soldiers in the countryside followed by some sporadic fighting in the capital. Perhaps the AFL were defeated and the NPFL fractured over how the spoils of office would be distributed. In both the latter cases, the location of fighting would have little to do with the strategic decisions of military actors, and more to do with intra-insurgency politics or a ‘mopping up’ operation. This section proceeds by detailing military events in Liberia from 1989-1990 followed by an analysis of Samuel Doe and the NPFL’s military strategies.

**Liberia’s Civil War, December 1989 – August 1990**

Charles Taylor and roughly 100 soldiers of the NPFL attacked a border post at Butaro in Nimba county on Christmas Eve, 1989, with the stated aims of removing Doe and restoring democracy to Liberia. Taylor was familiar with the perks of office from his time as the head of the General Services Agency when was accused of embezzling $900,000 in 1983. Taylor fled to the United States and was imprisoned awaiting extradition. After escaping and frequenting various prisons in West Africa he trained a small group of insurgents in Libya and Burkina Faso. Blaise Comparore,

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64 Huband, *The Liberian Civil War* Pg 16.
President of Burkina Faso, supplied the NPFL with weapons, rear bases, mercenaries and regular soldiers to settle an old score with Doe.\textsuperscript{65} Cote d'Ivoire also supported the NPFL to repay Doe for the murder of his son-in-law.

The NPFL attacked Kharmplay and Loguato near the border with Cote d'Ivoire on January 1 and 2, 1990.\textsuperscript{66} Government police and immigration officials were killed and some weapons were smuggled over the border.\textsuperscript{67} Blehwalley, Yorpea, Kpbali and Djukorway, all small towns in Nimba county, were attacked on the 14th and 15th.\textsuperscript{68} Kharmplay exchanged hands on January 14-26\textsuperscript{69} and US rangers were reported to be directing the AFL.

Two battalions of the AFL were belatedly sent to Nimba in a poorly disciplined attempt at counter insurgency. AFL soldiers lashed out at the civilian population, particularly Mano and Gio.\textsuperscript{70} Villagers were murdered and raped, their houses destroyed, their goats, rice and money stolen.\textsuperscript{71} Fighting in the bush suited the small, mobile NPFL as they raided villages, stole weapons, traversed the hilly and forested areas and provoked the AFL into retaliations against the civilian population. One AFL spokesperson commented - ‘let’s be realistic, you can’t always tell a rebel’.\textsuperscript{72} The 1st battalion, dominated by Doe’s Krahn, were not large enough, not well trained enough in counter-insurgency, and too poorly disciplined to contain the conflict.

Taylors ‘army’ of 127 had grown to ‘thousands’ within a few weeks.\textsuperscript{73} Gio and Mano were armed and undertook reprisals against members of the Krahn and Mandingo

\textsuperscript{65} Cohen, \textit{Intervening in Africa: Superpower Peacemaking in a Troubled Continent} Pg 132.
\textsuperscript{66} “Curfew and Coup Fever in Nimba”, \textit{West Africa}, 15-21 January 1990, Pg 44
\textsuperscript{68} ‘Liberia: Failed Coup,’ Pg 9558., It is unclear whether these rangers were directly involved in the fighting, although the US embassy in Monrovia denied any combat role. ‘Nimba Fighting Continues,’ \textit{Africa Research Bulletin} 27, no. 2 (1990): Pg 1596.
\textsuperscript{69} Everest Ekong, ‘Pressure on Doe”, \textit{West Africa}, 29 Jan – 4 Feb 1990, Pg 125
\textsuperscript{70} Huband, \textit{The Liberian Civil War} Pg 11., Watch, ‘Liberia: Flight from Terror: Testimony of Abuses in Nimba County.’
\textsuperscript{71} ‘Liberia: Failed Coup,’ Pg 9558.
Memories of the AFL’s brutal repression in 1985 were fresh for many Nimbians. Doe held a general election in 1985 at the urging of the United States and although he claimed 51% of the vote, the elections were widely acknowledged to have been rigged. Thomas Quiwonkpa, a former army officer in the AFL, led a coup attempt that was suppressed with great violence in the capital and in Nimba county. Tensions increased after 1985 between the Krahn dominated army and the Gio and Mano, perceived to be behind the coup plot. Doe cut Gio and Mano off from employment and economic opportunity and Nimba county was actively persecuted.

Jim Bishop, member of the US Africa Desk, characterised the war on March 26th 1990 as ‘a low-intensity conflict, but it is one the government is currently losing’. Doe replaced the army commander, Moses Craig, with his deputy Col. Hezekiah Bowen in mid March. The trading town of Bahn fell on March 28th, about 240km north east of Monrovia. Doe recruited another 2000 soldiers to the AFL and ‘sucked in thousands of unscreened youths, prison graduates, drug dealers, and previously expelled military delinquents’. The NPFL began ‘large-scale attacks’, ‘designed to inflict maximum casualties on the AFL’ by the end of March. Sixty-thousand refugees had crossed into Cote d’Ivoire and 84,000 to Guinea. One-thousand were crossing these borders per week. By early April, fighting centred around Saniquelle (the regional capital) and Ganta (the largest town in Nimba) and had broken out of Nimba into Tapeta, Grand Bassa, Bong and Riveresse counties by late April. Liberia’s war had become ‘full-blown guerrilla warfare’ around the regional capital of Saniquelle. The road from Grand-Gedeh to Monrovia was cut and the Yepeka to Buchanan iron-ore train was attacked. A ‘senior western diplomat’ commented on April 29 that Liberia was ‘divided in two’ and that the NPFL were marching on.

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76 Ibid.
81 Ibid., Pg 134.
83 "Liberia: Nimba Conflict Continues", *West Africa*, 9-15 April 1990, Pg 600
84 James Butty, “Fragile Realignments”, *West Africa*, 7-13 May, Pg 781
Monrovia. Doe replaced the AFL commander for the third time with Charles Julu - notorious for his brutal reprisals against Nimbians in 1985. Doe informed the press in April that he would not negotiate with Taylor and stated that the AFL was ‘adequately trained and equipped to contain the situation’.  

Liberia’s civil war was dominated by the use of irregular tactics by the NPFL and an ill-fated and poorly executed counter-insurgency campaign in Nimba country until the end of April. Warfare changed in May as the AFL staged a retreat back to Monrovia. Saniquelle, Palala and Yepeka were captured by the NPFL in quick succession and the NPFL were attacking the port of Buchanan, just under 100km south east of Monrovia, by May 19th. Doe conceded that Buchanan had fallen to the rebels on May 22nd. Fighting was reported at Robertsfield international airport and the Firestone rubber plantation, just under 50km from central Monrovia, on May 29th. Shooting was reported at Kakata, just 35 miles from Monrovia, by the end of May. The NPFL advanced hundreds of kilometres from Nimba to the coast and were threatening Monrovia in just over a month.

War quickly degenerated into a siege of Monrovia by early June. Firestone was attacked on June 4th and on June 6-7 Robertsfield airport was attacked, just 50km from central Monrovia. Doe claimed that the AFL had recaptured the airport and plantation on June 8th and the NPFL confirmed they had withdrawn when government soldiers ‘backed by heavy artillery’ approached. Fighting was reported at Mount Barclay, 10 miles from Monrovia, on June 29th. Robertsfield airport and the Firestone rubber plantation changed hands several times. Doe claimed he was ready for any battle for Monrovia and ‘adamant about not resigning, now or later’. Western military experts argued that Taylor would have little trouble overrunning

88 “Liberia: The Nimba County War”, Africa Confidential, 20 April 1990, Vol 31, No 8, Pg 5
89 “Liberia: Nimba Conflict Continues”, West Africa, 9-15 April 1990, Pg 600
90 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 137.
92 Ibid.
94 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 145.
96 This may have been either the NPFL or INPFL. Ibid, Pg 9735.
97 “Liberia: Hope for Ceasefire”, West Africa, 18-24 June 1990, Pg 1047
98 Gerald Bourke, “Taylor Talks”, West Africa, 28 May -3 June, 1990 pg 880
Monrovia. Around 1000 AFL were left in the city facing at least 4000 NPFL soldiers.99

Monrovia was assaulted for the first time on July 2nd, cutting power and water supplies.100 Taylor lost control of Robertsfield airport in early July101 but on a second front the NPFL reached Paynesville in the eastern suburbs of Monrovia, 10km from the city centre.102 ‘Heavy fighting’ was still taking place around Paynesville on July 16th – nearly two weeks later.103 It was not until 20 July that Spriggs-Payne airport (the domestic airport 4km from the executive mansion) was captured and the NPFL was capable of bombarding Doe’s mansion with rockets.104 Doe and the remaining AFL were fortified around the Defence Ministry and the Executive Mansion protected by the ‘Executive Mansion Guard’ and the ‘Special Anti-Terrorist Unit’.105 Taylor is reported to have pulled back from his offensive on Monrovia towards the end of July in part because he knew ‘the limitations of his men’.106

The Independent Patriotic Front of Liberia, (INPFL) burst through central Monrovia to within a few kilometres of the Executive Mansion on July 23rd.107 Led by Prince Yormie Johnson, the INPFL allegedly split with Taylor early in the war, taking the ‘elite Libyan-trained commandos’ along a western route to Monrovia via, Duala, Bong, White Plains, Caldwell, and Bushrod Island.108 Johnson proclaimed Taylor a Libyan-trained communist, a ‘criminal and a rouge’.109 The Freeport of Monrovia was taken by the INPFL on 25 July.110 The NPFL bombarded the presidential mansion with hijacked gunboats on the same day, but were repelled by rockets and machine gun fire.111 Doe’s AFL and INPFL formed an alliance to resist Taylor’s advance.112

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99 'Massive Exodus,' Pg 9735.
100 Cohen, *Intervening in Africa: Superpower Peacemaking in a Troubled Continent*  Pg 146-47.
102 Huband, *The Liberian Civil War*  Pg 113.
103 Ibid, Pg 132.
105 Ibid, Pg 164.
106 US Department of State Human Rights Report, as cited in *Liberian Studies Journal*, XVI (1), 1991, Pg 120
108 Huband, *The Liberian Civil War*  Pg 171.
109 Ibid, Pg 145.
110 “Doe Clings on”, *Africa Research Bulletin*, 9774
Doe ‘was a virtual prisoner in his seafront mansion’. 113 Half of his Krahn soldiers were holding him hostage as their last bargaining chip to escape Monrovia safely, while the other half were said to be admonishing Doe to resign for the same reason.114 Taylor ‘dissolved’ the Doe government and proclaimed himself president. No-one recognised his claim.

Atrocities across Liberia, but particularly in Monrovia, were horrendous. The AFL murdered 600 civilians inside the Lutheran church in Monrovia on July 30 and it was becoming clear that the NPFL had murdered Mandingos and Krahn on their advance. Lloyds of London refused to insure shipping to Liberia and aid deliveries ceased. People flooded from the countryside to seek shelter in Monrovia.115 Taylor had taken 3000 Nigerians and other West African nationals hostage.116 Nearly 375,000 people had fled to neighbouring countries.117

The Economic Community of West African States (ECOWAS) established a Sub-Committee on Defence Matters ‘to consider issues relating to the military arm of the proposed ECOWAS Monitoring Group’ and formulated a ‘blueprint’ for military intervention in Liberia between July 18th and 20th. Nigerian President Ibrahim Babangida urged that the war in Liberia be brought to a ‘speedy’ and ‘peaceful’ end.118 The Standing Mediation Committee (SMC) adopted Decision A/DEC.1/1/90 - a peace plan involving deployment of West African soldiers to supervise a cease fire (which did not exist) on August 7th in Banjul (the capital of Gambia)119 Two thousand five-hundred troops with contingents from Ghana, Nigeria, Guinea, Sierra Leone and the Gambia would be deployed in Liberia ‘for the purpose of keeping the peace, restoring law and order and ensuring the cease-fire is respected’.120

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114 Ibid.
115 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 146.
116 Ibid.
117 ‘Doe Clings On,’ Pg 9774.
118 Clement Adibe, 'The Liberian Conflict and the ECOWAS - UN Partnership,' Third World Quarterly 18, no. 3 (1997): Pg 474.
119 Ibid.
120 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 150., “Mediation Committee meets (Banjul)”, Africa Research Bulletin, 1990, Pg 9801
Taylor launched a ‘final’ assault on central Monrovia on August 9 to ‘reach the executive mansion before the peace-keeping force arrived in order to present [the intervention force]… with a fait accompli’. He was repulsed by the entrenched AFL and allied INPFL. The INPFL and AFL announced another ceasefire on August 18th, allowing the AFL to concentrate on repelling Taylor until the intervention force arrived. The INPFL defended the port of Monrovia from the NPFL so Economic Community of West African States Cease Fire Monitoring Group (ECOMOG) could land there. According to Williams this was the decisive battle of the war.

Negotiations took place between 7 and 24 August, but the old sticking points remained. Taylor wanted to lead any interim government and ECOMOG states wanted a civilian. The talks were abandoned. Contingents of the 3000 strong ECOMOG force arrived in Monrovia on August 24th under the command of General Arnold Quainoo, a Ghanaian. Ghana and Nigeria provided the largest number of troops, nearly 1000 each. Smaller contingents came from Guinea, Sierra Leone and the Gambia. ECOMOG secured central Monrovia and the Freeport under fire from the NPFL. Taylor launched another assault on the executive mansion in September, but was beaten back by ECOMOG and the INPFL. Taylor continually claimed that ‘I am the president of Liberia now’, but was dismissed as ‘the ravings of a man whose drive to the seat of power has lost all semblance of a game plan’. An interim government, to be headed by Dr. Amos Sawyer, was established at an ECOWAS sponsored ‘All-Liberia’ conference between August 27th and September 1st. Once established in Monrovia, Sawyer’s government was recognised by most West African states, and the US made moves to recognise it too. ECOMOG was reinforced to 9000 soldiers by October and the Monrovia perimeter was expanded to take it out of

121 ‘President Doe’s Death,’ Pg 9841.
123 ‘President Doe’s Death,’ Pg 9841.
128 Peter da Costa, “Confused State”, West Africa, 1-7 October 1990, Pg 2557
129 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 150.
artillery range. Humanitarian relief was able to reach Monrovia and reports emerged late in the year that Taylor’s forces were deserting and surrendering to ECOMOG. Reports also emerged of Taylor’s major backers, Burkina Faso and Libya, drawing down their involvement. After numerous negotiations, a cease-fire was arranged on November 28th, 1990 – the first of many to 1997, when Taylor was elected president.

Military Strategy in Liberia’s Civil War

Fighting in Monrovia was not the consequence of a ‘mopping up’ operation. While the AFL suffered heavy casualties in the war over Nimba county, they were not defeated in a pitched battle in the countryside. We can observe this by visualising where the NPFL and INPFL fought the AFL between December 1989 and August 1990. Figure 7.4 is a ‘heat map’ showing areas of intense fighting around Monrovia and dispersed fighting from Nimba county to the capital. The NPFL did not do much fighting in the countryside, relative to the battles fought in Monrovia. Nor was fighting in Monrovia purely the product of a fractious insurgency. It is true the NPFL/INPFL split weakened the NPFL’s assault on Monrovia, but President Doe’s forces were a major player in the siege and singularly held the NPFL in pitched battles for the eastern suburbs of Monrovia. What, then, accounts for incidence and concentration of fighting in Monrovia?

130 Ibid, Pg 155.
A number of observes note that Doe retreated back to Monrovia in April/May 1990. A West Africa correspondent commented in August 1990:

‘the tormented President Samuel Doe deliberately changed the strategy of fighting in the countryside to draw the guerrillas into the open by encouraging them to march on Monrovia and attack the executive mansion. This, he hoped, would be better suited to his forces who are untrained in guerrilla warfare’.  

Doe himself, in clear frustration at the NPFL’s use of guerrilla tactics during the first stages of the war, said that ‘I would have loved the rebels to come into the city and fight so we can settle this matter once and for all’. Williams has questioned why Doe would stage a retreat, she writes – ‘for some weird reason, Doe and most of his loyal forces were convinced of being able to pull off what would have been one of the

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133 As cited in James Butty, “Mending Fences?”, West Africa, 14-20 May 1990, Pg 796
greatest surprises in world military history: defeat the rebels in Monrovia and from there retake the entire country’.134

Doe’s strategy was rational, although callous to the extreme, when one considers the capabilities at his disposal, those of the NPFL, and Doe’s knowledge of Taylor’s intentions. The AFL was trained to defend Monrovia and would be defeated if it continued to face the NPFL in the hilly, forested and inaccessible parts of Nimba county. Doe stacked the army and police with trusted Krahn tribesmen during the 1980s as he became increasingly paranoid about real and imagined rivals (Doe claimed to have survived over 30 coup attempts). He expelled experienced officers and fragmented the AFL into nine paramilitary groups ‘none effective enough to challenge him but all capable of interfering with rivals’.135 Doe relied on his paramilitaries for security, particularly the Israeli-trained ‘Executive Mansion Guard’ and, clearly, by the name of this premiere paramilitary group, when push came to shove, Doe intended on defending the capital.

Doe had reason to believe that, despite the AFL’s deficiencies, it could hold out against the NPFL in a positional battle. Although the NPFL’s numbers ballooned from January to August 1990, recruits were too poorly trained, too poorly armed and too logistically restricted to conduct the conventional military operations required to oust the AFL from central Monrovia.137 Howe notes that the NPFL’s ‘poor command-and-control system failed to keep its soldiers attention on fighting and away from the more attractive looting’.138 Ellis argues that the Nimba recruits underwent only ‘rudimentary training’ and that the AFL were an ‘infinitely more experienced fighting unit’.139 Ellis also notes, however, that, ‘in conventional military terms, none of the various armies in Liberia was very formidable’.140 A US Department of State report commented that ‘most of the soldiers involved in the conflict are poorly trained and

135 Reno, Warlord Politics and African States Pg 84. Also Howe Ambigious order, g 133
136 Ibid, Pg 85.
138 Herbert Howe, Ambigious Order: Military Forces in African States (Colombia: Lynne Rienner 2001) Pg 135.
barely, if at all disciplined’. 141 Most recruits had ‘little more than a few weeks military training... show little coordination and fire[d] wildly from the hip’.142 By the time the NPFL reached Monrovia, it probably numbered 10,000 men and women with 30% under 17.143 NPFL recruits were armed mostly AK-47s and 1944 and 1945 vintage Beretta sub-machine guns.144

Doe also believed that Taylor could be successfully ‘lured’ into a fight for Monrovia. Liberia’s economic geography and dependence upon leveraging sovereignty for revenues created huge incentives for Taylor to direct his forces to capture Monrovia. It was clear from the outset that the NPFL’s strategy focused on controlling Monrovia. Taylor’s first actions after the December 1989 invasion was to send a small squad of NPFL to infiltrate Monrovia – a move that he announced on radio. 145 Samuel Dokie, spokesperson for the NPFL during the early parts of the war, clearly identified the zero-sum nature of Liberia’s war when he said, ‘the problem in Africa is that, because of underdevelopment in the regions and the centralisation of power, the only way to make money is in politics’. 146 A West Africa correspondent wrote that, ‘Taylor himself believes that Monrovia is everything’. 147 Duyvesteyn argues that ‘the legitimacy that occupation of Monrovia could confer made an attack on the capital necessary’ and that ‘the capital was of primary focus in the direct military confrontations’.148 There was also material incentive to attack Monrovia. Ellis argues that many NPFL ‘flooded’ to Monrovia in mid-1990 ‘to be in at the climax’ for ‘the chance of a lifetime to acquire something valuable’.149 In the first round of negotiations mediated by the Liberian Council of Churches in Freetown on June 25th Taylor declared that ‘we are not committed to wasting money and time following
empty ventures... We are going to take Monrovia'. Again in June, this time in response to ECOWAS demands that Doe step down and elections be held, Taylor asserted that ‘I will take Monrovia in 12 hours. We are not going to talk forever’. Taylor claimed in July that he controlled 90% of Liberia and it was his right to assume power, asserting that ‘we’re going right ahead to flush Doe out of the executive mansion’.

The correlation between Liberia’s economic geography and the spatial pattern of fighting in Liberia’s first civil war was the product of a strategic decision by President Samuel Doe to fall back and exploit the advantages of conventional defence against a poorly organised and lightly armed adversary. Doe rightly predicted that Monrovia would be the focus of Taylor’s strategy, making it a useful location to fortify and defend.

The evidence in this section suggests that the NPFL’s lack of heavy weapons and poor logistic and command capabilities increased the utility of a ‘strategy of exhaustion’. The causal mechanism presented in Chapter 2 is a convincing and parsimonious explanation of Liberia’s geographic war-structure from January to August 1990. As events played out, it appeared as though Doe’s strategy had paid off. Herman Cohen commented to a US House of Representatives panel that ‘despite many weeks of combat, it was clear that Samuel Doe’s dwindling military could not be defeated in central Monrovia’. In an apt depiction, Butty and Ekong of *West Africa* Magazine wrote that the Liberian civil war had become ‘that of three spent dwarves, whose thirst for power has left too many suffering too much for too long’. It appeared that Doe had successfully used his status as the leader of an internationally recognised country to contract foreign military support when ECOMOG troops landed in August 1990, although Doe was killed by the INPFL in

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150 ‘Massive Exodus,’ Pg 9734.
154 Butty and Ekong, “When Dwarves Fight: Who is in Charge of Liberia?”, *West Africa*, 6-12 August, 1990, Pg 2230
September. How the Nigerian-led intervention force is linked to the battle for Monrovia is the subject of the following section.

Casual Mechanism 2: Nigerian Intervention in Liberia

Nigeria initiated and led a military intervention during the siege of Monrovia. Were the reasons for Nigeria’s deployment, however, those predicted by Chapter 2? Did Nigeria intervene during the siege of Monrovia to exploit an advantage in conventional offense during a pitched battle over a key objective? Did the irregular tactics and lack of set-piece battles in Liberia’s countryside deter earlier intervention? Did Nigeria believe that with a small injection of conventional force it could play ‘kingmaker’ in the negotiations over Liberia’s future? A number of alternative hypotheses may explain the timing and strategy of Nigeria’s intervention. Perhaps Liberia’s war degenerated so quickly that Nigeria was not ready for any deployment until the siege of Monrovia, a causal mechanism that dovetails nicely with experimental research into ‘dynamic task environments’. Decision-makers systematically seek information before taking action in a degenerating system (in experimental settings, usually the fitness of an athlete) and continue to do so in rapidly collapsing task environments when intervention is more cost effective.155 Perhaps Nigeria delayed its deployment to garner sub-regional support from ECOWAS members. Finally, it has been proposed that Nigeria wished to protect its foreign nationals under attack from the NPFL, or deployed in purely in response to the humanitarian situation. I do not deal with the last two causes in detail as they have been discussed and disputed elsewhere.156 Ultimately, multiple causal mechanisms operate at once. As Walraven argues ‘several motives may exist [for intervention] without being mutually exclusive’.157 Compounding this is the paucity of information on military decision-making. Documents of key meetings are often classified or

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unobtainable. Evidence to support the arguments made in this section come from public documents, previous interviews and reflections of actors involved, journalistic accounts and reports from diplomats.\textsuperscript{158}

The chapter proceeds as follows. Nigeria’s stakes in the conflict are outlined and revolved primarily around opposing the NPFL rather than protecting the regime of President Samuel Doe. I then make the case that Nigeria waited for a pitched battle before deploying soldiers to capitalise on its conventional war-fighting advantage. Most external states, including Nigeria, believed that Doe would crush the rebellion early on and refrained from intervening. As the threat became more serious, Doe flew to Lagos to request Nigerian troops and weapons. Nigeria provided the weapons, but refrained from deploying soldiers. Nigeria attempted to garner regional support for any intervention and realise its interests diplomatically from May to late July. As the battle for Monrovia reached a crescendo, however, Nigeria deployed to thwart the NPFL, capture Monrovia, and play kingmaker in Liberia. While this chapter makes a case for the plausibility of causal mechanisms described in Chapter 2, this section concludes with reflections on how other causal processes led to the intervention, especially how the goals of Nigeria shaped the timing of its deployment and the links between Nigeria’s Liberian deployment and its wider strategic goals as regional hegemon in a post Cold War world.

\textbf{Nigeria’s Stakes in the Conflict}

Nigeria’s primary aim was to deter the NPFL from taking power by force. There is a subtle distinction here between directly supporting the presidency of Samuel Doe and opposing those who opposed him. Liberia and Nigeria were allies in West Africa. When Ibrahim Babangida came to power in 1983, Doe worked assiduously to curry favour with the new regime. Babangida donated $1 million for the self-titled Graduate School of International Studies at the University of Liberia, invested $25 million in iron ore and $4.5 million in the Liberia National Oil Corporation, funded Liberia’s section of the trans-African highway and covered $50 million of Liberia’s debt at the

\textsuperscript{158} Ibid.
Asian Development Bank. Doe also received Nigeria’s highest medal, ‘the Grand Commander of the Federal Republic’, an honour not even bestowed on Nelson Mandela. However, according to Adebajo, Doe was an ‘embarrassment’ to Nigeria by 1990. Protecting Doe was not the primary motivation for intervention, an idea supported by the inclusion of Doe’s resignation in the peace plan and a lack of attention to Doe’s security once ECOMOG soldiers were on the ground.

Nigeria’s interests lay with opposing the NPFL, or controlling the means by which it came to power. Tuck writes that ‘Nigerian policy towards ECOMOG - its methods and objectives - were... coloured by its fundamental antipathy toward Taylor’s NPFL’. According to Mayes, Nigeria saw ECOMOG as ‘a tool to prevent Taylor from seizing total control of Liberia’. Eco argues that ‘the whole story of ECOMOG in Liberia is bound by the open desire of Nigeria to challenge, dominate and dictate the outcome of the conflict, but more importantly to prevent Taylor from seizing power’.

Nigeria was aware of the NPFL’s links to Burkina Faso, Libya, Cote d’Ivoire and, indirectly, France. Nigeria had historically resisted Libyan advances in West Africa, most overtly in Chad. Gershoni argues that Ghaddafi saw an opportunity with the end of the Cold War to fill a political vacuum in Liberia. Nigeria, competing for the same influence, ‘could not turn a blind eye to the military achievements of Charles Taylor, backed by Tripoli, especially when Libya’s expansionist policy was well-known in Lagos’. Nigerian relations were also strained with Cote d’Ivoire, the second largest power in West Africa and a close ally of France. Nigerian suspicious of Ivorian motives date back to the Biafran war (1967-1970) when France and Cote


d’Ivoire recognised and supported the separatist region. The NPFL received support from Cote d’Ivorie and Burkina Faso. Any NPFL victory would come at the expense of Nigerian influence in the region.

Dissidents from Ghana, Nigeria, Gambia, Sierra Leone, Burkina Faso and Togo were fighting alongside the NPFL. Walraven argues that ‘there seems little doubt that some West Africa leaders feared that, with socio-economic and political conditions comparable to those in Liberia and a Taylor-led regime ready to aid rebellions elsewhere, their own countries could become the target of a similar type of insurrection’.167 Vice President of Nigeria, Augustus Aikhomu, claimed that the intervention was motivated by concern that the war in Liberia ‘had developed a potential for ‘massive… interference and destabilisation in the sub-region’.168 Babangida warned at an ECOWAS summit before the intervention, ‘today it is Liberia, tomorrow it could be any one of you’.169 The Nigerian Ambassador to Liberia stated that ‘the Nigerian perception was that Taylor was a rebel. Once you use the vocabulary of government and rebels you cannot be even handed’.170 ECOWAS’s Executive Secretary noted, after the intervention, that :

‘I think that if there was one principle that united the entire West African leadership it was the one that said that West Africa, as a region, should not accept anyone who sought to shoot his way to power, especially if that person is actively aided and abetted by outside forces’.171

Nigeria (and other West African states) were concerned primarily with opposing the NPFL from taking power in Liberia, not necessarily supporting Samuel Doe.

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169 As cited in Boas, 'Liberia and Sierra Leone - dead ringers? The logic of neopatrimonial rule,’ Pg 710.
Fighting in the Countryside – December 1989 to March 1990

Doe was expected to crush the Nimba uprising quickly. President Momoh of Sierra Leone stated that intervention did not occur earlier than August 1990 because ‘just like ECOWAS at the initial stages, we all saw the Liberian situation as purely an internal affair’. As ‘developments degenerated’ Momoh, and ECOWAS, considered it ‘mandatory’ to ‘come in and help’. Vogt argues that Nigeria deliberately acted to play down the crisis and portray it as ‘strictly in the internal affairs of Liberia’ to avoid creating the impression that Doe had lost control of the situation. Mayes notes that it ‘was not until April/May 1990 when Lagos realised the danger Doe’s government faced from the NPFL’. While the information is scant on how foreign states perceived the early phases of the war, it is likely that the use of guerrilla tactics by the NPFL and the confinement of the war to Nimba county created the impression that the AFL could contain the insurgency, and as such, remained a strictly ‘internal affair’.

As Doe’s battlefield situation deteriorated in early May, he flew to Lagos and requested weapons, ammunition and 2000 Nigerian soldiers. Nigeria obliged with the weapons and ammunition, but denied the troop deployment. Indeed, Nigeria is reputed to have been ‘willing of offer troops’ and, according to Nigeria’s ambassador to Liberia, ‘Doe was beaming at the press conference on his way out. He was a very happy man. I felt there must have been a promise of assistance’. According to Ofuatey-Kodjoe, Nigeria was resolved on some form of intervention by May 1990 but not the how and when.

The readiness of Nigeria to contemplate deploying soldiers in May 1990 suggests that the intervention nearly three months later was not the result of Nigerian ignorance to the threat posed by the NPFL and consequently a rushed and delayed deployment. Indeed, when intervention was decided upon in late July and early August 1990, it

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172 As cited in Justice Fofanah, “Momoh’s Diversion”, *West Africa*, 20-26 August 1990, Pg 2320
took less than a month to organise and deploy soldiers from five West African states. It is likely that Nigeria had the capability to deploy soldiers in Liberia by early June or July.

Why then did Nigeria refuse Doe’s request for 2000 soldiers, but grant the request for weapons? Like many armed forces around the world, Nigeria’s military, while capable of fighting a conventional land war (which they had over the Bakassi peninsula on the border with Cameroon) were ill-equipped to fight a counter-insurgency campaign in the forested Liberian countryside, even against a poorly trained and armed insurgency like the NPFL. A former U.S special operations officer noted that ‘they [Nigeria] had no counter-insurgency doctrine, preferred conventional assault, and flew aerial reconnaissance at 5000 feet’. One Western military analyst noted that ‘it’s good ambush country, almost anywhere outside of Monrovia’. Liberia’s interior roads were poor, making helicopters a must for any intervention force, but Nigeria’s 15 armed helicopters had not been flown in years and were poorly maintained. General Maxwell Khobe, Nigerian force commander of ECOMOG in Sierra Leone, lamented that Nigeria was not well-equipped with combat helicopters, even in 1999. Nigeria had no jungle warfare training facilities in 1990 and had never fought in terrain similar to Liberia’s. Battle-tanks and infantry formations that made up the majority of Nigeria’s military were ‘ill suited for Liberia’s heavily forested interior’.

Nigeria’s reticence to fight in the Liberian countryside once ECOMOG deployed suggests that counter-insurgency was perceived as a high-cost option. Howe argues that Nigeria actively avoided a ‘Vietnam like-quagmire’ by not venturing into the Liberian countryside. Ofuatey-Kodjoe argues that when the NPFL resorted to guerrilla warfare they rendered ‘a complete victory over the NPFL so costly that the

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176 Howe, Ambiguous Order: Military Forces in African States Pg 166.
177 Howe, 'Lessons of Liberia: ECOMOG and Regional Peacekeeping,' Pg 170.
179 Ibid, Pg 154.
182 Ibid, Pg 162.
chances for a negotiated settlement were significantly improved’. 183 Khobe commented that, in Sierra Leone (with a war-structure, political history, and terrain closely resembling Liberia):

‘the groups which it [ECOMOG] are fighting are not conventional armies... carrying out extensive ambush operations on commercial vehicles in order to render roads unsafe... In order to checkmate this strategy of terror, ECOMOG has had to deploy over wide areas, but in most cases it has not had adequate troops and logistics to do so. It is usually at this critical stage that ECOMOG suffers operational reverses [emphasis mine]’.184

Nigeria co-opted warlords from the United Liberation Movement of Liberia for Democracy (ULIMO – an insurgent group based around former soldiers for Doe’s army) and the Liberia Peace Council (LPC – also comprised of Krahn and former AFL soldiers) to fight in the countryside. As Howe argues, ‘Liberian factions knew the countryside better, cost less to operate, and if killed did not cause political problems back home in ECOMOG countries’.185 High ambiguity from January to May 1990 compounded Nigeria’s lack of counter-insurgency capability. The United States had the best intelligence networks in Liberia at the time, 186 and Cohen described the situation in April and May as ‘so fluid and confused that we could not say we had taken charge of conflict resolution’.187 He compared the decision-making process in Liberia to that of the Sudan and Angola where years of experience enabled strategies and tactics to be developed, reviewed and re-developed. The Liberian civil war was so ‘fast-breaking’ and ‘fluid’ that it constituted an ‘emergency’ without ‘the luxury of spending time to analyse core issues and develop strategy’.188 Nigeria’s intelligence capabilities in Liberia were less developed than the United States and would have confronted the same ambiguity.

Conventional armed forces are effective when insurgents fight in the open. As the NPFL battled the AFL in Nimba county, it fought on numerous fronts at once,
combining guerrilla tactics and small-scale confrontations from which the AFL would usually retreat. The fortunes of the INPFL, advancing from the west, were largely unknown. Nigeria perceived a low demand for intervention when it appeared as though Doe would be able to contain the nascent rebellion. As the NPFL gathered strength, Nigeria opted out deployment, despite the motive and diplomatic cover to do so, because it perceived high, and potentially uncertain costs for a counter-insurgency campaign in Liberia’s countryside for which it was ill-equipped to fight. Instead, sending weapons was a low-risk, low-cost form of influencing the outcome of the war. When Nigeria realised that Doe could not win, and sending him weapons was not going to help, they ‘quickly withdrew military support’. Any military deployment would have been a high-risk, potentially humiliating and financially burdensome decision.

**Negotiations - May – July 1990**

Perhaps the timing of Nigeria’s deployment has more to do with its search for regional allies and a cease-fire agreement that would lower the costs of any intervention. President of Nigeria, Ibrahim Babangida, followed precisely this course after rejecting Doe’s request for troops in May 1990 by taking the issue to the 13th ECOWAS summit in Banjul on May 30. He proposed establishing a standing mediation committee (SMC) to ‘settle disputes and conflict situations within the community’ and ‘intervene in a timely fashion, whenever such disputes arise’. Doe was not in attendance, citing ‘pressing state matters’ and sent his planning minister. Guinea and Sierra Leone, both dealing with influxes of refugees, also pushed for a resolution to the conflict. The SMC proposal was accepted, with Gambia, Ghana, Mali, Nigeria and Togo as initial members and Guinea and Sierra Leone as observers. The SMC called for an immediate cease-fire and was mandated to mediate the conflict. EOWAS met again on June 19th and decided to reconvene

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190 Adibe, ‘The Liberian Conflict and the ECOWAS - UN Partnership,’ Pg 473.
192 Adi Obe, “ECOWAS: Quest for a Foothold”, *West Africa*, 4-10 June 1990, Pg 938
193 Adisa, ‘Nigeria in ECOMOG: Political Undercurrents and the Burden of Community Spirit,’ Pg 83.
flagging US-led peace talks through the SMC. 195 Dr Abbas Bundu, Secretary General of ECOWAS, established the possibility of Doe going into exile and general elections. The NPFL would only accept the immediate resignation of Doe. Taylor had hardened his negotiation position by July and would only agree to a cease-fire if Doe resigned and he personally assumed the presidency. 196 Taylor’s demands were rejected by ECOWAS on the basis that any presidency should reflect the public’s will through an election and that no belligerents to the current conflict could be a part of the interim government. 197 Taylor was suspicious of the motives of West African states, particularly Nigeria and Guinea, and resented the equal status afforded to Prince Johnson (discussed below)198, and considered it unlikely that ECOWAS would intervene without his consent. 199 By July, with military victory literally in sight Taylor repeated his demands that Doe resign and he immediately assume the mantle of presidency. According to a ‘Liberia veteran’ cited in West Africa Magazine, Taylor had ‘everything to lose by stopping the fighting’. 200 The incentives for him to accept a negotiated settlement, on the terms ECOWAS was proposing, were very low and the ECOWAS negotiation process was badly timed. 201 By mid-July successive attempts at negotiation had failed. Nigeria demanded an interim government and elections, Taylor demanded that he be the next president regardless.

Nigeria had considerable incentives to delay any deployment and try the diplomatic path. ECOWAS negotiations held out the possibility of Taylor accepting disarmament and peacefully contesting elections. Nigerian troops may not have been required, or if they were, deployed with the consent of warring parties, lowering the probability of facing combat and costs. Nigeria’s demands for an interim government without the warring parties was part of a strategy to deny Taylor the immediate spoils of office and buy Nigeria time to influence the outcome. Many scholars have pointed to the irony of dictators such as Babangida demanding democracy in Liberia. But a democratic Liberia, bound by civil society groups, political parties and elections

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195 Gershoni, 'From ECOWAS to ECOMOG: the Liberian crisis and the struggle for political hegemony in West Africa,' Pg 25.
196 Cohen, Intervening in Africa: Superpower Peacemaking in a Troubled Continent Pg 148.
197 Ibid.
198 Gershoni, 'From ECOWAS to ECOMOG: the Liberian crisis and the struggle for political hegemony in West Africa,' Pg 26.
199 Ibid, Pg 27.
200 Peter da Costa, “Intervention Time”, West Africa, 13-19 August, Pg 2289
201 Adibe, 'The Liberian Conflict and the ECOWAS - UN Partnership,' Pg 475.

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would be more transparent and constrained in its foreign policy than an autocratic, unpredictable, Taylor-led government. Democracy was a means of lowering the probability that post-war Liberia would destabilise the region.

Secondly, if the time came for military intervention without consent, cultivating support in ECOWAS would provide valuable international cover for a controversial mission. Coleman concludes that ECOWAS states would have been ‘outraged if Nigeria intervened in Liberia alone’.\(^\text{202}\) As one Sierra Leonean diplomat put it, ECOWAS was consulted so the mission would not look ‘like an invasion’.\(^\text{203}\) ECOWAS’s aegis made it ‘easier for Ghana, the Gambia, Guinea and Sierra Leone to accede to Nigeria’s request for their participation’.\(^\text{204}\) The United States became an important financial backer of the mission, averaging $10 million per year, along with various non-government humanitarian organisations.\(^\text{205}\) Coleman argues that legitimacy helped cultivate the perception of Nigeria as a ‘good international citizen’ when the Babangida regime was politically ostracised. At the very least, going through ECOWAS framed the intervention as a regional response, making it difficult for the Organisation of African Unity (OAU), United Nations (UN) and international community to criticise the deployment and easier for Nigeria to diplomatically isolate the NPFL’s supporters. Nigeria was also cognizant of the sunk costs in establishing ECOWAS as a institutional conduit for its influence in West Africa. Nigeria had absorbed up to 70% of the running costs for ECOWAS over 15 years and was its ‘finest foreign policy achievement’.\(^\text{206}\) In the end, Nigeria walked the tightrope between dividing ECOWAS and seeing its interests realised. Nigeria technically acted outside ECOWAS rules for establishing a military intervention, even under the clauses of the 1981 Mutual Defence Pact, but was crafty enough to present the rest of the forum with a fait accompli though the SMC which the region, including Nigeria’s francophone rivals, eventually acceded to.\(^\text{207}\)

\(^\text{203}\) Ibid, Pg 94.
\(^\text{204}\) Ibid, Pg 97.
\(^\text{205}\) Ibid, Pg 107.
\(^\text{206}\) Ibid.
\(^\text{207}\) Ibid, Pg 80-81.
While the pursuit of multilateral sanction and a diplomatic solution offered lower deployment costs, it is not convincing to argue that Nigerian diplomacy explains the timing of deployment. Both Nigeria and Guinea were prepared to intervene without the blessing of ECOWAS, and ultimately, the mission was endorsed retrospectively. According to West Africa magazine sources, ECOMOG was a ‘fait accompli’ before the August 7 Banjul conference and the adoption of Decision A/DEC.1/1/90. Military experts, including force commander Arnold Quainoo had been in Gambia a week before the conference and the decision to deploy troops was made over a short period between the end of July and the beginning of August. Adebajo writes that, on August 6, before the meeting of ECOWAS leaders where intervention decided upon, ‘Nigerian troops were on their way to Monrovia by sea… such was the determination of Nigeria to halt the war, stamp Taylor out and rescue up to 3000 Nigerians trapped in Liberia’. Clearly sub-regional endorsement was not a deal-breaker for Nigeria. It is more likely that Nigeria used the relatively short period from May to July to galvanise support for a mission to which they were already committed.

The Battle For Monrovia – July – August 1990

If diplomacy and negotiation are not convincing explanations of why Nigeria delayed its deployment until the siege of Monrovia, then why did it wait? One important reason was that the more Taylor concentrated his NPFL in the city the more they were vulnerable to Nigeria’s conventional military capacity.

Before discussing the military dimensions of Nigeria’s intervention, it is worth noting that fighting in Monrovia heightened the demand for a humanitarian intervention and provided additional legal cover. The extent of human abuse and suffering became apparent to West Africa’s, and to a lesser extent, the world’s media as the fighting approached Monrovia. Babangida justified ECOMOG on precisely these grounds:

‘We are in Liberia because events in the country have led to massive destruction of property, the massacre by all the parties of thousands of innocent civilians including foreign nationals, women and

208 Peter Da Costa, “Intervention Time”, West Africa, 13-19 August 1990, Pg 2280
209 Huband, The Liberian Civil War Pg 181.
children, some of whom had sought sanctuary in churches mosques, diplomatic missions, hospitals, and under Red Cross protection, contrary to all recognised standards of civilised behaviour’.210

Liberia’s collapsed government allowed ECOMOG to claim that there was ‘no government’ in Liberia and in these circumstances regional states had the right to intervene, an argument that would be rehashed in UN Security Council debates over Somalia two years later. The August 7 SMC communiqué justifying intervention stated that Liberia was ‘in a state of anarchy and total breakdown of law and order... presently, there is a government in Liberia that cannot govern’.211 OAU president Salim Salim and ‘elder statesmen’ such as Robert Mugabe, president of Zimbabwe, supported ECOMOG on these grounds.

As the atrocities in Monrovia worsened the viability of a military mission increased. Taylor threw his NPFL into a pitched battle for the capital and as he did, the NPFL were increasingly vulnerable to expulsion by a military force with even modest offensive capacity. The entry of the INPFL in the western suburbs of Monrovia left Taylor with only one bottleneck to the Executive Mansion – via Paynesville, Congotown and Spriggs-Payne airport in the east. Nigeria saw an opportunity to use its strength in conventional warfare to capture Monrovia and drive the NPFL to the negotiating table. As Howe states:

‘ECOMOG’s overall strategy was for its conventional military force to intimidate the three factions while an interim government tried to resolve political differences and prepare Liberia for peaceful elections’.212

Restricting military operations to Monrovia is clearly what Nigeria, and ECOMOG, had in mind when they decided upon intervention. As the first Chief of Staff of the ECOMOG mission, Nigerian Major General C.C Iweze recalls, ECOMOG had no plans beyond establishing a Monrovia as a ‘bridgehead’ to open the political ‘space’ for negotiations.213 Orders for the Nigerian battalion were to move into position

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211 ECOWAS Standing Mediation Committee, Banjul, Republic of Gambia, Final Communiqué of First Session 7 August 1990, in Weller (ed), Regional Intervention and Peace Enforcement: The Liberian Crisis, Pg 72
212 Howe, ‘Lessons of Liberia: ECOMOG and Regional Peacekeeping,’ Pg 154.
213 Walraven, Containing Conflict in the Economic Community of West African States: Lessons from the Intervention in Liberia  Pg 37.
around the St Paul’s river bridge and pursue ‘negotiation for the surrender of the NPFL forces’. Mayes argues that Nigeria ‘envisioned ECOMOG as a means to secure the capital and its environs’. Iweze recalls that three options for deployment were being considered in Freetown before the intervention. One involved a move ‘by land across Sierra Leone to the east and move into Monrovia from west Liberia’ but was rejected by military planners because ‘the logistic support would be more than we could handle and the condition of the roads would incapacitate our transport and compound our problems from the onset’. ECOMOG entered Liberia without transport helicopters and during the planning phase, the unit responsible for logistics had no officers actually trained in logistics, indicating that only a small operation was predicted. The force that landed in Monrovia ‘was large enough to stop the warring factions from fighting in Monrovia but not big enough to impose a permanent truce for the entire country’.

Nigeria believed the battle for Monrovia allowed it to leverage its offensive capacity, especially is organisational capacity and heavy weapons, against the lightly army and poorly organised rebel soldiers. Adebajo says that Nigeria ‘dismissed [the NPFL] as a ‘rag-tag’ arm[y] packed with ill-trained, drug induced child soldiers who would be intimidated at the sight of professional armies’. Officers interviewed by Herbert Howe ‘initially assumed that the superior firepower of their conventional, professional force would a priori intimidate the ragtag NPFL’. Arnold Quainoo, the first Force Commander of ECOMOG ‘believed the NPFL would lay down its arms once ECOMOG made clear both its determination and its armed capability’.

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217 Walraven, Containing Conflict in the Economic Community of West African States: Lessons from the Intervention in Liberia Pg 37.
219 Walraven, Containing Conflict in the Economic Community of West African States: Lessons from the Intervention in Liberia Pg 37.
220 Adebajo, Liberia's Civil War: ECOMOG and Regional Security in West Africa Pg 71. See also Adekeye Adebajo, Building Peace in West Africa: Liberia, Sierra Leone and Guinea-Bissau (London: Lynne Rienner, 2002).
221 Howe, Ambiguous Order: Military Forces in African States Pg 147.
222 Howe, ‘Lessons of Liberia: ECOMOG and Regional Peacekeeping,’ Pg 154.
intervention] there was a perception that the rebels would abandon their guns the moment the peace enforcement mission arrived in Liberia’.223 He recalls:

‘in one of my discussions with one of the officials of ECOWAS, he had the impression that with the calibre of soldiers all the warring factions had, the sight of tanks, armoured vehicles and aircraft would scare the living daylight out of them and we would just walk over the area’.224

According to a ‘top Ghanaian Foreign Ministry official’ the intervention was predicted to last an ‘absolute maximum of six months’.225 Proponents of intervention argued in Banjul in late July that ‘a surprise move into Monrovia would bring a quick... end to the carnage there’.226

We can see here the logic behind ECOMOG’s deployment. Liberia’s civil war had degenerated into a zero-sum struggle for Monrovia and the spoils of office. The commitment of both the AFL, INPFL and NPFL to the ‘battle for the capital’ indicated to outside actors that controlling Monrovia offered high political payoffs. As Liberia’s factions fought inconclusively over the ruins of Monrovia it was clear that a conventional military force could capture and then defend the capital with a minimum of force. If Taylor had difficulty ousting remnants of the AFL from central Monrovia, they would not stand a chance of ousting Nigeria. Nigeria and ECOMOG believed they were holding what Taylor coveted above all else – Monrovia and the mantle of sovereignty.

Nigeria’s intervention has come under much criticism. The deployment was, in Walraven’s opinion, a ‘serious miscalculation’.227 ECOMOG’s ‘preparations for intervention as well as its military capabilities were grossly insufficient… its strategy was seriously flawed and its tactics were short-sighted.’228 Walraven argues that ECOMOG ‘underestimated Taylor’s determination to settle for nothing less than the

223 Benjamin Njoku, , ‘How Ghanaian ECOMOG commander betrayed Sgt Doe’, The Vanguard (Lagos), 26 September 2009
225 Howe, Ambiguous Order: Military Forces in African States Pg 160., Tuck, ’Every Car or Moving Object Gone: The ECOMOG Intervention in Liberia.’
227 Walraven, Containing Conflict in the Economic Community of West African States: Lessons from the Intervention in Liberia Pg 36.
228 Ibid, Pg 41.
Liberian presidency.' 229 Nigeria’s intervention may have prolonged the war and transformed it from a political conflict into an economic one. It was only later in the war, after Monrovia was occupied by ECOMOG, that factions ‘soon lost sight of why they were fighting and any end to the war… and became embroiled in the warlord political economy… [fighting for control of] diamonds, gold, rubber, hardwood, palm oil, marijuana and looted goods of all sorts’. 230 Howe argues that ‘by not carrying the war outside Monrovia, except when attacked in late 1992, ECOMOG allowed Taylor to recover from his two defeats and to loot much of the countryside’. 231

If anything, however, Nigeria overestimated Taylor’s desire to capture Monrovia in the short term. By controlling Monrovia ECOMOG believed that it was controlling not only Taylor’s access to the Liberian state, but his prospects to garner revenue. What ECOMOG underestimated was the willingness of actors in the international political economy to deal with a non-sovereign entity in natural resources and weapons. 232 And to be fair, the strategy almost worked. By November 1990, with few casualties, the humanitarian situation in Monrovia had been stabilised, Taylor was dealt a decisive military blow and had signed a cease-fire, thus fulfilling all of Nigeria’s original objectives. That it could achieve this by deploying a military contingent in Monrovia demonstrates how important African capital cities are in economic and strategic terms. In the end, the fact that Taylor continued to receive resources from logging, diamonds, and gold gave him incentive to abandon negotiations and pursue a military option. It is important to note however, that the destructive and sub-optimal economic dimensions of the Liberian civil war studied in the literature are a consequence of rational, cost-effective, Nigerian military strategy.

Causal Mechanism 2: Conclusions

The causal mechanism linking fighting in the capital to the chances of military intervention appears plausible from the preceding analysis. When combat between Doe’s army and the NPFL centred on Liberia’s countryside, irregular tactics and counter-insurgency dominated. Intervention was an unattractive prospect for a

229 Ibid, Pg 42.
230 Boas, 'Liberia and Sierra Leone - dead ringers? The logic of neopatrimonial rule,' Pg 711.
232 Ibid, Pg 147.
Nigerian military apparatus designed to fight conventional wars. Evidence suggests that Nigeria associated guerrilla warfare with high costs and low payoffs. As the fighting concentrated in Monrovia and the factions committed to open warfare for the city, Nigeria exploited an opportunity to leverage its conventional war fighting ability and influence the outcome of Liberia’s war. Indeed, existing statistical models suggest that Nigeria’s deployment occurred at a sub-optimal point in the conflict as Nigeria’s favoured, party, the government of Samuel Doe, was on the precipice of defeat. Yet, Nigeria perceived low rather than high costs despite the substantial increase in the NPFL’s numbers and territorial control since May 1990 when Babaginda rejected Doe’s request for troops. ECOMOG strategists planned for a conventional assault and defence of Monrovia to hold the conflict’s singular bargaining chip and play kingmaker in Sub-Saharan Africa’s first crisis of the post Cold War period. Not all civil wars are equal. Some forms of warfare offer more opportunities for foreign states to do what they do best – fight conventional wars – and in different forms of warfare these opportunities arise at different points in the war-process.

That said, statistical models rarely consider how the goals of foreign states influence the chances and timing of foreign deployment, and in this case, Nigeria’s objectives weighed heavily in the decision-making process. Recall that Nigeria’s primary objective was to stop the NPFL from taking power in Liberia, not necessarily to ensure the survival of Doe’s regime. Any intervention in April and May 1990 could only have come in the form of direct support for Doe and the AFL. It would be extremely difficult for Nigeria to claim that it was not supporting one of Africa’s less endearing despots but opposing insurrection and destabilisation in West Africa as Nigerian soldiers fought alongside the AFL in Nimba county. Moreover, given the low political importance of Samuel Doe in Nigeria’s wider strategic vision, it is unlikely that enduring the high costs of a counter-insurgency campaign would be worth the payoff.

If Nigeria wished to stop the NPFL from taking power by force then it had to be sensitive to precisely what needed to be ‘taken’ before the NPFL could claim power. A norm affixing sovereignty to control of the capital city meant that Monrovia was central to Nigerian objectives. Since the historical precedent was to recognise African governments who controlled, or took control of, their capital cities, Nigeria would
have to impede this path for its objectives to be realised. Nigerian interests were
directly threatened as the NPFL approached Monrovia and looked increasingly likely
to capture the capital. With a conventional military force Nigeria fortified and blocked
the historical route to sovereignty to increase the incentives for Taylor to pursue a
different path – in this case, democratic elections.

In practice, the majority of this thesis has assumed that norms are ‘static’ and that
states are norm ‘receivers’. However, it is difficult to divorce Nigeria’s intervention in
the Liberian civil war from a wider strategic project to re-engineer sovereignty norms
in West Africa. Many states had an interest in perpetuating the norm that controlling
the capital was sufficient to claim sovereignty during the Cold War. Rulers could
reliably accumulate military and economic assistance, keeping them and their allies
generally secure from the threat of small-scale insurrection. However, the effect of the
end of the Cold War may have been change the impact of a sovereignty-capital norm
from providing regime security to undermining it. A capital-sovereignty norm has the
effect of incentivising the use of violence by sub-state groups. Insofar as the perks of
sovereignty can only be claimed by physically controlling a limited land area, sub-
state actors will focus their strategies to access power on physical, that is military,
control. While this may have been acceptable when military and economic aid was
widely available, as this aid dried up, it left a number of West African states
vulnerable to even small-scale insurrections. In order to disincentivise the pursuit of
power by force, West African states had to disconnect the association of controlling
Africa’s capitals with international recognition. That is, sovereignty norms in West
Africa needed re-engineering. The best and – as discussed above – the most cost-
effective way of achieving this was to control West Africa’s capital cities when they
were threatened. Thus, Nigeria focused its military strategy on controlling Freetown
in Sierra Leone and did not recognise the rebels when it controlled the city. Senegal
and Guinea acted to oppose the capture of Bissau by a fractious group of the military
in 1998. Winning elections rather than capturing capitals is the norm that West
African states seem increasingly willing to promote. Individuals that hold capitals but
lose elections are increasingly likely to remain unrecognised, as Johnny Paul Komora
discovered in Sierra Leone in 1997. Indeed the African Union now refuses to
recognise governments that capture capitals by force. In 2008, Guinea’s military junta
was not recognised nor was Laurent Gbagbo’s attempt to physically hold power in
Cote d’Ivoire by controlling Yamoussoukro and Abidjan. Promoting a democracy-sovereignty norm over a capital-sovereignty norm does offer benefits to incumbent rulers. Although losing elections is a risk, most governments are in a stronger position than domestic rivals in their ability to disburse sanctions and rewards in exchange for electoral support.

Normative engineering can only be successful if its practiced and the limited military capabilities of many West African states, combined with internal problems, may limit the extent to which norms can be changed. In Cote d’Ivoire, for example, Nigeria threatened to invade and physically oust Laurent Gbagbo if he did not accept election results that deemed his rival, Alassane Ouattara, as the legitimate president. Gbagbo, however, called Nigeria’s bluff and the regional giant looked ill-prepared and motivated to fight Gbagbo’s backers who, unlike Charles Taylor, were relatively well organised with heavy weapons. In the end it was UN and French soldiers that followed through, but this raises questions about the extent to which norms can be changed in West Africa.

Much of the preceding is speculative and more research is needed to examine whether normative change is occurring in West Africa and the extent to which this is possible given the capabilities at the disposal of present rulers. Nonetheless it does point us towards the close integration of objectives and strategy in military intervention. While the causal mechanisms discussed in Chapter 2 are plausible by the analysis in this chapter, we need to keep in mind that Nigeria’s military capabilities also dovetailed well with its political objectives.

**Conclusion**

This chapter has shown that the causal mechanisms linking economic geography with the location of fighting and foreign intervention are plausible. The overwhelming political and economic importance of controlling Monrovia in a situation where both Samuel Doe’s AFL and Charles Taylor’s NPFL lacked the ability to coordinate conventional offensives increased the utility of a ‘strategy of exhaustion’. President Samuel Doe abandoned an ill-fated counter-insurgency campaign in place of a close
positional defence of Monrovia. His decision was based on the knowledge that Monrovia was where the NPFL would gain the highest utility in capturing, and that the NPFL lacked the offensive the capacity to do so. Secondly, most regular, standing military forces have an advantage in conventional warfare. Conventional offense is most effective when belligerents commit to a pitched battle, regardless of the balance of power between the rebels and a government. Neither the AFL, nor the NPFL committed to face-to-face battles until they were in close proximity to the capital. This geographic conflict structure created disincentives for Nigeria, determined to avoid an NPFL take-over of Liberia, to intervene whilst fighting was in the countryside. As the fighting reached Monrovia, Nigeria believed it was embarking upon a low-cost mission to capture the capital from militias lacking the capacity to re-take it. This section has shown a clear link between the geography of civil war and the timing of foreign intervention. In low-capability warfare, foreign states are more likely to hold off on deployment until their rival engages in the open and design military strategies around taking and holding areas of vital economic importance.
Chapter Eight

Conclusions

Whether by the AK-47 or the aircraft carrier, strategy is apprehensible within existing theoretical frameworks. This thesis has articulated a theory of military strategy in low-capability warfare capable of explaining existing empirical puzzles and generating novel hypotheses. On the shoulders of Stathis Kalyvas and Laia Balcells, low-capability warfare was distinguished from ‘conventional’ and ‘guerrilla’ warfare by the poor material and organisational capabilities available to both government and insurgent actors. Light and small weapons, especially Kalashnikov assault rifles and RPG-7 grenade launchers, prevail in a military environment lacking the mobile armor and artillery we associate with conventional warfare. My main contention was that low-capability warfare is defensive. Small and light weapons have devastating defensive advantages when belligerents lack the ability to organise and supply their soldiers. Capturing territory in low-capability warfare is vastly more costly than defending it.

Chapter 2 predicted that a ‘strategy of exhaustion’ is cost-effective in low-capability warfare. The attritional advantages of defense can be exploited by concentrating one’s forces in areas where a rival is likely to attack. Even if an opponent’s military force cannot be destroyed, holding strategically important sites preserves bargaining power for future negotiations. Conventional warfare, on the other hand, demands that a rival’s offensive capacity be degraded and a ‘strategy of annihilation’ sees both the government and insurgency striving to destroy their opponent’s offensive capabilities through a combination of conventional offensive and defensive tactics. Manoeuvre and judicious force concentration directed at supply lines, communications and strategic bottlenecks are common derivatives of this strategy. Guerilla strategy is the inverse of a ‘strategy of annihilation’. Small and mobile units disperse, often into rough terrain where the government has difficulty concentrating its armed forces, to harass soldiers, officials and infrastructure. Anything but the smallest and sharpest of force concentrations are avoided to prevent being obliterated in open battle. Counter-insurgency is a variant of the ‘strategy of annihilation’ relying on a combination of
Chapter Eight - Conclusions

territorial defence in peripheral communities combined with mobile ‘search and destroy’ operations to eliminate the threat posed by guerrillas.

Economic geography structures the location and concentration of fighting in low-capability warfare, in addition to the chances and timing of foreign intervention. Domestic combatants have incentives to concentrate in positional defence of lucrative regions. It is here that the enemy has high incentives to attack and it is here that casualties can be inflicted in a fight where the odds are stacked in favour of the defender. Holding these areas denies resources to rivals and limits their ability to recruit soldiers and purchase weapons. Upon these insights, fighting was predicted to be more likely to occur and cluster around a country’s most valuable areas. Conflict geography in conventional warfare is structured by the location of a rival’s force-concentration and the weak points there-located, not economic geography. Indeed it is the very predictability of positional defence in valuable regions that renders such a strategy dangerous. Governments can protect valuable sites and confine an insurgency to the periphery in guerrilla warfare, thus lowering the incidence and concentration of fighting around these locations.

Conflict geography in low-capability warfare, structured as it is by the economic geography of a conflicted state, was also predicted to influence whether and when foreign states choose to intervene. No studies have yet considered that the strategic decisions of belligerents at the domestic level influence the strategies of actors at the international level. Military forces are not usually designed to fight counter-insurgency. Rather, they are assembled to fight conventional wars against other states. Potential intervener prefer to deploy during ongoing or predicted pitched battles because it is at this point that conventional war-fighting ability can be best leveraged for impact upon the outcome of a civil war. Conventional battles are communicative, especially in low-capability warfare. Where a belligerent is prepared to assault a fixed position when defence has the advantage, foreign states can infer that the object of combat is of high value. Conventional battles gravitate towards areas of high economic value in low-capability warfare and, as they do, the probability of foreign states intervening increases. Fighting in conventional warfare is not related to economic geography and the chances of foreign intervention are unrelated to the distance of fighting from these areas. Intervention in guerrilla warfare was predicted
to be rare, but as open warfare exhibits no tendency towards areas of high economic value, no relationship between the distance of fighting from these zones and the chances of intervention was predicted.

Sovereignty norms connecting control of the capital city to international recognition, in a context where the opportunities for domestic accumulation are low have transformed Africa’s capitals into lucrative point resources. Sovereignty offers benefits with few risks. The ability to legitimately tax trade, exchange policy positions for military aid, economic aid and loans from international financial institutions, and contract foreign firms to exploit and legally sell natural resources increase the payoffs for international recognition. Physical (that is, military) control of these cities has, historically, offered the best chance for domestic actors to realise these benefits. As the epicenter of economic geography, capital cities were predicted to be at a higher risk of experiencing any fighting, experiencing a higher proportion of fighting, and triggering foreign military intervention in Africa’s low-capability conflicts when compared to conventional and guerrilla conflicts.

Taken together, the theory and hypotheses in this thesis advance our extant knowledge by developing a theory of military strategy in low-capability warfare and articulating a plausible logic behind observed, but undertheorised, links between economics and violence in contemporary civil war.

Summary of Findings

Chapter 4 found that the odds of an African capital experiencing fighting during a civil war were more than six times higher in low-capability warfare when compared to conventional warfare - a finding independent of confounding variables such as the number of soldiers at the disposal of a government, the battle intensity and the size of the country. Conflicts dominated by light weapons and, insofar as they correlate, by belligerents with a poor capacity to organise and supply their soldiers, are more likely to battle it out over the capital city. A statistically significant link between the level of conventional arms imports and the probability of fighting in Africa’s capitals increased our confidence in the presence of a relationship between low offensive
capacity and defensive military strategies structured around valuable regions. The lower the level of conventional weapons in a war-system, the higher the utility of a defensive ‘strategy of exhaustion’, as the example of Angola in the early 1990s demonstrated. Chapter 4 also showed fighting in low-capability warfare becomes less likely as one moved further from the capital. Fighting was more evenly dispersed, in conventional and guerrilla warfare, gravitating towards choke points for mechanised armies and international borders.

OLS regression analysis in Chapter 5 showed that Africa’s capitals were subjected to a higher proportion of battles when combatants were unable to access or wield heavy weapons, although these results were dependent upon removing outlying cases. Visual analysis ascertained that 80% of low-capability conflicts exhibited a concentration of fighting in the capital city. Put another way, in 80% of low-capability conflicts the number of battles that occurred around or within the capital city eclipsed the number of battles that occurred in any similarly-sized land area in the countryside. Just 25% of conventional conflicts and 11% of irregular conflicts showed the same pattern. Correlation between concentrations of fighting and areas of high economic value was comparatively high in the sample of low-capability warfare. The overlap was near perfect in Somalia, the Central African Republic and Congo-Brazzaville. Bipolar conflict structures correlated with bi-polar economic geographies in Sierra Leone (1991-2000) and Liberia (2000-2003). Concentrations of fighting and locations of high economic value did not correlate well in conventional and guerrilla warfare with the exception of insurgencies operating in regions of high oil production in Nigeria and Angola. This finding might be explained by both the increased risk of rebellions emerging in areas of high oil production and the attractiveness of disrupting oil revenues where government actors are heavily dependent upon hydrocarbon exports.

Chapter 6 showed that foreign states show a preference for intervention when conflict approaches capital cities in low-capability warfare – a pattern absent in both conventional and guerrilla warfare. A pitched battle within 25km of the capital increased the odds of a foreign state intervening by 11 times, a finding comparable to the obligations of a defence pact or a humanitarian crisis. In contrast, international alliance networks and rivalries tended to trigger intervention in conventional and
guerrilla warfare. Any country deploying in these higher-capability forms of warfare must bear the additional costs of confronting a rival with substantial offensive capabilities or a protracted counter-insurgency campaign. Either way the stakes need to be higher to justify the costs.

While the statistical analyses of Chapters 4-6 showed conspicuous and systematic cross-national links between low-capability warfare, economic geography, conflict geography and foreign intervention, the regression analysis did not demonstrate the plausibility of causal mechanisms described in Chapter 2. Chapter 7 tested two casual mechanisms with a case study of the Liberian civil war between 1989 and 1990: (1) the link between economic geography, a strategy of exhaustion and civil war location and (2) the link between fighting in the capital and a preference for intervention when conventional tactics are deployed. Analysis suggests that both mechanisms were plausible. President Samuel Doe changed his strategy from counter-insurgency to positional defence of the capital Monrovia. Doe and the AFL had knowledge of the NPFL’s low offensive capacity and Charles Taylors intention to attack Monrovia. Although Doe was killed in September 1990, his strategy very nearly worked as forces from ECOWAS, led by Nigeria, deployed in the capital and pushed the NPFL to the outskirts of the city. Luring ill-equipped insurgents into a battle for the capital has succeeded in other contexts, most notably in Chad in 2006 and 2008 but also in 2011, in Mogadishu, Somalia.

Nigerian intervention was intimately linked to Doe’s decision to pull back and defend Monrovia. Luring the NPFL into a conventional battle for Monrovia created the very conditions that made Nigerian intervention likely. Nigeria deployed in Liberia with a belief that it was embarking upon a low-cost, high payoff, mission to secure Monrovia and hold the key bargaining chip in future negotiations. Nigeria opted out of a military intervention in May 1990, despite a request from President Doe and a willingness to deploy, as the AFL and NPFL fought a guerrilla war in Liberia’s countryside. Nigeria’s military was ill suited to a counter-insurgency campaign and perceived deployment in a military situation dominated by irregular tactics as risky and costly. A preference for intervention in conventional battles led Nigeria to intervene at an apparently sub-optimal point when its rival, the NPFL, were far stronger than when Nigeria opted out of intervention in May 1990.
Evidence presented in Chapters 4-7 consistently supports the notion that economic geography and military outcomes in low-capability warfare are connected. From this thesis, we understand, if only modestly, more about why civil wars are fought where they are, the triggers of foreign military intervention and the logic, or strategy, that produces these outcomes. On a more practical level, the list of cities upon which the devastation of war was unleashed between 1989 and 2008 in Africa is long. From north to south they include: Bissau, Freetown, Monrovia, N'djamena, Khartoum, Mogadishu, Bangui, Brazzaville, Kigali, Bujumbura, Kinshasa and Maseru. We now understand more about why this spate of besiegement has occurred. The destruction rent upon Africa’s most populous and, usually, most productive, cities is the product of design, not of chaos and irrationality. Indeed it is precisely their population and productivity that, in part, makes them an attractive fulcrum for the strategies of insurgents, governments and foreign soldiers. Domestic and international actors have designed their military strategies around the defence of these cities to maximize bargaining power in a context where violence is the primary means though which ends are realised. This points us to a second important contribution of the present research. Norms stipulating criteria for international recognition have enormous bearing on the military strategies of actors in low-capability warfare. Put bluntly, sovereignty norms influence which locations will be subjected to the depredations of war, and which locations will not. Nowhere are norms more important than in Africa where the opportunities for domestic revenue extraction are low. So long as controlling Africa’s capitals offers the best chance for sub-state groups to access the material benefits of statehood, they will continue to be the focus of military strategy. So too, insofar as physical control of a territory is tied to the benefits of sovereignty, violence will remain an attractive means of taking power. Indeed, as long as small and symbolic land areas are coupled with international recognition, rulers may have little incentive to construct the organised, coherent military apparatus required to defend the populations they pledge to serve.
**Appendix**

**Cases of Low-Capability Warfare**

Cameroon vs UPC 1960-1961


Central African Republic vs Kolingba/Bozize 2001-2002

Central African Republic vs UDFR 2006

Chad vs Various 2005-2008

Comoros vs Presidential Guard 1989

Comoros vs Anjouan 1997

Congo-Brazzaville vs Cobras, Ninjas, Cocoyes 1993-2002

Democratic Republic of Congo vs Katanga/Kasai, 1960-1965

Guinea vs RFDG 2000-2001

Lesotho vs Military Faction 1998

Liberia vs NPFL, INPFL 1989-1995

Liberia vs LURD, MODEL 2000-2003

Sierra Leone vs RUF, AFRC 1991-2000

Somalia vs Various 1990-1996

Somalia vs SRRC 2001-2002

Somalia vs ICU, Al-Shabaab 2006-2008

Sudan vs JEM 2003-2008

Uganda vs ADF, LRA, WBNF 1990-2003

**Cases of Conventional Warfare**

Angola vs UNITA 1975-2002

Chad vs Various 1980-1994
Appendix

Cote d’Ivoire vs MJP, MPIGO, Forces Nouvelles 2002-2004
Democratic Republic of Congo vs Opposition Militias 1967
Democratic Republic of Congo vs FLNC 1977-1978
Democratic Republic of Congo vs ADFL, RCD, MLC 1996-2001
Djibouti vs FRUD 1991-1994
Guinea-Bissau vs Military Junta 1998
Mozambique vs RENAMO 1977-1992
Nigeria vs Biafra 1967-1970
Rwanda vs RPF 1990-1994
Uganda vs UNLA 1978-1980

Cases of Guerrilla Warfare

Angola vs FLEC 1991-2004
Burundi vs Hutu Insurgents 1965
Burundi vs CNDD, Palipehutu, FDD 1991-2008
Chad vs Various 1966-1979
Chad vs MJDT 1997-2002
Democratic Republic of Congo vs CNDP, BDK 2006-2008
Djibouti vs FRUD - D 1999
Eritrea vs EIJM – AS 1997-2003
Ethiopia vs Eritrea 1964-1991
Ethiopia vs TPLF 1976-1991
Ethiopia vs WSLF 1977-1983
Ethiopia vs Various 1996-2008
Mali vs Tuaregs 1990-1994
Mali vs ATNMC 2007-2008
Mauritania vs POLISARIO 1975-1978
Niger vs Tuaregs 1992-1997
Niger vs FARS 1997
Niger vs MNJ 2007-2008
Nigeria vs NDPVF 2004
Nigeria vs Ahlul Sunnah Jamaa 2004
Rwanda vs PALIR 1997-2002
Senegal vs MFDC 1990-2003
Somalia vs SNM 1982-1989
South Africa vs SWAPO 1966-1988
Sudan vs Anya Nya 1963-1972
Sudan vs SPLM 1983-2002
Uganda vs NRA, HSM, LRA 1981-1989
Uganda vs LRA, UDCA 2004-2007
Zimbabwe vs ZANU, ZAPU 1973-1979
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