

AN ANALYSIS OF POST CONFLICT ECONOMIC & PRIVATE SECTOR PERFORMANCE



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Abstract

The liberal peacebuilding literature focuses on economic growth as a key factor to exiting the conflict trap. Yet, there is a lack of research, particularly in Africa, on private sector development in post conflict environments. This thesis uses the Structure-Conduct-Performance (Bain, 1959) framework, which suggests that conflict alters the conduct of economic decisions-makers, to analyse the private sector reconstruction process. This allows for the inclusion of non-mainstream critiques of peacebuilding in the analysis and view private sector development from a partially, “bottom-up” approach. Each of the three substantive chapters investigates different aspects of these relationships to determine how and why private sector performance is ultimately influenced by recent conflict. The first chapter provides analysis at a macroeconomic and country-level, determining the influence of foreign direct investment (FDI) and aid on economic growth within the post conflict period. Using a panel structural vector autoregressive model, this paper finds that on average, FDI per capita flows have a significant and positive impact on GDP, which is larger in magnitude than aid per capita. The second chapter uses firm-level data in the African continent to explore differences in what influences business growth in post conflict firms. The variations I find are i) employee training has a significant higher correlation with firm performance in post conflict regions and ii) foreign ownership and business networks only have a positive association with non-post conflict firm performance. Lastly, the final chapter of this thesis uses fifty qualitative interviews from Liberia to be used as a case study for private sector development in a post conflict African country. The evidence suggests that the conflicts experienced in Liberia had a profound and long-lasting effect on firm conduct (access to finance, human capital, innovation, and trust), which has had negative consequences on firm performance. However, different types of entrepreneurs and investors have effectively altered their conduct to navigate these post conflict barriers and survive the challenging business environment. Overall, this thesis provides novel evidence on private sector development in post conflict markets, which can ultimately contribute to reconstruction policy and programs in these regions.

ACKNOWLEDGEMENTS

I am incredibly grateful for the immense amount of support I received throughout the past four years. There have been many challenges that I have faced to complete this DPhil, including stops by Liberian immigration, fieldwork going completely sideways, a stolen laptop, and even a pandemic. I couldn't have finished it without a wonderful group of people who have helped me along the way.

I first and foremost want to thank my supervisor, Christopher Adam, who took on my somewhat unconventional thesis topic with enthusiasm and interest. Our long meetings discussing models and theories helped me place my ideas and questions into a true body of research. Thank you for all the time you spent on helping me turn this thesis into a reality. In addition, thank you to the International Development Department at Oxford for providing opportunities for students to dive into research questions that may not fit into a standard department's box.

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To my community in Liberia, thank you so much for sharing your insights, learnings and passions with me. You opened my eyes to all of the struggles in doing business but also all of the wonderful opportunities in the region. Each of you not only contributed to my understandings of such a complex market but also, inspired me to pursue my passion of bringing more investment to the continent. Thank you for making Monrovia feel like home.

I wouldn't be handing in this thesis without the never-ending support and encouragement from my family back in Canada. Yama, you have been an amazing female role model for me and always told me that I could do anything that I set my mind to. To my Dad, who always inspired me to be the best person I could be, who talks through my decisions with me and encourages my ambitions to create change in the world. A big thank you to Noah, who always knows how to make me laugh when I need it the most. And to Chris, who was my editor in chief for my final phases of this thesis. Lastly, I want to thank my Nan, for always providing me with the love and guidance needed to get through some tough times. I know Papa would have been so happy to see this day.

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TABLE OF CONTENTS

ABBREVIATIONS	iv
ADDRESSING THE EXAMINERS' CORRECTIONS	v
Section 1: Overview	v
Section 2: Addressing the 5 Overarching Areas of Revisions	v
Section 3: Addressing Individual Chapter Revision	ix
Section 3.1: Introduction	ix
Section 3.2: Chapter 1.....	x
Section 3.3: Chapter 2.....	xi
Section 3.4: Chapter 3.....	xii
INTRODUCTION: An Analysis of Post Conflict Economic & Private Sector	
Performance	1
Section 1: Thesis Introduction	1
Section 2: Key Debates in Peacebuilding	5
Section 2.1: Liberalized Economic Growth	7
Section 2.2: Foreign Aid Inflows	10
Section 2.3: Natural Resources and Privatization.....	12
Section 2.4: Military and International Intervention.....	14
Section 2.5: Democratization and Institutional Reform.....	16
Section 3: Defining the Post Conflict Era	19
Section 3.1: Defining Peace	19
Section 3.2: The Post Conflict Framework in Practice	20
Section 3.3: State Fragility vs. Post Conflict Definitions.....	21
Section 3.4: Quantitatively Defining Post Conflict States	23
Section 4: Theoretical Framework for Thesis	25
Section 5: Contributions to Existing Research	27
References for Introduction	30
CHAPTER 1: Foreign Direct Investment: A Boost to Post Conflict Economic Recovery?	
A Structural Vector Autoregressive Model	35
Section 1: Introduction	35
Section 2: Literature Review	37
Section 2.1: The Impacts of Foreign Direct Investment in Developing Countries	38
Section 2.2: Capital Inflows into Post Conflict Countries.....	40
Section 3: The Theoretical Framework of the Conflict Trap and the Role of FDI	44
Section 3.1: An Overview of the Solow Growth Model	44
Section 3.2: Conflict-Affected Countries and Growth.....	46
Section 3.3: Four Cases on How FDI Can Impact Growth Using the Solow Growth Model.....	47
Section 4: The SVAR Method	51
Section 4.1: SVAR Model One	53
Section 4.2: The SVAR Model Including Exogenous Variables.....	56
Section 4.3: SVAR Model Two	57
Section 5: Preliminary Data Analysis	58
Section 5.1: Critical Analysis of Data.....	66

Section 6: Model Results	68
Section 6.1: SVAR Model One Results	68
Section 6.2: SVAR Model Two Results	74
Section 7: Conclusion	79
References for Chapter 1	81
Appendices for Chapter 1	85
CHAPTER 2: Investigating Firm Performance in Post Conflict Africa	95
Section 1: Introduction	95
Section 2: Key Debates in the Literature	97
Section 2.1: Human Versus Physical Capital in Post Conflict Contexts.....	98
Section 2.2: Does Foreign Ownership Support Post Conflict Firm Growth?.....	100
Section 2.3: Does Trust, Networks and Institutions Positively Increase Firm Performance in Post Conflict Countries?.....	102
Section 2.4: Summary of Literature Gaps.....	105
Section 3: The Characteristics of a Post Conflict State	106
Section 3.1: Developing a Binary Post Conflict Definition.....	106
Section 3.2: Working with Complex Post Conflict Contexts and Characteristics	108
Section 4: Methodology	115
Section 5: Exploring the WES Data	119
Section 5.1: Understanding the World Bank’s Enterprise Surveys (WES)	119
Section 5.2: Summary Data Analysis for Post Conflict and Non-Post Conflict Firms	124
Section 5.3: Sector Analysis by Post Conflict Environments.....	126
Section 5.4: Preliminary Analysis of the Four Key Firm Resources.....	128
Section 5.5: Discussion on Missing Firms and Data Quality.....	130
Section 6: Model Results	135
Section 6.1: Separate Models for Types of States	136
Section 6.2: Model with Post Conflict Interactions	140
Section 6.3: Further Modelling for Conflict Characteristic Analysis	144
Section 6.4: Further Modelling for Sector Analysis	146
Section 7: Summary and Conclusion	151
References for Chapter 2	154
Appendices for Chapter 2	157
CHAPTER 3: Post Conflict Private Sector Development and Foreign Investment in Africa: Evidence from a Field Study in Liberia	186
Section 1: Introduction	186
Section 2: Liberia as a Case Study	189
Section 2.1: Gaps in the Literature: Heterogenous Effects by Firm Type.....	191
Section 2.2: Economic and Conflict History.....	193
Section 2.3: Current Post Conflict Economy.....	197
Section 2.4: Post Conflict Sizeable Economic Shocks	199
Section 2.5: Firm and Entrepreneur Characteristics in Liberia	204
Section 2.6: Methods for Field Interviews.....	207

Section 3: The Structure of the Liberian Post Conflict Market.....	209
Section 3.1: Conflict’s Influence on Post Conflict Market Structure.....	210
Section 3.2: Post Conflict Market Structure’s Impact on Current Firm Performance.....	214
Section 4: Conduct of Firms in the Liberian Market.....	220
Section 4.1: Conflict’s Influence on Post Conflict Firm Conduct.....	220
Section 4.2: Domestic Firm’s Conduct and Current Firm Performance	224
Section 5: Business Conduct Disaggregated by Different Types of Firms	232
Section 5.1: Multinational Corporations	233
Section 5.2: Foreign SMEs	238
Section 5.3: Re-pat Owned Businesses.....	243
Section 5.4: Alternative Investment.....	247
Section 5.5: Impediments to Foreigners Entering the Market	253
Section 6: Conclusion.....	257
References for Chapter 3	260
Appendices for Chapter 3.....	265
CONCLUSION TO THESIS.....	276
Section 1: Filling Gaps in the Literature	276
Section 2: Main Findings	279
Section 3: Policy and Peacebuilding Program Implications	283
Section 4: Future Research	284
References for Conclusion	287

ABBREVIATIONS

Acronym/Abbreviations	Definition
CPIA	Centre for Peace Initiatives in Africa
CSIS	Centre for Strategic & International Studies
DDR	Disarmament, Demobilization and Reintegration
DFI	Development Finance Institution
FDI	Foreign Direct Investment
LDC	Least Developed Country
MNC	Multinational Corporation
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OLS	Ordinary Least Squares
ROW	Rest of World
SCP	Structure-Conduct-Performance Paradigm
SME	Small and Medium Sized Enterprise
SVAR	Structural Vector Autoregressive model
UNMIL	United Nations Mission in Liberia
WES	World Enterprise Survey

Addressing The Examiners' Corrections

Sarah Burns

Section 1.0: Overview

Over the past six months, I have addressed the corrections that were provided by the examiners at my defence in September 2021. The predominant work included writing a brand-new concluding chapter for the thesis and making significant changes to the Introduction and Chapter 3. To develop a clearer contribution from Chapter 3, it was imperative to significantly change the framing of the evidence. You will notice that the sections have changed quite drastically, especially in Section 4 and 5. There were also smaller, albeit important, corrections made to Chapter 1 and 2, following the examiners recommendations. Regarding the entirety of the thesis, I spent this time focusing on the debates in the literature, contributions of this thesis and better framing of the research. In terms of the literature, I have added a significant amount of research that critiques the liberal peacebuilding process. This literature is used primarily in the Introduction (there is an entire section devoted to these debates) and Chapter 1. Lastly, since the final defence, the findings from Chapter 3 have been referred to by the World Bank to help advise their new \$40 million loan program that will be deployed to the Liberian government focused on private sector development.

In the next two sections, I have responded to the examiner's direct corrections. In most cases I will explain the changes that I have made and then refer to a page number where the changes can be found. There are some minor corrections within each chapter that I have not included here because they were simple 'fixes,' that do not require any explanation.

Section 2.0: Addressing the 5 Overarching Areas of Revision

- 1) *The first is that the contribution of this thesis is not well identified. This is true for the thesis overall and also for each of the individual chapters. The thesis claims that there is a contribution because no one has done this before. Instead, the thesis needs to discuss the contribution in terms of what is learned from this research.*
- 2) *The second is closely related to the first, which is the while there is considerable literature cited, there is not a discussion of the debates. Throughout the thesis, the literature discussions need to be framed as a critical review of debates or even different perspectives. This is essential to situate the contribution of the thesis to the wider literature and provide an easier way to identify the contributions.*
- 3) *The third is that the thesis displays a lack of engagement with non-mainstream/heterodox approaches, and mainstream economics critiques of Collier's (and co-workers) understanding of conflict and post-war reconstruction. These are central to the argument of the thesis, and yet are presented as undisputed approaches to the study of violence and post-conflict.*

I have answered the first three corrections together as they are all closely linked.

After going through the entirety of the thesis for the defence and adding new literature, I can better frame this thesis in terms of its contributions. I have reframed this thesis by using the main liberal peacebuilding debates, while specifically focusing on those in economic growth and the private sectors. There is now a section on the contributions in the introduction of thesis (pg. 27) and in the concluding chapter (pg. 276). In the conclusion, I have also added a section that focuses on the policy implications for peacebuilding that can be derived from this research (pg. 283). In terms of the chapters, the contribution to existing research is explained within the literature review and the findings summarized in the conclusion.

- Chapter 1: pg. 43-44 and pg. 79
- Chapter 2: pg. 105
- Chapter 3. pg. 190 and pg. 257*

*Note that these are primarily policy-based recommendations, which is then added to findings from Chapter 2 to better explain the contributions to the research in the concluding chapter.

The primary debate throughout this entire thesis is surrounding the liberal peacebuilding mandates, which primarily came from Collier and his colleagues research at the World Bank. This mandate has been implemented in numerous of the conflicts that are analysed throughout this thesis, including Liberia. However, there are economists (and non-economists) who critique this research and the policies. The details of these debates are described in detail in the introduction of this thesis (pg. 5). Although this thesis focuses primarily on the private sector and economy, I also discuss the other primary debates within the peacebuilding space. This includes the following five topics: liberalized economic growth (pg. 7), foreign aid (pg. 10), natural resources and privatisation (pg. 12), military and international intervention (pg. 14) and institutional reform (pg. 16). Within these debates, I included non-mainstream economist and other academics' views like Acemoglu, Addison, Surhke, Fearon, Wood, and Salih. I have also included these papers across the three chapters as well.

I have developed a summary of the primary debates that are discussed across this thesis, the views from non-mainstream researchers, and the contributions from this thesis (details for each are in the introductory chapter):

- 1) Chapter 1: World Bank and colleagues suggests that foreign aid is a key contributor to growth in post conflict time. Non-mainstream economists find that the magnitude of the positive impact is significantly less than the model suggests (Chapter 1).

- Chapter 1's SVAR model finds that FDI's per dollar impact on economic growth is significantly larger than aids. The impact of aid in the post conflict decade may not be as effective as Collier and Hoeffler implied.
- 2) Chapter 1: World Bank and colleagues suggests that the management of natural resources and attracting high quality MNCs is beneficial for peacebuilding. Non-mainstream economists find that peace is not related to commodity exports except negatively with oil and gas. Thus, peacebuilding policies should focus on investment for non-extraction sectors and domestic businesses.
- Chapter 1's model finds that FDI does impact economic growth, aligning with Collier et al.'s (2003) suggestions. However, it is the tertiary sector that is the largest portion of that FDI. This means it may not be natural resource extraction generating that growth.
- 3) Chapter 2 and 3: World Bank and colleagues suggests a "top-bottom" approach focusing on the structure of the market to drive growth. Thus, they recommend that it is large organizations that will produce economic growth, employment, and business reconstruction in post conflict environments. Non-mainstream researchers believe that this approach to economic growth only benefits the elite and generates additional inequality and tensions. They suggest that it is MSME domestic businesses who can create more sustainable and peaceful growth in these environments.
- Chapter 2 finds that firm conduct in post conflict Africa is a main contributor to firm growth (measured by employment growth) and is different in post conflict Africa. Peacebuilding policies should not just focus on the structure of markets as there are also long-term consequences to conduct that need to be considered. Chapter 2 also finds that it may be networks, trust and employee training that should be targeted with local businesses throughout the peace process to develop a stronger domestic private sector. Chapter 3 suggests that non-MNC businesses, particularly foreign-SMEs and re-pat SMEs, can navigate through the challenging structural markets if they alter their conduct. The main alterations they make to succeed in the private sector is accessing finance outside of the market, extensive and long-run training with employees and local suppliers, a focus on innovative market solutions, and building trusting networks. These successful changes in conduct should be implemented in peacebuilding programs to promote growth

in domestic SMEs, which may build more economic opportunities and lessen economic inequality.

- 4) Chapter 3: World Bank and colleagues suggest that knowledge and skill transfers occur from large foreign organizations to help fill the human capital gap present in these markets. Non-mainstream economists find that the ‘trickle-down’ effect from these large projects do not occur and that these actors are ineffective at successfully building local capacity.
 - Chapter 3 finds that the most effective knowledge and skill transfers to local markets derive from re-pat SME business owners in post conflict Liberia. This is because, the re-pat owners provide ‘hands-on’ and ‘on-the-job’ training with their employees. Since they understand the culture, they also focus more on building trust with local communities and suppliers. Foreign-SMEs are also relatively effective, although they do not integrate with local networks as often. FDI projects in Liberia have been viewed as ineffective with their transfers and integration with local supply chains, implying that the ‘trickle-down’ effect is not occurring. This is particularly due to a lack of trust from the local community.

Overall, you will find that even though I have used the mainstream liberal peacebuilding framework in this thesis, my conclusions are often in support of the non-mainstream and “bottom-up” approach to peacebuilding.

- 4) *The fourth is the lack of a conclusion that pulls together the analysis of the three chapters.*

An entire concluding chapter has been added to this thesis (pg. 276). It includes four primary sections: Filling Gaps in the Literature (pg. 276), Main Findings (pg. 209), Policy and Peacebuilding Program Implications (283) and Future Research (pg. 284).

- 5) *The fifth is that thesis needs a thorough editing. Its presentation is often poor, and there are a number of typos, non sequitur sentences and inaccurate referencing that needs addressing.*

This thesis has gone through a thorough editing. In March 2022, it went through a copyediting process. However, there has been changes made since March, especially in the introduction to the thesis and Chapter 3. I have also addressed the issues with the inaccurate referencing throughout the thesis, in particularly with the problems found in the primary interviews.

Section 3.0: Addressing Individual Chapter Revision

Section 3.1: Introduction

- 1) *The introduction needs to spell out the contribution of the thesis to the literature more effectively.*

The introduction has been completely re-written and focuses on the liberal peacebuilding debates, the different chapters, and where this thesis fits in the debates.

- 2) *What also emerge in the introduction and in the chapter that follows, is the lack of engagement with non-mainstream/heterodox approaches, and mainstream economics critiques of Collier's (and co-workers) understanding of conflict and post-war reconstruction.*

Discussed above in Section 2.0.

- 3) *It would also be useful to reflect a bit more critically on the definitions of post-conflict that is being used in the thesis.*

Using the non-mainstream approaches to peacebuilding, I was able to provide more reflection on the definition of post-conflict used in this thesis. In terms of the quantitative definition, the longer timeframe I use, which is two decades, aligns well with the non-mainstream approach (pg. 20, 21 & 24). This means that this definition is a good combination of approaches from both sides of the debate.

- 4) *Why is the SCP the appropriate framework?*

As I added more literature from the non-mainstream research, the SCP framework became even more appropriate because it allowed the flexibility for me to analyse the private sector in post conflict environments from both a 'top-bottom' approach, associated more with liberal peacebuilding, and a 'bottom-up' approach, associated more with the non-mainstream findings. The structure component of the SCP framework tends to focus primarily on the liberal-based post conflict reconstruction research and the conduct component allows a deeper dive into the non-liberal research (pg. 25).

- 5) *To what extent is this thesis about post-conflict in low-income countries and to what extent is it more generally relevant?*

See page 22.

- 6) *The term "non post-conflict" is awkward. It would be helpful to find another term to describe these countries.*

I spent a long time deliberating on this and speaking with other colleagues on the best way to do this. I did suggest shortening it to non-PC to make it less awkward but that was seen as too

informal. I also considered a few other terms like peaceful, positive-peace, non-conflict affected, etc. However, these other terms did not appropriately fit and could be misleading. For example, just because a country is non-post conflict, it does not necessarily mean that it has achieved positive peace. Thus, after much consideration, it was decided that “non-post conflict” was the most accurate way of describing these states.

Section 3.2: Chapter 1

- 1) *The introduction to the chapter could be stronger and could better set up the analysis that follows.*

The introduction to Chapter 1 has significantly changed and there are key references to the liberal peacebuilding debates discussed. The introduction also makes clear the contribution that this chapter makes to the debates on page 36.

- 2) *The discussion of the literature is not well organized. As noted above, it would be helpful to organize it around key debates.*

The literature review is still divided by the two different areas of research. The first (pg. 38), surrounds the debate on whether FDI has a positive impact on growth in post conflict markets. The second (pg. 40) discusses the debates on capital inflows in post conflict countries and how they may differ from other environments. For example, this section discusses how FDI in Liberia may support local economic growth but also exacerbate inequality. Both sets of debates are important for understanding the findings from the SVAR model.

- 3) *One concern with this chapter is the lack of discussion about the potential quality of the data.*

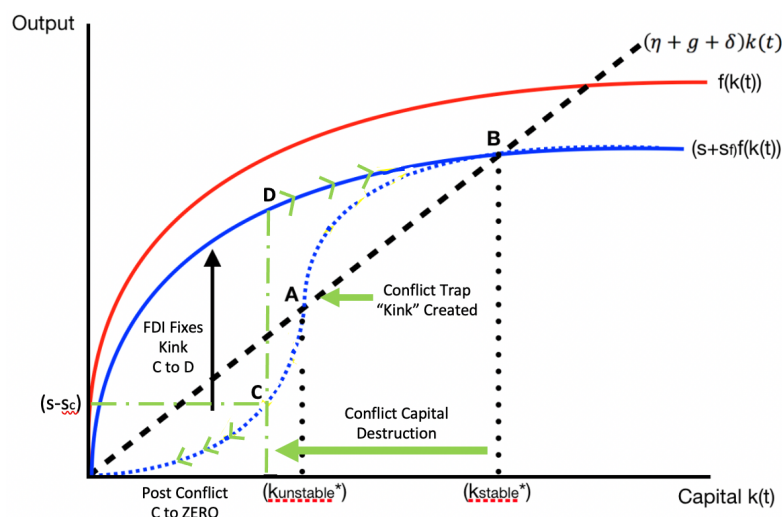
A new section in the preliminary data analysis, Section 5.1 (pg. 66), provides a critical analysis of the data.

- 4) *In several places in the thesis, you say that more data or better data would be helpful.*

The new Section 5.1 provides a description of what more and ‘better’ data would look like (pg. 66).

- 5) *In the discussions of the Solow Growth model – case 1 and 2, you comment that they don’t account for the negative shocks. But it is not clear what the graph is showing.*

The diagrams on this section now include light green arrows to explain the changes from the conflict (pg. 48). The effects of the conflict are also fully described in the text. An example of one of the new diagrams is below:



- 6) *The sentence says that some anthropological studies have answered these questions. This is an international development thesis, in an interdisciplinary department – it would be useful to tell us something about the anthropological studies.*

This sentence has been taken out of the conclusion. However, more importantly, the conclusion talks more about the debates on FDI in post conflict countries and how the ‘trickle-down’ effect does not occur, exacerbating inequality (pg. 80). Although this part of the debate is not answered in Chapter 1, evidence is provided for it in Chapter 3.

Section 3.3: Chapter 2

- 1) *The framing of this chapter still needs work. There is not a coherent story of why it is useful to consider African countries.*

This is now included in the introduction of the Chapter (pg. 95).

- 2) *What is the evidence that African markets are structured relatively similarly?*

This has also been included in the introduction of the thesis and uses World Bank data to show how African countries are structured (informal sector, agriculture, natural resources, and literacy rates, and how the data on structure significantly diverges from other regions (pg. 96).

- 3) *A counterexample is given about a diamond firm in Angola that says that conflict is good for business. Is this about the size of the firm as you suggest, or is it something more specific about the diamond industry?*

I explain the findings from this paper in more depth and provide an example for forestry where this is the case as well (pg. 101).

- 4) *The lit review section, discusses the evidence on firm growth. It is not always clear whether the discussion is about issues in post-conflict countries or that is about developing countries more generally.*

The literature review section of this chapter has been completely reorganized around the key debates on post conflict firms: human vs. physical capital for growth, impacts of foreign ownership, and the effects of trust and network. Unless explicitly stated, all the findings in these sections are specific to post conflict environments. This is stated on page 98.

- 5) *As before, there is no discussion on how confident can one be about the quality of the datasets provided by World Bank Enterprise Surveys. What are the conceptual and empirical underpinnings of the dataset?*

Analysis on the quality of the WES data has been added to Section 5.5 (pg. 130).

- 6) *When the specific variables used are discussed, it would be helpful to have more information on what they are able to capture and what they do not capture.*

Previously, this was discussed for access to finance and networks in Section 5.5. Now, I have added discussion on all the main variables, including corruption and regulations in this section (pg. 133).

- 7) *The discussion of the results often seems superficial. The results are taken at face value, rather than interrogated.*

As much as possible, I question the results, especially regarding the dependent variable (employment growth). When I make implications of the results, I back it up with other data or research.

- 8) *A paragraph, quoted below, at p. 94, reads , once more, is too descriptive, as the analysis states that authors x and y “find”, “the model finds”.*

I provide more detail in the literature review on the models that are used and added some criticisms when appropriate (pg. 99). This is something that I have changed in other Chapters as well (pg. 39).

- 9) *Please be sure that all necessary information is in the text rather than in the appendices.*

This wasn't particularly clear. I made one change where I provided more information on employment growth from the appendix (pg. 122). However, going through the rest of the appendix, we did not believe there was anything that was essential missing from the main part of the chapter.

Section 3.4: Chapter 3

Note that I have also had John Gledhill go through this chapter for extra support on the peacebuilding and qualitative aspect of it.

- 1) *It would be helpful to provide a bit more discussion of why it is useful to use Liberia as a case study.*

I have expanded on this quite drastically in Section 2.0 on page 189. To summarize: Liberia was chosen as a case study because the private sector has struggled to recover after the Civil Wars ending in 2003, meaning it provides a reference to ineffective economic reconstruction. In addition, the Liberian market has the different types of businesses described in Bray's (2009) work in a clear and defined manner. Within the private sector there are domestic, re-pat, foreign, and multinational businesses. Due to specific negro-native citizenship laws in Liberia, foreign, domestic and repat businesses are clearly defined, compared to in Sierra Leone and other nations where they are easily mixed.

- 2) *But there is little discussion of the extent to which these challenges are a result of the conflict. The thesis paints a very rosy picture of Liberia before the conflict, but this seems to be based only on interviews.*

Section 2.2 and 3.0 has been redone to ensure that there are no assumptions in terms of what things were like before the war. Then I have added data from the World Bank and other secondary sources, particularly for infrastructure, to show the effects of the conflict (pg. 210-212).

- 3) *Again, this chapter in particular does not link to any debates in the literature.*

Section 2.1 has focused on the gaps in the literature as this Chapter is slightly more focused on producing knowledge of private sector development in post conflict markets from a 'bottom-up' approach' rather than fully interacting with the liberal peacebuilding debates. The existing literature can be divided into three different components, described below:

- 1) The impact that conflict has on market structure
- 2) The effects that conflict has on business conduct
- 3) The effectiveness of different types of firms (domestic owner, re-pat, foreign SME, multinational) in post conflict markets

The primary gap derived from these three points is: the impact that business conduct modifications have on business effectiveness using number three's disaggregated approach.

- 4) *There is a long list of why it is hard to work in Liberia. But it isn't clear how much of this is specifically due to the war and also how it differs from other places.*

Since this is qualitative work, it is hard to determine whether these challenges are specifically caused by the war as we cannot isolate for the war's impact. There is some data evidence, like for the destruction of infrastructure in Section 3.1, that is direct. However, in the qualitative evidence, there is certainly indications that much of these challenges have been exacerbated by the war (and this is discussed). This includes a drop in savings and local's unwillingness to take on risk (pg. 221), the lack of education and experience that a full generation missed (pg. 222), the development of war-like mentality in business (pg. 222), and the loss of connection and trust in communities (pg. 223). We cannot guarantee that these effects were directly from the war, but there is a strong likelihood that the war at least worsened these problems.

An Analysis of Post Conflict Economic & Private Sector Performance

By: Sarah Burns

Section 1.0: Thesis Introduction

Over the past fifty years, conflict has devastated many economies, particularly on the African continent. Peacebuilding is a challenging process, and in practice has had mixed results. There is a strong likelihood that countries will relapse back into conflict and end up in a “conflict-trap” where destruction and violence become systematic and cyclical (Collier, 2007). Liberal peacebuilding, which was adopted by the World Bank and United Nations, has been the key theory behind post conflict policy implementation. These policies often included democratization and institutional reform, free markets, and international intervention. In the early 2000’s, Collier and his colleagues conducted critical economic research on post conflict reconstruction, adding the importance of foreign aid, military intervention, proper natural resource management, and economic growth to the peacebuilding strategies (Collier et al., 2003). Rebuilding a country’s economy is often viewed as a crucial part of the peacebuilding process as it provides opportunity and stability for many who were unable to work throughout the war. However, there is debate in the literature on the optimal ways in which to bring about such economic growth. In the World Bank report by Collier et al. (2003), there is a strong focus on the use of larger corporations, austere fiscal management, and macroeconomic stability to push countries out of the conflict trap. Other existing literature in economics, anthropology and politics suggests the importance of bottom-up approaches to peacebuilding to target the underlying grievances that caused violence (Newman, 2009). In terms of economic growth, there are critiques of the liberal peacebuilding mandate focused on the increase of inequality. They find that it is merely the elites and powerful who benefit from the boost in growth and that the ‘trickle-down’ effect to local communities is not occurring in practice (Richmond, 2005).

However, there is still only a limited volume of research available on the role of the private sector in post-conflict economic recovery, especially in Africa. Although this thesis’ research is built upon Collier et al.’s (2003) work because it has been the primary implementation policies in peacebuilding over the past twenty years, it also considers these opposing views. In much of the analysis, especially Chapters 2 and 3, I include factors like community development, trust and networks, and local skill transfers to the growth analysis. Unlike the liberal peacebuilding work, which puts the state as the main actor, this thesis uses the private sector as a main actor, from the large foreign MNCs that Collier et al. (2003) discuss, to small domestic firms developing in their local communities (Berdal & Mousavizadeh, 2010). Thus, this thesis

provides critical analysis on the influence of firms and investment on post conflict private sector performance and makes a considerable contribution to the economic recovery literature.

Many institutions are part of the peacebuilding process, like not-for-profits, development agencies, and international institutions, including the United Nations. These organizations, taking on a liberal approach to peacebuilding, tend to focus their programs on transitional justice, human rights, rebuilding infrastructure, and strengthening local institutions. However, they do not often place a high priority on private sector development, as they allow the market to be free and without intervention. This means that there is less knowledge within this field of peacebuilding, especially outside of natural resources.¹ As an international embassy worker in Liberia noted: the UN's "engagement with the private sector was very low, and I think it's a vital element, in [sic] the long run, to peace and stability. The UN was the biggest institution supporting this country for so long, and there was so little interest in the private sector and private investment."² This suggests that the lack of attention to the role of private sector regeneration and performance may be a serious weakness in programs for post conflict peacebuilding.

To contribute to filling this knowledge gap, this thesis provides an overview of the role of the private sector and private investment on the recovery process at three different levels. The first chapter provides analysis at a macroeconomic and country level, determining the influence of foreign direct investment on economic growth within the post conflict period.³ The second chapter's sample narrows its focus and uses non-MNCs firm-level data from the African continent to determine influences on growth in post conflict environments. Then, the final chapter of this thesis uses field-interviews from Liberia, providing a case study of private sector development in a post-conflict African country. This chapter analyses the conduct of firms of all different sizes and influences to better understand the resources they require to grow.

The first paper of this thesis examines the relationship between foreign direct investment flows and economic growth in a post-conflict setting. Using country-level data from UNCTAD, I develop a panel structural vector autoregressive (SVAR) model, which provides results on the influence of FDI, aid (overseas development assistance) and conflict characteristics on economic growth in a post conflict setting. The model finds that, on average, per capita FDI flows have a significant and positive impact on GDP within the two decades after a conflict has ended. The

¹ Note that programs focused on human rights, institutions, transitional justice and etc. are important and necessary for the peacebuilding process. This paper does not in any way suggest that those programs should not be deployed in post conflict countries.

² These were qualitative interviews conducted with business owners and investors in Liberia throughout 2018 to 2019. Chapter 3 of this thesis presents the results from this fieldwork.

³ This period is defined in 2.1.4 of this introduction.

magnitude of this impact is significantly larger than the impacts of aid per capita during these times, possibly because humanitarian and military aid spending is higher than ‘long-term’ development focused funding in these environments. This model also indicates that this positive impact is more significant in the African region. Further, an additional model presented in this paper suggests that FDI flows have the highest impact on economic growth between five and ten years after the conflict has ended.

Since Chapter 1 uses FDI as the capital inflow, its analysis focuses primarily on the influence of large multi-national corporations (MNCs), as opposed to the development of domestic and smaller foreign-owned firms. Since 70 percent of employment in Africa is generated from small and medium sized enterprises and they are often closer to local communities,⁴ influences on their growth through the post conflict period are critical for the peacebuilding process. Chapter 2 of this thesis investigates whether these types of firms’ growth is influenced differently in post conflict Africa compared to countries that have not experienced recent conflict.⁵ This paper uses the World Bank’s World Enterprise Surveys to examine access to resources, characteristics and performance of formal firms operating in post conflict versus non-post conflict African markets. Using a variety of country fixed effects regressions, I find relationships between the use of resources on firm performance that significantly differ between these two environments. The model finds that access to finance has a positive relationship that is similar in both markets; however, this positive relationship only emerges in post conflict firms after a decade of negative peace. Employee training has a positive correlation with performance in both markets as well, but it is significantly larger in magnitude in post conflict markets, particularly in high intensity conflicts. Foreign ownership is found to have a positive correlation in non-post conflict manufacturing firms but has zero relation in post conflict markets. Lastly, I find that business networks have no association with performance in post conflict markets and the model suggests there may be a negative relation when the conflict lasted more than a decade, suggesting that a legacy from conflicts may be a degradation of trust. In contrast, networks have a positive correlation in non-post conflict markets, particularly in services.

Due to limitations of the data in Chapter 2, I am unable to credibly provide causal relations; they are fundamentally correlations. To delve deeper into the relations found in Chapter 2, Chapter 3 of this thesis uses qualitative evidence from Liberian stakeholders to help explain these findings. Using evidence collected in Liberia from Spring 2018 to Summer 2019, this chapter explores each one of the causal linkages that is presented within the structure-

⁴ World Bank, “SME Finance,” 2021. <https://www.worldbank.org/en/topic/sme/finance>

⁵ A recent conflict is described as being less than 20 years since the conflict finished. Post-conflict is fully defined in Section 2.1.

conduct-performance framework for the private sector (see Section 3 of this introduction for the theoretical framework). This provides much needed analysis on the long-term effects of conflict on private sector dynamics in an African state. The evidence clearly shows that the conflicts experienced in Liberia had a profound and long-lasting effect on private sector development, which has had negative consequences on firm performance. This paper finds that Liberia's post conflict market structure - including destroyed infrastructure, poor government regulations, inability to deal with further negative shocks and corruption – makes firm survival extremely challenging. However, all types of business owners note that there is little that they can do personally to change these barriers in the short run.

However, the field interviews suggest that businesses with foreign influence,⁶ can better navigate the challenging post conflict environment by altering their business conduct. These changes in behaviour include increasing business innovation, employee training and education, business networks, and accessing capital and resources from outside of the country. Using interviews from foreign investors, foreign firm-owners and local entrepreneurs, Chapter 3 explains that domestic businesses may not as easily benefit from foreign investment in post conflict environments due to lack of trust and human capital. This aligns with the opposing peacebuilding literature suggesting that the trickle-down effect is not occurring in post conflict states. This paper finds that it is re-pat⁷ or foreign-owned SMEs, who build strong relations with their employees, that are the most successful in transferring skills and knowledge. In addition, community level dynamics have a substantial effect on firms and the private sector. One of the aspects of firm conduct that is examined in this paper is the use of networks and the struggles that the Liberian business community has had in trying to build them. Thus, this paper shows that community-led and 'bottom-up' approaches are required for private sector development.

Before presenting the three chapters that are described above, we consider the context in which the research fits. Section 2.0 of this introduction reviews the debates in the peacebuilding literature. Section 3.0 provides the four-step process used to cultivate a thorough and consistent definition of the post conflict era, which is used throughout this thesis. Section 4.0 describes the structure-conduct-performance (SCP) paradigm, which provides the overarching theoretical framework for this thesis. It includes a description of the links between conflict and private sector performance and provides information on where these different links are analysed within the thesis. Lastly, I provide a final section on the contributions this thesis makes to the existing literature.

⁶ These are foreign-owned firms and re-pat owned firms. More information on these business owners in Chapter 3.

⁷ Re-pats are Liberians who left and grew up elsewhere but have now returned after the wars.

Section 2.0: Key Debates in Peacebuilding

As this thesis focuses on economic and private sector growth in post conflict environments, the academic literature around peacebuilding must be explored. This is because peacebuilding is multi-faceted, and all its different components, including the private sector, are endogenous. The basis of the peacebuilding literature as well as the corresponding policies that have been implemented in the past two decades, stems from a World Bank report called “Breaking the Conflict Trap,” by Paul Collier and his colleagues (2003). This report and the World Bank policies that followed, are strongly aligned with liberal peacebuilding. In this case, ‘liberal’ follows the international relations theory that advocates for democratization, free markets, and international intervention. Collier et al.’s (2003) report builds on the liberal mandate to navigate actions for post conflict states to build and maintain peace.

In this report, they first describe the ‘conflict trap,’ where many countries get stuck in reoccurring civil wars. First, a war weakens an economy and generates more poverty, leading to additional conflict. Many countries have invested time, people and resources into violence and have a challenging time to pivot away from that. Lastly, many military leaders, warlords and economic profiteers, benefit from a conflict environment and often have little reason to stop fighting (Collier et al., 2003). “Breaking the Conflict Trap,” uses economic research on liberal-based policies to see how states can successfully exit the conflict trap and build long-lasting peace. These authors make 5 key recommendations, which will be discussed individually in each section below. The first is focusing on stimulating economic growth through developing employment opportunities and transitioning away from war economies. The second is providing post conflict countries with a large influx of foreign aid. The third is better international management of natural resources and privatization of markets. The fourth is for larger and longer military and international intervention and the final recommendation is focused on institutional reform and democratization. There have been many that have argued that these interventions have been successful, as countries like Liberia, Sierra Leone, Bosnia, and Cambodia have remained peaceful. However, there have also been vast criticisms within this literature as international actors implemented these policies.

One of the first general critiques of Collier et al.’s work is on the economic research that is behind these recommendations. At the time, there was an immense pressure from the World Bank for research to have policy implications, especially in post conflict scenarios. The end of several civil wars occurred in the early 2000’s, including Liberia, Sierra Leone, Afghanistan, Bosnia, Angola, etc., and there was a demand for implementable post conflict policies being derived from research. There has been criticism of the empirical and conceptual frameworks, as

“a lot of the work on civil wars, evaluator Daron Acemoglu points out, builds on a combination of theory that is 25 years behind the current state of knowledge and empirical work that is extremely deficient” (Banerjee et al., 2006). Thus, there are questions and concerns with this research that are further discussed below.

Many other researchers have noted the failure, or partial failure, of liberal peacebuilding in practice. Newman (2009) provides an example:

“A limited model of peacebuilding might present a clearly positive assessment of international efforts in Bosnia: the country is stable, it is experiencing economic growth and it is increasingly integrated into institutions. But from a broader, more ambitious approach to peacebuilding, Bosnia is far from a success: the country is ethnically polarized and sectarian, “democratic” politics mirrors the nationalist agendas of militant parties, and social and economic gaps are sources of dissatisfaction.”

The criticisms from both heterodox and mainstream researchers suggest that sweeping liberal reforms have rarely fixed the root cause of conflict in these states. Instead, they find that reforms exacerbate inequality, tensions and poverty. Paris (1997) explained liberal peacebuilding as “transplanting western models of social, political, and economic organisation into war-shattered states,” suggesting a neo-colonial influence. Taylor (2007) builds on this by stating that international interventions for peace is often disconnected with the socio-political dynamics that exist in the country.

Richmond (2005) deems that liberal peacebuilding uses the state as the main actor and not individuals or communities. This promotes the interest to the most powerful, which may make them put down arms, but worsens inequality country-wide. Newman (2009) adds that the cooperation of elites is essential to maintain stability. However, to solve the root cause of the conflict requires facilitating communication and change between previously conflicting communities from a bottom-up approach (Newman, 2009). However, Richmond (2005) finds that the “orthodox model of liberal peace involves a top-down approach to peacebuilding and then some bottom approaches to engage with non-state actors. However, it is the top-down approach that dominates policies.” Thus, a significant component of the peacebuilding process, that is focused on local community development, is de-prioritized in much of the liberal peacebuilding policies.

The rest of this section will provide an overview of the debates on the five different components of liberal peacebuilding. Many of the baseline models and theories for this thesis build on liberal peacebuilding. However, I have not taken Collier et al.’s (2003) assumptions at face value, deriving some conclusions that align with and others that diverge from their

recommendations. Therefore, these debates are crucial in the underlying understanding of the findings and interpretations made in this thesis.

Section 2.1: Liberalized Economic Growth

The liberal peacebuilding literature finds that conflicts may be triggered by ideology or opportunity, but that violence is sustained by a vicious cycle of poverty, lack of economic opportunity and inertia.⁸ This means we find that conflict is cyclical, and it is challenging to derive lasting peace.⁹ Collier (2008) defines this phenomenon as the ‘conflict trap,’ which is not based on ideology, but instead fuelled by poor economic circumstances. The conflict trap finds that the economic and social consequences of a civil war significantly increase the chances of future conflict. Hoeffler (2008) shows through statistical analysis that “Africa has experienced more civil wars mainly because of economic circumstances, low income, low growth and high dependence on natural resources, which has made war feasible” (Hoeffler, 2008). Collier (2008) also finds that low income and slow growth countries are much more likely to suffer from a conflict and on average, 40 percent of countries emerging from a civil war are likely to revert to another conflict within the first decade. The World Bank (2011) also finds that 90 percent of countries that fought a civil war between 2000 and 2010 previously experienced a civil war between 1945 and 2000. However, there is also a reverse causality of war because if violence is anticipated, then investment drops, the country becomes poorer, and governance worsens (Collier, 2009). It is also established that post conflict countries experience a ‘peace dividend’, which is a boost in economic growth after a conflict. Collier et al. (2003) find that post conflict countries grow at about three percent per annum, which is about one percentage higher than the average country and that they should harness this growth as much as possible to stop conflict relapse. Thus, this literature suggests that economic growth is crucial for peacebuilding and getting states out of the conflict trap.

One of the first consequences is that conflict devastates GDP due to the prolonged halt of productive activities, war-induced damage and destruction of infrastructure, and capital within the country. Caplan (2005) states that it is vital to take measures in the immediate post-war environment to promote economic development that can improve the general welfare and thus, weaken the economic foundations of political violence” (2). In addition, post conflict economies often have easier access to arms and weapons, which means that it is crucial to provide economic opportunities for previous combatants to stop ‘peace spoilers’ by effectively

⁸ An example of this is the Lord Resistance Army (LRA) in Uganda. Although the LRA at first claimed to be doing the work of the Lord, this type of mantra was quickly dropped and forgotten.

⁹ Gettleman, Jeffrey. (2010). Africa’s Forever Wars. *Foreign Policy*.

reintegrating combatants into the normal economy (Nitzsche and Studdard, 2005). This means that “the proclivity of rank-and-file soldiers to disarm may thus depend on the expected opportunities of socio-economic reintegration, most importantly access to education, land or employment and income opportunities” (Nitzschke et al., 2005: 228). Nevertheless, this is challenging in post-conflict scenarios because the country is often poorer than before the war started (more on reintegration programs in Section 2.4).

Although there is significant physical capital damage, Collier believes that it is the lack of human capital which has the longer-lasting negative impact on economic development (Collier and Duponchel, 2012). The lack of human capital is derived from conflict related deaths, professionals fleeing the country, children unable to attain any education, and workers going through the process of “forgetting by not doing” (Snodgrass, 2004, Collier and Duponchel, 2012). In addition, many civilians flee the country during war and often, do not return. Among the survivors, education is severely lacking because they were displaced, schooling stopped and youth were pulled out of school to fight (Blattman, 2010: 3). Further, war negatively impacts human health by the spread of disease, long-term injuries and mental health issues, making it difficult to work. This human capital gap has a longer-lasting effect than the destruction of physical capital in post-conflict settings. This is because it takes a full generation to offset these negative impacts of war (Blattman, 2010). In more recent work, Collier states that “human capital is unproductive unless it can collaborate in large organizations together,” suggesting that MSMEs may not be as effective for growth and to be effective, they must be working together.¹⁰ Thus, the lack of human capital and the ability to collaborate in these markets, remains a significant issue for economic growth in post conflict countries.

However, there are major criticisms on the findings by Collier and his colleagues. This criticism is not solely against the influence of economic growth on post conflict reconstruction, but instead, how this growth is achieved. Firstly, cases like Kenya, India and Sudan, have shown that conflict can arise in fast and strong growing economies (Addison et al., 2015). Suhrke and Buckmaster (2006) analyse seven case studies that show three distinct post conflict growth patterns who have remained at peace. This includes Bosnia and El Salvador who experienced a boom-and-bust growth pattern, Guatemala and Nicaragua whose growth remained stagnant, and Cambodia, Mozambique¹¹ and Rwanda who maintained steady positive growth. This presents moderate evidence that economic growth may not be the central element to peacebuilding.

¹⁰https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/insights/i15-paul-collier

¹¹ Note that Mozambique experienced significant changes in 2015 that has changed this outcome, which is almost ten years after the Suhrke & Buckmaster study was conducted.

A much more cited criticism on liberal peacebuilding is that economic growth and the peace dividend is not widely shared amongst communities. Instead, it is the elites and often foreigners who benefit from this growth the most, where the majority of communities remain marginalized and impoverished. In a case study completed in Sierra Leone, Tom (2011) finds that “the general perception among ordinary people is that the peace dividend has not been equitably shared and peace remains fragile. For them, most of the factors that contributed to the civil war remain unaddressed including marginalisation, unequal power relations, social injustice, corruption, exclusion and poverty with some saying that the situation is even getting worse.” The elites and powerful may put down their arms with this result; however, this peace entails a high level of social inequality, which often widens through the peace dividend (Addison et al., 2015). This means that many of the underlying grievances that led to conflict have not been solved. Newman (2009) states that there is a mismatch in these peacebuilding policies because, “a certain amount of social hardship – for a section of society – may therefore be unavoidable for economic recovery. And yet hardship and economic inequality can create social grievances that translate into political extremism and obstruct longer-term peacebuilding objectives.” The increase in social inequality caused by the way in which post conflict growth occurs may generate additional conflict.

Existing literature also criticizes the use of large corporations and foreign investment as a tool for economic growth, compared to grassroots and community-based policies (more on foreign investors in Section 2.3). The theory behind using large private sector actors to promote growth is that there is a ‘trickle-down’ effect that reaches the poor and lifts them out of poverty. However, this has been condemned for not putting social welfare first and that there is limited evidence of this effect occurring in practice (Casteaneda, 2009). To focus sustainable long-term growth, Berdal and Mousavizadeh (2010) recommend that private sector involvement in a post conflict market cannot simply be profit-seeking in the short-run but must focus on stabilisation and community building. They note that in the long run, taking on this approach is actually optimal for profits and growth. Without the trickle-down effect materializing and the social hardship that can be brought about by prioritizing growth, peace may be unsustainable as overall grievances are not being addressed. The growing inequality and lack of social welfare has the potential to also create ‘peace spoilers.’

Lastly, feminist-focused academics have criticised liberal peacebuilding economic policies for excluding women in growth. In many cases, women are a driving force in achieving peace and throughout civil wars their roles transition into major economic contributors. Like in the World Wars, women take on roles in the economic and civil space, to fill the absence of the men

who are fighting. Wood (2008) finds that it is common for women to remain within these roles after the war, “particularly in settings where combatants of neither side are welcomed into civil society, as in Peru.” This means that peacebuilding, which has primarily focused on male economic and military elites, would benefit from including a gendered approach for both economic and institution building. Jennings (2008) states that “in sum, peacebuilding activities relating to gender may be based less on a normative agenda for gender equality, and more on the assumption that women’s inclusion in economic and political life will help consolidate peace and/or improve representation and the quality of governance and growth.”

Lastly, Collier and his colleagues have noted the importance of co-operation and large organizations to stimulate economic growth in post conflict states.¹² However, conflict has a significant toll on social cohesion and trust within the country, which does not merely impact institutions but also private sector communities. Trust, networks and community are viewed as important intangible resources for business growth and success. Conflicts often break social bonds and individual trust as people suffer from families being ripped apart, injuries and severe trauma, sexual abuse, and a loss of community traditions (Panic, 2011). This makes conducting business extremely challenging in post conflict environments and the unity desired by Collier et al., unmanageable.

In conclusion, economic growth is a primary focus on the liberal peacebuilding agenda as it is suggested to help lift those out of the conflict trap. To achieve this, it is suggested to generate stability, attract investment, increase human capital, and profit from the peace dividend. However, critiques of these policies find that the benefit of this economic growth goes to the elites and rarely “trickles-down” to the poor. This generates further inequality and grievances in the country, meaning that peace is unstable.

Section 2.2: Foreign Aid Inflows

One of the primary findings from “Breaking the Conflict Trap,” is the importance of foreign aid for post conflict reconstruction. The World Bank team argues that to maximize the chance of peace, aid should be at least twice the size of inflows into non-post conflict countries (Collier et al., 2003). In the report, they suggest that “aid is particularly effective in raising growth during the post conflict decade, but that it is more effective in the middle of the decade than at the beginning. Aid in post conflict situations should be much larger than it has usually been, but it should be phased in gradually” (Collier et al., 2003). This finding is derived from a

¹²https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/insights/i15-paul-collier

combination of research conducted by Collier and Hoeffler. Hoeffler et al. (2010) discover that even though foreign aid does not contribute to growth in a normal developing economy, within the post conflict decade it has a small positive impact on growth when there is no post conflict violence. This is primarily because foreign aid helps make most of the peace dividend the country experiences after conflict. Post-war recovery sets in slowly and the strongest growth years are between the fourth to sixth once violence has stopped (Hoeffler et al., 2010: 28). With this, Collier et al., (2003) suggest that foreign aid should taper into post conflict countries, be at its highest in years four to seven and then taper out. Collier (2009) also shows that aid can help with these post conflict situations by: reconstructing lost infrastructure, countering high inflation, helping government spending, which is negatively impacted by low tax revenues, and reducing capital flight. Lastly, Collier et al. (2003) state that an alternative approach to aid is to reinforce existing democratic institutions, “by conditioning aid upon adherence to the country’s constitution.” This uses aid to help support stable and good governance (discussed further in Section 2.5).

There have been criticisms from economists about the empirical work that Collier and Hoeffler completed to derive these policy conclusions. Suhrke et al. (2005) find that there are several issues with the modelling, including a low sample size of only 27 countries in the dataset and inconsistent methodology for coding conflicts. The authors rebuild the model, to the best of their abilities, and recode mistakes and questionable assumptions that were made. Their models also find that aid is more productive with respect to growth during the four-to-seven-year period after peace. However, the primary difference is that “the coefficient indicating the effect of aid was less than half of the coefficient preferred by Collier and Hoeffler” (Suhrke et al., 2005). This shows that the results from this research are lacking robustness.

Other literature has questioned where aid in post conflict countries ends up. For example, Addison and Murched (2003) find that debt relief can potentially increase social welfare but that it depends on the state that receives it. The government has used these resources to fund military expenses and is captured by rebel leaders. Goodhand (2004) provides an example of this in Afghanistan, where aid was not only fed directly into the combat economy in the 1980s, but more recently used to finance the illicit economy like poppy and drug production. The international community, who is supplying the aid, has little influence over where the capital actually ends up in many post conflict environments (Addison and Murched, 2003).

In addition, the existing literature disagrees on the way aid is deployed into post conflict countries. Unlike Collier et al.’s (2003) suggestion to taper aid, Suhrke and Buckmaster (2006) recommend that large inflows of aid should be deployed immediately. This aid should be used

primarily for humanitarian relief, limiting social grievances, reintegrating civilians and combatants, and implementing the peace deal, which often needs to be renegotiated numerous times. Using a small qualitative analysis, they also find that the amount of aid a post conflict receives is not related to maintaining peace or human development (measured by HDI). In addition, Addison et al. (2015) discover that needs-based aid programs in post conflict countries, like conditional cash transfers, can increase violence in communities. Lastly, researchers have questioned foreign aid's liberal agenda, where the transfers are conditioned on institutions and processes mimicking Western ideals. Suhrke (2007) criticizes by stating that "local ownership in aid programs clearly means 'their' ownership of 'our' ideas, rather than the other way around." Thus, aid conditionality can be viewed as a form of neo-colonial influence.

Section 2.3: Natural Resources and Privatisation

The existing literature on peacebuilding discusses the complexities of natural resources for developing countries. Collier et al. (2003) recommend implementing policies that provide better governance of natural resources. Hoeffler et al. (2008) finds that countries with a high dependency on natural resources have a stronger likelihood of entering conflict. Thus, managing the issues within natural resource management is seen as a key policy priority for post conflict reconstruction. The existing literature provides four methods of doing this including: using aid to better cushion price shocks for commodities, enforcing more transparency in natural resource revenues, kicking out rebels, warlords and war profiteers who controlled these commodities, and attracting more credible natural resource companies (Collier et al., 2003). For many post conflict countries, extraction companies are often owned or partially owned by the government. Therefore, the final method in the peacebuilding literature implies the need for countries to privatise their markets and attract quality foreign investment.

Many agree that there have been massive disputes over natural resources that have caused civil and international conflict. However, Fearon (2005) questions the direct relationship of all commodities on the chance of conflict. He uses Collier and Hoeffler's data and makes minor changes to the framing of the model. The results show that "there is no clear evidence that high levels of primary commodity exports cause higher risk of civil war" but oil and gas specifically do¹³ (Fearon, 2005). Thus, a focus on other commodities, particularly in agriculture, may be more beneficial to the peacebuilding process. Addison (2005) believes that agriculture export-led growth is greatly beneficial for post conflict reconstruction, especially because a large

¹³ Note that Fearon (2005) also hypothesizes that diamonds do as well but the sample size is too small to develop any concrete findings.

portion of employment is generated in the sector. However, a major issue is rich-country protectionism that many developing countries face (Addison, 2005). Creating better trade terms for post conflict countries, especially in agriculture, could provide much-needed growth and opportunity to sustain peace. There are also typically disruptions in food production, which does not easily recover once the fighting stops, leading to systematic food insecurity (Panic, 2011). Thus, investment into these areas have a high social value in post conflict countries. However, legal productive sectors no longer receive investment, even domestically, because the risk is too high in post conflict (Snodgrass, 2004). This causes an investment drain from the country, which is difficult to recapture.

In addition, privatisation and natural resources can exacerbate ethnic tensions within a post conflict country. Addison and Murched (2005) provide Nigeria as an example, where oil, primarily controlled by the Igbos, created distinct changes in the welfare of ethnic and regional groups. The dominance of a business elite, whether an ethnic group or foreign investors, can contribute to long-lasting ethnic tensions and inequalities (Venuopal, 2012). The losers from these deals gain the motive and grievances to potentially pick up arms once again. In addition, the privatisation of the banking sector can also add to these social issues. After conflict, many banks are privatised and prioritise the elite, certain ethnic groups and foreigners, generating additional inequalities in opportunities (Addison et al., 2001).

There is rarely an easy transition from actors transitioning from the black market to legal productive markets. Many of the profiteers from conflict, especially in natural resources, tend to shift capital abroad. In addition, major shifts in sector focuses and those controlling capital often occurs. These major shifts alongside the “orthodox financial sector liberalization has thus often facilitated market behaviour that has undermined macroeconomic stability and economic expansion” (Cramer & Goodhand, 2002). Further, the peacebuilding policies that were implemented to keep rebels and warlords out of natural resources have had mixed reviews. The Kimberly Process Certification Scheme, which was implemented in 2003 to eliminate conflict diamonds from supply chains, has decreased the trade of conflict diamonds (by 0.4% in 7 years) but was unable to stop human rights atrocities in Zimbabwe, Cote D’Ivoire and Venezuela (Howard, 2016).

In comparison, ‘bottom-up’ focused peacebuilding researchers have focused on the importance of domestic small businesses in post conflict reconstruction. Berdal and Mousavizadeh (2010) state that “the coping mechanisms and entrepreneurial skills thus exhibited in post conflict countries often provide a more promising starting point for stimulating and supporting domestic private-sector activity than externally designed and templated solutions.”

The role of local SMEs in peacebuilding is often undervalued by the peacebuilding literature. However, SME linkages to both political actors and local communities often makes them useful actors in the peacebuilding process (Doblas et al., 2019). Lederach (1997) argues that “by definition, local businesses form part of the existing conflict context. In a sense, this relationship with the conflict is essential for local businesses to play an important role in building peace.” Therefore, these types of businesses should be further explored and included in the peacebuilding literature.

Section 2.4: Military and International Intervention

“Breaking the Conflict Trap,” provides clear recommendations in terms of military interventions for post conflict countries. Due to the time it takes for aid and the peace dividend to take full effect in catalysing economic growth, approximately four to seven years, Collier et al. (2003) suggest that international military intervention should be larger and be implemented for longer. Those early years of the post conflict era are particularly fragile as democratization reform is new and growth remains slow. Furthermore, Collier et al. (2003) find that post conflict spending on military by local governments is high due to the risk of relapse. However, these funds could be released to use for social welfare, economic development and infrastructure reconstruction. Following this, the recommendation is for local governments to reduce their military spending and instead, focus on building regional security organizations and coordination. This would optimize military spending amongst the regional group and allow public spending to go elsewhere (Collier et al., 2003). Although not explicitly stated, international and regional peacekeepers are the primary actors that fulfil these roles.

Conflicts can begin and end through numerous different means. Caplan and Hoeffler (2017) find that negotiated conflicts are more likely to breakdown than military victories. They also find that the ideology of the conflict, whether territorial, ethnic or government control, does not impact the duration of peace in the post conflict period. For many recent conflicts, peacekeepers are brought in to help bring the conflict to an end and maintain peace afterwards.

However, as noted above, peacekeepers are the main international actor that focuses on the security dimension of peacebuilding. Most of the literature has focused on the short- and medium-term impacts of these missions (Gledhill, 2020). There is evidence that these missions only have a significant impact on peace duration when the conflict ended in a negotiated agreement between parties (Caplan and Hoeffler, 2017). This is because many of the military leaders in conflicts are under severe domestic and international pressure to sign these

agreements, which often causes these leaders to sign agreements they are dissatisfied with (Lyons, 2015). Lyons (2015) suggests that if peacebuilders like the UN are flexible, they can strengthen these agreements in the medium term. However, Gledhill (2020) notes that there are longer-term direct and indirect consequences from peacekeeping missions that have yet to be thoroughly explored in the literature and thus, there remains a significant knowledge gap.

In addition, peacekeeping operations often distort post conflict economies. The launch of large-scale peacekeeping missions generates a dual economy, particularly in the service sector, where one is specifically for the peacekeepers. Although this provides an avenue for employment generation, it detracts from more sustainable economic opportunities (Aning, 2013). This can have a negative impact on the local economies once the peacekeepers withdraw, as the demand that the community has relied on throughout the post conflict era dissipates (Beber, 2016). Forthcoming research from Gledhill and Karim finds that individuals in Liberia who were dependent on the peacekeeping mission are vulnerable after the mission concludes. However, individuals can mitigate this economic effect through savings and external support (Gledhill & Karim, Forthcoming).

Disarmament, Demobilization and Reintegration¹⁴ (DDR) are programs implemented by peacebuilders to work with the previous combatants in conflicts. Research on the effectiveness and use of these programs are the focus of a significant share of the peacebuilding literature on security. DDR is required in this process to reduce access to arms, disconnect combatants from their leaders and “group-think” mentality, and to reintegrate them into their community. Jennings (2007) argues that in the past, DDR programs have struggled to have impact because “the extent and form of DDR programming must be more sensitive to and predicated on context, taking into account conflict histories and current socioeconomic conditions and local institutional capacity. Specifically, in areas emerging from extended conflicts, where the line between civilians and combatants was unclear, the conflict period engendered great mobility and social change, and the existing needs are both wide and deep.” In a study with Liberian combatants, they found that DDR programs were often unsuccessful as the combatants were not satisfied with their opportunities. Jennings (2007) finds that many of the combatants received job training but were unable to secure work afterwards because of a general lack of job opportunities in the market. This shows the importance of economic development occurring alongside the DDR process.

There are, however, other reasons and grievances for why combatants pick up arms and whether they reintegrate into local communities. RCTs find strategies like microfinance and

¹⁴ This can be referred to as Rehabilitation as well.

training programs have yet to be shown to decrease these risks and the “successful employment programs [only] reduce materially motivated crime and violence” (Blattman & Ralston, 2015: ii). Many former combatants were not motivated by material goods in recruitment and the only programs that have reduced their risk of relapse include learning soft skills, like cognitive behavioural therapy.

Many practitioners find that there is a substantial gap between the theory discussed in international discourse and the local practices (Heathershaw, 2008). International intervention into post conflict states is criticised for the inconsistency and lack co-operation between the international actors. Goodhand and Walton (2009) find that in Afghanistan, while “negotiating these turbulent political waters, international actors tended to swing dramatically from one approach to another, and by doing so they arguably over-compensated for shortcomings in earlier phases of the peace process.” The over-internationalization of the peacebuilding process can lead to defensive actions by local groups, generating peace spoilers. Existing literature argues for ‘light’ touch intervention and allow local communities to develop their resolutions (Brahm, 2008). This is described as “a willingness, on the part of practitioners, to leave their ‘comfort zones’, to refrain from providing ‘solutions’, and to become ‘courageous, critical friends’”(Paffenholz, 2021).

Section 2.5: Democratization and Institutional Reform

Institutional reform is a significant component of the liberal peacebuilding agenda. Collier et al. (2003) state that “rapid policy and institutional reform should be started immediately after peace has been established.” The reasoning behind this is that the benefits from economic growth spurts have not yet occurred and these institutions take time to implement. Collier (2008) finds that democracy in itself is not necessarily related to peace, but that when you split democracy as two components, multi-candidate elections and government checks and balances, he finds that it is the latter that maintains peace. Thus, peacebuilding policies not only focus on democratization but also good governance.

Democratization is a key component of the peacebuilding process, but previous literature suggests that this is a delicate process. The timing of elections is challenging to determine as “premature post-conflict elections leave insufficient time for democratic forces to emerge, making it more likely that elections are fought out by nationalist or ethnic parties than by policy-driven ones; undue weight is typically accorded to administrative ease in the choice of electoral systems, with potentially debilitating consequences” (Reilly, 2016: 73). Reilly (2016) has also found that highly inclusive democracies have generated barriers and challenges when developing

new constitutions, which can slow down the entire peacebuilding process. Newman (2009) states that transitional political systems are the ones that are most likely to experience conflict. He finds that the “Political Instability Task Force, after conducting a large-scale analysis of conflict from 1955 to 2003, came to the conclusion that, in terms of statistical correlation, the risk of conflict is highest not among democracies or authoritarian states but in partial democracies or transitional states, especially when factionalism is present” (Newman, 2009). Due to this, the sequencing of peacebuilding mandates, including democratization, must be considered carefully and with strong local influence.

The literature shows that in the initial phases of the post conflict period, more general institutional solutions can easily fail. Ottaway (2002) states that although the chance of failure is high, the international community tends to favour institutional reformation for their programs. Due to this, “institution building is often taken on prematurely and with a lack of support and funds that are required to fulfil the expectations of the international community” (Ottaway, 2002: 1021). Englebort and Tull (2018) concur with Ottaway that donors and institution in practice rarely provide resources sufficient for institutional reform.

Cramer and Goodhand (2002) provide an example from Afghanistan, where central statebuilding worked against the historical and political context of the country. These researchers explain that “decentralized or federal systems may sound attractive, but they are likely to lead to massive tensions in Afghanistan between the centre and regions to be inherently destabilizing.” (Cramer & Goodhand, 2002). This is particularly because the border states were the primary incubators for conflict and grievances. Surhke (2007) also notes the general tensions between liberal peacebuilders who generally conflicted with local interests of nationalism and Islam. Dodge (2020) states that although in Iraq the peacebuilders attempted to include Iraqi religious and ethnicities in the political system, the elite in that system clung to power. This “increasingly resorted to use of coercion, putting the goals placed at the centre of regime change in mortal danger” and ‘liberal democracy’ inevitably failed (Dodge, 2020).

There are often lingering legacies from the conflict that influence institutions. Military leaders are often voted in as political leaders, like Paul Kagame in Rwanda and Charles Taylor in Liberia. Costalli and Ruggeri (2019) find that in post-WWII Italy, there was a direct relationship between communist party organisation strength and the location of where they fought Nazi forces. This suggests that parties with ties to conflicts have an organizational advantage over others. However, Englebort and Tull (2018) note that “Africa is unique in the extent to which some of its states were already dysfunctional prior to collapse and failure. Most African states have never had effective institutions, relying instead on the personalized networks of patronage.”

This means that institutions and processes that work in developed regions cannot easily be implemented in this context. The authors suggest strong cooperation between donors and local leaders to develop stronger local institutions that are sustainable.

Justice and reconciliation after the conflict is also a key component of peacebuilding. However, this is conducted in diverse methods depending on the context. In some cases, institutions for transitional justice are not instigated at all. Justice can be extremely difficult to reach in many contexts because there are numerous perpetrators and even more victims, which normal legal procedures struggle to handle. Graybill (2004) shows how three different post conflict countries dealt with their reconciliation processes. In South Africa, a Truth and Reconciliation Commission was set up, which investigated human rights violations during apartheid. Although this provided an avenue for reconciliation, only a small number of victims were able to share their story. Rwanda focused on punishing leaders through the International Criminal Tribunal, which provided a degree of accountability. However, many Rwandans remain unsatisfied as these trials were not held in Rwanda and they were unable to participate. Brahm (2008) writes about the importance of justice being held in the hands of locals for reconciliation. Finally, Graybill (2004) points to the lack of a reconciliation and justice system in Mozambique, as decision-makers believed that discussing the violence would cause further instability. This diversity of approaches to and outcomes from justice and reconciliation suggests that no one method can be considered the optimal approach in all contexts.

There is a group of critical voices who believe that their concept of statebuilding is problematic. Instead of building from local traditions and knowledge, statebuilding has involved the development of 'familiar' institutions for the West (Newman, 2009). Newman (2009) writes that "the state-building component of peacebuilding as a thinly disguised attempt to modernize and thus "civilize" dysfunctional "third world" countries that are incapable of developing viable indigenous forms of cohesion." Thus, it is argued that post conflict countries should have 'local ownership' of the institutions they are building. Suhrke (2007) asks a question when discussing the peacebuilding experience in Afghanistan:

"When rebuilding their state, society and economy, 'the Afghans must be in the driver's seat'. But, Afghan critics asked, how can we be in the driver's seat when, in fact, the map is produced in New York, Bonn and London, the fuel bill is paid for at pledging conferences in Tokyo and Berlin, and foreign experts are doing back-seat driving?"

This thesis does not dive deeply into these debates within institutional reform for peacebuilding because its primary attention is on the private sector. However, it does reference these debates

and discusses the importance of institutional decisions on the private sector in these post conflict environments.

Section 3.0: Defining the Post Conflict Era

The crux of my thesis revolves around the distinction of post conflict from non-post conflict states, which provides the ability to determine the various factors influencing economic and private sector recovery in the former. Hence, it is necessary to establish a clear and thorough definition of a post conflict state. This is a complex process because each conflict is unique, with its own history, influences, consequences, politics, and culture. However, existing literature in conflict studies and peacebuilding can help provide an explanation of what is considered a post conflict state. I first analyse the theories around defining peace and the differences in approaches. I then analyse the framework that is used in liberal peacebuilding processes and discuss considerations from the critiques on those processes. Then I explain the distinction between post conflict and fragile states, to ensure clarity. Lastly, since two of the chapters in this thesis use a quantitative analysis, this section substantiates the use of post conflict dummy variables and explains how they have been generated.

Section 3.1: Defining Peace

There is a division of the conflict literature focused solely on defining conflict and peace. As mentioned above, this is necessary as conflicts are vastly diverse in cause, experience and legacy. The primary concept explored in the peace literature is that peace is merely the absence of war. However, Diehl (2016) argues that this causes significant omissions of countries where there is systemic violence and human rights violations, like North Korea, because by this definition they are peaceful. To account for violence and crimes against humanity, the term “negative peace” was introduced by scholars. Negative peace refers to the absence of violence and/or the fear of violence occurring (Diehl, 2016). Negative peace is often referred to as moments where there are strong and legitimate ceasefire and peace agreements, usually protected by peacekeepers. Negative peace is the concept that is used in terms of liberal peacebuilding (Newman, 2009).

However, Diehl (2016) believes that negative peace is too simple and should be further defined. He develops the concept of “positive peace”, which focuses on strong institutions, attitudes and culture that promotes a peaceful society. He describes the four characteristics that help define positive peace: “(i) absence of major territorial claims, (ii) institutions for conflict management, (iii) high levels of functional interdependence, and (iv) satisfaction with the status

quo” (Diehl, 2016: 2). Thus, positive peace places an emphasis on well-being and non-traditional security concerns that are not directly related to conflict. Similarly, Banks (1987), concludes that peace is best defined as conflict management, which suggests that it is a long-term process where conflict is settled by non-violent means. Newman (2009) uses the theory of transformatory peacebuilding, which emphasizes the underlying causes of conflict. He states that “this approach is premised upon the assumption that durable peace and stability rest upon the achievement of positive peace and giving free expression to local voices, desires and forms of politics” (2009). Thus, positive peace often takes significantly longer to achieve and is harder to measure as its goals are less tangible.

These two concepts, negative and positive peace, provide insight into how the post conflict phase can be defined. In this paper, I use the concept of negative peace to mark the beginning of the post conflict era. However, as discussed in the next section, I do increase the amount of time in the post conflict period from the liberal peacebuilding-based timeline to account for the longer positive peace development.

Section 3.2: The Post Conflict Framework in Practice

Although academic theory provides insight on the definition of peace, Caplan (2020) clearly states that there can be no single approach to measuring peace in practice. This is because conflicts are so varied across states and regions. In addition, Keen (2000) adds that because many wars deviate from a simple two-sided battle, it is challenging to concretely determine when areas are in times of war, peace or a transition between the two. Keen (2000) states that in practice, “a transition from war to peace is unlikely to see a clean break from violence to consent, from theft to production, from repression to democracy, or from impunity to accountability. Peace is likely to institutionalize violence in some form; indeed, peace may not be possible without institutionalizing violence in some way” (Keen, 2000: 10). In addition, there is a more recent theory of ‘perpetual peacebuilding,’ where peace processes require two or more decades of renegotiations, active discussions and rebuilding of productive non-violent relationships in communities (Paffenholz, 2021). This challenges Banks (1987) and Diehl’s (2016) definition that peace is strictly non-violent and thus, throughout the transition, it is difficult to apply these definitions in a ‘clean-cut’ manner.

Liberal peacebuilding institutions and policy workers tend to use more practical frameworks for their post conflict work based on the liberal mandates. The Center for Strategic and International Studies (CSIS) defines post conflict as the process of moving from violence to normalization. They state that normalization is reached when “1) extraordinary outside

intervention is no longer needed; 2) the processes of governance and economic activity largely function on a self-determined and self-sustaining basis; and 3) internal and external relations are conducted according to generally accepted norms of behavior” (CSIS, 2002: 2). Thus, their definition of normalization includes the successful exit of peacekeeping or military interventions, economic sustainability, and ‘normal attitudes’ towards foreign policy. A normal attitude towards foreign policy is primarily defined by the CSIS as the adoption of neo-liberal principles, which is controversial and should be questioned. CSIS then define three different phases of the post conflict reconstruction phase, in which the completion of those steps concludes the post conflict process. These steps are almost identical to the framework developed by the New Partnerships for Africa’s Development (NEPAD). These phases, timelines, and primary objectives are summarized in Table 1 below.

Table 1: Liberal-Based Post Conflict Phases in Practice

CSIS Phase	NEPAD Phase	Objectives	Economic Progress	Timeline
Initial Response	Emergency	Military intervention for basic security, stability and emergency services. Creating a safe environment and surveying long-term needs.	Economy focused on filling immediate social needs and humanitarian relief.	90 days – 1 year
Transformation	Transition	Developing legitimate local capacity, establishing mechanisms for institutions, building a foundation for justice and reconciliation.	A focus on rebuilding infrastructure, short-term job creation.	1 - 3 years
Fostering Sustainability	Development	Further reconciliation processes, sustainable and peaceful institutions, peaceful transfer of government power, withdrawal of peacekeepers.	Developing sustainable economic markets and capacity.	4 – 10 years ¹⁵

Table 1 shows us that the post conflict era on average lasts around 10 years but can last longer depending on country specifics. However, as mentioned above, these liberal peacebuilding frameworks do not necessarily consider ‘positive peace.’ Since I was to consider longer-term development community peacebuilding processes, which Paffenholz (2021) suggests takes decades to achieve, my timeline for post conflict era needs to be longer than the typical liberal model.

Section 3.3: State Fragility vs. Post Conflict Definitions

It is common for people to believe that fragility and post conflict are synonymous, but this is a misconception. The OECD (2020) defines fragility as the “combination of exposure to

¹⁵ There are a number of states, particularly those with poor development prior to the conflict, that take longer than 10 years.

risk and insufficient coping of the state, systems and /or communities to manage, absorb or mitigate those risks.” The risks involved here include not solely concerns on violence, but economic, environmental, political, security and societal outcomes.¹⁶ Thus, a fragile state is not necessarily one that is experiencing or recently experienced negative peace. This is only one of the five aspects that define a fragile state. This means that a post conflict country, is not necessarily defined as a fragile country depending on their ability to deal with risks in the other four dimensions outside of security. An example of this is Senegal, which is a post conflict country in my data, but is not categorized as fragile in the OECD index. In addition, a country may not have experienced a recent conflict, but suffers from severe environmental and economic concerns, making it fragile. An example of this is Zambia. Thus, fragility is a much broader category that takes account of a wide array of factors associated with vulnerabilities.

Although there is a difference between fragility and post conflict, the OECD (2020) finds that in 2019, 79 percent of deaths from conflict occurred in fragile contexts, which confirms that violence is concentrated in fragile contexts. In addition, many of the 57 countries identified as fragile by the OECD in 2020 are used in my sample of post conflict countries examined throughout this thesis. In Chapter 1, which uses a wider definition of post conflict,¹⁷ 85 percent of the fragile countries from the 2020 OECD rankings are included. In Chapter 2, seven of the eight African post conflict countries used in the analysis are also defined as fragile.¹⁸ However, for a number of these post conflict countries, the security component of their fragility score is no longer severe in 2020 and it is often the other dimensions, particularly economic and political, that are ranked as severe. The poor performance on the non-security dimensions are often long-term consequences from the conflict that still cause vulnerability in the country. Therefore, it is common for a post conflict state to also be defined as fragile, but this is not a necessity.

This section also provides insight that much of the analysis occurs in 5 post conflict countries. With the recent war in Ukraine, there is some question on whether the findings are generalizable to middle- or high-income conflict. Since in the past thirty years, the largest percent of conflicts occurred in Africa,¹⁹ which is primarily low-income countries, this research is relevant to these trends. However, in Chapter 2, it is evident that a modest number of findings

¹⁶ Each dimension is defined as whether the country is vulnerable in that area. Economic is in weak economic fundamentals and high exposure to macroeconomic shocks. Environmental is in climatic and health risks that affect livelihoods. Political is risks in political processes and state accountability. Security is violence and crime as well as the institution’s ability to mitigate it. Societal is risks associated with social capital, cohesion and inequalities.

¹⁷ This is due to degrees of freedom concerns discussed in the next footnote.

¹⁸ Senegal is the one country in my post conflict sample that is no longer defined as Fragile by the OECD.

¹⁹ Uppsala/PRIO data

for African firm growth align with the existing literature from post conflict Europe. Although further analysis would need to be conducted, some of these findings may be able to inform decisions in conflict like Ukraine.

Section 3.4: Quantitatively Defining Post Conflict States

Developing a definition for a post conflict state based on quantitative data is an important component of this thesis because of the analysis in the first two chapters. In the limited post conflict quantitative literature, there is a specific convention that is used for defining conflict and post conflict states. The Uppsala and PRIO armed conflict datasets provide us with data on each conflict, including the type of conflict, the actors, the dates, and the intensity of the conflict. This dataset is commonly used in the economic peacebuilding literature, both liberal and heterodox. One of the primary criticisms of Collier and Hoeffler's earlier analysis is that they used the COW dataset, which is less accurate in terms of conflict characteristics (Suhrke et al., 2005). After this criticism, most data-based research switched to using the PRIO dataset.

In this dataset, intensity is measured by the number of battle-related deaths in that conflict, where a high intensity is defined as at least 1,000 battle-related deaths and a low intensity is 25 to 999 battle-related deaths. This means that if a country has experienced fewer than 25 battle-related deaths, these acts of violence are not picked up as a conflict. As Caplan and Hoeffler (2017) state, "herein lies one of the limitations of statistical analysis: the use of uniform definitions of terms allows for comparability but it obscures unique features of a given conflict" (10). Although this method may miss some violence, it has become a common tool of analysis that defines a conflict state in the quantitative literature. This definition of conflict is used in this thesis, where Chapter 1 examines both low and high intensity conflicts for the Structural VAR model and Chapter 2 focuses solely on high intensity conflicts in Africa.²⁰

To define a post conflict state, one needs to decide on the official end of a conflict to determine the start of the post conflict period. As noted in Section 3.1, negative peace is a typical method in defining the end of a conflict. Caplan and Hoeffler (2017) agree with this method and add that "most quantitative studies of armed conflict employ a negative conception of peace, with armed conflict being defined variably depending on which data set is adopted. Many post-conflict situations in fact are not entirely peaceful but, rather, are characterised by ongoing, sporadic violence. However, if the level of violence is below the given threshold of armed conflict, we define these situations as post-conflict." This shows that the quantitative method

²⁰ Due to a much smaller dataset in Chapter 1, I was required to include smaller scale conflicts in order to conduct the Structural VAR model. This was to ensure that there are enough degrees of freedom to conduct the analysis.

aligns with Section 3.2, where there is an expectation that there may be lingering violence in the post conflict period in practice but remains in the post conflict category if that violence does not cross the 25-death threshold. This method of defining both conflict and the start of the post conflict period is widely used in the literature including Caplan and Hoeffler (2017), Collier and Hoeffler (2002), Hoeffler (2008), Hoeffler (2012), and Hoeffler, Shahbano and Billerback (2010). Thus, there are high-quality peer-reviewed articles that use this technique and less debate over this in the heterodox materials. This provides a strong argument for using it in the quantitative analysis for this thesis.

The last component of defining a post conflict state is to determine how long that period should last after negative peace has occurred, which possesses more debate. Using the findings from the above literature, I define this as two decades after negative peace has been achieved. This is less common in the liberal peacebuilding literature that tends to focus solely on the first decade after the end of the conflict. However, existing research based on community-led peacebuilding, inequality and institutional reform shows that a decade is rarely long enough for the state to reach “positive peace.” Even within the liberal peacebuilding literature, there is evidence that this period should be longer than one decade. Findings from Hoeffler et al. (2010) show that, on average, GDP returns to its pre-war level 14 years after the end of the conflict, which suggests that there is significant economic “catch-up” that occurs after the first post conflict decade. Hoeffler (2008) finds that the risk-ratings for post conflict countries take at least 15 years to recover to pre-war levels, which influences levels of investment and private sector development. Hoeffler et al. (2010) show that human rights levels do not reach non-civil war levels within the first post conflict decade. Reilly (2016) presents that international involvement often lasts over one decade after the conflict has ended. He states that “in best case scenarios, international engagement remains lasting between fifteen and twenty-seven years” (77).

Further, as described in Section 3.2, other peacebuilding literature describes the need for much longer rebuilding, especially for less tangible recovery like trust, communities, and inequality. Newman (2009) suggests that for more substantive peacebuilding, which includes reconciliation and underlying conflict resolution, ‘results’ are much more challenging to measure, meaning that it is challenging to develop a distinct timeline. Paffenholz (2021) suggests that this type of peacebuilding takes at least two decades and, in some cases, can be an infinite process. Since for my research I must develop a post conflict end point to conduct analysis, I define the post conflict era as two decades after negative peace. This definition does not stray too far from the typical liberal peacebuilding literature but does include the more substantive peacebuilding findings that has been ignored in much of the literature.

Section 4.0: Theoretical Framework for Thesis

From the three perspectives analysed in this thesis – macro-level, firm-level, and case study – a simple framework can be used to help understand the overall influence of conflict on post conflict economic and private sector performance. The theory used is the structure-conduct-performance paradigm developed for industrial organization theory by Joe Bain in 1959.²¹ This theory is traditionally used for describing firm performance; however, in this thesis, it helps clearly map the influences that conflict has on firms and the overall macroeconomy. This theory “postulates causal relationships between the structure of a market, the conduct of firms and their economic performance” (Ferguson, 1988). Although not all conclusions within this thesis are causal, this framework allows us to consider how conflict impacts economic and private sector performance within the post conflict period.

This economic framework is beneficially because it provides a clear framework that allows us to include liberal peacebuilding mandates, which are primarily in the structure component, but also include fewer tangible influences from the controverting literature, like trust, networks, skill development, and local ambitions. The performance outcome is also relatively amenable, meaning that I can focus on economic growth like in Chapter 1, but can also analyse community development in Chapter 3. This flexibility allows this research to diverge from typical liberal peacebuilding frameworks, while still including issues like the ‘conflict trap.’

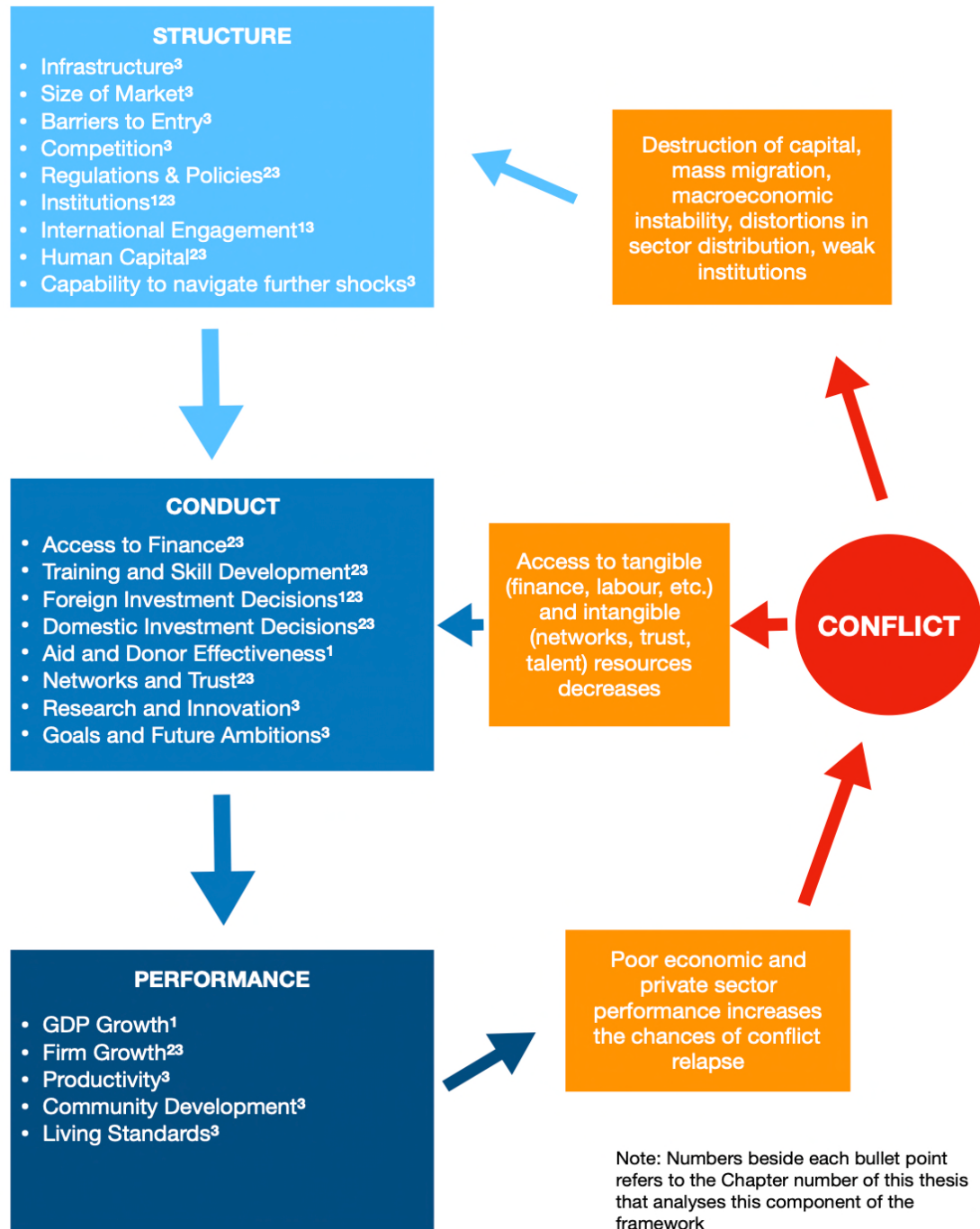
The structure component of the paradigm describes the characteristics of the market and overall economy. This includes the distribution of sectors, labour markets, size of the market and infrastructure available. The theory states that structure directly impacts the conduct of firms and economic decisionmakers. This is the conduct component, which describes the decisions and behaviours of players in the market. This can include access to and use of finance, innovation and research, education and training, investment decisions and the use of networks. The final element of this theory is ‘performance’, which is directly impacted by conduct and thus, indirectly by structure (Ferguson, 1988). There are several indicators of performance including overall economic growth, firm growth productivity and even human development. The structure-conduct-performance paradigm provides a clear framework for understanding post conflict economic recovery and is used throughout this thesis.

An extension of this framework is that public policy decisions directly influence both the structure and conduct aspects of the causal chain. This thesis shows that a country’s structure and conduct is significantly altered by conflict (like policy), distinguishing post conflict markets from non-post conflict markets. In addition, it is evident from the above literature that poor

²¹ Bain, Joe S. (1959) Structure-Conduct-Performance Paradigm, *Industrial Organization*.

economic performance increases the chance of conflict relapse. This in itself generates a link from performance at the end of the chain, back to conflict. Then conflict creates further negative impacts on structure and conduct, generating a cycle of violence and poor economic

Figure 1: Structure-Conduct-Performance Paradigm with Conflict Framework



performance. This aligns with Collier's (2008) macroeconomic work on the conflict trap but still allows non-liberal peace processes and analysis. This circular pattern is shown in Figure 1 above. Figure 1 also includes the indicators of each phase in the framework and provides information on the chapter within this thesis that discusses this factor. The relationship of each of these indicators within structure and conduct to performance is explored in this thesis. Ultimately, this provides suggestions on where interventions within the structure and conduct phases can be made to generate better post conflict economic and private sector performance. With better economic and private sector growth, the last link between performance and conflict could be broken, stopping the conflict cycle.

Section 4.0: Contributions to Existing Research

As Section 2.0 shows, there are several different ways of viewing the peacebuilding process; however, it is liberal peacebuilding, primarily led by Collier's 'conflict trap,' which has been the main framework used in policy making. Within the existing economic research, there is a strong emphasis on macroeconomic perspectives, particularly on economic growth, foreign aid, military intervention, natural resources and institutions. Although there has been a great deal of focus on economic growth, as Collier et al., (2003) recommend that growth is a way out of the conflict trap, research on the private sector in post conflict environments has been overlooked. Researchers with critical views of liberal peacebuilding find that economic growth cause further inequalities in these markets and it is only the elite who benefit from it. If this is true, and the 'trickle-down' effect does not occur, then there also remains a gap in the literature on the alternative, which is to analyse the private sector using a 'bottom-up' approach. This thesis uses the basis of the conflict trap and liberal peacebuilding models because that is what has been deployed over the past three decades. However, the SCP model allows this thesis to include more of the bottom-up approach, especially when analysing local firms, to actively include critiques of Collier's work in the analysis.

This thesis particularly adds to the existing research on African post conflict private markets. I choose to focus on the African markets in the second two chapters for three key reasons. The first is that despite major recent conflicts in Ukraine, Yemen and Syria, it has been Africa that has suffered from the most conflicts in the past three decades. The second is that post conflict African firm-level analysis is neglected in the existing research, and third, compared to other regions, the economic structure of post conflict African markets is more similar to non-post conflict Africa, allowing for tractability.

A large portion of the existing peacebuilding literature focuses on the impacts of aid on economic growth and stability in post conflict markets. Although there is work on concessions and natural resources in these markets, there is a lack of empirical work on the impacts of FDI. If the conflict trap is correct, and aid can push countries out of the trap through an injection of capital, then theoretically, FDI should have a similar effect. FDI may have an additional impact on growth because it can also transfer skills and technology to local markets. The model in Chapter 1 finds that FDI does have a significant positive impact on growth in post conflict markets, showing that this theory may be correct. In addition, FDI's impact is significantly larger than foreign aid's flow, aligning with Suhrke et al.'s (2005) conclusion, which questions Collier and Hoeffler's conclusion on the importance of aid. The liberal peace agenda has had a strong focus on natural resource management (Collier et al., 2003), which aligns with the result in this chapter. However, the FDI in this chapter, when separated by sector, is highest in the tertiary sector. This suggests that much of this positive result is derived from non-extractive natural resource projects and supports Fearon (2005) and Addison (2005)'s conclusion that investing into non-extractive sectors is preferential.

In terms of the private sector, there is much less research conducted on SMEs and local firm development in post conflict areas. The liberal peacebuilding literature has thoroughly discussed the effects of structural changes to the market by conflict, including the lack of human and physical capital, weak institutions, and peacekeeping missions influence. However, there is much less research that analyse the conduct of these firms, how they may be different, and understanding their needs. To take on a fully fledged "bottom-up" approach, this research would include informal and micro firms. However, due to the lack of firm-level data, this thesis focuses formal local firms, primarily SMEs. Since, the World Bank finds that formal SMEs contribute to 40 percent of national GDP in emerging markets, this research is still crucial for post conflict reconstruction.²² This adds to the work by Bray (2009), Addison and Murched (2005), Doblaz et al. (2019) and Berdal & Mousavizadeh, 2010, who discuss the contributions that non-MNC businesses can have in post conflict reconstruction, particularly in Africa. However, the existing research does not provide the transmission mechanisms producing growth for these firms. This thesis provides insights into the conduct of these firms in post conflict Africa and what makes them different.

The evidence from Chapter 2 and 3 proves that hands-on training to businesses is an important component to post conflict firm growth. Research from Liberia suggests that the training conducted by re-pats who work alongside them, is the most effective way to transfer

²² <https://www.worldbank.org/en/topic/sme/finance>

skills and knowledge in post conflict markets, not through FDI projects. This research also shows the importance of innovation and creativity being included in entrepreneurship training in these challenging markets. This thesis also finds that trust and networks help foreign SMEs do well in post conflict settings. However, the lack of trust between domestic businesses is hindering their development and ability to tackle challenges. These important conclusions suggest that the liberal peacebuilding mandate of creating jobs and economic growth to leave the conflict trap, particularly through large organization, is inadequate. For post conflict private sectors to become stable, decrease peace spoilers and grow more inclusively, active long-term training, innovation, and trust and network building are key elements for reconstruction. Thus, this research provides policymakers with information on the resources and support that businesses require to succeed in these markets. Policy implications are included in the conclusion of this thesis.

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**Foreign Direct Investment:
A Boost to Post Conflict Economic Recovery?**
A Structural Vector Autoregressive Model

Section 1.0: Introduction

Conflict within a country devastates infrastructure, destroys local economies, stagnates economic growth and decreases adherence to international human rights norms. Once the conflict ends, the process for peacebuilding and reconstruction begins. Conflict in a region both destroys existing capital and hinders the entrance of new capital. However, foreign capital inflows is widely seen as an instrument in liberal peacebuilding to help conflict-affected country move out of the ‘conflict trap.’ Often, the focus in post conflict reconstruction is to use foreign aid to accelerate growth. However, there may be an important difference between the effects of aid flows compared to private capital flows. The literature has tended to focus on the former rather than the latter. Thus, the central question of this paper concerns the role of private capital and in particular, foreign direct investment (FDI)¹, on the reconstruction process. Foreign direct investment represents an alternative strategy to promote capital accumulation in post conflict settings. Further, FDI not only brings in much needed physical capital and employment into a country but also brings knowledge, skills, technology and management tools. However, the impact of FDI in these post conflict settings has received little attention and is poorly understood.

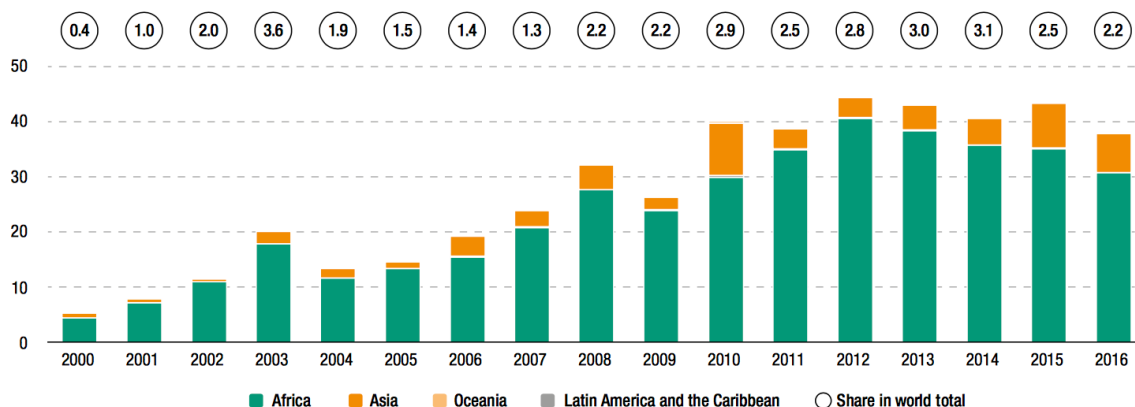
This lack of understanding is primarily because post conflict regions receive relatively small amounts of foreign investment. Investors tend to be risk averse and generally view low-income countries as too politically unstable and/or costly to invest in. However, over the past twenty years, patterns of FDI flows have changed and higher amounts have been invested into these countries, meaning that they should be more seriously considered in the peacebuilding process. In 2016, FDI flows into developing countries were \$400 billion more than official development assistance (UNCTAD World Investment Report, 2017). From 2000, FDI flows into LDC’s (least developed countries) have grown from approximately \$5 billion to \$38 billion in 2016 (Figure 1). Although these statistics do not specifically analyze post conflict regions only, the majority of them are within the LDC category. It is important to note however that in terms of the percentage of world FDI

¹ Foreign direct investment is defined as an individual or firm from one country investing in their business interests in another country

flows, LDCs are still receiving a very small amount. Figure 1 shows that in 2016, LDCs received a mere 2.2 percent of global FDI inflows.

Figure 1: FDI into LDC's, 2000-2016

(Billions of Dollars on left, percent of share in world FDI on top)



Source: UNCTAD World Investment Report 2017

The existing literature has focused primarily on the impacts of foreign aid and peacebuilding programs, like UN peacekeeping missions, on economic reconstruction in post conflict settings. Research finds that these post conflict environments are unique and that capital inflows have different effects within these markets compared to other developing countries. They also find that the effects are different depending on the timing of the inflows and the region (Hoeffler et al., 2010). In addition, there has been academic debate on the impact of FDI on developing countries' growth, where positive spillovers occur in local supply chains, there is a negative market-stealing effect from domestic businesses and the transfer of skills and knowledge to the local markets is dependent on local capacity. FDI often has an overall net zero effect on growth in developing countries. However, the research does not necessarily combine these two sets of research to determine whether FDI's effect diverges in post conflict markets from these findings. As noted in the introduction to this thesis, liberal peacebuilding research has focused specifically on natural resource management (Collier et al., 2003). This paper helps to fill this gap by determining whether FDI has a significant impact on economic growth in post conflict countries. Further, the model compares the effects that FDI and aid inflows have in these settings to uncover which capital flow impacts growth more. Lastly, this paper than analyses whether the effect of FDI on post conflict growth is different depending on the region and the time after a conflict FDI inflows occur. As FDI

becomes a greater capital inflow into post conflict countries, seen in Figure 1, this research is critical in understanding the effects of FDI on the economic reconstruction process.

This paper uses a comprehensive dataset and Structural Vector Autoregressive (SVAR) model to determine the general impact of FDI flows on economic growth within the two decades after a conflict has ended. The dataset includes 92 different countries that have experienced at least one conflict between the years 1970 and 2008. The model finds that FDI does provide a significant positive increase in economic growth in post conflict countries, which is larger in magnitude per dollar than aid inflows. The model also finds that this effect is strongest in Africa and that FDI's positive impact is most significant if deployed 5 to 10 years after a conflict has ended.

The paper proceeds as the following: Section 2 surveys the academic literature on FDI flows into developing countries and post conflict economies. Section 3 uses an extension of the Solow Growth Model to develop a theoretical model on how FDI can potentially alter post conflict economies' growth patterns. Section 4 describes the SVAR framework that is used. Section 5 goes through the preliminary data analysis and how FDI has changed in conflict-affected countries over the past four decades. Lastly, Section 6 presents the findings of the SVAR model and Section 7 concludes.

Section 2.0: Literature Review

As noted above, there is little research specifically on the impacts of FDI on post conflict economic recovery. Although there is qualitative literature available on foreign direct investment projects in conflict-affected areas, there are no aggregate empirical studies on the relationship between economic growth and FDI in these settings. There are two key debates in this literature that this paper helps contribute to. The first debate is around the effect of FDI on economic growth in developing countries, which is relevant because most of the post conflict countries included in this research are also developing countries (Section 2.1). The second is focused on the uniqueness of post conflict environments and that capital inflows have different impacts on these economies than elsewhere (Section 2.2). This paper helps to combine these two debates in the literature to determine if FDI's impact on economic growth diverges in post conflict settings and whether it can support the reconstruction process.

Section 2.1: The Impacts of FDI in Developing Countries

As mentioned above, the first debate in the existing literature is determining whether FDI has a positive impact on economic growth in developing countries. In theory, FDI flows into developing countries is a potential source of capital, knowledge and technology transfer that can stimulate employment, diversification and economic growth (Chowdhury & Mavrotas, 2006). To take just one example, Arnold et al. (2009) show that foreigners owning greenfield Indonesian plants leads to significant productivity improvements in those acquired firms. After three years, the new greenfield foreign owned firms outperform new domestic firms in productivity by 13.5%. Other than the acquired firm itself, theory suggests that the knowledge FDI should also have an “intra-industry” spillover effect into the local domestic market from the transfer of technology and trained labour. However, Aitken and Harrison (1999) find a negative spillover effect because the acquired firm is “market-stealing” from the domestic firms in developing countries in their regressions. Thus, the overall impact on the economy’s productivity is net zero and can take away from local owners.

Although there may be negative spillover effects within the same industry, Javorcik (2004) shows that FDI helps boost productivity in the acquired firm and the supplying-sectors. This is because the international corporations want to prevent knowledge spillovers to their competitors in their industry but benefit from transferring knowledge to their local suppliers. Javorcik (2004) finds that a one standard deviation increase in foreign presence creates a 15 percent increase in output of each domestic firm in the supplying industry. However, this result only occurs when the investments are both domestic and foreign because it increases the likelihood of the plant using local inputs. Blomstrom and Sjöholm (1999) uses micro data from Indonesian firms to find that firms with foreign establishments have higher labor productivity and that domestic firms benefit from spillovers but the degree of foreign ownership in the company does not change either of these impacts. Abebe et al. (2018) also find that if a domestic firm is geographically close to a greenfield plant in Ethiopia, this increases total factor productivity (TFP) by 8 percent over four years. Thus, the existing literature finds that FDI has a positive effect on the acquired firm and can have some spillover into domestic firms in their supply chain or geographical close to them. However, there is an offsetting market stealing effect which causes other local firms to exit the market.

Many policymakers state the importance of job creation through FDI, which is why many developing countries look to attract MNCs. There are numerous examples of FDI increasing employment for low-skilled workers in developing countries. For example, while liberalizing their economy, Mauritius implemented an export processing zone in the 1970s, which brought in

substantial foreign investment. From 1970 to 1990, two-thirds of the employment expansion in the country came from jobs within the export processing zone (Moran, 2002). Further, the working conditions in developing countries are generally poor with no local enforcement of minimum wage, few labour standards, no health benefits, severe penalties, child workers, high injury rates and physical punishments. However, Moran (2002) shows that “on average foreign-owned, export-oriented factories offer higher pay and better working conditions than comparable jobs in domestic companies” (13). This is beneficial for the foreign businesses employees but does not necessarily transfer to local firm policies. Moran (2002) also gives examples of how low-skilled labour that is produced from foreign investment can be transformed into high-skilled labour when proper skill development is implemented through both the host country and the investors.

The next set of debates within the literature is focused on skill and knowledge transfer, which is more challenging to quantify in the data. Abebe et al. (2018) find evidence in Ethiopia of knowledge spillovers to domestic firms that are within the same geographic area as a foreign plant using a difference-in-differences approach. These spillovers help enhance the domestic plants’: “(i) production processes; (ii) managerial and organizational practices; (iii) logistics and; (iv) knowledge about exporting” (1). Abebe et al. (2018) find that transfers occur primarily through the vertical channels connected with the foreign firm and with labour moving to the domestic plant. Overall, developing countries can grow substantially by MNCs bringing in technology. However, the literature finds that transferring technology to the host-country is complex. Countries with low levels of education are less likely to absorb the new technologies. LDCs, which have “economies with weaker initial conditions are likely to experience smaller inflows of FDI, and those foreign firms that enter are likely to use simpler technologies that contribute only marginally to local learning and skill development” (Blomstrom & Kokko, 2002: 10). Thus, many LDCs do not have the industry or the human capital to really absorb any of the benefits from technology transfer. MNCs internalize most of their technology in LDCs but diffusion can occur when the “MNCs provide training and technical assistance to their local suppliers, subcontractors and customers” (Blomstrom & Kokko, 2002: 10). An industry like natural resource extraction, which is a large portion of FDI flows into LDCs, have a relatively low need for domestic suppliers and thus, there is little opportunity for skill building and technology diffusion (UNCTAD, 2010). In conclusion, as Moran (2002) states, an “effective means of capturing the benefits of foreign direct investment is to ensure that foreign subsidiaries are integrated as tightly as possible into the regional or global sourcing networks of their parent firms” to increase the chance of skill and technological diffusion (110).

Thus, the literature is inconclusive on the impacts that FDI has on developing countries. FDI tends to have a ‘market-stealing’ impact on their local competition but a positive productivity boost in both the acquired firm and vertically in the supply chain. In LDCs, the literature states that there is evidence in economic growth in areas with high FDI flows; however, it is unlikely there is local skill and knowledge transfer due to a severe lack of human capital capacity. This paper helps to determine whether FDI has an impact on economic growth in a post conflict environment specifically, building on the above findings. In a post conflict setting, there could be less local market stealing effects because the economy is often starting from scratch after the conflict. However, the significant education gap created by a conflict (discussed further in Chapter 3), may lessen the ability for MNCs to transfer skills and knowledge to local markets.

Section 2.2: Capital Inflows into Post Conflict Economies

There is existing research that is focused on capital inflows into post conflict countries, including foreign aid, UN missions and FDI. In the aid literature, it is found that aid inflows have a positive effect on growth in post conflict countries but not in non-post conflict. However, weak institutions created through these chaotic environments, which have been described above, hinder the impacts that capital inflows have on a post conflict economy. In addition, the greater education gap in post conflict markets means that transfers from FDI may not occur in these settings. Thus, there is a debate on whether FDI may or may not positively contribute to growth given these findings on post conflict markets. There is modest literature on FDI in post conflict markets available, which is also included in this section. However, it does not provide a clear quantitative macroeconomic analysis. This paper adds to the existing literature by determining whether FDI does significantly contribute to post conflict growth like aid does, and if so, whether FDI’s impact is larger than aid inflows.

As mentioned above, there are several pieces of literature on the impact of foreign aid in post conflict environments. Collier and Hoeffler (2002) discover that even though foreign aid does not contribute to growth in a normal developing economy, within the post conflict decade it has a small positive impact on growth when there is no post conflict violence. This is primarily because foreign aid helps make most of the peace dividend² the country experiences after conflict. Postwar recovery sets in slowly and the strongest growth years are between the fourth to sixth once violence

² Post conflict countries on average grow at about three percent per annum, which is about one percentage higher than the average country

has stopped (Hoeffler et al., 2010). Further, even though these countries experience strong recovery, this is not reflected in their risk rating until much later in the future, detracting investment. They detect that “during the post-war decade aid has a small positive effect on growth, an extra one percent of aid (measures as a percent of GNI) provides an additional 0.05 percent growth per year throughout the post-war decade” (Hoeffler et al., 2010). However, there have been major critiques of these conclusions. Suhrke et al. (2005) rebuild the model after adjusting for previous conflict data issues and finds that although aid still has a positive effect, it is much smaller in magnitude than that estimated in Collier and Hoeffler’s (2002) work. This does challenge these assumptions on the importance of aid in peacebuilding processes.

Collier (2009) describes that aid can help with these post conflict situations by: reconstructing lost infrastructure, countering high inflation, helping government spending, which is negatively impacted by low tax revenues, and reducing capital flight. Adam et al. (2006) explain that postwar aid significantly supports the country’s monetary reconstruction process. This is because aid decreases the temptation and need for governments to use seigniorage to increase government revenues. Since civil wars are very expensive for the government, they need to increase their revenues, which can be done through seigniorage tax. However, this drastically increases inflation for the country creating monetary instability. Thus, aid can support governments through these challenging financial barriers after a conflict.

Although Hoeffler et al. (2010), do not quantitatively find significant evidence that UN peacekeeping missions generate stronger growth in post conflict settings, there is more recent work that discovers these missions do stimulate domestic demand. Beber et al. (2016), show that UN peacekeeping missions are large-scale economic interventions and can shape local markets. They note that “the amounts of money that are injected into local economies by peacekeeping deployments may not seem large in absolute terms, but it is hard to overstate their significance in the context of the ravages economies of post-war societies” (Beber et al., 2016: 3). Although this boost can be positive in the short run, it is unsustainable economic growth and when the troops withdraw, it can have negative consequences on the local markets (Gledhill & Karim, Forthcoming). This is because the large presence of peacekeepers generates a dual economy in the area, specifically in services, which serves as major employment opportunities for locals (Aning and Edu-Afful, 2013). However, this fleeting domestic demand takes away from more sustainable long-term sector developments like agriculture, construction, forestry and mining. This debate in the effect of

peacekeeping missions on post conflict growth is controlled for in the model by adding a dummy variable (see Section 4).

After a conflict, countries have strong incentives to attract FDI to support rebuilding their economy. In addition, “new leaders can use FDI as a domestic indicator of their ability to govern and secure their own legitimate tenure in office” providing the government with more authority and legitimacy within the local and international community (Appel et al. 2012). Busse et al. (2006) use a time series dataset which statistically proves that FDI flows are substantially impacted by conflict and violence. When analyzing foreign investment trends into post conflict countries, it is important to note that “the volume and composition of foreign capital flows to these countries is significantly different from the patterns observed in developing countries” (World Bank, 2010). From the view of the investors, these decisions are based on the risk of asset destruction or loss, appropriation, unavailability of local inputs and infrastructure and abrupt declines in domestic demand³. The 2010 World Bank report finds that these investors are more concerned with the risk of adverse government interventions than the resurgence of violence. Thus, the unpredictable environment generated by past conflict, including unstable institutions, means that these post conflict states receive less FDI than their peaceful counterparts (Aginam et al., 2010:11).

Although these countries are high-risk for investors, Appel et al. (2012) discover that evidence of strong institutions, particularly in the justice system, can significantly increase FDI inflows. This is because “post conflict justice institutions [act] as a signaling mechanism to the international community, particularly MNCs and other investors” (Appel et al. 2012). These institutions are often seen in the form of temporary justice processes like trials, truth commissions, reparations programs and other accountability procedures.

Garriga et al. (2014) explores the relationship between FDI and aid in post conflict countries. They find that foreign aid flows can also act as a signal for foreign investors. This paper shows that foreign aid is a potential signal because foreign aid flows “suggests some levels of trust of the recipient government, on the part of the donor government” (Garriga et al. 2014). However, this is not the case with US foreign aid because USAID “seems to function as a warning sign...because of the US tendency to aid countries not because of their economic potential or need, but instead for geostrategic reasons” (Garriga et al. 2014). Therefore, post conflict scenarios are unique for foreign

³ The extractive and telecommunication sectors are outliers in typical investor behavior

investors because they are often low-information environments and they are forced to look at signals, like justice institutions and foreign aid flows.

Within the limited growth and FDI research for post conflict countries, Bunte et al. (2018), conducted research specifically on FDI flows into Liberia. As a proxy for economic growth, the authors used nighttime light growth emissions in the local communities around the concessionary land. They then built a difference-in-differences quantitative model to determine how varying types of FDI projects impact local growth. They find that “with respect to initial effect of FDI on economic outcomes, however, our results suggest that extractive sector FDI has improved local economic growth in Liberia” but agricultural projects do not (Bunte et al., 2018: 6). Lastly, they find that Chinese firms are better positioned than US firms to make investment deals and supply public goods in a timely manner. This suggests that certain FDI projects have a positive impact on growth in post conflict countries; however, using light as a proxy for growth may be misleading in terms of the transfers of growth to local communities. In addition, Paczynska (2016) conducts qualitative work with the iron ore FDI projects in Liberia and determines that these projects increased inequality and tensions in local communities. This aligns with the critiques of liberal peacebuilding policies that the large investment projects benefit the elites and does not ‘trickle-down’, generating further inequality (Newman, 2009, Addison et al., 2005, Castaneda, 2009).

However, there are researchers that critique these findings and suggest that focusing on other commodities and sectors, particularly in agriculture, may be more beneficial to the peacebuilding process. Addison (2005) believes that agriculture export-led growth is greatly beneficial for post conflict reconstruction, especially because a large portion of employment is generated in the sector. This is especially because Fearon (2005) challenges Collier’s finding that natural resources increase the likelihood of conflict. Instead, he finds that it is the oil and gas⁵ that increases this likelihood.

This section clearly shows the existing debate on the effects of capital inflows on post conflict economies. The literature finds that aid has a significant positive effect in post conflict countries when it has no effect in developing countries. Additional research shows that UN peacekeeping missions can also significantly boost economic growth in these settings, but this is merely a short-run effect. There is a debate on whether FDI can create the same or better positive impact on growth as aid in post conflict settings. This is because, as seen through foreign aid,

⁵ As well as diamonds, although the author believes the sample size is too small to identify this.

including UN Mission spending, there can be substantial returns to capital in these areas. However, FDI is challenging to attract into post conflict markets, especially with weak institutions and the transfer of skills may be limited. In addition, these projects may cause inequality and tensions in post conflict regions, that should be considered. Therefore, this research develops a model to find an answer to the debate surrounding on the effects of FDI on growth in post conflict environments. The transmission mechanism of how FDI could create positive economic returns and impact growth is explained in the next section.

Section 3: The Theoretical Framework of the Conflict Trap and the Role of FDI

This section utilizes standard economic growth theory to explain the different possibilities on how foreign direct investment can impact a post conflict country's economic recovery. The empirical framework used to quantify these impacts is described in Section 4. The first section will give a brief overview of the Solow Growth Model, which is the primary theoretical framework used. Then, there is an overview of the past literature on some of the theory around the conflict trap, recovery and economic growth. Lastly, using the Solow Growth Model, four different cases are presented on how FDI may alter a country's growth pattern and has the potential boost post conflict countries out of a 'conflict-trap'.

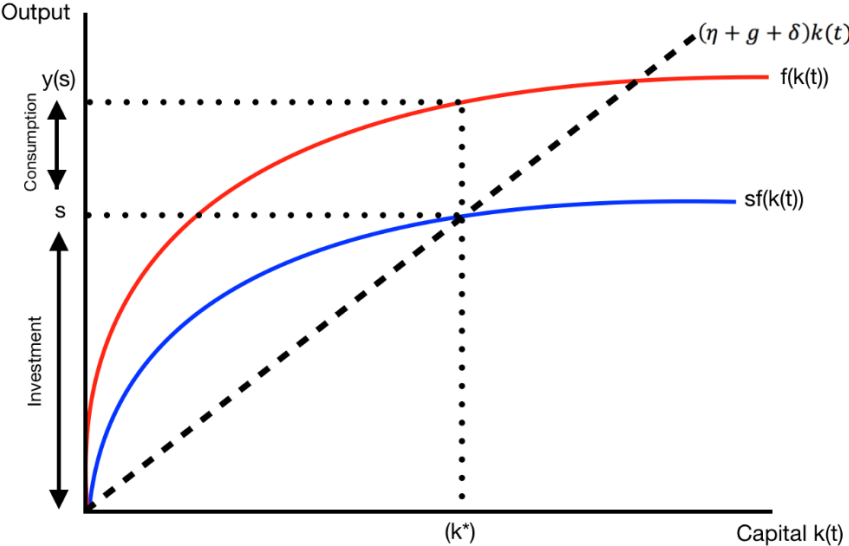
Section 3.1: An Overview of The Solow Growth Model

Economic growth and stability are key components for a conflict-affected country to recover and rebuild. When determining the economic growth path for a post conflict country, it is crucial to begin by understanding the Solow Growth Model. This neo-classical model assumes output (Y) is produced using capital (K) and labour (L) where the productivity of labour is enhanced by technical efficiency (A). Labour and labour-augmenting technical progress grow at exogenously determined rates so that the fundamental driver of growth in the accumulation of physical capital through investment. The dynamics of this process are described by the fundamental equation of motion relating investment per effective worker to savings and the exogenous drivers of the capital requirements of the economy. This is represented in Equation (1).

$$(1) \dot{k} = sf(k) - (\eta + g + \delta)k(t)$$

In this equation, $k = K/AL$ is the capital stock per 'effective worker', s is the savings rate, $f(k)$ denotes output, δ is the depreciation of capital, η is population growth, and g is technological growth. Both η and g are assumed to be exogenous factors.

Figure 2: The Original Solow Growth Mode



The Solow growth model has four main assumptions: technology is labour-augmenting, constant returns to scale, positive but diminishing marginal returns to both capital and labour, and the Inada conditions⁸ (Adam, 2017). Using Equation (1), we can determine that when savings is greater than $(\eta + g + \delta)k$, then the country will experience capital deepening. In other words, an increase in the capital available per effective worker will lead to higher growth rates but at a diminishing return as the country moves towards the equilibrium. On the other hand, when savings is less than $(\eta + g + \delta)k$, then the country does not have enough capital accumulation to maintain capital constant per effective worker given the depreciation in the existing capital, the growth in population, and the rate of technical progress, causing growth to decrease. When savings is equal to $(\eta + g + \delta)k$ then the country is at its growth equilibrium or the steady state. The Solow growth model is shown in Figure 2, where we can see that the country’s output per effective worker is always growing if capital per effective worker is below the steady state. A country will only experience a decrease in output per effective worker when capital per effective worker has moved past the steady state where consumption becomes too high for the level of capital accumulation required for the population (Adam, 2017). However, in many least developed countries, there is little

⁸ The Inada conditions are an assumption in the Solow Growth Model that capital’s marginal return tends to infinity as capital tends to zero and vice versa. It is important because with the Inada conditions, poverty traps are not viable as the production function is concave and marginal returns increase as you move towards zero. This means a country will always grow faster if there is less capital and this diminishes as it reaches stable equilibrium. In practice, it is evident that many countries’ growth does not follow the Inada conditions as they struggle to move out of poverty. Section 3.3 provides models that relaxes these conditions to better understand growth in post conflict countries stuck in traps.

evidence that they experience this capital deepening effect. Thus, the original Solow Growth Model does not illustrate why many least developed and conflict impacted countries experience slow growth and struggle to gain capital. I use an extension of this model to better understand this phenomenon in Section 3.3. However, prior to explaining the extensions of the model, it is crucial to further analyze post conflict growth patterns in practice.

Section 3.2: Conflict-Affected Countries and Growth

As described in the introduction to this thesis, Collier et al. (2003) discover that countries which have a history of conflict are more likely to experience conflict in the future. This ‘conflict trap’ is caused by slow economic growth, political instability, and a lack of investment that follows war. Using the original Solow Growth Model (Section 3.1), these post conflict countries should theoretically experience high levels of growth until they reach the steady state because capital moved drastically to the left during war. However, in practice this has not been the case.

This model assumes that in low-income countries, whose capital is devastated by civil war, are placed at an unstable equilibrium and are therefore, stuck in a low growth and investment environment. Low savings causes a poverty trap because all income must be used for sustenance. This poor and worsening economic environment increases the likelihood of a conflict relapse, which Collier describes as the conflict trap (Collier, 2007). An extension of Solow’s Growth, that produces a kink in the savings function creating two equilibriums can explain why many post conflict countries become stuck in poverty, low growth scenarios and relapsing conflict (Figure 5). To escape this trap, countries who have experienced a civil war need a boost in capital that surpasses the unstable and low equilibrium so the country can reach a more standard growth path. Sachs et al. (2004) believe that this ‘big push’ should be through aid transfers, while Collier (2007) discusses the use of improved governance, trade policy, and military intervention to push poor countries out of the conflict trap. However, capital in the post conflict case, does not need to be viewed strictly as physical. Collier (2009) notes that conflict in fragile states creates a profound loss in human capital as well. An obvious cause of the loss in human capital is that many people, including skilled labourers, either flee the country to seek refuge or are killed. The other reason is that worker productivity drops heavily during a conflict as many projects cease, which causes a symptom called “forgetting by not doing” (Collier, 2009: 94).

As Sachs et al. (2004) and Collier (2007) note, aid and military intervention can help create this ‘big push’ towards standard economic growth in post conflict countries. However, if aid does

not help to build physical and human capital, then its effect on growth is limited. Hoeffler et al. (2010) find that post conflict countries receive more humanitarian aid than peaceful states but the same amount of economic infrastructure aid. Further, Collier (2007) notes that “Africa has twice as much public capital as private capital,” which is the opposite of East Asia (87). This means there is little private capital that is contributing to the ‘push’. Thus, FDI may increase the level of capital, through increasing savings and/or transferring technology that can push the economy towards a more standard growth path.

Foreign direct investment brings both physical capital and technology transfers into a country. Companies build much needed physical capital, like roads, electricity grids and bridges, to conduct their business and in many cases, are used as public goods. These changes do not necessarily change steady state growth but instead, boosts savings, which leads to higher incomes and consumption. Foreign companies also transfer technology and knowledge, which increases the productivity of the economy. Theoretically, this increases the production possibility frontier of the country. These different cases will be further explained in Section 3.3. The first two cases help to explain the shifts in savings and productivity, and the final two better applies those to a post conflict setting as it includes the conflict trap.

It is important to keep in mind that the conflict trap and the framework around it is based on a liberal peacebuilding model. It does not take into account the other complexities surrounding conflicts, the critiques that FDI projects may exacerbate local inequalities and tensions, and that the ‘trickle-down’ effect may not occur. Many of these critiques are further explored in Chapter 3 of this thesis.

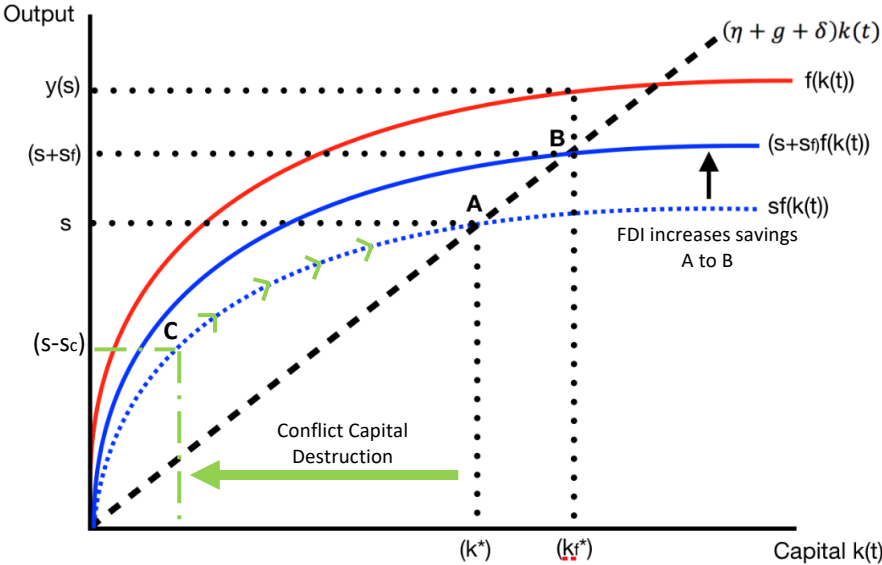
Section 3.3: Four Cases on How FDI Can Impact Growth Using the Solow Growth Model

Case I: FDI as a Source of Additional Savings

FDI generates a boost to augmented domestic savings, which is seen in Figure 3. In this case, the original Solow Model assumptions are kept, which means that there is no conflict trap modelled yet. FDI’s impact is solely a shift upwards in the domestic savings curve, which creates an alteration to the country’s economy. In the case of a conflict affected country, the destruction of capital is shown as a shift to the left in capital away from equilibrium A to point C. The loss of savings is represented by sc . In the post conflict era, savings would move along $sf(k(t))$ back to equilibrium A, shown by the green arrows. When FDI inflows come into the country, the steady state equilibrium moves from point A to B (Figure 3), which raises steady state incomes and

domestic consumption by increasing the capital per effective worker as the savings function gets steeper. However, this does not change the steady state growth rate, which is still determined by $(\eta + g + \delta)k$. In this case, there is no change in the production function of the country. Further, this model does not show a conflict trap, which means that after a conflict, the savings simply moves back to steady state growth. As noted above, this does not occur often in practice, which means that this model does not best show a conflict scenario as it doesn't include a conflict trap.

Figure 3: Case I with Original Solow Model Assumptions

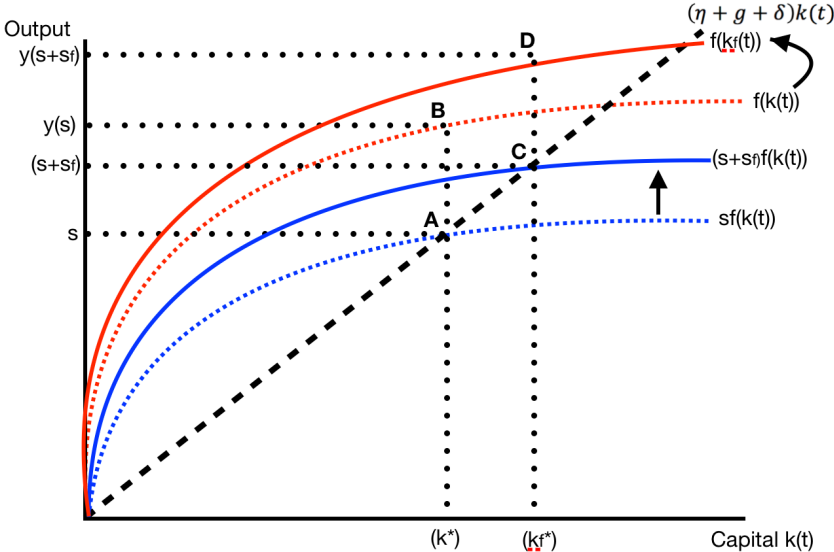


Case II: FDI Boosts Savings and Productivity

In Case II, the standard Solow Model assumptions are also kept, and savings is boosted again like in Case I. However, now there is technology and knowledge transfer by foreign direct investment, which impacts the production function of the country. As seen above in Case I, the boost in investment shifts the savings function upwards. The technology and knowledge transfer creates a rotation to the left in the production function as effective workers become even more effective. As in Case I, the steady state moves to the right as the equilibrium moves from point A to C, creating an increase in capital per effective worker shown in Figure 4. The technology transfer creates an even higher income and consumption per effective worker as the production function equilibrium moves from point B to D (Figure 4). However, it is important to note that there is no change to the labour-augmenting technology which is g included in $(\eta + g + \delta)k$. Instead, in this case those transfers influence every value of k , so the marginal product of capital is higher. As in Case I, there is no change in the steady state growth rate but the rate of growth towards the steady

state is higher. If a conflict occurs, the same shift to the left occurs in this model as in Figure 3 (not shown in Figure 4 as it's the same as Figure 3). Both Case I and Case II help us understand the impacts that FDI has when using the original Solow Growth Model context. However, they are not able to fully explain what occurs in a post conflict setting because there is no conflict trap modelled.

Figure 4: Case II with Original Solow Growth Assumptions

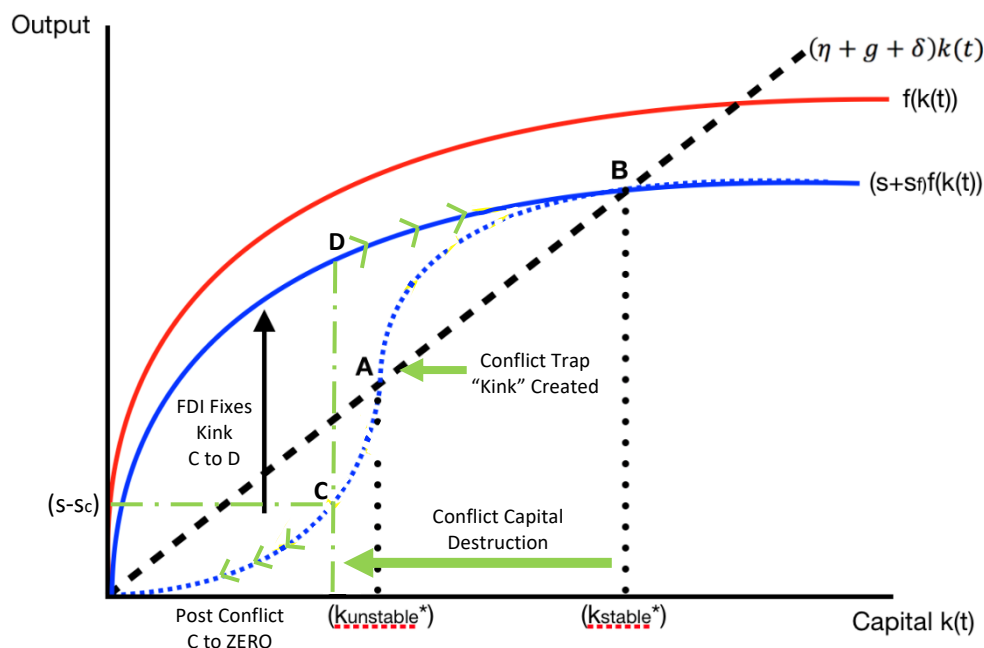


Case III: FDI Repairs the Savings Trap in Post Conflict Setting

For Case III, the Inada conditions still hold for the production function but there is a non-linearity in the savings function. In the conventional Solow Growth Model, the destruction of capital would represent a sudden drop in k to the left of the steady state. Thus, the destruction of capital would generate an investment boom and an increase in the growth rate. However, this is rarely the case and the non-linearity in the savings function helps to explain this (Figure 5). This ‘kink’ generates two different equilibria for savings. Starting at the stable steady state B, when there is a substantial destruction of capital, the marginal product of capital increases because the Inada conditions still apply to the production function. However, the non-linearity in the savings function means that there is insufficient savings to take advantage of the high productivity; the demands of capital widening exceed the supply of savings so that capital per effective worker declines. This kink in the savings function means that there is insufficient savings to take advantage of the higher productivity generated from the fall in k , creating a conflict trap. This is at the unstable equilibrium, A, which shows that the destruction of capital causes growth to fall. When a country’s capital level is below A, savings will continue to decrease until it reaches the lowest equilibrium at zero. This is shown by the destruction of capital from a conflict, moving the country to point C, where savings

then moves towards zero. In this case, FDI brings a boost to augmented domestic savings, which repairs this kink, moving the country from point C to D. Once savings are above the capital widening requirements, then the country can converge to the stable steady state at point B and is no longer stuck between zero and point A. This boost in savings means that the country can take advantage of the higher marginal productivity of capital after the negative shock.

Figure 5: Case III with Non-Linearity in Savings in Post Conflict Setting

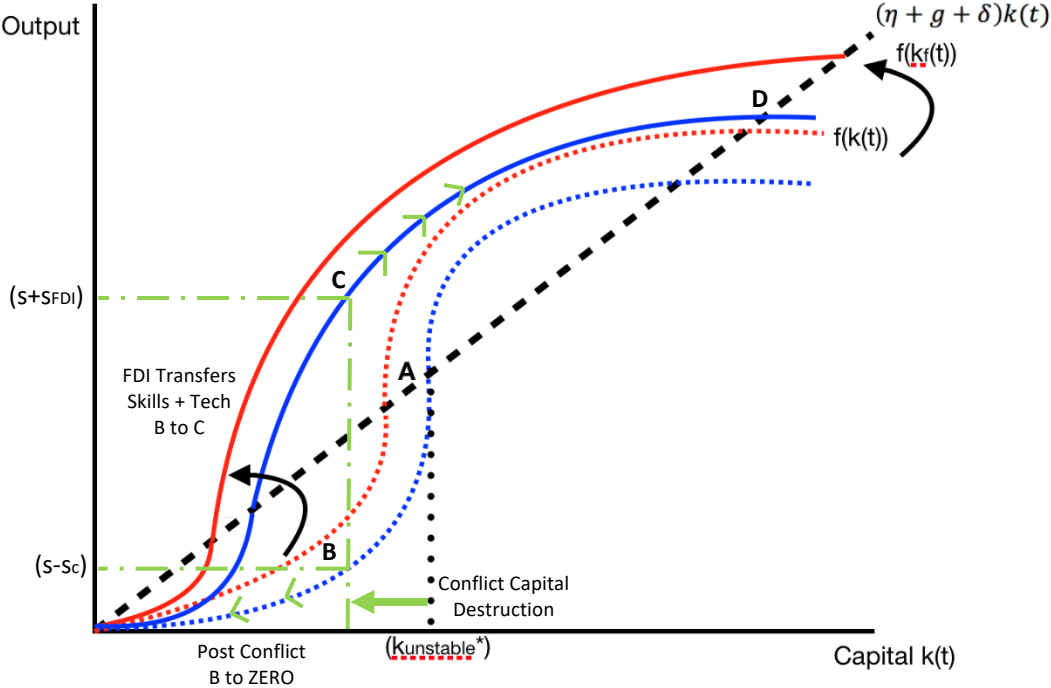


Case IV: The “Trap” and a Rotation of the Production Function Generated by FDI

In this case, the Inada conditions are relaxed and the production function also has a kink in it, creating the poverty trap that is represented in Sachs et al.’s work (2004). Similar to Case III, when a conflict occurs, a kink is produced in the savings and in this case, the production function, and capital moves left to point B. In this unstable environment, growth will move along the savings function to zero. Instead of fixing the kink in the production function, technology and skill transfers from FDI rotates the production function, which is shown in Figure 6. This is because technology and knowledge transfers significantly enhance the productivity of capital at these low levels, which creates a rotation to the left. This rotation moves the unstable equilibrium progressively to the left and possibly all the way to zero, where the ‘trap’ disappears entirely. This moves the conflict-affected country from point B to C, where less savings is required to get past the ‘trap’ to the positive side of growth because capital is now more productive. At point C, the country can grow towards the steady equilibrium D, returning to the original Solow Model. Case IV could also include

a savings boost as well from FDI, which would move the unstable equilibrium even further to the left (this is not shown in Figure 6). In practice, this would require a ‘trickl-down’ effect to occur.

Figure 6: Case IV where the Inada Conditions Do Not Hold



In theory FDI should generate these outcomes from Case III and IV in post conflict settings, however there is limited quantitative evidence on whether this is occurring in practice. This chapter focuses on the evidence in the data for Case III, where there is a capital boost that increases savings. Chapter 3, which uses qualitative research in Liberia, focuses on examining the presence of Case IV and the impact that knowledge and technology transfer can have on firms’ productivity and overall economic growth within post conflict regions.

Section 4.0: The SVAR Method

From the previous section, one can see that there are two main channels in which FDI can impact economic growth. The first is a direct savings effect shown in Figure 5. The second is through FDI boosting productivity through knowledge and technology transfers shown in Figure 6. These both can have significantly positive impacts on economic growth but as shown in Section 3.3, the boost in income does not change the steady state of the country for Cases I-III. It merely helps to push the country back to its original growth path towards the steady state. With the framework used above, one might expect that I would use a growth regression as the model. However, the data

from post conflict states are time series with substantial variation, meaning that a growth regression is not appropriate. Instead, a Vector Autoregressive Model (VAR) can control for the variation while exploring the causal links between FDI and economic growth.

In addition, to analyze the impact that foreign direct investment has on economic growth and living standards in post conflict areas, it is crucial to consider that many of the key variables of interest, including output, FDI and aid, are endogenous. The definition of an endogenous variable is that it has causal relationships with other variables. In this case, it is evident that GDP impacts FDI in the future and vice versa. Thus, an OLS model would be inadequate for modeling this relationship because the OLS estimator would be biased due to the endogeneity. An example of this notion is in Hoeffler et al.'s 2010 paper, which uses a model that instruments for aid inflows in post conflict areas, which is endogenous. In this paper, the authors use a Two-Stage Least Squares (2SLS) model and the four instruments that these authors use to control for aid's endogeneity are proxies for the post conflict country's closeness to the donor country. However, there are still limitations to the 2SLS model because it does not allow the variables within the model to be instruments for the others. For example, you are unable to instrument FDI with host country output when GDP is the dependent variable. Thus, for such a complicated system a dynamic model is required, and I build a Structural Vector Autoregressive model (SVAR) to fill these demands.

The SVAR model allows us to control for the endogenous and exogenous variables. It can introduce shocks to these variables and map the impacts of the shocks while holding all other variables constant. In this paper's model, a shock to FDI can occur during the post conflict decade and holding all other variables constant, maps out the impact of that shock on GDP growth. In this SVAR model, the panel data is for each country and time is indexed as the year, which spans from 1970 to 2015. This becomes somewhat complicated since some countries in the dataset experience numerous different conflicts throughout that time-period. Thus, the country must be out of conflict and not relapse back into conflict for at least five years to be considered post conflict.⁹ This dataset looks specifically at the two decades after a conflict ends and remains peaceful.

However, the data can be organized in different ways, which adds to the analysis. This is because the model can index time using historical years or the number of years after a conflict has ended. Using a historical time index is a more conventional approach and is how most VAR models are developed. However, some more detailed information is neglected if the model does not use the

⁹ This decision is based on the research for defining a post conflict state in the introduction to this thesis.

time indexed by the end of the conflict. Indexing time with this technique allows us to really focus on the post conflict era and the impacts within those years. Thus, the first model uses the conventional approach of using historical time to derive FDI's impact on growth in post conflict countries. Then, the second model uses this new approach of using conflict time to delve deeper into the details of FDI's and aid's impact on growth within those twenty years after a conflict.

Section 4.1: SVAR Model One

The endogenous variables in both SVAR models are GDP per capita (y_t) and FDI flows per capita (F_t). FDI per capita is used to control for the size of the economy. Since I am looking specifically at the impact of FDI during post conflict years, I also create an interaction variable with a dummy variable (D_t) that equals 1 when the country is in a post conflict year (Equation 1):

$$(1) \quad F_t \times D_t = FP_t$$

To account for all the data, an endogenous variable is also created for the years that the country is not in a post conflict time era. Thus, the opposite of the post conflict dummy variable is taken to create another interaction variable below (Equation 2). The years that this interaction includes is when a country is in conflict, in-between conflicts (within three years) and before any conflicts have begun.

$$(2) \quad F_t \times (1 - D_t) = FC_t$$

Before explaining the model that consists of all three of these variables, I will outline the two-by-two VAR model that is used. This model is basic and merely looks at the impact of lagged FDI on GDP growth in post conflict countries in a year and not specifically in a post conflict time. The basic model is:

$$(3) \quad [B] \begin{pmatrix} y_t \\ F_t \end{pmatrix} = [A] \begin{pmatrix} y_{t-1} \\ F_{t-1} \end{pmatrix} + \begin{pmatrix} \varepsilon_{yt} \\ \varepsilon_{Ft} \end{pmatrix}$$

$$(4) \quad [A] = \begin{bmatrix} a_{yy} & a_{yF} \\ a_{Fy} & a_{FF} \end{bmatrix}$$

$$(5) \quad [B] = \begin{bmatrix} 1 & b_{yF} \\ b_{Fy} & 1 \end{bmatrix}$$

where Matrix A are the lagged impacts of y_t and F_t (Equation 4), Matrix B is the contemporaneous impacts (Equation 5) and ε are the errors. In Matrix B, the diagonal values are equal to one because the impact of the variable on that same variable contemporaneously must be equivalent. For this analysis, I am interested in the causal impact of shocks to these two variables on the dynamic paths of each. If I do not put restrictions on Matrix B then these causal effects cannot be separated and thus, identified. Due to theory,¹⁰ in a two-variable VAR, there is one restriction and in a three-variable VAR there is three restrictions. One way of achieving these appropriate restrictions is with “recursive ordering” in which I need to decide the contemporaneous correlation of the variable.¹¹ In this model, I must choose between whether there is no contemporaneous impact of GDP on FDI, which is coefficient b_{Fy} , or no contemporaneous impact of FDI on GDP, which is represented by coefficient b_{yF} . Considering how GDP is calculated, it is impossible for GDP to not be impacted by contemporaneous¹² FDI flows because those flows are placed into the current accounts immediately. Since the current accounts are included within the calculation of GDP, this means that b_{yF} cannot equal zero. Thus, b_{Fy} must be constrained to zero for the recursive ordering of the model. However, this restriction is logical because FDI flows into a country cannot be impacted contemporaneously by shocks to the country’s GDP. Investment deals require time to be negotiated, which means that a GDP shock would only have a lagged effect on FDI flows.¹³ With this assumption, Matrix B is transformed into the following:

$$(6) \quad [B] = \begin{bmatrix} 1 & b_{yF} \\ 0 & 1 \end{bmatrix}$$

¹⁰ There must be $\frac{1}{2}(n^2-n)$ where n is the number of endogenous variables in the model.

¹¹ By this, I am choosing which variable is most exogenous.

¹² Since the data is annual, contemporaneous FDI inflows means the flows entering within that calendar year.

¹³ In the analysis, to check robustness of this recursive ordering, I also run the regression with post conflict aid and non-post conflict aid placed above the FDI variables. The change in the coefficients is negligible, which presents evidence that the matrix may actually be diagonal. This is because there is little contemporaneous correlation between all of the variables. Even for FDI/capita, although this is included in GDP for that year, it is a very small portion of GDP. Thus, the B coefficients in this matrix are all very close to zero. This means that the restrictions are not really necessary and that the Cholesky ordering can be done in anyway.

With the new Matrix B, I can isolate for $\begin{pmatrix} y_t \\ F_t \end{pmatrix}$ by taking the inverse of B and multiplying each matrix on the right-hand side of the equation by it. The result is shown in Equation (7):

$$(7) \quad \begin{pmatrix} y_t \\ F_t \end{pmatrix} = [B^{-1}][A] \begin{pmatrix} y_{t-1} \\ F_{t-1} \end{pmatrix} + u_t \quad \text{where } u_t = [B^{-1}] \begin{pmatrix} \varepsilon_{yt} \\ \varepsilon_{Ft} \end{pmatrix}$$

This means that the inverse of the contemporaneous coefficients and the lagged coefficients are both crucial at determining the impact of lagged FDI on GDP growth. The disaggregated equation is shown in Equation (8). Here, a_{yF} is the main coefficient of interest because it represents the impact of lagged FDI at time t-1 on GDP growth at time t. Then equation (9) shows the fully reduced form of the VAR.

$$(8) \quad y_t = [B^{-1}][a_{yy}y_{t-1} + a_{yF}F_{t-1}] + [B^{-1}]\varepsilon_{yt}$$

$$(9) \quad \begin{pmatrix} y_t \\ F_t \end{pmatrix} = \begin{bmatrix} \gamma_{11} & \gamma_{12} \\ \gamma_{21} & \gamma_{22} \end{bmatrix} \begin{pmatrix} y_{t-1} \\ F_{t-1} \end{pmatrix} + \begin{pmatrix} u_{1t} \\ u_{2t} \end{pmatrix}$$

Where $\gamma_{11}=(a_{yy}-a_{yF}b_{yF})$, $\gamma_{12}=(a_{yF}-b_{yF}a_{FF})$, $\gamma_{21}=(a_{Fy})$, $\gamma_{22}=(a_{FF})$, $u_{1t}=(\varepsilon_{yt}-b_{yF}\varepsilon_{Ft})$ and $u_{2t}=(\varepsilon_{Ft})$

However, in this simple two by two model FDI is not for post conflict years specifically as it is merely for all years in these post conflict states. To analyze the impact of FDI during post conflict years specifically, it is necessary to use a three-by-three VAR model including FP_t and FC_t , which are defined in Equation (1) and (2), respectfully. This model is shown below as Equation (10):

$$(10) \quad [B] \begin{pmatrix} y_t \\ FP_t \\ FC_t \end{pmatrix} = [A] \begin{pmatrix} y_{t-1} \\ FP_{t-1} \\ FC_{t-1} \end{pmatrix} + \begin{pmatrix} \varepsilon_{yt} \\ \varepsilon_{FPt} \\ \varepsilon_{FCt} \end{pmatrix}$$

Since both FP_t and FC_t are FDI variables, recursive ordering between the two variables is inconsequential. This is because contemporaneously the two variables cannot impact them each other as one of them will always be zero at time t. However, recursive ordering is still crucial between the two FDI variables and GDP growth. As discussed above, it is necessary for FDI to impact GDP contemporaneously, which generates the three-by-three Matrix B below:

$$(11) \quad [B] = \begin{bmatrix} 1 & b_{yFP} & b_{yFC} \\ 0 & 1 & b_{yFC} \\ 0 & 0 & 1 \end{bmatrix}$$

Section 4.2: The SVAR Model Including Exogenous Variables

The Structural Vector Autoregressive Model (SVAR) uses the same model as Section 4.1 but adds a new matrix for the exogenous variables that are added as controls. Thus, the model in matrix form is represented by Equation 12 below:

$$(12) \quad \begin{pmatrix} y_t \\ FP_t \\ FC_t \end{pmatrix} = [B^{-1}][A] \begin{pmatrix} y_{t-1} \\ FP_{t-1} \\ FC_{t-1} \end{pmatrix} + [B^{-1}][\tau] + u_t$$

The τ Matrix includes all the exogenous variables that need to be included in the model. The τ matrix is also multiplied by the inverted B matrix.

The variables that are included in the τ matrix either control for country or conflict characteristics. A variable for political stability is included, called the polity score, which is an index from -10 (hereditary monarchy) to 10 (consolidated democracy) describing the type of government in place.¹⁴ As discussed in the introduction to this thesis, the presence of a UN Peacekeeping Mission helps create domestic demand and decreases the likelihood of conflict relapse. Due to this, a dummy variable is included on whether a UN Peacekeeping Mission is active in the country during that specific year. The exogenous variables that are included to control for the conflict are a dummy variable for the intensity of the conflict and type of conflict. The dummy variable is equal to zero and thus, a low intensity, when there have been 25 to 999 cumulative battlefield deaths. It is equal to one and thus, a high intensity, when there are more than 999 cumulative battlefield deaths throughout the conflict. Lastly, a dummy variable for the type of conflict is also included, where the variable is equal to one if it is an internal conflict and zero if it is any other type of conflict. This includes interstate, extrasystemic and internationalized internal conflicts. This division for the dummy variable was created because 79.3 percent of conflicts between 1970 and 2008 were

¹⁴ The Polity Project, *Centre for Systemic Peace*. <https://www.systemicpeace.org/polityproject.html>

categorized as internal (see Chart 2). Further information and analysis on these different variables are discussed in Section 5.0.

This model is also helpful to analyze in more detail the difference that FDI and aid have during three different time periods: before conflict, during conflict and post conflict. This extension of the model is presented in Appendix 2. The second extension that is used is to determine whether FDI has a different impact in economic growth in different geographical regions. This analysis is conducted by running five separate regressions, isolating the conflicts that are only in that region. To analyze in more detail of the effects of FDI by timing of the flow, I have created a second SVAR model. This also helps to check for the robustness of the results of this first model.

Section 4.3: SVAR Model Two

This second SVAR model changes the panel information of the data. Instead of being organized by country and year, the data is reformatted to be arranged by conflict and year after conflict. This means that if a country has multiple conflicts, each conflict will be its own panel and countries may be repeated. Further, the data is now organized by how many years since that one conflict ended. The year that the conflict ends in is labelled as zero and then the year after is labelled as one. This reformatting provides us with some new information to the model. However, some data is lost in this process because we no longer have data from before, during and twenty years after a conflict has ended. This means that every data point in the sample is within the first two decades of when a conflict has ended. Thus, an interaction term for it being post conflict time is no longer required because all data in the sample is within this time. The change from Equation (12) is that there is now only one term for both FDI per capita (F) and aid per capita (A), which is shown below:

$$(13) \quad \begin{pmatrix} Y_t \\ F_t \\ A_t \end{pmatrix} = [B^{-1}][A] \begin{pmatrix} Y_{t-1} \\ F_{t-1} \\ A_{t-1} \end{pmatrix} + [B^{-1}][\tau] + u_t$$

The structural exogenous matrix $[\tau]$, must also change slightly. This is because in the previous model, there were exogenous variables that were used to control for the characteristics of conflict like intensity and type. However, now the conflict is the panel and thus, these variables are already included. Thus, conflict intensity and type has been dropped because they are already controlled for

through the panel and the values do not change over time. However, the presence of a UN mission and a control for government stability included as the polity score remain in the matrix.

This model can then be used to isolate for certain characteristics to gain more information on the impact of FDI on economic growth. The extension of this model used in this paper is to determine when FDI is most effective on economic growth after a conflict finishes. This model uses a difference-on-differences approach, where dummy variables for the first five years after a conflict, five to ten years after a conflict, ten to fifteen years after a conflict and fifteen to twenty years after a conflict have been made. Then, those dummy variables are interacted with FDI per capita and a SVAR model is run using a difference-in-differences approach for each one of those interactions. For example, the first SVAR, which shows the impact of FDI/capita in the first 5 years after a conflict ends, is the following:

$$(14) \quad \begin{pmatrix} y_t \\ F_t \\ FX(0 - 5dummy)_t \end{pmatrix} = [B^{-1}][A] \begin{pmatrix} y_{t-1} \\ F_{t-1} \\ FX(0 - 5dummy)_{t-1} \end{pmatrix} + [B^{-1}][\tau] + u_t$$

Aid per capita is also included in this model, although not shown in Equation (11). A robustness check, which uses the same difference in differences approach for aid as well as FDI is completed. These results are shown in Appendix 3.

Section 5.0: Preliminary Data Analysis

There are numerous different datasets that are merged together to run the SVAR model. The primary dataset used is the UCDP/PRIO Armed Conflicts Database, which includes the variables on conflict date, length, intensity and type between the years 1970 to 2008. All conflicts that are included in this dataset end by 2008. However, many of these countries, like India for example, have numerous different conflicts over this time period. For the country to be defined as post conflict, it must not relapse into another conflict within five years of the last conflict ending. Once this definition is considered and the dataset is cleaned, 116 different conflicts from 94 countries remain, which is represented in Chart 1. This chart also shows that the region with the highest number of conflicts is Africa and that from 1989 to 1998, there is a substantial increase in conflicts globally. The average duration of a conflict in this sample is approximately four years; however, there are some conflicts included that only last a few weeks. Within this sample, 62.3 percent of the countries that have experienced a conflict, relapse into another conflict before 2016. Chart 2 demonstrates

that the most common conflict within the dataset is internal battle meaning that there is no intervention from outside states (UCDP, 2010). The least common conflict is extrasystemic, which includes a government and a non-state actor that is external. An example of this type of conflict is in Guinea-Bissau throughout the early 1970's. Lastly, Chart 3 shows that there are slightly more low intensity conflicts in this dataset as only 46.6 percent are defined as cumulatively high intensity¹⁵. Both the Middle East and Asia are the only regions that have experienced more high intensity conflicts than low throughout this timeframe.

Chart 1: Conflicts by Region

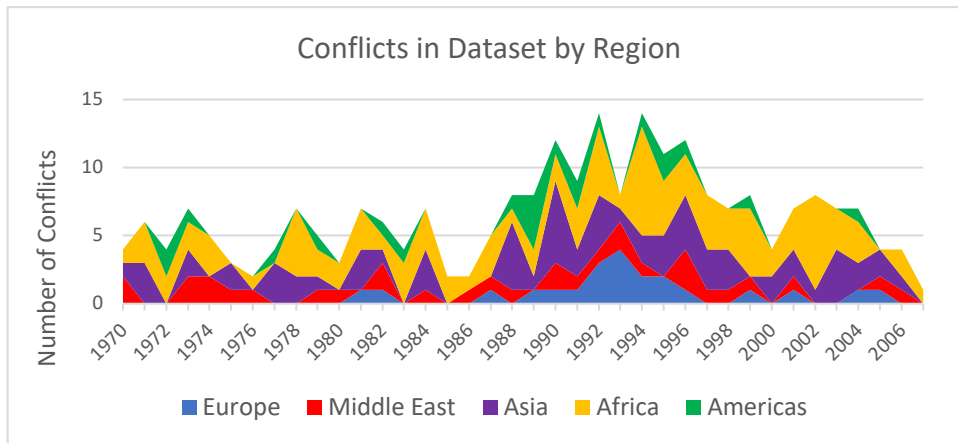
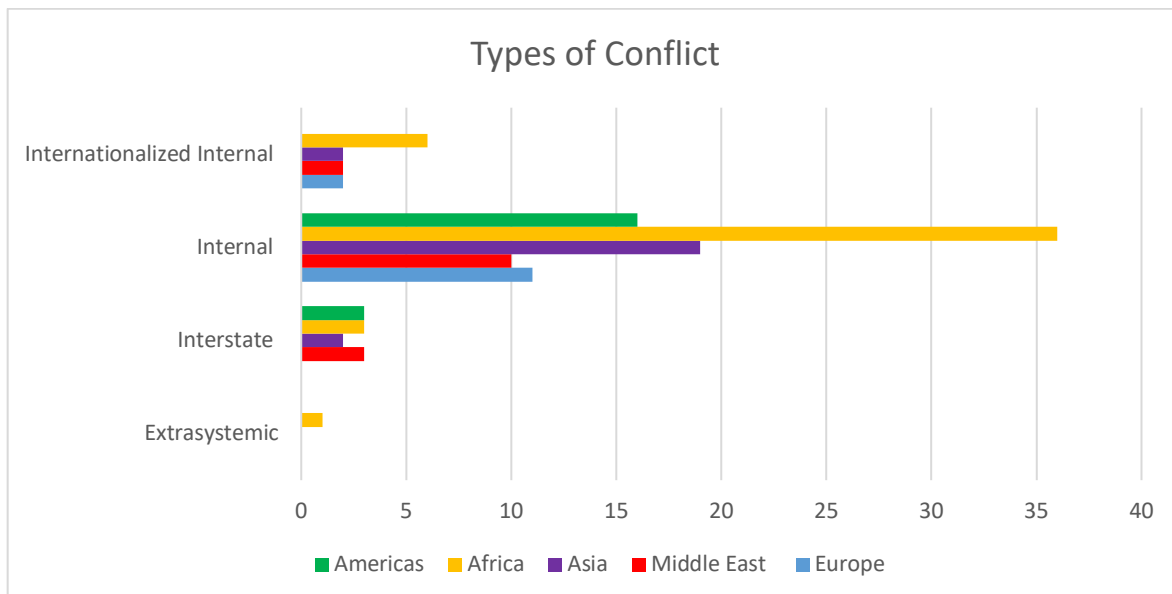
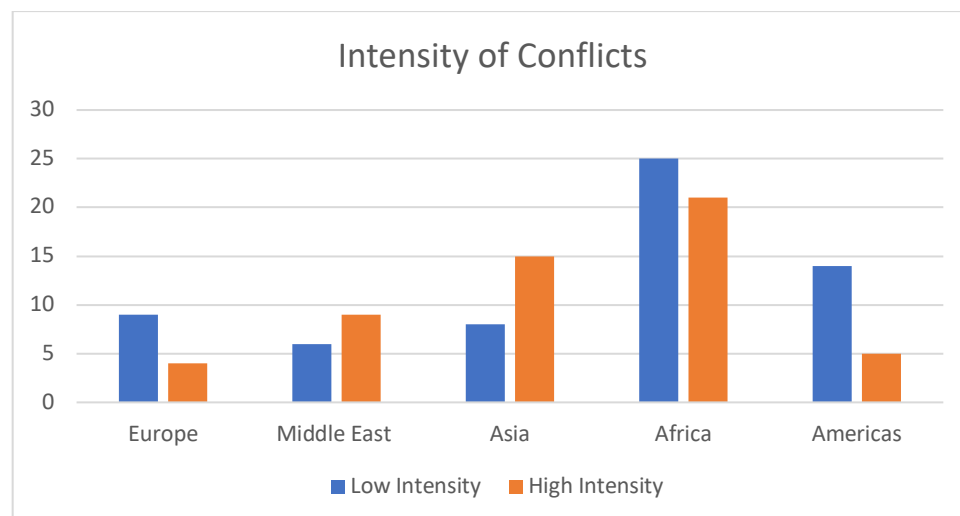


Chart 2: Types of Conflicts in Dataset



¹⁵ The intensity of conflicts is defined in the UCDP/PRIO by the following: low intensity means there is 25 to 999 battlefield fatalities and high intensity is 1,000 or over fatalities.

Chart 3: Intensity of Conflicts in Dataset



The data for the main variable of interest, FDI inflows per capita, is from the UNCTAD *World Investment Report*. This data can be disaggregated into three sectors: primary, secondary and tertiary. Further, using FDI per capita controls for the size of the economy. Since 1970, it is evident that FDI flows into countries that have been conflict-afflicted¹⁶ has increased significantly (see Chart 4). This trend has been global and on average the FDI flows per capita into conflict-affected¹⁷ areas has increased from \$0.5 USD/capita in 1970 to \$13.6 USD/capita by 2016. This upwards trend accelerates in the early 2000's and is seen the most in the Middle East, Europe and Latin America. Chart 4 clearly shows that the increasing interest in FDI flowing into LDCs discussed in Section 1.0 also remains true for countries that are conflict affected. However, it is crucial to note that the global average for FDI per capita has increased from \$2.8 USD per capita in 1970 to \$330.3 USD per capita in 2016. This means that FDI flows have increased on average by more in countries without conflict. Further, Chart 5 shows that on average, countries who have experienced conflicts of a low intensity receive more FDI flows over time. This is most likely because these environments are less risky for investors than countries who have experienced high intensity conflict. These two charts help us to analyse the flow of FDI over time into the countries that are in conflict or post conflict settings during specific years, providing time trends. The next set of charts allow analysis of FDI depending on the time in relation to the conflict and not the year.

¹⁶ Conflict-affected is defined as a country that has experienced and ended at least one conflict in the timeframe 1970-2008. Charts 4-6 includes all years of these conflict-affected countries whether in that year the country is before any conflict, in a conflict or post conflict.

¹⁷ Conflict-affected countries mean countries within the database that are in-conflict or post conflict during that specific year.

Chart 4: FDI per Capita Since 1970 by Region

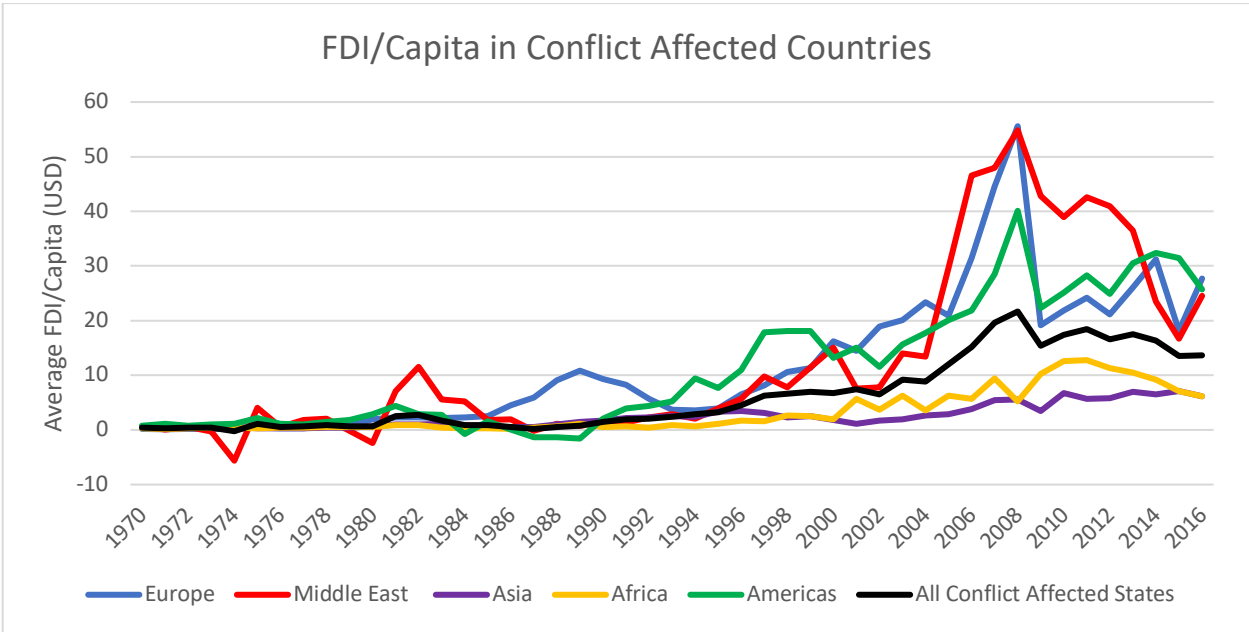
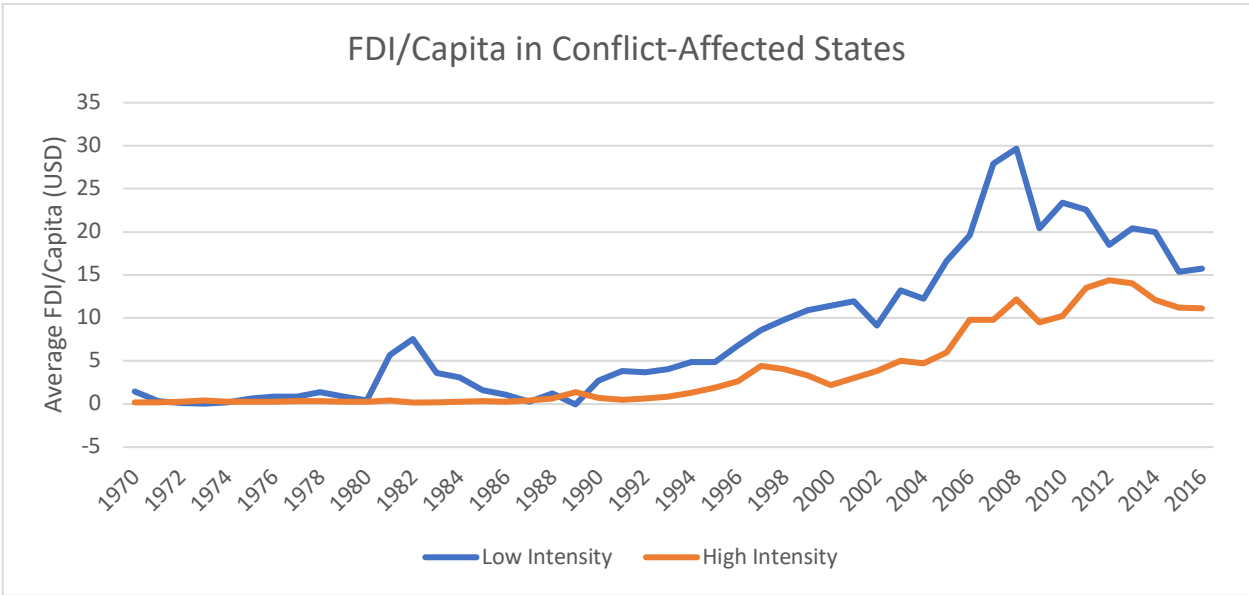


Chart 5: FDI per Capita Since 1970 by Conflict Intensity



Further preliminary analysis can be conducted once the data is rearranged for the SVAR Model 2 (see above in Section 4.2). Chart 4 was re-created but instead of the year as the x-axis, it is plotted as the number of years after a conflict has ended. This is then aggregated into the five different regions and is shown in Chart 6. In general, this chart shows that FDI per capita remains

low for countries before a conflict ends. This is logical as conflict time is unpredictable and extremely risky for investors, meaning very few deals would occur. The Middle East does see a spike in average FDI per capita flows a year before a conflict ends. A theory for this anomaly is that conflict in the Middle East has typically involved higher number of international actors in this time frame. Due to this, updates from these regions are more public and prominent in headlines, which means that investors may have a better sense of when the conflict will come to an end. Once a conflict ends, there is a steady increase in average FDI per capita flows for the first ten years after the war has ended globally. This is particularly true in Europe, which experiences a steep climb in investments. Asia and Africa's increase in FDI flows is more gradual than Europe's. Ten years after a conflict ends, Africa experiences an average decrease in investments, which may be caused by investors not experiencing the growth they anticipated. This is further shown in Appendix 1 Chart A.4, which shows that average GDP growth in post conflict African countries overall decreases after the first year out of conflict. The Middle East is the only region where post conflict FDI per capita flows are unpredictable and somewhat decreasing as time goes by. This may simply be because investors 'jumped the gun' and invested too soon. Appendix 1 provides some more detail by comparing average GDP growth and FDI per capita flows for each region.

Chart 6: FDI per Capita with Time Indexed Around End of Conflict

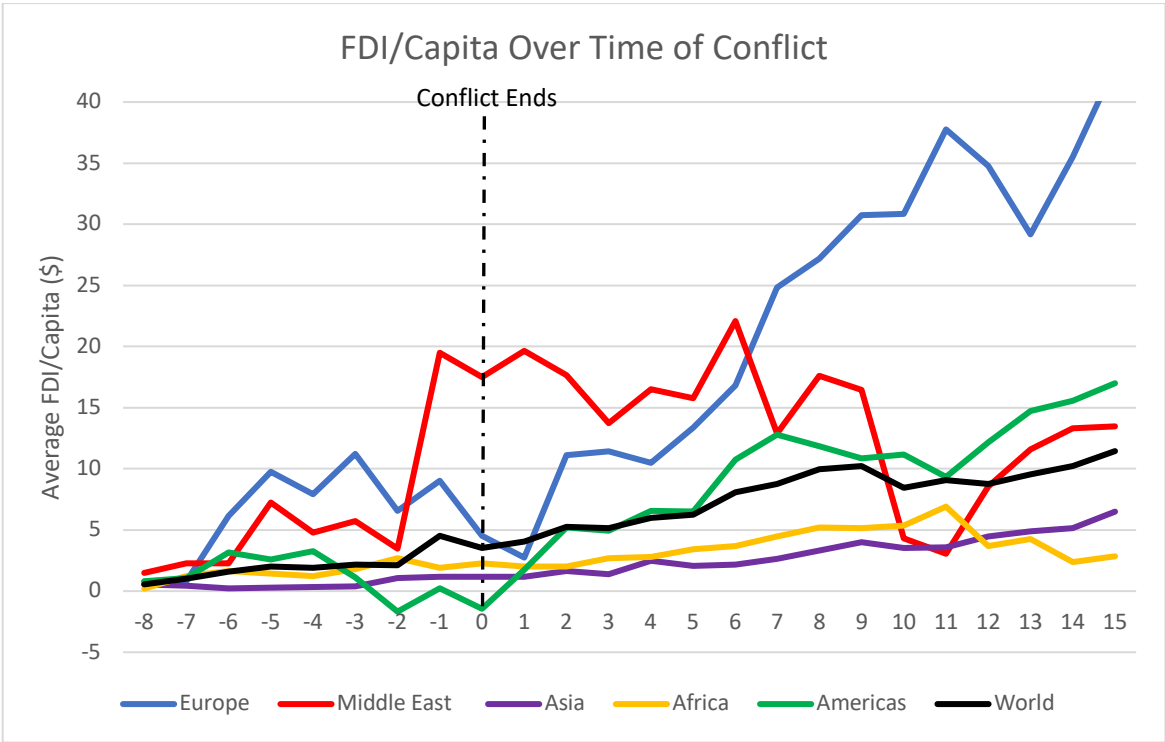
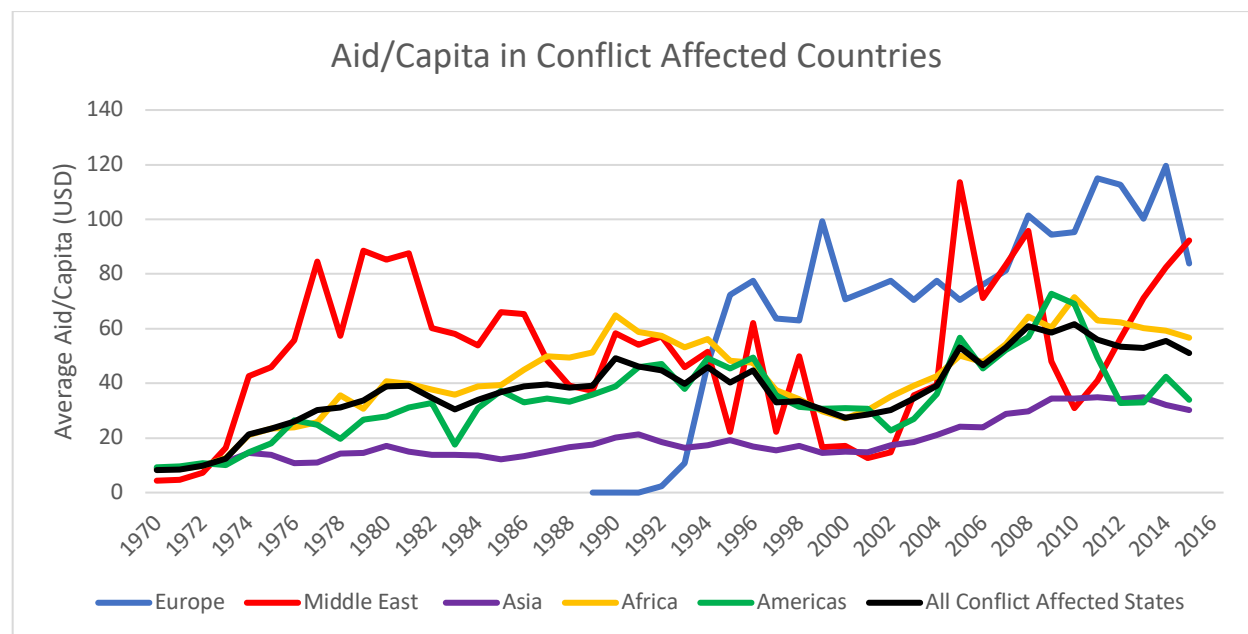


Chart 7: Aid per Capita Since 1970 by Region



The final endogenous variable that is included in this model is Official Development Aid (ODA) per capita, which is from the World Bank. It is required for aid to be included in this model because it is another fundamental source of capital influx into post conflict countries and as Hoeffler et al. (2010) discover, foreign aid has a positive impact on economic growth within the post conflict decade. To stay consistent with the other data and to control for the size of the economy, aid per capita is used. Chart 7 shows aid per capita by region from 1970 to 2015 and compared to Chart 4, it is evident that aid per capita into these areas are significantly higher than FDI per capita. However, it is important to consider that Hoeffler et al. (2010) find that post conflict countries receive more humanitarian aid than peaceful states but the same amount of economic infrastructure aid. This means that the extra amount of aid that enters post conflict countries is humanitarian, which is used for relief. This type of aid does not necessarily stimulate growth or create long-run development. Similar to FDI per capita, Chart 7 shows that the Middle East and Europe have the overall highest aid per capita flows in countries affected by conflicts within this time frame.

However, as noted above, Charts 4, 5 and 7 only includes the averages of countries that have been conflict-affected at some point within the years 1970 to 2008. In contrast, Table 1 only produces the averages of the endogenous variables for the *two decades* after a conflict ends. Table 1 also confirms that post conflict aid per capita flows is significantly higher than FDI per capita flows. Within this post conflict time, on average Europe receives the highest total amount of FDI and Africa receives the least. However, when converted into per capita, it is Asia that receives the least

amount of FDI inflows even though it receives the second highest of any region in absolute terms. This is simply caused by the large populations within the Asian region, specifically China and India, which are both included in this post conflict sample. The GDP growth rates within the post conflict two decades is the highest in Asia and the lowest in the Americas. Even though Africa has the lowest amount of FDI inflows during the post conflict decade, their average growth rates are only 0.2 percentage points lower than the global average. In addition, Europe has the highest average FDI per capita, but its growth rate is lower than the global average. Tertiary FDI per capita inflow is the largest sector in all regions except for the Americas. Although this cannot be modelled for due to data constraints, this is an extremely critical point to keep in mind when interpreting these results. This is because Collier et al. (2003) focus particularly in FDI projects that include natural resource management, which would be the primary sector. This means that impacts found in this model does not necessarily align with their recommendations for peacebuilding. However, primary average FDI flows remain relatively high in the Americas, Africa and Europe, regions where GDP is below or at the global average. Lastly, a major difference in aid per capita compared to the amount of FDI per capita is that Africa receives more than the global average in aid. Overall, Table 1 does not suggest a clear correlation between GDP growth, aid and FDI inflows in the post conflict decade.

Table 1: Summary Statistics
1970 to 2016

Endogenous Variable	World	Europe	Middle East	Asia	Africa	Americas
FDI (Millions USD)	2657.1 (8573.6)	7646.4 (14632.7)	1838.4 (4100.5)	5454.1 (14374.6)	729.7 (2151.8)	2342.0 (6205.0)
FDI/Capita (USD)¹⁹	8.3 (19.4)	22.2 (27.7)	15.9 (32.6)	3.2 (4.8)	3.8 (10.0)	11.0 (21.5)
Primary FDI/Capita (USD)	3.4 (11.1)	4.4 (11.1)	0.7 (1.3)	1.0 (4.2)	2.5 (4.0)	6.8 (17.8)
Secondary FDI/Capita (USD)	2.7 (6.4)	5.8 (10.0)	6.2 (12.3)	1.3 (1.8)	0.8 (0.9)	2.0 (3.6)
Tertiary FDI/Capita (USD)	13.0 (13.0)	17.1 (21.2)	5.9 (12.2)	2.5 (5.0)	3.5 (5.5)	6.3 (11.9)
Aid/Capita (USD)	45.1 (55.6)	17.1 (66.5)	47.2 (88.1)	25.4 (35.4)	50.0 (42.5)	40.9 (62.2)
GDP Growth (%)	4.6 (6.9)	3.9 (8.8)	4.8 (7.9)	6.5 (3.3)	4.4 (8.0)	3.4 (4.2)

Standard Deviations are included in brackets below the average.

¹⁹ Due to firm confidentiality, the disaggregates of FDI/capita will not sum to equal the total value for FDI/capita.

Thus, for a further step in preliminary data analysis, I graphed the average FDI per capita and GDP growth by country for the post conflict era, which is shown in Chart 8. This chart also shows a flat correlation between FDI per capita and GDP growth in the post conflict period. However, this is primarily caused by several outliers that are countries that receive on average more than \$20 per capita. These countries within the outliers' group are almost all heavy natural resource extraction, specifically oil-states, which explains why they are receiving a significantly higher amount of FDI. If the countries above the \$20 per capita mark are excluded, Chart 8 shows that there is a small upwards trend between GDP growth and FDI per capita. To dissect this trend further, Chart 9, plots the same variables by each region. Here, all regions except for Europe show a positive relationship between FDI per capita and GDP growth. Europe, the region that is most developed, has a negative relationship, which could suggest that FDI has no or a negative impact in developed countries. However, Chart 9 has few data points meaning that these interpretations are not significant. Thus, more rigorous analysis needs to be conducted, which is done in Section 6.0.

Chart 8: GDP Growth vs. FDI per Capita in Post Conflict Countries

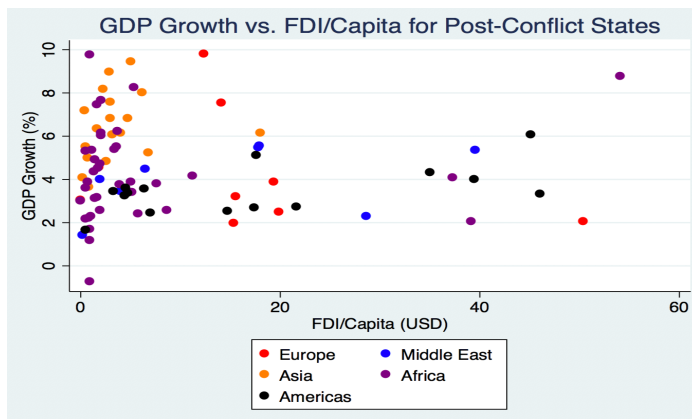
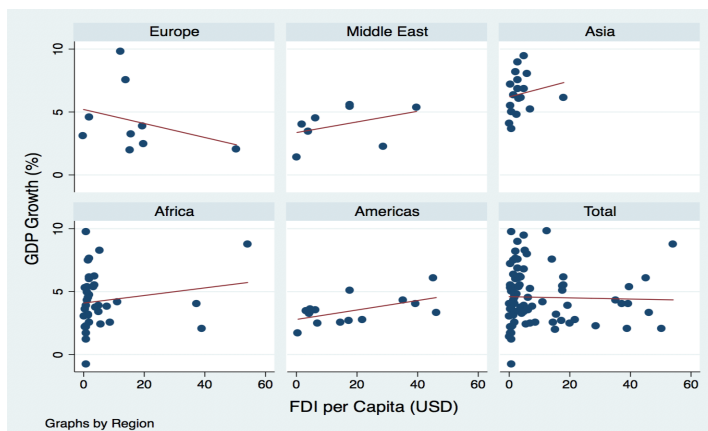


Chart 9: GDP Growth vs. FDI per Capita by Region



Section 5.1: Critical Analysis of Data

As noted in the above two sections, a variety of data sets have been used to develop the SVAR models in this paper. This includes the data on global armed conflicts, FDI and aid per capita, GDP per capita growth, and the two exogenous variables including UN peacekeeping mission and polity score. This section provides a critical insight into this data, why it was chosen, and information that may be missing from that data.

Throughout this entire thesis, the UCDP/PRIO armed conflict data is used to quantitatively categorize countries into post conflict and non-post conflict. It is also used to determine the type of conflict and its intensity. For this model, there are several other datasets that could have been used. The COW Intrastate War dataset could have been used as it is global and spans back to 1816.²¹ However, this dataset only includes conflicts that have had over 1,000 deaths, which means that the analysis on conflict intensity in this chapter could not be completed. There are also several datasets including the Armed Conflict Location and Event Dataset²² and the Social Conflict in Analysis database²³ that do not provide global coverage and only focus on specific regions. This UCDP/PRIO database includes the most detailed global dataset on armed conflicts that spans back to World War Two. However, as discussed in the introduction of this thesis, this data is focused on physical violence as a definition of conflict. There are other types of violence including gender-based, violating human rights, politically focused, and ethnic discrimination, that is not included in this data. Qualitative analysis into these other types of violence is outside the scope of this thesis.

The FDI per capita data used in this thesis is from UNCTAD, where I was provided with a non-public version that includes additional detail on sectors and dates, which is used for analysis in the *World Investment Report*. This data spans back to 1970, allowing the model to include many different conflicts from all over the world. In addition, it provides information on the distribution of the FDI amongst different sectors. The OECD also provides data on FDI inflows but only includes data for certain countries. The IMF provides data on the investment position of a country which does not provide detail on the FDI inflows. Lastly, the World Bank has a global database on FDI as a percentage of GDP but does not provide the details in terms of sectors and is missing moderate data from LDC countries. Thus, it is evident that the UNCTAD FDI data is the most suitable for the SVAR model used in this chapter. However, there are gaps in this data that should be considered

²¹ <https://correlatesofwar.org/data-sets/COW-war>

²² <https://acleddata.com/#/dashboard>

²³ <https://www.strausscenter.org/ccaps-research-areas/social-conflict/database/>

in the analysis. The first is that in smaller countries with less FDI inflows, which in often includes post conflict countries, the breakdown of FDI inflows by sector cannot be shown for confidentiality reasons. This is because there may only be one or two main MNCs that are investing. In addition, this data is built by UNCTAD by compiling government accounts and MNC reports. This means that the FDI inflows do not include alternative investments that are flowing into these countries like impact investment and venture capital, which is discussed in Chapter 3 as one of the main inflows of capital into post conflict Africa. Lastly, this data does not provide any indication on FDI's interaction with local markets and businesses. As noted in Section 2, FDI has the potential to transfer knowledge and skills to the local market. However, this data does not provide any insight into those transfers. Data including MNC's spending on training, contracts to local suppliers, or tax revenues paid to local governments could be used to fill this knowledge gap. This is discussed further in Chapter 3 where I analyse qualitative evidence from a case study.

GDP per capita growth is used to measure economic growth and development for countries in this paper. This data is from the World Bank and is available for each country for a wide time span, allowing for a robust SVAR model. Using GDP per capita controls for the size of the country and to proxy changes in living standards. However, there are many instances, especially in post conflict and fragile countries, where the economic growth derived from FDI inflows only benefits the elite. This means that the trickle-down effect of those benefits to the majority of citizens does not easily occur due to income inequality. Thus, GDP per capita growth does not provide this insight in this analysis. Income inequality could be included in the model as an endogenous variable. However, the gini coefficient and other income inequality data points do not have consistent and large enough datasets, especially in post conflict countries, to be included in the SVAR. In addition, the informal economy, which is often a large portion of employment and income for developing countries, is not incorporated in this variable. This means that the model does not include a significant portion of a country's income. As data becomes more comprehensive in both spaces, income inequality and the trickle-down effect could be added to the model.

The other key variables in the model include ODA/aid per capita, a polity score, and a dummy variable for whether there was a UN peacekeeping mission in place. The aid per capita variable uses data from the World Bank, which is available for all countries since 1970. This is also the data that is used in the Hoeffler et al. (2010) paper, which provides an easier comparison between results. The polity score provides controls for the government regime on the model, which is particularly important in a post conflict setting after political turmoil. The polity score is also

useful as it provides an index on a scale providing deeper insight on countries that, for example, may be democracies in theory but operate more like autocracies.²⁴ However, this score does not also include different policies and processes of these governments. For example, a government may be fully democratic and thus, score well on the polity index, but may suffer from severe corruption. This would effect the presence and entry of FDI as well as economic growth. These more detailed data points on governance are not included in this model, but are included in the analysis completed in Chapter 2 and 3. Lastly, the presence of a UN Peacekeeping mission has a significant influence on post conflict economies, which has been seen in the existing literature. Due to the lack of data on the extent and cost of these missions, I am only able to indicate whether a mission was active or not in a specific year. As peacekeeping missions can vary in terms of mandates, size, types of spending and local influence, better data on these aspects of missions would provide additional insights to this model. Although there are a number of gaps in the data used for the SVAR model, the model still provides a critical findings on the influence of FDI on post conflict growth. As better data for these variables becomes available in the future, additional research can be conducted to shrink these gaps.

Section 6.0: Model Results

This section explains the results of the two different models proposed in the above section. In both SVAR models, there is a significant positive effect of FDI on economic growth within the first two decades of a conflict resolving. This section also adds extensions to these two models to gain further understanding of the impacts of FDI on economic growth in post conflict states and further, to check the robustness of these results.

Section 6.1: SVAR Model One Results

As explained in Section 4.2, SVAR Model 1 uses panel data of the countries that have experienced conflict and sets time as the year. This model uses interaction terms for FDI per capita and aid per capita with a dummy variable for when the country is in post conflict time, which is defined as two decades after a conflict concludes. The first test that must be run determines the number of lags that should be included for each variable. The selection order criteria test is minimized at a one-year lag for the MBIC and MQIC. The MAIC value is minimized at three lags

²⁴ President Kagame in Rwanda is an example of a country that is democratic but runs more like an authoritarian leadership. This types of regimes are represented in the Polity Score Index.

for each variable. For the model to be parsimonious, it is therefore best to use only one lag for each variable in this model.

All results from this section can be viewed in Tables A.1 to A.2 in Appendix 2. Table A.1 provides the preliminary results for the first three models, which build from the basic model shown in Equation (9). I then adds the exogenous variables and aid per capita. Regression (1) only includes GDP growth, post conflict FDI per capita and non-post conflict FDI per capita as the endogenous variables and does not include any exogenous variables. This regression generates a baseline correlation between FDI at different conflict stages and GDP growth. It is evident that the primary driver of GDP growth is its own lag from the year prior with a coefficient of 0.329 and statistical significance below 1 percent. However, the coefficient for post conflict FDI per capita at 0.076 is also positive and significant at the 5 percent level. The long-run impact²⁵ of a one standard deviation (19.40 USD/capita) increase in FDI per capita on GDP growth is an increase of 0.11 percentage points. The panel VAR-Granger causality Wald test is passed for both the FDI interaction terms in the GDP growth equation and the model satisfies the stability conditions. Although it has been determined that in its most primitive form that FDI per capita may have a positive relationship with GDP growth, Regression (1) does not provide the best fit for the model.

The endogenous variables remain the same as (1) in Regression (2) but in addition, the exogenous variables are added. These variables are related to the characteristics of the conflict that was experienced by the country and we can determine their impacts on FDI flows and GDP growth. These results, presented in Table A.1 show that non-post conflict FDI per capita no longer has a significant impact on GDP growth. However, post conflict FDI per capita still has a positive coefficient of 0.065 at the one percent statistical significance level. This positive shock to GDP growth is shown below in an impulse response function²⁶ (Figure 7). It shows that a one standard deviation shock (19.40 USD/capita) has a long-run value of 0.14 percentage points increase in GDP growth. Two of the exogenous conflict characteristic variables that have been included have a significant impact on GDP growth: the type and the intensity of the conflict. If the conflict is categorized as an internal conflict, this has a positive impact on economic growth in the post conflict era. However, the coefficient is only at a ten percent significance level and it is high at 10.21. As seen in Chart 2, a large portion of conflicts within this data set are internal. Since there is a lack

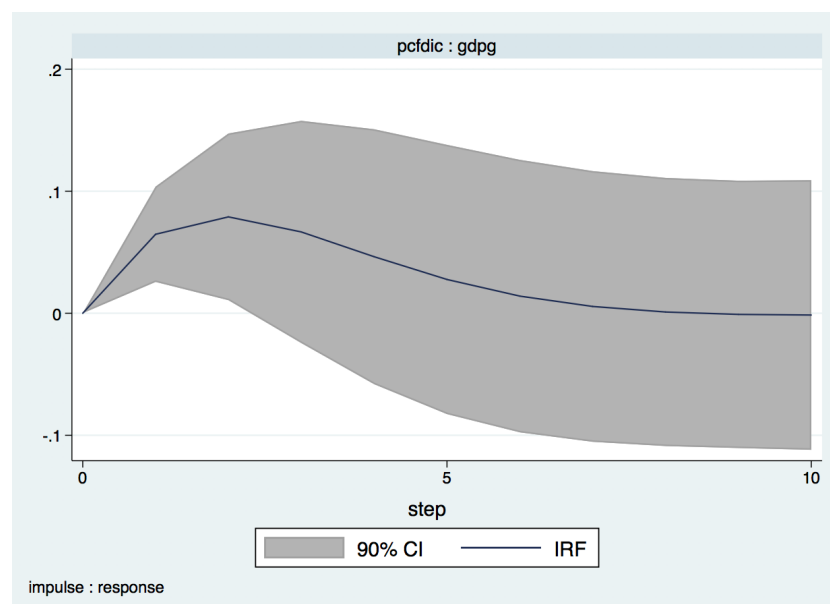
²⁵ The Long-run impact of FDI/capita on GDP growth is determined by dividing the FDI/capita coefficient(-1)/(1-GDPgrowth coefficient(-1)).

²⁶ Note that for all Impulse Response Functions, I have altered the confidence interval to 90 percent

of variation in the types of conflicts and a few small outliers, it is difficult to identify this effect. Thus, inference of this high coefficient is challenging and potentially, misleading. The other variable, the cumulative intensity of the conflict, also has a positive coefficient at 5.53 and is significant at the 1 percent level. This is also a high percentage point increase in GDP per capita but there is some logic to it. Countries that experience a higher degree of intensity in a conflict, defined in this variable as over 1,000 deaths, have a more substantial decline in GDP during conflict time. This means that once a more intense conflict ends, GDP growth is significantly higher because it was more devastated by the war. This is similar to the notion of the ‘peace dividend’ described in the introduction of this thesis. A country with a more devastating war experiences a higher ‘peace dividend’ because they have more to recover from.

Figure 7: IRF of Post conflict FDI/Capita on GDP Growth without Aid

One standard deviation shock to FDI per capita (\$19.40)



Regression (3) in Table A.1, shows the full SVAR model, which adds two more endogenous variables to Regression (2). The other crucial capital flow into post conflict countries is foreign aid. Aid flows per capita has been interacted with a dummy variable for the post conflict era and the non-post conflict era and then added to our endogenous matrix. This means there is now five different dependent variables. Lagged GDP growth remains a positive coefficient and statistically significant at the one percent level. Regression (3) shows that the coefficient for lagged GDP growth is 0.59. FDI per capita flows in the post conflict era also continues to have a positive impact on

economic growth at the 10 percent significance level. This shock is shown in Figure 8 and we see that a one standard deviation (19.40 USD/capita) increase in FDI per capita within twenty years after a conflict ends, increases long-run GDP growth value by 0.36 percentage points. Non-post conflict FDI does not contribute to economic growth. This may be caused by the low amounts of FDI that flows into a country during conflict or right before a conflict, which was shown above in Chart 9. Specifically, during a conflict, it is extremely difficult to truly utilize any FDI because the business sector is not functioning well-below capacity.

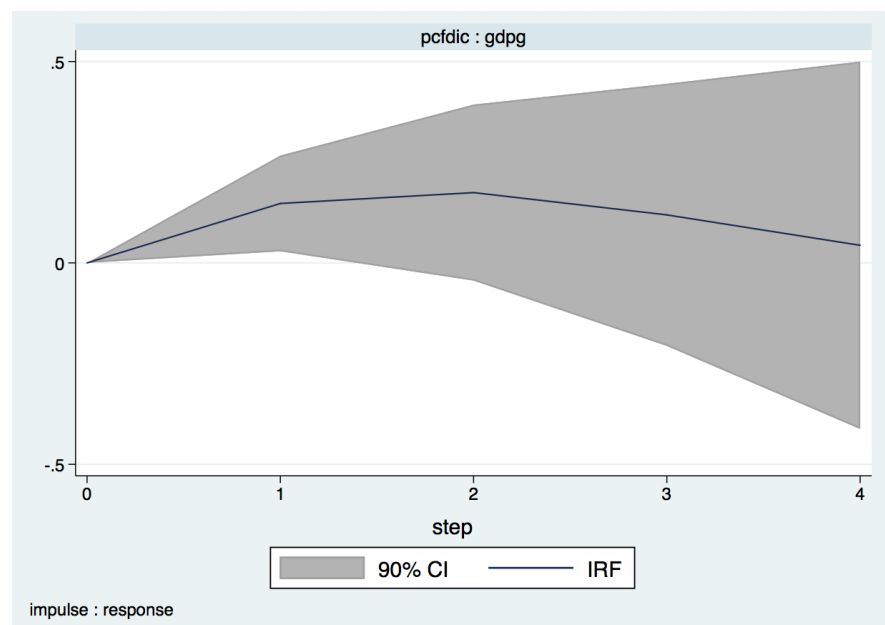
Both post conflict and non-post conflict aid per capita flows have positive and significant impacts on economic growth. During the post conflict era, an increase of one standard deviation in aid per capita (55.60 USD/capita) only has a long-run dynamic impact on GDP growth of 0.08 percentage points. This is significantly smaller than the impact of FDI flows on economic growth. Linking back to the theory explained in Section 3.2, a substantial portion of aid brought into post conflict areas is humanitarian aid and possibly military aid. Thus, a probable explanation is that impact on economic growth is small because the capital is not often used for building economic capacity but instead, is focused on peacebuilding, basic needs, refugees, health, and institution building. This does not mean that aid during post conflict times is not a necessary and crucial source of capital for the peacebuilding process. It merely notes that FDI flows have a more significant impact on building capacity and generating economic growth during this time. Aid flows in non-post conflict times are also positive and significant at the five percent level with a coefficient of 0.29. This high impact on economic growth is most likely caused by the years a country is in conflict and the only source of capital flowing into the country is aid.

In Regression (3), only one exogenous variable is statistically significant, which is the cumulative intensity of the conflict. This states that if a conflict was a high intensity, this increases GDP growth by 7.29 percentage points. The type of conflict is no longer significant in Regression (3). Further, the presence of UN peacekeepers and the type of government in place does not significantly impact economic growth. This regression also shows that post conflict FDI is not determined by past GDP growth, FDI flows or aid flows. This means that the amount of FDI that flows into a country after a conflict may be random or there may be some omitted variable bias. In addition, this suggests that post conflict FDI does not go back to similar levels as before the conflict because non-post conflict FDI has no significant impact on the level of flows after the conflict has ended. However, non-post conflict FDI flows are strongly dependent on the lagged FDI flows. This effect is most likely to be experienced during the period before a conflict

starts, which, if a peaceful time, would mean that when investors are able to witness past investments in the country, they are more likely to follow previous decisions. This effect does not seem to occur within the twenty years after conflict, which is likely caused by the negative perception of the country generated from conflict. This means that even if investors witness other investments occurring in a post conflict country, this is not enough proof to persuade them to invest because it is still viewed as too risky.

Figure 8: IRF of Post conflict FDI/Capita on GDP Growth Including Aid

One standard deviation shock to FDI per capita (\$19.40)



The amount of aid flows per capita in both post conflict and non-post conflict eras are positively correlated with their lags. This makes sense for aid situations because generally, large aid donors will have a longer-term commitment to fund a long-term program. This is different compared to FDI because a project may require the capital all in one year or a significantly larger amount in the first year of investment compared to years afterwards for the start-up costs (buildings, machinery, construction, etc.). The intensity of the conflict also has a statistically significant positive impact on post conflict aid as well. If the conflict was a higher intensity, aid per capita increases by \$25.88 per person. This shows that the more devastating a conflict, the more aid that will flow into it. On the other hand, there is no significant impact on the amount of FDI per capita caused by the

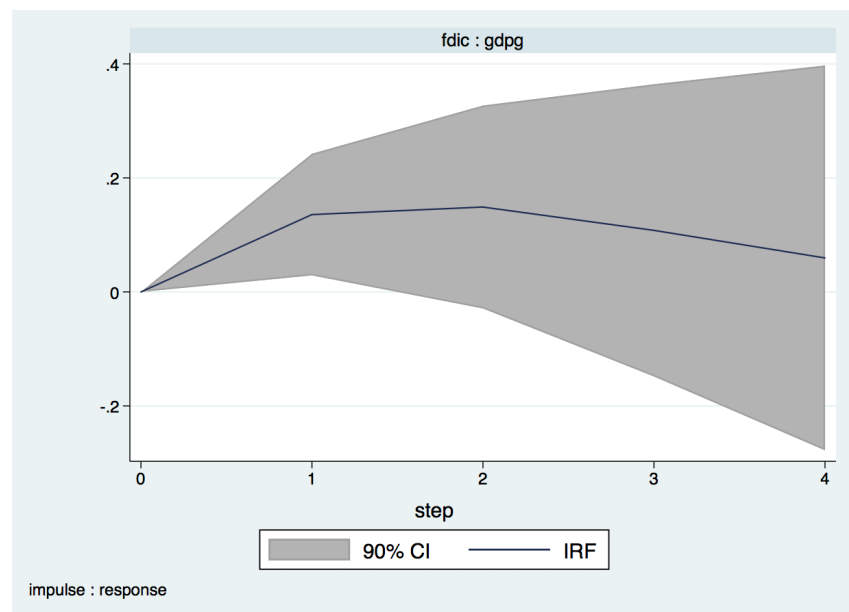
intensity of the conflict. This means that investors are as risk averse investing in countries who had experienced low or high intensity conflicts.

This final SVAR model presented in Regression (3) satisfies the stability conditions. Further, for the GDP growth equation, the panel VAR-Granger causality Wald test rejects the null hypothesis for post conflict FDI, post conflict aid and non-post conflict aid. This means that these three variables Granger-cause GDP growth. However, it is crucial to emphasize that Granger causality is not actual causality.²⁸ For a further robustness test, I run this model three separate times but for each time-period: before a conflict, during a conflict and the twenty years' post conflict. This is shown in Appendix 2 as Table A.3 and further proves that the coefficient for post conflict FDI remains the same in value and significance.

Finally, there is an extension added to this model, which uses country and year as the panel, focused on geographical area. For this extension, only the post conflict times are kept within the sample, which means that all results are for post conflict times and interactions with dummies are no longer required. Then five separate models isolate for the five different geographic regions: Africa, Middle East, Americas, Asia and Europe. The same four exogenous variables remain as controls. The results to these five separate models are presented in Table A.2.

Figure 9: IRF of Post conflict FDI/Capita on GDP Growth in Africa

One standard deviation shock to FDI per capita (\$10.00)



²⁸ A discussion of this can be found at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3253161/>

Table A.2 shows that the geographical region that shows FDI per capita having a positive and significant impact on economic growth is Africa. The impulse response function above (Figure 9) shows this positive impact in African post conflict countries. This result is shown in Regression (1) and states that a one standard deviation increase (\$10.00) in FDI per capita has a long-run dynamic impact on GDP growth per capita by 0.32 percentage within post conflict time. This is significant at the five percent level. Further, the model satisfies the stability conditions and both FDI per capita and aid per capita flows granger cause GDP growth. A potential reason why FDI per capita has this positive impact in Africa and no other regions is because of the lack of public capital on the continent. This means that private capital may help to fill some of the gaps that the public sector cannot fill, meaning it has a higher impact on economic growth. The impact of foreign aid per capita is significant at the ten percent level with a coefficient of 0.07. The long-run value of a one standard deviation shock in foreign aid per capita (66.50 USD per capita) in Africa only contributes 0.17 percentage point increase in dynamic GDP growth. This aligns with the results in Table A.2 and further shows that foreign aid has a smaller impact on economic growth in post conflict eras.

This result gives reason to believe that the evidence provided from Table A.1 may be heavily influenced by the Africa region. If you compare the number of observations and panels in Africa, it is significantly higher than the other regions. This is primarily caused by the high incidence of conflict in Africa compared to the other regions between 1970 and 2008. Thus, it is important to question whether the lack of significance of FDI on growth in the other regions is due to the low degrees of freedom or is simply the truth. This requires further research in future projects. However, this model provides us with evidence that FDI per capita has a positive impact on economic growth, particularly in Africa.

Section 6.2: SVAR Model Two Results

The second model, as explained above, no longer uses the year as the time reference. Instead, the time reference is the number of years after a conflict has past, with the end of a conflict set as time is equal to zero. Further, the panel is also changed so that it is indexed by the conflict itself and not the country the conflict took place in. Thus, several of the differences between conflicts are controlled for through the panel. The polity score and the presence of UN peacekeepers are two exogenous variables that remain in the SVAR as significant and differentiating throughout the post conflict timeline. To focus on the post conflict timeframe, I drop all the conflict

times that are negative, which includes the time before and during conflict. All tables presenting the results for Model Two are in Appendix 3.

Before running the SVAR, I first run a lag test to determine the optimal number of lags for Model 2. Parallel to the Model 1, the parsimonious and significant choice is to include a one-year lag. There are no interactions with post conflict dummies in this model because this sample only includes post conflict times. Table A.4 shows the results of this SVAR model, which are closely related to the results generated in the first SVAR model. Regression (1) shows that the three endogenous lagged variables, including GDP growth, FDI per capita and aid per capita, significantly impact GDP growth. An increase in one standard deviation of FDI per capita (\$19.40) has a long-run impact of 0.24 percentage points on GDP growth. This is significant at the ten percent level. The coefficient of FDI per capita in this model is about 0.02 less than the coefficient in Model 1. However, running a Z-test on the two coefficients, shows that they are not statistically different from one another. Lastly, this model shows that a one standard deviation increase in aid per capita (66.50 USD) generates a long-run value of 0.06 percentage point increase in GDP growth. This is also statistically significant at the ten percent level and is like the result in Model 1. The similar results for both the first and second SVAR model shows consistency and robustness of the results.

One of the potential issues with this model compared to the first model, is that there are no set controls for the physical year and the country, which were previously included through the more conventional structure of the data. This is because the time index of the panel data has been converted from a regular time series from 1970 to 2016, to an index of the time before and after the end of a specific conflict. This has an impact on GDP growth because there may be external influences like global recessions or booms during certain years and as well as specific country effects that directly impact GDP growth that are no longer being controlled for. To determine if this is a problem, I ran a model that added regional and decade (year) time controls. However, these dummies were not significant and redundant in the model. This is because, the conflict ID itself does contain a significant portion of the controls that the previous panel held. The specific conflict is happening in a country at a certain time, inherently controlling for the differences in these two factors. For example, the Rwandan genocide ended in 1994, so by having the panel set up for that specific conflict means that the setup of the data is controlling for country, Rwanda, and the year, 1994. Although this is not as clear and precise as the first model, the lack of significance for the dummies created show that this setup as a panel adequately controls for country, conflict and year differences.

For the exogenous variables present in the model, Table A.4 shows that the polity score has no significant impact on GDP growth, which is consistent with the first model. However, in this model, the presence of UN peacekeepers is significant and has a substantial impact on GDP growth. When a UN peacekeeping mission is present in a post conflict time, the country experiences a 6.46 percentage point increase in GDP growth, which is statistically significant at the five percent level. This result helps strengthen the argument by Bebel et al. (2016) that the presence of UN Peacekeeping does distort the economy by injecting large amounts of capital into the country. This particular model does not provide further detail on whether this is a short-term or enduring effect. However, the analysis in Chapter 3 of this thesis, which uses Liberia as a case study, suggests that this a short-term effect dissipates once the mission leaves.

Like Model 1, the endogenous and exogenous variables in this model have no significant impact on the presence of FDI per capita in a country throughout the post conflict period. This means that the flow of FDI per capita into a country during the post conflict time is impacted by other factors not currently modelled. Since the amount of FDI flows in the previous year has no impact on FDI flows in the current year, this means that factors like foreign investment policy, commodity prices and risk appetite are most likely not influencing investors decisions. Further research in Chapter 3, through qualitative work, provide a better indication of what is motivating investors to enter these markets. The influx of aid per capita is significantly influenced by the amount of foreign aid per capita that entered the country in the previous year. The coefficient for this result, 0.55, does not differ from the result found in Model 1 for the post conflict era.

Using the panel VAR Granger-Causality Wald test, show that both aid per capita and FDI per capita granger cause GDP growth in this model. Using a test for stability, I am also able to determine that all the eigenvalues lie inside the unit circle, which means this panel VAR is stable. These tests give indication that the model is well-fit and consistent.

The extension that I use on Model 2 is to determine the optimal and most impactful time after a conflict to attract FDI. Hoeffler et al. (2010) states that economic growth after a conflict is strongest between the fourth and sixth years. This gives some inclination that there might be more beneficial times for FDI to impact economic growth as well. To test this theory, I extend the SVAR by including dummy variables that isolate the impact of FDI per capita at different post conflict intervals. For each regression, I include a general FDI per capita lag, as well as a FDI per capita lag interacted with a five-year dummy. The dummies are for: the first five years after a conflict has ended, five to ten years after, ten to fifteen years after and fifteen to twenty years after. I then run

the Model four times, each with a different FDI interaction. Figure 10.A to Figure 10.D below show each impulse response functions for the FDI and 5-year dummy variable. These figures show the following pattern: less impact on growth for the first five years, the most amount of impact five to ten after a conflict, and then returning to a normal positive impact on growth shown in Figure 9.

Regression (2) shows the results for the model while including an interaction term with FDI for the first five years after a conflict has ended. The coefficients of this model are closely linked to the results shown from Regression (1). The coefficient for FDI per capita is 0.15 and significant at the ten percent level. However, the interaction term is significant and negative at the one percent level. This does not mean that FDI per capita has a negative impact in the first five years after conflict. Instead, Regression (2) shows that the short-term elasticity of FDI per capita flows within the first five years after conflict is 0.09 percentage points lower than other times in the post conflict era. Thus, the total impact of a one standard deviation increase in FDI per capita flows in the first five years of conflict has a long-run impact of 0.13 percentage points increase in GDP growth. This means that the first five years' of post conflict time is not the most effective time to attract FDI flows. This is most likely because the first five years' post conflict are a time of variability and extreme uncertainty. Some of the factors that are typically influencing an economy during those first five years is: post-violence, new democratic processes and elections, an economy heavily dependent on the black and informal market, citizens slowly returning home and a focus on building institutions. Due to the fast-paced changes and uncertainty on significant portions of the economy, it is logical that FDI flows may not generate as much positive impact on growth during those first five years.

Regression (3) shows that the time where FDI flows have the highest impact on economic growth is five to ten years after conflict. The coefficient for FDI per capita is 0.10 and significant at the ten percent level and the coefficient for the FDI and time interaction term is 0.10 and significant at the one percent level. This means that the combined impact of a one standard deviation increase of lagged FDI per capita within five to ten years after a has a long-run dynamic value of 0.41 percentage points of GDP growth. An explanation of this is that once five years have passed after a conflict, some stability and "normalcy" has generally been put in place. This means that more attention can be placed on the private sector and rebuilding the economy. The next two regressions that include an interaction for ten to fifteen years or fifteen to twenty years were not statistically significant. However, FDI flows in general remained significant with a coefficient of 0.12. This means that it is only the first ten years after a conflict that has some differences in the impacts that

FDI per capita has on growth during the post conflict era. These regressions pass the Granger Causality tests and stability conditions.

Figure 10: IRF of Post conflict FDI/Capita on GDP Growth by Time Frame After Conflict

One standard deviation shock to FDI per capita (\$19.40)

Figure 10.A: 5 Years After Conflict

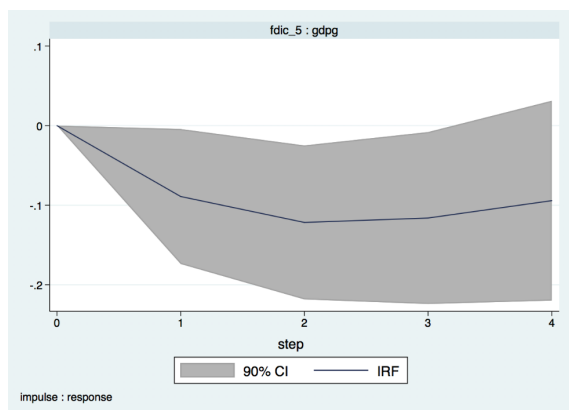


Figure 10.B: 5-10 Years After Conflict

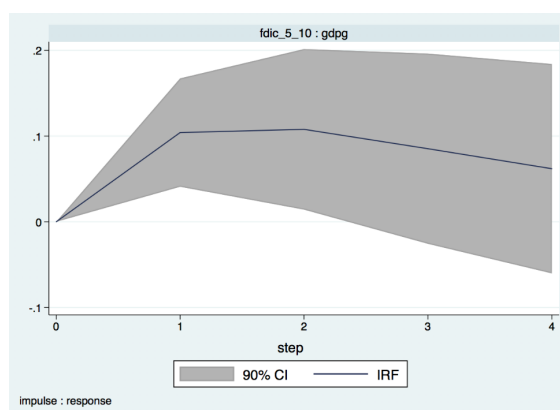


Figure 10.C: 10-15 Years After Conflict

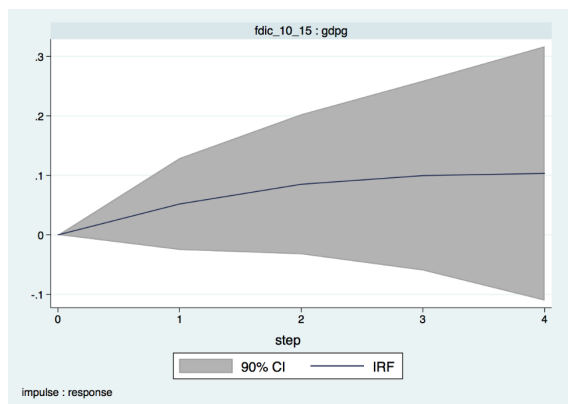
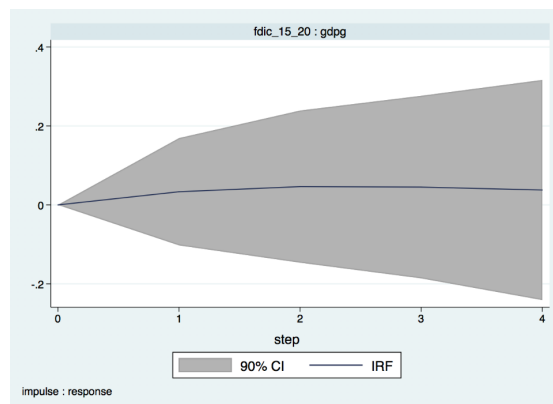


Figure 10.D: 15-20 Years After Conflict



To check the accuracy and consistency of the difference-in-differences approach, I have also run the model adding the same interaction term to foreign aid flows as well, which is shown in Appendix 3, Table A.5. These interaction terms do not alter the coefficient for Regression (3), which further strengthens the argument that the most beneficial time to attract FDI flows in within five to ten years' post conflict. However, this addition does change the significance of the negative FDI interaction term for the first five years. This means we may need to question this result and the impact of FDI per capita in the first five years may not be different than other post conflict times. The timing of aid only has a significant impact within the first five years' post conflict. However, the combination of the aid per capita coefficient and the aid and timing interaction is 0.04, which is only

0.01 higher than in Regression (1). There is a possibility that the aid interaction is taking away some significance from the FDI per capita interaction. The aid interaction terms for the other post conflict times are not significant and the coefficient of lagged aid per capita remains at 0.03. This means that there is no change in the impact of aid flows at different times throughout the post conflict era.

Section 7.0: Conclusion

This paper is the first step to better understanding the relationship between foreign direct investment flows and economic growth in a post conflict setting. As FDI into post conflict settings is a growing trend, it is crucial that we learn the influence that these deals may have on the economic recovery of a country. Existing literature analysing the impact of FDI flows on productivity and growth in developing countries has suggested that the overall impact on the economy is net zero because of market-stealing effects and a lack of transfers to the local economy. However, this paper has shown that this may be different in a post conflict setting because the private sector is being rebuilt. This means that there is little market stealing effect from domestic firms that takes place during these years. Instead, FDI is providing a modest capital boost to the country after a period of capital destruction. This aligns with the literature that aid inflows is not significant in developing countries but has a significant positive impact in post conflict settings.

The panel SVAR model built in this paper shows that on average, lagged FDI per capita flows have a significant and positive impact to GDP within the two decades after a conflict has ended. The magnitude of this impact is significantly larger than the impacts of aid per capita during these times. Thus, this supports the critiques of Hoeffler and Collier's (2002) findings by Suhrke et al. (2005) that aid may not have as large of an impact as implied in the peacebuilding literature. In addition, since the sector that is the largest component of FDI per capita is tertiary, this may also suggest that it is not natural resource extraction that promotes the impact on economic growth. However, further research on this needs to be conducted. This model also shows indication that this positive impact is especially true in the African region. Further, the difference-in-differences approach suggests that FDI flows have the highest impact on economic growth between five and ten years after the conflict has ended.

However, there is a copious amount of research that needs to be completed to fully understand the relationship between FDI and post conflict economic recovery. Firstly, the data for countries that have experienced conflict are generally not of a high quality because it is difficult to

collect. This means that more detailed and consistent data must be collected to ensure that the results in this paper are truly robust (see Section 5.2). Secondly, this paper has only explored the capital boost impact that FDI may have on an economy, which resembles Case III explained in Section 3.3. However, this paper does not provide an explanation of the elements of Case IV, which looks at the transferring of knowledge, skills and technology. The roll of FDI in these transfers in a post conflict setting needs to be further researched in either a qualitative or quantitative manner. Further, in relation to the literature finding that FDI exacerbates inequality and tensions, this paper does not provide any insight on these social issues and must be further considered. Although, these investments may help boost economic growth, if there is little training, jobs, local business inclusion, education and community involvement incorporated into the deal, then only the elite may benefit from the deal. This would suggest that the 'trickle-down' effect is not occurring in practice. These questions are further explores in Chapter 3

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Appendix (1): Timing of FDI After a Conflict

Figure A.1: Post conflict GDP Growth vs. FDI/Capita inflows in Europe

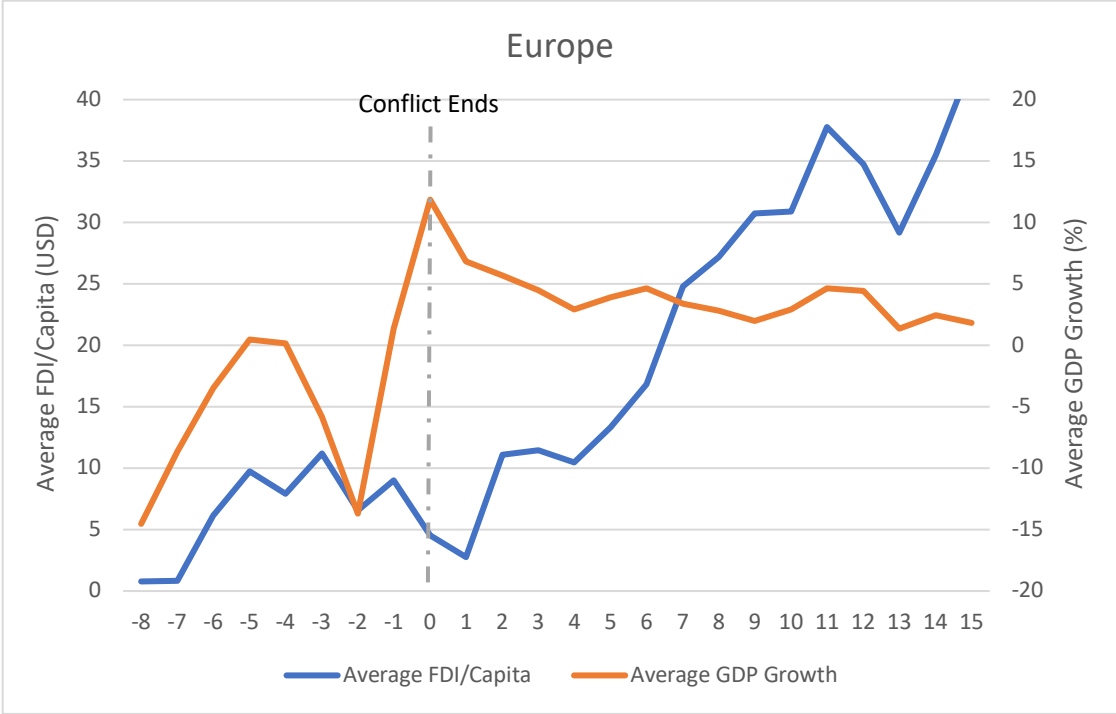


Figure A.2: Post conflict GDP Growth vs. FDI/Capita inflows in the Middle East

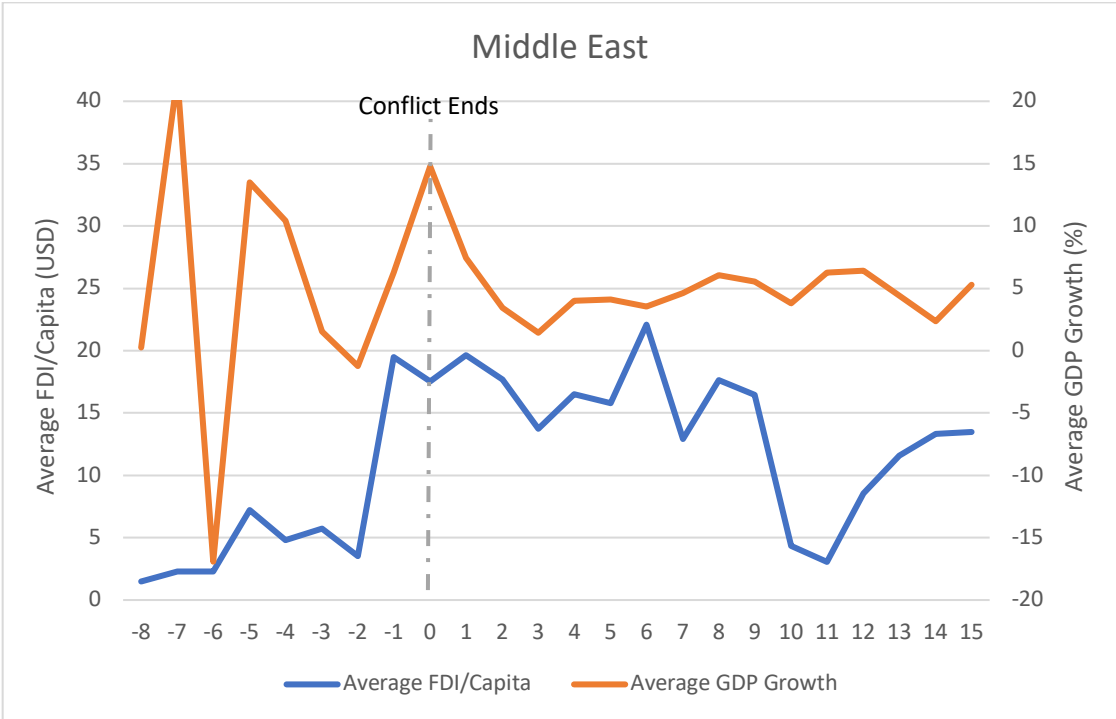


Figure A.3: Post conflict GDP Growth vs. FDI/Capita inflows in Asia

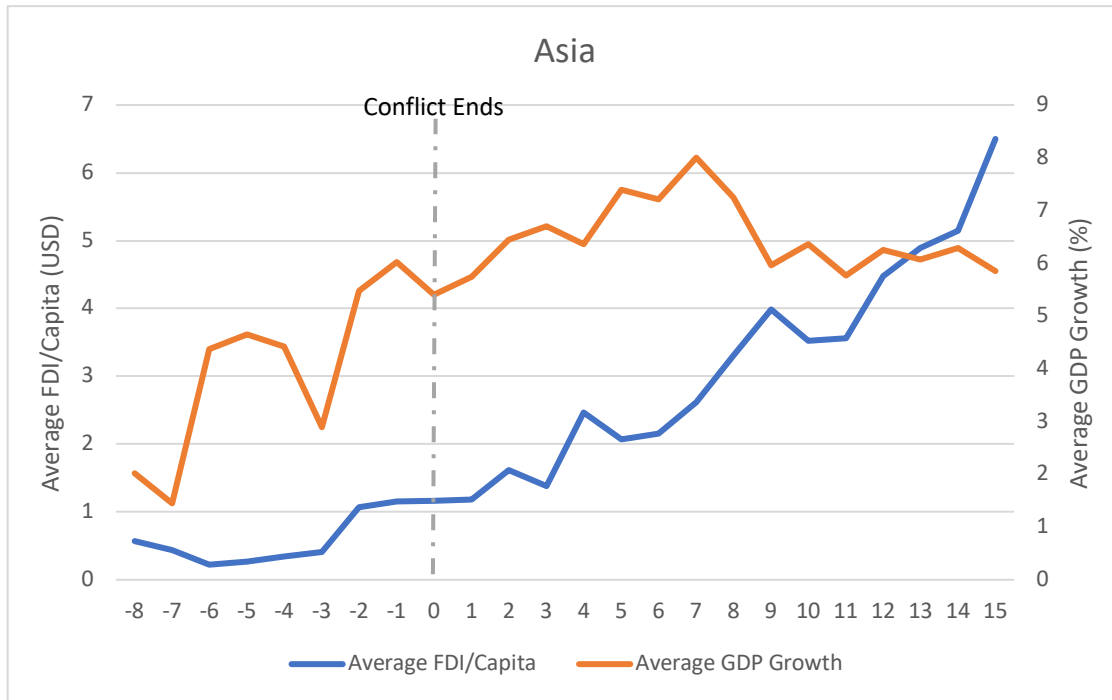


Figure A.4: Post conflict GDP Growth vs. FDI/Capita inflows in Africa

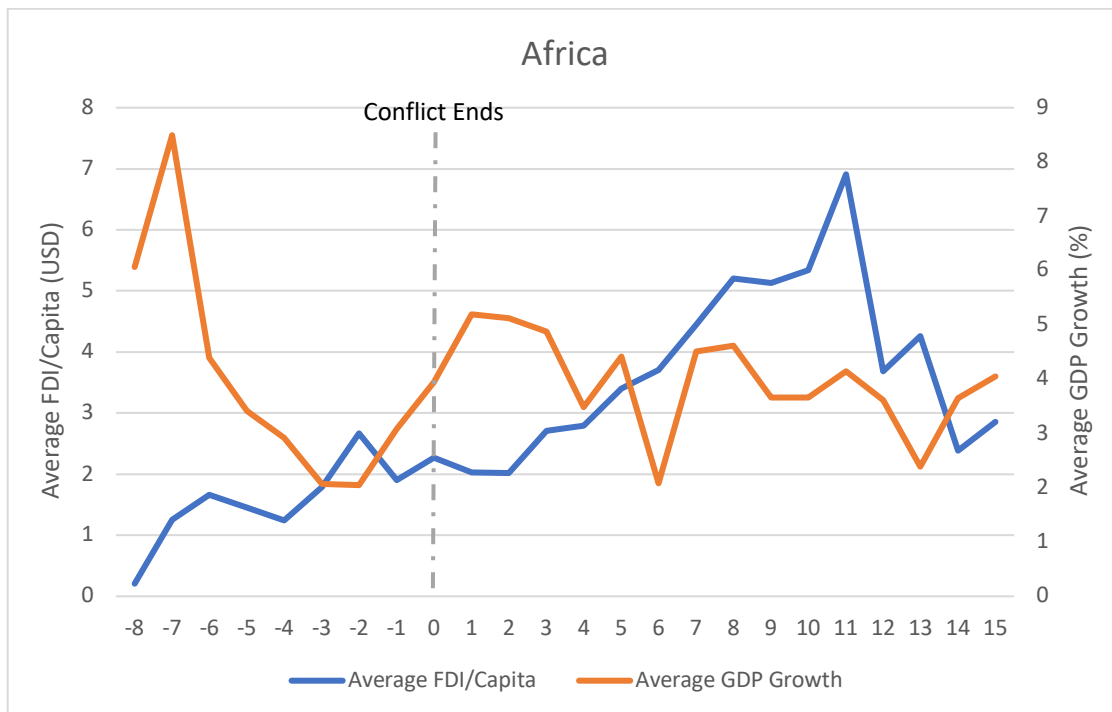
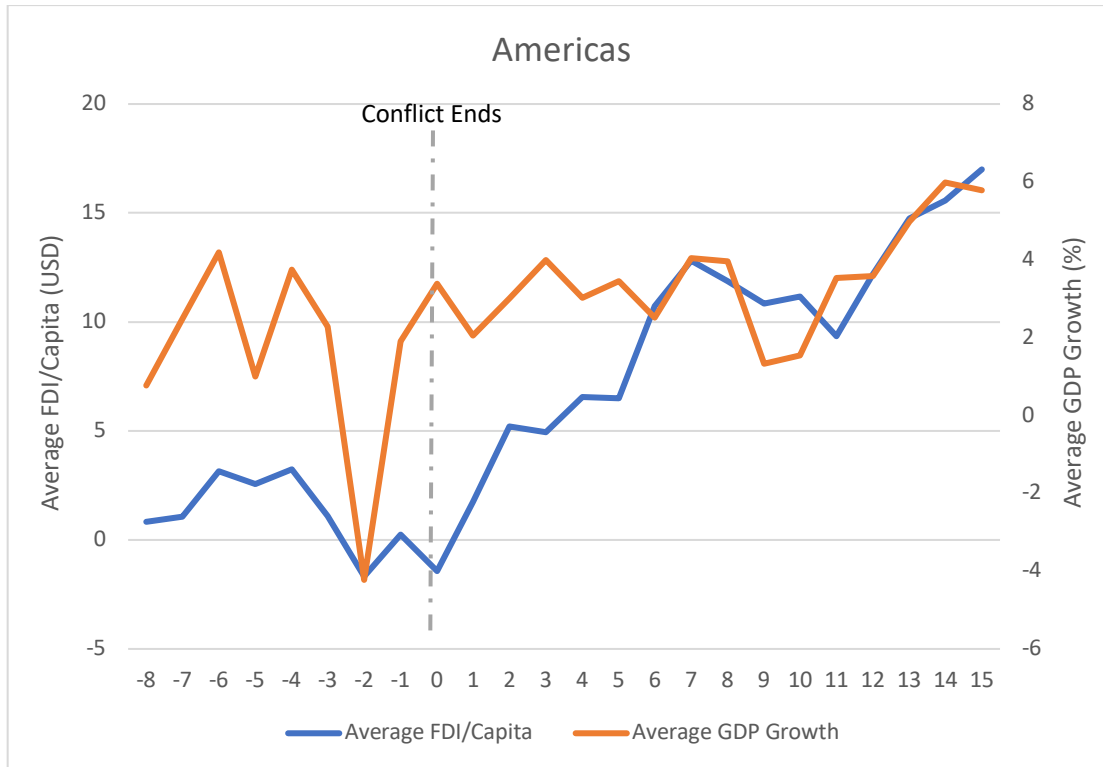


Figure A.5: Post conflict GDP Growth vs. FDI/Capita inflows in the Americas



Appendix 2: SVAR Model 1 – Table A.1: SVAR Model 1

	Regression (1)	Regression (2)	Regression (3)
GDP Growth (%)			
GDP(-1)	0.3286*** (0.07988)	0.52194*** (0.14273)	0.59411*** (0.21626)
PCFDI(-1)	0.07625** (0.03097)	0.06471*** (0.02439)	0.14762* (0.07848)
NonPCFDI(-1)	0.0754154* (0.04268)	0.24191 (0.16397)	0.48722 (0.35787)
PCAID(-1)			0.03299* (0.01807)
NonPCAID(-1)			0.29352* (0.15057)
<hr/>			
Polity Score		-0.04491 (0.03853)	-0.0731277 (0.06716)
UN Peacekeeping		-3.6357 (2.46287)	-5.86223 (4.29332)
Internal Conflict		10.2072* (6.35935)	16.53316 (12.5135)
Conflict Intensity		5.5309*** (1.72268)	7.2933*** (2.21052)
<hr/>			
Post conflict FDI/capita			
GDP(-1)	-0.2048446 (0.14115)	-0.62643 (0.46055)	-0.8690698 (0.77834)
PCFDI(-1)	0.51981*** (0.19355)	0.57312*** (0.16353)	0.4427931 (0.37400)
NonPCFDI(-1)	0.0128956 (0.25374)	-0.29662 (0.66762)	-1.359923 (1.47551)
PCAID(-1)			-0.0675691 (0.07103)
NonPCAID(-1)			-0.7331877 (0.64581)
<hr/>			
Polity Score		0.2234221 (0.16299)	0.3194905 (0.27998)
UN Peacekeeping		8.63367 (8.1345)	18.80075 (16.3962)
Internal Conflict		-40.64231 (28.2519)	-60.42842 (52.77913)
Conflict Intensity		-2.108714 (4.5667)	-7.454628 (8.15275)
<hr/>			
Non Post conflict FDI/capita			
GDP(-1)	-0.0093137 (0.06237)	0.05118 (0.08926)	0.0235454 (0.017499)
PCFDI(-1)	-0.022645 (0.07738)	0.03352 (0.03759)	0.0082303 (0.00769)
NonPCFDI(-1)	0.4600025	0.24178	0.561052***

	(0.30348)	(0.1891)	(0.16812)
PCAID(-1)			0.002077 (0.00189)
NonPCAID(-1)			-0.0129522 (0.01483)
<hr/>			
Polity Score		-0.0028403 (0.02939)	0.0001003 (0.00623)
UN Peacekeeping		-0.0836236 (1.2902)	-0.1478651 (0.36164)
Internal Conflict		0.8350647 (4.88127)	0.7838632 (1.11566)
Conflict Intensity		-0.0830552 (0.64002)	-0.4125131* (0.21145)
<hr/>			
Post conflict Aid/capita			
GDP(-1)			0.31638 (0.45787)
PCFDI(-1)			-0.05226 (0.20882)
NonPCFDI(-1)			0.00993 (0.752236)
PCAID(-1)			0.55661*** (0.109189)
NonPCAID(-1)			-0.05224 (0.34294)
<hr/>			
Polity Score			-0.0320978 (0.19389)
UN Peacekeeping			-18.37111 (13.21301)
Internal Conflict			-27.12745 (28.0533)
Conflict Intensity			25.88197** (11.1477)
<hr/>			
Non Post conflict Aid/capita			
GDP(-1)			-0.20263** (0.09674)
PCFDI(-1)			0.0654601 (0.04202)
NonPCFDI(-1)			-0.3380653 (0.38164)
PCAID(-1)			0.028297** (0.013293)
NonPCAID(-1)			0.53641*** (0.12517)
<hr/>			
Polity Score			0.0123178 (0.04092)
UN Peacekeeping			-5.268076 (3.25318)
Internal Conflict			-4.21514**

			(6.24529)
Conflict Intensity			-8.10254***
			(1.51297)
<hr/>			
n of obs	3410	2795	2550
n of panels	92	91	87

Significance levels: * 10%, ** 5%, *** 1%

Table A.2: SVAR Model 1 by Region

	(1) AFRICA	(2) ME	(3) AMERICAS	(4) ASIA	(5) EUROPE
GDP Growth (%)					
GDP(-1)	0.58133* (0.30324)	0.0955677 (0.08074)	0.36429* (0.08074)	0.6547182 (1.23632)	0.37037** (0.15375)
FDI(-1)	0.13572** (0.064487)	-0.0640569 (0.060359)	-0.00143 (0.060359)	0.4949761 (2.24704)	-0.0636423 (0.11918)
AID(-1)	0.0702714* (0.04322)	0.0087511 (0.008049)	0.001229 (0.008049)	0.1638988 (0.841621)	-0.0047848 (0.02864)
Polity Score	0.10774** (0.04619)	0.0393731 (0.059834)	0.0218309 (0.059834)	-0.2446975 (0.77926)	0.1273234 (0.150334)
UN Peacekeeping	2.183975 (3.70817)	2.187702 (105.9816)	-4.342028 (105.9816)	-156.5604 (610.3909)	3.81762 (6.20794)
Internal Conflict	22.57606 (18.0836)	6.965668 (84.7602)	0.5018369 (84.7602)	-103.9297 (381.6876)	5.551228 (8.35941)
Conflict Intensity	3.52341 (2.37447)	8.919738 (67.29142)	61.53372 (67.29142)	144.9275 (550.3677)	-9.243769 (10.0833)
FDI per Capita					
GDP(-1)	-0.4740968 (0.58020)	0.1844951 (0.19966)	-1.972167 (0.19966)	2.229892 (8.96534)	-0.2219796 (0.893639)
FDI(-1)	0.4439829 (0.38979)	0.97216*** (0.23233)	1.491735 (0.23233)	5.994022 (16.1538)	1.591435 (1.27741)
AID(-1)	-0.167704 (0.18249)	0.0206719 (0.02325)	0.0255106 (0.02325)	1.764318 (6.14488)	-0.1439168 (0.23248)
Polity Score	-0.0913815 (0.125589)	0.0458547 (0.24214)	2.094562 (0.24214)	-1.544044 (5.67501)	0.3146835 (1.0361)
UN Peacekeeping	-4.652735 (6.890798)	358.8274 (285.6499)	82.40189 (285.6499)	-1344.946 (4408.577)	30.06632 (47.0656)
Internal Conflict	-62.67003 (72.15794)	-272.2907 (231.8379)	166.9272 (231.8379)	-805.6956 (2749.868)	68.36683 (89.27235)
Conflict Intensity	-3.494571 (6.947294)	-211.3213 (186.1542)	-4607.683 (186.1542)	1201.832 (3961.186)	-50.18713 (65.22979)
AID per Capita					
GDP(-1)	-0.13535 (0.23840)	4.030033 (2.62499)	-2.097504 (2.62499)	-1.1548 (4.06484)	0.5072301 (0.89719)
FDI(-1)	0.1395619 (0.142055)	-0.0191355 (0.606548)	0.3625721 (0.606548)	-2.390015 (7.29176)	0.2796414 (0.80864)
AID(-1)	0.35579** (0.17879)	0.42547*** (0.111976)	0.88336*** (0.111976)	0.0410583 (2.76688)	0.77063*** (0.260031)
Polity Score	-0.0624702 (0.136259)	-0.5534804 (0.71073)	1.34969 (0.71073)	0.0550452 (2.5201)	-0.22305 (0.89333)
UN Peacekeeping	-14.26602 (21.56436)	-1527.025 (940.6711)	164.9723 (940.6711)	564.9896 (1987.638)	24.3125 (42.9397)
Internal Conflict	-83.7251* (50.36689)	961.5268 (701.7498)	179.4824 (701.7498)	336.3286 (1245.779)	41.73859 (51.76074)
Conflict Intensity	9.56526 (12.9672)	774.9398 (556.8764)	-4223.313 (556.8764)	-514.4762 (1789.453)	-38.5379 (61.55953)
n of obs	775	183	346	322	89
n of panels	38	8	15	18	6

Significance levels: * 10%, ** 5%, *** 1%

Table A.3: SVAR Model 1 Isolating Post Conflict Time

*Note that only the GDP equation is shown here

	(1) POST CONFLICT TIME	(2) BEFORE CONFLICT TIME	(3) DURING CONFLICT TIME
GDP Growth (%)			
GDP(-1)	0.53214*** 0.20675	0.134651 0.195998	0.0770715 0.1678455
FDI(-1)	0.13967* 0.08256	0.1177001 0.178211	0.1172228 0.9403939
AID(-1)	0.03497* 0.01834	0.045102 0.075478	0.0319872 0.0934386
UN Peacekeeping	-3.8104 0.04797		-4.804002 9.480199
Internal Conflict	20.4365 15.08214	0.0678495 5.873027	18.80594 26.85235
Polity Score	0.10063** 0.047973	0.0663041 0.0502444	0.0396566 0.1083383
Conflict Intensity	9.57395** 4.26338	27.18805 16.82831	34.93351 50.31246
n of obs	1715	80	398
n of panels	85	52	46

Significance levels: * 10%, ** 5%, *** 1%

Appendix 3: SVAR Model 2 - Table A.4: SVAR Model 2 with Post Conflict Time Dummies

	(1) ALL POST CONFLICT TIME	(2) 0-5 YEARS POST CONFLICT	(3) 5-10 YEARS POST CONFLICT	(4) 10-15 YEARS POST CONFLICT	(5) 15-20 YEARS POST CONFLICT
GDP Growth (%)					
GDP(-1)	0.507884*** (0.19488)	0.540743*** (0.199219)	0.495447*** (0.191261)	0.511165*** (0.19548)	0.506907*** (0.193664)
FDI(-1)	0.11955* (0.06856)	0.15025* (0.08046)	0.10433* (0.058914)	0.119598* (0.06929)	0.1176875* (0.06991)
AID(-1)	0.03174* (0.01699)	0.039241** (0.01966)	0.030708** (0.015954)	0.0330469* (0.017658)	0.0316664* (0.017307)
FDI _x TimeDum(-1)		-0.08904* (0.05069)	0.104077*** (0.03928)	0.051971 (0.045084)	0.033349 (0.08238)
Polity Score	0.012376 (0.019679)	0.01061 (0.021259)	0.0155945 (0.019198)	0.0105015 (0.020257)	0.009943 (0.020936)
UN Peacekeeping	6.45669** (2.97689)	7.50365** (3.27479)	6.57071** (2.89079)	6.39723** (2.987742)	6.61541** (3.151881)
FDI per Capita					
GDP(-1)	-0.5662701 (0.464647)	-0.5257926 (0.474918)	-0.5471405 (0.440991)	-0.5628374 (0.468147)	-0.569193 (0.470507)
FDI(-1)	0.3214851 (0.398114)	0.359303 (0.410486)	0.344895 (0.366342)	0.3215381 (0.398203)	0.315921 (0.407632)
AID(-1)	-0.0958633 (0.081467)	-0.086627 (0.083455)	-0.094272 (0.07896)	-0.094499 (0.082961)	-0.096091 (0.081951)
FDI _x TimeDum(-1)		-0.109689 (0.124124)	-0.160074 (0.241495)	0.054376 (0.152895)	0.099757 (0.228966)
Polity Score	0.0361644 (0.05364)	0.0339827 (0.05203)	0.031215 (0.04942)	0.034203 (0.054250)	0.028886 (0.047553)
UN Peacekeeping	-9.047751 (9.76582)	-7.758042 (10.10907)	-9.22312 (9.81845)	-9.10996 (9.66112)	-8.572954 (9.28401)
AID per Capita					
GDP(-1)	0.5112286 (0.51182)	0.4483741 (0.50078)	0.537075 (0.51486)	0.516696 (0.51201)	0.517432 (0.513092)
FDI(-1)	-0.1370686 (0.227893)	-0.1957939 (0.249313)	-0.105439 (0.20052)	-0.136984 (0.22744)	-0.125261 (0.23011)
AID(-1)	0.547487*** (0.119744)	0.53314*** (0.115847)	0.54964*** (0.120204)	0.549661*** (0.121365)	0.547971*** (0.119732)
FDI _x TimeDum(-1)		0.1703272 (0.14754)	-0.216277 (0.25366)	0.086608 (0.258138)	-0.211688 (0.174753)
Polity Score	-0.2237562 (0.2124339)	-0.2203683 (0.212914)	-0.2304436 (0.214761)	-0.22688 (0.211287)	-0.20831 (0.2131262)
UN Peacekeeping	-15.26563 (23.84824)	-17.26832 (24.10026)	-15.50257 (23.82703)	-15.36471 (-15.3647)	-16.27317 (23.8482)
FDI_xTimeDummy					
GDP(-1)		0.063722 (0.045055)	0.004998* (0.055468)	0.158911 (0.153980)	-0.010401* (0.1855373)
FDI(-1)		0.013166 (0.0263762)	0.000634** (0.0350629)	0.131112 (0.126965)	-0.080071 (0.141480)
AID(-1)		0.007495 (0.006926)	0.0129884 (0.0135571)	0.020822 (0.031356)	-0.001941 (0.031582)
FDI _x TimeDum(-1)		0.71533*** (0.125149)	0.76505*** (0.154687)	0.94671*** (0.181886)	0.732225*** (0.200149)
Polity Score		-0.0075421 (0.212914)	0.000802** (0.021269)	-0.0328971 (0.029019)	0.0394576* (0.020457)

UN Peacekeeping		3.15677*	0.808501	1.286808	0.4489085
		(1.931754)	(2.915083)	(5.386942)	(7.26273)
n of obs	1700	1700	1700	1700	1700
n of panels	104	104	104	104	104

Significance levels: * 10%, ** 5%, *** 1%

Table A.5: SVAR Model 2 with Post Conflict Time Dummies for FDI and Aid

*Note that only the GDP equation is shown here

	(1) 0-5 YEARS POST CONFLICT	(2) 5-10 YEARS POST CONFLICT	(3) 10-15 YEARS POST CONFLICT	(4) 15-20 YEARS POST CONFLICT
GDP Growth (%)				
GDP(-1)	0.547938*** (0.201251)	0.495423*** (0.191264)	0.513788*** (0.19667)	0.508578*** (0.194355)
FDI(-1)	0.13447* (0.072117)	0.104336* (0.05894)	0.118352* (0.068371)	0.1176861* (0.06913)
AID(-1)	0.077712** (0.036696)	0.030679* (0.016139)	0.0339603* (0.018195)	0.0324586* (0.017493)
FDIxTimeDum(-1)	-0.059005 (0.054086)	0.103891*** (0.03938)	0.038376 (0.044621)	0.0214101 (0.079337)
AIDxTimeDum(-1)	-0.03489* (0.019902)	0.000131 (0.005782)	0.015228 (0.014069)	0.0175083 (0.010722)
Polity Score	-0.007565 (0.026273)	0.0155937 (0.019195)	0.0082722 (0.02089)	0.004078 (0.0215036)
UN Peacekeeping	10.7937** (3.27479)	6.57995** (2.92715)	6.48999** (3.015104)	6.67537** (3.201966)
n of obs	1700	1700	1700	1700
n of panels	104	104	104	104

Significance levels: * 10%, ** 5%, *** 1%

Investigating Firm Performance in Post Conflict Africa:

A quantitative analysis on the relationships between firm resources and growth in post conflict versus non-post conflict countries

Section 1.0: Introduction

Over the past half century, Africa has suffered numerous devastating conflicts. These conflicts postpone development and substantially reverse previous progress. Conflict leaves countries with uneducated workforces, destroyed infrastructure, worsened social systems, prolonged ethnic tensions, and weak institutions. When a conflict ends, peacebuilding is challenging, especially since there is an increased likelihood that the conflict will relapse (Collier, 2007). As discussed in the previous chapter, many governments in post conflict environments focus their policy on attracting FDI to help with economic recovery. However, formal SMEs contribute to 40 percent of output in developing countries and provides 7 out of 10 formal jobs.¹ Thus, it is evident that comprehending formal SME growth in post conflict countries is also a key component to the economic reconstruction process. This paper identifies key resources and conduct that support formal firm growth in post conflict Africa and how it differs from firms in non-post conflict Africa.

Compared to the first chapter of this thesis, this paper narrows its focus on private sector development on the African continent. This is for three key reasons: Africa is important, neglected in existing research, and tractable. The first is that despite major recent conflicts in Ukraine, Yemen and Syria, it has been Africa that has suffered from the most conflicts in the past three decades. This is shown using the UCDP/PRIO data in Chapter 1, Section 5.0, where Africa had the most high and low intensity conflicts compared to all other geographic regions. However, the study of the impact of conflict on firm performance is neglected in Africa given the amount of conflict compared to other regions (see Section 2.0). In addition, Chapter 1 finds that the impact of FDI inflows into post conflict Africa is more significant than any other region. This shows that Africa may be a unique context for post conflict economic reconstruction, which limits the ability to generalise from case studies conducted in other regions. Lastly, compared to other regions, the economic structure of post conflict African markets is more similar to non-post conflict Africa (described below). The “structure, conduct and performance” paradigm² used in the introduction of this thesis, suggests that firm performance is influenced by market structure and firm conduct (Bain, 1959). Hence, the similar structural makeup of African markets helps to identify and better isolate the effect of conflict on

¹ <https://www.worldbank.org/en/topic/smefinance>

² First generated by Chamberlin & Robinson in 1933 and further developed by Bain in 1959 for Industrial Organization theories.

firm performance through changes in conduct specifically. These reasons together show that this paper provides insight into an important, neglected, and tractable area of study.

Although African markets are diverse, there are key aspects of their structure that are similar, whether they are post conflict or not. Many of these elements are also significantly different from other regions, which substantiates that the findings from existing literature on post conflict firm performance from other geographies are untransferable. African countries have a much more prominent informal sector that is relatively consistent across the continent. The World Bank finds that the median percent of economic contribution from the informal sector is 37 percent in Africa, where it is 25 percent in the rest of world (ROW).³ Within the different regions, Africa's standard deviation of this statistic is 3 percent less than Latin America and Asia, showing a likeness amongst African countries. Another structural similarity is the large agricultural sector within African markets. The average percent of GDP derived from agricultural activities is 16 percent in Africa, while merely 4 percent for the ROW.⁴ In addition, the percent of GDP from agriculture in conflict-affected countries is 17 percent, showing negligible variance between the two environments. As noted in Chapter 1, FDI and large natural resource concessions are used in many post conflict settings to boost capital inflows. Within Africa, it is also common to have large natural resource extraction projects, which make up a significant component of the economy. The average percent of GDP from natural resource rents is 8 percent in Africa and 4 percent for the ROW (1.5 percent if you exclude Arab states).⁵ Africa's average rent aligns with conflict-affected countries, which is 10 percent. A final commonality in African markets is the lack of skilled workers. The average literacy rate in Africa is 65 percent but 88 percent for ROW, showing a drastic divergence in education.⁶ Once again, Africa's literacy rate is aligned with the rate for conflict-affected countries which is at 64 percent. All these statistics show that Africa as a region is significantly different from the ROW in terms of market structure. In addition, Africa's structure is the most aligned with the structure in conflict-affected countries. Thus, this is beneficial for the analysis as I can identify which effects are most likely caused by general African structures or more specific post conflict effects.

Combining the World Bank's Enterprise Surveys (WES) and UCDP/PRIO armed conflict data, this paper discovers significant similarities and differences in how resources influence firm growth in African post conflict and non-post conflict countries. In the WES survey, the firms that are included are formal firms of five or more employees, which means the

³ World Bank data from 2017. <https://www.worldbank.org/en/research/brief/informal-economy-database>

⁴ World Bank data from 2019. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>

⁵ World Bank data from 2020. <https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS>

⁶ World Bank data from 2020. <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS>

informal sector and micro firms are missing from our analysis (see Section 5.5 for more information). Using an OLS model with country-fixed effects, I find that access to finance has a positive relationship with firm growth in post conflict settings, although this is a generic finding; financial constraints are equally prevalent in non-post conflict African countries. Secondly, employee training has a significant positive correlation with firm performance in both contexts, but it is larger in magnitude for post conflict firms, specifically if the country suffered from an ‘extra’ intensive conflict. This may be because of the large educational and work experience gaps caused by the conflict. I find that foreign ownership has no significant association with firm performance in post conflict contexts but find a significant effect for manufacturing firms in non-post conflict countries, specifically in the food manufacturing sector. This suggests it is more difficult for firms in post conflict contexts to absorb technology, skill and knowledge transfers. Lastly, the models show that business networks have a positive relationship with service firm performances in non-post conflict states, but zero, or even a negative effect, in post conflict states. This finding may be caused by the lack of trust within communities that is generated after a conflict has occurred.⁷

This paper proceeds as the following: Section 2 reviews the previous literature on the structure of post conflict markets, the change in resources and conduct in these markets and the limited research available on firm performance; Section 3 provides an in-depth analysis of each conflict and their characteristics within my data sample and finds grounding in defining eight countries as post conflict; Section 4 lays out the quantitative methods used; Section 5 describes the data used in this paper and some preliminary analysis; Section 6 presents the primary findings from the models; lastly, Section 7 concludes and provides suggestions for further research.

Section 2.0: Key Debates in the Literature

This section provides an overview of the main debates within the post conflict literature on the influences on firm growth. One of the largest challenges is that there is a lack of academic research that specifically focuses on firms’ conduct and performance in a post-conflict context. Most of the research in this area is composed of case studies on formal businesses.⁸ These case studies originate from Georgia⁹ (Petracco and Schweiger, 2012), Sri Lanka¹⁰ (Chand and

⁷ Interviews in Chapter 3 case studies provide further evidence for this explanation.

⁸ This is because the WES dataset used in this paper is of formal firms. If a paper presented in this section does not use formal firms as its data, I will explicitly say so.

⁹ Georgia suffered from a short, armed conflict with Russia in August 2008

¹⁰ Sri Lanka suffered from a separatist conflict, which ended in 2009 after 25 years of instability. Some cities were impacted more heavily than others.

Maddumage, 2017, and McMillian and Woodruff, 2000), Kosovo¹¹ (Krasniqi and Mustafa, 2016 and Krasniqi and Branch, 2018), Bosnia and Herzegovina¹² (Efendic et al., 2015 and Demirguc-Kunt et al., 2008), Palestine¹³ (Amodio and Di Maio, 2014), Kenya¹⁴ (Hjort, 2013 and Ksoll et al., 2016), Côte D'Ivoire¹⁵ (Klapper et al., 2013), Eastern Congo¹⁶ (Sierra and Mutakuma, 2014 and Sierra, 2014) and Colombia¹⁷ (Rozo, 2016). This section uses these case studies to summarize the discussions on firm growth in these environments. It is important to note that all findings presented below are related to post conflict firm growth unless explicitly mentioned. However, it is important to note that within this limited existing research, there is even less available on African firms. The first debate surrounds the importance of physical capital versus human capital for post conflict firm growth (Section 2.1). The next set of literature analyses the varying results of foreign ownership in post conflict firms (Section 2.2). The final set of research disputes the influence of networks and trust on post conflict firm growth and how this effect can vary depending on the ethnicity, class and link to the government of the business owner (Section 2.3). This paper adds to this existing literature by adding to each one of these three debates and expanding the analysis into post conflict Africa (Section 2.4).

Section 2.1: Human Versus Physical Capital in Post Conflict Contexts

During a conflict, there are two different types of capital that are negatively impacted. The first is physical capital, which includes monetary savings, machinery, infrastructure and access to finance for firms. The second is human capital, which includes healthy and capable workers, education and experience levels, and skillsets. The first primary debate in the existing literature focuses on which of these two sets of capital is more important for firm growth and survival in a post conflict setting.

Two main consequences of war on a firm are the destruction of capital and a fall in demand as fewer people can buy goods and services. Collier and Duponchel (2012) note that both consequences are easily reversible once the conflict ends. Since infrastructure and capital

¹¹ Kosovo transitioned from a socialist economy to a market-based in the early 1990s and then suffered from a civil war from 1998 to 1999.

¹² Bosnia and Herzegovina suffered a genocide from 1992 to 1995,

¹³ The conflict in Palestine has been long-term and low intensity in the West Bank and Gaza strip. This has been for independence from Israel.

¹⁴ Kenya suffered from electoral violence in 2007. However, it is important to note that in this paper, Kenya is considered non-post conflict because the number of fatalities of the 2007 violence did not reach the minimum defined by the UCDP.

¹⁵ Côte D'Ivoire experienced a civil war starting in 2000. See Appendix A1.3 for full detail.

¹⁶ The conflict in the eastern part of the DRC has been caused primarily from a spill over of rebel groups from Ugandan and Rwanda and continues today.

¹⁷ The conflict in Colombia focuses on when President Uribe came to power and was against the two rebel groups, FARC and the ELN between the mid 1990s and 2010.

were scarce prior to the conflict in low-income countries, most of this can be replaced quickly to previous levels. In addition, more people and liquidity return to the market as it stabilizes. They suggest that physical capital is returned to non-post conflict levels relatively easily. Collier and Duponchel (2012) believe that the long-lasting effect of a civil war on firms is on human capital. As a war occurs and the economy stops, “the decline in employment then deskills that part of the labor force that loses employment in that activity, in a process analogous to the deskilling of workers who remain unemployed for long periods” (Collier and Duponchel, 2012: 69). This is a theory that Collier describes as “forgetting by not doing” (Collier and Duponchel, 2012: 70). This means that even when the financial and physical capital becomes available to firms in a post-conflict setting, it may be ineffective due to the lack of human capital.

In terms of human capital in formal firms, Bloom et al. (2013) uses a small sample of textile manufacturers in India to determine the impact of management training on productivity. The results of this intervention generated “significant improvements in quality, inventory and output.... [and] within the first year, productivity increased by 17%” (Bloom et al., 2013: 3). Bloom et al. (2013) suggest that these managerial changes were not implemented before the intervention due to informational constraints caused by a lack of competition. Although this provides beneficial insight into the impacts of training on formal firms, the firms in this dataset are not located in the Indian state that is considered post conflict.¹⁸ This means that we cannot necessarily relate this finding to a post conflict context.

In addition, Krasniqi and Mustafa (2016), which uses data from 1606 firms in Kosovo to develop a probit model, and Chand and Maddumage (2017), which uses data on 243 firms ownership characteristics to develop a least deviation regression, both find that a manager’s experience in their firm’s sector is found to have a positive impact on growth. It is hypothesized that the manager’s past business experience has a positive effect on growth because “work experience helps to expand the capabilities and social networks of entrepreneurs” (Chand and Maddumage, 2017: 91). This positive effect may simply be from their managers networks (Section 2.3) and not their actual skill. Krasniqi and Branch (2018) build off these findings and develop a linear regression using WES data in Kosovo to find that on-the-site job training for employees positively contributes to firm growth and they suggest this is because “formal firms in Kosovo might also be using training as a way to compensate for low quality of Kosovan labour” (Krasniqi and Branch, 2018: 10). This does suggest that employee training does positively increase growth in post conflict firms as it helps to fill some of the human capital gaps. Nevertheless, these two studies also find that the educational level of the manager and/or

¹⁸ The post conflict area of India is at the Pakistani border

entrepreneur have no significant impact on a firm's performance (Chand and Maddumage, 2017 and Krasniqi and Mustafa, 2016). Further, Krasniqi and Mustafa (2016) find that the education level of the manager is negatively associated with manufacturing growth, implying that manufacturing may need a more specific skillset. This does question whether Collier and Duponchel's (2012) assessment about the importance of human capital in post conflict contexts is correct.

There are several research articles that suggest physical capital, specifically access to finance and infrastructure, is the key component to post conflict firm success and growth. Demircuc-Kunt et al.'s (2008), research uses a panel regression to determine the important role those financial constraints have on business survival. The model suggests that "wealthier households with access to bank financing are more likely to become entrepreneurs and survive the early period of post conflict adjustment" (Demircuc-Kunt et al., 2008: 2). This shows the significant financial barrier to firms as only wealthier entrepreneurs can use internal funds to survive. Previous relationships with banks prior to the conflict also increases the likelihood of business survival. Chand and Maddumage (2017) find that sole ownership of a firm has a negative and significant impact on growth, which they hypothesize is because more owners lead to larger networks and access to finance. Lastly, this case study finds that small firms grow faster, and old firms grow slower¹⁹ (Chand and Maddumage, 2017). However, unlike in developing countries, the model shows that there is no firm age effect in post conflict firms under three years old, suggesting "that nascent firms first attempt to survive their early years of establishment due to little capital" before they focus on growth (Chand and Maddumage, 2017: 90).

In terms of infrastructure, the existing literature finds that access to safe roads and work environments is positive for local economic growth. In Mozambique, Chiovelli et al. (2019) use luminosity and demining data to determine that economic activity significantly picks up after the demining process has occurred. Many of these mines hindered road and travel routes. They also find that the indirect effects of demining are significant and have an economic impact similar in magnitude to a large infrastructure project. This contradicts Collier and Duponchel's (2012) hypothesis that physical capital is easily returned to pre-war levels and therefore, does not have as long-term economic growth effect.

Section 2.2: Does Foreign Ownership Support Post Conflict Firm Growth?

Chapter 1 of this thesis, I find that foreign ownership and capital inflows into a post conflict setting is one method to boost country economic growth, especially in Africa. However,

¹⁹ Krasniqi and Mustafa (2016) find no significant impact in firm age on performance.

in terms of formal firms, particularly SMEs, it is unresolved on whether foreign ownership aids firm growth. Klapper et al. (2013) use employment and financial data from formal firms in Côte D'Ivoire to estimate the cost of conflict on firms, especially those with foreign ownership. They do this by first estimating the production functions and deriving firm TFP, and then regressing this on foreign ownership and employment. They find that there were fewer firm entries than exits and less aggregate employment after the conflict in Côte D'Ivoire. Pre-conflict, Klapper et al. (2013) find that foreign-owned and firms with foreign employees and ownership had higher productivity than domestic firms. However, the conflict decreases this advantage, as an increase in foreign employment and foreign ownership²⁰ leads to an immediate decrease in total factor productivity. The authors believe that this heavier impact on foreign owned or employed firms is due to the anecdotal evidence that anti-foreigner sentiments during the violence led to disproportional attacks and looting of foreign businesses. In this paper, I compare the association of foreign ownership and firm performance in both post conflict and non-post conflict markets. This helps determine whether the foreign-ownership effect found in Klapper et al. is likely to be a common effect amongst most post conflict African countries, or just in Côte D'Ivoire. In addition, Krasniqi and Mustafa's (2016) model for Kosovan firms finds no significant impact of foreign ownership on performance. This also suggests that there is no evidence of knowledge and skill transfers from foreign ownership, which is discussed in Chapter 1. Although, the lack of impact from foreign ownership in Kosovo may be from the consequences of higher looting of foreign businesses found in Klapper et al.'s (2013) paper. This remains uncertain.

However, Guidolin and La Ferrara (2007) use an augmented market model, where they compare a portfolio of diamond companies with Angola holdings and the other with diamond companies without Angola holdings, to determine how conflict events impacts returns. Using this, they find that investors for the diamond industry in Angola perceived the conflict as advantageous for their firm's performance. They hypothesis that this is because the foreign-owned firms were able to make the most out of a challenging situation. These firms were able to benefit from the little competition in the market, more bargaining power with the government, and fewer market entries due to the lack of transparency in the licensing process. This suggests that there are some consequences that can counterbalance the negative impacts of the conflict on business. This could simply be specific to the diamond market as "blood diamonds" have a long and complex history of prospering through African conflicts (see Section 3.2). However, a

²⁰ This effect is time delayed

foreign forestry owner in Liberia²¹ stated that “during the civil war, foreign businesses did extremely well in timber if they were willing to work with the warlords. This is because no one else would come but if you were willing to work with the local rebels, business was booming.” This statement suggests that it may not just be the diamond industry that can benefit from conflict situations. Lastly, Bunte et al. (2018) find that FDI projects in Liberia for iron ore have a positive impact on local economic growth, which is proxied by night-time light emissions and analysed through a natural experiment. However, due to the proxy used, it is difficult to determine whether that growth is also experienced by individual firms and whether those are foreign owned. This research showing positive growth from foreign ownership is derived from large FDI projects and not for the typical firm that is within the WES dataset used in this paper. Thus, there is no clear conclusion on the impacts of foreign ownership on firm growth in post conflict environments.

Section 2.3: Does Trust, Networks and Institutions Positively Increase Firm Performance in Post Conflict Countries?

Within the existing literature on post conflict firms’ performance, there is debate on the importance of networks, trust and institutions. The literature also touches upon the influence of ethnicity, which in many cases relates to trust amongst groups within the business community. It is found that networks can support firm growth in certain situations. However, many firms in post conflict contexts cannot benefit from these positive effects due to ethnicity and trust barriers.

Efendic et al. (2015) collected data on social capital, entrepreneurship aspirations, trust and ethnicity from 244 firms in Bosnia.²² The regression from this data finds that a firm owner’s network is shown to have a large positive effect on aspirations. The model’s results demonstrate that “aspirations are lowered by half, for the respondents whose business discussion networks are dominated by acquaintances, compared with respondents whose five first business discussion contacts consist entirely of family or friends” (Efendic et al., 2015: 555). It is also suggested that the larger the owner’s business network, the higher their aspirations for business growth. However, it is important to note that aspirations for growth does not necessarily cause actual firm growth.

²¹ This interview was conducted for Chapter 3 of this thesis. It was completed in person in Kakata, Liberia in October 2018.

²² It should be noted that 490 firms approached did not contribute to the survey. This suggests that businesses with the least amount of trust since they did not feel comfortable answering questions, were not included in this analysis.

Ksoll et al. (2016) use the 2007 electoral violence in Kenya as a natural experiment to determine the impacts on productivity for the floriculture sector. They discover that “weekly export volumes of firms in the regions affected by violence dropped, on average, by 38% relative to what would have happened had the violence not occurred” (Ksoll et al., 2016: 3). This drop occurred because workers’ absence increased by approximately 50 percent. However, they also find that larger firms with long-term contracts or affiliated with a business association had less reductions in their production.

McMillan and Woodruff (2000) use collected data in post conflict Sri Lanka to show that associations and business networks can be used as a method of holding accountability when legal systems are inadequate, which occurs frequently in post conflict regions. They argue that “private-order organizations of either kind have two roles in sustaining contracting: first, providing information about breaches, and second, organizing the responses to those breaches” (McMillan & Woodruff, 2000: 2423). Thus, networks can help offset the negative implications of poor institutions created by conflict. However, the authors do note that these associations can be discriminatory to gender and ethnic minorities.

Ethnicity and identity differences often influence and trigger the conflicts within the dataset used throughout this paper. Previous literature shows that these ethnic tensions can also impact firm productivity. Hjort et al. (2013) use a quasi-random experiment in a flower packaging plant in Kenya,²³ which has different ethnic groups as workers in teams (one upstream and two downstream). They find that teams that were not ethnically homogenous were less productive and that upstream workers were willing to decrease their own pay to lower the pay of the downstream team if they were of a different ethnicity. This effect was exacerbated during the 2007 electoral crisis. Thus, ethnic discrimination negatively impacts production, which is heightened by the political environment. Although Kenya is not defined as post conflict, the political turmoil around elections provides a signal to what occurs in post conflict political environments.

Fafchamps (1999) uses financial data from Kenya and Zimbabwe to determine whether there is significant bias in access to supplier and bank credit for different ethnicities.²⁴ This regression finds that there is no ethnicity bias in supplier credit, but black people and women are at a disadvantage. Instead, they find that it is business networks which play an important role in

²³ It is important to note that in this paper, Kenya is considered non-post conflict because the number of fatalities of the 2007 violence did not reach the minimum defined by the UCDP.

²⁴ In these markets, there are often dominant business groups present, which are composed of a specific ethnicity. This is discussed in more detail in Chapter 3 when discussing the impacts of dominant merchant groups in Liberia and Sierra Leone.

this bias and these groups are penalized due to their lack of connections. This shows the importance of business networks for accessing finance in these markets.

Sierra and Mutakuma (2014) analyse the interaction of contract enforcement and ethnicity in Eastern Congo by conducting an experiment on delivery payments. The authors find that when there is a shared ethnicity in the state-system and the consumer has access to a state-contract for their delivery, there is an increase in transactions. They also find that state-contracts only increase trade when the delivery is in the future and not immediate, showing a lack of trust in institutions. Thus, the authors conclude that “state-backed contracts only protect individuals belonging to groups which have captured the administration of the legal system. They are ineffective at decreasing defection against members of marginalized groups” (Sierra & Mutakuma, 2014: 5). This means that even legal protection can be influenced by ethnicity and that networks can only be effective for certain groups of business owners.

Lastly, the existing literature also analyses the influence of institutional factors on conduct and performance. The most commonly cited factor in the post conflict literature is a lack of trust in institutions.²⁵ Efendic et al.’s model uncovers that higher levels of trust in institutions is significant for business aspirations but trust in general people is not. However, it is challenging for a country’s population to regain trust in their institutions after their institutions have allowed violence to occur. Further, one of the most detrimental impacts is that firms’ change their perception of institutions after a conflict. Petracco and Schweiger (2012) find that the most negative change in perceptions is on tax rates, even though no actual change occurred.

The evidence shows that strong legal systems and the trust within those systems supports firm productivity. For example, Boehm and Oberfield (2018) use firm-level data from different Indian²⁶ states with a variety of court congestion. They find that firms that with worse off court systems, tend to shift away from relationship-based inputs because the slow courts raise costs. Firms tend to start using more standardized baskets of inputs and respond by performing more of the value chain themselves. Although not all of these Indian states are post conflict, this evidence suggests that poor justice institutions, often found in post conflict areas, leads to less relationship-based business. Johnson et al. (2002) use data from post-communist countries,²⁷ that had a variety of different levels of property rights and access to bank financing. Using firm-level data, they find that “the entrepreneurs in our sample reinvest less of their retained earnings when they perceive their property rights are insecure, irrespective of whether they own the collateral

²⁵ Often caused from the conflict

²⁶ Once again, India is considered a post conflict state by the UCDP definition; however, these firms are from across the entire country and not just from close to the Pakistani border where the majority of violence occurred.

²⁷ Slovakia, Poland, Romania, Ukraine and Russia.

that is generally required to obtain credit” (Johnson et al., 2002: 1336). Thus, the authors believe that secure property rights provided by institutions are necessary for entrepreneurs to invest.

Within institutions, corruption is another factor that influences firms’ conduct in post conflict markets present in the literature. Using additional data from the Kosovo case study, Krasniqi and Branch (2018) find evidence that corruption has a negative impact on firm performance, but this effect “becomes positive when interacting with firm size” (Krasniqi and Branch, 2018: 10). The firms who face corruption are gaining access to larger and better deals than their counterparts due to their networks. The authors state that “these findings suggest that the larger the firm is, the more able it is to network and “exploit” corruption to avoid administrative bureaucracies and burden in transitional countries” (Krasniqi and Branch, 2018: 10). This result may be more prominent in post-conflict areas as corruption is higher in these countries. I explore this hypothesis using the model in this paper, which compares the influence that corruption has on African post conflict and non-post conflict firms.

Section 2.4: Summary of Literature Gaps

Much of the existing literature on firm performance in post conflict settings is focused on specific case studies and most of those have been outside of Africa. This paper combines many of the findings of this literature and explores whether effects of finance, human capital, trust and networks, foreign ownership on firm performance are the same in post conflict Africa. In addition, there is a hypothesis that because Africa is still developing as a continent, the influences on firm performance may be the same whether there has been a conflict or not. This paper establishes whether these relationships with firm performance are significantly different in post conflict and non-post conflict Africa, or whether they are simply relationships caused by a nascent private sector. This means we can identify any impact that may be specific to a post conflict African context.

The existing literature provides a guide for choosing the four main factors of conduct to include in this paper’s analysis. From Section 2.1, I have included a firm’s access to capital and employee training to contribute to the debate on the importance of human and physical capital for post conflict firm growth. I have also included firm foreign ownership in the model, to add to the literature presented in Section 2.2. The last main variable in the model is a proxy for business networks to further delve into the debate focused on trust and networks’ impact on post conflict private sector growth. From other aspects of the existing literature, the model also contains variables for institutions, corruption, firm size, exports, and manager experience, which are used in the existing literature for post conflict case studies. This paper combines these three

debates from the case studies presented above to develop an empirical answer on the effects of physical and human capital, foreign ownership, and trust and networks, on post conflict firm performance in Africa. Before doing so, Section 3 offers more texture on what I mean by post conflict and discusses in detail the characteristics of the post conflict countries within my sample.

Section 3.0: The Characteristics of a Post Conflict State

Each conflict within the dataset is complex and can be influenced by international interventions, colonial history, ethnicity, politics and economics. The wars can be used for gaining power over expensive natural resources, like diamonds in Sierra Leone, or can be rebel groups causing terror in villages for little ideological reasons, like the LRA in Uganda. However, even with these complexities, I can provide a binary definition of a post conflict state to be used in the model. This section first develops a definition for post conflict using the UCDP/PRIO methods, which defines eight countries in my dataset as post conflict. Then, I provide a grounded and rigorous basis that supports making this choice. This analysis helps to show the reasoning for being able to confidently group these countries together as post conflict. The final stage of this section describes differences in conflict characteristics between the eight countries that I then control for in the regressions presented in Section 5.3.

Section 3.1: Developing a Binary Post Conflict Definition

One of the key components to the analysis conducted in this paper is to be able to define a post conflict state and a non-post conflict state in a clear and concise manner. This poses many challenges because it is not always clear when a country is in or out of conflict. Further, each conflict is complex and distinct, meaning it is challenging to group these conflicts into one homogenous group (see Section 3.2 for the analysis on why this is feasible). The definition of a post conflict state is developed using both the model results found in Chapter 1 and the definition that Hoeffler et al. (2010) use in their research. In addition, the definition of post conflict states for this thesis is provided in detail in the introduction to this thesis. A conflict impacts an economy for many years into the future and Chapter 1 provides evidence that the economy is especially unique in the two decades after the conflict ends in regard to FDI and aid. Using this finding, this paper defines a post-conflict country as one that has suffered from a conflict within twenty years of the survey being conducted. Although it is important to note that conflict has long-term impacts on the economy that may be felt for decades after this period.

The dataset used to help develop this definition is the UCDP/PRIO Armed Conflicts Database,²⁸ which includes data on conflict date, length, intensity²⁹ and type between the years 1970 to 2019. To keep consistency and ensure that this paper focuses on the impacts of large-scaled conflict, I only use high intensity defined by the UCDP/PRIO. In addition, any firms located in an active conflict during the collection of enterprise survey data are not included within the sample used in this paper. This includes the following countries: Niger, Sudan, South Sudan, Egypt, DRC, Nigeria, Cameroon, and Mali. It is also important to note that many of the countries in the non-post conflict category could have suffered from conflict in their history, but not within two decades of the survey collection date. Further, many of these countries have suffered from small ‘skirmishes’ that caused less than 1,000 battle deaths.³⁰ An example of this is Kenya and the 2007 electoral violence, which was mentioned in Section 2.2. Therefore, just because a country is considered non-post conflict in this paper, it does not mean that the country has not suffered recent violence or political instability.

Using these definitions and categorization techniques explained above, as well as the availability of the World Enterprise Surveys, Table 1 presents the countries included in this model. This definition provides a binary variable for whether or not a firm is within a post conflict environment, which can be used in this paper’s model.

Table 1: Breakdown of Post Conflict and Non-Post Conflict Firms

Post Conflict		Non-Post Conflict			
Country	Num. of Firms	Country	Num. of Firms	Country	Num. of Firms
Burundi	157	Benin	150	Malawi	523
Chad	153	Djibouti	266	Mauritania	150
Côte D'Ivoire	361	Eswatini	150	Morocco	407
Ethiopia	848	Gambia	151	Mozambique	601
Liberia	151	Ghana	720	Namibia	580
Senegal	601	Guinea	150	Tanzania	813
Sierra Leone	152	Kenya	1001	Togo	150
Uganda	762	Lesotho	150	Tunisia	592
		Madagascar	532	Zambia	720
				Zimbabwe	599
8 Countries	3185 firms			19 Countries	8405 firms

²⁸ <https://www.prio.org/Data/Armed-Conflict/UCDP-PRIO/>

²⁹ The database defines a high intensity conflict to be 1,000 cumulative battle deaths or more. A low intensity conflict is between 25 and 999 battle deaths.

³⁰ The conflict must reach at least 1,000 battle deaths to be considered of a high intensity

Section 3.2: Working with Complex Post Conflict Contexts and Characteristics

As mentioned previously, using quantitative data to analyse questions on conflict is challenging due to the complex nature of these situations. There are different types of conflict including interstate and civil wars, which can alter the overall consequences that the war has on the country's peacebuilding process. In addition, a conflict is often deep-rooted in history, politics, identity, class and economic resources, which means that many of the consequences of a war cannot be fully captured through quantitative data. The exercise in Section 3.1 to group together countries into the post conflict category can be erroneous because it does not include other characteristics of the conflicts.

In the WES datasets used, there are eight African countries whose circumstances are consistent with the definition laid out in the above section. The eight conflicts that fall into this category are:

- Burundian Civil War (1993-2008)
- Chadian Civil War (2005-2010)
- First Ivorian War and 2010-2011 Crisis (2002-2005 & 2010-2011)
- Ethiopia-Eritrean Border War (1998-2000)
- First and Second Liberian Civil War (1989-1997 & 1999-2003)
- Casamance Conflict in Senegal (1992-2001)
- Sierra Leone Civil War (1991-2002)
- Uganda's War on the LRA and ADF (1991-2006)

Although these wars may fall into the category of post conflict by definition, the scenarios may be dissimilar. Thus, this section provides an analysis of the characteristics of each conflict within this dataset and finds numerous similarities. This provides more depth to the quantitative analysis when looking at post conflict firm performance and allows us to have more confidence in grouping these countries in the post conflict category. In addition, this section finds a few significant differences in conflict characteristics, which I can then control for in the model in Section 6.3. For an in-depth explanation of each conflict, go to Appendix A.

I first examine the principle quantitative data on the conflicts provided by the UCDP data. This includes the intensity of the conflict, by battle-related deaths, the length of the conflict and the time elapsed between the end of conflict and WES survey.

The number of battle-related deaths from each conflict varies greatly. The average deaths are 23,664. The minimum deaths are from Senegal, with 2,195 and the maximum is from Ethiopia with approximately 98,217. Thus, with the substantially higher number of deaths in Ethiopia, this conflict may be an outlier in this group. Since some of these countries are much

larger in size than others, to determine the magnitude of these deaths, I calculated the percentages of deaths for the population. These are shown in Figure 1 below. The conflicts with the highest intensity of deaths by population size is Liberia, Sierra Leone, and Burundi. This is most likely due to these countries' small land and population sizes. The countries with the smallest death tolls and conflict intensity by population size is Senegal and Côte D'Ivoire. However, in Table 2 I find that these two conflicts have similar characteristics to the others.

Figure 1: Battle-Related Deaths

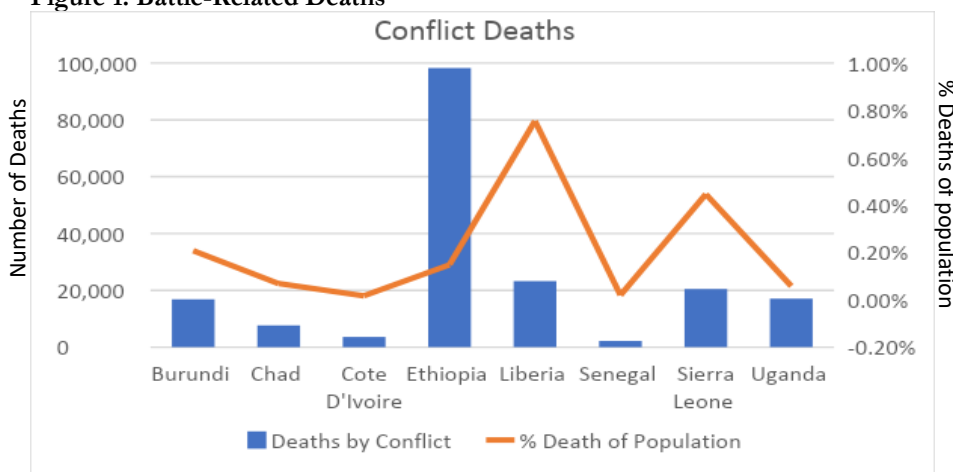
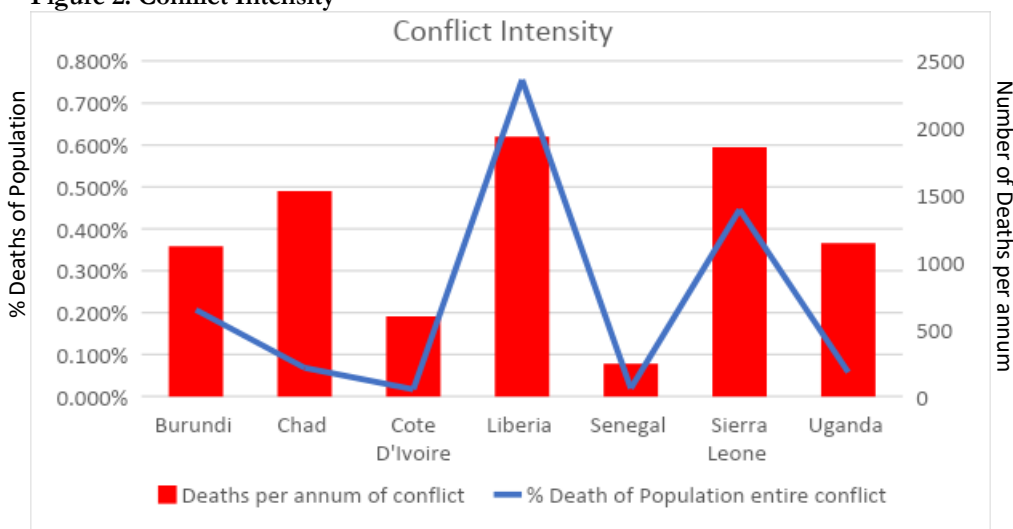


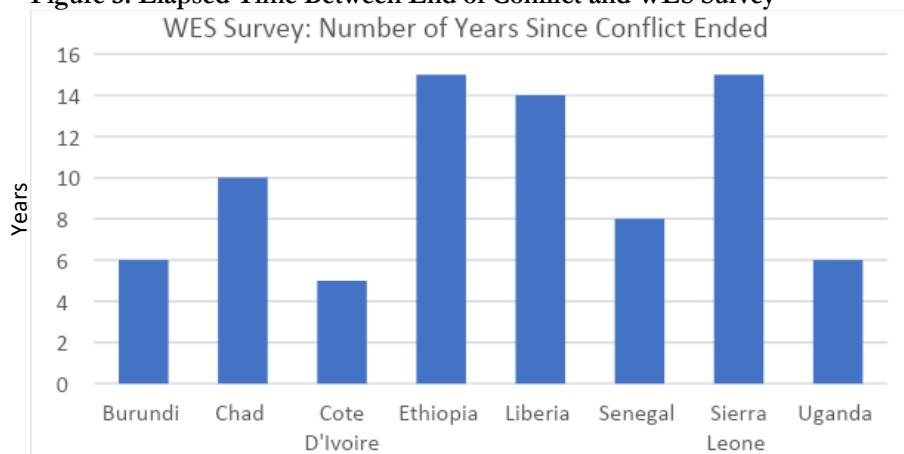
Figure 2: Conflict Intensity



The duration of a conflict is also critical when determining the intensity. Thus, I believe that the deaths per annum and population is an appropriate measure for conflict intensity. This accounts for some countries having had fewer overall deaths, but the deaths occurring all at once, intensifying the conflict throughout a single year. This is compared to conflicts that may have been over a long-time period but with fewer deaths occurring at once. This analysis is shown in Figure 2, where Ethiopia has not been included, since it has already been noted as an outlier from Figure 1. Figure 2 shows that conflict intensity, when including the length of the conflict, is still highest for Liberia and Sierra Leone. When controlling for the length of the

conflict, Chad's intensity increases. Côte D'Ivoire and Senegal remain at a lower intensity. Due to this variation of intensity for conflicts, even within the UCDP/PRIO definition, it is important to control for these differences in the model. Thus, an "extra" high-intensity conflict variable is generated in Section 6.3, which includes Sierra Leone and Liberia, since they are clearly the highest intensity conflicts amongst these seven countries.³¹ If a country has experienced a higher intensity in conflict, this most likely effects firm performance in the post conflict era because there's been a higher loss in human capital,³² physical destruction, and capital flight.

Figure 3: Elapsed Time Between End of Conflict and WES Survey



In addition, the length of time between the end of the conflict and the WES is significantly varied between the eight countries. Figure 3 shows that the range of time elapsed post-conflict is from 5 years to 15 years. This means that these conflicts are in different stages of their post conflict reconstruction period, and this should be accounted for in the model. Côte D'Ivoire and Senegal, which have the lowest conflict intensity, are two of the countries with fewer years elapsed. Burundi, which was in the higher conflict intensity group, only had 6 years lapse, which means that it may be significantly earlier in its post-conflict reconstruction stage than the other conflicts when the survey was conducted. In addition, Ethiopia, Liberia and Sierra Leone have the longest length of time elapsed. Thus, to control for these differences in reconstruction timing within the model, a variable for length within the post conflict period is generated. This variable separates the post conflict countries for being within the first decade after a conflict when the survey is taken compared to those in the second decade. This allows for analysis in Section 6.3 on whether there are significant differences in firm performance between these points of time in post conflict reconstruction. This is because, in the second decade, the immediate impacts of the conflict are finished, and the reconstruction process is further along.

³¹ Since Ethiopia is an outlier for almost all the characteristics (see Table 2 below), I do not include it in the high intensity category as it is unique. This is further discussed below.

³² This is from both many deaths as well as a large portion of the population, particularly those with a higher level of education, fleeing the country.

Thus, issues that influence firm’s ease in doing business, like destroyed roads and skilled civilians forced to stay out of the country, are more likely to be resolved.

As mentioned above, these conflicts are immensely complex, with numerous actors, influences, international intervention, ideologies and politics. However, after analysing the history of the conflict, I was able to determine nine key characteristics for the conflicts that allow for a comprehensive comparison between them. Also, these categories have been chosen because they have a significant influence on the post conflict reconstruction process. This includes characteristics like the use of UN peacekeepers, who often remain for several years after the conflict concludes, the use of child soldiers and violence against civilians, which often causes trauma and long-lasting effects, and issues with neighbouring countries which cause effects due to conflict spill over and poor relations in the post-conflict time period. In addition, the length of the conflict can also determine the amount of infrastructure that was destroyed, and the human capital degradation labelled “forgetting by not doing” (Collier & Duponchel, 2012). These characteristics can help us determine whether I have grounding in grouping these countries in the same post-conflict category. A table with these characteristics presented for each conflict is shown below.

This table shows that the common conflict within this dataset is one that is a civil war³³ over identity and/or ethnicity lasting on average 9 years, with rebel groups that use child soldiers, commits violence against civilians, has been influenced by natural resources and bad neighbours, is country-wide, and where UN peacekeepers have intervened. Through this table, we can see that all the conflicts except Ethiopia, which is discussed below, are variations of this type of conflict. This suggests that these conflicts are all quite similar in characteristics.

Table 2: Key Characteristics for Conflicts

Country	Inter or Intra Conflict	Type of Conflict	Length of Conflict	Use of Child Soldiers	Violence against Civilians	Influence of Natural Resources	UN Peacekeepers	Local/Country-wide Violence	Rebel Groups	Neighbour Issues
Burundi	Intra	Identity/Ethnicity	15 Years	Yes	Yes	No	Yes	Country	Yes	Yes
Chad	Intra	Identity/Ethnicity	5 Years	Yes	Yes	Yes	Yes	Country	Yes	Yes
Côte D'Ivoire	Intra	Identity/Ethnicity	6 Years	Yes	Yes	Yes	Yes	Country	Yes	Yes
Ethiopia	Inter	Land	2 Years	No	Yes	No	Yes	Local	No	Yes
Liberia	Intra	Identity/Ethnicity	12 Years	Yes	Yes	Yes	Yes	Country	Yes	Yes
Senegal	Intra	Identity/Ethnicity	9 Years	No	Yes	Yes	No	Local	Yes	Yes
Sierra Leone	Intra	Identity/Ethnicity	11 Years	Yes	Yes	Yes	Yes	Country	Yes	Yes
Uganda	Intra	Identity/Ethnicity	15 Years	Yes	Yes	No	No	Country	Yes	Yes

³³ This is shown as an intra-country conflict in Table 2.

Uganda, Sierra Leone and Liberia, are three conflicts that are well-known for their mass atrocities in using child soldiers and violence against civilians. In Liberia and Sierra Leone, child soldiers made up of approximately a quarter of the fighters, while in Uganda, they made up approximately 80 percent of the Lord's Resistance Army (UCDP, 2020). However, in Chad, the use of child soldiers was rarer and instead, children were forced into domestic and sex slavery, particularly girls (UNHCR, 2008). This may have a different impact on the peacebuilding process because there is less need for reintegration programs, specifically for children. This has the potential to impact economic recovery because the reintegration for traumatized children is a long-term undertaking, which affects the long-term level of human capital for the market.³⁴ Additionally, in Senegal, the Movement of Democratic Forces of Casamance (MFDC) did not often target civilians, and there were only large civilian casualties in a few intense battles. This is different from the other conflicts that preyed on civilians. Since the worst examples of this are in Liberia and Sierra Leone, a separate variable to control for child soldiers and targeting civilians is not used because these two conflicts are already in the "extra" high intensity variable.

The influence of natural resources is quite different amongst these conflicts. There were some wars that were direct results of fighting over natural resources like Chad over oil and Sierra Leone over diamonds. Although slightly different in conflict ideology because the Movement of Democratic Forces of Casamance (MFDC) were fighting for independence from Senegal, the conflict intensified once oil was found in the Casamance region. Then there are more subtle influences like in Côte D'Ivoire, where the conflict began as the northern Muslim community moved southward to benefit from the cocoa and coffee belt. In addition, you have actors like Charles Taylor, the president of Liberia, who was supporting the Revolutionary United Front in Sierra Leone, to gain influence over the illicit diamond trade (UCDP, 2020). Since there is some variation of natural resource influence within this group of conflicts, and that these countries often suffer from the "resource curse," these conflicts are different and thus, a variable for natural resource influence is introduced in Section 6.3. Access to natural resources can impact the types of businesses that are within the dataset of this paper because many small formal firms depend on working on large projects for multi-national corporations that invest in this sector. However, like in Liberia and Sierra Leone, if there is a negative and violent association with these resources, many MNCs are wary of entering the market.

The intervention of UN peacekeepers occurred in almost all the conflicts, including the Ethiopian-Eritrean border war. Although the number of troops ordered into the country varied, in several cases, the introduction of UN peacekeepers was able to maintain peace and enter the

³⁴ <https://childrenandarmedconflict.un.org/wp-content/uploads/2018/09/Reintegration-brochure-layout.pdf>

post conflict phase. This did not occur in Sierra Leone; however, the entry of British soldiers aided the UN mission to end the war. Uganda did not receive a UN mission, but its neighbours, Sudan and the DRC, had large missions. Since these neighbours were quite heavily involved in the Ugandan conflict, the UN still had some influence on the situation. Senegal also did not have an influence from the UN, but it was a smaller conflict with significantly less targeting of civilians. Overall, the UN was involved in the mass majority of these conflicts and does not need to be controlled for in the model. In addition, the development of a UN peacekeeping economy, where you have an increase of demand for goods and services from the mission's large personnel, occurred primarily in Liberia and Sierra Leone.³⁵ Since these two countries are already categorized as high-intensity conflicts, this is controlled for.

The length of the conflict also varied from two to fifteen years amongst these eight conflicts. However, for many of these conflicts, violence and tension were severe before the conflict officially started and this is not accounted for in the length. For example, Chad's conflict only officially lasted five years, but there was violence, tension and previous wars for a number of decades prior to the civil war. Côte D'Ivoire, with only six years³⁶ of conflict, suffered from political instability since 1990, when a three-decade presidency ended. However, even without including the pre-war violence, these differences in conflict length should be considered as this could potentially change the nature of the post conflict private sector. If a conflict lasts for a long time, this means that you may have a longer educational gap for youth, decreasing skills in the post conflict workforce.³⁷ Thus, the length of conflict is also controlled for in Section 6.3.

Most of these conflicts were influenced by their neighbours. In most cases, rebel groups were financed by or supported by their neighbours. Sudan was involved in numerous wars including Chad and Uganda.³⁸ Liberia's civil wars also spilt over to their neighbours including Sierra Leone and Côte D'Ivoire. In addition, the Casamance independence was supported by Guinea-Bissau who was in their own civil war to fight for independence. Lastly, Burundi's civil war was heavily influenced by the Rwandan genocide, which saw the flood of thousands of refugees into the country. Ethiopia's war was solely based on poor relations with Eritrea. These strained relationships impact post conflict firm performance because it can influence the opportunities for trade. For example, the conflict with Eritrea meant that many Ethiopian businesses were unable to ship their products through Eritrea to reach ports.³⁹ However, since

³⁵ The effects of a peacekeeping economy on firms is discussed in more detail in Chapter 3.

³⁶ Five years from the first civil war and one year from the 2010 election crisis

³⁷ Collier & Duponchel, 2012

³⁸ In the 1990's Sudan financed the LRA's activities

³⁹ UCDP, Ethiopia, <https://ucdp.uu.se>

this characteristic is so common amongst these conflicts, there is no need to control for this within the model.

For the seven countries⁴⁰ who experienced this similar type of conflict, there has also been similar impacts on post conflict recovery. Almost all these seven countries were drained economically and have had trouble in prolonged economic growth. The destruction of infrastructure has been a major issue in post conflict recovery; although, due to the lower intensity of the conflicts in Côte D'Ivoire and Senegal, this is relatively less. These conflicts all forced thousands of people into displacement and caused numerous refugee crises. Except for Senegal, whose conflict was more localized, education programs for children were inconsistent throughout the war, leaving significant human capital gaps throughout. Lastly, many civilians and children suffer from trauma due to the violence and mass atrocities committed throughout the war. Several governments attempted to set up Truth and Reconciliation Commissions like Sierra Leone and Côte D'Ivoire,⁴¹ but many have remained without the formation of reconciliation systems (UCDP, 2020).

As stated above, the Ethiopian-Eritrean war is the outlier within the conflicts used in this paper. This is because it was an inter-state war between two country's governments, that did not conscript children and occurred locally at the border. Although this meant that many civilians in those areas were forced to flee, the rest of the country remained somewhat stable. The war was initiated by Eritrea who believed that there were parts of land that should belong to them after their independence from Ethiopia in 1991. The Ethiopian military did not use child soldiers and the war was characterized as resembling the trenches in World War One (UCDP, 2020). The war only lasted about two years; however, the official peace agreement was not signed until 2018. Thus, Ethiopia's war is significantly different from the other seven conflicts used in this paper. Due to this, I ran the first model without Ethiopia to determine whether these differences significantly influenced the impacts on post conflict firm performance. This is shown in Appendix B and the results clearly show that removing Ethiopia from the post conflict group does not significantly change the results.

A theory to help explain this is that Ethiopia's post conflict impacts are like the other seven countries. Ethiopia did have the influence of UN peacekeepers in the country for several years once the conflict ended. They also spent massive amounts of money to fight, which hindered their economy for many years to come. This severely impacted economic growth opportunities for certain areas of the countries, especially since trade was highly reliant on

⁴⁰ Ethiopia is excluded for the moment and will be discussed below.

⁴¹ Many viewed that the countries that did set up Commissions were not done so in an effective manner

transportation through Eritrea. Thousands of people from the north were forced to flee, causing large amounts of displacement. Lastly, although the conflict was short, it was the highest intensity conflict in this group, which meant that there was still massive damage to both physical and human capital (UCDP, 2020). The only difference that may occur in the post conflict recovery processes is higher levels of trust since the conflict was interstate and non-ethnic based. However, this result is not found in the individual regressions for the post conflict states shown in Appendix C.

It is also important to note that conflict flared up once again in Ethiopia in late-2020. The Tigray War has put to question whether Ethiopia should remain in this data set. However, the WES data was collected in 2015, which is 15 years after the Ethiopian-Eritrean conflict ended and 5 years before the new conflict began. This means that at the time of the WES collection, Ethiopia is clearly categorized as post conflict by the definition set in the introduction of this thesis. It is better to include Ethiopia in the model because the WES surveys a larger number of businesses compared to the other post conflict surveys (see Table 1), providing useful variation and robustness for the models.

Thus, this section has shown that although conflicts are profoundly complex, the eight conflicts that are included in this paper share many key characteristics and post conflict impacts. This means that we can group these eight countries into a post-conflict category for the quantitative analysis of this paper. However, some of the differences in this group of conflicts shown in this section, including the influence of natural resources, “extra” high intensity, length of the conflict and how far along the country is in reconstruction, are introduced as conflict characteristic variables in Section 6.3.

Section 4.0: Quantitative Methodology

This paper attempts to determine if there are specific differences in how firm resources and their conduct influence performance in post conflict Africa. As noted, this is a relatively under-researched area, but existing literature presented in Section 2.2 has shown that factors like finance, foreign ownership, business networks, institutional strength and employment training may be significant. The quantitative model explained in this section, uses proxies to analyse these different factors. To measure firm performance, which is the dependent variable, this paper uses three-year employment growth. Although this is an incomplete proxy⁴² due to the data limitations, employment growth is the most viable. More explanation on this and the use of employment growth as the outcome variable is discussed in Section 5.1. The four main firm

⁴² Sales growth, output per worker, profitability, return on equity or return on assets are more ideal proxies.

resources that are the primary explanatory variables for firm performance which are represented in the past literature and have available proxies in the WES data are: access to finance, employee training, foreign ownership, and business networks⁴³ (Section 5.1 and 5.5 provide description and critique). The regression also includes firm size and sector dummy variables as well as a group of firm characteristics, which includes the manager's experience, if they export, the age of the firm, and whether they are located in a rural or urban setting. Lastly, it was noted in the literature review that institutions may impact firm performance in these settings and thus, I include a variable for corruption prevalence and the time a manager spends dealing with regulations. Further detail on these variables is described in Section 5.1.

Given the paucity of data in general and the specific limitations of the WES data (see Section 5.5), this analysis is necessarily exploratory and provides information on significant relationships. As will be discussed, it is difficult to establish causal effects from the data-

Two approaches to specifying regression models are deployed. The first model runs two separate regressions: one for firms in post conflict areas and one for firms in non-post conflict countries. The second approach uses one regression where key variables are first interacted with a post-conflict dummy and then with post-conflict and sector or conflict characteristic dummy variables. The WES data do not have a panel structure. There are 27 countries within the dataset, with a different number of firms surveyed within each country. Thus, the data are pooled, and we include country fixed effects in order to control for between country variances. This not only controls between country differences for economic growth but also conflict and institutional strength variance.⁴⁴

The general equation for the first model is the following:

$$(1) \text{EmpGrowth}_{ij} = c + \beta_1 \text{Finance}_{ij} + \beta_2 \text{Training}_{ij} + \beta_3 \text{ForeignOwnership}_{ij} + \beta_4 \text{Networks}_{ij} + \beta_5 \text{FirmCharacteristics}_{ij} + \beta_6 \text{FirmSize}_{ij} + \beta_7 \text{Sector}_{ij} + \beta_8 \text{Institutions}_{ij} + \beta_9 \text{CountryFEeffects}_j + e_{ij}$$

The j subscripts shown in Equation (1) represents the individual country and i subscripts represent each individual firm. The data from the surveys for each country were also collected within different years, which needs to be controlled for. However, no country in this sample was surveyed in two different years. Thus, the country fixed effect picks up both the standard time-

⁴³ The networks dummy variable is highly related to the dummy variable for access to credit, simply because it is a form of credit as the proxy for networks used is whether the firm uses supplier or consumer credit. This means that if the supplier credit variable is equal to one, the access to credit dummy variable also has to be equal to one. Thus, if the equation includes the two variables: 1Credit+ 2Networks, this means that 1 represents the impact of credit that is **not** from suppliers, 2 represents the marginal impact of credit from suppliers and 1+2 is the total impact of access to credit from suppliers on employment growth.

⁴⁴ There can be differences caused from local institutions. However, the institutions that are often the most impactful to a firm including business registration, courts, taxes and tariffs are often directed by the federal level.

invariant country characteristics but in addition, absorbs any global differences arising from variations in the sample year. Equation (1) is estimated separately for the group of eight countries that are defined as post conflict in Section 3.1 and then for the group of nineteen countries that are defined as non-post conflict. These regressions simply explore some basic differences in the factors of firm performance between the two groups that allow us to better interpret the overall results.

The next step is to combine the post conflict firms with the others. To differentiate the impact of our factors of interest within post conflict states, a dummy variable is introduced. This post conflict dummy variable is equal to one when the country has been defined as post conflict above. This means I interact the four main variables of interest with the post-conflict dummy to determine whether there is a variation on the effect from these factors on the performance of firms in post conflict countries. Thus, the model for Section 6.2 is Equation (2) below:

$$(2) \text{EmpGrowth}_{ij} = c + \beta_1 \text{Finance}_{ij} + \beta_2 \text{Finance} * PC_j + \beta_3 \text{Training}_{ij} + \beta_4 \text{Training}_{ij} * PC_j + \beta_5 \text{ForeignOwnership}_{ij} + \beta_6 \text{ForeignOwnership}_{ij} * PC_j + \beta_7 \text{Networks}_{ij} + \beta_8 \text{Networks} * PC + \beta_9 \text{Controls}_{ij} + \beta_{10} \text{CountryFEffects}_j + e_{ij}$$

In this specification, the marginal effect of access to finance on firm performance is allowed to differ between post-conflict and non-post-conflict countries, with the effect in the latter measured by β_1 , whereas in post-conflict countries the marginal effect is:

$$(3) \frac{\partial \text{EmpGrowth}}{\partial \text{Finance}} \Big|_{PC=1} = \beta_1 + \beta_2$$

where β_2 is the differential effect of access to finance in post conflict firms and $\beta_1 + \beta_2$ is the total effect on post conflict firms. The same interpretations of β follow for training, foreign ownership and networks.

The next step of analysis introduces interactions that provide further knowledge into the effects that conflict characteristics and sectors have on post conflict firm performance. In Section 6.3, the model uses dummy variables created for the four different conflict characteristics derived in Section 3.2, which include an influence of natural resources on the conflict⁴⁵, “extra” high intensity conflict⁴⁶, long-lasting conflict⁴⁷, and a long post-conflict timeframe⁴⁸. I run four separate regressions that only include the interactions with one variable

⁴⁵ This includes Chad (oil), Côte D’Ivoire (cocoa and coffee belt), Liberia (timber and diamonds), Sierra Leone (diamonds) and Senegal (oil)

⁴⁶ This includes Sierra Leone and Liberia who had extremely high total deaths, deaths by population and deaths by population per annum of conflict, representing an “extra” high-intensity conflict

⁴⁷ This dummy variable includes conflicts that were 10 years or longer, which includes: Burundi, Liberia, Sierra Leone and Uganda

⁴⁸ This dummy variable includes conflicts that were out of conflict for ten years or longer when the WBES survey was conducted, which includes: Chad, Ethiopia, Liberia and Sierra Leone.

of interest.⁴⁹ While in principle one could specify a general model with the full range of potential interactions, the multiplication of parameters makes inference extremely difficult. I therefore adopt an alternative approach in which I explore the conflict characteristic one at a time with each variable of interest. Clearly this alternative may mean that certain complex interactions are missed but preliminary analysis suggest that it does identify the key channels of possible influence on firm performance. An example for the model which provides a relationship for the main variable access to finance and the conflict being influenced by natural resources is shown below as Equation (4):

$$(4) \text{EmpGrowth}_{ij} = c + \beta_1 \text{Finance}_{ij} + \beta_2 \text{Finance}_{ij} * PC_j + \beta_3 \text{Finance}_{ij} * PC_j * \text{NaturalResources}_j + \beta_4 \text{Man}_{ij} + \beta_5 \text{Training}_{ij} + \beta_6 \text{ForeignOwnership}_{ij} + \beta_7 \text{Networks}_{ij} + \beta_8 \text{Controls}_{ij} + \beta_9 \text{CountryFEffects}_j + e_{ij}$$

Thus, the coefficients of Equation (4) can be interrupted as the following:

$$(5) \left. \frac{\partial \text{EmpGrowth}}{\partial \text{Finance}} \right|_{PC=1, \text{NaturalRes}=1} = \beta_1 + \beta_2 + \beta_3$$

$$(6) \left. \frac{\partial \text{EmpGrowth}}{\partial \text{Finance}} \right|_{PC=1, \text{NaturalRes}=0} = \beta_1 + \beta_2$$

$$(7) \left. \frac{\partial \text{EmpGrowth}}{\partial \text{Finance}} \right|_{PC=0, \text{NaturalRes}=0} = \beta_1$$

This provides us information on firms who have experienced different types of conflicts and the relationship they have with resources. Each of the above equations show the relationship between access to finance on the firms in different political contexts: Equation (5) is for post conflict firm where the county's conflict was influenced by natural resources, Equation (6) is for post conflict firms where the conflict was not influenced by natural resources, and Equation (7) is for all non-post conflict firms. This model is then run for each of the four firm resources of interests with each of the four different conflict characteristics.

In Section 6.4, the model focuses on sectoral differences within this framework. As there are disparities between the resources required for manufacturing⁵⁰ and service⁵¹ firms, shown in the data analysis below, it is important to also determine whether conduct is varied amongst these two general sectors. This regression is like Equation (4) but because non-post conflict firms are also divided by sector, this needs to be accounted for. Thus, the regression for access to finance with controlling for manufacturing is below:

$$(8) \text{EmpGrowth}_{ij} = c + \beta_1 \text{Finance}_{ij} + \beta_2 \text{Finance}_{ij} * PC_j + \beta_3 \text{Finance}_{ij} * \text{Man}_j + \beta_4 \text{Finance}_{ij} * PC_j * \text{Man}_{ij} + \beta_5 \text{Man}_{ij} + \beta_6 \text{Training}_{ij} + \beta_7 \text{ForeignOwnership}_{ij} + \beta_8 \text{SupplierCredit}_{ij} + \beta_9 \text{Controls}_{ij} + \beta_{10} \text{CountryFEffects}_j + e_{ij}$$

⁴⁹ The four variables of interest are: access to finance, employee training, foreign ownership and networks.

⁵⁰ Often capital-intensive firms

⁵¹ Often labour-intensive firms

In Equation (8), the sector that is included as a dummy variable is manufacturing, with the default category being services. However, when we interpret the coefficients of this regression, we can determine the impacts of finance on all types of firms. The following four equations differentiate the regression to show how the results are interpreted.

$$(9) \frac{\partial EmpGrowth}{\partial Finance} \Big|_{PC=1, Man=1} = \beta_1 + \beta_2 + \beta_3 + \beta_4$$

$$(10) \frac{\partial EmpGrowth}{\partial Finance} \Big|_{PC=1, Man=0} = \beta_1 + \beta_2$$

$$(11) \frac{\partial EmpGrowth}{\partial Finance} \Big|_{PC=0, Man=1} = \beta_1 + \beta_3$$

$$(12) \frac{\partial EmpGrowth}{\partial Finance} \Big|_{PC=0, Man=0} = \beta_1$$

Each of the equations above show the relationship between access to finance on the following different types of firms: Equation (9) is for post-conflict manufacturing firms, Equation (10) is for post-conflict service firms, Equation (11) is for non-post conflict manufacturing firms and Equation (12) is for non-post conflict service firms. The exact same model and interpretations are used for the other three regressions on training, foreign ownership and business networks.

The results of these numerous models are presented throughout Section 6. Next, this paper provides preliminary analysis on the available enterprise data and includes a discussion on the numerous limitations that need to be considered (Section 5.5).

Section 5.0: Exploring the WES Data

Section 5 provides a thorough overview of the data that is used in this paper. The first section explains the World Enterprise Surveys, the collection methods, and the data from each firm. The second component provides a summary of these data points divided into the two political environments: post conflict and non-post conflict. Section 5.3 stipulates an analysis on sectors by type of country, since the resources required for firms in different sectors is important. In addition, Section 5.4 presents preliminary analysis on the four key firm resources focused on in this chapter and simple correlations. Lastly, Section 5.5 discusses the quality of the WES data and the components of post conflict markets that are excluded from it.

Section 5.1: Understanding the World Bank's Enterprise Surveys (WES)

The World Enterprise Surveys are conducted by the World Bank to better understand the private sector in different countries. The data collected for this survey is from the firm-level and the enumerators speak directly to either the owner or a top manager of the firm. These firms are formally registered, which causes some issues with the data (discussed in Section 5.5). The survey conducts an overview of numerous different aspects of business in the country including

topics regarding performance, available resources and barriers to growth. The survey defines a firm as one that is formally registered, has over 5 employees and is profit-seeking.

These surveys are conducted across the globe; however, this paper only analyses the firms operating in Africa. It is also important to note that the structure and questions of the WES substantially changed in 2012. Consequently, to ensure that surveys are comparable across different countries, it is preferential to only use surveys collected in 2013 and after. With these three restrictions in place – African markets, survey data collected post-2012 and not in an active conflict – there are 28 country datasets⁵² compiled from the WES.

In some countries, the survey has been repeated in different years.⁵³ However, there is no panel data available as different firms are surveyed each year, which means that the data is lacking a baseline to conduct timed-panel data analysis. This severely limits the analysis of the data and makes it difficult to determine the impacts of treatment interventions on firms.⁵⁴ The World Bank uses a set of methods to ensure quality data collection.⁵⁵ The sampling of these surveys is also thoroughly explained by the World Bank.⁵⁶ They survey a different number of firms depending on the size of the country's economy: 1500 firms in large economies, 360 for medium-sized economies and 150 for small-sized economies. Within these, they select both manufacturing and service firms to speak with. They also ensure they sample a variety of sized firms; however, the “Enterprise Surveys oversample large firms since larger firms tend to be the engines of job creation” (World Bank, 2019). This does put into question the quality of small firm data and its variation. They also try to properly sample in regard to geography within the country and these “are selected based on which cities/regions collectively contain the major economic activity” (World Bank, 2018). The consequence of this is that regions that struggle economically are not sampled, which does lower the quality of the data as it excludes poorer areas. With these sampling techniques in mind, firms are then randomly selected to participate in the surveys.

⁵² A full list of the countries that are included in the compiled dataset is shown in Section 3.1.

⁵³ Kenya has two sets of data since 2013. Only one set of data, the most recent data, is included in this paper.

⁵⁴ For future research, the World Bank has stated that “obtaining panel data, i.e. interviews with the same firms across multiple years, is a priority in current Enterprise Surveys” (World Bank, 2019). Thus, this issue may be mitigated for improved analysis and modelling.

⁵⁵ There is a private company in each country that conducts the survey. This ensures that there is no government/local organisation affiliation with the survey, which may influence false answers by survey participants. The World Bank also ensures personal confidentiality to ensure the safety of survey participants.

⁵⁶ See <https://www.enterprisesurveys.org/en/methodology> for more information

Table 3: Variables with Final Data Manipulations and Proxy Explanation

Category	Proxy For	Variable	Type of Variable ⁵⁷
Dependant	Firm Performance	3 Year Employment Growth	Percent
Resources of Interest	Access to Finance ⁵⁸	Does the firm use any external finance for fixed assets and/or working capital?	Dummy
	Human Capital/Training	Has the firm conducted employee training in the past year?	Dummy
	Foreign Investment	Is there any foreign ownership in the firm?	Dummy
	Business Networks	Does the firm use any supplier and/or consumer credit?	Dummy
Firm Characteristics	Firm Sector	Food Manufacturing, IT, Transportation, Hospitality & Retail ⁵⁹	Multiple Dummies
	Human Capital/Networks	Years of Managerial Experience	Number
	Firm Age	Firm Age	Years
	Urban vs. Rural	Operating in Large City over 1 million?	Dummy
	Exporter	Does the firm export at all?	Dummy
	Firm Size	Small, Medium and Large ⁶⁰	Multiple Dummies
Institutional Factors	Corruption	Has an informal gift/payment been asked of you when dealing with the authorities?	Index ⁶¹
	Regulations	Percent of managers time spent on regulations	Percent

The post-2012 surveys contain numerous questions to understand different aspects of the firm. The exact questions from the WES explored in this paper are shown in Appendix K. Much of the data that is collected through these questions is combined and manipulated, i.e. turned into dummy variables, to be used in the model. Table 3 shows how the WES data is used as a proxy in the models presented in Section 4. The resources of interest are the main components of conduct derived from the existing literature that effect firm growth. Firm characteristics are still important for firm growth; however, these are much more difficult to

⁵⁷ The dummy variables created are consistent where when it equals 1, the answer is YES to the question and when it equals 0, the answer is NO to the question posed.

⁵⁸ A dummy variable is then created to determine whether that company uses external finance for at least 5 percent of overall spending, which is merely the average percent of credit used for fixed assets and working capital. The reason for using 5 percent or higher is simply because firms who only have access to credit for 5 percent of their spending are still heavily credit constrained. Thus, the dummy variable would be somewhat misrepresented by stating a firm has access to credit, when in reality, the amount of credit they have received is very limited. There are some issues with using this as an access to credit as some firms may have access but were not using it. This is further discussed in Section 5.5.

⁵⁹ These are included in the regression because they have significant differences in performance within the data. All other sectors are included in the constant.

⁶⁰ The definition that the World Bank uses for the Enterprise Surveys is that small firms are less than 20 employees, medium are 20 to 99 employees and large are 100 and above.

⁶¹ The index for corruption is created from zero to four. The WES provides data on whether firms are asked to provide 'gifts' when applying for permits or dealing with the government. This index has been created by compiling those five questions throughout the survey. The index is from zero, which means that the company is never asked to provide gifts to officials, to four, which means they are always asked to provide.

change. Institutional factors are comprised of structural factors that may influence firm performance that there is data available for.

As mentioned in Section 4, the greatest empirical challenge is to develop useful proxies for firm performance. One of the first issues with finding a good proxy is that the data is not panel, which means I cannot measure changes in outcomes over time. However, the WES data does include questions on sales and number of employees from three years ago (Table K.1). Using this data, I compute a three-year growth rate for both. However, it is important to note that these variables are self-reported, which means there is a high probability of measurement errors and bias from business owners. I believe that these human errors and biases are higher in the reported sales compared to the reported number of employees because the latter may be easier to recall.

In the data, the average sales growth is extremely large with a high level of variance across countries. Many of the economies within this dataset are undergoing high inflation and the data mixes these with different nominal growth rates. Also, many of the countries have unreliable exchange rates, and the surveys are inconsistent with currency. Thus, sales growth is inconsistent. Three-year employment growth tends to show more realistic and usable numbers (see Table 4). Krasniqi and Branch (2018) agree as they also use employment growth for their dependent variable and state that “employment figures are less likely to be under-reported [than sales]. Additionally, employment figures are easier to remember by the entrepreneur, and are also uncontaminated by price changes” (Krasniqi and Branch, 2018: 7). One of the other reasons for using employment growth instead of sales growth is that it may help further control for in-country shocks. Appendix D provides an example of this from Liberia, where the reporting of employees during Ebola did not fall as greatly as sales as many businesses tried to keep some workers throughout the crisis.

Although, as stated previously, employment growth is a better proxy for firm performance compared to sales growth, there are still issues present. The first is the presence of significant outliers. Figure 4 shows a boxplot with employment growth for the data sample. This figure shows that there are some extreme outliers on the top of the sample, who have experienced very strong growth. There are no significant outliers on the bottom.⁶² The outliers are within the non-post conflict contexts. When analysing the firms that are within this sample above 1000 percent employment growth, 48 percent of them are firms operating in Tanzania. This suggests that there could be some measurement errors present within the data from Tanzania and this should be considered. Further, it is also common for a large portion of these

⁶² Firms that have experienced negative growth

outliers to have had one or two employees in their baseline employment levels and above 25 employees in the present employment levels.⁶³ In these scenarios, it may be the case that a firm had not been fully up and running three years ago, the owner was not fully committed to it full-time, it was not a formally registered firm yet, or the business substantially changed in strategy, aim, etc. This is the case for over a quarter of the firms that are in these outliers.

Figure 4: Boxplot for Employment Growth⁶⁴
Full Dataset

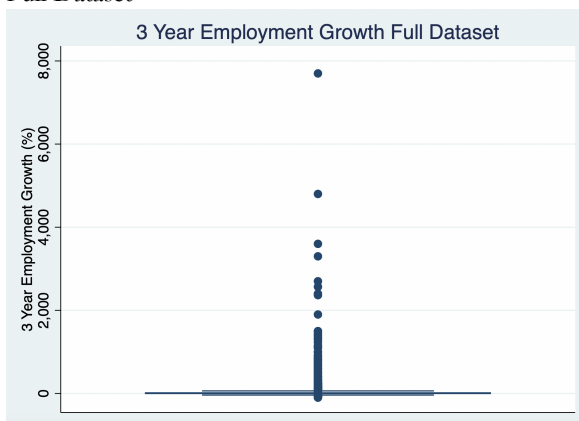


Figure 5: Boxplot for Employment Growth
99.9 Percent Winsorized



Figure 6: Boxplot for Employment Growth
99 Percent Winsorized



To help mitigate these problems, I use the winsorize technique on the employment growth rates. Winsorizing data is a transformation of the data that cuts off the data values at a specific percent from either one or both of the distribution tails. The values that are past these cut-off points are transformed to a new value of where the cut-off point is. For this data, I winsorized the data from the top level at both 99.9 percent and 99 percent.⁶⁵ The results of these transformations are seen in Figure 5 and 6 respectively. The cut off for employment growth using the 99.9 percent is 1500 percent and is 400 percent at the 99 percent level. The 99 percent winsorized level transforms the extreme outliers described above, approximately 108 firms,

⁶³ Businesses that did not exist 3 years ago are taken out of this sample as they cannot have zero employees to start with in the growth calculation.

⁶⁴ Note that this is not annualised growth. These are three-year growth rates.

⁶⁵ The bottom level remains at 0, meaning that no data transformation occurred.

without altering the data significantly. Appendix F shows the results for the first model explained in Section 4, for each of the three levels of winsorizing: full dataset, 99.9 percent level and 99 percent level. There are no significant differences between the results from the 99.9 percent level and 99 percent level.⁶⁶ Thus, the rest of this paper uses the employment growth data that is winsorized at 99 percent because it controls for these extreme outliers, with confidence that these 108 outliers do not change the overall estimation of the relationships within the regression.

Section 5.2: Summary Data Analysis for Post Conflict and Non-Post Conflict Firms

Now that the countries and firms have been properly categorized and the variables explained, some preliminary data analysis is conducted. I first analyse the differences in the summary statistics from post conflict and non-post conflict firms. The averages and medians of each variable is shown in Table 4 below. Table 4 shows clear differences in access to resources between firms operating in post conflict and non-post conflict areas. All types of access to finance are lower in post conflict environments. In addition, use of supplier and consumer credit, which is the proxy used for business networks, is low in both contexts but significantly lower for post conflict firms. This suggests fewer networks and less trust within the business community in these markets. Further, 6 percent more firms in non-post conflict settings do employee training. In general, few firms are exporters, but almost 4 percent more firms export in non-post conflict environments. Similarly, 15 percent of the firms surveyed in post conflict settings have any foreign investors, compared to 17 percent in non-post conflict areas. The time that a manager spends on navigating regulation is two percentage points higher in non-post conflict firms, which is opposite to what might be expected. One hypothesis is that institutions are weaker in post conflict areas and firms don't need to spend as much time on them. Finally, corruption is experienced more frequently by post conflict firms. These indicators show an overall worse environment for post conflict businesses but not substantially so.

However, while looking at firm performance, the summary statistics are somewhat unclear. On average, employment growth is lower in post conflict contexts. By both average and median, Table 4 shows that non-post conflict firms have higher employment levels than post conflict. However, the median for firm performance is similar for both post conflict and non-post conflict at zero growth. This means that whether firms in either context experience significant growth within the three-year timeframe remains ambiguous. Figure 7 plots the average employment growth for firms in each country in the sample by the political context to provide further analysis on firm performance. In non-post conflict countries, firm growth is

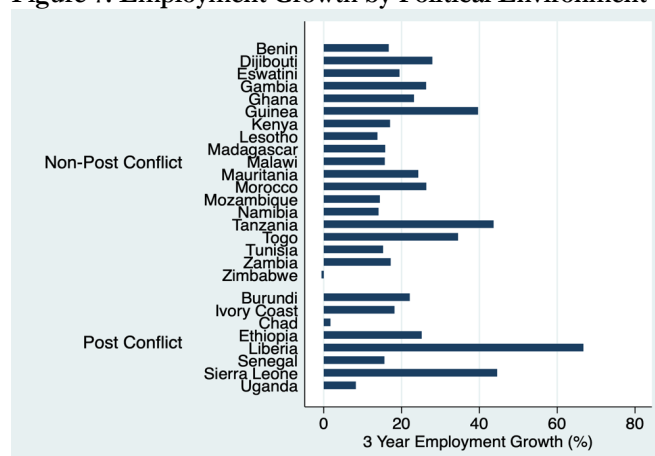
⁶⁶ The explanation for why this is the case is presented in Appendix E.

relatively analogous, except for Zimbabwe. The WES in Zimbabwe was conducted in 2016, when the country was amid a financial crisis and falling growth, which helps explain the negative firm growth. Average firm growth in the post conflict samples have a higher degree of variation.⁶⁷ There are two post-conflict countries, Liberia and Sierra Leone, that are outliers as they show strong employment growth levels above all other countries. However, the three-year time period began during the Ebola crisis, where many firms were either not operating or at lower capacities. This means these two data points are somewhat skewed as the growth may be overstated.⁶⁸ Overall, the analysis at the country-level for firm performance does not show significant differences between these two political environments.

Table 4: Summary Statistics by Political Environment

Dependent Variable	Variable	Post Conflict		Non-Post Conflict	
		Averages	Medians	Averages	Medians
Number of Employees	Number of Employees	57.469	12	62.575	15
	Number of Employees 3 Years Ago	51.784	11	56.892	15
	3 Year Employment Growth (%)	20.26	0	26.49	0
Variables of Interest	Foreign Ownership?	0.149	0	0.171	0
	Has there been Employee Training in the Past Year? (%)	0.253	0	0.307	0
	Do you use supplier or consumer networks for credit? (Networks)	0.063	0	0.107	0
	Credit used for Working Assets (%)	18.272	0	22.403	0
	Credit used for Fixed Assets (%)	4.945	0	8.920	0
Firm Characteristics	Years of Manager Experience in Sector	16.273	15	16.541	15
	Number of years in operation?	15.785	13	18.329	14
	Does the firm export?	3.841	0	7.405	0
	Are operations in a large city (>1 million people)	0.614	1	0.520	1
	Time a Manager Spends on Regulations (%)	8.951	1	10.947	1
	Corruption Index (0 to 4)	0.267	0	0.178	0

Figure 7: Employment Growth by Political Environment



⁶⁷ In the model, these growth differences are captured through the country fixed effects.

⁶⁸ For more information on this, see Appendix D.

Section 5.3: Sector Analysis by Post Conflict Environments

An important component of this analysis is the differences in firm performance and access to resources by sector. This is because it is common for sectors to require different resources for their growth. For example, manufacturing is often capital-intensive, so access to finance to purchase machinery may be more critical for success. On the other-hand, services are often more labour-intensive and thus, could require more training to develop higher skills. This section provides further insight into the differences in the manufacturing and services sectors that are present within the dataset. In addition, it delves into analysis on the five more detailed sectors - food manufacturing, hospitality, transportation, IT and retail – that are differentiated from the others. These five sectors were chosen through a regression analysis that showed these five sectors had statistically significant relationships with firm performance than all others in both contexts.

In non-post conflict firms, there are approximately the same percentage of manufacturing and service firms. However, there are approximately 7.5 percent more service firms in post conflict markets. Due to the capital-intensive nature of manufacturing, this difference may be caused by the lower access to finance seen in post conflict countries shown in Table 4. Nonetheless, Figure 8 shows that there is higher employment in the manufacturing sector in all African markets,⁶⁹ and this share is approximately 4 percent higher in non-post conflict markets. Although this seems substantial, it is important to note that these are all formal firms and that a substantial portion of informal employment is not included here. If it were to be included, I would expect to see a higher percent of employment in services since there is a high level of self-employment in that sector.

Figure 8: Average Sector Employment Market

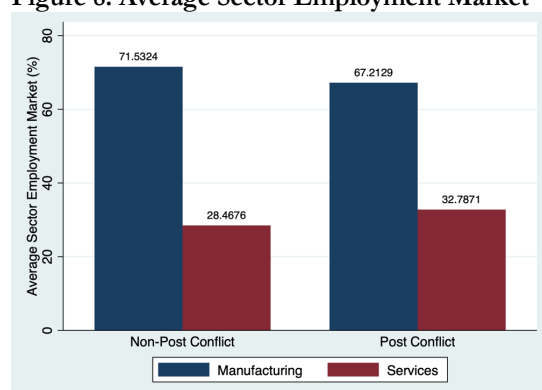
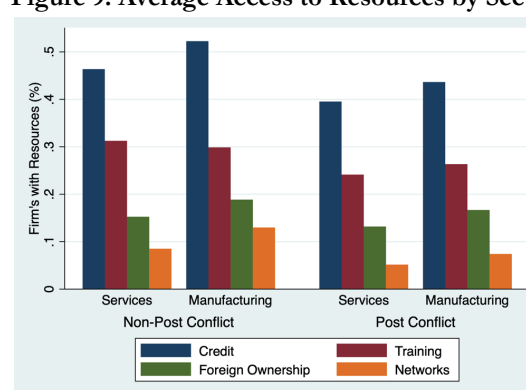


Figure 9: Average Access to Resources by Sector



The data can determine which sectors, by post conflict environment, have access to the four main resources this paper analyses, which is shown in Figure 9. There is a pattern across all

⁶⁹ This is logical, since manufacturing firms require more capital and often buildings, in order to operate. To receive these resources, these firms will more likely have to formalize. In addition, the WES data is slightly skewed to include more manufacturers.

firms shown in this figure, which is that access to finance is the most common resource, training is the second most, foreign ownership is the third and business networks is the least. However, there is variation amongst these groups. Non-post conflict manufacturing has the highest access to finance, prevalence of foreign ownership and use of business networks. This means that overall, they have the largest access to capital and overall resources. Non-post conflict services conduct firm training more than all others. Overall, it is evident that non-post conflict firms have an overall higher access to key resources, and this is particularly true for manufacturing firms.

Figure 10: Number of Employees by Sector

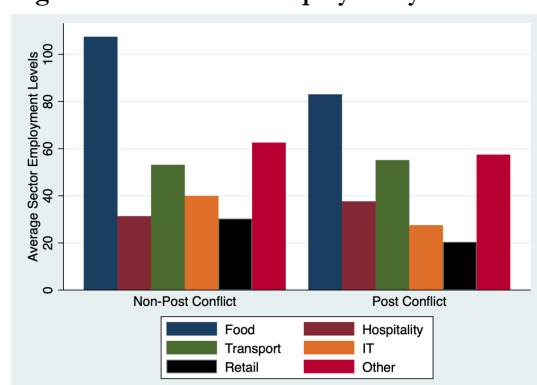
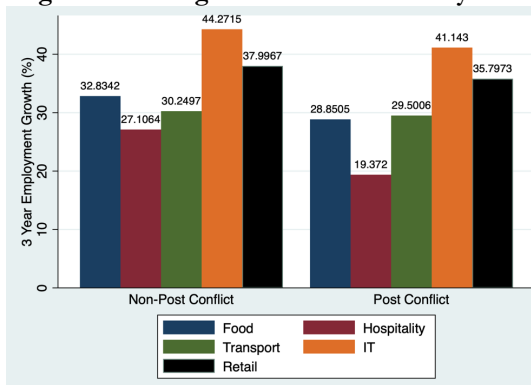


Figure 11: Average Firm Performance by Sector



Within the services and manufacturing groups, there are specific sectors that have significantly distinctive firm performance. Four sectors - food manufacturing, transport, IT and retail - have significantly higher employment growth than the average firm⁷⁰ in those contexts. Hospitality is differentiated because it is a lower growth than the average firm. In Figure 11, the average employment growths are shown for each of these sectors. It is evident that IT is the sector with the strongest growth in both contexts. However, Figure 10 shows that IT has a lower average employment per company and there are far fewer IT firms in the dataset. This means that even though the IT sector shows high growth, it has a small influence in the overall market. There is a 10 percent divide in employment growth between the two contexts for the hospitality sector. This division is logical because there are far fewer tourists in politically unstable and possibly violent areas. The food manufacturing sector⁷¹ shows a four percent difference in average growth between the two types of markets. In addition, the average number of employees for the food sector is substantially higher in non-post conflict markets. This indicates that there may be a significant divide in the structure of the food sector between these two contexts

⁷⁰ Average three-year employment growth for post conflict firms is 20% and 26% for non-post conflict firms.

⁷¹ The ISIC code that is associated with this sectoral grouping includes all food and beverage manufacturing. Thus, some very large businesses can be within this grouping including large grain mills and breweries. This sector does not include any form of agriculture, so farmers are not represented in this sector. It is also important the note that the Enterprise Surveys do not often survey farms in general. This means that the surveys do not provide much/any insight into businesses in agriculture.

(explored in Section 6.4). Lastly, the retail sector shows high employment growth in both contexts, but Figure 10 shows that on average, retail firms employ much fewer workers.

Section 5.4: Preliminary Analysis of the Four Key Firm Resources

As stated above, I used the previous literature and available data through the WES to derive the four key resources that may influence firm performance in post conflict Africa. These include access to finance, employee training, foreign ownership and business networks. Prior to presenting the results of the models, I provide simple correlations at the country level for each of these resources (Figures in Appendix L).

Figure L.1 provides the average country-level correlations for a firm's access to finance and three-year employment growth. It is evident that post conflict countries have less access to finance overall and access to finance's relationship with firm performance for post conflict countries is negative. However, this is primarily driven by two outliers, Sierra Leone and Liberia, whose surveys were impacted by the Ebola Crisis (see Appendix D). On the other hand, the non-post conflict correlation is positive and there is a greater variation of average access to finance across these countries. Thus, Figure L.1 suggests that access to finance may have a positive relationship with firm performance in non-post conflict African firms but provides little insight for post conflict firms.

The access to finance dummy variable is generated by combining a firm's working capital and fixed assets sources of financing.⁷² Hence, the WES data provides in-depth detail on how firms in both political contexts are financing their business, which is analysed here. Figure 12 and 13 show the average division of how a firm is financing their working capital and fixed assets, respectfully. Figure 12 shows that on average post conflict firms use less finance from external entities for their working capital. This shows that post conflict firms are more reliant on their internal funds for their working capital. Figure 13 also shows that post conflict firms use more internal funds for their fixed assets than non-post conflict firms. The percent of fixed assets financed by banks and family and/or friends is significantly higher for non-post conflict firms. This substantial portion, almost 20 percent, of fixed assets financed by family and/or friends in non-post conflict firms, suggests that business networks may be stronger in these markets. Further, Figure 13 suggests that it may be more difficult for post conflict firms to make investments in fixed assets, as this must be done primarily through internal sources.

The second key resource examined in this paper is employee training and its correlation to firm performance is shown in Figure L.2. This figure shows that at the country-level, there is

⁷² See footnote 35 for full explanation.

less of a difference between the use of this resource in both contexts at the country level. The two countries with the least average use of employee training, Ethiopia and Senegal, are post conflict. Further, the correlation between the use of employee training and firm growth is positive for non-post conflict firms and negative for post conflict firms. However, the line of best fits is not significantly different from zero for either group.

Figure 12: Average Working Capital Financing

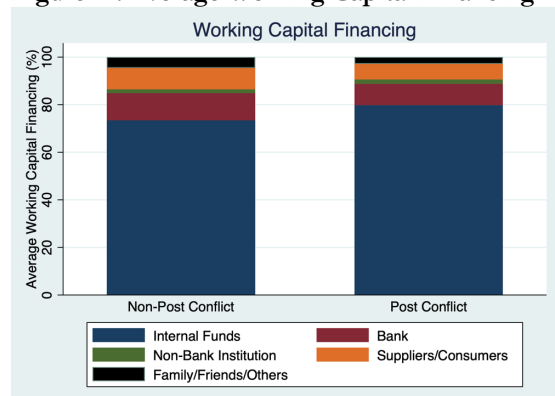
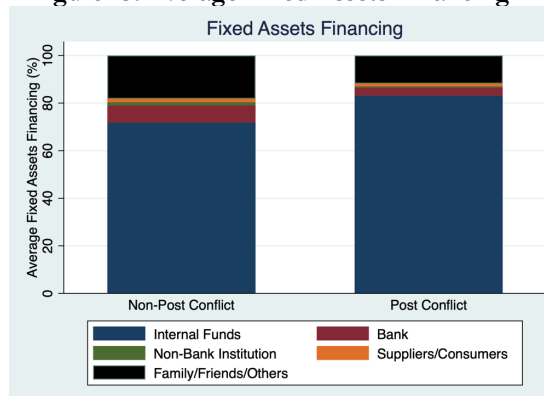


Figure 13: Average Fixed Assets Financing



Another form of finance that firms have access to is foreign investment. Foreign ownership within firms is low in both contexts, which is shown in Table 5. This lack of foreign interest in the African private sector, and particularly in post conflict environments, is most likely due to the high-risk environment, poor knowledge of a complex system and a lack of companies that are investment ready (discussed further in Chapter 3). The foreign ownership dummy variable tells us whether there is any foreign ownership in the firm but not the percent of ownership that the foreigners have. When conducting this analysis, in both contexts, it is most common for a firm with foreign investment to be entirely foreign owned. However, it is a slightly more common in non-post conflict than post conflict firms to have a partnership where the foreigner only owns 50 percent of the company. In both post conflict and non-post conflict environments, foreigners more often invest in manufacturing firms and not service firms. Figure L.3 shows a strong positive relationship for foreign ownership on firm performance in post conflict firms. Once again, this is most likely driven by Liberia who has a large foreign ownership in firms,⁷³ and potentially skewed growth rates due to the Ebola crisis. The correlation for this resource on firm performance in non-post conflict countries is negative.

Lastly, Figure L.4 plots the correlation between the use of suppliers and/or consumers for financing, which is a proxy for networks, and firm performance. This figure shows that overall, there is more use of network financing in non-post conflict firms. The country-level correlation for this resource and non-post conflict firm performance is slightly positive, while the

⁷³ This phenomenon is described in detail in the Liberian case study in Chapter 3, while discussing the Lebanese dominant merchant group.

correlation for post conflict firms is negative. This negative correlation may be caused due to the nature of the proxy, which is that firms use network financing as acts of desperation and not because they have built strong networks (this issue is discussed below in Section 5.5).

Therefore, after a preliminary analysis of the data, this section shows potential distinctions in the private sector environment, firm performance and access to resources between post conflict and non-post conflict states. This means that although there are many similarities within the structure and conduct of African firms, the influence that resources have on post conflict firms may be relatively unique. A more in-depth and sophisticated analysis of the differences is provided from the results of the models in Section 6.

Section 5.5: Discussion on Missing Firms and Data Quality

There are several challenges with the regression models presented in the next section. The majority are due to data limitations, which cannot be solved at present. This means that when interpreting the results, one must remain cautious and remember that the results present significant relationships and not causation. It is also crucial to consider that the proxies used for the key resources may not be perfect representations. Lastly, there are many firms and economic influences to post conflict reconstruction that are missing from this data due to its inherent structure.

One of the issues with the data is that the variables of interest (access to finance, employee training, foreign ownership, and business networks) are most likely endogenous. This is because there are many other factors that influence each of these variables for firms. It may even be the case that these four variables impact one another. For example, foreign ownership in a firm most likely increases the firm's access to finance.⁷⁴ There could also be other variables that impact each of these four variables for firms that we do not have any data for. For example, Chapter 3 shows that business networks in Liberia are much stronger when you have large family networks in the local area. The WES does not have any data on family networks within the dataset. If I had data for these additional variables, I could use them to instrument for the four main variables in a two-staged least squares model, and find causal relationships. However, the WES datasets are limited, and I do not have access to variables that could be instruments for the four variables of interest.

Although I am including the best successes in businesses within our sample, it is important to note that the data possesses an innate selection bias against the poorest performing

⁷⁴ See Chapter 3, Section 4 to see that foreign or re-pat owned SMEs are more able to find financing in Liberia compared to purely domestic firms.

firms. Since the survey takes place at one time and simply asks the firm owner to recall their employment levels three years ago, any firms that have shut down within that time frame are not included in this dataset. This means that the model and data naturally have an upside bias to the better performing firms. Further, there is a specific “survivor bias” for post conflict states as well. This is because the firms interviewed are ones that began either after the conflict or were resilient throughout the conflict and does not include the many firms shut down throughout the conflict. The question that needs to be explored is how strong this resilience effect on firms is, which may alter the results on performance. I can analyse the strength of this effect by comparing the age of the firms to when the conflict ended. For the eight post conflict countries, the average firm began operations six years before the conflict ended. This suggests that the average firm within the post conflict sample was resilient to conflict and thus, there is conflict survivor bias within the WES dataset that cannot be changed. Ideally, to get rid of this survivor bias, I would require panel data of firms before and after the conflict. Then I would be able to compare firm performance in a pre and post conflict scenario. However, this data is unavailable. It is also important to note that any firms that began within the 3 years of employee growth are taken out of the dataset as the dependent variable cannot be calculated.⁷⁵

Another concern with this bias is that it is possible that the firms who survived a conflict have particularly strong performance levels, compared to the firms that began after the conflict (see Appendix M). To analyse this, I graph the years of operation vs. firm performance for each of the eight post conflict states. I then indicate when the conflict ended to compare performance for the firms who survived the conflict and those that were established after the conflict. These graphs show that performance is either on average consistent between the two groups, or stronger for the firms established after the conflict. Thus, the performance of the firms that survived the conflict are not skewing the results. The stronger growth experienced from new firms is controlled for by the “years in operation” variable in the model.

Further, as noted in Section 2.1, a substantial portion of a post conflict economy, as well as African economies in general, is the informal sector. This means that there are numerous self-employed and businesses that are contributing to private sector development in the post conflict era that are not captured in this data. This is because the WES data does not include the informal sector. The average for the percent of informal sector workers⁷⁶ in the eight post conflict

⁷⁵ This is because the denominator for the calculation growth is zero.

⁷⁶ This is defined by the World Bank as “employment in the informal economy as a percentage of total non-agricultural employment. It basically includes all jobs in unregistered and/or small-scale private unincorporated enterprises that produce goods or services meant for sale or barter. Self-employed street vendors, taxi drivers and home-base workers, regardless of size, are all considered enterprises. However, agricultural and related activities,

countries is approximately 87 percent.⁷⁷ In comparison, the average for the percent of informal sector workers in the 19 non-post conflict countries is 76 percent.⁷⁸ This suggests that there are more barriers for formalizing firms in post conflict countries. As De Mel et al. (2008) find in Sri Lanka, there may be less demand for formalization due to poor policies in post conflict environments. In addition, both the WES data and the informal workforce statistics presented above do not include agriculture. I also know that agriculture and subsistence farming is a substantial portion of African economies. The average percent of agricultural workers in the eight post conflict countries is 59 percent and 41 percent in the non-post conflict countries.⁷⁹ This suggests that agriculture is a significantly higher portion of economic activity in post conflict environments, and this is not picked up by the WES data. Therefore, there is a higher amount of “missing firms” representing the economy makeup of post conflict states in the WES compared to non-post conflict firms. Thus, when interpreting these results, there are numerous factors that may be missing because we have not included the informal sector. However, this analysis of formal firms is relevant for post conflict countries because it is found that formal firms are significantly more productive and thus, contributes significantly more to economic growth. Amin et al., (2019) find that informal firms’ productivity is one-fourth of formal firms. In addition, La Porta and Shleifer (2014) argue that due to the low levels of productivity from informal firms, economic growth stems from the formal sector and as the economy develops, the informal sector slowly shrinks. Thus, it can be argued that even though the informal sector is large in these markets, it is formal firms that are key contributors to growth and productivity.

The data shows that there are a few patterns regarding the exit and entry of firms in post conflict markets. A post conflict environment makes it more challenging for formal businesses to enter the market and provide more reasons to exit a market, creating additional “missing firms” in this context. Using the WES data, I find that 61 percent of post conflict firms are in a large city, compared to 52 percent in non-post conflict firms. This suggests that a portion of rural firms are missing from post conflict markets. This difference may be caused by poor road linkages to rural areas and mass migration into cities during conflict.⁸⁰ There is also a slight difference in the entry of manufacturing businesses in post conflict environments. The data shows that 50 percent of non-post conflict firms are in manufacturing compared to 45 percent in post conflict countries. This is most likely because there are more barriers for accessing physical

households producing goods exclusively for their own use and volunteer services rendered to the community are excluded.”

⁷⁷ World Bank Databank (2020).

⁷⁸ World Bank Databank (2020).

⁷⁹ World Bank Databank (2020)

⁸⁰ See Chapter 3 that provides evidence of these two explanations for Liberia as a case study.

capital in these markets and shows that there are some missing manufacturing firms in these markets. Lastly, there are 3 percent more foreign-owned firms in non-post conflict markets, suggesting that foreign-owned firms are also missing in post conflict markets. This is because they are either less likely to enter due to the high perceived risk of the market, or these firms exited the market due to the conflict.⁸¹

Lastly, the variables derived from the WES data may not perfectly represent the underlying resource or challenge that we are interested in. The “access to finance” dummy variable is determined by what forms of financing used. I assume that if a firm uses finance from a bank, non-financial institution or supplier/consumers, this means they have available finance. The dummy variable does not include any firms who are able to receive a loan but are currently not using it. However, I check to ensure that this was not a common occurrence within the data. There is a variable in the WES for whether the firm has access to a line of credit at a bank. I cross the data for the access to finance dummy variable I generated and the access to a line of credit variable. Less than four percent of firms within the sample are not using external financing from our access to finance dummy variable but have access to a line of credit. Therefore, I believe this is not a substantial problem within the overall model, since it is only occurring in a small number of firms. However, there may be firms within the dataset who don’t want any sort of loan or financing for their business due to their preferences. These types of firms cannot be found in the data because we do not have access to the reasons why they do not have a line of credit. This means that when we interpret the results for the access to finance dummy, one must consider that some firms may have access to finance but are not using it.

The variable for employee training also has missing components to proxy skilled labour. The quality and type of training is not considered in this variable, meaning that there could be poor training programs that are not transferring skills to employees, skewing the results of the coefficient downwards.⁸² In addition, training does not account for the general level of education and experience of the employees. This is slightly controlled for by including the managers experience level variable, but it does not consider the rest of the employees. It is probable that some businesses, like an agri-processing business, have employees with no education and others, like a tech business, have employees with tertiary education. In addition, there may be some reverse causation between employee growth, the dependent variable acting as a proxy for firm growth, and employee training, as many businesses conduct training with new employees. The question in the survey on training is specifically for full-time permanent employees, which means

⁸¹ Examples of foreign-owned formal businesses exiting the Liberian market are described in Chapter 3.

⁸² Since the models show very high positive coefficients for training, I do not believe this is a serious problem.

this is slightly less likely. However, this may be one of drivers in the high positive coefficient, which is across both environments in the models below.

Foreign ownership is another variable of interest that may be missing some information. Since it is a simple dummy variable, there are firms that may have a small percentage of foreign ownership compared to fully foreign owned which are not distinguished in the data. This may potentially have an influence on the findings on foreign ownership in post conflict countries. If foreign-owned businesses are less productive because of anti-foreign sentiments in post conflict settings, suggested by Klapper et al. (2013), then those businesses that have both foreign and local ownership may be less negatively impacted than a fully foreign business. This could generate a positive bias in the coefficient. However, because post conflict foreign ownership is skewed towards 100 percent foreign-owned businesses, there is less chance of this occurring.

The other variable that is not an ideal proxy is the “business networks” dummy variable derived from whether firms are borrowing from consumers and/or suppliers. Ideally, I would want to collect data on whether the firm is a part of an association, co-op and/or business group. However, this is not available. Borrowing from suppliers and consumers is a common tool that can be used to finance investment. Having a strong trust within your community of consumers and suppliers allows these types of transactions to occur, which is why it can proxy business networks and trust. However, borrowing from suppliers and consumers may reflect desperation rather than good business networks, since this method of financing may be used as a last resort when companies are in dire need. This could cause some challenges when interpreting the model results, particularly in post conflict countries where firms have dealt with these significant negative shocks. However, the average for growth of firms borrowing from suppliers and/or consumers is approximately the same in both contexts, which means this situation is not occurring frequently within the data.

The variables for corruption and regulations also have inherent problems in terms of the model. The corruption variable is based on a question to the owners about the frequency of being asked for informal gifts, which is classified as extortion. However, there are many other areas of corruption, including favouritism, patronage, regulatory capture, and systemic, that are not captured through this variable.⁸³ Thus, when interpreting the coefficient for corruption in this model, it is important to remember that it represents extortion, and not all corruption present in the state. The time spent on regulation by a manager also does not necessarily line up with the efficiency and strength of local regulations. For example, if there is no credit bureau in a

⁸³ “Drivers of Corruption,” A World Bank Review, 2014.
<https://openknowledge.worldbank.org/handle/10986/20457>

country then a business does not have to spend time on the proper procedures for them. The firm is spending less time on regulation, but it is overall not beneficial for them. This may cause some inconsistencies when interpreting the results.

Lastly, one of the primary issues with the data is that all of it is self-reported by managers or business owners. Although the World Bank does put measures in place, like using non-governmental organizations to conduct the surveys and confidentiality, there is still a high likelihood that some interviewees actively lie, misremembers, or estimates incorrectly. For example, many owners could still be nervous to inform someone of accurate corruption information. In addition, there are cases in the data, where the information that is self-reported does not add up properly. For example, the total amount of employees does not properly add up to full time and part time employees. This shows that there are both missing firms, discussed above, and mistakes in the data. Lastly, as stated in Section 4.1, the WES oversamples large and exporting firms because they are the most visible, meaning that other types of firms are less represented. These issues show that the quality of the data should be questioned. However, the WES provides the largest set of consistent firm-level datasets, with over 174,000 firms interviewed in 151 countries.⁸⁴ It provides detailed information on firms that are not easily available, especially in post conflict countries. Thus, for this research, although there are moderate data quality issues, the WES provides a solid base to begin research in African post conflict contexts.

This section has provided an overview of the challenges with the data and models presented in this paper. Accordingly, when interpreting the results of the models in the next section, one must be cautious in the interpretations of the relationships. However, even with these challenges, this paper finds intriguing significant relations on the resource's firms have access to and their performance in post conflict African markets.

Section 6: Model Results

Although Section 5.4 can describe some patterns within this data, the relationships between resources and firm performance in post conflict Africa is still unclear. In this section, I summarise the key results from a set of regression models designed to help better understand how firms conduct and thus, their use of resources, is associated with their performance in post conflict Africa. This section deploys the methods explained in Section 4 to further delve into these queries. The focus of the analysis is the relationship between the four key drivers discussed earlier – access to finance, training, networks and foreign ownership – and firm level

⁸⁴ <https://www.enterprisesurveys.org/en/about-us/global-indicators>

performance, measured as three-year employment growth, and the extent to which these drivers differ between firms in post-conflict and non-post conflict environments. There are a variety of ways to explore these relationships. So, in addition to a basic specification in which I divide the sample between post conflict and non-post conflict firms (Section 6.1), I also analyse the key interactions in more detail (6.2), and whether these effects vary across different dimensions of conflict (6.3) and across sectors (6.4). Consistently throughout this section, I find that access to finance has a positive and significant relationship with performance in both political contexts (6.2). However, I find that in post conflict settings, finance is beneficial if it is used after a decade of peace (6.3). In addition, the model suggests that employee training has a positive and significant correlation with performance, which is approximately double in magnitude for post conflict firms (6.2). This is particularly true in high intensity conflicts; however, this extra boost in stimulus is lost when a conflict lasts for more than a decade (6.3). I determine that foreign ownership has no relationship with the performance of post conflict firms, but a positive one for non-post conflict manufacturers, especially in food (6.4). Lastly, I do not find a significant effect of business networks on performance in post conflict markets, most likely due to the lack of trust caused by war (6.2). This theory is further substantiated by the fact that networks may have a negative relationship with performance in countries that experienced long conflicts (6.3). On the other hand, these models find that networks have an overall positive correlation in non-post conflict markets, specifically for food manufacturers and service firms (6.4). This section is devoted to explaining the steps and individual results of each model, in which these conclusions are drawn from.

Section 6.1: Separate Models for Types of States

This section uses OLS models, with country fixed effects, that are separated by post conflict and non-post conflict. Table 5 shares the results of three separate regressions, with different cuts of the data. It includes the OLS models for all the data pooled together with no separation for context, post conflict firms and non-post conflict firms. Table 5 also includes an analysis of whether the coefficients for each variable in the post conflict and non-post conflict results are statistically different from each other.

The first regression in Table 5 shows that for African firms in general, the four variables of interest's coefficients are positive and significant. This suggests that access to finance, training, foreign ownership and networks have a positive relationship with firm performance. However, when the data is separated into post conflict and non-post conflict, Table 5 suggests that the relationships with training and foreign ownership differ. Although the coefficient for access to

Table 5: Results for Separate Regressions by Post Conflict

Dependent Variable is three-year employment growth (%)

	Variable	All	Post Conflict	Non-Post Conflict	Test Stat for Difference
Variables of Interest	Access to Credit	2.324* (-1.36)	4.457* (-2.33)	2.244 (-1.64)	0.61
	Training	9.994*** (-1.41)	15.126*** (-2.6)	8.714*** (-1.65)	3.85**
	Foreign Ownership	4.682*** (-1.73)	0.046 (-3.18)	6.034*** (-2.01)	2.1*
	Suppliers Networks	4.340** (-2.16)	-0.07 (-4.5)	5.179** (-2.45)	2.01
Firm Characteristics	Manager Experience	-0.190*** (-0.07)	-0.114 (-0.12)	-0.195** (-0.08)	0.47
	Urban	2.345* (-1.38)	4.580* (-2.44)	1.617 (-1.64)	0.26
	Years Operating	-0.275*** (-0.05)	-0.417*** (-0.09)	-0.239*** (-0.05)	1.95
	Exports	0.008 (-0.03)	-0.075 (-0.07)	0.023 (-0.04)	1.87
	Small	21.087*** (-2.19)	18.758*** (-3.98)	21.991*** (-2.58)	0.69
	Medium	3.391 (-2.15)	7.336* (-4.03)	2.077 (-2.5)	1.96
Institution Factors	Time on Regulation	-0.043 (-0.03)	-0.015 (-0.06)	-0.057 (-0.04)	0.39
	Corruption	-0.46 (-1.11)	-2.877* (-1.66)	0.853 (-1.42)	2.76*
Sector	Food	4.987** (-1.99)	-2.408 (-3.33)	7.011*** (-2.43)	5.63***
	Hospitality	-6.568*** (-2.18)	-8.349** (-3.85)	-6.078** (-2.6)	0.56
	Transport	-1.231 (-2.17)	-3.521 (-3.61)	-0.652 (-2.59)	0.16
	IT	0.274 (-5.02)	4.797 (-9.49)	0.44 (-5.75)	0.28
	Retail	-0.322 (-1.76)	-2.528 (-3.05)	-0.51 (-2.09)	0.39
	Constant	8.338*** (-2.81)	11.439** (-5.21)	7.017** (-3.3)	
Analysis	R Squared	0.1824	0.0495	0.0432	
	F-Stat	20.56***	7.01***	15.98***	
	Number of Obs	8492	2316	6410	

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

finance is approximately 2.2 percentage points larger in post conflict markets, I do not find any statistically significant difference between access to finance in these two business environments.

The correlation of a firm conducting employment training on firm performance is positive and significant for both environments, but the magnitude is significantly higher in post conflict

markets. When analysing foreign ownership, the significance of the coefficient disappears for post conflict firms, suggesting limited or no relationship between foreign ownership and firm performance in post conflict countries. However, for non-post conflict firms, foreign ownership remains positive and significant at the 1 percent level. Lastly, the influence of networks is insignificant for post conflict firms but significant for non-post conflict firms. However, the difference between these two coefficients is not statistically significant and shows the need for further analysis. All four of these effects are explored in more depth throughout the next sections, which provide more convincing arguments for these preliminary findings.

Table 5 shows that there are several characteristics that have a significant relationship on firms' performances in these markets. In a post conflict setting, if a firm is in a city of over 1 million people, this increases growth by approximately 4.6 percentage points but there is no significance for non-post conflict firms. One hypothesis is that this could be because of worse infrastructure in post conflict countries, making conducting business in rural areas more costly.⁸⁵ In both contexts, the number of years a firm is operating has a negative and significant correlation. This means that in general, younger firms, tend to grow faster in African markets and this is not statistically different between contexts. Managerial experience is a significant and negative coefficient in all and non-post conflict data regressions. However, the test statistic for the difference is not significant, which suggests this relationship may not be distinct in post conflict markets. Although one would suspect that a manager with more experience has stronger networks and knowledge, this model suggests that this may not be the case. It is possible that managers may have started their career with the firm, which would make years' operating and manager experience the same amount and thus, co-linear. However, there are only 21 percent of firms in the sample where this is true. I run the regression without that subset of firms and manager experience remains significant and negative in all and non-post conflict firms. Thus, this effect is distinct from a firm's age. Lastly, a firm exporting does not have a significant relationship with performance in either context.

Table 5 clearly shows that there is a strong and significant relationship between firm size and growth. Firms that are smaller grow significantly more than larger firms. This is particularly true in non-post conflict countries, where small firms grow 3.2 percentage points more than in post conflict. On the other hand, medium-sized firms tend to grow 5.3 percentage points more in post conflict countries. These differences are not statistically different between the two contexts. Although the magnitudes of these coefficients seem large, this is logical when we are

⁸⁵ If infrastructure is more advanced and accessible in non-post conflict areas, business can easily be conducted in all areas and not just in cities

regressing on employment growth.⁸⁶ The size dummy variables help control for this effect. However, aligned with the previous literature, this model implies that small firms in these contexts grow faster. Since foreign owners tend to become involved in larger sized firms in African markets, it is also possible that foreign ownership is simply acting as a proxy for large firms. Appendix E shows that this is not the case and overall, there are more small and medium-sized firms that have foreign ownership. In conclusion, Table 5 suggests that the firm characteristics do not have a different effect on firm performance in post conflict markets compared to non-post conflict.

Table 5 also analyses the relationship of institutional factors on firm performance in these two environments. The time that managers spend on dealing with regulation is not significant for all three regressions, suggesting that challenging bureaucratic processes may not have a significant correlation with firm performance. It may also suggest, as discussed in Section 5.5 that this variable is not clearly capturing the effects of regulation on businesses. However, the frequency of corruption is significant and negative for post conflict firms, while it is insignificant for non-post conflict firms. The test statistic is significant at the 10 percent level, suggesting that in a post conflict setting, a higher frequency of a firm being asked for a 'gift' has a negative correlation with their performance. From Table 4, we know that the frequency of corruption is 11 percent higher in post conflict countries. This finding suggests that not only is there more corruption in post conflict countries, but the higher frequency of corruption is also associated with poorer firm growth. Once again, it is important to remember that extortion is not the only type of corruption in these markets and there may be other types of corruption effecting these firms that is not captured.

Lastly, Table 5 provides insights on the sectoral effects that occur in both these contexts. The sector coefficient that has a strong statistical difference between post conflict and non-post conflict is for food manufacturing. Growth for firms in the food sector is substantially higher, by approximately 9.4 percentage points, in non-post conflict environments. It is important to recall that the share of employment for food manufacturing in non-post conflict countries is high at 17.9 percent. This means that this positive growth effect for the food sector does contribute heavily to the labour market and the overall economy. Section 6.4 analyses this phenomenon in more depth to explain the potential reasons for this significant distinction in food manufacturing performance in the two environments.

⁸⁶ This is because firms that went from 2 employees to 10 employees have a higher employment growth than those that went from 20 employees to 24 employees. It tends to be easier for small firms to bring on more employees at that stage of growth.

The F-statistics for these regressions are significant at the one percent significance level for each regression, which provides evidence that they have good explanatory power. The main conclusions that are brought about from this first model is that there are significant differences between the factors influencing firm performance in these two contexts. This model suggests that the resources and characteristics that tend to influence firm growth similarly in both contexts are access to finance, training,⁸⁷ networks, firm size and the firm's age. The factors that show evidence of being significantly different in these contexts are foreign ownership, corruption, and sectors, particularly food manufacturing.

Section 6.2: Model with Post Conflict Interactions

To focus primarily on the resources of interest, I develop a pooled model including all the data. By using post conflict dummies as interactions with the firms' resources, I can determine the direct marginal impact that these resources have on performance when located within post conflict countries. The characteristic variables of firms have remained the same, except for exports, which has been excluded.⁸⁸ The institutional effects and sectors remain the same and act as controls in this model. There are limited changes in the results of the firm characteristic and institutional variables, which are discussed above. The results of the new interaction effects are shown in Table 6.

Table 6 provides no evidence that there is a difference in the relationship of access to finance and firm growth in a post conflict setting. Regression (1) shows that access to finance is associated with a 2.4 percentage points increase in non-post conflict firm. The interaction term for access to credit is positive, showing that having access may increase employment growth by 1.3 percentage points more in post conflict countries. However, it is not significant, which means that the correlation between finance and firms' performances is still positive but not necessarily higher in magnitude for firms operating in post conflict countries. One hypothesis is that this may be due to the overall lack of credit available to firms across all African markets. Thus, this model suggests that finance is positively associated with firm performance, but not differently in post conflict environments.

In Appendix I, I explore the likelihood of access to external finance firms in each context by running a set of probit models. The overall conclusion from these models is that, although the relationship between finance and performance is the same in post conflict and non-post conflict environments, the characteristics that help you receive access to external credit are

⁸⁷ Although training has a larger in magnitude correlation with firm performance

⁸⁸ Since the export coefficient possessed very small magnitudes and a lack of significance in Section 5.1, it has been excluded to merely provide a more parsimonious model

Table 5: Results for Separate Regressions by Post Conflict

Dependent Variable is three-year employment growth (%)

	Variable	(1)	(2)	(3)	(4)	(5)
4 Main Variables	Access to Credit	2.427 (-1.59)	2.835** (-1.37)	2.807** (-1.37)	2.796** (-1.37)	2.423 (-1.61)
	Training	9.408*** (-1.43)	7.421*** (-1.62)	9.380*** (-1.42)	9.385*** (-1.42)	7.285*** (-1.63)
	Foreign Ownership	5.226*** (-1.73)	5.265*** (-1.73)	6.454*** (-1.97)	5.238*** (-1.73)	6.689*** (-1.97)
	Networks	3.715* (-2.19)	3.759* (-2.19)	3.626* (-2.19)	4.204* (-2.39)	4.654* (-2.43)
Post Conflict Interactions	Credit*PC	1.27 (-2.86)				1.624 (-3.02)
	Training*PC		8.129** (-3.22)			8.624*** (-3.25)
	Foreign Own*PC			-5.106 (-3.93)		-5.986* (-3.94)
	Networks*PC				-3.011 (-5.27)	-4.704 (-5.57)
Firm Characteristics	Manager Experience	-0.170** (-0.07)	-0.167** (-0.07)	-0.168** (-0.07)	-0.170** (-0.07)	-0.165** (-0.07)
	Urban	2.473* (-1.4)	2.323* (-1.4)	2.541* (-1.4)	2.450* (-1.4)	2.438* (-1.4)
	Years Operating	-0.278*** (-0.05)	-0.277*** (-0.05)	-0.278*** (-0.05)	-0.277*** (-0.05)	-0.277*** (-0.05)
	Time on Regulation	-0.04 (-0.03)	-0.044 (-0.03)	-0.04 (-0.03)	-0.04 (-0.03)	-0.043 (-0.03)
	Corruption	-0.554 (-1.12)	-0.513 (-1.12)	-0.509 (-1.12)	-0.51 (-1.12)	-0.463 (-1.12)
	Small	20.884*** (-2.16)	20.899*** (-2.16)	20.902*** (-2.16)	20.896*** (-2.16)	20.954*** (-2.16)
	Medium	3.105 (-2.14)	3.1 (-2.14)	3.144 (-2.14)	3.117 (-2.14)	3.179 (-2.14)
Sector	Food	5.197** (-2.02)	5.127** (-2.02)	5.251*** (-2.02)	5.219*** (-2.02)	5.121** (-2.02)
	Hospitality	-6.500*** (-2.12)	-6.422*** (-2.12)	-6.463*** (-2.12)	-6.489*** (-2.12)	-6.402*** (-2.12)
	Transport	-1.107 (-2.18)	-0.969 (-2.17)	-1.098 (-2.17)	-1.118 (-2.17)	-0.94 (-2.18)
	IT	0.78 (-5.04)	1.073 (-5.04)	0.781 (-5.04)	0.8 (-5.04)	1.144 (-5.04)
	Retail	0.458 (-1.78)	0.518 (-1.78)	0.448 (-1.78)	0.466 (-1.78)	0.457 (-1.78)
	Constant	8.193*** (-2.76)	8.161*** (-2.76)	8.044*** (-2.76)	8.139*** (-2.76)	7.988*** (-2.76)
Analysis	R Square	0.183	0.1666	0.1703	0.1893	0.1593
	F-Stat	20.07***	20.45***	20.16***	20.08***	17.54***
	Number of Obs	8705	8705	8705	8705	8705

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant
Employment Growth (dependent variable) winsorized at 99%

varied. Appendix I shows that post conflict firms are more likely to receive finance if they are an exporter⁸⁹ and show strong business growth. There are two factors that are significant and positive influence in both environments, which includes the firm having a female founder⁹⁰ and experiencing corruption⁹¹ more frequently. In non-post conflict markets, firms are more likely to receive finance if the manager has more experience, they conduct employee training,⁹² and are purely domestic owned⁹³. These models show that networks may be more important in terms of gaining external finance within non-post conflict countries since both corruption and managers experience is significant. An in-depth analysis of these models is presented in Appendix I.

Results from Regression (2) show that employee training has a positive and significant relationship with firm performance in both markets. The model suggests that running employee training in post conflict firms is associated with a 15.6 percentage point increase in employment growth. There is still a significant and positive relationship between training on non-post conflict firms, but this is about half of the magnitude at 7.4 percentage points. Thus, this proposes that employee training, although important in all African markets, may be more effective in post conflict countries. Collier and Duponchel (2012) may suggest that this effect may be stronger in post conflict markets due to the phenomenon of “forgetting by not doing.” Since conflicts severely disrupt educational systems and business operations, educational and work experience levels are typically lower in these areas. However, it is important to note that there may also be a reverse effect in this model because the dependent variable is employee growth. Employee training and employee growth may be related in different ways other than increasing productivity and skills (discussed in Section 5.5). Although there are data concerns that must be considered in this finding, the model indicates that employee training may have a larger positive effect on firm performance in post conflict environments compared to non-post conflict.

Regression (3) and (5) provide a consistent conclusion for the relationship of foreign ownership in post conflict firms. Regression (3) shows that foreign ownership is associated with

⁸⁹ This is driven by formal banks and may be caused by banks viewing exporters as less risky because exporters do not solely depend on domestic markets and have a portion of revenues in foreign currency.

⁹⁰ This is contradictory to Fafchamps (1999) findings. The positive findings are derived from bank credit in both environments and suppliers and consumer credit for post conflict firms. This effect in post conflict states may be because females were not combatants in conflicts and may be easier to trust.

⁹¹ Although this seems somewhat counterintuitive, it follows the same logic presented by Krasniqi and Branch (2018) that a firm who deals with corruption more frequently is further integrated in a large business and government network. This effect is stronger in post conflict markets. Evidence of support in this theory is presented in Appendix J.

⁹² This shows lenders that the owner has a strong commitment to the business's growth

⁹³ This is somewhat misleading because you'd expect foreign owned companies use external financing. However, foreigners often receive this finance from banks in their home country and not local institutions, causing this effect (Chapter 3 provides a case study of the Lebanese business cartel). Since interest rates are relatively high in African banks, it is rational that foreigners would use loans from another country.

a 6.5 percentage point increase in employment growth. The interaction term is not significant and when performing an F-test on whether the addition of foreign ownership and the interaction term is equal to zero, the result is insignificant. Thus, the relationship of foreign ownership on performance is positive for non-post conflict firms but is zero for post conflict firms. The finding is the same in Regression (5); however, the interaction coefficient is significant at the ten percent level. This offsets the positive relationship that occurs in non-post conflict firms. This finding may seem as if it is the opposite to the conclusion in Chapter 1 of this thesis, which uses a SVAR model to determine that foreign direct investment (FDI) has a positive impact on economic growth in post conflict countries. However, it is important to remember that foreign ownership can be dissimilar from FDI. The majority of FDI inflows is composed of large concessional deals in natural resources, while in this sample, there are only three foreign owned firms that are in the primary extraction sector and in post conflict states. This means that it is evident that these types of deals analysed in Chapter 1 are not represented in the WES data.⁹⁴ The foreign investment that occurs with these firms is a small proportion of the total countries FDI inflows. This finding is more consistent with the literature in Section 2.2, where Klapper et al. (2013) determine that foreign owned firms lose productivity advantages throughout conflict because of disproportional violence and looting against foreign-owned businesses.⁹⁵ However, I am unable to determine whether this is the reason for the minimal effect of foreign ownership in a post conflict environment.

Lastly, Table 6 presents the results of the non-post conflict and post conflict interaction coefficient for business networks. The coefficient for non-post conflict business networks is significant at the ten percent level and positive in Regression (4) and (5). This implies that a firm having access to strong networks increases three-year employment growth by 4.2 percentage points. However, the interaction coefficient is insignificant and negative. Also, the F-test for the combination of the two coefficients is insignificant, which means that the total effect of business networks in post conflict firms is zero. This finding suggests that using networks may not boost firm performance in post conflict environments. This data cannot provide a reason why that may be the case but interviews from Chapter 3 in Liberia suggest that this may be due to a lack of a trust in networks. This is significantly different than non-post conflict firms, where the model shows that using business networks for financing has a positive relationship with performance.

Therefore, the results of this model imply several distinct relationships between access to resources and firm performance in the two environments. In non-post conflict regions, there is a

⁹⁴ The foreign investment that occurs with these firms is a small proportion of the total countries FDI inflows.

⁹⁵ These findings are discussed further in Section 6.4 when analysing this effect by sectors and in Chapter 3, using interviews with foreign business owners in Liberia and Sierra Leone.

positive relationship with access to finance, training, foreign ownership and business networks. For post conflict firms, there is a positive correlation with access to finance that is no different from non-post conflict firms, and employee training, which has a larger magnitude effect than in non-post conflict firms. However, post conflict firm performance may not be influenced by foreign ownership and the use of business networks. Therefore, this model provides preliminary evidence that there are meaningful variations in the relationships of resources and firm performance in these two types of environments.

Section 6.3: Further Modelling for Conflict Characteristic Analysis

In Section 3, I discuss the importance of variations within the conflicts that the eight post conflict countries in this data experienced. This section allows for additional regressions that take those characteristics into account to determine whether there is variation in how resources impact firms when that country has suffered from a specific conflict characteristic. As noted in Section 4, to do this, I generate a dummy variable for each characteristic, which includes: an “extra” high intensity conflict, whether the conflict was influenced by natural resources, the length of the conflict⁹⁶ and if the conflict ended over a decade before the WES is collected. These dummies are then interacted with each of the four variables of interest. Since the conflict characteristics are defined at the state level and there are certain states that are within most of these different characteristics, it is more accessible to interpret the regressions when running them separately for each interaction.⁹⁷ Appendix G provides the results for each of these four characteristics.

The only conflict characteristic that shows a significant relationship when interacted with access to finance is with post conflict countries where the conflict ended over a decade ago (Table G.1). This regression suggests that when a post conflict firm has access to finance, it is associated with a 7.3 percentage point increase in three-year employment growth but only when it has been at least a decade since the conflict ended. This suggests that within the first decade of the post conflict era, access to finance may not be as effective in stimulating firm growth. This aligns with existing post conflict literature that states the first three years after a conflict, a firm is merely trying to survive (Chand and Maddumage, 2017). Another potential reason is that after a conflict, institutions and infrastructure are rebuilt relatively slowly, taking a decade or longer to

⁹⁶ A long conflict is defined as occurring for ten years or longer.

⁹⁷ An example of this is Liberia and Sierra Leone, which are included in all four different conflict characteristic dummies because they are “extra” high intensive conflicts, with influences from natural resources, that were over 10 years long and the WES survey was taken more than a decade after the conflicts ended.

do so. Thus, a hypothesis is that financing into businesses may only become effective once these key external factors are fully or partially rebuilt.

In Section 6.2, I find that employee training has a larger in magnitude relationship with firm performance, indicating that this resource is more effective in these markets. Table G.2 shows that this varies depending on conflict characteristics. This regression shows that employee training conducted in countries that experienced high intensity conflicts is related to a 28.1 percentage point increase in three-year employment growth. This is approximately 14 percentage points higher than effects in other post conflict countries. This aligns with the notion that higher intensity conflicts have a larger erosion of human capital, including migration to other areas and thus, training is more effective. However, this once again could simply be significant correlation between the two employment focused variables that is generating such high coefficients. The second highest correlation of training with firm performance is within states whose conflict ended more than a decade ago. This suggests that the effects of training are positive, but it takes time to take effect and begin to fill the human capital gaps caused by the conflict. States where the conflict was influenced by natural resources also see a significant relation with training, but this is not as large as the high intensity and long post conflict time interactions. This positive effect may occur because many of the natural resource states suffered from Dutch disease⁹⁸ and thus, lacked diversity in their markets. Employee training could provide new skills in different sectors that were not developed during or prior to the conflict. Lastly, the interaction with states that suffered from long conflicts shows a significant and negative coefficient. As a longer conflict would most likely generate a larger skill gap in a country, this does not follow the same logic as above. This divergence could be caused by the quality of the data, where information like the quality of training and the ability for employees to absorb the knowledge, is unknown. The results in Table G.2 provide further evidence that training may provide larger effects in post conflict markets, but better quality data would provide more information to make final conclusions.

Table G.3 is consistent with the findings from Section 6.2 that there is no significant relationship between foreign ownership and firm performance in post conflict markets, even when conflict characteristics are included.

Lastly, Table G.4 also shows that there is no significant correlation of business networks on firm performance in the different conflict contexts, which aligns with the findings above. However, Table G.4 shows that the interaction with networks of post conflict firms operating in states that suffered from long conflicts is negative and significant. Although the F-statistic for

⁹⁸ Collier, 2007

the overall effect is not significant, this coefficient suggests that there may be a negative effect of networks when a conflict was long-lasting. This may be caused by the conflict affecting communities and negatively impacting the overall level of trust for individuals and institutions. This could suggest that networks may have a negative influence on firm performance when a community has suffered from conflict for a long time due to a lack of trust and comradery.

In conclusion, this section has shown that firm resources have different relationships with firm performance in post conflict countries depending on the conflict they experienced. I find that this is particularly true for employee training, which may be caused by the impact conflict has on human capital. Table G.2 finds that training may be most effective for firms in countries that have experienced high intensity conflicts. The model also finds a higher positive coefficient for training a decade after a conflict has taken place. This is also true for the effect of access to finance on firm performance, since investment into business may only be effective once certain key factors are rebuilt in the country. Lastly, there is some indication that networks are further eroded in countries that experienced long conflicts and thus, the use of them may have a negative relationship with firm performance due to a lack of trust within the business community.

Section 6.4: Further Modelling for Sector Analysis

In Section 5.3, it was determined that there are differences in the resources available to the manufacturing and services sectors in this sample. This section provides further analysis to determine how the relationships determined in Section 6.2 alter when analysing by sector in the two environments. In Table 7, each of the four variables of interest (access to finance, training, foreign ownership, and networks) are interacted with a manufacturing dummy and a post-conflict dummy variable. This provides analysis on how these variables of interest effect manufacturing and service firms in both post conflict and non-post conflict markets. It is determined that resources have different influences on manufacturing firms compared to service firms. This also shows that the influences these resources have on manufacturing firms are different in post conflict settings.

All the regressions presented show that in general, manufacturing firms in African markets grow on average between 2.5 to 4.0 percentage points more than service firms do. Since the labour share of manufacturer workers is quite large in both contexts, specifically post conflict, this finding is crucial for overall African economic growth.⁹⁹

⁹⁹ This is showed in Figure 9 in Section 5.3

Regressions (1) and (2) presented in Table 7, focus specifically on access to finance. When testing the F-statistic for access to finance overall, the resource's coefficient is positive and significant. This suggests that access to finance in total has a positive and significant relationship with firm performance, but this is not significantly different in post conflict regions. However, when looking specifically at manufacturing, Regression (1) suggests that access to finance has a 5.4 percentage point higher effect on firm performance within manufacturing firms. Regression (2) also suggests that manufacturing firms across the African market, benefit more from access to finance than service firms do. One hypothesis for this is that manufacturing firms are often capital-intensive and thus, require more financing. Thus, Regressions (1) and (2) indicates that access to finance boosts employment growth for manufacturing firms but has a limited effect on service firms in both political environments.

Regression (3) and (4) focus on the relationship of employee training on employment growth in firms. The results from Regression (3) suggest that training is associated with a 15.7 percentage point increase in employment growth. This regression once again shows that training is also positive and significant in non-post conflict contexts but is only about half of the magnitude. In Regression (4), the interaction term that includes manufacturing and post conflict is not significant, which suggests that there is no added benefit to training in manufacturing firms compared to service firms in either context.

Regressions (5) and (6) focus specifically on the correlation of foreign ownership and firm performance. In terms of post conflict foreign owned firms, these regressions find a similar result to Section 6.2. However, this regression includes a positive and significant coefficient for foreign ownership in non-post conflict manufacturers, which remains in Regression (6) as well. Thus, this model shows that the total effect of foreign ownership in non-post conflict manufacturers is related to a 9.8 percentage point increase in three-year employment growth. However, the coefficient representing services in non-post conflict contexts is insignificant. Although the F-statistic suggests that foreign ownership is significant in non-post conflict contexts, the interaction term implies that this is primarily for manufacturers. One of the possible reasons for this is due to the fact that foreigners may not know the local markets well enough to contribute fully to the service sector. However, in manufacturing, the foreign owners transfer of knowledge, management skills, technology, and connections to other markets for exporting, may effectively help the business reach its capacity.¹⁰⁰

¹⁰⁰ This hypothesis is explored further with foreign-owned SMEs in Liberia throughout Chapter 3

Table 7: Results for Regressions with Post Conflict & Manufacture vs. Service Firms Interactions

	Variable of Interest	Access to Finance		Training		Foreign Ownership		Networks	
	Dependent Variable is three-year employment growth (%)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables of Interest	Access to Finance	1.362 (-1.66)	1.703 (-1.68)	2.736** (-1.39)	2.780** (-1.39)	2.673* (-1.39)	2.660* (-1.39)	2.679* (-1.39)	2.677* (-1.39)
	Training	9.454*** (-1.45)	9.390*** (-1.45)	7.846*** (-2.15)	6.892*** (-2.23)	9.487*** (-1.45)	9.500*** (-1.45)	9.507*** (-1.45)	9.485*** (-1.45)
	Foreign Ownership	5.645*** (-1.77)	5.653*** (-1.77)	5.634*** (-1.77)	5.625*** (-1.77)	3.523 (-2.74)	3.179 (-2.87)	5.592*** (-1.77)	5.604*** (-1.77)
	Networks	1.982 (-2.44)	2.205 (-2.45)	4.134* (-2.23)	4.112* (-2.23)	4.029* (-2.23)	4.033* (-2.23)	6.580* (-3.52)	7.275** (-3.7)
Firm Characteristics	Manager Experience	-0.177*** (-0.07)	-0.177*** (-0.07)	-0.175*** (-0.07)	-0.172** (-0.07)	-0.176*** (-0.07)	-0.176*** (-0.07)	-0.178*** (-0.07)	-0.178*** (-0.07)
	Urban	2.750* (-1.41)	2.709* (-1.41)	2.570* (-1.41)	2.599* (-1.41)	2.760* (-1.41)	2.758* (-1.41)	2.679* (-1.41)	2.681* (-1.41)
	Years Operating	-0.265*** (-0.05)	-0.265*** (-0.05)	-0.265*** (-0.05)	-0.265*** (-0.05)	-0.264*** (-0.05)	-0.264*** (-0.05)	-0.265*** (-0.05)	-0.265*** (-0.05)
	Time on Regulation	-0.045 (-0.03)	-0.046 (-0.03)	-0.05 (-0.03)	-0.05 (-0.03)	-0.046 (-0.03)	-0.046 (-0.03)	-0.045 (-0.03)	-0.045 (-0.03)
	Corruption	-0.701 (-1.13)	-0.724 (-1.13)	-0.577 (-1.13)	-0.551 (-1.13)	-0.559 (-1.13)	-0.558 (-1.13)	-0.593 (-1.13)	-0.564 (-1.13)
	Manufacturing	2.525* (-1.39)	2.516* (-1.39)	3.677** (-1.51)	3.637** (-1.51)	2.665* (-1.4)	2.664* (-1.4)	3.962*** (-1.35)	3.964*** (-1.35)
	Small	22.009*** (-2.21)	22.006*** (-2.21)	21.763*** (-2.21)	21.743*** (-2.21)	21.943*** (-2.21)	21.972*** (-2.21)	21.728*** (-2.21)	21.731*** (-2.21)
	Medium	3.709* (-2.19)	3.705* (-2.19)	3.523 (-2.2)	3.533 (-2.2)	3.788* (-2.2)	3.821* (-2.2)	3.498 (-2.19)	3.51 (-2.19)
Sector + PC Interactions	Variable of Interest*PC	1.828 (-2.9)	0.363 (-3.11)	7.873** (-3.27)	11.942*** (-4.13)	-4.725 (-4)	-3.326 (-5.33)	-3.284 (-4.18)	-4.409 (-4.57)
	Variable of Interest*Manufacture	5.374** (-2.48)	3.912 (-2.72)	-0.513 (-2.75)	1.372 (-2.99)	5.993* (-3.39)	6.612* (-3.73)	-3.306 (-5.4)	-6.919 (-8.02)
	Variable of Interest*Manufacture*PC		6.66 (-5.14)		-8.951 (-5.55)		-2.918 (-7.33)		6.341 (-10.4)
	Constant	5.764** (-2.87)	5.819** (-2.87)	5.454* (-2.88)	5.390* (-2.88)	5.646** (-2.87)	5.620* (-2.87)	5.332* (-2.87)	5.331* (-2.87)
	R Squared	0.1697	0.1751	0.1543	0.1371	0.1601	0.1593	0.1735	0.1734
	F-Stat	23.49***	22.04***	23.55**	22.15***	23.46***	21.91***	23.18***	21.66***

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant, Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Lastly, the final two regressions in Table 7 have consistent findings about networks to Table 6 but find a distinction between sectors in the non-post conflict markets. In Regression (7) and (8), the F-Statistic for the total effect of networks for post conflict firms remains insignificant, suggesting that networks have no relationship with firm performance in this environment. However, the coefficient for manufacturers in non-post conflict markets is also insignificant. Thus, I can conclude that the positive relationship between networks and employment growth in non-post conflict firms is being driven by the service sector. This could be caused by the labour-intensive nature of the service sector, which makes business networks more critical in finding customers and employees.

Therefore, the correlational conclusions that can be drawn from Table 7 are the following: manufacturing firms experience stronger growth in these African countries; access to finance has a similar relationship with performance in both contexts but has a higher effect on manufacturing firms in general; training has a higher positive effect in post conflict firms, which does not differ by sector; foreign ownership has no impact in post conflict firms but has a positive relationship with the performance of non-post conflict manufacturers; and finally, networks have no correlations with performance in post conflict firms but have a positive one with service firms in non-post conflict areas.

With the WES data, I can pursue further analysis to determine if there are any significant variations in post conflict markets within a specific sector. This helps better explain the findings from the table above. In Appendix H, I have run the same model as in Section 6.1, for each of the five primary sectors focused on in Section 5.3.¹⁰¹ Table H.1 shows variations on the correlations that resources have on the same sector but in a different political environment.

The sector that has the largest divergence in coefficients between post conflict and non-post conflict environments is the food manufacturing sector. In Table H.1, all four variables of interest have a significant and positive relationship with non-post conflict food manufacturing firm performance, while only training is significant for food manufacturers in post conflict areas. From Section 5.1, I also find that the food sector performs significantly better than other sectors but only in a non-post conflict environment. This provides evidence that there may be unique distinctions within the food manufacturing sectors in these two environments and is further explored. This is particularly of interest as food security is often a major issue in post conflict markets and understanding what may help grow local food production has significant and large-scale benefits.

¹⁰¹ These 5 sectors are food manufacturing, hospitality, transport, IT and retail.

However, the four other sectors presented in Table H.1, are services, which means I need to ensure that food manufacturers are also distinct from other manufacturing companies. Table H.2 presents the results using the same model as Section 5.2 but does so only for non-food manufacturers versus food manufacturers. The food manufacturers in non-post conflict areas do have statistically different coefficients compared to the other manufacturers. Access to finance has an insignificant coefficient for non-food manufacturers but is both statistically significant and 7.6 percentage points larger in magnitude for food manufacturers. This implies that access to finance may be more impactful for food manufacturers as it is most likely used to import machinery and other higher-end inputs. Employee training has approximately the same effect in both types of manufacturers in non-post conflict contexts. Foreign ownership is positive and significant for both types of manufacturers, but the coefficient is 3.2 percentage points larger for food manufacturers. Lastly, business networks have a large and significant correlation with firm performance for food manufacturers, but no relation for other manufacturers. Borrowing from suppliers may be particularly helpful in the food manufacturing sector as they need agricultural inputs. Thus, it can be concluded that in non-post conflict regions, food manufacturers' use of resources is distinct from other manufacturers.

For post-conflict firms, Table H.2 shows that there are no significant differences between other and food manufacturers. It also shows the influences that resources have on food firm performance are less in post conflict environments. The F-statistic shows that the total relationship with finance for post conflict food manufactures is insignificant. The same result is found for foreign ownership's correlation with employment growth. Training and business networks still have a positive relationship with post conflict food firms, but this is not statistically different from the non-post conflict food manufacturers. Table 9 finds that in post conflict markets, food manufacturers use resources similarly to other manufacturers. In addition, access to finance and foreign ownership have significantly different correlations with performance compared to food firms in a non-post conflict environment.

The WES data can help us better understand why the food sector in post conflict markets is not able to use these resources to promote the growth it does in non-post conflict food markets. Figure H.1 uses the averages of standardized scores for the different obstacles presented in the WES for food manufacturers specifically.¹⁰² In order to minimize some of the subjectivity, I created a standardized scoring system that takes away individual bias to take away

¹⁰² These questions are about a variety of different factors including taxes, worker education, electricity, customs, court systems, and etc. The survey asks the business owner to rank each obstacle from zero to five, depending on how big of an obstacle they believe that factor is for their business.

individual idiosyncrasies.¹⁰³ This figure shows that the overall pattern for how detrimental certain obstacles are for business is relatively similar in both environments but there are clear discrepancies that can help explain why resources may influence performance differently. Tax rates, corruption, political instability, electricity and access to land tend to be larger obstacles in post-conflict markets than non-post conflict markets. This shows that access to the bare necessities for production are perceived as worse in post conflict spaces. In comparison, obstacles like worker education, transport, and customs are larger obstacles in non-post conflict markets. These factors are related to value addition and expansion of businesses, instead of operational. Thus, Figure H.1 suggests that the obstacles that post conflict food firms face tend to harm basic operational capabilities, while food manufacturers in non-post conflict markets experience obstacles for expansion and value addition. These types of expansions require financing through either borrowing or investment, which explains the divergence of significance for access to finance and foreign ownership in Table H.2.

Section 7.0: Summary and Conclusion

This paper addresses a substantial gap in the academic literature by identifying key correlates of performance in post conflict African firms. I find that there are differences in the conduct and performance of firms in post conflict and non-post conflict Africa. The results are summarized in Table 8, which show that there are variations in the relationships of resources with firm performance between political environments, sector and conflict characteristics. I find that access to finance, from any source, has a significant and positive correlation with employment growth in all African firms. In addition, employee training has a positive relation with performance; however, there is evidence that suggests this is even greater in magnitude in post conflict areas, particularly areas that experienced an “extra” high intensity conflict. I also find that foreign ownership only has a positive relationship in non-post conflict manufacturing firms. This is particularly true in the food manufacturing sector. It can be hypothesized that this is because the management skills and technology that are transferred may not be effectively absorbed in post conflict firms with low human capital, although this paper cannot confirm this. Further, foreigner owners may have been disproportionately targeted throughout conflict for looting and violence, having a long-term productivity effect. Lastly, I find that business networks

¹⁰³ This score takes the average score for the individual and then determines the difference of each individual factor from the average score for obstacles. This means that owners who rate all obstacles very high are controlled for. This index is between -3.75 and 3.75, where 3.75 means that the individual factor in question is perceived as the highest obstacle compared to the others for that owner.

have no correlation with performance in post conflict environments and may even have a negative relationship in areas that experienced long-lasting conflicts. This is most likely due to the degradation of trust within communities and in institutions that the conflict has caused. On the other hand, networks have a positive relationship with performance in non-post conflict environments, which are particularly high for the IT sector. Although there are still questions in terms of the quality of the data and these results, these findings provide ample evidence that policymaking and development programs should not use a “one-size-fits-all” approach for private sector development across Africa. For example, there should be a higher emphasis on employee training, and potentially rebuilding community trust when focusing on private sector development in post conflict areas, in addition to access to finance, which is useful in both contexts. Then, even further modifications to private sector interventions should be made according to further local contexts, which is explored more in Chapter 3 using Liberia as a case study. However, these models provide a basis that one can use as a base knowledge for developing these private sector interventions.

This research is a jumping off point for further studies that can be conducted in this area. For more rigorous research to take place, collecting higher quality data from African firms must become a priority. There is a need for proper panel data at the firm level to better determine these effects over time. In addition, running Randomized Control Trials with firms, but in each of these different types of political environments, would provide causal links to access to resources and firm performance.

Further, case study qualitative work can also help us better understand the decision-making processes of firms and how their conduct changes due to conflict. With this, we can better understand the barriers, external and internal, that they face when they are trying to grow businesses in post conflict environments. This qualitative and more detailed analysis is presented in the next Chapter of this thesis, which provides a thorough overview of doing business in Liberia. Using in-depth interviews with numerous different stakeholders, I can capture and analyse additional challenges and opportunities in post conflict African markets, which cannot be shown through quantitative data. Although there is still more work to be done on understanding firm growth in post conflict Africa, this research has provided a respectable quantitative overview of the differences in post conflict firms conduct and the influences on their performance.

Table 8: Summary of Results from Section 6

			Resource of Interest			
			Access to Finance	Employee Training	Foreign Ownership	Networks
Post Conflict	Overall		Positive relationship, same as NPC	Positive relationship, twice the magnitude of NPC	No relationship	No relationship
	Sectors	Manufacturing	Positive relationship, same as NPC	Positive relationship, no difference from services	No relationship	No relationship
		Services	No relationship	Positive relationship, no difference from manufacturing	No relationship	No relationship
	Conflict Characteristics	High Intensity	No relationship	Positive relationship	No relationship	No relationship
		Natural Resources	No relationship	Positive relationship	No relationship	No relationship
		Long Conflict	No relationship	Positive relationship, less in magnitude than other conflicts	No relationship	Negative relationship
		Long PC Time	Positive relationship	Positive relationship	No relationship	No relationship
Non- Post Conflict	Overall		Positive relationship, same as PC	Positive relationship, half the magnitude of PC	Positive relationship	Positive Relationship
	Sectors	Manufacturing	Positive relationship, same as PC, higher for food manufacturers	Positive relationship, same as services	Positive relationship, larger for food manufacturers	No Relationship, except food manufacturers
		Services	No relationship	Positive relationship, same as manufacturing	No relationship	Positive Relationship, particularly high for IT

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Appendix A: Contexts for the Eight Conflicts

Please note that all resources used for this section is from the UCDP Uppsala Conflict Data Program at <https://ucdp.uu.se>.

A1.1: Burundi

The Burundian Civil war began in 1993 and officially ended in 2008, with a total number of deaths of approximately 17,000 (UCDP, 2020). The war was rooted in historical ethnic tensions between the Hutus and the Tutsis. In pre-colonial times, the Tutsi monarchy held power within the region, which was then heightened with German and Belgian colonial rules that provided advantages for the Tutsis through their indirect rule. The colonists separated the ethnic groups by common physical features and gave power to the Tutsis to rule over the ethnic Hutu majority. Burundi became independent in 1962 and initially, the Tutsi monarchy remained in power. For 25 years, up until 1993, there were a number of Tutsi military regimes that took control of power through coups d'états. Throughout this time, there was consistent violence from the military against the Hutu population.

In 1993, the first free and multi-party democratic election was held in Burundi and the Hutu leader, Melchior Ndadaye, came into power as president. He dealt with a number of Tutsi extremists as well as the Hutu militia groups, primarily the Palipehutu-FNL. The president was murdered, which led to violence across the country. This event led to the formation of another political and military group called the CNDD-FDD. The next president, Ntaryamira was also assassinated in a plane crash in April 1994, alongside the Rwandan president. This exacerbated tensions and violence within Burundi but did not cause the mass killings experienced in Rwanda. The arrival of large amounts of Rwandan refugees provided further instability within Burundian politics. Once the genocide concluded in Rwanda, the CNDD-FDD and Palipehutu-FNL aligned themselves with the Rwandan Hutu fractions who had lost the civil war. Both sides of the war actively recruited and used child soldiers, often between the ages of 7 and 16.

In 1998, Tutsi leader, Pierre Buyoya, held a military coup against the Hutu government and gained power. This provided further incentive for the Hutu rebel groups to continue fighting. Peace agreements between the Hutu and Tutsi fractions were attempted in 1999 and 2000; however, leading Hutu rebel groups refused to sign ceasefire agreements. In 2001, Buyoya was sworn in as President and South African peacekeepers entered the country.

In 2003, Buyoya stepped down from presidency and power was handed over to the Tutsi leader Ndayizé. Throughout this process, the integration of CNDD-FDD and Palipehutu-FNL into the government was attempted. There were a number of peace processes and agreements that were set in motion in 2004 but these were broken as a massacre against Tutsi refugees occurred by the Palipehutu-FNL. UN peacekeepers took over the peacekeeping responsibilities from the African Union in 2004. Peace remained elusive until the election of Nkurunziza, who had led that CNDD-FDD. This election formally concluded the war; however, violence continued between ethnicities for approximately 3 more years until an official peace agreement was signed in 2008. The violence had been experienced throughout the whole country.

The UN peacekeeping mission officially ended in 2007 and there was a pivot towards the reconstruction process. Numerous NGOs and development agencies were brought in the hopes to help with the process; however, poverty and economic growth remains low within the country. Further, the government has not set up any Truth and Reconciliation processes or tribunals to punish those who committed crimes against humanity. Nevertheless, many refugee camps have been shut down in the hopes that they can return to their homes in Burundi.

There has been recent tension in 2015 as Niyombare declared a coup d'état against Nkurunziza after he declared he would run for a third term. However, Nkurunziza was sworn in to a third term after an election without the participation of the opposition. The president did not allow peacekeepers to enter the country and approximately 200 hundred people were killed

in the violence. However, this has not crossed the cumulative 1,000 deaths to be declared a high-intensity conflict.

A1.2: Chad

The most recent Chadian civil war began in 2005 and officially ended in 2010 and the battle related deaths was approximately 7700. However, most of the violence subsided significantly by 2008. Chad has suffered from numerous civil wars in its post-colonial era due to constant tensions between religious groups, primarily the Muslims in the North and the Christians in the South. Fighting would start by the opposition whenever one of the groups was placed in political power. In the 1990s and 2000s, before the official civil war, numerous battles were fought amongst newly and constantly changing rebel groups. The most common goal of these groups was to transform into a political party in order to gain official power. However, many of these groups terrorised civilians in order to acquire money, power and weapons.

The tensions in Chad were heightened by its neighbours, Sudan's, widespread conflict. After the election of the Northerner, Idris Deby as president, Sudan slowly attempted to overthrow the government using Chad's rebel groups. The rebel groups received funding and weapons from the Government of Sudan. In addition, Chad's government was also supporting the rebel groups in Sudan, causing further tensions across the two nations. These tensions led to the first battle in 2005 initiated by rebel forces. This violence continued into 2006 and caused it to be the deadliest year for the country with almost 2,000 battle-related deaths. Although the fighting was often close to the Sudanese border or the capital, violence was experienced throughout the entire country. There were children as young as the age of 13 being recruited to fight in Chad; however, the number of child soldiers are not as high in magnitude as other African conflicts.

Hundreds of thousands of refugees from both the Chadian and Sudanese conflict in safer areas within Chad. In 2007, the UN sent in military and civilian peacekeepers to help with the protection of refugees and civilians. However, they were asked to leave by the Chad government in 2010. In addition, French troops also intervened at the beginning of the war in order to help the Chad government from being overthrown. The official end of the war was marked by a peace treaty between Sudan and Chad signed in 2010. After the war, there have still been unjust arrests and detainment of civilians based on ethnicity. The government has been unable to set up any justice system for the crimes that took place throughout the conflict. Further, the aftermath of the conflict has led to a serious refugee problem within the region.

In 2018, there was a small increase in tensions and violence as Chad became involved in the Libyan conflict. This led to approximately 250 deaths and has reopened some tensions within the government.

A1.3: Côte D'Ivoire

In 1993, the end of a 33 year-long presidency came to an end, which brought political instability. In the 1990's, leaders began to use the divisions in ethnicity and religion as means to access power. The country was particularly divided between Muslims, residing in the North and Christians in the South. When the Muslim group began to move further South to work in the Cocoa belt, there were pushbacks from leaders and xenophobic policies began to rise.

In 2000, a policy requiring a presidential candidate's parents to both be born in the country, forbade the participation of a popular presidential candidate representing the Muslim North. By 2002, a number of troops from the north launched attacks in cities, including the capital, which officially began the first civil war. The government troops fought back, maintaining a hold of Abidjan and other areas in the South. A number of soldiers recruited by the government were former combatants from the Liberian civil wars, who were often under 17 years old. The northern rebels, known as the New Forces, also recruited soldiers from the neighbouring wars in Liberia and from former RUF rebels in Sierra Leone. The New Forces

gained full control of the northern part of the country. France brought in 2500 troops to help bring reconciliation and asked the UN to also intervene.

A number of peace treaties and ceasefires were negotiated in 2003; however, the fighting continued as more rebel groups formed. In 2005, UN forces attempted to mitigate the fighting by maintaining a neutral “confidence zone” between the North and the South. The peacekeepers remained in the country until 2009. Many of these soldiers were under the direction of the UN but were peacekeepers from ECOWAS. A final peace agreement was signed in 2007, where the head of the New Forces group, Alassane Outtara was appointed Prime Minister.

However, an additional crisis began in 2010, after a national election, where the country suffered from an additional 1250 battle-related deaths. Outtara had run against the former president of the country, Laurent Gbagbo, who was proclaimed the winner. However, there was outrage within the country and worldwide, stating that Outtara had won the election. What started as peaceful protests, sparked country wide violence and a second civil war. Heavy fighting broke out in the Western part of the country as a rebel group supporting Outtara launched a military offensive against the government. The French and UN troops returned to the country and used attacks against Gbagbo’s heavy weapon forces. UN forces were also used to guard Outtara’s residence. Gbagbo was captured in 2011, which brought an end to the violence, and he was eventually arrested by the International Criminal Courts.

A new government was set up by the former Prime Minister, and in late 2011, Ouattara's party and his allies won in a relatively calm process. The Commission Dialogue, Verite et Reconciliation was formed and based off of the Truth and Reconciliation Commission of South Africa.

A1.4: Ethiopia

The Ethiopian-Eritrea war has the highest battle-related deaths in this sample of African conflicts, reaching almost 100,000. After a number of years of disintegrating relations between the two countries, a border dispute broke out in 1998 when Eritrean troops entered an area that was officially under Ethiopia’s control. Eritrea officially gained independence from Ethiopia in 1991¹⁰⁴ but believed that certain land areas should belong to them. This escalated into a full-scale war between the governments, resulting in slight changes to the borders. This caused a severe refugee crisis, as tens of thousands of Eritreans and Ethiopians fled the country.

Although there were civilian casualties through the war, civilians were not particularly targeted throughout the war. In addition, both countries have a clear rule against the recruitment of children into the military. However, there are reports of children being used as forced labour in military camps (UNHCR, 2004).

In 1999, a number of peace talks and ceasefire negotiations were signed but were not followed. After the Ethiopian military were highly successful in offensive missions, Eritrea agreed to withdraw its military from specific areas and a ceasefire agreement was signed. This agreement was more favourable to Ethiopia and produced a demilitarized zone in Eritrea. UN peacekeeping forces were deployed to maintain this agreement. Although a peace agreement was not signed, the war unofficially ended in 2000. Peacekeepers were withdrawn throughout 2005.

There were times in the mid-2000s where tension between the country continued. The aftermath of the war led to thousands of displaced people and refugees. In addition, the war was costly and the tensions between the countries reduced the ability to trade for both countries. This led to food shortages and a hindrance on economic recovery. An official peace agreement was signed in 2018 by the newly elected Ethiopian Prime Minister, Abiy Ahmed.

¹⁰⁴ 1991 de facto

A1.5: Liberia

Liberia suffered from two major civil wars in recent history, which led to an approximate death toll of over 23,000¹⁰⁵ people in the small West African country. The first civil war occurred from 1989 to 1997. This war stemmed from decades of tensions between a number of different ethnicities in the country. In the 1970's, the American-elite, those who descended from the freed-American slaves brought to the country, who dominated the government and the economy. Although the country was growing economically, little of this wealth was reaching the majority of the country. In 1980, Samuel Doe, a leader of the Krahn ethnicity, held a coup and grabbed power. However, once Doe was in power, he showed favouritism to his own tribe and there were mass mistreatments of the Gio and the Mano ethnicity groups.

In the late 1980's, Charles Taylor began to form a military group in Côte D'Ivoire called the National Patriotic Front of Liberia. This group was primarily composed of Gio and Mano groups who felt wronged by the Krahn government. In 1989, they launched their first 1989 and Doe responded by using the Armed Forces of Liberia. Almost a million civilians were forced to flee from their homes. As fierce fighting continued, ECOWAS decided to deploy a peacekeeping force called ECOMOG in 1990. At the start of ECOMOG's deployment, Doe was captured and killed by Taylor. However, Taylor struggled to gain control over Monrovia for some time after. In 1993, the UN launched an observer mission to support ECOMOG. A ceasefire agreement was signed in 1995 but was broken from both sides. In 1996, the fighting in the capital intensified and was ended by the agreement of demobilization and elections. Taylor won the 1997 elections and the fighting stopped briefly.

In 1999, a rebel group of displaced Liberians in Guinea, who primarily fought with the AFL, called LURD invaded Liberia. This triggered the second civil war, which lasted another four years. LURD was financially backed by Guinea and some groups in Sierra Leone. In addition, Taylor was now supporting the Revolutionary United Front (RUF) in Sierra Leone in order to take control of and benefit from the diamond mines. Both LURD and Taylor used thousands of child soldiers, who were often addicted to drugs and forced into fighting.

ECOMOG continued their mission in the second war but made well-known ties with LURD, making them no longer unbiased observers. As LURD gained more control of Liberia, a second rebel group from the Ivory Coast called the Movement of Democracy in Liberia (MODEL), began to invade from the South of the country. By mid-2003, Monrovia, which was the only area that Taylor still controlled, was attacked by both rebel forces. Taylor was forced to resign a month later, and his arrest was made for his involvement with the RUF by the International Criminal Courts.

A large UN Peacekeeping mission was established in 2003 in order to maintain the peace agreement. The government set up the Liberian Truth and Reconciliation Commission and Ellen Johnson-Sirleaf was elected president in 2005. However, the wars devastated the Liberian economy and it remains one of the poorest countries in the world.

A1.6: Senegal

For Senegal, this paper analyzes the Casamance conflict, which is a conflict that was long but with lower levels of fatalities. The total battle related deaths for this conflict is approximately 2,195. In 1982, the conflict officially began with the formation of the Movement of Democratic Forces of Casamance (MFDC). This rebel group fought for the independence of their region from Senegal due to their ethnic and religious differences from the rest of the country.

The high-intensity period for this conflict was between 1992 and 2001, which marks the conflict that this paper identifies. This heightened conflict was due to the discovery of oil in the

¹⁰⁵ Note that this number is from the UCDP. The UN sources state that the death toll is closer to 200,000 people; however, that includes all fatalities from the war including disease, starvation, etc.

Casamance region, which the MFDC believed should benefit their people and not the entire country. The Senegalese military moved thousands of soldiers to stop this uprising, resulting in further violence. By 1998, MFDC, which had split into two different rebel groups, had created alliances with groups in the Guinea-Bissau civil war.¹⁰⁶ In 1999, the Senegal government shelled the Casamance region, which killed numerous civilians and forced many into displacement. After this attack, both parties agreed to a ceasefire and peace talks commenced. In 2006, low-level fighting, which was less than the 25 battle-related deaths criteria by the UCDP, continued. In 2012, further peace negotiations took place and it was announced that Casamance would be using an advanced decentralization policy.

A1.7: Sierra Leone

The civil war in Sierra Leone lasted eleven years and caused over 20,000 battle-related deaths. The indirect rule used during colonial times, generated poor institutional structures and placed power in the elites. After independence, this worsened, generating vast inequality and ethnic tensions. In addition, the country's natural resources, primarily diamonds and timber, were subject to corruption and an ineffective economic system. In 1978, Sierra Leone fell under a one-party regime, which hindered democratic freedoms. Further, the government's decisions often weakened social support for those who need it, which increased tensions and frustrations.

In 1991, the Revolutionary United Front invaded Sierra Leone from Liberia, having a strong backing for Liberia's Charles Taylor. Although the RUF stated that its goals were to overthrow the corrupt government, it is often noted that their ideology was inconsistent and underdeveloped, meaning there was no preferred methods on how to overthrow the government. The RUF committed mass atrocities targeted at civilians, including mass murder, amputations, rape, burning down villages, theft and slavery. They used forced labour to work the diamond mines that due to embargos, were smuggled into neighbouring countries. Lastly, child soldiers made up approximately a quarter of the RUF, who were forced into their positions through manipulations, violence, drug dependency, and desensitization.

The Sierra Leonean army (SLA) began their offensive in late 1991 and another rebel group, that had been forced to leave Liberia by Taylor, also attacked the RUF. However, the RUF continued to gain territory and control over lucrative diamond mines that helped fund the war. The peacekeeping force ECOMOG entered the country in 1993 but was unable to maintain control of the violence. The SLA began to feel resentful of their poor conditions and they began misusing the natural resources for their own personal benefit. The SLA began to fight using similar methods to the RUF, causing atrocities to civilians on both sides.

A number of peace agreements were talked over in 1995 but this was broken. In 1999, the Lome Peace agreement was signed by both sides as it gave the head of the RUF vice-presidency of the country and control of the diamond mines. This was controversial both locally and internationally. However, it did allow for some of the disarmament and demobilization of the RUF. Following this agreement, a large UN peacekeeping mission was launched in order to maintain the agreement. By March 2001, there were over 17,000 peacekeepers in the country, making it at the time, the largest peacekeeping mission. However, in 2000, the RUF still held half of the country and there was significant British military intervention, finally leading to some stabilization and a ceasefire. Another factor that ended the war was that the UN placed a new resolution that Liberia could not support the RUF or the illicit diamond trade any longer. In 2002, the war was officially declared over.

The war took a massive toll on the country's economy and people. An estimated one to two million people had been displaced from their homes. The war had destroyed substantial amounts of infrastructure throughout the country, which is yet to be fully rebuilt. Thousands of children needed to rehabilitate and went through severe drug withdrawals. The government set

¹⁰⁶ This was also a war to fight for independence.

up a Truth and Reconciliation Commission to deal with the human rights violations. They also asked the UN to set up a Special Court for Sierra Leone, which was used to prosecute those who committed crimes against humanity.

A1.8: Uganda

Since independence, Uganda has suffered from consistent violence throughout the country. This paper focuses on the massive conflict between the government and the two rebel groups: The Lord's Resistance Army (LRA) and the Alliance for Democratic Forces (ADF). The conflict with the LRA began in 1991, when they received support from the Sudanese government. The ADF began fighting in Uganda, using bases in neighbouring Zaire, in 1996. These groups left Uganda in 2006 but are still operating in other states including the DRC and Sudan.

Joseph Kony, the leader of the LRA, began to target Acholi civilians stating that they did not support his cause. With the support of Sudan, they had ample weapons but lacked soldiers. To solve this problem, the LRA began abducting thousands of children to fight, leading to as many as 80 percent of the LRA being under 18. To stop the mass abductions, the government attempted to develop camps for civilians. However, these camps did not have enough protection and ended up being children "pick-up centres" for the rebels.

In 2000, the relationship between the Ugandan and Sudanese government improved, allowing for authorized attacks against the LRA in Sudan. As the relations continued to improve, this put further pressure on the LRA, forcing them to separate in 2006 and disperse primarily into the DRC.

When the ADF entered the country, they attacked indiscriminately and were seen as a rebel group without a cause. The DRC helped to provide arms and equipment to the group. In 1998, the Uganda army entered the DRC to try and destroy ADF bases. By 2000, enough bases were destroyed that the group weakened substantially and no longer posed a serious threat.

Beginning in 2006, numerous peace talks were held with the LRA but the arrest warrants by the International Criminal Courts hindered the process. By 2008, partial agreements had been made but Kony did not show up to sign them. The fighting continued in neighbouring Sudan and DRC.

The lasting impacts of the insurgencies of the rebel groups is vast, particularly in Northern Uganda. Almost two million people became internally displaced and thousands of children and adults had been abducted. Thousands of women were forced into domestic and sex slavery. The war was extremely costly for the government, which has stunted their development and growth. In addition, the war destroyed much-needed infrastructure and entire villages, particularly in the North parts of the country.

Appendix B: First Model with and without Ethiopia
Table B.1: Analysis of Ethiopia OLS Regressions

		With Ethiopia	Without Ethiopia
Variables of Interest	Access to Credit	4.457* (-2.33)	4.588* (-2.84)
	Training	15.126*** (-2.6)	11.415*** (-2.97)
	Foreign Ownership	0.046 (-3.18)	1.671 (-3.65)
	Suppliers Networks	-0.07 (-4.5)	-0.702 (-4.91)
Firm Characteristics	Manager Experience	-0.114 (-0.12)	0.053 (-0.15)
	Urban	4.580* (-2.44)	5.155* (-2.88)
	Years Operating	-0.417*** (-0.09)	-0.473*** (-0.12)
	Exports	-0.075 (-0.07)	-0.09 (-0.1)
	Time on Regulation	-0.015 (-0.06)	0.006 (-0.07)
	Corruption	-2.877* (-1.66)	-4.342** (-1.86)
	Small	18.758*** (-3.98)	13.083** (-5.7)
	Medium	7.336* (-4.03)	2.738 (-5.72)
Sector	Food	-2.408 (-3.33)	0.61 (-3.91)
	Hospitality	-8.349** (-3.85)	-4.81 (-4.56)
	Transport	-3.521 (-3.61)	-2.936 (-4.74)
	IT	4.797 (-9.49)	5.599 (-10.03)
	Retail	-2.528 (-3.05)	0.173 (-3.46)
	Constant	11.439** (-5.21)	11.347 (-7.1)
Analysis	R Square	0.0495	0.0397
	F-Stat	7.01***	3.93***
	Number of Obs	2316	1599

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant
Employment Growth (dependent variable) winsorized at 99%,
country fixed effects in place

Appendix C: Regressions for Each Post Conflict Country

Table C.1: Separate Post Conflict OLS Regressions by Country

		Burundi	Chad	Côte D'Ivoire	Ethiopia	Liberia	Senegal	Sierra Leone	Uganda
Variables of Interest	Access to Credit	18.874* (-12)	-1.389 (-9.68)	9.196* (-8.85)	7.676* (-4.05)	5.469 (-14.75)	-2.661 (-4.85)	1.646 (-12.07)	-4.805 (-4.43)
	Training	30.503** (-12.19)	14.885 (-9.55)	25.223*** (-8.33)	25.96*** (-5.38)	49.55*** (-14.83)	7.321 (-7.52)	5.543 (-10.9)	-3.001 (-4.45)
	Foreign Ownership	-0.687 (-13.76)	14.213 (-13.95)	5.729 (-9.54)	-6.218 (-6.62)	2.738 (-15.15)	-5.519 (-7.87)	-11.361 (-15.87)	2.155 (-6.2)
	Networks	6.193 (-16.47)	8.1 (-16.94)	-4.443 (-14.76)	2.026 (-11.98)	-25.829 (-26.79)	38.65*** (-13.25)	-1.526 (-20.74)	-8.065 (-7.17)
Firm Characteristics	Manager Experience	0.446 (-0.65)	1.206** (-0.6)	0.269 (-0.42)	-0.335* (-0.19)	-0.337 (-0.95)	-0.046 (-0.23)	0.255 (-0.56)	-0.257 (-0.28)
	Urban	-35.773 (-31.39)		9.345 (-8.51)	5.789 (-4.59)	-20.548 (-14.88)	10.961** (-4.92)	22.747* (-12.84)	4.658 (-4.25)
	Years Operating	-0.593 (-0.42)	-1.46*** (-0.55)	-0.484 (-0.33)	-0.348** (-0.16)	-0.59 (-0.98)	-0.50*** (-0.18)	-0.528 (-0.39)	-0.06 (-0.23)
	Time on Regulation	-0.357 (-0.52)	-0.134 (-0.14)	-0.107 (-0.14)	-0.142 (-0.14)	0.441 (-0.65)	0.011 (-0.15)	0.178 (-0.27)	0.147 (-0.16)
	Corruption	6.592 (-8.67)	-9.292* (-5.21)	-3.794 (-6.95)	3.7 (-3.68)	-6.398 (-6.26)	-4.361 (-9.91)	-0.017 (-4.97)	-6.495** (-2.98)
	Manufacturing	13.704 (-11.56)	-8.072 (-8.13)	21.692** (-8.83)	5.548 (-4.01)	-4.164 (-13.75)	-0.576 (-4.55)	9.772 (-10.5)	-0.945 (-4.18)
	Small	53.813** (-24.53)	8.777 (-15.38)	24.42 (-14.97)	29.93*** (-6.05)	58.182* (-32.22)	12.909 (-11.36)	38.947 (-28.79)	-4.821 (-8.86)
	Medium	22.94 (-23.55)	0.401 (-16.13)	1.04 (-14.84)	14.557** (-6.09)	46.827 (-34.61)	8.251 (-11.7)	45.797 (-28.62)	-10.107 (-9.07)
	Constant	-42.345 (-28.61)	2.18 (-18.23)	-18.079 (-21.52)	2.951 (-8.78)	28.879 (-37.09)	7.402 (-13.07)	-11.031 (-33.13)	21.94** (-10.8)
Analysis	R Square	0.157	0.1212	0.0961	0.0924	0.1551	0.0716	0.1162	0.0357
	F-Stat	1.86**	1.38	1.97*	6.02***	1.68*	2.33***	1.21	1.42
	Number of Obs	133	122	235	722	123	375	123	472

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%,
country fixed effects in place

Appendix D: Why Does Employment Growth Control for In-Country Variations? Case Study Example from Field Work in Liberia

The data for Liberia, which was collected in 2017 after the Ebola crisis, is quite skewed. The three-year period that the business owners would refer to for these questions would be 2014, at the start of the Ebola crisis. During this crisis, many businesses were forced to shut down and to stop operating. When analysing the annual sales variables from 2017 and from three years prior within Liberia, sales growth has an extremely high variance and changes drastically over the three years. The average sales growth between these three years is reported at over 714 percent. The large standard deviation is most likely caused by the fact that many companies slowed their production and operations in 2014 and they would be reporting that slowdown from Ebola. Therefore, sales growth over three years is not an optimal variable to use for business growth because it was so heavily impacted by a substantial and devastating shock to the country.

However, it is reported in Liberia that many employees remained part of the company as owners tried to do what they could throughout the crisis. From interviews with business owners,¹⁰⁷ it was common for them to mention that they did their best to try and keep their employees throughout the Ebola Crisis. For example, one investor stated that “since the companies were experiencing cash flow problems and might not have been able to make payroll, we provided some extra capital. So, the staff didn’t feel it as much since they got paid throughout” (SME Impact Investor). One company mentioned that even though they weren’t producing anything, her employees worked as volunteers together. She said that “we closed down operations for almost a year but the women didn’t want to just stay at home so we just raised a few dollars and went into the communities that we worked in and helped where we could” (Accessories Company Owner). Thus, employment may not have been as negatively impacted during Ebola as sales were. This is because even though the employees may not have been getting fully paid due to cash flow problems, many companies were still engaged with their employees and kept them for as long as they could. This is especially the case because the employment level three years prior is self-reported and the owner may recall, even if they were not paying them their full salaries, a more accurate number. Further, because employment was not impacted as much as sales, using employment growth, helps to partially control for the Ebola crisis in this regression. Although this is just one country’s example, the same theory may apply to other countries who have experienced major or minor negative shocks within this dataset.

¹⁰⁷ These were qualitative interviews conducted with business owners and investors in Liberia throughout 2018 to 2019. Chapter 3 of this thesis presents the results from this fieldwork.

Appendix E: Is Foreign Ownership a Proxy for Large Firms?

Running these regressions is a robustness check to ensure that foreign ownership is not merely acting as a proxy for large sized firms. There are no significant changes to the coefficients of small sized or medium sized firms, showing that this is not the case.

Table F.1: OLS Model from Section 6.1 without Foreign Ownership

		Post Conflict	Non-Post Conflict
Variables of Interest	Access to Credit	4.457* (-2.33)	1.908 (-1.67)
	Training	15.127*** (-2.6)	8.379*** (-1.69)
	Suppliers Networks	-0.07 (-4.5)	5.574** (-2.49)
Firm Characteristics	Manager Experience	-0.114 (-0.12)	-0.212*** (-0.08)
	Urban	4.582* (-2.43)	1.247 (-1.68)
	Years Operating	-0.417*** (-0.09)	-0.233*** (-0.05)
	Exports	-0.075 (-0.07)	0.041 (-0.04)
	Small	18.748*** (-3.92)	20.650*** (-2.57)
	Medium	7.331* (-4.02)	1.485 (-2.53)
Institution Factors	Time on Regulation	-0.015 (-0.06)	-0.05 (-0.04)
	Corruption	-2.876* (-1.66)	1.015 (-1.46)
Sector	Food	-2.407 (-3.32)	7.827*** (-2.46)
	Hospitality	-8.348** (-3.85)	-5.931** (-2.62)
	Transport	-3.52 (-3.61)	-0.409 (-2.67)
	IT	4.796 (-9.49)	-0.882 (-5.92)
	Retail	-2.528 (-3.05)	0.495 (-2.14)
	Constant	11.450** (-5.16)	9.039*** (-3.28)
Analyses	R Square	0.0403	0.0424
	F-Stat	7.45***	15.82***
	Number of Obs	2316	6176

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Appendix F: Winsorized Results at Different Levels

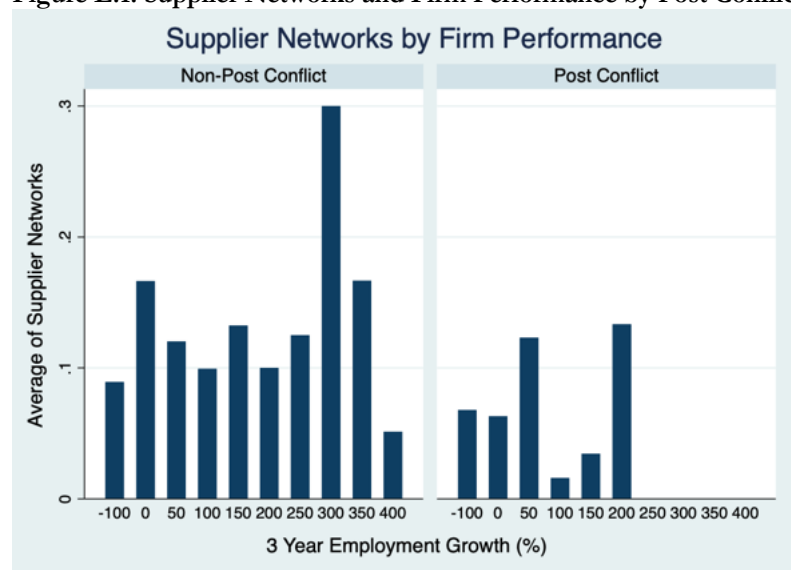
Table E.1: Separate OLS Regressions by Type of Conflict and Different Winsorized Levels

	Variable	All Data			Post Conflict			Non-Post Conflict		
		Original	99.9%	99.0%	Original	99.9%	99.0%	Original	99.9%	99.0%
Variables of Interest	Access to Credit	4.146* (-2.51)	4.307** (-2.02)	2.324* (-1.36)	4.492* (-2.56)	4.492* (-2.56)	4.457* (-2.33)	4.691 (-3.23)	5.008* (-2.56)	2.244 (-1.64)
	Training	13.358*** (-2.6)	11.328*** (-2.1)	9.994*** (-1.41)	16.888*** (-2.86)	16.888*** (-2.86)	15.126*** (-2.6)	12.535*** (-3.25)	9.974*** (-2.58)	8.714*** (-1.65)
	Foreign Ownership	7.688** (-3.19)	7.078*** (-2.57)	4.682*** (-1.73)	0.237 (-3.5)	0.237 (-3.5)	0.046 (-3.18)	9.741** (-3.97)	8.950*** (-3.14)	6.034*** (-2.01)
	Suppliers Networks	-0.163 (-3.98)	1.314 (-3.21)	4.340** (-2.16)	-0.792 (-4.95)	-0.792 (-4.95)	-0.07 (-4.5)	-0.09 (-4.84)	1.6 (-3.83)	5.179** (-2.45)
Firm Characteristics	Manager Experience	-0.15 (-0.12)	-0.165* (-0.1)	-0.190*** (-0.07)	-0.114 (-0.13)	-0.114 (-0.13)	-0.114 (-0.12)	-0.135 (-0.15)	-0.156 (-0.12)	-0.195** (-0.08)
	Urban	3.049 (-2.54)	2.097 (-2.05)	2.345* (-1.38)	4.941* (-2.68)	4.941 (-2.68)	4.580* (-2.44)	2.142 (-3.24)	0.967 (-2.56)	1.617 (-1.64)
	Years Operating	-0.215** (-0.09)	-0.250*** (-0.07)	-0.275*** (-0.05)	-0.436*** (-0.1)	-0.436*** (-0.1)	-0.417*** (-0.09)	-0.164 (-0.11)	-0.205** (-0.08)	-0.239*** (-0.05)
	Exports	0.046 (-0.06)	0.02 (-0.05)	0.008 (-0.03)	-0.081 (-0.07)	-0.081 (-0.07)	-0.075 (-0.07)	0.074 (-0.07)	0.043 (-0.06)	0.023 (-0.04)
	Time on Regulation	-0.046 (-0.06)	-0.037 (-0.05)	-0.043 (-0.03)	-0.028 (-0.07)	-0.028 (-0.07)	-0.015 (-0.06)	-0.058 (-0.07)	-0.048 (-0.06)	-0.057 (-0.04)
	Corruption	-1.635 (-2.04)	-1.314 (-1.65)	-0.46 (-1.11)	-3.173* (-1.82)	-3.173* (-1.82)	-2.877* (-1.66)	-0.772 (-2.81)	-0.238 (-2.22)	0.853 (-1.42)
	Small	29.510*** (-4.02)	27.127*** (-3.25)	21.087*** (-2.19)	19.520*** (-4.38)	19.520*** (-4.38)	18.758*** (-3.98)	32.811*** (-5.08)	29.756*** (-4.02)	21.991*** (-2.58)
	Medium	6.675* (-3.95)	5.437* (-3.19)	3.391 (-2.15)	8.144* (-4.44)	8.144* (-4.44)	7.336* (-4.03)	6.134 (-4.94)	4.53 (-3.91)	2.077 (-2.5)
Sector	Food	7.893** (-3.66)	7.009** (-2.96)	4.987** (-1.99)	-2.863 (-3.66)	-2.863 (-3.66)	-2.408 (-3.33)	11.087** (-4.79)	9.981*** (-3.79)	7.011*** (-2.43)
	Hospitality	-9.883** (-4)	-9.427*** (-3.23)	-6.568*** (-2.18)	-9.064** (-4.24)	-9.064** (-4.24)	-8.349** (-3.85)	-10.507** (-5.12)	-9.775* (-4.05)	-6.078** (-2.6)
	Transport	-3.424 (-3.98)	-3.219 (-3.21)	-1.231 (-2.17)	-2.364 (-3.98)	-2.364 (-3.98)	-3.521 (-3.61)	-4.175 (-5.1)	-3.869 (-4.04)	-0.652 (-2.59)

	IT	30.839*** (-9.23)	4.926 (-7.46)	0.274 (-5.02)	3.811 (-10.44)	3.811 (-10.44)	4.797 (-9.49)	37.784*** (-11.35)	6.21 (-8.98)	0.44 (-5.75)
	Retail	-2.121 (-3.24)	-2.23 (-2.62)	-0.322 (-1.76)	-3.247 (-3.36)	-3.247 (-3.36)	-2.528 (-3.05)	-2.842 (-4.12)	-2.877 (-3.26)	-0.51 (-2.09)
	Constant	1.799 (-5.17)	5.12 (-4.18)	8.338*** (-2.81)	11.300** (-5.74)	11.300** (-5.74)	11.439** (-5.21)	-1.261 (-6.52)	2.866 (-5.16)	7.017** (-3.3)
Analyses	R Square	0.1558	0.16667	0.1824	0.0455	0.0455	0.0495	0.2231	0.224	0.2578
	F-Stat	9.83***	12.47***	20.56***	6.42***	6.42***	7.01***	7.44***	9.42***	15.98***
	Number of Obs	8492	8492	8492	2316	2316	2316	6410	6410	6410

Country fixed effects in place

Figure E.1: Supplier Networks and Firm Performance by Post Conflict



Note that no post conflict firm borrows from consumers/suppliers above a three-year employment growth of 200 percent

Appendix G: All Conflict Characteristic Interactions for Section 6.3

Table G.1: Conflict Characteristic Interactions with Access to Finance

		Natural Resources	High Intensity	Long Conflict	Long PC Time
Variables of Interest	Access to Finance	2.16 (-1.62)	2.164 (-1.62)	2.139 (-1.62)	2.14 (-1.62)
	Training	9.540*** (-1.45)	9.542*** (-1.45)	9.521*** (-1.45)	9.527*** (-1.45)
	Foreign Ownership	5.565*** (-1.77)	5.555*** (-1.77)	5.588*** (-1.77)	5.587*** (-1.77)
	Networks	4.102* (-2.24)	4.092* (-2.24)	4.196* (-2.24)	4.203* (-2.24)
Firm Characteristics	Manager Experience	-0.178*** (-0.07)	-0.178*** (-0.07)	-0.180*** (-0.07)	-0.178*** (-0.07)
	Urban	2.719* (-1.41)	2.706* (-1.41)	2.724* (-1.41)	2.700* (-1.41)
	Years Operating	-0.266*** (-0.05)	-0.266*** (-0.05)	-0.265*** (-0.05)	-0.265*** (-0.05)
	Time on Regulation	-0.046 (-0.03)	-0.046 (-0.03)	-0.045 (-0.03)	-0.046 (-0.03)
	Corruption	-0.632 (-1.13)	-0.673 (-1.13)	-0.583 (-1.13)	-0.656 (-1.13)
	Manufacturing	3.652*** (-1.29)	3.671*** (-1.29)	3.614*** (-1.29)	3.630*** (-1.29)
	Small	21.759*** (-2.21)	21.744*** (-2.21)	21.796*** (-2.21)	21.773*** (-2.21)
	Medium	3.544 (-2.19)	3.53 (-2.19)	3.594 (-2.19)	3.571 (-2.19)
Conflict Characteristics Interactions	Finance*PC	1.289 (-3.56)	1.276 (-3.02)	3.555 (-3.47)	-1.085
	Finance*PC*Natural Resource	1.386 (-5)			
	Finance*PC*High Intensity		5.665 (-8.1)		
	Finance*PC*Long Conflict			-4.546 (-5.11)	
	Finance*PC*LongPC Time				6.275 (-4.93)
	Constant	5.484* (-2.87)	5.497* (-2.86)	5.486* (-2.86)	5.499* (-2.86)
Analysis	R Square	0.0389	0.0399	0.039	0.0406
	F-Stat for Credit + Interactions	1.57	1.4	0.08	4.3**
	F-Stat	23.15***	23.18***	23.20***	23.26***
	Number of Obs	8499	8499	8499	8499

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant
Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Table G.2: Conflict Characteristic Interactions with Employee Training

		Natural Resources	High Intensity	Long Conflict	Long PC Time
Variables of Interest	Access to Finance	2.734** (-1.39)	2.739** (-1.39)	2.697* (-1.39)	2.693* (-1.39)
	Training	7.593*** (-1.65)	7.582*** (-1.65)	7.610*** (-1.65)	7.606*** (-1.65)
	Foreign Ownership	5.568*** (-1.77)	5.629*** (-1.77)	5.570*** (-1.77)	5.612*** (-1.77)
	Networks	4.132* (-2.23)	4.111* (-2.23)	4.212* (-2.23)	4.282* (-2.23)
Firm Characteristics	Manager Experience	-0.177*** (-0.07)	-0.176*** (-0.07)	-0.175*** (-0.07)	-0.173*** (-0.07)
	Urban	2.612* (-1.41)	2.539* (-1.41)	2.656* (-1.41)	2.598* (-1.41)
	Years Operating	-0.265*** (-0.05)	-0.264*** (-0.05)	-0.266*** (-0.05)	-0.265*** (-0.05)
	Time on Regulation	-0.052 (-0.03)	-0.049 (-0.03)	-0.052 (-0.03)	-0.05 (-0.03)
	Corruption	-0.613 (-1.13)	-0.598 (-1.13)	-0.598 (-1.13)	-0.619 (-1.13)
	Manufacturing	3.574*** (-1.29)	3.519*** (-1.29)	3.542*** (-1.29)	3.464*** (-1.29)
	Small	21.689*** (-2.21)	21.703*** (-2.21)	21.882*** (-2.21)	21.947*** (-2.21)
	Medium	3.478 (-2.19)	3.465 (-2.19)	3.698* (-2.19)	3.709* (-2.19)
Conflict Characteristics Interactions	Training*PC	4.509 (-4.08)	6.065* (-3.44)	12.275*** (-4.18)	1.19 (-4.11)
	Training*PC*Natural Resource	7.973 (-5.75)			
	Training*PC*High Intensity		14.529* (-8.55)		
	Training*PC*Long Conflict			-9.596* (-5.7)	
	Training*PC*LongPC Time				15.352*** (-5.72)
	Constant	5.612* (-2.86)	5.601* (-2.86)	5.424* (-2.86)	5.402* (-2.86)
Analysis	R Square	0.0401	0.0419	0.0394	0.0425
	F-Stat for Training + Interactions	21.03***	12.40***	5.99**	31.36***
	F-Stat	23.69***	23.77***	23.75***	24.88***
	Number of Obs	8499	8499	8499	8499

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Table G.3: Conflict Characteristic Interactions with Foreign Ownership

		Natural Resources	High Intensity	Long Conflict	Long PC Time
Variables of Interest	Access to Finance	2.702* (-1.39)	2.714* (-1.39)	2.709* (-1.39)	2.703* (-1.39)
	Training	9.495*** (-1.45)	9.499*** (-1.45)	9.505*** (-1.45)	9.514*** (-1.45)
	Foreign Ownership	6.806*** (-2.01)	6.812*** (-2.01)	6.807*** (-2.01)	6.804*** (-2.01)
	Networks	3.950* (-2.23)	4.003* (-2.23)	3.991* (-2.23)	3.999* (-2.23)
Firm Characteristics	Manager Experience	-0.175*** (-0.07)	-0.177*** (-0.07)	-0.176*** (-0.07)	-0.176*** (-0.07)
	Urban	2.772** (-1.41)	2.784** (-1.41)	2.776** (-1.41)	2.779** (-1.41)
	Years Operating	-0.267*** (-0.05)	-0.265*** (-0.05)	-0.266*** (-0.05)	-0.266*** (-0.05)
	Time on Regulation	-0.046 (-0.03)	-0.046 (-0.03)	-0.046 (-0.03)	-0.046 (-0.03)
	Corruption	-0.588 (-1.13)	-0.561 (-1.13)	-0.581 (-1.13)	-0.559 (-1.13)
	Manufacturing	3.668*** (-1.29)	3.623*** (-1.29)	3.630*** (-1.29)	3.643*** (-1.29)
	Small	21.745*** (-2.21)	21.786*** (-2.21)	21.760*** (-2.21)	21.750*** (-2.21)
	Medium	3.558 (-2.19)	3.59 (-2.19)	3.568 (-2.19)	3.561 (-2.19)
Conflict Characteristics Interactions	Foreign Own*PC	-7.279* (-5.21)	-4.508 (-4.23)	-5.328 (-4.99)	-2.802 (-4.99)
	Foreign Own*PC*Natural Resource	4.592 (-6.98)			
	Foreign Own*PC*High Intensity		-4.112 (-10.08)		
	Foreign Own*PC*Long Conflict			0.594 (-7.05)	
	Foreign Own*PC*LongPC Time				-5.376 (-7.04)
	Constant	5.372* (-2.87)	5.338* (-2.87)	5.354* (-2.87)	5.368* (-2.86)
Analysis	R Square	0.0389	0.0381	0.0386	0.0381
	F-Stat for Foreign Ownership + Interactions	0.66	0.04	0.15	0.07
	F-Stat	23.26***	23.24***	23.23***	23.27***
	Number of Obs	8499	8499	8499	8499

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Table G.4: Conflict Characteristic Interactions with Networks

		Natural Resources	High Intensity	Long Conflict	Long PC Time
Variables of Interest	Access to Finance	2.677* (-1.39)	2.699* (-1.39)	2.669* (-1.39)	2.698* (-1.39)
	Training	9.525*** (-1.45)	9.510*** (-1.45)	9.543*** (-1.45)	9.509*** (-1.45)
	Foreign Ownership	5.529*** (-1.77)	5.605*** (-1.77)	5.552*** (-1.77)	5.595*** (-1.77)
	Networks	4.602* (-2.43)	4.582* (-2.43)	4.607* (-2.43)	4.582* (-2.43)
Firm Characteristics	Manager Experience	-0.178*** (-0.07)	-0.178*** (-0.07)	-0.178*** (-0.07)	-0.178*** (-0.07)
	Urban	2.696* (-1.41)	2.686* (-1.41)	2.649* (-1.41)	2.690* (-1.41)
	Years Operating	-0.265*** (-0.05)	-0.265*** (-0.05)	-0.264*** (-0.05)	-0.265*** (-0.05)
	Time on Regulation	-0.046 (-0.03)	-0.046 (-0.03)	-0.047 (-0.03)	-0.046 (-0.03)
	Corruption	-0.606 (-1.13)	-0.559 (-1.13)	-0.567 (-1.13)	-0.571 (-1.13)
	Manufacturing	3.662*** (-1.29)	3.635*** (-1.29)	3.637*** (-1.29)	3.640*** (-1.29)
	Small	21.813*** (-2.21)	21.788*** (-2.21)	21.847*** (-2.21)	21.778*** (-2.21)
	Medium	3.576 (-2.19)	3.566 (-2.19)	3.615* (-2.19)	3.56 (-2.19)
Conflict Characteristics Interactions	Networks*PC	-7.845 (-6.85)	-2.582 (-5.7)	5.425 (-7.69)	-2.943 (-6.4)
	Networks*PC*Natural Resource	11.056 (-9.86)			
	Networks*PC*High Intensity		-4.258 (-14.67)		
	Networks*PC*Long Conflict			-15.317* (-9.82)	
	Networks*PC*LongPC Time				-0.527 (-10.35)
	Constant	5.401* (-2.86)	5.400* (-2.87)	5.378* (-2.86)	5.414* (-2.87)
Analysis	R Square	0.0393	0.0387	0.0391	0.0389
	F-Stat for Networks + Interactions	1.08	0.03	0.65	0.02
	F-Stat	23.23***	23.14***	23.32***	23.14***
	Number of Obs	8499	8499	8499	8499

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Appendix H: Separate Regressions for Five Sectors by Post Conflict

Table H.1: OLS Regressions by Sector: The Food Sectors Variables of Interest Coefficients are Significantly Different in Non-PC environments

	Variables	Food Sector		Hospitality		Transport		IT		Retail	
		Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC
Variables of Interest	Access to Finance	8.874 (-6.62)	9.108* (-5.48)	-11.406* (-6.76)	2.198 (-5.14)	4.714 (-9.02)	5.532 (-5.92)	13.19 (-45.74)	18.393 (-14.45)	2.685 (-4.9)	-1.651 (-3.97)
	Training	15.782** (-7.18)	9.753* (-5.39)	5.132 (-7.15)	5.357 (-4.83)	32.223*** (-9.87)	14.916*** (-5.65)	19.806 (-50.83)	24.113* (-14.9)	4.067 (-5.9)	3.438 (-4.23)
	Foreign Ownership	0.916 (-8.17)	12.546** (-6.08)	7.627 (-9.48)	0.834 (-6.29)	-10.11 (-11.9)	-2.398 (-6.96)	11.202 (-51.99)	17.981 (-23.78)	4.486 (-7.9)	1.817 (-5.24)
	Suppliers Networks	12.87 (-11.96)	11.995* (-7.75)	14.096 (-17.49)	5.742 (-8.45)	-11.595 (-17.89)	0.473 (-8.59)	-13.569 (-67.43)	43.562* (-23.06)	2.038 (-11.36)	4.851 (-7.27)
Firm Characteristics	Manager Experience	-0.207 (-0.29)	-0.264 (-0.25)	0.334 (-0.36)	-0.156 (-0.26)	0.278 (-0.44)	-0.005 (-0.26)	-0.634 (-2.33)	-2.508** (-1.08)	0.445 (-0.32)	0 (-0.19)
	Urban	10.222 (-7.02)	2.805 (-5.56)	0.23 (-6.27)	-2.303 (-4.78)	-6.858 (-10.04)	-5.799 (-5.75)	12.245 (-40.05)	18.856 (-15.47)	-3.996 (-5.03)	5.582 (-4.01)
	Years Operating	-0.216 (-0.25)	-0.222* (-0.14)	-0.177 (-0.31)	-0.286 (-0.19)	-0.755* (-0.39)	-0.270* (-0.16)	-1.857 (-4.02)	-1.365 (-1.14)	-0.617*** (-0.23)	-0.194 (-0.13)
	Exports	-0.116 (-0.21)	0.019 (-0.11)	-0.279 (-0.58)	0.042 (-0.13)	-0.001 (-0.27)	0.12 (-0.15)	-0.062 (-3.85)	0.356 (-0.33)	-0.294 (-0.26)	-0.233* (-0.14)
	Time on Regulation	-0.203 (-0.18)	-0.195 (-0.13)	0.154 (-0.22)	-0.028 (-0.11)	0.217 (-0.2)	-0.018 (-0.13)	1.644 (-2.04)	-0.948*** (-0.32)	0.127 (-0.12)	-0.036 (-0.11)
	Corruption	-5.269 (-4.67)	1.024 (-5.29)	-7.992* (-4.32)	-3.092 (-4.21)	-0.892 (-8)	4.041 (-4.13)	-6.861 (-40.65)	-15.616 (-15.39)	-7.331* (-4.06)	1.679 (-3.34)
	Small	31.042*** (-9.35)	36.927*** (-7.28)	18.237 (-12.95)	21.159** (-9.68)	8.909 (-13.62)	12.128 (-9.35)	26.791 (-37.31)	51.187* (-27.27)	8.28 (-14.84)	19.982** (-9.11)
	Medium	21.184** (-9.24)	-0.949 (-6.69)	1.96 (-13.33)	4.176 (-9.39)	2.9 (-14.21)	-3.816 (-9.33)		70.228** (-32.28)	-2.403 (-15.45)	3.734 (-9.39)
	Constant	-8.479 (-11.76)	5.021 (-9.45)	1.599 (-15.25)	4.839 (-11.21)	19.014 (-17.8)	10.777 (-11.68)	15.674 (-70.55)	2.719 (-30.74)	17.742 (-16.76)	5.032 (-10.39)
Analysis	R Squared	0.077	0.0789	0.0841	0.0349	0.0791	0.0225	0.3972	0.0548	0.0477	0.0327
	F-Stat	1.91**	6.11***	1.51	1.89**	1.62*	1.63*	0.55	2.14**	1.65*	2.44***
	Number of Obs.	314	700	217	619	247	575	30	101	0.0755	1033

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant

Employment Growth (dependent variable) winsorized at 99%, country fixed effects in place

Table H.2: Results for Regressions Separated by Manufacturing Type

Dependent Variable is three-year employment growth (%)

	Variable	Non-Food Manufacturing	Food Manufacturing
Variables of Interest	Access to Finance	1.105 (-2.66)	8.725* (-5.24)
	Training	8.416*** (-2.74)	9.328* (-5.16)
	Foreign Ownership	8.765*** (-3.25)	11.922** (-5.78)
	Networks	0.594 (-3.74)	11.409* (-7.44)
Post Conflict Interactions	Credit*PC	5.775 (-5.44)	-2.297 (-9)
	Training*PC	11.660** (-5.83)	9.707 (-9.25)
	Foreign Ownership*PC	-8.759* (-7.06)	-7.525 (-10.68)
	Networks*PC	-10.273 (-9.36)	2.527 (-15.38)
Firm Characteristics	Manager Experience	-0.309*** (-0.11)	-0.232 (-0.19)
	Urban	5.408** (-2.4)	3.703 (-4.45)
	Years Operating	-0.231*** (-0.09)	-0.228* (-0.12)
	Time on Regulation	0.039 (-0.05)	-0.216** (-0.1)
	Corruption	0.567 (-1.94)	-2.057 (-3.68)
	Small	25.752*** (-3.34)	34.515*** (-5.82)
	Medium	5.642* (-3.24)	5.1 (-5.49)
	Constant	4.939 (-4.27)	2.218 (-7.44)
Analysis	R Squared	0.051	0.0658
	F-Stat	10.35***	5.64***
	Number of Obs	3207	1022

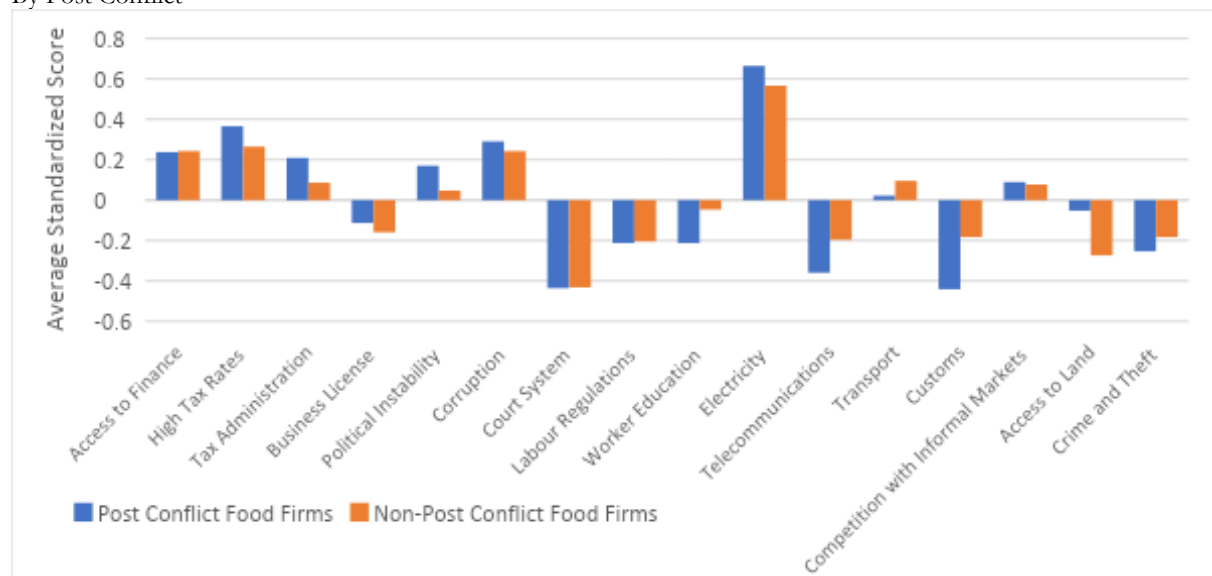
Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant
Employment Growth (dependent variable) winsorized at 99%,
country fixed effects in place

Main finding from Table H.2:

Food manufacturing firms use of resources has more significant impacts than non-food manufacturing.

Post conflict food manufacturers does not benefit from foreign ownership and access to finance as much as non-post conflict food manufacturers.

Figure H.1: Obstacles for Food Manufacturers
By Post Conflict



Appendix I: Probit Models for Access to Finance Analysis

The WES data provides an opportunity to explore some additional information on access to finance to these firms. This data provides information on whether firms use finance for working capital and/or fixed assets from banks, non-financial institutions, suppliers and/or consumers, and family or friends. I run probit models to determine the likelihood of firms receiving finance from these different sources. The probit model is run for firms in not-post conflict and post conflict states separately. The dependent variable in these models is a dummy variable for if the firm is using that specific type of finance for their firm. If the firm received any finance from that source, the dummy variable equals one and if they have received no financing from that specific source, then the dummy variable equals zero. The independent variables included in these models are similar to the model presented in Equation (1). However, three-year employment growth and female ownership are also included as an explanatory variable. These models not only offer more analysis in understanding the use of finance in these markets but also the influence of business networks and foreign ownership in accessing capital in post conflict markets. This relates to the findings from Fafchamps (1999), where business networks are key to accessing finance in Kenya and Zimbabwe.

Table I.1 and I.2 show that the factors influencing the likelihood of a firm receiving capital is similar within non-post conflict firms for both working capital and fixed assets. On the other hand, there are a number of distinctions within post conflict markets. A manager having a higher number of years of experience has a significant positive influence on the likelihood of receiving finance in non-post conflict environments. Appendix I, shows that this positive impact is primarily from nonfinancial institutions and supplier/consumer networks. This does suggest that networks are a strong element for receiving credit. In post conflict firms, manager experience is only significant and positive for using working capital and Table I.1, shows that this solely from suppliers/consumers. This suggests that business networks between managers may be less prominent in post conflict markets. Thus, managers with more experience in non-post conflict regions do not need to rely on the informal lending market due to their stronger networks in more formal institutions. Firm performance, which is proxied by employment growth, is only significant for post conflict firms borrowing for fixed assets, which is driven fully by finance sourced from formal banks (see Table I.). This means that in order to receive a loan from a bank to increase investment into a business, prior growth is important in post conflict markets but insignificant in non-post conflict markets.

Contradictory to Fafchamps (1999) findings, these results show that female ownership has a positive and significant influence on the chances of receiving external financing in both environments. However, female ownership is insignificant for post conflict firms using fixed assets, which could present a lack of investment by female owners in post conflict environments. Table I.1, provides evidence that it is formal banks that prefer female founders to borrow for fixed assets in non-post conflict markets. Employee training, which shows lenders an owner's commitment to their business's growth, increases the chances of using external finance for non-post conflict working capital and both environments fixed assets. This is primarily driven by formal institutions and supplier/consumer networks, as it provides key information on an owner's dedication. However, the above sections show that training has a significantly higher relationship with future business growth in post conflict markets. Thus, it would be beneficial for lenders in post conflict markets to use this characteristic more frequently in their due diligence process for working capital.

Foreign ownership has a significant and negative coefficient for non-post conflict firms using external finance for fixed assets. However, this is somewhat misleading because foreigners may bring strong ties to suppliers and formal banks from their home country or past business

networks,¹⁰⁸ which explains this effect. Accordingly, these owners often receive external finance, but not from local institutions. The negative effect is coming solely from formal banks (see Table I.2), meaning that a foreign owned company is significantly less likely to use finance from a local bank. However, since interest rates are relatively high in post conflict African formal banks, it is rational that foreign owners would use loans from other countries to minimize their costs.

An exporting firm increases the chance to use external financing for post conflict firms only. For both financing needs, this is driven by formal banks and may be caused by banks viewing exporters as being slightly less risky with a larger opportunity of growth. This is because exporters do not solely depend on domestic markets and have a portion of revenues in foreign currency. This makes the loan to a post conflict firm significantly less risky compared to purely domestic firms in post conflict markets, which may have to deal with local economic and currency shocks. In addition, the urban characteristic is negative and significant for post conflict firms using working capital and non-post conflict firms using fixed assets. Although we may believe that firms within cities have a higher chance of getting credit, there are numerous subsidies for loans provided to agriculture firms which are located in rural areas.¹⁰⁹ This is a possible explanation to the reasons why being located in the city may be a disadvantage.

In both political environments, a firm has a higher chance of receiving finance for working capital and fixed assets if they experience corruption more frequently. Although this seems somewhat counterintuitive, it follows the same logic that is presented in Section 2.2 by Krasniqi and Branch (2018). This notion is that a firm who deals with corruption more frequently is further integrated in a large business and government network, providing more business opportunities. Thus, experiencing corruption more often, positively signals stronger business networks and integration, increasing the likelihood of receiving finance. Both tables show that this effect may be stronger in post conflict markets, which means the networks and integration effect may have a more substantial influence in post conflict markets than in non-post conflict markets. It is, however, possible that the higher magnitude is merely due to the larger amount of corruption within post conflict markets. Further evidence of support in the former theory is presented in Appendix J.

Lastly, Table I.1 shows that a food manufacturer in non-post conflict markets is less likely to receive external financing for working capital. However, from Section 6.4, I have determined that access to finance for food manufacturers is significantly more important for growth compared to other sectors. In addition, food manufacturers experience high growth and a large labour force market influence in these markets. Thus, this analysis shows that it would be beneficial for lenders to prioritize the food manufacturing sector in these non-post conflict African markets.

¹⁰⁸ This is often seen a lot in import and export companies in Western Africa. Chapter 3 discusses this in more detail.

¹⁰⁹ An example of this is in Uganda, where the interest rate for agricultural loans is half of the base rate and the Ugandan government has enforced a quota for the number of agricultural firms who must receive financing.

Table I.1: Probit for Access to Working Capital Finance

	Working Capital		Formal Bank		Non-Financial Institution		Suppliers/Costumers		Family/Friends/Other	
	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC
Employment Growth	0.001 (0)	0 (0)	0.001** (0)	0 (0)	-0.002 (0)	0 (0)	0 (0)	0 (0)	-0.001 (0)	-0.001** (0)
Manager Experience	0.006** (0)	0.004** (0)	0.002 (0)	0.003 (0)	-0.001 (-0.01)	-0.005 (0)	0.007** (0)	0.005*** (0)	-0.003 (0)	-0.005** (0)
Female Founder	0.217*** (-0.06)	0.126*** (-0.04)	0.217*** (-0.07)	0.155*** (-0.04)	0.012 (-0.11)	0.119** (-0.06)	0.197*** (-0.07)	0.059 (-0.04)	0.254*** (-0.09)	0.081* (-0.05)
Training	0.028 (-0.07)	0.178*** (-0.04)	0.049 (-0.07)	0.191*** (-0.04)	0.213* (-0.11)	0.202*** (-0.06)	-0.022 (-0.08)	0.113*** (-0.04)	0.162* (-0.09)	0.058 (-0.05)
Large City	-0.170*** (-0.06)	-0.001 (-0.04)	-0.006 (-0.07)	0.035 (-0.04)	-0.167 (-0.1)	0.06 (-0.06)	-0.186** (-0.07)	0.055 (-0.04)	-0.055 (-0.09)	0.130** (-0.05)
Years Operating	-0.001 (0)	-0.002 (0)	0.003 (0)	0 (0)	-0.001 (0)	-0.001 (0)	-0.001 (0)	-0.002 (0)	-0.007* (0)	-0.004** (0)
Foreign Ownership	-0.053 (-0.08)	-0.029 (-0.05)	-0.01 (-0.09)	-0.056 (-0.05)	-0.068 (-0.15)	-0.203** (-0.08)	0.099 (-0.09)	0.056 (-0.05)	-0.088 (-0.12)	-0.018 (-0.06)
Exports	0.004** (0)	-0.002** (0)	0.005*** (0)	-0.002** (0)	0.003 (0)	-0.002 (0)	-0.001 (0)	-0.001 (0)	-0.003 (0)	0.002* (0)
Time on Regulation	0.004** (0)	0.006*** (0)	0.004** (0)	0.006*** (0)	-0.001 (0)	0.003** (0)	0.004** (0)	0.005*** (0)	0 (0)	0.001 (0)
Corruption	0.164*** (-0.04)	0.071** (-0.03)	0.180*** (-0.04)	0.114*** (-0.03)	-0.024 (-0.07)	0.110** (-0.05)	0.141*** (-0.05)	0.04 (-0.03)	0.059 (-0.05)	0.115*** (-0.04)
Small	-0.371*** (-0.1)	-0.341*** (-0.06)	-0.579*** (-0.11)	-0.471*** (-0.06)	0.423* (-0.22)	0.104 (-0.1)	0.131 (-0.13)	-0.141** (-0.06)	0.114 (-0.17)	0.356*** (-0.09)
Medium	-0.177* (-0.1)	-0.109* (-0.06)	-0.185* (-0.11)	-0.116* (-0.06)	0.332 (-0.22)	0.028 (-0.1)	0.15 (-0.13)	-0.002 (-0.06)	0.222 (-0.17)	0.255*** (-0.09)
Food	0.055 (-0.08)	-0.168*** (-0.06)	0.082 (-0.09)	-0.256*** (-0.06)	-0.136 (-0.14)	-0.026 (-0.09)	-0.025 (-0.1)	-0.02 (-0.06)	-0.077 (-0.12)	-0.135* (-0.08)
Hospitality	-0.254** (-0.1)	-0.365*** (-0.06)	-0.274** (-0.12)	-0.360*** (-0.07)	-0.315* (-0.18)	-0.03 (-0.1)	-0.223* (-0.12)	-0.401*** (-0.07)	-0.217 (-0.14)	-0.172** (-0.08)
Transport	-0.171* (-0.09)	-0.218*** (-0.06)	-0.102 (-0.11)	-0.202*** (-0.07)	-0.363* (-0.19)	-0.031 (-0.1)	0.041 (-0.11)	-0.048 (-0.07)	-0.223 (-0.15)	-0.201** (-0.08)
IT	-0.331 (-0.26)	-0.286** (-0.13)	-0.054 (-0.29)	-0.348** (-0.15)		0.353** (-0.18)	-0.187 (-0.28)	-0.168 (-0.15)	-0.197 (-0.36)	0.152 (-0.16)
Retail	0.106 (-0.08)	-0.134*** (-0.05)	0.206** (-0.09)	-0.113** (-0.05)	-0.278** (-0.13)	-0.082 (-0.08)	0.055 (-0.09)	-0.066 (-0.05)	-0.173 (-0.11)	-0.220*** (-0.07)
Constant	0.619*** (-0.17)	0.01 (-0.14)	0.271 (-0.17)	-0.385*** (-0.14)	-1.716*** (-0.3)	-1.458*** (-0.2)	-0.627*** (-0.19)	-0.922*** (-0.15)	-1.378*** (-0.25)	-1.811*** (-0.21)
Pseudo R2	0.0573	0.0771	0.1064	0.104	0.0514	0.0989	0.0799	0.0819	0.1183	0.0854
LR Chi2	177.27***	628.72***	259.97***	715.77***	46.20**	265.64***	182.16***	554.56***	170.63***	353.25***
Number of Obs	2298	5952	2298	5952	2269	5952	2298	5952	2298	5952

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant, Employment Growth winsorized at 99%, country fixed effects in place

Table I.2: Probit for Access to Fixed Assets Finance

Variables	Fixed Assets		Formal Bank		Non-Financial Institution		Suppliers/Costumers		Family/Friends/Other	
	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC	Post Conflict	Non-PC
Employment Growth	0.002*** (0)	0 (0)	0.003*** (0)	0 (0)	-0.003 (0)	0 (0)	0 (0)	0 (0)	-0.001 (0)	0 (0)
Manager Experience	0.004 (0)	0.005** (0)	0.005 (0)	0.003 (0)	0.002 (-0.01)	0.007* (0)	0.005 (-0.01)	0.005 (0)	0.001 (-0.01)	-0.003 (0)
Female Founder	0.004 (-0.09)	0.105** (-0.04)	0.088 (-0.1)	0.160*** (-0.05)	0.189 (-0.16)	0.02 (-0.08)	-0.143 (-0.13)	-0.024 (-0.07)	0.057 (-0.1)	0.057 (-0.06)
Training	0.347*** (-0.09)	0.276*** (-0.05)	0.187* (-0.1)	0.280*** (-0.05)	0.534*** (-0.17)	0.101 (-0.09)	0.296** (-0.12)	0.207*** (-0.07)	0.243** (-0.11)	0.398*** (-0.06)
Large City	0.071 (-0.09)	-0.101** (-0.05)	-0.016 (-0.11)	-0.137*** (-0.05)	0.122 (-0.18)	0.026 (-0.09)	0.06 (-0.13)	0.089 (-0.07)	0.009 (-0.11)	-0.035 (-0.06)
Years Operating	0.004 (0)	-0.001 (0)	0.008** (0)	-0.001 (0)	-0.001 (-0.01)	0 (0)	-0.006 (-0.01)	0.001 (0)	-0.001 (0)	-0.001 (0)
Foreign Ownership	-0.065 (-0.11)	-0.111* (-0.06)	-0.154 (-0.13)	-0.105 (-0.06)	0.135 (-0.21)	-0.128 (-0.12)	0.144 (-0.14)	0.018 (-0.08)	-0.066 (-0.13)	0.047 (-0.07)
Exports	0.004** (0)	-0.001 (0)	0.005** (0)	0 (0)	0.004 (0)	-0.002 (0)	0.003 (0)	0 (0)	0.004 (0)	0 (0)
Time on Regulation	0.002 (0)	0.004*** (0)	0 (0)	0.003*** (0)	0.002 (0)	0.002 (0)	0.005** (0)	0.002 (0)	0.005** (0)	0.002 (0)
Corruption	0.223*** (-0.05)	0.160*** (-0.04)	0.266*** (-0.05)	0.158*** (-0.04)	0.132 (-0.1)	0.199*** (-0.06)	0.129* (-0.07)	0.175*** (-0.05)	0.171*** (-0.06)	0.159*** (-0.04)
Small	-0.302** (-0.13)	-0.493*** (-0.07)	-0.335** (-0.15)	-0.576*** (-0.07)	0.276 (-0.29)	-0.098 (-0.13)	-0.264 (-0.2)	-0.214** (-0.1)	0.226 (-0.19)	0.02 (-0.09)
Medium	-0.152 (-0.13)	-0.190*** (-0.06)	-0.085 (-0.14)	-0.189*** (-0.07)	-0.195 (-0.31)	0.02 (-0.12)	-0.188 (-0.2)	-0.151 (-0.1)	0.153 (-0.19)	-0.009 (-0.09)
Food	-0.059 (-0.11)	-0.097 (-0.07)	0.099 (-0.13)	-0.088 (-0.08)	-0.357 (-0.25)	-0.029 (-0.13)	-0.296* (-0.18)	-0.14 (-0.11)	0.062 (-0.13)	-0.165* (-0.09)
Hospitality	-0.292* (-0.16)	-0.433*** (-0.08)	-0.275 (-0.2)	-0.368*** (-0.09)	-0.742* (-0.42)	-0.436** (-0.18)	-0.254 (-0.22)	-0.342** (-0.14)	-0.158 (-0.18)	-0.136 (-0.09)
Transport	0.042 (-0.13)	-0.013 (-0.07)	0.171 (-0.14)	-0.047 (-0.08)	-0.331 (-0.32)	-0.049 (-0.14)	0.001 (-0.18)	0.056 (-0.1)	-0.034 (-0.17)	-0.191* (-0.1)
IT	-0.62 (-0.47)	-0.21 (-0.17)	-0.176 (-0.47)	-0.201 (-0.18)		-0.25 (-0.34)		0.077 (-0.22)	0.143 (-0.37)	0.103 (-0.18)
Retail	-0.251** (-0.12)	-0.252*** (-0.06)	-0.005 (-0.13)	-0.227*** (-0.07)	-0.178 (-0.2)	-0.2 (-0.13)	-0.275* (-0.16)	-0.148 (-0.1)	-0.324** (-0.15)	-0.096 (-0.08)
Constant	-0.927*** (-0.2)	-0.954*** (-0.17)	-1.318*** (-0.23)	-1.092*** (-0.19)	-2.272*** (-0.42)	-1.983*** (-0.27)	-1.333*** (-0.3)	-1.934*** (-0.25)	-1.583*** (-0.27)	-1.727*** (-0.23)
Pseudo R2	0.0847	0.0836	0.1125	0.1037	0.1111	0.1536	0.1271	0.073	0.1137	0.0545
LR Chi2	124.07***	426.70***	118.05***	435.28***	38.82**	197.99***	86.30***	138.11***	110.43***	152.52***
Number of Obs	2298	5952	2298	5952	2147	5348	2269	5892	2298	5952

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant, Employment Growth winsorized at 99%, country fixed effects in place

Appendix J: What Influences Corruption?

In Section 6.5, the probit model shows that firms who experience corruption more frequently tend to receive access to finance more frequently. Appendix J presents the result of a simple OLS regression that finds the variables have a significant relationship with the likelihood of experiencing corruption. This is to see whether the notion that corruption can act as a proxy for how integrated the firm is in local institutions is plausible.

Table J.1: OLS Regression for Factors influencing Frequency of Corruption

	Post Conflict	Non-Post Conflict
Employment Growth	0 (0)	0 (0)
Access to Finance	0.122*** (-0.03)	0.047*** (-0.01)
Manager Experience	-0.003** (0)	0 (0)
Female Ownership	0.067** (-0.03)	0.022 (-0.01)
Training	-0.009 (-0.03)	0.061*** (-0.02)
Large City	0.021 (-0.03)	0.033** (-0.01)
Years Operating	0.002 (0)	-0.001** (0)
Foreign Ownership	0.011 (-0.04)	-0.015 (-0.02)
Exports	-0.001 (0)	0 (0)
Time Spent on Regulation	0.004*** (0)	0.001*** (0)
Small	-0.118** (-0.05)	-0.009 (-0.02)
Medium	-0.055 (-0.05)	-0.009 (-0.02)
Food	-0.019 (-0.04)	-0.029 (-0.02)
Hospitality	0.02 (-0.05)	-0.02 (-0.02)
Transport	-0.110** (-0.05)	0.063*** (-0.02)
IT	-0.001 (-0.12)	-0.071 (-0.05)
Retail	0.006 (-0.04)	0.032* (-0.02)
Constant	0.316*** (-0.07)	0.121*** (-0.03)
R-Squared	0.0328	0.0124
F-Stat	5.14***	5.15***
Number of Obs.	2298	5952

Confidence Levels: *** 1% Significant, ** 5% Significant, * 10% Significant
Employment Growth winsorized at 99%, country fixed effects in place

Table J.1 presents several insights on corruption in these markets. Firstly, firms who have access to finance are more likely to run into corruption more often in both environments. This does show that firms dealing with creditors are probably being asked for gifts or bribes to receive

loans. Corruption is also experienced more in larger cities in non-post conflict markets. In addition, smaller firms experience less corruption than larger firms, which further supports the theory that larger firms are more integrated in local institutions. Female co-founders increase the frequency of corruption in post conflict markets only. Lastly, more time spent on regulation and working with the government also increases the chances of corruption in both types of markets. This regression supports the theory that larger firms who are more intertwined in formal institutions tend to experience corruption more frequently.

Appendix K: Summary of WES Questions Used in This Paper

Table K.1: Overview of Questions posed in the Enterprise Surveys

Variable	Question in Survey	Measurement
Firm Performance		
Employment	Num. Permanent, Full-Time at end of Last Fiscal Year?	Number
Past Employment	Num. Permanent, Full-Time at end of 3 Fiscal Years Ago?	Number
Annual Sales	In Last Fiscal Year, What were your establishment's total annual sales?	Local Currency
Past Annual Sales	What were your establishments total annual sales 3 years ago?	Local Currency
Firm Characteristics		
Firm Age	Year Establishment Began Operations	Year
Managers Experience	How many years of experience working in this sector does the top manager have?	Year
Large City	Size of Locality: City with Population over 1 million?	Y/N
Exporter	Percent of Sales that are exports?	Percent
Sector	Industry Screen Sector	ISIC Codes
Resources of Interest		
Access to Finance: Working Capital	Percent of working capital financed from internal funds/retained earnings	Percent
	Percent of working capital borrowed from Banks	Percent
	Percent of working capital borrowed from Non-Bank Financial Institutions	Percent
	Percent of working capital purchased on credit/advances from suppliers/customers	Percent
	Percent of working capital borrowed from others: Family, moneylenders, friends, etc.	Percent
Access to Finance: Fixed Assets	Percent of fixed assets financed from internal funds/retained earnings	Percent
	Percent of fixed assets borrowed from Banks	Percent
	Percent of fixed assets borrowed from Non-Bank Financial Institutions	Percent
	Percent of fixed assets purchased on credit/advances from suppliers/customers	Percent
	Percent of fixed assets borrowed from others: Family, moneylenders, friends, etc.	Percent
Access to Finance: Suppliers/Consumers	Percent of fixed assets financed from internal funds/retained earnings	Percent
	Percent of fixed assets borrowed from Banks	Percent
	Percent of fixed assets borrowed from Non-Bank Financial Institutions	Percent
	Percent of fixed assets purchased on credit/advances from suppliers/customers	Percent
	Percent of fixed assets borrowed from others: Family, moneylenders, friends, etc.	Percent

Employee Training	Formal training programs for permanent, full-time employees in last fiscal year	Y/N
Foreign Ownership	Percent owned by private foreign individuals, companies, or organizations	Percent
Institutional Factors		
Corruption	For imported material inputs or supplies, was an informal gift or payment expected or requested?	Y/N
	For an export license, was an informal gift or payment expected or requested?	Y/N
	For a construction related permit, was an informal gift or payment expected or requested?	Y/N
	In reference to that application for an operating license, was an informal gift or payment expected or requested?	Y/N
	In any of these [government] inspections or meetings was a gift or informal payment expected or requested?	Y/N
Infrastructure ¹¹⁰	Number of power outages experienced in a typical month in the last fiscal year?	Number
Government Regulations	What percent of senior management time was spent in dealing with government regulations?	Percent

¹¹⁰ Note that this is not used in any of the modelling due to the data's inconsistency and large variance

Appendix L: Correlations Graphs for Four Resources of Interest

Figure L.1: Access to Finance vs. 3-yr Emp Growth

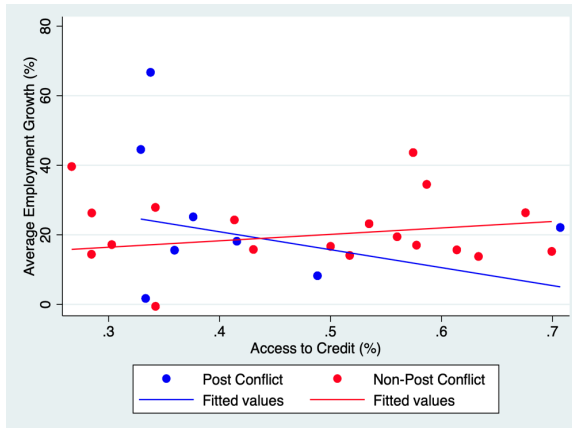


Figure L.2: Employee Training vs. 3-yr Emp Growth

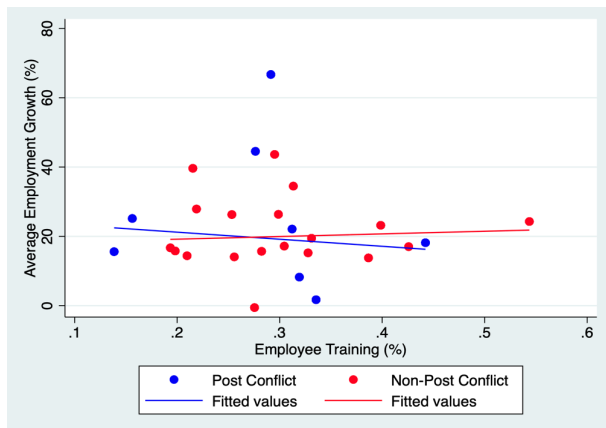


Figure L.3: Foreign Ownership vs. 3-yr Emp Growth

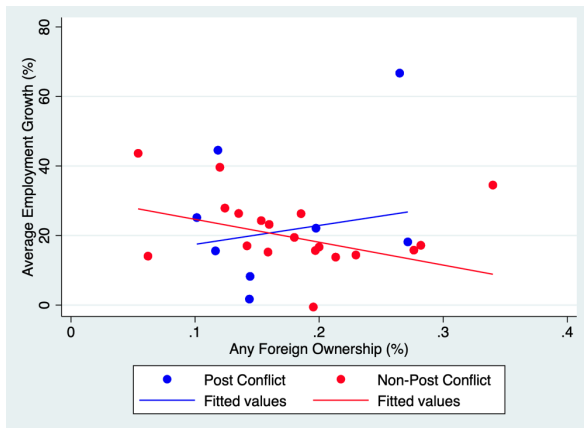
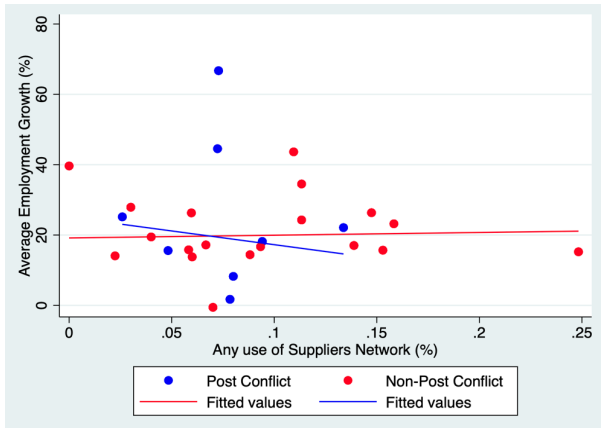
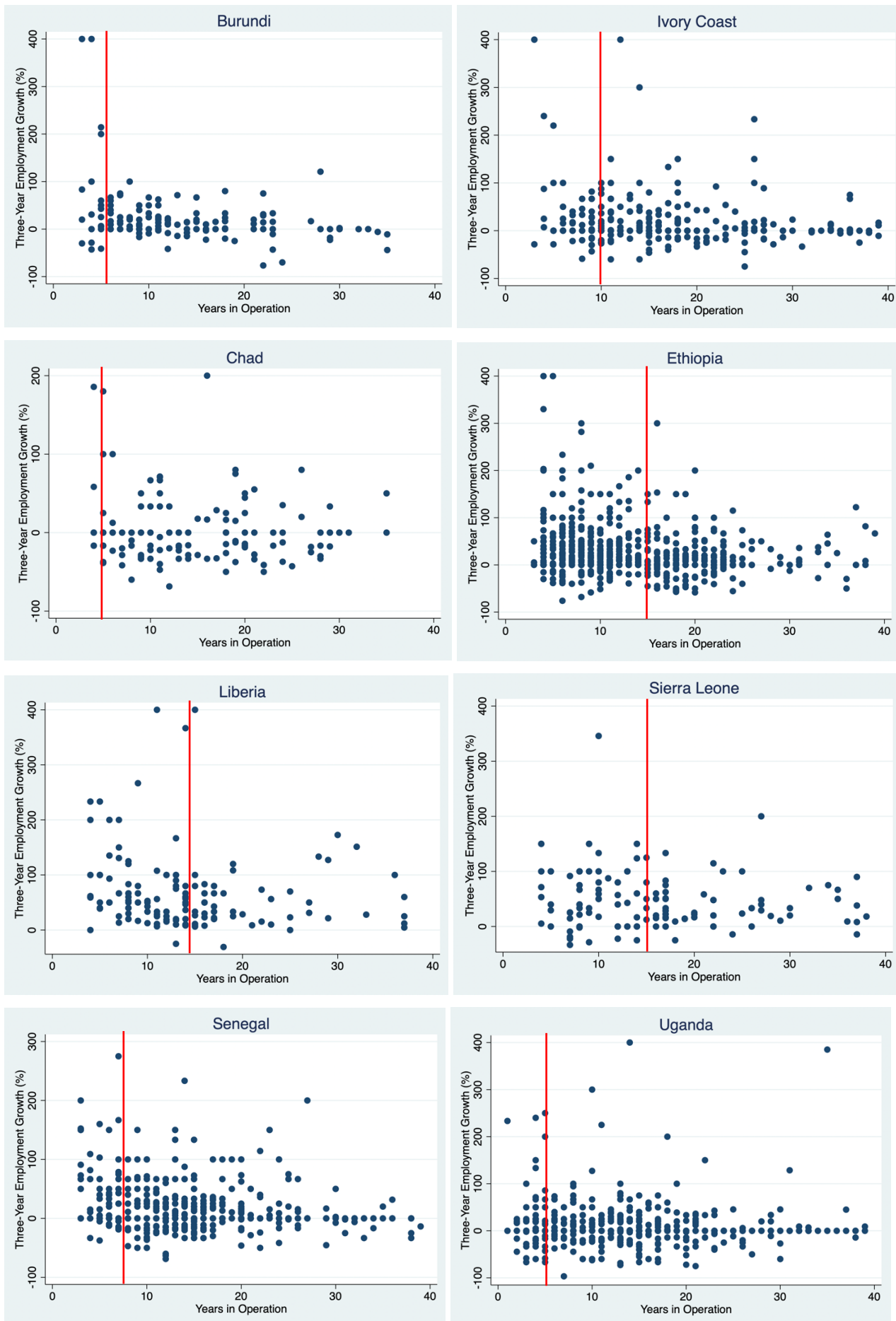


Figure L.4: Business Networks vs. 3-yr Emp Growth



Appendix M: An Analysis of Years in Operation and Performance for Post Conflict States



Post Conflict Private Sector Development and Foreign Influence in Africa: Evidence from A Field Study in Liberia

1.0 Introduction

One of the primary components of the peacebuilding process after a conflict is rebuilding the private sector. However, a conflict's legacy makes generating a thriving private sector particularly challenging. Businesses must navigate poor infrastructure, increased ethnic tensions, poorly educated workers, and a lack of business support. Although many of these issues are also present in non-post conflict environments in Africa, conflict tends to worsen many of these issues. This paper uses Liberia, a West African country, that has been in the post conflict reconstruction phase since 2003 after fourteen years of civil war. A field study in Liberia has been conducted to develop evidence on the post conflict private sector environment from all stakeholders' perspectives.

Returning to the Structure, Conduct and Performance (SCP) paradigm that is explained in the introduction of this thesis, this theoretical model shows the two direct impacts that conflict can have on private sector performance. The first is that conflict can alter the structure of the market firms operate in. These alterations include factors like infrastructure, demographics, and institutions. The second is effects on the conduct of the firm itself. This includes factors like access to finance, employee skills, use of networks and innovation. Using the qualitative evidence collected in Liberia from Spring 2018 to Summer 2019, this chapter explores the causal linkages presented within the SCP framework. This provides much needed analysis on the long-term effects of conflict on private sector dynamics in an African state. In addition, this evidence shows that while differentiating businesses by Bray's types (2009) – domestic, diaspora, foreign, multinational owned - firms with foreign influence alter their conduct to perform better than domestic firms. Bray suggests that these different types of entrepreneurs change their business conduct according to their backgrounds. Using this disaggregation, this paper provides further analysis on these changes in conduct by different foreign-influenced firm types and how it aids them in navigating Liberia's challenging post conflict environment more successfully (Section 5.0).

This research helps to fill the significant gaps in existing literature by using Liberia's post conflict private sector as a case study (see Section 2.1). It provides extensive analysis on the impact of the civil wars on post conflict market structure, firm conduct and performance using a variety of private sector actors. It also provides research findings on the different types of firms in Liberia's market and their specific manors in navigating the environment. Due to Liberia's totality of conflict characteristics (Chapter 2), it's clear distinctions in terms of negro-citizenship

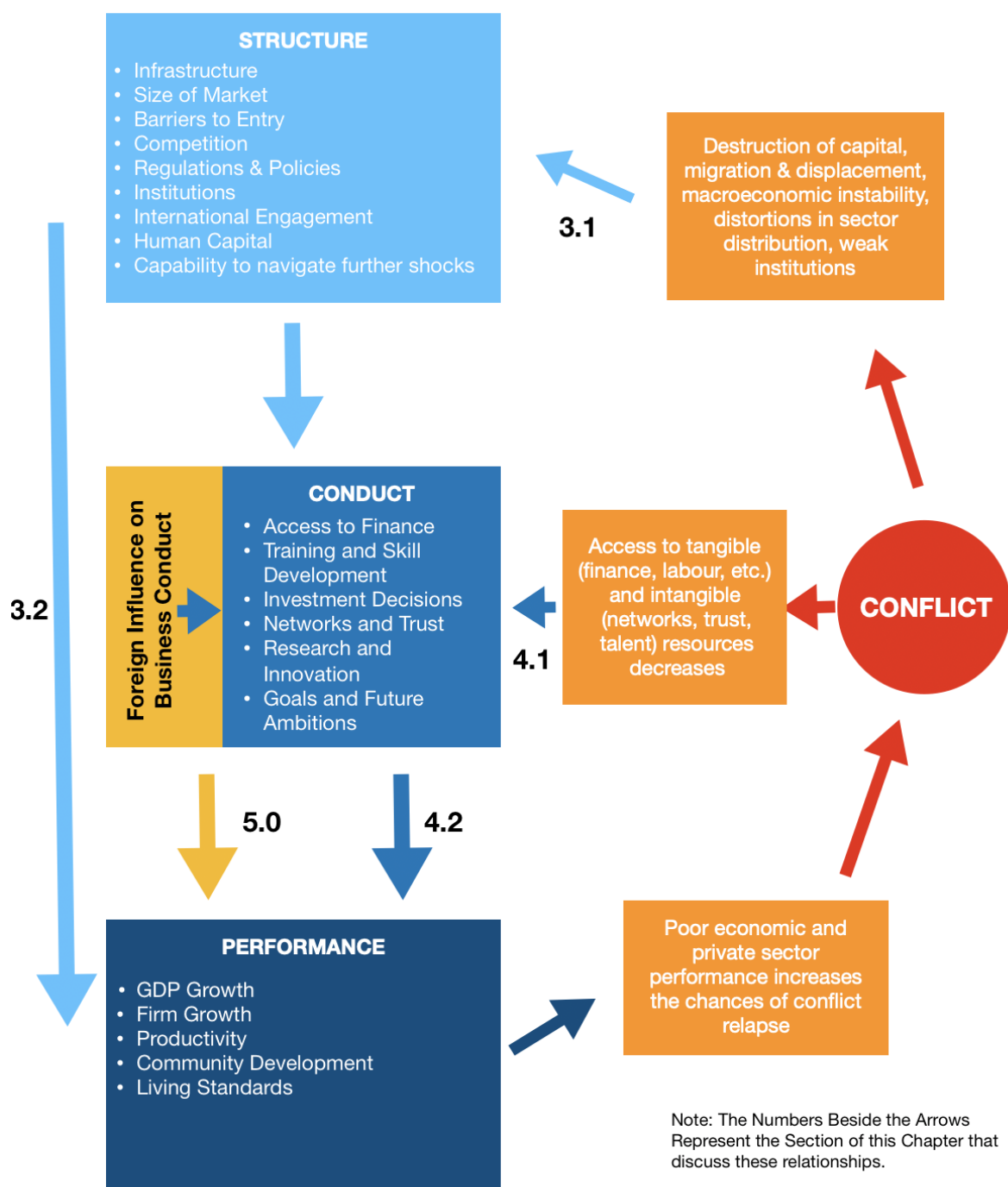
for Bray's (2009) different types of firms, and its struggle to recover from the conflict, it is a suitable case study to act as a baseline for future policy decisions (discussed further in Section 2.0).

Figure 1 below maps out each one of the SCP linkages and shows this chapter's section that corresponds to that analysis. The direct influence of the Liberian civil wars on the structure of the market is discussed in Section 3.1. Section 3.2 then provides analysis on the consequences of these worsened market structures on present firm performance. Section 4 of this paper focuses on the conduct of firms and their decision-making processes. Section 4.1 first discusses the perceived impacts of the war on the conduct of local firms by stakeholders and Section 4.2, then determines how those changes in conduct affect current domestic firm performance. Lastly, Section 5.0 of this paper examines the effects of foreign influence on firms' conduct differentiated by four types of firms, and the specific challenges that these foreign private sector actors face in the Liberian market. The evidence for this paper has been derived from fifty semi-structured interviews with a variety of private sector stakeholders in Liberia including local and foreign entrepreneurs, investors, policymakers, international institutions, and local community organizations to develop analysis on each of the SCP linkages described above.

This evidence clearly shows that the conflicts experienced in Liberia had profound and long-lasting effects on private sector development, which has had consequences for firm performance. This paper finds that the consequences of Liberia's post conflict market structure - including destroyed infrastructure, poor government regulations, inability to deal with further shocks and corruption - makes firm survival extremely challenging. However, all types of business owners note that there is little that they can do personally to change these barriers in the short run. On the other hand, firms, especially foreign or re-pat¹ owned firms, show that a change in business conduct can help successfully navigate the post conflict environment. This is by increasing innovation, training and education, generating business networks, and accessing capital/resources from outside of the country. Although these businesses may be able to better survive due to their pivot in conduct, this paper finds that foreign investment remains extremely low in Liberia due to the substantial barriers for market entry. The evidence also shows that knowledge and technology transfers are not occurring easily, particularly from foreign investors and multinational corporations due to the actors' lack of contextual knowledge. Therefore, the evidence suggests that a greater emphasis should be placed on knowledge and skill transfers to the local market.

¹ Liberians who left and grew up elsewhere but have now returned after the wars. More information on these business owners in Section 5.1.3.

Diagram 1: Map of SCP Structure in Relation to Evidence Presented in This Chapter



The next section of this paper provides the reasoning for using Liberia as a case study. Section 2 also presents the literature on the economic history of the country, the current makeup of the Liberian private sector and the different actors present. This paper then describes the methods used for the field study and a summary of the actors who were interviewed (Section 2.5). The paper then dives into the SCP framework for Section 3 and 4. Lastly, Section 5 analyses the four different types of foreign influenced firms in the Liberian market, the barriers to enter

the market and finally, their ability to make transfers to the domestic market. Section 6 concludes.

2.0 Liberia as a Case Study

The small West African country of Liberia is an example of a post-conflict country that has struggled to rebuild its economy. It experienced two civil wars over 15 years, which ended in 2003. The conflict killed over 250,000² people and many more were raped, forced to flee, and displaced. The United Nations Mission in Liberia (UNMIL) was deployed in 2003 and concluded in 2018.³ Since 2003, the country has remained relatively peaceful, with a long peacekeeping mission in place. Liberia has remained one of the poorest countries in the world and capital is scarce. Although the conflicts have ended, the recent outbreak of the Ebola virus in 2014, the drop of global commodity prices, and the withdrawal of UNMIL in 2018, generated further shocks, which disrupted and further hindered post-conflict growth.⁴ Liberia is nearing the end of its twenty-year post-conflict era; however, the country has not successfully achieved post conflict economic reconstruction.

Liberia makes a fitting extreme⁵ case study because it is one of the worst countries to do business in and the private sector has failed to recover since the conflict.⁶ Forbes⁷ ranks Liberia as the 15th worst country in the world to do business, and in the 2020 World Bank's 'Doing Business' rankings⁸ Liberia was placed in the bottom tenth percentile. In Chapter 2 of this thesis, it is shown that Liberia is categorized as a country possessing all the common characteristics of African conflicts. This includes having a peacekeeping mission, dealing with rebels, issues with neighbours, natural resource influence, use of child soldiers, targeting civilians, and ethnic tensions. In addition, Liberia is categorized as an 'extra' high intensity conflict, which means that the battle-related death per annum of the conflict was particularly high. Sierra Leone, the most similar in conflict characteristics to Liberia, as well as suffered from the Ebola crisis,⁹ still had a much shorter UN peacekeeping mission, which ended over a decade before Liberia's. Liberia

² 'Liberia Country Profile,' BBC News, January 2018. <https://www.bbc.com/news/world-africa-13729504>

³ UNMIL Timeline, 2019. <https://unmil.unmissions.org/timeline>

⁴ 'Liberia Country Profile,' BBC News, January 2018. <https://www.bbc.com/news/world-africa-13729504>

⁵ An extreme study is one that is chosen because of its extreme or unusual variable of interest (Seawright & Gerring, 2008).

⁶ However, the economy has also experienced additional external shocks that has also impacted its ability to fully recover.

⁷ 'Best Countries for Business,' Forbes, 2018. <https://www.forbes.com/best-countries-for-business/list/4/#tab:overall>

⁸ 'Doing Business,' World Bank, May 2020.

<https://openknowledge.worldbank.org/bitstream/handle/10986/32912/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies-Economy-Profile-of-Liberia.pdf?sequence=1&isAllowed=y>

⁹ See Chapter 2 for this analysis

experienced a large peacekeeping economy, which made many economically dependent on the mission (Gledhill & Karim, Forthcoming). Thus, Liberia provides an example of an African country that has dealt with all the conflict characteristics described in Chapter 2. These conflict characteristics and the exceptionally poor performance of the post conflict private sector makes Liberia an extreme case study.

As an extreme case study, the analysis that is provided on Liberia does not necessarily reflect a universal finding for all African post conflict countries. For example, there was no UN peacekeeping mission deployed in Uganda after the conflict with the Lord Resistance Army,¹⁰ meaning that the post conflict economy was not influenced by a UN mission. However, the findings in this paper can be used for different aspects of other post conflict environments in partiality. For example, if a country suffered from an intensive conflict that lasted 30 days, instead of 15 years, human capital is most likely not as impacted as in Liberia. However, access to finance may change as savings were destroyed and bank loans become less accessible and trust in communities may have also been destroyed, impacting business co-operation. In this scenario, the findings from access to finance and influence of trust fit this scenario. Thus, this evidence is still valuable as a baseline for post conflict private sector recovery where certain aspects can be applied depending on the conflict experience (Seawright & Gerring, 2008).

Lastly, the economic makeup of the country offers a unique opportunity as a case study to clearly define the different types of entrepreneurs based on Bray's (2009) definitions. Liberia has a distinctive variation of economic actors, including multinational, re-pat¹¹ and foreign SME owners. Liberia has a strict negro-native citizenship policy, which means that only those with a negro background qualify to become citizens.¹² Therefore, Lebanese, Indian, Chinese and other foreign families that migrated to Liberia and have remained for generations are not defined as domestic owners.¹³ This means that the different entrepreneurs are easily identified, and they provide a counter point for firm growth, allowing for identification. This provides clear analysis in Section 5.0.

¹⁰ See Chapter 2 for more information on the conflict in Uganda.

¹¹ Bray (2009) defines these as diaspora owners. In Liberia they are referred to as re-pats.

¹² Banton, Caree A. (2019) "Making Citizenship and Blackness in Liberia," *Cambridge University Press*.

¹³ Foreign Hospitality Business Owner, Public Sector Commerce Economist 2. Note this is not the same in Sierra Leone.

2.1 Gaps in the Literature: Heterogenous Effects by Firm Type

There is a significant gap in the literature on how changes in business conduct impacts overall post conflict private sector performance by different types of firms in the African region. The existing literature can be divided into three different components, described below:

- 1) The impact that conflict has on market structure
- 2) The effects that conflict has on business conduct
- 3) The effectiveness of different types of firms (domestic owner, re-pat, foreign SME, multinational) in post conflict markets

The primary gap derived from these three points is: the impact that business conduct modifications have on business effectiveness using number three's disaggregated approach. This paper helps to fill this gap by providing that connection between point two and three, generating much needed knowledge on how to improve post conflict private sector performance. The remainder of this section provides a summary of the literature in points one, two and three.

There have been numerous studies focused on the effects of the post conflict market structure on the private sector. Collier (2008), Ganson & Wennmann (2016), Ford (2014) and Bray (2009) discuss the challenges of conducting business in post conflict markets, focusing primarily on a macro-level analysis of the structural barriers. Using Mozambique as a case study, Mucuané (2018) determines a link between the civil war and the lack of productivity and regional trade due to poor infrastructure. The post conflict structural constraints discussed in these papers includes poor infrastructure, lack of effective regulations, and corruption, which is also analysed from Liberia's experience in Section 3.0.

Specifically on Liberia's market structure, there is several research papers available. Aning and Edu-Afful (2013) analyses the impact of the UNMIL peacekeeping mission on the distribution of sectors in the Liberian economy. Beber et al. (2016) uses firm-level survey data in Monrovia to find that a substantial number of businesses entered due to UNMIL, which has created a higher demand for low-skill services. However, Gledhill and Karim (Forthcoming) conducted a survey in 2019 that explores the effects of the withdrawal of UNMIL on the economy. They find that some households are hit particularly hard by the exit if their livelihoods depend on the peacekeeping economy. Beekman et al. (2012) discusses the negative influence of corruption by community leaders in regional trade in Liberian communities. These findings align with the evidence presented in this paper in Section 3.0.

Existing literature does discuss the implications of conflict on business conduct, including access to capital, gaps in human capital, and lack of trust. One of the aspects of business conduct that this research discusses is the lack of capital entering post conflict countries

due to the perceived risk (Ford, 2014). In addition, Demirguc-Kunt et al.'s (2008) research finds that in a post conflict state, wealthier households are more likely to have businesses that survive, implying the importance of access to finance. Collier & Duponchel (2012) conclude that human capital gaps have a longer-term effect on economic growth than physical capital gaps in post conflict environments. Lastly, Efendic et al. (2015) finds that many networks are damaged by a conflict and that a lack of trust in institutions negatively impacts business aspirations in the post conflict era. This literature suggests that conflict is impacting the conduct of the private sector, but it does not provide an analysis of how alterations to conduct can influence private sector performance. These impacts on business conduct are discussed in a Liberian context in Section 4. Then a crucial addition to the literature is conducted in Section 5, focusing on how changes in these conducts by different types of foreign-influenced firms.

There is a lack of research available providing research on the conduct of Liberian firms specifically. McDougal (2017) concludes that investment and good supply and distribution networks created a higher chance of survival. Tarwat-Twalla (2011) that finds informal micro businesses provide much-needed goods in rural Liberia but lack resources to grow. Annan and Blattman (2016) also evaluate the effectiveness of job training programs for ex-combatants in Liberia and find that training programs are only effective if there are jobs in that sector available in the market.

Bray (2009) defines distinctive types of businesses in as African country as domestic owners, diaspora investors¹⁴, foreign regional players¹⁵ and large multinational companies. Bray (2009) concludes that in a post conflict market, local business owners have the highest motivations to start a business, but lack resources and experience to do so, while diaspora investors are the most effective actors in these markets because they have resources. The paper also finds that foreign regional players have excellent access to resources but lack local knowledge making them less effective. In terms of multinational businesses, Ganson and Wennman (2016) and Ford (2014) both describe the potential for large foreign corporations to have both positive and negative influence in the post conflict peacebuilding process. These businesses provide employment, higher wages, generate tax revenues, labour rights and opening new sectors in post conflict countries. However, many of these companies can also be predatory, create inequality and tensions in local communities, and generate immense amount of power within the country without local knowledge. Lastly, in Liberia specifically, there is limited work conducted on foreign private sector actors, with the majority focusing on multinational

¹⁴ Diaspora investors are the same as “re-pat” investors, which is the term used in this paper because that is how they are referred to in Liberia.

¹⁵ Foreign regional players are the same as foreign SMEs in Liberia.

corporations (MNCs) in Liberia by Bunte et al. (2018) and Paczynska (2016) discussed in Section 2.2.

In conclusion, it is evident that the previous literature provides moderate evidence on conflicts impact on market structure and conduct, with limited research from Liberia. However, the literature gap that remains is the disaggregation of the analysis on business conduct by firm type in a post conflict setting. This paper finds that this analysis is significant to the literature because the impacts are heterogenous across firm types, leading to large disparities in firm performance (see Section 5.0 for these results).

2.2 Economic and Conflict History

In the 1840's, Liberia was founded as Africa's first Republic and independent state. It was founded by slaves freed from the United States, and because of this, has kept an outward orientation and close links to the US. From 1944-1971, Liberian President Tubman began an aggressive open-door policy to stimulate the economy and attract FDI (Bunte et al., 2018). However, this made the country highly reliant on the extractive sectors, particularly iron ore, rubber, and timber. Although this helped boost the economy, by the 1980's, inequality had risen sharply, creating substantial political tensions between tribes (UCDP, 2021). The powerful elite, primarily those with origins tracing back to the American-Liberian founders, were perceived as corrupt and running the nation for their own benefit (Nyemah, 2009).

These issues led to the first coup d'état by Samuel Doe and the emergence of ethnic tensions in 1980. During this time, there was significant economic and infrastructure development (Ganson & Wenmann, 2016). However, throughout the 1980s, ethnic tensions continued to intensify and by the end of the decade, full-scale civil war broke out. Doe was assassinated by a rebel group composed of Gio and Mano ethnic groups, led by Charles Taylor. These two groups felt wronged by the ethnic Krahn group who controlled the government (Nyemah, 2009). As the war raged on, the country suffered from extreme poverty and the economy came to a halt. In 1990, ECOWAS decided to deploy their peacekeeping force called the Economic Community of West African States Monitoring Group (ECOMOG), which worked alongside a small UN observer mission. In 1997, a ceasefire was agreed to, and the country held elections by which Charles Taylor became the new president.¹⁶ Fighting re-emerged in 1999 when a rebel group of displaced Liberians in Guinea invaded Liberia. At this time, Taylor was also supporting the Revolutionary United Front in Sierra Leone to benefit from the

¹⁶ UCDP Uppsala Conflict Data Program at <https://ucdp.uu.se>.

diamond mines.¹⁷ ECOMOG continued their mission in the second war but made well-known ties with Liberians United for Reconciliation and Democracy (LURD), making them no longer unbiased observers. The UN placed embargoes on Liberian timber and diamonds since the international community believed that Taylor was encouraging the war in Sierra Leone by exploiting natural resources (Ford, 2015). After two civil wars and decades of instability, Taylor resigned, and a ceasefire was agreed to in August 2003, after Monrovia was captured by both the LURD and The Movement for Democracy in Liberia (MODEL) rebel forces (Bunte et al., 2018).

The two civil wars exacerbated poverty and hardship across the country. Within five years of Charles Taylor's invasion in 1989, the unemployment rate skyrocketed to 75 percent (Nyemah, 2009). Primary infrastructure, including transportation and electrical grids, were destroyed (Thompson, 2018). There were almost no FDI flows and little private sector development throughout the fifteen years.¹⁸ The two civil wars had a direct battle-death toll of over 23,000, while the overall death toll is estimated to be around 250,000.¹⁹ The wars forced many civilians to flee, with an estimated 780,000 people displaced externally and 500,000 internally.²⁰ Both the LURD and Taylor's troops consisted of thousands of child soldiers who were often addicted to drugs and had been kidnapped by the combatant group. Much of the violence was directed towards civilians, as rebel and government troops would raid local villages to steal goods, rape women, kidnap children and claim territory.²¹ The conflict in Liberia spread into neighbouring countries Cote D'Ivoire and Sierra Leone, causing additional civil wars.²² The two Liberian civil wars have had profound and long-term consequences for the social, political, and economic development of Liberia and the region as whole (Aning & Edu-Afful, 2013).

In 2003, a large-scale peacekeeping mission was launched by the UN to help maintain peace and support the transitional government.²³ In November 2005, when Ellen Johnson-Sirleaf was voted into office, she focused on rebranding Liberia away from "a nation in permanent violent turmoil" by again opening Liberia's doors to FDI (Nyemah, 2009: 199). At the end of the war, "international partners agreed that (a) Liberia's deficiencies in economic governance had been a key contributor to the fourteen-year civil war, and (b) that continued

¹⁷ Ibid.

¹⁸ Nyemah, 2009

¹⁹ The UN sources state that the death toll is closer to 200,000 people, which includes all fatalities from the war including disease, starvation, etc.

²⁰ UN High Commissioner for Refugees, "2005 UNHCR Statistical Yearbook: Liberia," <http://www.unhcr.org/4641be64d.html>, 401 (see "D: Refugees and Asylum Seekers from Liberia").

²¹ UCDP Uppsala Conflict Data Program at <https://ucdp.uu.se>.

²² Ibid.

²³ Ibid.

inattention to the issue posed a long-term risk to the peace process and ongoing planned donor assistance” (Bridgman, 2009: 253). Thus, Sirleaf focused primarily on economic recovery for the country and in many ways, the changes she implemented were globally regarded as successful.²⁴ One of the programs implemented was The Government Economic Management Assistance Program (GEMAP), which was supported by the World Bank, UNMIL and a variety of other international partners. This program focused on the following six mandates: securing tax revenues, improving budgeting and expenditure management, improving concession grant procedures, controlling corruption, supporting key institutions of government, and building capacity (Bridgman, 2009: 254). They qualified for debt relief through the Heavily Indebted Poor Countries initiative (HIPC) by March 2008, which significantly helped their current accounts. In addition, FDI increased by 1.5 billion USD with ArcelorMittal, 2 other mining firms, a logging firm, and a diamond and gold mining firm (Nyemah, 2009: 199). They also started a National Investment Commission whose main goal was to reduce the number of days to incorporate and register a business from 90 to 10 days (Nyemah, 2009: 204).

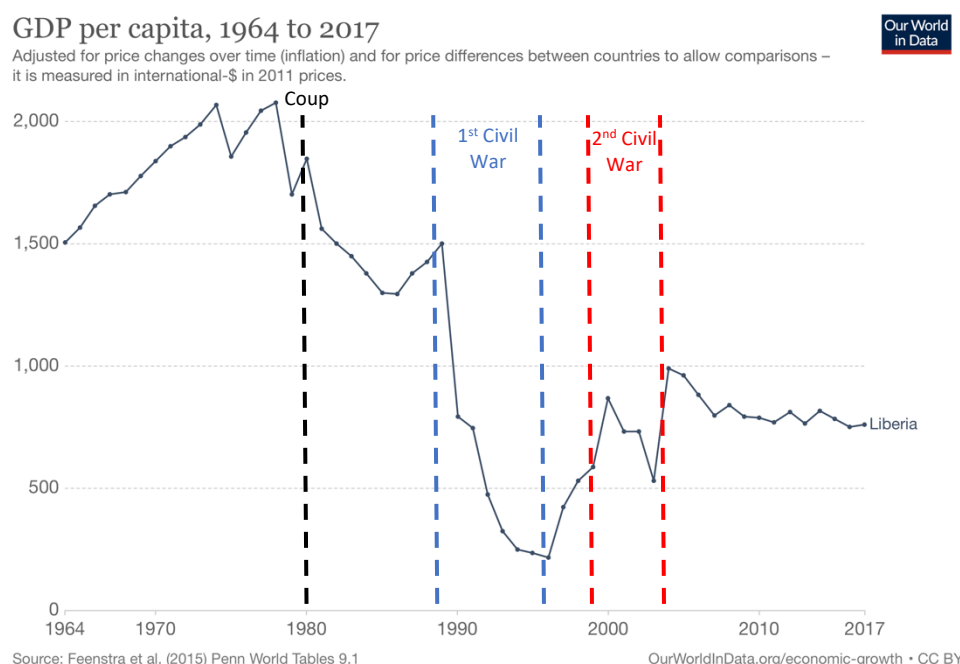
Although the Sirleaf administration prioritized economic reconstruction after the wars, the data show that Liberia’s real GDP per capita has yet to reach half of its pre-war levels. Figure 1 shows that in the 1970’s, real GDP per capita had reached just over \$2,000 and was considered one of the fastest growing economies in Africa.²⁵ A large portion of this growth came from iron ore mining and forestry (Thompson, 2018). Figure 1 shows the first significant drop in GDP per capita in 1980 after the Coup held by Samuel Doe. However, the most severe drop is seen throughout the first civil war, where economic output hit its lowest at \$215 per capita in 1996. There is a marginal recovery between the two civil wars, but then an additional drop in GDP per capita throughout the second civil war.²⁶ Once the second war ended, there was a small boost in economic activity, but this quickly dissipated. In the post conflict period, GDP per capita remains stagnant between 2008 and 2017, at only approximately half of the 1970s pre-war levels. This shows that post conflict economic recovery has not yet fully occurred in Liberia. This presents how profoundly destructive the wars have been on Liberia’s economy and private sector.

²⁴ Nyemah, 2009

²⁵ Bridgman, 2009

²⁶ The initial increase in GDP per capita during the second civil war is primarily attributed to the government’s income generated from Sierra Leone’s diamond export market (Nyemah, 2009).

Figure 1: GDP per Capita from 1964 to 2017



Bunte et al. (2018), conducted research specifically on natural resource FDI flows into post conflict Liberia and how it impacted local economic growth. The FDI policy by Ellen Johnson-Sirleaf was approached uniquely in Liberia because “in contrast to previous approaches – where host governments provided public goods to attract foreign investors – the Ellen Johnson-Sirleaf administration has required that foreign companies provide public goods” (Bunte et al., 2018: 5). The development was completed near the communities where the extraction was taking place, to ensure that it wasn’t solely the business that benefited from the infrastructure. Common FDI strategies like liberalized FDI flows, designated export zones and imposing joint local ventures are “most relevant to countries with existing infrastructure and an entrepreneurial base ready to benefit from knowledge and technology transfer” (Bunte et al., 2018: 7). However, Liberia does not have the infrastructure or human capital for this yet, so the administration strategy involves getting private companies to build public infrastructure in the hopes that it will bring in more investments. As a proxy for economic growth, the authors used night-time light growth emissions in the local communities around the concessionary land. They find that “with respect to the initial effect of FDI on economic outcomes, however, our results suggest that extractive sector FDI has improved local economic growth in Liberia” (Bunte et al., 2018: 6). They also discover that investments requiring higher public structure goods, like mining iron ore, saw larger economic growth than investments that require fewer public goods like forestry and agriculture. Lastly, they find that Chinese firms are better positioned than US firms to make investment deals and supply public goods in a timely manner.

However, Paczynska (2016) questions the success of FDI in Liberia because of the numerous negative social impacts it has bestowed on local communities. Paczynska (2016) finds that the FDI inflows into Liberia after Johnson-Sirleaf's election, primarily into iron ore, forestry, rubber, and palm oil, has been unsuccessful at bolstering tax revenues and improving employment. The country is still suffering from high poverty levels, exacerbated inequality, and increased food insecurity. Due to problems with land ownership, a lack of investment into training and creating unequal access to social services, Paczynska's (2016) discovers that the trickle-down impact of these large investment flows has not occurred and living standards have not significantly improved. In conclusion, although the influx of FDI into post-conflict Liberia helped to boost its economic growth, there is little evidence to suggest that the average Liberian has benefited.

Lastly, UNMIL generated a significant peacekeeping economy within the country over its long-term presence. In general, UNMIL's large-scale presence was an economic stimulus for the country (Beber et al., 2016). UNMIL worked closely with both the government and other international actors to support government finances and infrastructure development (Dwan & Bailey, 2006; UNMIL 2016). This large presence also generated an unintended increase in demand for both luxury items and services like hotels, restaurants, bars, and apartment complexes. This increased employment and entrepreneurship opportunities for locals, particularly in Monrovia (Beber et al., 2016). However, Aning and Edu-Aiffel (2013) find that there were negative consequences to this boom in demand, including higher prices, a distorted labour force, and a new demand for sex workers. Finally, the exit of UNMIL in 2018, has also had a negative influence in the local economy, as many households were dependent on the "bubble" generated from its large presence (Gledhill & Karim, Forthcoming). This is discussed further in the Section 2.4.

2.3 Current Post Conflict Economy

The Liberian economy is currently one of the poorest in the world, with a GDP per capita of \$633 in 2020.²⁷ However, it is resource rich with water, good climate for agriculture, mining, and timber. Its main exports consist of iron ore, palm oil, rubber, timber, diamonds, and gold.²⁸ As noted above, these resources created substantial economic booms in the 1960's and 1970's. After the war, the economy failed to pick up to the level of production seen in the pre-war years, implied by Figure 1.

²⁷ <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=LR>

²⁸ CIA World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/geos/li.html>

Liberia suffers from high levels of import dependency, especially for food products, creating a negative net export environment.²⁹ In 2019, the inflation rate was high, at almost 30 percent, as the Liberian dollar continued to depreciate, negatively impacting many Liberians' ability to purchase much-needed goods like rice.³⁰ To curb the high inflation rate, the prime bank lending rate is also high, at approximately 15.2 percent, and few Liberians use the formal financial system.³¹ Although the unemployment rate is quite low in Liberia, 70 percent of the workforce works in agriculture, even though it is only 36.1 percent of GDP.³²

The depreciation of the Liberian dollar is currently one of the most substantial issues affecting Liberians.³³ Since July 2017, the Liberian dollar has depreciated by 115 percent,³⁴ and many policymakers are concerned that Liberia could enter a hyperinflation situation.³⁵ This drastic change stemmed both from the change in leadership, the exit of UNMIL,³⁶ and a scandal wherein millions of dollars went missing.³⁷ This scandal, although still under investigation, is where \$15.5 billion Liberian dollars went missing and only \$5B has so far been accounted for. There was the mismanagement of a \$25 million USD cash injection into the economy, where old Liberian dollars were not properly taken out of the market.³⁸ These actions have had a profound impact on the economy, the lives of citizens, and businesses. The Central Bank has attempted to slow the depreciation of the dollar by pumping reserves into the market. However, they can no longer do this because they have run out of reserves, causing severe macroeconomic issues.³⁹ Since Liberia is a dual currency system, using USD for most large transactions, financial institutions have also been impacted heavily by the depreciation. An Institutional Investment Manager notes that many loans could not be repaid because "these SMEs had USD commitments, but they were receiving their revenue in LD, so they weren't able to make their commitments. Banks' non-performing loans grew from 5% to 18% during that period." Thus, liquidity has become a major problem in the country and financial institutions have become more hesitant to provide loans.

²⁹ "Country Programme Framework for Liberia," FAO, <http://www.fao.org/3/br862e/br862e.pdf>

³⁰ Public Sector Commerce Economist 2

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁴ XE. <https://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=LRD>

³⁵ Public Sector Commerce Economist 1, Public Sector Investment Manager

³⁶ The exit of UNMIL has decreased the amount of USD in circulation.

³⁷ Public Sector Commerce Economist 1, Public Sector Commerce Economist 2, Public Sector Youth Manager

³⁸ "Independent Review regarding allegations of the disappearance of the new Liberian dollar banknotes," USAID (2019).

https://www.usaid.gov/sites/default/files/documents/1860/Kroll_Missing_Currency_Report_2019_508.pdf

³⁹ Public Sector Commerce Economist 2

In addition, the global commodity price shocks of 2015 reached Liberia. This primarily affected the iron ore mining industry, which accounts for a significant portion of large FDI deals within the country. An SME fund manager explained that,

“Technically, ArcelorMittal, maybe except Firestone, is the biggest company here. And the effect of them slowing down is huge on the Liberian population, you can see it everywhere. They employed 5,000 to 7,000 people and firing all these people between 1 or 2 sites, had a big impact. So, them scaling down operations really hurt.”

Due to this crash in global prices, interest in new FDI deals were negligible and many companies considered exiting the market. The country has also been faced with devastating shocks to their economy including the Ebola Crisis, a transition to a new national government, and the UN mission leaving the country. These shocks are discussed in Section 3.2.2.

2.4 Post Conflict Sizeable Economic Shocks

Although the war ended in 2003, the economy has struggled to gain momentum. Aside from the conflict, the country has had to navigate three significant additional economic shocks. This has caused further hindrances to private sector growth throughout the post conflict period and businesses have struggled to navigate through them.

The first devastating shock was the Ebola crisis in 2014 and 2015, which caused over 4,810 deaths.⁴⁰ It also heavily impacted neighbouring countries Sierra Leone and Guinea. Most Liberian businesses were forced to shut down for at least a year and few workers continued to do their jobs.⁴¹ A fruit and veggie processing business owner stated that “the entire country was panicked. So, because of that, there was nothing going on. Businesses were closed. I was staying home. It really set our businesses back.” This was particularly seen with workers in the field, which meant that food production, although desperately needed during this time, came to a halt. A gari processing business owner said that it was almost impossible to get supplies from farmers because many people stopped working and planting. In a country where food production is already highly dependent on imports, having almost zero production meant that food prices skyrocketed. These prices have remained high and have not returned to the pre-Ebola equilibrium.⁴² FAO shows this through their consumer price food index, which was at 86.1 in

⁴⁰ ‘2014-2016 Ebola Outbreak in West Africa,’ Centre for Disease Control, March 2019:
<https://www.cdc.gov/vhf/ebola/history/2014-2016-outbreak/index.html>

⁴¹ Accessories Manufacture Business Owner, Paper Manufacture Business Owner, Rice Processing Business Owner, Gari Processing Business Owner 2, Foreign Restaurant Owner 1, Food Security NGO Project Manager, Fruit & Veg Processing Business Owner

⁴² Public Sector Commerce Economist 3, Food Security NGO Project Manager

2014, 103.3 in 2016 and 197.7 in 2020 (base year 2015).⁴³ In some cases, local businesses were forced to close because of quarantine rules put in place.⁴⁴

However, it was not only local businesses that were impacted. A large portion of foreigners and foreign businesses were forced to leave the country, and many have not returned. The Ebola crisis provided good motivation for companies, already struggling, to shut down operations and move to another part of the world.⁴⁵ A re-pat owned tech start-up co-founder said that “Ebola affected the whole economy, a lot of businesses left or shut down. A lot of investors pulled out, like Exxon. They were already experiencing challenges and Ebola was the final straw for many and the business environment was already challenging.” Although a large influx of aid poured into the country during and after the Ebola crisis, little of those projects were focused on rebuilding the private sector. A family office manager stated that “the international community threw money at Liberia, but a lot of it was in very focused on health and food, and the devastating impact on the business community and local banks was ignored.” This has meant that long-term private sector development has not been a primary focus for a large portion of the aid money entering Liberia.⁴⁶

The aftermath of the Ebola Crisis was also difficult on owners and employees. Some entrepreneurs and employees lost loved ones and/or were traumatized and reminded of the war. One entrepreneur moved the location of her business within Liberia because the event had been so difficult for her emotionally.⁴⁷ Many companies were unable to restart after the crisis. This was occasionally because processing equipment had been sitting unused for over a year and could not be fixed.⁴⁸ The consequences of Ebola were immense for the entire country and are still being felt in the current economy.

The second major shock to the Liberian markets was the national election cycle in 2017 and the transition to the new government that followed. Leading up to the election, people were uncertain about whether there may be violence or unrest because it was the first change of power since the end of the war. Many citizens saved up their money during this time, just in case violence started up again.⁴⁹ This uncertainty was also difficult for foreign businesses and investors as they were unsure how a change in the government may impact their businesses.⁵⁰

⁴³ FAO Dataset, Consumer Food Price Inflation, Liberia. <https://www.fao.org/faostat/en/#data/CP>

⁴⁴ Tech Start-Up Co-Founder

⁴⁵ Public Sector Investment Manager, International Embassy Manager, Tech Start-Up Co-Founder

⁴⁶ International Embassy Manager

⁴⁷ Fruit & Veg Producer

⁴⁸ Paper Manufacture Business Owner

⁴⁹ Public Sector Commerce Economist 3, Fishery Owner, Food Security NGO Project Manager

⁵⁰ Foreign Import Business Owner 1, Foreign Restaurant Owner 2, Foreign Forestry Company Owner, Foreign Construction Company Manager

The first election was held on October 10th, 2017, and then a second was held with just the top two parties as neither won a majority, which is categorized as a run-off. The run-off was held on December 26th, 2017, and George Weah was officially the winner. Once the results were final, President Sirleaf peacefully stepped down and President Weah was sworn in on January 22nd, 2018.⁵¹ Once this peaceful transition occurred, an immense step forward for the country, businesses became optimistic about their prospects.⁵² This can be found in some of my earliest interviews in Liberia in March 2018. This is because the new administration is focused on domestic growth and development, primarily through the pro-poor agenda. A public sector economist described that “the pro-poor agenda is focused on creating jobs and elevate people from poverty into the middle class, which is generating optimism. And we do that through industrialization.” This agenda, focusing on domestic private sector development, offered hope for the typical Liberian entrepreneur.⁵³

However, one year after the new government was sworn in, this optimism has faded as few promises have come to fruition and many business processes have slowed down.⁵⁴ Further, the systems have changed for these processes and the government has been unclear in its priorities. One of the first issues caused by this transition is that government workers have been demotivated by salary cuts and in some cases, not receiving their pay.⁵⁵ These salary cuts have been because ministries have inflated payroll to bring in more people they want to work with.⁵⁶ Many of the Ministries now have too many people working for them and this has led to inefficiencies and large expenses.

Further, the management style and processes of the old government have changed. Many employees from the previous government were fired because they were perceived as being too close to President Sirleaf.⁵⁷ This logic was also used for the processes and procedures that were in place for the government. Instead of the new administration building off the previous system, it has decided to start from scratch.

The change in personnel within the government mentioned above means that many employees in decision-making positions have changed. Thus, the new government has little experience and knowledge about how to perform tasks. One government manager who has

⁵¹ Final Report: European Union Election Observation Mission at http://www.eods.eu/library/eu_eom_liberia_2017_final_report_0.pdf

⁵² International Embassy Manager, Business Start-Up Org Director, Entrepreneurship NGO Manager

⁵³ Gari Processing Business Owner 3, Business Start-Up Org Director

⁵⁴ Fruit & Veg Processing Business Owner, Gari Processing Business Owner 2, Beauty Business Owner, Paper Manufacture Business Owner

⁵⁵ Public Sector Youth Manager, Public Sector Commerce Economist 2

⁵⁶ Public Sector Commerce Economist 2

⁵⁷ Public Sector Investment Manager

worked in both administrations, stated that “the previous government was young and educated and very much knew what they were doing. The current, I understand that it is politics, but most of the appointees are misplaced. They don’t have any idea on what they are doing.” This means a lot of confusion and mistakes have been made.⁵⁸ It is also taking businesses weeks or months to complete procedures for trade, taxes, licenses, and approvals, which should take days.⁵⁹ As the new government continues to learn and develop, these mistakes may be mitigated. However, a portion of the population is starting to become unhappy with the running of the current government and peaceful protests were held in Monrovia in June 2019.

Policymakers in commerce, investment and youth, who have worked with both administrations, have noted the change in attitude from the new government.⁶⁰ There is a more relaxed approach to peacebuilding compared to President Sirleaf, especially since UNMIL exited. In the reconstruction literature, Englebert and Tull state that “many African political elites, however, share neither the diagnosis of failure nor the objectives set out by the foreign promoters of reconstruction policies. Instead, they seek to maximize the benefits accruing to them from these policies, as well as from ongoing political instability” (Englebert & Tull, 2008). This analysis relates to what Liberian policymakers have said about the current administration. As the state and their goals are at the centre of the reconstruction process, this ‘relaxed’ attitude by the leaders of the administration presents a significant barrier.

This may also have a negative impact on how the international community perceives the country, and the government is not always taken seriously. A change in attitude, personnel and “domestic-focused” policy changes have made foreign businesses wary about entering the market.⁶¹ Further, foreign businesses already in the country have mentioned that they are trying to move to Nigeria or Sierra Leone due to these changes.⁶² Considering there were so few investors and market confidence prior to Ebola and the transition in government due to the war, this exit of capital is detrimental for private sector opportunities.

Once the peaceful transition to the new government occurred in 2018, the UN Mission in Liberia’s mandate concluded after twenty years of operation. This created the third and final economic shock in Liberia. Although UNMIL did not work closely with the private sector, the spending by the mission was substantial for the country. In 2004 to 2005, in the first years of UNMIL, the budget for the mission was \$760 million, while the Government of Liberia’s budget

⁵⁸ Ibid.

⁵⁹ Public Sector Youth Manager

⁶⁰ Public Sector Youth Manager, Public Sector Commerce Economist 3, Public Sector Investment Manager

⁶¹ Public Sector Investment Manager

⁶² Foreign Import Business Owner 2, Foreign Restaurant Owner 2, Foreign Forestry Company Owner

was a mere \$61 million.⁶³ The mission had developed a false economy and a housing bubble, especially in Monrovia. This phenomenon has been analyzed by Beber et al. (2016) as they determine that UN Missions themselves can reshape an economy. One of the biggest influences of the UN's presence in the country was the large inflow of US dollars and local spending. When the UN left the country, the government's reserves dropped substantially, causing issues in the currency and prices.⁶⁴ This spending and influx of USD was keeping the macroeconomic environment under control. An impact fund director explained that "the UN was a provider of jobs, cash, liquidity, that combined with the price environment collapsing in the last couple of years really put the market in a difficult spot." Further, the employees, both foreign and local, and the institution itself were spending at local businesses, increasing the market size. In addition, an international investment manager added that:

"The private sector was really relying on non-sustainable business, that came in from the high influx of donors. The UN was here, every aid organization was here, so you saw high rent prices, which meant high revenues for those who were in the real estate business, those who were importing goods, who were trading since there was a lot of USDs on the market. So now that the UN and other aid organizations pulled out, you really see the market size decrease."

There has not been an influx of capital or resources that is remotely close to the magnitude required to offset the economic impacts of the UN exiting.⁶⁵

Lastly, when UNMIL was operational in Liberia, its programs rarely directly targeted private sector development.⁶⁶ Thus, even though the UN was distorting the local market, few of its strategies focused on developing a sustainable economy. A foreign embassy program director described that "they were the biggest institution supporting this country for so long, there was so little interest in the private sector... But I think in peacekeeping operations it's very important to think about these private actors, and how they contribute to peace, or they take away from peace." In conclusion, the UN Mission ending, which was supposed to be a positive event for the country, was instead a significant negative shock to the local economy. Further, because the UN did little work on developing the private sector, the economy has been unable to sustain itself since its departure.

⁶³ 'How the UN silenced Liberia's Press,' Foreign Policy. August 2016.
<https://foreignpolicy.com/2016/08/08/how-the-u-n-silenced-liberias-press/>

⁶⁴ Public Sector Commerce Economist 3

⁶⁵ Institutional Investment Manager

⁶⁶ However, the security that UNMIL ensured did better the overall business environment.

2.5 Firm and Entrepreneur Characteristics in Liberia

Due to the lack of private sector development, most businesses in Liberia remain micro-sized, and small businesses do not often formalize and grow. The World Bank states that in 2014, 90 percent of non-agricultural employment was in the informal sector.⁶⁷ In addition, Elgin et al. (2021) find that Liberia's informal sector contribution to GDP has not changed since the end of the war. It is approximated that in 2004, 44.8 percent of GDP is from the informal sector and in 2018, the contribution is 44.6 percent.⁶⁸ This shows that overall, small informal businesses are not changing their contributions to growth or formalizing.⁶⁹ Further, entrepreneurs typically do not want to formalize due to the unreliable bureaucratic process and to avoid taxes.⁷⁰ This means that most businesses are “mom-and-pop shops,” which all provide the same goods or services as many other nearby businesses.⁷¹ Due to the informal nature of the market, a large portion of the economy is informal and lacks data. However, Tarwat-Twalla (2011) shows that the informal and micro business sector is a key contributor to Liberia's post conflict private sector. These micro businesses ensure that goods and services are available in remote areas. Tarwat-Twalla (2011) also finds that these businesses provide modest job creation, income for family health and educational needs, and contributions to community development projects like sanitation infrastructure. Although these types of businesses are an important aspect of Liberia's economy, this paper focuses on formal small, medium and large-sized businesses in Liberia.⁷² This is because these are the types of businesses that have ambition to grow, influence policy and potentially attract private investment.⁷³

Using the World Bank Enterprise Survey⁷⁴ (WES) data in Liberia, there are some recent developments in the characteristics of local formal firms that can be discussed. This data has two waves⁷⁵: one set of interviews that were conducted in 2009, and the next set in 2017. In total, 301 firms were surveyed, where of those, 148 are manufacturing, 23 are retail services, and 130 are other types of services. Figure 2A and 2B show the size of firms that were surveyed by full-time employees in 2009 and 2017 respectively. These figures determine that most firms are small, with less than ten full-time employees. However, between 2009 and 2017, there was a shift from the

⁶⁷ World Bank Data. <https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=LR>

⁶⁸ Elgin, C., M. A. Kose, F. Ohnsorge, and S. Yu. 2021. “Understanding Informality”, C.E.P.R. Discussion Paper 16497, Centre for Economic Policy Research, London.

⁶⁹ For example, this is different from Kenya where in 2004, informal firms contributed to 35.1 percent of GDP and in 2018, contributed to 29.2 percent of GDP. This shows a trend of formalization.

⁷⁰ Fruit & Veg Processing Business Owner

⁷¹ Culture Preservation NGO Researcher

⁷² This also matches the characteristics of the businesses that are analyzed in Chapter 2 of this thesis.

⁷³ Culture Preservation NGO Researcher

⁷⁴ World Enterprise Surveys. <http://www.enterprisesurveys.org>

⁷⁵ It is crucial to note that this is not panel data because the same firms were not resurveyed in 2017.

under 10 employee category (small-sized firm) to the between 20 to 30 employees (medium-sized firm). This could have been caused by the entry of new firms that are slightly larger, that firms are growing, or a combination of both. It is evident that the median size of firms is larger in the 2017 survey, showing a modest increase in business sophistication.

Figure 2A: Full-Time Employees in 2009
World Enterprise Survey, World Bank

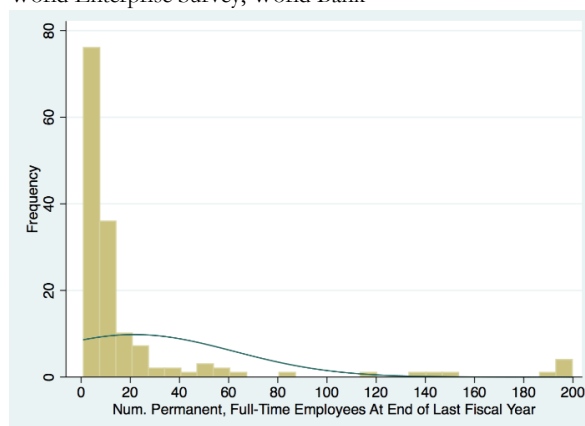
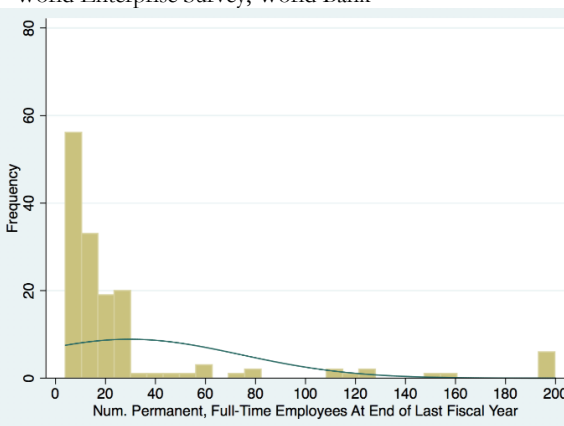


Figure 2B: Full-Time Employees in 2017
World Enterprise Survey, World Bank



However, available financing for firms has remained similar over the past eight years, which is shown in Figure 3. Financing from banks has remained at a mere 8 percent for Liberian firms and has remained one of the biggest challenges for their growth. Eighty percent of firms in 2009 used their own internal funds for capital growth, while 74 percent did in 2017. The largest change between 2009 and 2017 is that nine percent more firms are receiving their funding from other sources, like moneylenders, family and friends. This implies that there is a gap in the available funding needed for small firms to grow into medium size enterprises and beyond. This is further explored in Section 4.2.1.

Foreign ownership is also a growing trend in Liberia, which can be seen in Figure 4. Although on average, Liberians are maintaining control of companies, as domestic ownership remained over fifty percent in 2017, while average foreign ownership has increased by 12 percent since 2009. This shows that there has been an influx of foreign capital and influence since 2009, and its impact on the post conflict environment is analysed in Section 5. Furthermore, government ownership remains insignificant at below 2 percent. In addition, 24 percent of firms are part of larger firms as subsidiaries and only 29 percent of firms have female ownership.

The WES data for Liberia shows that firms in Liberia currently struggle with security, infrastructure, and corruption. Tax rates, tax administration, business licensing and corruption remain minor obstacles for firms. However, political instability on average creates no obstacles for firms, which was further proven through the peaceful government transition in late 2017. On average, 12 percent of sales are lost by each firm due to theft, robbery, vandalism, or arson. This

is higher than the average for Sub-Saharan Africa, which is 7.8 percent,⁷⁶ showing that the conflict may have exacerbated crime against firms. This is discussed further in particular to the relationships with multinational corporations in Section 5.1. Lastly, in 2017, firms experienced an average of 11 power outages per month, which has worsened since 2009. Thus, the data suggest that formal Liberian firms still face obstacles due to government policy and infrastructure.

Figure 3: Finance for Liberian Firms

World Enterprise Survey, World Bank

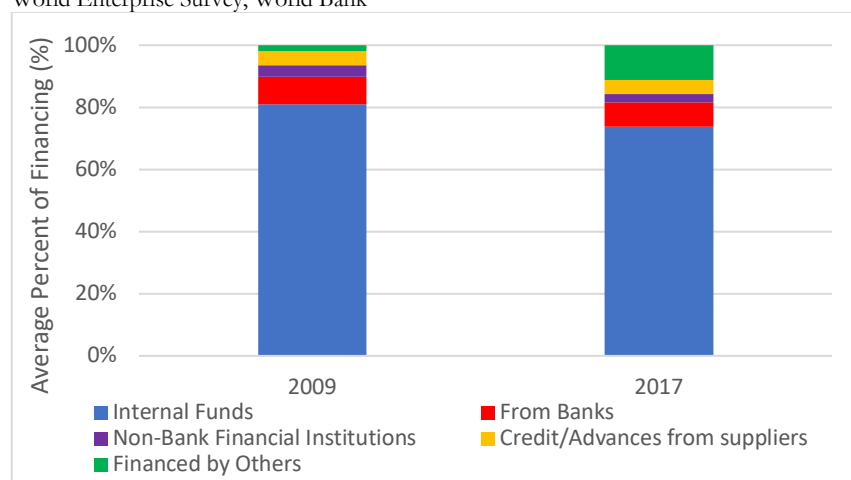
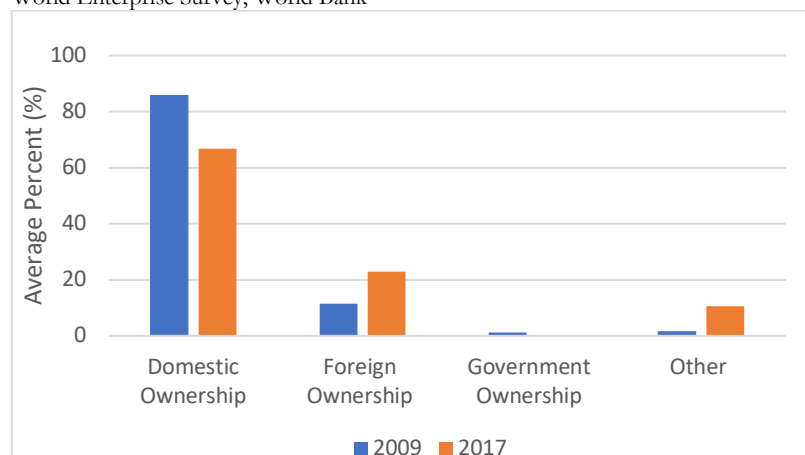


Figure 4: Types of Firm Ownership in Liberia

World Enterprise Survey, World Bank



Foreign ownership in Liberian firms has been growing since 2009. An aspect of this, although not captured in the World Bank Enterprise Survey, is the large foreign direct investment concessions. In Liberia, the concessions are often for the extraction of iron ore, palm oil, and rubber. However, these deals have proven difficult to execute for the multinational corporations.⁷⁷ The other type of foreign ownership in Liberia is Lebanese, Indian and Chinese

⁷⁶ <https://www.enterprisesurveys.org/en/data/exploreconomies/2018/kenya#crime>

⁷⁷ Public Sector Investment Manager

investment into small to medium sized enterprises (SMEs), which is common across West Africa. Many of these companies are family-owned and the owners have resided in the country for generations.⁷⁸ Typically, these businesses are in the hospitality, construction and importing sectors. However, there are a few smaller, foreign-owned businesses that work in forestry, extraction, palm oil, and finance.

There has also been a growing trend of business owners who are Liberian but grew up elsewhere. These entrepreneurs are called “re-pats”, and approximately 65 percent of this subset grew up in the United States and have now returned to Liberia. The re-pats were primarily refugees fleeing the civil wars as children. One re-pat entrepreneur stated that their families were part of the ‘elite’ that were targeted during the war, forcing them to leave:

‘My family is part of the American Liberians that settled here. There was a group of people who felt disenfranchised, and that settled people were the elitist, so they wanted some kind of a change. When the revolution happened, my adopted family was that elitist group of people, some of our families got killed. My father was killed during the war. So, our only option was, well we fled.’

This also means that these entrepreneurs are quite young on average, in their late twenties and early thirties. One hundred percent of this category of entrepreneurs completed a portion of their education outside of Liberia. A more in-depth analysis of the foreign stakeholders in the Liberian market are conducted in Section 5.0.

2.6 Methods for Field Interviews

In order to fill the knowledge gap in private sector development in a post conflict environment from a variety of stakeholders’ perspectives, I conducted extensive field interviews in Liberia from March 2018 to July 2019.⁷⁹ There were four significant data collection periods within that time frame where a total of fifty on-the-record⁸⁰ semi-structured interviews took place.⁸¹ Each of the four periods had a slightly different focus in order to gain varying perspectives on the challenges and strategies to overcome the barriers within Liberia’s post conflict market. These are summarized below:

- Preliminary market analysis: March 16th, 2018 – March 26th, 2018
- Local Entrepreneur and Policy focus: September 21st, 2018 – November 3rd, 2018

⁷⁸ Tech Start-Up Co-Founder, Foreign Hospitality Business Owner

⁷⁹ I am grateful for the two following grants that made these field studies possible: the Skoll “Apprenticing with the Problem” grant and a research grant from the International Growth Centre through their Liberia country office.

⁸⁰ Additional interviews did take place, but the interviewees did not feel comfortable with their interviews being published, even when under pseudo-anonymity.

⁸¹ The field interviews were ethically approved by CUREC at the University of Oxford.

- Foreign Actors in Liberia focus: January 4th, 2019 – March 15th, 2019
- Sierra Leone comparison and Alternative Investors focus: May 9th, 2019 – July 5th, 2019

The first collection of field interviews was during a 10-day exploratory visit to Monrovia, Liberia. Within the first few days, I worked with a local contact to set up two different focus groups. The first focus group was for entrepreneurs, including domestic and re-pat business owners. The second group was with NGO and international institution workers. These discussions were off the record and are not quoted in this paper. However, they did provide excellent insight into the Liberian private sector to develop interview questions and framing for the semi-structured interviews. Ten of the participants in the focus group then agreed to an official interview the following week. In the following three field visits, I used extensive networks and cold emailing to find the appropriate interviewees. The majority of interviews were conducted in Monrovia, due to the capital being the primary business and government hub. However, interviews were also conducted in Ganta, Robertsport, Yekepa, Bong, Lofa and Kakata. All interviews have been pseudo-anonymized for their protection and signed a detailed participant consent form.⁸²

I developed a semi-structured interview for each of the different stakeholders that I spoke to including entrepreneurs, foreign firm-owners, policymakers, investors, and international institutions/NGOs. The interview includes questions on the conflict's impact on Liberia's current private sector and their own organization. Stakeholders also provided details on the barriers that they face in operating their organization, both in structure and conduct, and the strategies they use to overcome them. Many firms and policymakers also discussed the impact of the Ebola crisis, the UN mission and the 2017 election of President George Weah. Foreign investors discussed examples of deals that they have made in Liberia and often compared them to deals they have made in more accessible markets like Ghana and Nigeria. With policymakers, the interviewees provided critiques on the policies the government pursued to stimulate private sector development. A template of the semi-structured interviews for each stakeholder is presented in Appendix A.

In the final set of interviews conducted in June 2019, I also meet with stakeholders in Freetown, Sierra Leone. This was decided after several interviews in February 2019 concluded that Sierra Leone's private sector, although very similar to Liberia's, was performing significantly better and receiving more foreign investment. I conducted six interviews primarily with

⁸² This form is provided in Appendix A. Participants have been pseudo-anonymized for their protection by both job title and date of interview. Interview date has been left at the monthly level as interviews were often times completed in public spaces and others could know the day I met with an interviewee.

investment managers and different types of entrepreneurs over a ten-day period. These interviews provided insight on challenges that are magnified in the Liberian market, particularly for business conduct.

In total, I was able to complete fifty detailed semi-structured interviews, providing an extensive evidence base for this case study from all varieties of stakeholders. A summary of the interviews by stakeholder is presented in Table 1. The interviews lasted from between 34 minutes to 148 minutes, with an average of 66 minutes in length. Each interview has been transcribed and coded to provide evidence for each section. The list of fifty anonymized interviews is provided in the Primary Interview References at the end of this paper.

Table 1: Summary of Primary Interviews by Stakeholder

Country	Stakeholder	Number of Interviews
Liberia	Local Entrepreneur	9
	Foreign Firm Owner	7
	Re-pat Firm-Owner	6
	Foreign Investor	6
	International Entity/NGO	4
	Community Organization	1
	Policymaker	8
	Researcher	1
Other	Sierra Leone	6
	Nigeria	1
	Ghana	1
	Total	50

3.0 The Structure of the Liberian Post Conflict Market

This section uses evidence from the interviews conducted in Liberia to analyse the structure of the post conflict private sector. Many African markets deal with poor infrastructure, urbanization and weak institutions. However, Section 3.1 discusses how conflict contributed to these trends and often exacerbated these problems. The findings align with the literature from Collier (2008), Ganson & Wennmann (2016), Ford (2014) and Bray (2009) presented in Section 2.1. Section 3.2 continues this link to determine how the post conflict market structure is affecting present firm performance. The qualitative evidence overwhelmingly finds that the most significant consequence of the conflict impacting firm performance today is the lack of critical infrastructure. Entrepreneurs of all types find that the lack of road connections and access to electricity are the two most costly challenges to running their businesses. Other market

challenges, like corruption and poor institutions, are also stated in the evidence as hindrances to business growth, but to a lesser extent. However, interviewees find that there is little they can do to alter the market structural challenges. Instead, the evidence shows that it is through business conduct, particularly the businesses that have foreign influence, that firms navigate the post conflict market by altering their behaviours (discussed in Section 5).

3.1 Conflict's Influence on Post Conflict Market Structure

Throughout the numerous interviews with Liberian stakeholders, there are three commonly cited direct impacts of conflict on the structure of the market. The first is the damage and destruction of key infrastructure. The overall level of infrastructure is low, with some interviewees citing that it is still below pre-war levels.⁸³ Second, the evidence indicates that mass levels of migration to either Monrovia or outside of the country, caused by the wars, has changed the overall demographics of the country. Lastly, interviewees commonly spoke of the weak institutions that the country suffers from, which is a direct consequence of the civil war and Taylor's leadership. The combination of these changes caused by conflict has made conducting business in Liberia particularly challenging throughout its post conflict recovery.

In the 1960s, infrastructure grew enormously, and Liberia was perceived as having the fastest growing access to infrastructure on the continent.⁸⁴ This was particularly true for increasing access to electricity, which grew by 30 percent from 1960 to 1968. This was the sixth fastest growing electricity access change across the globe at that time (Beleky, 1973). However, access remained quite low throughout the country, especially in rural areas. The Liberian Electricity Company (LEC) was developed in 1973 and by 1989 served approximately 13 percent of the population.⁸⁵ Except for 10 small grids, the rest of the electrical framework was destroyed during the war.⁸⁶ The current access rate for electricity in the country is 11 percent, which is 2 points lower than 1989.⁸⁷ The owner of an eco-friendly energy SME who lived in Liberia before the war states that “until the war, access to electricity was a bit better across the country and people were only using charcoal as a secondary resource. Now there is no other option, so there has been a huge increase in the charcoal.” Another example is access to pipe water, which was significantly better before the war than in the post conflict era. In 1986, access to piped water was 15 percent, but this dropped to 3 percent in 2008 (Foster & Pushak, 2011).

⁸³ International Embassy Manager, Public Sector Investment Manager

⁸⁴ Nyemah, 2009

⁸⁵ History, *LEC Liberia*, 2016, https://lecliberia.com/?page_id=106

⁸⁶ Ibid.

⁸⁷ Liberia Power Africa Fact Sheet, *USAID*, 2022, <https://www.usaid.gov/powerafrica/liberia>

A foreign SME construction company owner whose family has run businesses in Liberia since the 1980s also noted that “before the war during Samuel Doe’s time, there were a lot of major infrastructure projects, like building bridges for 30 to 40 million USD. But after the war, the government couldn’t fully rebuild all of these and now these types of projects don’t exist anymore.” After the government lost a significant amount of money from the civil wars and was unable to easily raise income through taxes, they did not have the capital available to fully rebuild (Foster & Pushak, 2011). Many international actors have attempted to rebuild the infrastructure, but the barriers and costs have made it challenging. A family office country manager stated that “we tried to get into building electrical grids, but the government made it so expensive because they saw it as a social project and not a commercial one, that after 5 years, we had to give up.”

In addition, international institutions and large MNC investors have worked on building roads, which were also poor before the war. However, a public sector investment manager explained that “this has been a slow and costly process. A lot of the workers don’t know how to properly do this and with the cheap material, the roads usually deteriorate quickly after one or two rainy seasons.” Even though it’s been almost two decades since the war created the destruction, infrastructure has not been fully rebuilt.

Large amounts of private infrastructure, including buildings, farms, mining towns, were also damaged. Firestone, the largest multinational corporation (MNC) operating in Liberia that stayed throughout the conflicts, suffered serious damage. Firestone provides significant infrastructure in their rubber plantations including schools, hospitals, residences, roads and electricity.⁸⁸ In the 1990’s, rebel groups took over a Firestone community and stayed there for months, destroying its infrastructure. In addition, the hospital, which remained open during the war to support the wounded, was bombed by ECOMOG in 1991 (Public Sector Investment Manager). Firestone states that it required approximately \$146.9 million to undo the damage caused by the conflict.⁸⁹ Although aid organizations, international institutions and MNC’s have contributed to rebuilding public infrastructure, it remains drastically underdeveloped and is cited as a significant barrier for conducting business for any private sector actor.

Currently, a large portion of business activity in Liberia occurs in the capital city, Monrovia, and over half of the population of the country lives there. This is because during the war, many people fled to the city looking for safety and opportunity.⁹⁰ Many believed that the city was the safest area in the country throughout the conflict, which caused mass levels of migration into urban areas. A food security NGO worker stated that “before, young people were

⁸⁸ Public Sector Investment Manager, Public Sector Commerce Economist 2

⁸⁹ Firestone, 2019 at <https://www.firestonenaturalrubber.com/about-us/background/>

⁹⁰ Culture Preservation NGO Researcher

all in the rural areas, but during the war, they all came into the city because it was safer.... And then they all refused to go back.” This has left the rural areas with few workers and developing the agricultural sector has suffered because of this. A gari-processing business owner described that the war “made it difficult for agribusinesses because most of the people out there in the interior came down to the city and the major problem we have here and now is to make them go back home and start farming again. Now 50% of the population are here in Monrovia doing nothing.” In addition, the infrastructure of the city was not built for such a large population, causing severe strain on development. A tech start-up founder stated, “Monrovia was built for maybe like 300,000 people. There was only like 250,000 here when I was a kid. Now, because of the war, we have like 2.5 million people here now and there has been no major infrastructure built to accommodate all these people.” The Government of Liberia finds that Monrovia’s population was 491,078 in 1984 and 1,010,970 in 2008 with only 326,990 internally displaced people returning to rural areas between 2004 and 2007.⁹¹ The existing infrastructure in Monrovia is overworked because of the overflow of residents. This mass migration into the city heightens the problem of inadequate infrastructure discussed above.

It was not only migration into urban areas that caused problems, but also emigration out of the country to find safety. One renewable energy entrepreneur explained that “I wanted to stay during the war. I was already doing business here and was dedicated to keep rebuilding it after the war destroyed it but finally, I had to move as it really wasn’t safe anymore or financially feasible.” Of the re-pats who have returned to Liberia after the war, many of them noted that their families wanted to stay but were forced to leave.⁹² Since the origin of the violence was against the elite socio-economic class in the country, many of these families had the resources to leave the country. However, it did mean that a large portion of the highly educated workforce left the country. This “brain drain” that occurred also contributes to the education gap that is discussed below in Section 3.1.

The final impact of the conflict on market structure discussed by stakeholders is weak institutions. These include regulations, government systems and support, legal capacity, and systemic corruption. It is evident that institutions and regulations were weak prior to the conflict, but the evidence suggests that the conflict further engrained this in the status quo. An international embassy manager stated that in Liberia, “the institutions are not strong in general, and I believe the conflict destabilized them. Accountable institutional structure is still a serious challenge, and the system is not accountable enough to make sure people do what they have to

⁹¹ Government of the Republic of Liberia. 2008. *2008 National Population and Housing Census: Preliminary Results*. Liberia Institute of Statistics and Geo-Information Services (LISGIS). Monrovia, Liberia.

⁹² Accessories Manufacture Business Owner, Fashion Designer, Alcohol Production Business Owner

do, or that people are punished for not doing the right thing in the system.” This creates a long-term instability in the institutions of the government, which negatively affects private sector development. It was suggested that one reason for this is that the government has no safety net for the private sector and that the political uncertainty makes doing business difficult.⁹³

Even if effective government regulations are in place, enforcement is uncommon. Many suggest conflict altered the perception of the law, since the country itself was ungoverned and anarchic for such a long period of time in recent history.⁹⁴ A large institutional investment manager stated that “the lack of regulations or enforcement of those regulations, that’s also a result of the war. Because it was a lawless place for a long time, things went unregulated for a long time. So, to reinstate institutions that people respect now, it’s a real challenge.” A tech entrepreneur who grew up in Liberia in the 1980s also provided his opinion that “the institutions before the war were not good either, but I think what the conflict has done has made as relatively stagnant. It’s hard for the institutions to get better when we regressed for 14 years.” Thus, a relaxed attitude towards law and following the government has transpired. Although some businesses may benefit from this, the overall private sector environment is negatively impacted, and firms are unable to have any trust in the system they operate in. The Government of Liberia is the key entity in both developing the private sector environment and peacebuilding process. If there is a more relaxed attitude for policy by the government, this causes long-term consequences in the development of all the components of reconstructing after the war.

One of the direct legal implications of conflict has to do with land ownership. During the war, a large portion of land was left behind by owners who were displaced by violence. In some cases, the deeds were lost or confused once the wars ended because so much time had passed.⁹⁵ Some plots of land had many families living on them who eventually bought the land from the government. However, it was not the government's land to sell. This means there were multiple owners of the same piece of land, a discrepancy which needs to be taken to court. Further, there have been many cases where others have started to live on that land and it can take 10 years to solve the problem through the court system.⁹⁶ These weak systems lower the overall trust in the business community and cause numerous tensions (more on trust in Section 4.2.5). It also means that these long, tedious, and expensive legal processes make it challenging to enter the formal business market.

⁹³ Tech Start-Up Co-Founder

⁹⁴ Institutional Investment Manager, Public Sector Commerce Economist 2, Culture Preservation NGO Researcher, Entrepreneurship NGO Manager, Family Office Country Manager, Gari Processing Business Owner 1

⁹⁵ Tech Start-Up Co-Founder

⁹⁶ Tech Start-Up Co-Founder

Weak institutions that have been solidified throughout the conflict have also allowed for frequent corruption. Corruption has become embedded systems throughout the country, and this occurred before the war as well. A domestic entrepreneur who fled to Monrovia in the 1990s states that during the war there was even less enforcement of rules, and corruption and black-market dealings was encouraged.⁹⁷ An institutional investment manager described that the lack of enforcement and positive reinforcement is “a result of the war. Because I think it was a lawless place for a long time, things went unregulated for a long time and that is hard to change.” Thus, corruption became a normal and consistent occurrence, which businesses deal with regularly. An international embassy manager added to this by saying that institutions themselves are “not accountable enough to make sure people do what they have to do, or that people are punished for not doing the right thing.” This has created a culture of tolerance for corruption within the country, making business expensive and challenging (discussed in Section 3.2.4).

Thus, it is evident that Liberia’s two civil wars influenced the structure of the private sector by destroying public and private infrastructure, increasing migration into the city and out of the country, and further promoting weak institutions. These substantial changes to the configuration of the Liberian market have had further consequences on post conflict private sector performance, which is discussed in the next section.

3.2 Post Conflict Market Structure’s Impact on Current Firm Performance

The direct impacts of conflict on the structure of the Liberian market also affect a firm’s ability to be successful. This section presents the evidence for how these market structures, influenced by the civil wars, are impacting business performance. The consensus from numerous interviewees is that they have little control and influence over these substantial market structure barriers to doing business.⁹⁸ A foreign import business owner stated that “except for packing up and moving my business to a different country, there is little that I can personally do to change the setup of the business environment here. I can advocate for less corruption, and better infrastructure but I don’t think that goes far.” A re-pat fishery entrepreneur also commented that as a business “it’s hard but adapting to the environment is the only thing that you can really do. It will take a long time for these structures to change.” Thus, the evidence shows that the structural barriers to firms discussed below are significant and that there is little the private sector can do to alter these in the short-term (except MNCs, discussed in Section 5.1). As discussed in Section 2.4, the state is the primary decision maker for these policy changes and

⁹⁷ Fruit & Veg Process Business Owner

⁹⁸ Foreign Import Business Owner 2, Entrepreneurship NGO Manager, Fishery Owner, Fruit & Veg Processing Business Owner, Gari Processing Business Owner 2

public spending. However, they too face constraints, particularly a lack of fiscal income and experience,⁹⁹ to accomplish many of these changes.

3.2.1 Inadequate Infrastructure

A significant barrier for business growth is the ubiquitous poor infrastructure. As noted above, this is a direct consequence of the destruction of a large portion of both public and private infrastructure throughout the wars. In Liberia, although there was an inflow of aid to target rebuilding infrastructure after the wars, there is still a substantial gap.¹⁰⁰

The most cited issue with infrastructure is poor quality roads. Less than 5 percent of roads are paved,¹⁰¹ which makes transporting goods across the country slow and costly. Since most roads are dirt or pebbles, the rainy season washes many of them out, making them impassable, and impossible to transport goods to certain regions of the country.¹⁰² Many business owners discuss that a lack of paved roads means that transportation is a large expense for them because it takes a long time to transport goods.¹⁰³ One business owner's vehicle was stuck on a road during the rainy season for over two months, leaving them unable to conduct business in that area for that time.¹⁰⁴ A gari processing business owner explained that businesses struggle to connect rural areas to urban markets because “bringing goods from the firm to the factory and then to market becomes more difficult, timely and expensive.” This lack of connectivity for business is particularly hard for the agricultural sector, which suffers from 80 percent post-harvest loss due to poor roads and a lack of cold-chain transportation options.¹⁰⁵ The lack of quality roads means that many businesses are unable to access regions of the country, costs for transport are high and take away from profits, and goods are easily damaged or lost. This negatively impacts firms’ growth and thus impedes private sector performance in Liberia.

Additionally, only 11 percent of Liberians have access to electricity,¹⁰⁶ which means that most businesses are forced to use fuel generators for production and operations. This is the second most cited issue for a firm’s operational effectiveness and their overall performance. It

⁹⁹ Public Sector Investment Manager

¹⁰⁰ Institutional Investment Manager, International Embassy Manager

¹⁰¹ ‘Addressing infrastructure constraints to inclusive growth in Liberia’, African Development Bank Group, 19 July 2017, available at: <https://www.afdb.org/en/blogs/measuring-the-pulse-of-economic-transformation-in-west-africa/post/addressing-infrastructure-constraints-to-inclusive-growth-in-liberia-17200/>

¹⁰² Agri-NGO

¹⁰³ Gari Processing Business Owner 1, Fruit & Veg Processing Business Owner, Renewable Energy Manufacture Owner

¹⁰⁴ Foreign Import Business Owner 2

¹⁰⁵ Entrepreneurship NGO Manager

¹⁰⁶ Liberia Power Africa Fact Sheet’, USAID, September 2016, available at: <https://www.usaid.gov/powerafrica/liberia>

also adds significantly to business costs, which increases sale prices and decreases overall opportunity for firms.¹⁰⁷ For example, a fruit and vegetable processing business owner said that “we have to use fuel generators and that brings our overhead costs very high. So, for something that we want to sell at a minimum amount, we have to sell it more expensive because of the running costs.” Liberia’s cost per Kw of power is one of the highest in Africa, ranking the fourth highest behind Comoros, Mali, Guinea-Bissau, and Somalia.¹⁰⁸ This means that running these diesel generators constantly for a business becomes very expensive and, in many cases, impossible for small business owners. One fashion designer joined the electrical grid in 2018 and said that it had decreased her operational costs significantly. However, she states that even though they are on the grid, “it failed so often that we ended up resorting to the generator often, and then we just moved back to manual sewing machines, so we did not have to use either power source.” Thus, the lack of access to reliable and affordable electricity means that many businesses must resort to lesser technologies, less production, and much higher operating costs. This makes it particularly challenging for businesses to perform well.

Even when certain infrastructure is set up in the country, most of it is inconsistent. A tech start-up founder mentioned that since the “infrastructure here is unstable, that creates a challenge for growth because scaling up requires stable internet, power, water, etc. With that limit, because we try scaling up the power goes out, this affects you in a serious way.” Thus, the overall unreliability for transportation, water, internet and power, are serious challenges for private sector development in Liberia. The only businesses that have overcome this challenge directly are large MNCs that have the capital to build their own infrastructure (discussed in Section 5.1).¹⁰⁹

3.2.2 Poor Regulatory Environments & Weak Institutions

The government regulation and legal structures in place are inconsistent for businesses, making it challenging to perform well. As mentioned above in Section 3.1, a legacy of the conflicts in Liberia is weak institutions, which have led to poor regulations, little enforcement, and disorderly government systems. For many business owners, it is difficult to manoeuvre efficiently through the processes to receive proper documentation.¹¹⁰ However, the Ministry of Commerce has created an electronic system for business registration which has sped up this

¹⁰⁷ Foreign Hospitality Business Owner, Paper Manufacture Business Owner, Fruit & Veg Processing Business Owner, Gari Processing Business Owner 3, Rice Processing Business Owner

¹⁰⁸ <https://www.cable.co.uk/energy/worldwide-pricing/>

¹⁰⁹ Public Sector Investment Manager, Public Sector Commerce Economist 2, Tech Start-Up Co-Founder

¹¹⁰ Accessories Manufacture Business Owner, Beauty Business Owner, Gari Processing Business Owner 1, Fruit & Veg Processing Business Owner

process substantially. One can now register a business within ten business days.¹¹¹ The most common issues cited by interviewees are related to situations when numerous government entities are included in the process. For example, if a business would like to start importing, it requires a permit through the Ministry of Commerce. In the application for this permit, it must show that it is up to date on corporate taxes. However, the Liberian Revenue Authority (LRA) can sometimes take months to deliver the receipts for tax payments, which slows down business processes. This happens frequently and an international embassy manager claimed that “there is a need for clarity in rules and regulations, and how they’re consistently applied.” To make the country more business-friendly, these inconsistencies between government entities need to be reduced. An entrepreneurship focused NGO manager stated that:

“[Liberia] needs to become a place where people know how to get a license to do A, B and C, how much it’s going to cost and how long it’s going to take to get approved. They need to know how long it’s going to take to clear customs, and how much it’s going to cost – that it’s not going to take 3 weeks and you have to pay so many bribes to get it through.”

Further, a lack of regulations and quality control in Liberia means there is little demand for exports into other countries.¹¹² For example, agri-businesses are unable to find foreign customers because the standards for food hygiene must be shown.¹¹³ Although Liberia entered the WTO in 2016 and is now in the process of ratifying the Trade Facilitation Agreement, it is still challenging for businesses to export their goods.¹¹⁴

Although the Central Bank has set regulations for the commercial banks, the lack of enforcement explained above creates issues within the financial system. For example, if someone defaults on their loan and the bank is to collect collateral, there is no enforcement of this process.¹¹⁵ An institutional investment manager explained that “if a person hasn’t paid for a year or 6 months and you want to confiscate whatever collateral, you have to go through the normal court process, which can take years. And the cost of that alone is huge.” Further, a finance sector investor noted that there is “a lack of clear regulatory framework for the financial system.” These issues present within the financial framework of the country directly influences access to finance for businesses, especially SMEs, which is further discussed in Section 4.2.1.

Disputes over laws and an underdeveloped legal system also hinders business development throughout the country. The most cited problem for businesses has been the land disputes

¹¹¹ Public Sector Commerce Economist 2

¹¹² Renewable Energy Manufacture Owner, Gari Processing Business Owner 2

¹¹³ Business Start-Up Org Director

¹¹⁴ International Embassy Manager

¹¹⁵ Institutional Investment Manager, Regional Financial Institution Manager

discussed in Section 3.1. Many businesses want to grow and invest in property to expand their business. However, this investment may be tied into land disputes making it significantly less attractive.¹¹⁶ Businesses are wary of being stuck in long and expensive legal proceedings to move forward with their business. This has also been an issue for the large concession deals, which have caused social tensions between the communities and the companies. A public sector investment manager explained:

“All the land in rural areas was viewed as being the government's lands but they were actually already deeded to communities. The first problem is that the rural area inhabitants were not consulted and the investors didn't do their due diligence on those communities. Then they would sign contracts and the investor would then face tensions from these communities.”

This issue is a priority for the current government, demonstrated by the passing of the Land Rights Act in September 2018. This Act strongly protects communities' rights by allowing private ownership of customary lands and deeds to be made verbally. It also ensures that women and minorities have equal rights to own and claim land.¹¹⁷ However, it is unknown whether this policy change will alter the conduct of firms in terms of investing in land for business expansion.

3.2.3 Systematic Corruption

It is crucial to discuss how widespread corruption in the Liberian economy hinders business development. Liberia ranks 120th out of 180 countries on the Corruption Perception Index (CPI) in 2018, which has improved slightly from 2017. However, prior to the election, there was a significant push by President Sirleaf to fight corruption, which is seen in the 2016 rankings where Liberia was 90th, significantly better than the present ranking.¹¹⁸ This means that overall, the perceptions of corruption have been exacerbated under the new administration. The perception of corruption is key in providing us insight on how businesses and investors view the opportunities and barriers in a country.¹¹⁹ However, it is important to remember that CPI is based on perceptions found by several different institutions and not the actual total “payoffs” or “gifts”, which could potentially be the same between the two administrations.¹²⁰ Due to the slow and backlogged legal system in the country, corruption is often quietly tolerated by businesses to

¹¹⁶ Foreign Hospitality Business Owner

¹¹⁷ ‘The Lands Right Act Victory in Liberia means the work has Just begun,’ Thomas Reuters Foundation, October 2018. <http://news.trust.org/item/20181023161353-j601g/>

¹¹⁸ Transparency International. <https://www.transparency.org/country/LBR>

¹¹⁹ Public Sector Commerce Economist 3

¹²⁰ This sort of data is not available as it is illegal activity and records are not kept.

ensure that they can survive and continue to operate.¹²¹ This profoundly hinders private sector development and business opportunities throughout the country.

Above, I discussed that receiving a business license through the new system has become significantly easier. However, a gari processing business owner stated that “on paper, they say you can get your document in 48 hours but that’s not true. The person you are supposed to help you, doesn’t and you have to pay petty cash. The government is one of the biggest bottlenecks for my business.” Whether it is a business needing a proper license or permit, numerous owners stated that they needed to pay bribes for almost all types of transactions with the government.¹²² A fishery business owner explained that this means that “government officials in the area being a hindrance instead of a help to your business, asking for things that you can’t put in your expense book.” This reduces the incentive for growing a business because to do so, one often needs additional paperwork and co-operation with the government. However, many business owners do not believe in the overall benefit of this growth because they know that going through these government channels is often a detriment to their profits.¹²³ This is also true if a business looks at expanding its market outside of the country by exporting their markets. The permits and processes required for trade often require the payment of large bribes.¹²⁴ A government economist in commerce said that “officially there are no costs to exporting in this country but unofficially the country isn’t used to exporting so everyone at the border is taking the opportunity to make money from it.” Thus, there is a significant financial barrier for any firm ambitious enough to try and enter new markets. Often, this means that firms are forced to remain domestic and small.

Further, businesses can also experience corruption outside of government institutions. This is often experienced when trying to access finance, loans or other types of business support. An example of a local food processor that experienced corruption through a local a bank is the following:

“I had an incident, where the government had some money for small businesses and when I applied, they were supposed to give me \$14,000 dollars. You won’t believe that the deputy minister and the bank, where they put the money, took \$8,000 dollars out of the fourteen... And I had to pay back the \$14,000 with interest. So, I had to pay it all back, even though I didn’t get all of it.”

¹²¹ Family Office Country Manager

¹²² Gari Processing Business Owner 3, Fishery Owner, Fruit & Veg Processing Business Owner, Alcohol Production Business Owner, Rice Processing Business Owner, Gari Processing Business Owner 2

¹²³ Gari Processing Business Owner 3

¹²⁴ Renewable Energy Manufacture Owner, Fashion Designer

This means that the barriers for firms to access finance and services, which are already substantial (discussed in Section 4.2.1), are amplified due to corruption. This increases the cost and difficulties of conducting business in the country and thus, negatively influences firm profits.

4.0 Conduct of Firms in the Liberian Market

The previous section explored the evidence describing Liberia's private sector structure and its relation to post conflict firm performance. This section focuses on the second aspect of the SCP framework, which is the conduct of firms. This includes the decision-making, behaviour and use of firms' resources in the post conflict environment. Section 4.1 uses the interviews to determine the impacts that the conflict has had on firm conduct, including issues like the human capital gap, lack of savings and risk averseness, war mentality and lack of trust within communities. Following, Section 4.2 demonstrates how those consequences from the conflict on domestic firm conduct influences current private sector performance. This section includes an analysis of the firms access to finance, training, innovation and business networks. Section 5 then analyses how different types of firms with foreign influence navigate these challenges to increase their performance in such a difficult market.

4.1 Conflict's Influence on Post Conflict Firm Conduct

The conflict did not merely change the structure of the market, but also the resources available to firms and how business is conducted. This section describes the three primary direct influences that the wars had on resources and firm conduct in Liberia. The first is the destruction of capital, which led to low savings as well as a hesitation to invest in private sector activity. Next, the lack of human capital, which stemmed from fourteen years of little education or work opportunities for the labour force due to conflict. Lastly, stakeholders discuss how the conflict changed human connection and trust throughout the country. These three changes to behaviour alter the way that businesses are run today and thus, their performance (more discussion on this link in Section 4.2).

Throughout the two civil wars, many businesses attempted to remain open but continued to lose their investment. Numerous entrepreneurs discuss how their family's businesses had failed numerous times during the conflicts.¹²⁵ This meant that many entrepreneurs needed to start from scratch once the war ended. Any investment, property, inventory, and inputs had been destroyed or stolen due to the violence. This was particularly common for foreign-owned businesses, which were more often targeted for looting. This aligns with the findings from

¹²⁵ Tech Start-Up Co-Founder, Foreign Hospitality Business Owner, Foreign Construction Company Manager

Klapper et al. (2013) in Côte D'Ivoire. All of the foreign-owned businesses in my sample that were operating throughout the wars mentioned this as a significant problem.¹²⁶ One family business owner in the hospitality sector said that “we lost all our businesses during the war. Actually, three times we lost everything. From houses to every business we had. Rebels looted our entire factory, loaded everything up on a ship and I think they said it ended up in Nigeria.” However, it was not just foreign business owners that lost significant amounts of investment. Local business owners are now also hesitant to make any investment after experiencing such losses in capital throughout the civil wars and the Ebola crisis. One re-pat tech founder commented that “as a businessman you become ‘gun shy’ after your investments have been scorched, and you do not want to invest again.” A long-term legacy of the conflict is that many remain pessimistic and nervous, making them wary to start or try to expand their businesses.¹²⁷ This owner continues by saying “I think most Liberians are just traumatized and they definitely don’t want to invest in any kind of way. So, there is a lot of reticence in Liberians keeping their money in Liberia and doing things in Liberia because there is that uneasiness in what would happen.” Thus, there was not only a decrease in savings but also the realisation of a deep-rooted resistance to investing in the private sector directly caused by the conflict.

This high-risk and uncertain environment, which was directly generated from these long-term intense conflicts, have also made it challenging for foreign investors to enter the market and for local banks to provide finance. This means that businesses in Liberia are cautious to attempt growth through investment and if any decide they want to take that risk, find it almost impossible to receive financing.¹²⁸ Since Liberia is a challenging market to operate in due to the long-term consequences of the war, the risks that banks must assume are substantial, and loans are rejected often. If a bank does approve a loan, the interest rates, collateral and payback terms required to cover the risk for the bank are often unreasonable for small and growing businesses.¹²⁹ In addition, many foreign investors have little knowledge about the Liberian market, culture and the potential within the country. Often, the two facts that people outside of the region often know about the country is that it is war-torn and suffered from the Ebola crisis.¹³⁰ A re-pat business owner found that “for people outside of Liberia, they see Liberia as damaged, they don’t see Liberia as a place to invest.” This perception caused by the two severely intense and brutal wars has tainted the country and driven away investment flows. Overall, the

¹²⁶ Foreign Hospitality Business Owner, Foreign Construction Company Manager, Foreign Import Business Owner 2

¹²⁷ Gari Processing Business Owner 3

¹²⁸ Fashion Designer, Public Sector Commerce Economist 2, Fruit & Veg Processing Business Owner

¹²⁹ Institutional Investment Manager

¹³⁰ Tech Start-Up Co-Founder

access to and use of finance in Liberia has been negatively impacted by the wars and has severe consequences to private sector development (further discussed in Section 4.2.1).

Due to the civil wars, most of the education system was not operational for almost twenty years, causing a massive education gap. Not only was education infrastructure destroyed but a re-pat fashion designer explained that “the teachers fled, there was no one to educate them, so there is a gap in time without any education.” Numerous stakeholders mention that the entire education system, from primary to tertiary, collapsed throughout the civil wars and have struggled to ‘catch up’ since peace.¹³¹ However, this knowledge and education gap is not merely caused by a lack of formal education; there are many other informal ways of learning that were severely disrupted. An NGO manager focused on agriculture stated that “the war disrupted the traditional family learning for farms. There’s a whole generation that missed out on learning.” Since many men went to war or families had to flee their lands, many young people did not learn farming from the elder generation. These farming methods had been passed on for generations prior to the wars and are now difficult to come by.¹³² In addition, there were few people able to find employment throughout the conflict, which meant that many people came out of the war with no work experience. A local business organization’s director described that “a lot of people missed any type of work opportunity because they were fighting...and now they have to conduct business with very limited experience and knowledge.” This dearth of human capital, derived from a substantial gap in formal education, generational knowledge and work experience from long-term conflict, causes many barriers to performance in current Liberian firms (discussed further in Section 4.2.3).

The education gap from conflict has caused both a lack of skills but also a change in mentality when it comes to business. People tend to think more short-term because of the uprooting they have experienced from the conflict. A culture preservation researcher stated that:

“Liberia is suffering greatly from war mentality, where people who are at the age to run a business, they didn’t go to school regularly, by going to school and not being displaced. You learn how to plan ahead and make commitments through this...but it’s a skill that you learn and if you are forced your whole life to think short term it’s difficult to not do that, especially when a whole generation is thinking that way – it becomes the culture.”

Thus, the culture surrounding business is less ambitious overall than other regions that did not experience wars.

¹³¹ Accessories Manufacture Business Owner, Fashion Designer, Agri-Education NGO Manager

¹³² Agri-Education NGO Manager

The conflict has also profoundly altered the levels of trust within communities. Stakeholders believe that communities and families, after the conflict separated them for such a long time period, feel much less connected.¹³³ This researcher continued to explain “that people do not feel connected anymore, especially since the whole family unit, which is needed for healthy child development, was destroyed in most cases.” The trauma of the conflict, where loved ones were killed and/or raped, homes looted, families displaced and children kidnapped, has created a legacy of mental health issues. Since much of the population, including most civilians, were impacted by the conflict, the need for trauma support is considerably larger than what is available.¹³⁴ There are a small number of NGOs that work on trauma and support groups; however, this is extremely limited. One of the consequences of this trauma and the lack of support to deal with it is that trust in the business community remains low. A government economist in commerce commented that “we live in a country where everyone considers it’s a zero-sum game. They think, if I don’t make it, then someone else will take that money from me and this comes from the war. They don’t think that together we can make the pie even bigger,” where the pie represents the private sector. This means that many businesses do not support one another or work together to overcome barriers to grow Liberia’s private sector. The impact that the lack of trust and business networks have on private sector performance is further discussed in Section 4.2.4.

Therefore, it is evident that conflict has had a direct impact on the conduct of firms in Liberia. Access to finance has become extremely limited as many stakeholders perceive the risk as being too high. In addition, many business owners are hesitant to invest in their businesses because of the war mentality and trauma of losing past investment throughout the conflict. The civil wars also created a significant human capital gap due to the long pause in formal education, opportunities for gaining work experience and the inability to learn informally from local communities. Lastly, conflict directly impacted the level of trust within communities and left a legacy of trauma and disconnect for a large portion of the population. These direct consequences of the civil wars have a profound impact on how business decisions and operations occur in Liberia, which is discussed in detail in the next section.

4.2 Domestic Firm’s Conduct and Current Firm Performance

¹³³ Gari Processing Business Owner 2, Culture Preservation NGO Researcher

¹³⁴ Culture Preservation NGO Researcher

The private sector actors surveyed in the field study had different methods on how to navigate their business in the Liberian market to make it as successful as possible. Unlike in Section 3, there is a higher census that businesses can change their behaviours to gain a competitive advantage in the market and become more successful.¹³⁵ The types of stakeholders that have a higher capability of making those necessary changes are the re-pat and foreign-owned SMEs, which is further discussed in Section 5. This section discusses the evidence collected on the conduct of domestic Liberian firms and how it impacts their performance. The firm conduct that is focused on below is the use and access to finance, training, innovation, and business networks.

4.2.1 Access to Finance

Access to finance, especially for local entrepreneurs, is a commonly cited issue for businesses in Liberia. If a business requires long-term capital to help them expand either production or distribution, the owner struggles to find any individual or institution to finance them.¹³⁶ This means that for most businesses, it is common to use internal funds generated through the business and/or using their own or their family's savings. However, domestic saving levels are low across the country as only 35.7 percent have an account with any sort of financial institution, which is 7 percent lower than the Sub-Saharan African average.¹³⁷ SuSu's, community saving programs, are more frequently used and many Liberians feel safer and more comfortable using these types of accounts.¹³⁸ However, these informal methods do not give people the records and credit scores required to access official loans. Due to the high cost of living generated through imported goods and the depreciating dollar, it is also challenging for the typical Liberian family to save any of its income.¹³⁹ Due to these hardships many households depend on remittances. In Liberia, remittances received, as a percent of GDP was 11.3 percent in 2019, where it was only 2.8 percent for sub-Saharan Africa.¹⁴⁰ However, much of the remittances are spent on everyday needs as well as health and education expenses.¹⁴¹ This is in addition to the destruction of savings throughout conflict discussed in Section 4.1. The low

¹³⁵ International Embassy Manager, Foreign Import Business Owner 2, Foreign Hospitality Business Owner, Foreign Forestry Company Owner, Alcohol Production Business Owner, Commercial Cocoa Business Owner, Tech Start-Up Co-Founder

¹³⁶ Institutional Investment Manager, Gari Processing Business Owner 2, Fruit & Veg Processing Business Owner, Paper Manufacture Business Owner, Impact Fund Director, Entrepreneurship NGO Manager

¹³⁷ World Bank Data. <https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=LR>

¹³⁸ Fruit & Veg Processing Business Owner, Rice Processing Business Owner, Fashion Designer, Public Sector Commerce Manager

¹³⁹ Public Sector Commerce Economist 2

¹⁴⁰ <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS?locations=LR>

¹⁴¹ Culture Preservation NGO Researcher, Public Sector Commerce Economist 3

savings along with the poor macroeconomic environment, makes it even more difficult for Liberians to start and grow a business.

In addition, many owners struggle to secure an effective loan to help grow their businesses. This is because credit is expensive and has strict payback terms. The typical loan for a Liberian entrepreneur from a bank is around 18 to 28 percent depending on the sector. The collateral for these loans is also substantial, like property or the business itself, even for small loans.¹⁴² Lastly, most loans have short payback periods of around six to eighteen months. A fruit and vegetable processing firm owner summarized that, “the banks, if they do give you the money, the turning over period is very short, 6 months to 1 year, the interest rate is very high, you start paying off as soon as you get the loan, you don’t get an adjustment period.” In other markets, this type of loan would be used primarily for trading, when you need capital for a deal, and you receive returns quickly. However, these terms for a loan are restrictive and nearly impossible to use for long-term business development and growth.¹⁴³ For example, a cocoa producer requires three years to plant, grow and harvest their trees to have a final product. A loan that is expensive and needs to be paid back within one year is not a feasible option for a cocoa farmer.¹⁴⁴ Further, in the past year, the banks have become stricter with their loans due to the falling exchange rate. Thus, an impact fund director explained that businesses are “usually getting loans given on the basis of 2 things: the business is generating revenue in USD to repay the loan, and the collateral availability from the business to repay the loan if needed.” This is because the banks lost a significant amount of money by providing loans in USD, but the businesses generated income in the Liberian dollar and were unable to pay back their obligations.¹⁴⁵

Another form of investment for local businesses is equity. However, given the poor business climate, there is a lack of opportunity for businesses to find equity deals. There are currently four active investment funds in the country, and they often require large ticket prices of over one million USD for a deal.¹⁴⁶ For the average SME, this ticket price significantly overvalues their business, and they are unable to disperse the capital in an effective manner. Entrepreneurs are also hesitant to receive capital from investors. An accessories business owner mentioned that “because we know what happens in this country, and people have good intentions...and big dreams and they get all these money injections and then they cannot deliver.” A more detailed

¹⁴² Regional Financial Institution Manager, Finance Sector Investment Fund Manager, Family Office Country Manager

¹⁴³ Institutional Investment Manager

¹⁴⁴ Commercial Cocoa Business Owner

¹⁴⁵ Institutional Investment Manager

¹⁴⁶ Ibid.

explanation of the main reasons why investors do not enter the Liberian market is covered in detail in Section 5.5.

Lastly, a large portion of business financing in the Liberian market is through aid organization. These agreements can be either equity, loans, or most frequently, grants that are often given to agricultural businesses from any part of the value-chain. However, business grants that are provided by aid organizations decrease incentives for market growth and business development. For example, an entrepreneurship focused NGO manager stated that “when a program comes in to support farmers, they buy from the importers and give it to the farmers for free, which cuts out the whole agri-dealer. Then the farmers don’t buy from them because they just expect to get things for free from donors.” When an aid organization is providing a loan to a business, there can be some inconsistencies with timeframes. Due to bureaucracy and procedures, aid organizations work on slower timeframes than the business itself. Below is an example from a company that received financing through USAID’s Liberian Agribusiness Development Activity (LADA).

“It’s causing an enormous challenge for us as a business because they are a funding program, time is not an issue for them because they are getting paid, the program continues so time is not really a pressing factor for them as an aid partner, just in what they are doing as an aid partner. We’ve been waiting for over two years for the investment to come from USAID.”

In this scenario, it took over two years for a deal to fully process and the capital to be released to the business. This was harmful to them because they had plans to receive that capital from LADA much earlier and invested further in the business accordingly. When their investment was already made, they had to wait and lose significant amounts of money for LADA to hold up their end of the deal.¹⁴⁷ Thus, receiving funding through aid organizations has not been the most effective way to finance businesses in Liberia.

4.2.2 Innovation

As explained in Section 2.4, there is a lack of innovative ideas for businesses in Liberia, as many businesses provide the exact same goods or services. For example, an academic researcher explained that there are “a million tailors, but no one goes to the next step, to do something different...so there is not a lot of creativity.” To gain a competitive advantage in a market, the Resource-Based View¹⁴⁸ states that a business must have a unique idea before

¹⁴⁷ Tech Start-Up Co-Founder

¹⁴⁸ The Resource-Based View (RBV) takes the approach of focusing on the internal resources of the firm for determining key differences in the performance between firms (Wernerfelt, 1984).

anything else to gain an advantage. Barney (1991) states that “a firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy.” In the developed world, this is a valid assumption and the first step to make. However, in a post conflict state, many businesses do not take this first step due to the makeup of the market.

An accessories business owner explained that due to lack of education and experience, “people are not developing creative skills, everyone is trying to make the same thing. The trend here is that if one person is doing something profitable, then everyone follows that same trend.” Copycat businesses are popular in all countries, but in Liberia, they are most of the businesses. However, a culture preservation NGO researcher explained that the “lack of creativity is because they are business owners out of necessity and not inspiration.” This means that because there are so few jobs available in the Liberian market, it becomes a necessity to become an entrepreneur to generate an income. In addition, as stated in Section 4.1, the war mentality means that very few entrepreneurs have the ambition to grow their business as they do not think often about the long-term. There are structural barriers to innovation as well. This includes issues like the lack of internet which doesn’t allow entrepreneurs to conduct research and access educational information, a lack of public funding for local research and development, and difficulties in getting business permits and licenses to grow and try new business models.¹⁴⁹ Overall, this means that innovation and research for new products or services is not common in the Liberian market.¹⁵⁰ This lack of innovation decreases overall private sector development as few businesses gain any sort of competitive advantage that would support significant growth.

The first place to find a business in Liberia with a competitive advantage is entrepreneurs who are not entrepreneurs out of necessity but out of choice. Further, there needs to be an innovative idea that helps solve a problem within the community that is either ignored or the current solutions are underdeveloped.¹⁵¹ Thus, innovation seems to be a key at navigating the Liberian market, but there is a severe lack of this at the domestic level. Even in these interviews, four of the seven businesses produced very similar goods.¹⁵²

4.2.3 Human Capital, Skills and Training

¹⁴⁹ Public Sector Youth Manager

¹⁵⁰ Culture Preservation NGO Researcher, Accessories Manufacture Business Owner, Fashion Designer, Entrepreneurship NGO Manager, Public Sector Commerce Economist 3

¹⁵¹ Culture Preservation NGO Researcher

¹⁵² Gari and dried fruits and veggies.

One of the most common barriers to business growth that Liberian entrepreneurs mentioned is the low human capital present in the country. Section 4.1 shows the substantial education and skill gap that was generated over the fourteen years of conflict. This legacy has made it challenging for businesses to find labour that can increase their productivity and overall performance. Even twenty years after the war, illiteracy remains relatively high in the country, especially in rural areas.¹⁵³ Currently, teachers often go unpaid or underpaid and the curriculum is underdeveloped because there has been a lack of funding by the government.¹⁵⁴ Thus, the quality and consistency of the education system has not yet fully recovered from war. This means that finding skilled labour for positions in middle management is difficult for business owners.

The low human capital also poses a threat to a business's supply-chain. This is especially true for agri-businesses who rely on local farmers for their inputs, who are inconsistent with supply and prices. One gari processing business owner explained her experience where "the farmers are not reliable. Today they give you a price, tomorrow they increase it. Because they realize there is a demand for a particular produce, they hike it up to 100 percent." In reverse, the processors are inflexible in terms of prices and because there are so few buyers and the goods spoil fast, farmers have little power in the relationship.¹⁵⁵ The issues in the relationships from both sides mean that little trust is held between the local suppliers and buyers.

Further, some entrepreneurs attempt to bring in technology to help boost the productivity of their workers. However, this is often unsuccessful because the skill level of the workers is still too low for the technology to be effective. For example, a fishery owner tried to implement a sonar fish detecting system and "the first time I tried to use a fish finder device, they didn't want to use it, they called it white people witchcraft. There's a lot of technologies or fishing techniques out there they could use and don't know about or don't know how to use." Therefore, businesses struggle to grow because they cannot find quality middle managers, rely on inexperienced suppliers, and use technology beyond the means of the workers.

Finding and retaining skilled labour is also extremely challenging in Liberia. Numerous firms in their interviews mentioned a lack of skilled workers in the private sector to be ranked within their top three main barriers for their growth.¹⁵⁶ As mentioned above in Section 4.1, the human capital gap originated from the civil wars where education was halted for decades. This

¹⁵³ Agri-Education NGO Manager.

¹⁵⁴ Public Sector Agriculture Economist

¹⁵⁵ Commercial Cocoa Business Owner

¹⁵⁶ Gari Processing Business Owner 1, Gari Processing Business Owner 2, Accessories Manufacture Business Owner, Fashion Designer, Alcohol Production Business Owner, Fruit & Veg Processing Business Owner, Rice Processing Business Owner, Beauty Business Owner, Fishery Owner.

means that basic skills like reading, writing and basic calculations can be difficult skills for an employer to find within the labour force.

However, it is not just the civil war that created the human capital gap in the private sector but also more recent trends and policies. Firstly, the smartest youth in the workforce are easily convinced to work for the government instead of the private sector. One domestic owner stated that there is a “lack of a good pool of talent for employees because the smarter kids get pulled into politics quite early. If you are a smart kid in college, you...are going to work for the government because it’s the biggest employer or you might work at an NGO, so you know they have a lot more money to offer than us.” Since the government and NGOs can pay more than most of the private sector in Liberia, the most talented workers work within those sectors, or they leave the country. There is also a much higher perceived risk to working in the private sector than the not-for-profit and government sectors.¹⁵⁷ After the shocks, like the civil wars and the Ebola crisis, it is logical that workers are heavily risk averse.

One re-pat government worker in commerce mentioned that although he would like to be in the private sector, he is working for the government because he feels as if it is an obligation to serve his country through the public sector. He said that “after all this research I went back to the States and got my MBA in project management. I came back to Liberia and started working at the Ministry of Commerce in April. I’m here to help develop the country, and give back, plus there’s not a ton of opportunity anyways.” This shows that even the brightest Liberians are not seeing enough potential returns for becoming entrepreneurs and feel a moral obligation to work for the government.

Additionally, entrepreneurship and creative thinking is not currently being taught in the secondary school curriculum, which means that few young Liberians are gaining experience in the type of thinking it requires to be within the private sector. A policymaker in the youth and entrepreneurship department said:

“Entrepreneurship and even business practices are just not being taught...In Ghana, part of the student body did entrepreneurship and business projects. They would have competitions where they would bring in local businesses and even investors – sometimes students would get jobs or grants out of it. This makes you think outside of the box. You would be able to identify a need in the community and then be able to turn it into a business development. This kind of thing just doesn’t happen here.”

This means that graduating Liberians have not gained the necessary skills to enter the private sector. Further, due to their lack of exposure to business, they have little desire to do so.

¹⁵⁷ Business Start-Up Org Director

This qualitative analysis of the access that different types of firms have to skilled labour, provides further evidence of the importance of quality labour for performance and thus, business growth in Liberia. This analysis is in line with the findings from the quantitative model in Chapter 2 that estimated that holding employee training has a positive relationship with firm growth and this is significantly larger in magnitude in post conflict environments. Although these variables are quite different in definition, they both show that the education and employee training is a significant contribution to private sector development in Liberia.

4.2.4 Trust and Business Networks

As discussed in Section 4.1, the Liberian civil wars have negatively influenced trust and attitudes within a community. A lack of trust within business communities' is mentioned often as a hindrance to growth in interviews with Liberian firms. As one policymaker in entrepreneurship stated, "trust is a rare commodity in Liberia" and thus, if companies can form trustful communities, they often perform better in the market. The interviews shows that foreign-owned businesses tend to have greater access to this resource.

Many of the interviews showed a lack of community and coordination between Liberian businesses.¹⁵⁸ Unlike the small foreign businesses that tend to show loyalty within their groups, which is further discussed in Section 5.1.2, Liberian businesses do not often have the same camaraderie. Speaking about the Lebanese community in Liberia, one tech business owner stated that "this kind of dominant merchant group, there doesn't exist a parallel thing for Liberians." This lack of cooperation between Liberian businesses is believed to be a cultural consequence of the civil wars. A public sector economist in the commerce department explained that the civil war has engendered "a war-like mentality where there is only one winner, and you cannot trust others." This type of mentality stops businesses from looking at a 'bigger' picture and that supporting the general business community is beneficial in the long run.

An example of this lack of networks is through the cooperative system in Liberia. The co-ops are often founded at a community level to support local farmers.¹⁵⁹ These are particularly common for cocoa farmers who have long growing periods and require the support of others. Although the co-op has guaranteed buyers, they do not provide the funds until later. Thus, an agri-NGO manager stated that "during the planting season, most farmers are in search of pre-finance to hire laborers, provide food and school fees for their kids and cooperatives cannot provide these things. In lieu of this, many farmers sell to middle buyers breaking their co-op

¹⁵⁸ Tech Start-Up Co-Founder, Entrepreneurship NGO Manager, Business Start-Up Org Director, Fruit & Veg Processing Business Owner

¹⁵⁹ Agri-NGO

agreements.” Further, cooperatives do not seem to build significant relationships between the farmers. This manager continued by explaining that, “the farmers in the co-ops are friendly to one another but they don’t really trust one another, which makes it hard to develop long-term plans as a group to grow the cocoa sector.” Generally, it is foreign NGOs that try to incorporate and help build these relationships between the co-ops and the farmers. The co-ops serve as good examples of attempts to form communities between businesses, but the lack of trust is a barrier to do so. Within Monrovia, there is also a chamber of commerce that conducts advocacy programs and events for SMEs. Many businesses stated that they have attended events by the Chamber of Commerce, but there was a lack of social community or commodity between the businesses because it’s a relatively large institution.¹⁶⁰

This lack of cooperation is also seen between foreign agencies and local institutions. Several interviewees say that some international institutions and aid organizations tend to not work with the local entities for their projects.¹⁶¹ This has hindered development projects across the country. A primary example has been the constant battle over electrical grids over the past decade. An investor who was at one-point part of this project questioned this logic. A family office country manager said:

“The World Bank and Millennium Challenge Corporation have been fighting for the control of the Liberian energy sector for the past 10 years and have never let the Liberians take control of it and use their funding as leverage. There’s a lot of false sense of ownership by international institutions. If the real goal is to build up this country, then why have this power battle?”

Thus, it is evident that the lack of cooperation between all entities within the market is stunting economic growth.

This aligns with the findings in Chapter 2 on business networks, where the variable had a positive association with business growth in non-post conflict countries and no impact in post conflict regions. The lack of trust found in the Liberian business community shows that business networks are not being used effectively to bolster private sector performance. However, these networks have a positive impact on the foreign SME business community that was not influenced by the Liberian civil conflicts. This shows that the finding of the positive association of using networks in non-post conflict communities may be correct. Thus, the lack of social

¹⁶⁰ Entrepreneurship NGO Manager, Fruit & Veg Processing Business Owner, Renewable Energy Manufacture Owner

¹⁶¹ Family Office Country Manager, International Embassy Manager, Entrepreneurship NGO Manager, SME Fund Manager

capital within the Liberian community due to the wars, is hindering private sector rebuilding in the post conflict era.

5.0 Business Conduct Disaggregated by Different Types of Firms

In Section 3, I outline the numerous structural challenges that businesses face in Liberia that have inevitably impacted private sector performance. Except for a limited number of MNCs (discussed in Section 5.1), firms have expressed that they believe there is little they can do personally to change structural barriers in the short-term.¹⁶² Instead, certain business owners tend to alter the way they conduct business and how they use resources to grow and develop in Liberia's challenging market. As shown in Section 4, there are numerous challenges for domestic business owners in terms of their conduct. This section analyses the other types of businesses, defined by Bray (2009), that have a foreign influence. This includes large multinational corporations, foreign SME owners, and re-pat business owners. I have also included firms that are invested in by alternative capital partners, like impacts funds, development financial institutions (DFIs) and private investors, which since 2009, have become a foreign presence in the market. An embassy manager stated that in Liberia's harsh environment, "foreign influenced businesses can manage to survive, but local businesses find it much more difficult. So, there's a sense of 'foreigners have privilege in Liberia', which is not necessarily true. They can just navigate the market better." This section provides an analysis of each of these types of firms and how they have altered their conduct to perform better.

Within these categories, I also provide an analysis on the skill and knowledge transfers that these different types of firms have on the domestic market. In Chapter 1 of this thesis, the literature review discusses Javorick (2004), who finds that a foreign firm significantly increases productivity of domestic firms within their supply chain. In addition, Abebe et al. (2018) find that firms geographical close to a foreign-owned firm have significantly higher productivity in Ethiopia. However, Bunte et al. (2018) and Blomstrom & Kokko (2002) note that LDCs may be unable to absorb these transfers due to a lower level of human capital and infrastructure. This theory also supports the findings in Chapter 2, where foreign ownership has no effect in post conflict Africa. It suggests that countries with less of a human capital gap may be able to use foreign ownership more effectively to increase productivity. This section uses the evidence from the disaggregated types of firms to analyse the transfer of knowledge and skills to the domestic market.

¹⁶² Tech Start-Up Co-Founder, Entrepreneurship NGO Manager, Gari Processing Business Owner 2, Foreign Import Business Owner 2 and Fishery Owner.

The evidence presented below shows that transfers in Liberia occur through three different channels. The first is through a positive and trusting relation with the foreign stakeholder. The second, is with immense amounts of hands-on training and the third, is organization flexibility. My evidence suggests that the two stakeholders most successful at these transfers are foreign and re-pat owned SMEs. However, this does not have a large reach in the domestic market as it is often with a small number of individuals. Several actors believe that skill transfers to the domestic market from foreign entities have been relatively more successful in Sierra Leone by alternative capital providers, which is discussed in Section 5.4.2.¹⁶³

Although the number of foreign-owned firms in Liberia are in an upward growing trend, it is still extremely difficult for these players to enter, operate and successfully grow in the market. This section also provides evidence for these four different stakeholders on the challenges they face in the market as a foreign entity. Lastly, I describe the evidence on why it is still so challenging for foreign players to enter the Liberian market, even if they may be able to navigate it better. In this analysis, I explore several comparisons with foreign investors in Sierra Leone, as there is a perception that Sierra Leone's business environment is recovering better than Liberia's. Liberia and Sierra Leone are neighbouring countries with similar geography, history, culture, and recent negative economic shocks (See Appendix B). When interviewing stakeholders in the Liberian business environment, it was frequently stated that Sierra Leone has become a better place to conduct business, especially after the exit of UNMIL. An SME fund manager stated:

“A year or two ago, when people would compare Liberia and Sierra Leone, everyone would say Liberia is going far, and Sierra Leone is still lagging behind. And in just ten months, we are the ones lagging behind. When you speak to the businesspeople, Lebanese people down in Waterside, you see shops closing, and people will tell you they moved to Sierra Leone.”

Thus, this final section also uses a small number of field interviews from foreign actors in Freetown to discuss why Sierra Leone has been more successful at creating a more foreign investor-friendly post conflict environment.

5.1 Multinational Corporations

FDI into Liberia experienced modest recovery during Johnson-Sirleaf's government after the conflict but then dropped significantly after the Ebola crisis, by approximately 78 percent in

¹⁶³ Institutional Investment Manager, SME Fund Manager, Entrepreneurship NGO Manager, SL Incubator Director

2019.¹⁶⁴ However, it remains a significant component of the country's income. The MNCs in Liberia are in the natural resource extraction sector and primarily in the iron ore, gold, rubber, and palm oil industries. These companies provide a significant employment base for the country.¹⁶⁵ Examples of local employment levels this from the larger MNCs in Liberia include Firestone with 7,500 employees,¹⁶⁶ Sime Darby¹⁶⁷ with 2,800 employees,¹⁶⁸ ArcelorMittal with 2,000 employees,¹⁶⁹ and Orange (ICT) with just over 400 employees.¹⁷⁰ Although these firms generate employment, this is often low-skilled labour and a government investment worker commented that they spend little effort in training to upskill. The advantages that MNCs have is their substantial access to capital, allowing them to bridge gaps in market structure gaps and bring in skilled labour. However, the evidence shows that MNCs in Liberia are poor at building trust in communities and transferring knowledge and skills domestically.

5.1.1 Conduct: Structural Barriers Broken Due to High Access to Capital

MNCs enter Liberia with large amounts of capital behind them, which originates from outside of the country. This means that access to finance for the business is only an issue if the parent company is having financial issues. In most countries, a significant portion of the basic infrastructure needed to produce, like roads, electricity, water systems and railways, are already put in place by the government. However, this is not the case for Liberia. Firestone, a rubber company, is a prime example of this and an embassy manager explained that “Firestone is like its own country. It created all its own services, there's a school system, electricity, security, they repair their own roads, build their own houses, their own hospital.” The substantial access to capital means that MNCs are the only private actor that can have an influence over the poor infrastructure problems presented in Section (3.2.1). This helps generate structural change and can reduce infrastructure barriers for other firms.¹⁷¹ However, in the field-interviews, this was not cited as a solution to inadequate infrastructure by any of the domestic business owners in my sample. In addition, the lack of taxes that MNCs pay for the deal, means that the government receives limited revenue.¹⁷² This hinders the government's ability to support public infrastructure

¹⁶⁴ UNCTAD FDI Data

¹⁶⁵ Public Sector Investment Manager

¹⁶⁶ <https://www.firestonenaturalrubber.com/media/faqs/>

¹⁶⁷ In 2020, Sime Darby was fully acquired by the Malaysian company Mano Palm Oil Limited.

<https://www.simedarbyplantation.com/media/press-releases/sime-darby-plantation-completes-divestment-of-its-liberia-operations>

¹⁶⁸ <https://www.simedarbyplantation.com/sustainability/beliefs-progress/practices-key-initiatives/people>

¹⁶⁹ <https://liberia.arcelormittal.com/people-careers/why-ArcelorMittal.aspx>

¹⁷⁰ <https://frontpageafricaonline.com/business/orange-liberia-gets-new-chief-executive-officer-as-outgoing-ceo-heads-to-burkina-faso/>

¹⁷¹ Public Sector Investment Manager

¹⁷² Ibid

development as well. Nevertheless, this large source of power and capital does allow MNCs to perform better than domestic businesses in the Liberian market.

In addition, the access to capital and global networks means that many MNCs bring in foreign skilled labour to overcome the lack of human capital available domestically. ArcelorMittal recruit foreign engineers, managers and experts to ensure production and operations run smoothly.¹⁷³ This means that many of the domestic jobs created by the MNCs are low skilled, which is discussed further in the next section.

However, MNCs have been ineffective at building trust and networks within Liberia. There have been social issues that have occurred within the communities that concessions work in, which has decreased business trust.¹⁷⁴ This is generally in relation to land disputes, which was discussed in Section 3.2.3. Due to the poor relations between local communities and the concessions, products are often stolen from the company. The average amount of product stolen has been quoted as high as 40 percent.¹⁷⁵ An investment focused policy-maker stated that “the concession needs to be protected by the community as they see it as a good source of livelihood. This is not necessarily the case. The concessionaires need to train these communities to grow with them and be a part of the economic activity, doing their own work.” Thus, the lack of trust is also hindering knowledge and skill transfers to domestic markets (see 5.1.2). In addition, it is quite rare for MNCs to work together to better local infrastructure or regulation. The competition between MNCs for government contracts and productive opportunities means that they work primarily in isolation.¹⁷⁶

5.1.2 Transfers: Lack of Trust Deters Transfers

As mentioned above, there is little trust between the MNCs and the local business community.¹⁷⁷ This has also been heightened by the recent anti-foreign trend brought in by the new administration. On the other side, many foreign entities are nervous about working with local businesses, due to negative perceptions and instability. This means that overall, the relationships between foreign stakeholders and the domestic business community remain poor, making it challenging for transfers to take place.

After land disputes, theft and disruptions to productions, MNCs often avoid working with local communities and businesses. Hence, MNCs use a foreign supply chain for goods and

¹⁷³ Public Sector Investment Manager, Public Commerce 1

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ Public Sector Investment Manager

¹⁷⁷ SME Fund Manager, Institutional Investment Managers, Paper Manufacture Business Owner

services that could be supplied domestically. An investment government worker stated that “a good example is concrete. We have concrete companies in Liberia, but the big foreign companies don’t use them because they prefer to just import it. They have no interest in working locally.” Thus, it is evident that the supply-chain transfer effect found by Javorick (2004) is not occurring from foreign MNCs in Liberia because they do not engage with potential suppliers locally. Some note that this may be because the local market does not have required inputs; however, this evidence shows that this is the case even when there is availability in the domestic market.¹⁷⁸

However, one example shows that concessions can effectively transfer skills and develop local businesses. This was seen following the Ebola crisis by Sime Darby, a palm oil company. Sime Darby made deals with a few local businesses, which gave them enough leverage and credibility for their services to secure loans from local bank. They worked on the projects with Sime Darby, gained a good reputation with banks, won new clients and became independent and skilled firms.¹⁷⁹ Nevertheless, this sort of story is still uncommon between local communities and large MNCs in Liberia.

The second major hindrance for skills and knowledge transfers is from a lack of appropriate and value-addition training conducted by MNCs. This is because foreign corporations find it challenging to work with such large numbers of employees. There are also distinct cultural differences that MNCs global mandates and employee programs do not consider.¹⁸⁰ It is difficult for transfers to occur because the way the investors conduct their business is not flexible and adaptable to the environment.¹⁸¹ For example, it is explained by an investment focused policymaker that MNCs, “are these large profit maximizing businesses that have investors back home who expect certain returns. Those investors have no idea what business is like here and how spending money on things like training and local community could significantly increase profits long-term.” These constraints mean that decisions are not always best suited for Liberia and its private sector.

The Liberian government expects employee training and education by MNCs, which is a part of their concession deal. Businesses tend to manoeuvre through these requirements by providing a small number of employee scholarships and training for low skill workers.¹⁸² The majority of management for MNCs in Liberia remain foreigners and there is a lack of programs

¹⁷⁸ Private Sector Investment, Private Sector Commerce 4

¹⁷⁹ Public Sector Investment Manager

¹⁸⁰ Ibid.

¹⁸¹ Impact Fund Director, SME Fund Manager, Institutional Investment Manager

¹⁸² Public Sector Investment Manager

that help prepare employees to move up into management.¹⁸³ The firms rarely conduct training that provides the education needed for low skilled workers to start performing higher-level skills. A government employee expressed that “the concessions don’t take training that seriously. They ensure that employees know how to do their specific job but not much else.” Thus, the transfer of knowledge that an employee at a concession could then use to begin their own firm in the local market is not occurring in practice. This reinforces the hypothesis by Blomstrom & Kokko (2002) that little skill transfer is occurring in a post-conflict country like Liberia.

The MNCs, particularly in agriculture, also have the potential to train local farmers. For example, if there is a concession in cocoa, they should not only train their own employees but also the other cocoa farmers within the area so they can buy from the local farmers to add to their supply. This occurs with many larger cocoa producers in Ghana.¹⁸⁴ This promotes local business development and the spread of knowledge beyond the confines of the concession. However, the evidence shows that this does not occur in Liberia.¹⁸⁵

5.1.3 Challenges: Costs and Anti-Foreign Policies

Although MNCs are the only foreign entity that can break through some structural barriers using capital, there are also several significant challenges that MNCs face in Liberia. The first reason is that although they can build their own infrastructure, it is expensive to do so. In most countries, a significant portion of the basic infrastructure needed to produce, like roads, electricity, water systems and railways, are already put in place by the government (see Section 5.1.1 above).

The MNCs currently in Liberia are also struggling with the transition to the new government. As discussed above, the government has been focused heavily on domestic businesses and because of this, have become relatively ‘anti-foreign’. A government worker said that this has been evident for a few concessionaires, which has been seen by a public sector economist. He stated “that are having trouble under the new government, because they’ve been bullied into not hiring as many foreigners, getting shut down ... Then, there’s been little support for them to make money.” Not only is the new government struggling with keeping concessions in the country, but it is also suggested that they do not have the knowledge required to attract new FDI deals. In comparison, the investment policymaker who has worked with both administrations, stated that “the previous administration was very focused on the quality of investment and the transparency of the process. There was a lot of due diligence required. The

¹⁸³ Public Sector Commerce Manager

¹⁸⁴ West Africa Fund Director

¹⁸⁵ No stakeholder could recall an example of an MNC conducting training with non-employees

quality of the investors we saw in the previous government are just not there anymore.”

Therefore, the new government has changed the foreign direct investment climate in the country and made it more difficult for MNCs to enter and operate in the country.

In conclusion, the poor regulatory environment, relations with local communities and infrastructure makes production in Liberia costly and unstable. The challenges they face as a concession, provide several justifications to operate in another market. Yet, it is evident that MNCs produce significant formal employment in a post conflict country. Two government employees in their interviews mentioned that they believe that “concessions help with economic growth, but don’t necessarily contribute to private sector growth.” The reasons for this include a lack of skill transfers and little extension/use of local businesses for supply or value-added chains (explained in Section 5.3).

5.2 Foreign SMEs

This paper shows that foreign-SMEs have better access to capital, opportunities for middle management, and relationships with other businesses, compared to domestic SMEs, generating better performance. This is a form of foreign investment as the owners are not Liberian citizens; however, it is almost always greenfield investment as the owners often build their own companies with no international mandate. Most of these firms are owned by Lebanese, Chinese or Indian individuals or families.¹⁸⁶ Due to their expertise and hands-on approach, these businesses tend to transfer knowledge to local employees well but in small magnitudes. However, even with their access to more effective resources, these firms are still struggling in the Liberian market and owners mentioned their desire to move operations to another country.¹⁸⁷ These businesses still face harsh external factors and environments unsuitable for foreign business owners, hindering their growth.

5.2.1 Conduct: Strong Access to Capital, Innovation and Community

Access to capital, a significant barrier for domestic firms found in Section 4.1, is not challenging for foreign-owned SMEs in Liberia. Foreign-owned firms tend to find access to capital from personal contributions and family funds. A foreign import firm’s owner explained that “most businesses here use personal pre-financing, and that’s what keeps most of these businesses going.” Many of these foreign companies have built years of positive relationships

¹⁸⁶ Foreign Import Business Owner 1, Foreign Import Business Owner 2, Foreign Restaurant Owner 1, Foreign Restaurant Owner 2, Foreign Forestry Company Owner, Foreign Construction Company Manager, Foreign Hospitality Business Owner

¹⁸⁷ Foreign Import Business Owner 2, Foreign Restaurant Owner 1, Foreign Forestry Company Owner

with Liberian banks, which means they are able to receive loans much easier than the average Liberian. One foreign hospitality business owner noted how important these relationships and history are with the bank by stating that “I could walk into any bank in Lebanon or Liberia and get any loan I want because of the trust that we have built.” However, a foreign construction business manager noted that more recently, getting a loan domestically “is becoming hard. Sometimes we get the money from London.” This means that even some of the best customers of the Liberian banks are not able to afford the financing within the country. However, when the loan is too challenging to get in Liberia, these companies have the option to receive loans from banks within their home countries. These firms also mentioned being able to receive credit from their external suppliers when cash flow is low. This helps specifically with trade financing and is typically cheaper than what local banks can offer.¹⁸⁸ An import business owner provided an example:

“When we get a contract, we use our suppliers, they pre-finance with a minimum interest rate, instead of us going to the local banks. If the supplier charges you 5% on top of the cost, it’s still better than going to the banks and get charged 18%. So, we either do that or we use our personal funds, use it to buy goods, and then once you get business you reimburse yourself.”

This form of financing relies on strong relationships with suppliers, which takes time to build. Most foreign business owner interviewees stated that they needed to work with a supplier for at least two years before they could agree on credit deals.¹⁸⁹ Both of these finance options are rarely accessible for domestic businesses.

Foreign-owned businesses also perform better due to their innovative business models and market solutions. A foreign restaurant business owner stated that the “key to our success is being different and doing things no one else does.” This statement refers to the businesses bringing in styles of food in his restaurants that have never been in the Liberian market. This has provided them with a competitive advantage and thus, better performance than many other restaurants in the city.

In terms of human capital and knowledge, the owners of foreign SMEs are all educated outside of Liberia, and many have completed degrees in business or management.¹⁹⁰ Further, many of the owners have worked in the private sector in developed countries, where they have

¹⁸⁸ Foreign Import Business Owner 1

¹⁸⁹ Foreign Import Business Owner 1, Foreign Import Business Owner 2, Foreign Restaurant Owner 1, Foreign Forestry Company Owner

¹⁹⁰ Foreign Import Business Owner 1, Foreign Import Business Owner 2, Foreign Restaurant Owner 1, Foreign Restaurant Owner 2, Foreign Forestry Company Owner, Foreign Hospitality Business Owner, Accessories Manufacture Business Owner, Fishery Owner, Fashion Designer, Alcohol Production Business Owner

gained valuable experience. A foreign restaurant owner said, “in business, you need to do the research, know what’s happening in that market and then go for it. Here in Liberia, people get access to some cash, and they just go for it and it’s a problem... First, I worked with a business to learn good business practices and then I became an entrepreneur.” This means that many of these foreign owners have been exposed to different business learning environments and can apply those skills.

Similar to MNCs, foreign-owned SMEs tend to bring in expat staff to fill the middle management gap. Another restaurant owner mentioned that the “the problem is it’s not that we don’t want to hire a Liberian, it’s that we want to do things the right way for the business, so we need the right person. Certain skills are needed” so they are forced to hire expats. The hospitality owner added that having the expat staff gives them a significant competitive advantage in the market with much finer quality and services. He said, “we’re criticized a lot for having a lot of expats, but this expat resource from abroad does make us stand out.” Possessing skilled and well-trained middle management provides a significant competitive advantage in the Liberian market for the foreign-owned firms.

Lastly, the foreign-owned SMEs tend to have large, trustful networks within Liberia and the rest of West Africa. There is a culture of helping one another in these communities as a different foreign import business owner explained that “by making good relationships with people, other businesses, people in the government... It helps, because you are a part of a community, and Lebanese people tend to help each other.” Further, many of the foreign-owned firms are part of family businesses, which means there is often a substantial amount of cooperation between the numerous different businesses to support one another. The foreign hospitality business owner provided a clear example:

“So obviously being a family business helps, we’re all working towards the same goal, and the good thing is that we don’t work together, but we work for all of us combined, so there’s never any conflict, because we all run our own separate business, but at the end of the day we report to each other.”

This sense of community, which is largely absent in the domestic business community, generates better performance in the market. This is not only because the business can access more support and resources, but there is a true comradery on these businesses being successful ‘together’.

5.2.2 Transfers: Limited due to Insular Community and Expat Hires

Foreign-owned businesses struggle with creating long-term domestic skill and knowledge transfers because of their narrow networks and expat hires. Domestic businesses described that

foreign-owned businesses were difficult to supply for. This is because of their strong family and network ties that are discussed above. A tech company owner described that “the Lebanese business community is very insulated. They really only support each other and don’t really work with local businesses, even though we could work together.” Another domestic fishery business owner mentioned that they tried to supply a foreign-owned restaurant “but we were not given the contract even though we were cheaper because they decided on another Lebanese business.” This means that the foreign SMEs and local businesses are rarely working with one another, meaning that transfer to local markets are not occurring in practice.

Foreign-owned businesses do provide “hands-on” training to their Liberian employees. One restaurant business owner believes that “the attention to detail while working with employees here is very important. It’s me showing you how to do things properly and to transfer that knowledge to the employees.” A few of these owners mention the importance of training and how one must have patience and resilience in Liberia. One foreign owner mentioned the importance of leading by example and how being on the ground teaching employees proper technique is key to their development. However, for more skilled position, these businesses do prefer to hire expats than to train.¹⁹¹ A foreign owner mentioned that a few of their employees, have been able to find better jobs now that they have experience and training.¹⁹²

Another example is that a foreign SME owner provided capital to two of his Liberian employees to start their own business and has continued to mentor them through the process. As a business owner he had a service that needed to be provided and had no interest in doing it himself. So, he invested in his employees, who he had trained already, the necessary capital, mentorship, and support to start this business. The foreign hospitality owner explained:

“I need someone to deliver my food because people want it to be delivered. I just don’t want to have to deliver it myself. So, I loaned money to my manager, and a server, Liberian, to start [the company]. I know that they are struggling with cash flow already, but I will keep funding them and providing them with advice.”

This not only shows that foreign businesses can creatively help fill some of the financial capital gaps but also reinforces the importance of trust and relationships in the business community. Since these two workers had worked with this foreign owner for a long time and gained his trust, they now work together on a new business and have been provided with the skills and mentorship needed to do so.¹⁹³ Although this type of scenario does not occur often, it shows the

¹⁹¹ Foreign Hospitality Business Owner, Foreign Restaurant Owner 2, Foreign Import Business Owner 1

¹⁹² Foreign Hospitality Business Owner

¹⁹³ Foreign Hospitality Business Owner

potential for how foreign businesses, who have more access to resources, can significantly support local private sector development.

5.2.3 Challenges: Anti-foreign and Social Expectations

Although these businesses do perform better than domestic SMEs, there are several challenges that these businesses need to overcome. The first, which is the same for all businesses in Liberia, is the lack of infrastructure and pro-business government policies. An import business owner complained that he needs to pay high taxes in Liberia but receives little public infrastructure here for his tax money:

“For anyone to be paying such high taxes they need to see return. In the States when the government takes 20-30% of my income, I have proper schools, the proper infrastructure. Here we don’t have that. We don’t even have electricity. They’ve been working on this hydro plant, and when you want to get a line to connect yourself, they tell you they don’t have the transformer, they don’t have the wires. We pay up to 25% taxes, and we don’t see any progress.”

Further, similar to the issues MNCs face in Liberia, the new administration is heavily focused on domestic business development, while making it tougher for foreign businesses. An embassy manager stated that since the government change, “there is this increased sense of nationalism when it comes to businesses...there is a kind of tendency against foreign businesses doing well. It’s not institutionalized, but gradually you can see that feeling of giving more priorities to local businesses.” This is furthered by the citizenship laws, which states that only those with a negro origin may become a citizen.¹⁹⁴ However, the government defends its position by stating that the foreign companies already have a significant advantage in the market by having access to finance elsewhere.¹⁹⁵ Due to this political climate, Liberia has become a hostile environment for this form of foreign investment into the country.

The last issue for the foreign SMEs is that the government often has an expectation for them to use their business for social impact in the community.¹⁹⁶ However, these companies are significantly smaller than large concessions who have the resources to rebuild public infrastructure and conduct social programs in communities. For example, one foreign import business owner said that “we’re fighting with the Union, they want us to give them \$25,000,000 LRD in loan, even though we already give loans to employees ... We are not a concession. We

¹⁹⁴ Public Sector Investment Manager, Public Sector Commerce Economist 2

¹⁹⁵ Public Sector Commerce Manager

¹⁹⁶ Ibid.

are a large taxpayer] and we have no social responsibility to do that.” These obligations from the government often decrease performance and can force foreign SMEs to exit the market.

5.3 Re-pat Owned Businesses

In many ways, re-pat businesses operate similarly to foreign-owned SMEs as they are educated outside of Liberia, have experience in business, and have access to capital outside of the country. However, there are some differences in how re-pat businesses work with domestic employees and their use of networks. Re-pat business owners often operate SMEs in Liberia in an area that they became educated in outside of the country. Unlike foreign-owned SMEs, the reason behind starting these businesses is often more than mere commercial purposes. Thus, it is first crucial to understand why Liberian ‘re-pats’ make the decision to return to Liberia and start a business, especially when the economy is sluggish and poses many challenges for them.

All the re-pat businesses interviewed mention that they made this difficult decision because they saw a social need for their business.¹⁹⁷ For example, an agri-business owner wants to tackle the issue of the high cost of food for the average family and said, “I decided to start this business to help, especially getting the cassava to reduce the cost of importing rice and make Liberians know that Cassava is a healthy and local product.” Some owners state that they wanted to contribute to the rebuilding process after the war. For example, an accessories business owner explained that “since I’m a Liberian and was born here, after I lived in the US for many years, hearing about the war and the devastation, I came here for vacation, and there was just so much need, especially the women that I encountered had little or no training.” This gives evidence that many re-pat entrepreneurs interviewed decided to enter the Liberian market social reasons as well as commercial. Re-pat owners also do make it clear that they believe there is a substantial untapped market in both Liberia and West Africa. A minority of owners believe that their business has the potential to become regional and potentially, continental. A tech start-up founder said:

“If not [Liberia] than in the region at least because this is where all the new consumers will be in the future. The western world is pretty much saturated, so you need to really work to get the consumers so the cost per customer goes down. India, Asia are tapped so Africa is going to be the next place. And I know that foreign companies will come in to take those opportunities unless Africans step up to take it.”

¹⁹⁷ Accessories Manufacture Business Owner, Fashion Designer, Alcohol Production Business Owner, Commercial Cocoa Business Owner, Fishery Owner

There is strong evidence for market growth in these areas and these entrepreneurs would like to be at the forefront of business development in the area.

5.3.1 Conduct: Local Knowledge, Business Experience and Capital Helps

The Liberian re-pat owned businesses can tap into resources similar to the foreign-owned firms but in many cases, to a lesser extent. Re-pats may bring personal savings from working in the country they grew up in and/or were educated in. These savings are the personal contributions used to help finance the business, especially at the beginning of the process. The tech start-up founder stated that in his work in the US “I always had the intention of starting an online business in West Africa and I was saving for it in the process.” Furthermore, although to a much smaller extent, these businesses have access to credit lines based in their home countries. The small loans given are usually to the individuals themselves and not the actual business. One business uses small PayPal loans to finance working capital.¹⁹⁸ However, the re-pat owned companies still struggle with taking out domestic loans. For example, the same tech company has tried to take out numerous loans where the bank “has seen over a million dollars in cash flow but we can’t even get a \$20,000 USD loan and this makes it tough for us to grow.” In addition, because re-pat owners are trying to do social good with their business, many foreign financiers misconstrue that their business is a “social-enterprise” or a charity. The accessories firm owner stated that “I am trying to do good, yes. But, I am also running a legitimate and profitable business. There are a lot of opportunities in Liberia and not just charity. Yet, when I try to sell the goods back in America, people see it as a donation.” This shows that even though re-pats have more options to access finance providing higher performance levels in Liberia's harsh business environment, finance remains a challenging barrier to navigate.

In terms of human capital, re-pat owned businesses are like foreign-owned businesses because their owners have mostly been educated in the US and have gained experience working for international businesses. This provides these businesses with a significant advantage over domestic businesses who have had little access to business education or experience. For example, the tech founder mentioned that “I worked with a few tech companies in the States but I decided to come back for my Dad. So, I came back and worked as a consultant for UNICEF, government, and NGOs.” The educational and work experiences that these business owners had outside of Liberia are crucial positive influences on their business capabilities.

However, re-pats also struggle to find middle management workers for their businesses due to the local human capital gap. Unlike foreign-owned businesses, re-pat owners do not often

¹⁹⁸ Fashion Designer

hire foreigners for middle management. To perform, these owners are forced to conduct extensive training as well as take on additional functions that need to be completed themselves.¹⁹⁹ One agri-processing business owner explained that “our job is hard... you need to tell them every time they come in to tie your hair, put on your apron, sanitize your hands, put on your hair cap, so our job is hard. That’s why when I’m not there, they don’t package. I need to be there to package.” The demand on them from the business is significant and often time-consuming. This constrains the growth of the business because the owners are only able to complete so many tasks and conduct so much training. As the business grows, they must start using other employees to complete certain tasks and they cannot find the right people to do so. This evidence shows that although re-pat businesses do gain better business performance from their own skills, education and experience, this is restricted by the lack of local talent.

However, with re-pats previous experiences outside the country, they can contribute significantly to innovation in the private sector. One re-pat owned cocoa processor stated that he has had to change his business significantly from the average cocoa farmer to gain traction in his performance. Like many Liberian cocoa farmers, he focuses on the export market, but his chocolate goes straight to specialty hotels and high-end markets, where the consumers like “the narrative, the whole rebuilding of a dying industry and supporting a war-torn country like Liberia.” He has marketed himself in an innovative way even though cocoa is a common commodity in the Liberian private sector. In addition, a fashion company’s owner stated that “my designs set me apart from the typical Liberian tailors because I mix American and Liberian styles.” Tailors are an extremely common small business in Liberia, but this re-pat owned company has taken the designs to the next level and marketed them globally. This allows her to perform significantly better than the domestic tailors.

Unlike foreign-owned firms, re-pats have not built strong business networks and communities. One re-pat owner explained that “many of us [re-pat owners] are coming and going throughout the year and don’t really see each other much. It’s not that we wouldn’t be willing to work together but it’s just hard to coordinate and when we are in country, we spend the whole time at the business.” There are a few agri-based re-pat firms that have shared a shipping container to export goods at better economies of scale. Thus, business networks are not the key change in conduct that is generating higher performance for re-pat firms. Instead, it is primarily their past experiences, innovation and access to capital.

¹⁹⁹ Accessories Manufacture Business Owner, Commercial Cocoa Business Owner, Fashion Designer, Alcohol Production Business Owner

5.3.2 Transfers: Resource Intensive but the Most Effective

As an extension to Bray's (2009) finding that diaspora/re-pat owners are the most effective at navigating markets, this evidence shows that these businesses are the best at transferring knowledge and skills. This is primarily through the fact that re-pat owners are often committed to using local supply chains and providing extensive training for local workers. Both the accessories business owner and the fashion designer incorporate a sewing training program and apprenticeship into their businesses. In these programs, local women go through daily hands-on sessions for three to six months. The accessories business owner shared that at the end, "about 15 percent stay with us, 50 percent start their own tailors, and the rest are employed at other businesses." Due to the more social aspect and long-term development focus of the re-pat owners, these types of training programs help to provide effective skill transfers.

In addition, since re-pat owners do not often bring in expat middle managers, this means that they must train local employees. The fashion designer described stated that "it was really hard to find a manager for the store. At first, I did everything myself and started to bring in [my employee] to learn. Then I paid for her to go to night school to become better at bookkeeping. She still needs extra attention, but the improvements are vast." These owners often discussed that they have to work side-by-side with these employees and find that it is most useful when you teach them 'on-the-job'.²⁰⁰ Although it is challenging and time intensive, re-pat owners have the greatest dedication to transfer skills and knowledge to domestic workers. In addition, re-pat owners state that because they fully understand the culture, they are able to build trust with their employees and suppliers. An accessories manufacture business owner states that "building trust with your employees and showing that you are like them is the best way to increase production. Once they trust you, they really listen to you, and that's when the most learning happens." Thus, these entrepreneurs are ideal for creating these transfers.

For supply-chains, re-pat owners frequently work with local suppliers, especially in agriculture. Many agri-processing firms work closely with local smallholder farmers to ensure they are producing the goods properly. Developing a steady supply of goods is challenging for the re-pat agricultural businesses and requires a lot more effort than elsewhere.²⁰¹ However, they can successfully transfer those agricultural skills through local supply chains.

²⁰⁰ Fashion Designer, Accessories Manufacture Business Owner

²⁰¹ Cocoa Producer, Gari Processing Business Owner 1

5.3.3 Challenges: Less Regulation Challenges for Re-pat Firms

Many of the barriers that re-pat owners discuss are the same as domestic SMEs including lack of skilled labour, regulations, high taxes and limited infrastructure.²⁰² Similarly, when re-pat businesses need skilled labour, they have to use extensive resources to train.²⁰³ However, one significant difference is that re-pat owners do not suffer from the same anti-foreign policies from the new government as foreign SME owners do. A government employee, who is a re-pat himself, stated that “the government tends to favour businesses owned by Liberians, even if they grew up elsewhere, than the foreigners. They are happy to have skill re-enter the country.” This is particularly true when it comes to land ownership, as strict laws prohibit foreigners from buying land.²⁰⁴ However, re-pats do qualify, which makes conducting business a bit safer in the country. A foreign real estate business owner said, “I am in the real estate business, but I can’t actually buy land, which means at any point, someone could turn on me and tell me to leave and I lose my entire investment. It’s not very safe.” Thus, there are a few advantages that re-pat owners have that foreign-owned businesses do not.

5.4 Alternative Investment

There has been a growing trend of private investors entering African markets over the past two decades. Investing with social purpose has become normalized and many investors would like to add ‘impact’ investments to their portfolio.²⁰⁵ These tend to be smaller deals than the FDI deals and are typically focused on SMEs and tech. Africa has been receiving significantly more attention by these private investors because it has become a ‘sexy’ market.²⁰⁶ This type of capital includes public impact investing (Development Finance Institutions), private impact funds, venture capital, and angel investments. Bray (2009) has not included these types of foreign private investors in his previous analysis.

However, Liberia is not receiving a lot of this capital compared to other African countries. States that are further along in their private sector development, like Ghana, Nigeria and Kenya, are receiving the bulk of this attention because they are overall less risky than a market like Liberia’s.²⁰⁷ For example, the tech founder noted that “if you are an outside investor and you hear Liberia: the population is less than 5 million people and you could easily invest in Accra [where] the population is 10 times as big and more stable, there’s electricity, good

²⁰² Fashion Designer, Alcohol Production Business Owner, Fishery Owner

²⁰³ Fishery Owner, Alcohol Production Business Owner

²⁰⁴ Foreign Hospitality Business Owner

²⁰⁵ Family Office Country Manager

²⁰⁶ Impact Fund Director

²⁰⁷ Nigerian VC Investment Associate

education level, etc.” Even if an investor is focused on social impact, they still require financial returns, which means that the investment must be fairly secure. This is evident by the fact that more than half of all the foreign investment deployed in West Africa goes towards Ghana and Nigeria.²⁰⁸ However, West Africa, even with these two powerhouses, is not as popular of a market as East Africa. Between 2005 and 2015, there was \$6.8 billion USD invested in West Africa, in comparison to \$9.3 billion in East Africa, which is only half of West Africa’s total GDP.²⁰⁹ Thus, not only is Liberia an unpopular country to invest in within West Africa, the region as a whole is also less popular than other areas in Africa.

There has been the rise of Development Finance Institutions (DFI), but this remains significantly lower than other markets.²¹⁰ They have been the primary source of this non-MNC investment into Liberia and between 2005 and 2015 invested \$90 million USD over 15 deals. In comparison, Cote D’Ivoire received \$879 million over 49 deals and Ghana received \$1,615 million over 28 deals. However, for non-DFI investments, Liberia only received \$0.6 million USD over two deals. This is one of the worst performances within the region when looking at Cote D’Ivoire, who received \$11 million over 10 deals and Ghana, who received \$75 million over 84 deals.²¹¹ This evidently shows the unpopularity of Liberia as a market for foreign private investors.

On the ground, I was able to determine that there are approximately six of these types of investors in the market. Although these investors can provide much-needed access to finance and ensure the business model is innovative, these investors have not yet effectively influenced other forms of conduct. Although many of the impact funds implement training programs, entrepreneurs state that these are not helpful to their businesses. In addition, due to the little investment knowledge from domestic owners, there is a lack of trust between the two actors, meaning that transfers do not occur easily. Thus, alternative investment actors in Liberia still need to make substantial progress to ensure these businesses perform strongly.

Due to the lack of funds and this type of angel and/or venture capitalist investment into the country, it is nearly impossible to determine the effectiveness of this method in Liberia. There are more investment projects in Sierra Leone that are more mature than projects occurring in Liberia. Thus, I use additional qualitative research from Sierra Leone, which has more of these

²⁰⁸ Ibid.

²⁰⁹ ‘The Landscape of Impact Investing in West Africa,’ Global Impact Investing Network, December 2015. https://thegiin.org/assets/160620_GIIN_WestAfrica_full.pdf

²¹⁰ Ibid

²¹¹ Ibid

types of funds on the ground as well as similar characteristics to Liberia, to better understand if this alternative investment does have the potential to fill these market gaps.

5.4.1 Conduct: Access to Capital Helps but Lack of Trust Detracts

In Liberia, the commonly cited benefit of working with one of these alternative investors is the much-needed capital. A rice processing business owner said that “since we were turned down for loans at all the banks, this fund has been a life saver in providing the capital we needed.” These investors do help to fill some of the local capital gaps. Additionally, institutional investors have strong mandates to make a specific financial return with their investments. This means that often the terms of these are not flexible, meaning that many investment opportunities are not reached. A family office manager said that “I wish there were more people willing to take that risk with their money. I wish the DFI community was actually built to help economies like Liberia, because I don’t think it is. I think they have a lot of restrictions due to ticket size and returns that make them not invest in places like this.” This investor discusses that the requirements for the DFIs, who are supposed to be operating in the most fragile areas to generate impact and private sector development, are unable to deploy capital to businesses within the growth stage of development.

In Freetown, when asked what the major contribution of the investment deal is to the business, almost all the companies spoke about the financial capital that they have received. In a lot of cases, these firms were unable to receive loans and financing from local banks beforehand.²¹² Now, the firms have access to capital through the fund and further, having the fund as a partner provides more positive signalling to local banks so they can receive additional loans.²¹³ One agri-processing co-founder said that due to the difficulties of the finance market in Sierra Leone, “without our angel investor, we would not have survived, financially, throughout this process.” However, this agri-business also mentioned that due to the numerous shocks and unpredictability of the market, the only reason their investment deal has succeeded is because it is flexible. Therefore, he is of the opinion that “investment can work in an area like this, as long as it's flexible. You will always need a bit more capital and a bit more help and the investor needs to adapt to the environment.” Managers of funds that are linked to large institutions or DFI’s have mentioned how difficult their strict mandate can be in markets like Liberia and Sierra Leone. For example an SME fund manager in Sierra Leone stated that “after Ebola and a change in management, the companies needed some more capital, but we didn’t have the flexibility to

²¹² SL Incubator Director

²¹³ SL SME Fund Director

provide more to them at that time and because we are attached to a large institution, we couldn't change that." These strict rules and procedures mean that the funds cannot easily adapt to widely varying and difficult markets. This means that a flexible and adaptive investor is optimal for capital deployment in these markets.

Back in Liberia, the alternative investors often include a training component, which many investees have mentioned that the "class-room" style approach is not helpful. There is either a lack of or merely generic training available for portfolio businesses.²¹⁴ A paper business owner expressed that "I am busy running my company and in a lot of ways the investor got in the way. They got me to do all this basic training that was not specific to my company, so it was a waste of my time and didn't help me." She is referring to a three-day generic business training that each business must go through. Since this particular business owner has a business degree, it was repetitive and not useful to her.

Allocating immense resources into training is a difficult choice for many of these investors. For example, the family office manager explained that:

"A huge investment that needs to be made in any institution here is in trainings, education, banking school in Wisconsin, etc. I don't think we would have the level of staff we have if we only relied on external hires. A lot of the model is about finding really promising people, lifting them up, and hoping they don't leave us to go work for the LRA."

One of the challenges that investors face in the market is that government jobs are higher paid and better respected in the community. This means that businesses often lose employees after they have completed extensive training. The quote above suggests that the training they do for bankers means they become qualified to work for the Liberian Authority Revenue, where employees are paid above market rates.²¹⁵ Overall, it becomes costly for investors to commit to extensive training programs if they end up losing those employees.

Due to the uncertainty of training and loyalty, one fund focuses on using their networks to help with increasing investee networks. The SME fund manager stated that "we've mostly helped the companies get in touch with suppliers in other countries, for them to get the right equipment and the right support. We bring in expertise for installation of equipment." This suggests that this fund conducts less hand-on training and has instead helped with sourcing physical capital. As noted in Section 4.2.4, better access and use of networks is a significant value add for domestic businesses.

²¹⁴ Rice Processing Business Owner, Paper Manufacture Business Owner

²¹⁵ Family Office Country Manager

However, there is an immense amount of distrust within the private and institutional investment sector from both the investor and investee side. From the investee side there are several examples that presented themselves in the evidence. The fisheries owner stated that they had a large investment deal set up with an international institution but they “there’ve been some mismanagement of funds over spending and the contract kept changing and being delayed, for years. So eventually I just didn’t trust a single thing they told me.” For some of the businesses who have taken on investments from funds, they don’t necessarily want to take on the expertise or training that the investment fund provides. The paper business owner said, “I know I need the investor to get money, but I don’t like them, so I avoid a lot of the calls, trainings, etc. I want them to just let me run my business.” Therefore, it is evident that many local businesses have poor relations with foreign private investors, leading to tensions and a lack of cooperation between the two parties.

Many local entrepreneurs have no experience working with equity investments because it is new to the country. However, a renewable energy company co-founder stated that “we had one an investor who was interested, but they wanted 51 percent of the company, which means they would take it over completely. I looked it up, and that wouldn’t happen in the US for our type of company. They didn’t trust us to run our own company so why would we work with them?” The investment fund managers in my sample, all mentioned that they had to be careful when choosing the companies. Even once the fund has found high quality businesses, the SME fund manager said it is common that “these businesses tend to push back on our involvement. I think it’s more because they don’t understand how investment works.” This means that the funds' distrust in the businesses is often felt by the entrepreneur and forces them to disregard any sort of partnership.

5.4.2 Transfers: Sierra Leone Technical Assistance is More Tailored

Due to the type of training that alternative investors conduct and the lack of trust in these deals, knowledge and skill transfers to domestic markets do not occur as effectively as foreign or re-pat owned owners. One large institutional investor in Liberia stated that “the lack of investment is human capital – basic training and knowledge. SMEs must train and retrain people, which really brings up costs for them. It’s just too hard for us to work at that level.” This means that where significant knowledge transfers could occur in the market are too difficult to reach for most investors. Therefore, there are fewer effective transfers from foreign stakeholders to domestic actors and firms in the Liberian market.

As a comparison, much of the small-impact focused funds working in Sierra Leone provide a varying number of resources for technical assistance with the firms they work with. An SME fund manager said that their technical assistance program “works on a needs basis. When the fund was initially set up there was the investment capital, and there was a TA facility of \$1.2 million. Most companies apply for expertise in financial management, and on the operational side, in marketing for example.” This usually involves hiring consultants who specialize in the required area for the company. Another fund stated that they take a more hands-on approach to technical assistance. The employee of an impact fund in Freetown claimed, “I have worked here within the company as the manager for the past six months to get this business set up. I am involved in every aspect of the business and work almost as an employee and not the investor>” This type of experience is much more hands-on than a large portion of the other investment deals and is quite unique. However, the companies stated that only some of the technical assistance has been helpful to their growth. One agri-processing founder said, “we go through a lot of training. There is always more training to do. But I am not entirely sure if it’s that helpful to us.” A business incubator director expressed that instead of just training, these companies “require true partners in the business that are willing to work with them for long-periods of time, sharing their knowledge and not only do short term training.” This means that some companies do believe that having a partner, who is present and working within the firm may be more helpful than just having access to some training programs. In conclusion, efforts on increasing knowledge and skill transfers from foreign stakeholders to domestic needs to be a higher priority to both countries.

5.4.3 Challenges: Finding Suitable Opportunities

Many of the challenges for domestic businesses face are the same as businesses with foreign alternative investors. However, since these investors are foreign and have less knowledge of the market, it is challenging for them to find suitable businesses for investment. Alternative investment managers say that it is difficult to attract the “right-type” of business.²¹⁶ An SME fund manager stated that “it’s difficult here, venture capital and private equity are brand new to the country” meaning they have a hard time recruiting businesses. Since there is a lack of quantity and interest in this type of financing, it is difficult to determine whether it can provide the tools required for businesses in Liberia to gain significant growth. These investors also face numerous challenges in entering the market, which is discussed in Section 5.5.

²¹⁶ Impact Fund Director, SME Fund Manager

5.5 Impediments to Foreigners Entering the Market

In Figure 4, there was a significant increase in the percent of formal businesses with foreign ownership in Liberia from 2011 to 2017. However, Liberia still suffers from a severe lack of foreign entries and investors compared to other African countries. As noted above, investment from both DFIs and non-DFIs remains low compared to other West African countries. In 2019, FDI flows into Liberia decreased by 78 percent since 2015 and due to the covid crisis is expected to fall further in 2020.²¹⁷ Lastly, Section 5.1.2 noted the frustration that many foreign-owned SMEs are having operating in the country forcing them to leave, making many potential business owners in their networks hesitant to enter.²¹⁸ Many of the reasons that investors avoid Liberia are the same as the constraints to business growth explained in Section 3. However, from the foreign investor's point of view, there are five key additional reasons why they have little interest in entering the country derived from the field interviews. These are political and economic uncertainty, negative perceptions of Liberia, the lack of investment ready businesses, little incentive for fund managers and a lack of available professional services.

Although Liberian businesses do not state that political instability is a concern for them, investors do. Since potential investors may not know the country well, they state that political instability and the possibility of violence is a central deterrent to investment.²¹⁹ One large financial investor mentioned that they had been nervous about violence surrounding the election in 2017.²²⁰ Further, with the constant shocks that have persisted since the civil war, investors have a challenging time generating economic forecasts and predictions. In particular, a public sector economist explained that the new government “has been terrible in terms of uncertainty. Before, there was a 3-4 month period where people stopped spending. People didn't know if the new government would be okay, there was a big drop in small investment.” This means that there is little protection for the investors, particularly if they are foreign. An entrepreneurship NGO manager said that “investing in Liberia is scary - there is no security exchange, monitoring how companies perform, there is no recourse in the court systems here for a foreigner.” Thus, without some confirmed and consistent stability, Liberia is too risky to enter in an investor's point of view.

The shocks that Liberia has faced has not just generated uncertainty, but it has also painted a negative perception of the country. Even within the impact investment community, Liberia is still separated into the highest risk category. An impact investor described that

²¹⁷ UNCTAD FDI Data

²¹⁸ Foreign Import Business Owner 2

²¹⁹ Family Office Country Manager, Impact Fund Director, Institutional Investment Manager

²²⁰ Finance Sector Investment Fund Manager

investors “see Liberia as a very poor country, with few opportunities, not a thriving entrepreneurial community, etc. It’s still considered a post-conflict country, so it puts it in a different category.” The negative perception is often derived from the stories told in the media. An institutional investment manager pointed out that “the only facts that people from the West know about Liberia and Sierra Leone is the war and Ebola, and maybe the diamond trade, because that’s when there were news cameras here.” This means that only the most risk-loving foreign investors enter the market. However, even this is not necessarily occurring because almost all the private foreign investors and funds in Liberia, which are approximately six in total, have personal connections to the country.²²¹ This means that even the most risk-loving investors don’t enter the market; it is only those who have a personal connection with Liberia. This is most likely because the negative perceptions are too difficult to see past if an investor has no relationship with the country.

In addition, if an investor does decide to try and enter the Liberian market, it is challenging for them to source investment-ready companies.²²² One of the reasons for this is that investors may only have a small amount of time on the ground and most information in Liberia is spread through ‘word of mouth’. An impact investor described, “the good thing in a small society like this, is that people talk a lot. If someone has done something shady or questionable in the past, you always find out, but you have to be here to know.” The other primary reason is that most companies who need capital are not yet ready for large-scale investment because they cannot absorb that amount of capital effectively. In many cases, Liberian companies do not have the basic paperwork and financials for standard investment due-diligence processes. An SME fund manager said that “most of the companies that operate here are not sophisticated, they have no records at all. Especially in the bracket we’re looking at [SMEs], people have no accounting records, no corporate agreement templates, etc. So that gives us trouble when we need to do due-diligence.” Due to the high cost of sourcing and vetting deals, investors require deals that are larger in size and easier to manage.²²³ The small market size also decreases the amount of investment that enters the country. One Family Office Country Manager from the US tried to raise a significant fund for commercial purposes in Liberia. Their experience is stated below:

“We were debating raising 100 million US dollars, but that’s too much money for Liberia. We were getting a lot of push back about the size of the fund, because 50 million

²²¹ Family Office Country Manager, Impact Fund Director, SME Fund Manager

²²² Institutional Investment Manager, Impact Fund Director, SME Fund Manager

²²³ Impact Fund Director

is pretty small for a lot of these Institutional Investment Managers, but we had to ask them to trust us, we know the market. But the market is just too small.”

Although this particular investor is committed to bringing in more investment into the country, they could not justify it due to the size of the market. Additionally, a large institutional investment manager stated that, “I’ve identified a long list of agri-companies we could work with, but a number of them are not ready yet and have a number of things to be fixed first. Most of those companies won’t be able to make those changes.” Since most Liberian companies are still in the early stages of development, they are not yet ready for this type of deal.

Unless it is an individual private investor, most of this form of investment is from a fund that manages a portfolio. Incentives for those managers, who receive fees from managing the portfolio, are very low.²²⁴ This is because, as stated above, the size of investment deals in Liberia are much smaller than the average deal in other parts of West Africa. The institutional investment manager explained:

“The market size is very small, [as an investor] you spend a lot of time working on deals here because there are a number of issues that you have to address. And the deal size is small. So, people would rather spend that time and energy working on a deal in Nigeria for example, or Nairobi, on like a \$100 million USD project.”

As mentioned above, sourcing deals is a challenge and even if they find a company, it’s difficult to make a deal. This is because owners don’t fully understand equity deals yet in the country since they are new and SME fund manager shared that “there has been push back from the ones who aren’t honest, against our level of involvement. But for this to work we have to be there and take the risk together.” The companies also require more technical assistance and monitoring than other areas, which is both expensive and time consuming. The family office investor stated that “we have to spend at least double the amount of time with our investment in Liberia. I’m on the phone with them every day, we develop the systems, we train the entire team. If it weren’t such a large investment, it would be impossible to be this involved.” The evidence suggests that to be a fund manager in Liberia, it takes ample time, energy, patience, and resources, with less compensation than other areas. This decreases the incentives for fund managers to try and run their portfolios in Liberia drastically.

The final reason why foreign stakeholders are not entering Liberia is because there is a lack of professional services available within the country. This was caused by the educational gap in the country and limited options when it comes to professional services. This includes services in accounting, consulting, lawyers, auditing, and tech developers. The SME fund manager said

²²⁴ Impact Fund Director, SME Fund Manager

that “we’ve also been in the situation that there were no other service providers, especially for accountant firms. So, we have to do a lot of it ourselves, even if we don’t specialize in it.” It is risky to invest in a place that does not possess the tools required to help make the acquired business successful. Most companies and funds must either try and do the work themselves or outsource it to other countries.²²⁵

Overall, the Liberian market does not provide an inviting environment for foreign investors due to its size, uncertainty, and lack of resources. This means that although foreign entities tend to be able to access more resources and navigate the market challenges more effectively, which is explained above, there are numerous justifications for investors to go elsewhere. Potential contributions that could be made in Liberia’s private sector development through foreign investment are lost. However, Sierra Leone has attracted more foreign private investment in recent years and helps determine methods on overcoming these barriers.

Many of the challenges that businesses in Sierra Leone face are the same as in Liberia. This includes challenges like inadequate infrastructure, poor education and a lack of skilled labour, corruption, the depreciation of the Leone, the negative shock from the UN leaving,²²⁶ the negative perceptions caused after the Ebola crisis, and a general uneasiness of processes.²²⁷ However, there were three main differences for foreign investors that were clear between the two different markets: the government’s pro-foreign investment attitude, a focus on structural change within the government, and increasing transparency in processes.

Although Sierra Leonean business owners described the many challenges they faced, they all had a more optimistic view for business compared to owners in Liberia. They expressed more optimism for the future of their business and the opportunities available to them.²²⁸ This seems to have stemmed primarily from an attitude seen from the new government, elected in 2017. The first has been that the new government has shown and expressed their desire for more foreign companies and investment to enter the country. An impact fund manager in Sierra Leone said that “the new government has opened its doors to foreign investors and has not necessarily been trying to help us but also hasn’t really gotten in our way for these new projects.” This has been the opposite approach to the newly elected administration in Liberia, which has been focused almost entirely on domestic business development.

²²⁵ Impact Fund Director

²²⁶ Although this was significantly before Liberia in 2005

²²⁷ SL Incubator Director, SL Fintech Co-Founder

²²⁸ SL Impact Fund Manager Director, SL Institutional Investment Manager, SL SME Fund Director, West Africa Fund Director

The second is that the government has shown an awareness and has acknowledged pitfalls in current policies and processes for businesses in the country. Although there are still many challenges present, a fintech co-founder found that “they’ve at least identified where some of the issues lie. The Ministry of Finance said quite clearly that the Environment Protection Agency was used too much as a revenue generating agency instead of an environment protection body. There is a recognition that the policy needs to be more fairly applied.” He continued to explain that the previous government also discussed these issues frequently but “they now also recognize that they have been talking about the same things year after year and are trying to make a change.” Although there has yet to be many significant changes to those policies, the acknowledgement of problems and their eagerness to make changes has made business owners more hopeful for the future.

Lastly, the new government of Sierra Leone has placed a higher emphasis on transparency and decreasing corruption. Some businesses in Sierra Leone mentioned that this has made business a bit more challenging now because they must learn new processes. A business incubator director said, “the new government has really come down on corruption, which I think in the long-term is good for our development. But, right now, it’s actually slowed down some processes for businesses and made it a bit slower to get things done.” This sends a positive signal for foreign businesses and private investors that if they do enter the market, they will not have to cope with large amounts of corruption. As mentioned in Section 3.2.4, Liberia has struggled with corruption throughout the change in administration.

In conclusion, the difference in Sierra Leone seems to be that the structure of the market is slightly better than in Liberia, allowing more investment to enter. This means that the conduct of domestic firms does not seem to be the overall hindrance for investors in Liberia. Instead, it is the overall market structure, which requires long-term systematic change, that is the present main barrier for foreign investors.

6.0 Conclusion

The field interviews conducted in Liberia clearly show that the two Liberian civil wars have had a long-term and profound consequence on the private sector, which is still experienced today. This includes drastic effects on the structure of the market and the conduct of individual businesses. The evidence shows that direct impacts of the conflict on the market structure, including destroyed infrastructure, weak institutions and systemic corruption has a direct effect on the firm's current performance. However, many business owners note that there is little they can do to change these post conflict market structures in the short run. Section 4 describes the

number of channels in which the conflict impacted the behaviour and capacity of firms. Firms in Liberia have an overall lack of innovation, human capital and skills, access to finance and business networks, which have been exacerbated by conflict. These challenges have a negative effect on firm performance, which has led to the current informal, micro, “mom-and-pop” shop economy in present-day Liberia.

However, there are several firms, specifically foreign and re-pat owned, that have effectively changed their conduct to overcome many of the challenges in the post conflict private sector environment. In addition, these types of businesses have the potential to create effective and sustainable knowledge and skill transfers. These transfers occur by building trust with domestic suppliers and employees, providing hands-on tailored training, and remaining flexible and adaptable in terms of financing. It is re-pat business owners that are the most effective at these transfers. This shows potential promise for the use of foreign investors to help in the process of rebuilding post conflict markets.

Nonetheless, foreign investors and owners severely struggle entering the Liberian market. This is due to extremely high due diligence costs, risks, negative perceptions of the country and lack of opportunities within the market. In addition, once they are operating in the market, they find the anti-foreign government stance and the cultural distrust of foreigners within local communities creates additional challenges for business performance. This means that foreign investors can navigate through the post conflict market by changing their conduct effectively but there are additional barriers that they must face.

Although it is clear from the differences between Liberia and Sierra Leone that every post conflict environment is unique, Liberia’s private sector provides an excellent baseline as it has struggled to gain private sector traction. In Chapter 2, Liberia’s civil war is defined by all the conflict characteristics, including high intensity. This means that the analysis of the four different areas of conduct will most likely relate to many other post conflict areas but at differing degrees. For example, a conflict that only occurred for 30 days will not have the same human capital gap, so training may not be a key area of focus but rebuilding trust and networks may be. Thus, the findings from this paper can help policy makers and stakeholders implementing peacebuilding programs in Africa develop best practices for the ‘worst-case’ scenarios. Then they can build upon these and tailor the programs to the specifics of each individual scenario.

Further research in post conflict private sector reconstruction needs to be pursued across Africa. The next step would be to conduct additional case studies with deep qualitative analysis from all different stakeholders in the private sector to determine disparities in structures, conduct and foreign-actors’ behaviours in other post conflict reconstruction processes. Even

through a small number of interviews in Sierra Leone, I find that foreign investors act relatively different than in Liberia. This shows the need for further case studies as each of these post conflict environments are unique. In addition, generating a substantial dataset, particularly with entrepreneurs and investors in post conflict areas would allow for quantitative analysis on these questions. Although this paper provides a detailed insight into the challenges and strategies used by different stakeholders in the Liberian post conflict environment, there are still substantial gaps in our knowledge on best approaches for private sector rebuilding policies.

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Agri-NGO Manager. *International NGO.* Interview conducted in Monrovia, Liberia in March 2018.

Alcohol Production Business Owner. *Re-pat Owner.* Interview conducted in Monrovia, Liberia in October 2018.

Beauty Business Owner. *Domestic Owner.* Interview conducted in Monrovia, Liberia in October 2018.

Business Start-Up Org Director. *Domestic Organization.* Interview conducted in Monrovia, Liberia in October 2018.

Commercial Cocoa Business Owner. *Re-pat Owner.* Interview conducted in Lofa, Liberia in March 2018.

Culture Preservation NGO Researcher. *Researcher.* Interview conducted in Monrovia, Liberia in March 2018.

Entrepreneurship NGO Manager. *Investor.* Interview conducted in Monrovia, Liberia in October 2018.

Family Office Country Manager. *Investor.* Interview conducted in Monrovia, Liberia in February 2019.

Fashion Designer. *Re-pat Owner.* Interview conducted in Monrovia, Liberia in October 2018.

Finance Sector Investment Fund Manager. *Investor.* Interview conducted in Oxford, UK by phone in April 2019.

Fishery Owner. *Re-pat Owner.* Interview conducted in Robertsport, Liberia in October 2018.

Food Security NGO Project Manager. *International NGO.* Interview conducted in Monrovia, Liberia in March 2018.

Foreign Construction Company Manager. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in February 2019.

Foreign Import Business Owner 1. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in February 2019.

Foreign Import Business Owner 2. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in January 2019.

Foreign Restaurant Owner 1. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in February 2019.

Foreign Restaurant Owner 2. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in February 2019.

Foreign Hospitality Owner. *Foreign Business Owner.* Interview conducted in Monrovia, Liberia in January 2019.

Foreign Forestry Company Owner. *Foreign Business Owner.* Interview conducted in Kakata, Liberia in October 2018.

Fruit & Veg Processing Business Owner. *Domestic Owner.* Interview conducted in Monrovia, Liberia in October 2018.

Gari Processing Business Owner 1. *Domestic Owner.* Interview conducted in Monrovia, Liberia in February 2019.

Gari Processing Business Owner 2. *Domestic Owner.* Interview conducted in Bong, Liberia in October 2018.

Gari Processing Business Owner 3. *Domestic Owner.* Interview conducted in Ganta, Liberia in March 2018.

Impact Fund Director. *Investor.* Interview conducted in Monrovia, Liberia in May 2019.

International Embassy Manager. *International Entity.* Interview conducted in Monrovia, Liberia in February 2019.

Institutional Investment Manager. *Investor.* Interview conducted in Monrovia, Liberia in February 2019.

Nigerian VC Investment Associate. *Investor.* Interview conducted in Oxford, UK by phone in June 2019.

Paper Manufacture Business Owner. *Domestic Entrepreneur.* Interview conducted in Monrovia, Liberia in May 2019.

Public Sector Agriculture Economist. *Policymaker.* Interview conducted in Monrovia, Liberia in March 2018.

Public Sector Commerce Economist 1. *Policymaker.* Interview conducted in Monrovia, Liberia in January 2019.

Public Sector Commerce Economist 2. *Policymaker.* Interview conducted in Monrovia, Liberia in March 2018.

Public Sector Commerce Economist 3. *Policymaker.* Interview conducted in Monrovia, Liberia in January 2019.

Public Sector Commerce Manager. *Policymaker.* Interview conducted in Monrovia, Liberia in May 2019.

Public Sector Investment Manager. *Policymaker.* Interview conducted in Yekepa, Liberia in January 2019.

Public Sector Youth Manager. *Policymaker.* Interview conducted in Monrovia, Liberia in February 2019.

Regional Financial Institution Manager. *Domestic Owner.* Interview conducted in Monrovia, Liberia in May 2019.

Renewable Energy Manufacture Owner. *Domestic Owner.* Interview conducted in Bong, Liberia in February 2019.

Rice Processing Business Owner. *Domestic Owner.* Interview conducted in Monrovia, Liberia in June 2019.

SL Fintech Co-Founder. *Re-pat Owner.* Interview conducted in Freetown, Sierra Leone in June 2019.

SL Foreign Agri-processor Co-Founder. *Foreign Business Owner.* Interview conducted in Freetown, Sierra Leone in June 2019.

SL Impact Fund Manager. *Investor.* Interview conducted in Freetown, Sierra Leone in June 2019.

SL Incubator Director. *SL Organization.* Interview conducted in Freetown, Sierra Leone in June 2019.

SL Institutional Investment Manager. *Investor.* Interview conducted in Freetown, Sierra Leone in June 2019.

SL SME Fund Director. *Investor.* Interview conducted in Freetown, Sierra Leone in June 2019.

West Africa Fund Director. *Investor.* Interview conducted in Oxford, UK by phone in April 2018.

SME Fund Manager. *Investor.* Interview conducted in Monrovia, Liberia in February 2019.

Tech Start-Up Co-Founder. *Re-pat Owner.* Interview conducted in Monrovia, Liberia in October 2018.

West Africa Fund Associate. *Investor.* Interview conducted in Oxford, UK by Phone in April 2018.

Appendix

Appendix A: Interview Survey Questions and Consent Form

Please see below the different questionnaires for the different stakeholders. These questionnaires are a guide and not all questions were asked for each participant and additional questions were added when needed. All interviewees listed above agreed to and signed the consent form.

Appendix A.1 Participant Consent Form

PARTICIPANT CONSENT FORM

CUREC Approval Reference

Purpose of Study: To better understand the potential of small-scale investment for inclusive growth in the Liberian economy. This study is partnered with International Growth Centre.

*Please initial each
box*

- 1 I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- 2 I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences or academic penalty.
- 3 I understand that research data collected during the study may be looked at by designated individuals from the University of Oxford where it is relevant to my taking part in this study. I give permission for these individuals to access my data.
- 4 I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee.
- 5 I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.
- 6 I understand how this research will be written up and published.
- 7 I understand how to raise a concern or make a complaint.
- 8 I consent to being audio recorded
- 9 I understand how audio recordings will be used in research outputs
- 10 I give permission to be quoted directly in the research publication without my name or identifying features
- 11 I agree to take part in the study

Appendix A.2: Business Owner Questionnaire

Small-Scale Investing in Liberia: A New Method for Inclusive Growth? PARTICIPANT (BUSINESS OWNER) INTERVIEW QUESTIONS

This interview will be approximately 1.5-2 hours long and will be tailored to the individual who is being interviewed and their expertise. This interview will go over the business' history, challenges in the business environment in Liberia and understanding the impacts of private investment.

For the participant's safety and comfort, this interview will be anonymized in accordance to the Oxford CUREC (Ethics) committee guidelines.

This research is one of the first academic papers to delve into the economic and social impacts of private investment in post-conflict states. Currently, there is little literature that focuses on how to use private investment as a tool to help rebuild economies. However, large foreign direct investment projects that are natural resource extraction heavy tend to do little to help the local private sector. Thus, this research focuses on another type of private investment that may have the potential to generate more local empowerment in the economy, while still contributing to economic growth. This interview will help determine the pros and cons to this possibility.

SECTION A: General Questions on the Firm and Sector

1. *Please describe what your company is currently doing in Liberia.*
2. *Please provide us with some basic information on the firm in its current state (we will come back to financials later on in this survey):*
 - 2.1. *Number of employees?*
 - 2.2. *Ownership?*
 - 2.3. *Formally registered?*
 - 2.4. *Primary customers?*
 - 2.5. *Any exports? Any Imports?*
3. *Tell us about some changes/challenges you've experienced in the _____ sector in Liberia since the company began?*

SECTION B: History of the Firm

4. *How long has your company been operational? Can you give us some background information on how and why it was started?*
5. *How has the business environment in Liberia changed over the past 5-10 years and how has this impacted your business?*
6. *Have there been any consequences of the civil war on your business and/or the overall business environment (skip if already mentioned in 3)?*
7. *Have there been any consequences from the Ebola crisis on business and/or the overall business environment (skip if already mentioned in 3)?*

8. *How do you envision your company changing/growing over the next five years? What is the end goal in market influence, employment numbers, etc.?*

SECTION C: History of the Respondent

9. *Please tell us, as best you can, a bit about yourself and your past experiences in business.*

SECTION D: Firm Performance

10. *Please provide us with some more information on the firms current and past performance:*
- 10.1. *Net sales in the past month & year? Was this past month a normal month?*
 - 10.2. *Average cost of sales per month in the past year?*
 - 10.3. *Average cost of employees' (wages) per month in the past year?*
 - 10.4. *What other services and capital is needed to run the business? What are these costs per month on average in the past year?*
 - 10.5. *Earnings before interest and tax in the past year?*
 - 10.6. *Amount paid in taxes last year?*
11. *What have been some of the largest successes so far? What have been some of the failures or challenges you have faced?*
12. *In your opinion, what are principal constraints to growth for:*
- 12.1. *Your business?*
 - 12.2. *SME's in general in Liberia?*
13. *In your opinion, what is needed for you to expand and grow your business successfully?*
- 13.1. *Financial Capital? If so, equity, credit or both? How much?*
 - 13.2. *Physical Capital? If so, what is needed?*
 - 13.3. *Skilled Labour? If so, what skills?*
 - 13.4. *Higher demand for product/service? If so, domestically or internationally?*
 - 13.5. *Change in business environment in Liberia? If so, how?*
 - 13.6. *Other?*

SECTION E: Financing

14. *Currently, when you need to replace equipment, buy inventory, hiring new employees or are considering expansion, how do you finance this? If you have multiple sources, please indicate which have been the most important.*
- 14.1. *Internal Funds*
 - 14.2. *Personal contributions or Family and Friends*
 - 14.3. *Banks*
 - 14.4. *Local Savings Programs or Money-Lenders*
 - 14.5. *Aid Organizations*

14.6. *Private Investors*

14.7. *Other*

15. *How difficult has it been to gain access to financing for your business? Has this changed in the past five years?*

SECTION F: Investment Deal

16. *Can you provide some history on the relationship between your business and the investor you are working with? How did the investor find you?*

17. *Can you provide some of the following basic information on the investment deal?*

17.1. *Size of investment, type of investment (Equity/debt), length of investment?*

17.2. *Promises that the investor agreed to at the beginning of the deal?*

17.3. *Expectations that the investor had for you and the business when the deal was made?*

18. *When you were provided with the capital, what did you use it for? Were these purchases/expenditures helpful in the business' growth?*

19. *How involved is the investment fund/investor with the company?*

19.1. *Do they provide any TA? If so, what?*

19.2. *Have they provided any training for you and/or your employees?*

19.3. *Have the investors helped you make connections within Liberia for suppliers, other investors, costumers and/or business mentors? If so, who?*

19.4. *Have the investors helped you make connections outside of Liberia for suppliers, other investors, costumers and/or business mentors? If so, who?*

20. *What do you think have been the biggest contributions that the investment deal has had on your business? Why?*

21. *Do you think there has been any negative consequences for your business from this investment deal?*

22. *What do you think the investors could provide your business with that they are not doing so already (or not enough)?*

23. *Do you think that your business would be doing worse or better than it is now, if you had not received this investment deal?*

- 24.** *Would you be willing to share some basic statistics on your business from the start of the investment to the present time (employment, sales, costs, etc.)?*

- 25.** *Would you be willing to work with more investors in the future? Why or why not?*

Appendix A.3: Investor Questionnaire

Small-Scale Investing in Sierra Leone: A New Method for Inclusive Growth? INVESTOR INTERVIEW

This interview will be approximately 1 hour long and will be tailored to the individual who is being interviewed and their expertise. All your answers will be anonymised in notes, publications and any other materials that will be produced from this project. If you would like more information on the protection of your information, please just ask for a more detailed information form.

This interview is for the researcher to better understand what the foreign investment process looks like. This is an opportunity to understand what investors are looking for and their goals for the companies they work with in Sierra Leone. We also want to hear about the experience of the investor and some of the factors that have made investing in Liberia difficult.

Section A: The investment fund in Sierra Leone

A.1 Can you please describe to me as best as you can, the operations of the investment fund (strategy, goals, etc.)?

A.2 What are some of the companies that you work with in Sierra Leone (sector, size, ownership)?

A.3 What do the deals that the fund provides usually look like? (Capital amount, equity, contacts, etc.)

A.4 Does the fund provide technical assistance (or assistance other than capital) to the firms they invest in? If so, what does that look like?

A.5 Where does the capital for the fund come from? Who are the 'typical' investors into the fund?

Section B: History of the Fund

B.1 What are the backgrounds of the fund? Why do they have an interest in investing in a place like Sierra Leone?

B.2 What were the main reasons on the fund deciding to invest in Sierra Leone?

Section C: Investing in SL

C.1 What have been some of the main challenges in investing in the Sierra Leone economy?

C.2 Do you ever have to work with the government to complete tasks? If so, what has that process been like??

C.3 Since the fund starting investing in Sierra Leone, how do you think the business environment has changed? (Mention ebola here if it was pre-ebola investment)

Section D: Sourcing deals and Monitoring

D.1 What are the strategies you use to find companies to work with in Sierra Leone?

D.2 What does the due-diligence process look like before you invest into a firm?

D.3 How do you monitor the firm after the investment has taken place?

D.4 What strategy do you use for evaluations of the firm and impact measurements?

Section E: Any Connections to Liberia

E.1 Has the Fund ever tried to or has worked in Liberia before? (If no, go to E.2, If yes, go to E.3)

E.2: Why has the fund decided to stay away from the Liberian market considering the countries have quite similar characteristics?

E.3: What were some of the biggest differences in working in the Liberian market compared to the Sierra Leone market?

Appendix A.4: Policymaker Questionnaire

Small-Scale Investing in Liberia: A New Method for Inclusive Growth? GOVERNMENT WORKER INTERVIEW

This interview will be approximately 45 minutes long and will be tailored to the individual who is being interviewed and their expertise. All your answers will be anonymised in notes, publications and any other materials that will be produced from this project. If you would like more information on the protection of your information, please just ask for a more detailed information form.

This interview is for the researcher to better understand the transition of governments in 2017 and how that may (or may not) affect business in Liberia. There is little yet known about the new government that began in December 2017 and how that transition has impacted investment and SMEs. This interview is not merely to discuss changes in policy but to also talk about the culture within the government and its ministries.

Section A: Your work in the ministry and the transition period

A.1 Can you please describe to me as best as you can, your job within the government and some of the projects you have worked on in the past?

A.2 Tell me about some of the changes that occurred to your job (personally) when the new government took over?

A.3 Have you noticed any changes in the work environment, culture and ministries priorities, since the new government came to power?

A.4 Have certain tasks or projects become easier or more difficult to pursue within the new government?

A.5 What are some of the main differences between Weah's administration and Sirleaf's?

Section B: Policy Implications

B.1 What are some of the items on the "pro-poor" agenda that are being pushed through?

B.2 What is happening to past policies that were pushed through (eg. Special econ zone & WTO agreement)? Are these still being implemented or are they being pushed to the side?

B.3 Policy-wise, can you discuss some of the differences between the priorities of the Sirleaf vs. Weah administration.

Section C: Impact on the Business Environment

C.1 How has the transition to the new government impacted the business environment?

C.2 Do you have any information on how the transition to the new government has impacted foreign direct investment deals over the past year?

C.3 Do you think that Weah's pro-poor agenda will have a positive impact on Liberian SMEs?

C.4 What impact does UNMIL leaving have on government policy and effectiveness and thus, Liberian SMEs?

Appendix A.5: Foreign Business Owner Questionnaire

Small-Scale Investing in Liberia: A New Method for Inclusive Growth? FOREIGN ALIEN BUSINESS OWNER

This interview will be approximately 45 minutes long and will be tailored to the individual who is being interviewed and their expertise. All your answers will be anonymised in notes, publications and any other materials that will be produced from this project. If you would like more information on the protection of your information, please just ask for a more detailed information form.

This interview is for the researcher to better understand the business environment in Liberia, specifically investment and entrepreneurship. Your experience and strategies that have made you into a successful entrepreneur in such a harsh business environment are crucial to understand how to make businesses successful in Liberia.

Section A: Your business and some history

A.1 Please describe what your company is currently doing in Liberia.

A.2 Please provide us with some basic information on the firm in its current state:

- 25.1. Number of employees?*
- 25.2. Ownership?*
- 25.3. Formally registered?*
- 25.4. Primary customers?*
- 25.5. Any exports? Any Imports?*

A.3 What have been some of the biggest challenges doing business in Liberia?

A.4 What are some of the strategies you have used to make your business successful in Liberia?

Section B: History of the Firm

B.1 How long has your company been operational? Can you give us some background information on how and why it was started?

B.2 How has the business environment in Liberia changed over the past 5-10 years and how has this impacted your business?

B.3 Have there been any consequences of the civil war on your business and/or the overall business environment (skip if already mentioned in 3)?

B.4 Have there been any consequences from the Ebola crisis on business and/or the overall business environment (skip if already mentioned in 3)?

Section C: Investment and Financing

C.1 What are some of the resources that you use to help you with your business?

C.2 How difficult is it for you to find capital for your business (physical and financial)?

26. *C.3 Currently, when you need to replace equipment, buy inventory, hire new employees or are considering expansion, how do you finance this? If you have multiple sources, please indicate which have been the most important.*

26.1. *Internal Funds*

26.2. *Personal contributions*

26.3. *Family and Friends*

26.4. *Banks*

26.5. *Local Savings Programs or Money-Lenders*

26.6. *Non-Bank Financial Institutions*

26.7. *Other*

C.4 When you started the company, where did the first set of funding come from? (Personal, Family, Banks, Investors, etc.)

Appendix B: Brief History of Sierra Leone

Sierra Leone, a neighbouring country to the West, possesses similar characteristics to Liberia. Sierra Leone is a small country in West Africa of just over 7 million people and has experienced a turbulent history. Briefly, I explain some of the similarities between the two countries in this Appendix.

Sierra Leone, although colonized by the British, was another area where freed slaves from America returned. The freed slaves, called the Creole, became an elite in Sierra Leone and were favoured in the colonial era. The country became officially independent in 1961 and Sir Milton Margai was elected as the first Prime Minister. He was of Mende descent, which is one of the two larger ethnic groups in the country, the other one being the Temne. However, when Margai suddenly died, a coup d'état led by Siaka Stevens occurred. He changed the system so that Sierra Leone became a one-party state, and this lasted until 1991. However, by this time, a brutal civil war had broken out in the country, which was heavily influenced by the war in Liberia. Charles Taylor reportedly helped develop the Revolutionary United Front, which was led by Foday Saybana Sankoh, and was spreading terror across the country. The death toll for the war is estimated at over 50,000 people and hundreds of thousands became refugees. The war came to an end in 2002 after Britain decided to intervene and a large UN peacekeeping mission (UNAMSIL) was launched in 1999²²⁹. Sierra Leone's economy has been heavily focused on agriculture and diamond mining, which the country has struggled to manage properly. This shows that both Sierra Leone and Liberia were countries set up for freed slaves from the Americas, both countries had turbulent governments that led to devastating civil wars, and they both had substantial UN peacekeeping missions launched after the war (Ganson & Wennmann, 2016).

The current economy in Sierra Leone has suffered through several the same shocks as Liberia. The UN Mission in Sierra Leone, running operations as an integrated office from 2005, fulfilled its mandate and operations by 2008. Sierra Leone was also hit with the Ebola crisis in 2014, which halted the economy as most businesses closed. Like Liberia, Sierra Leone had a national election in 2017, which generated some uncertainty for the development of the country. Lastly, since the elections, the country has also dealt with a significant depreciation of the Leone. Many of these shocks are like Liberia's, which are discussed above in Section 3.2.

²²⁹ 'United Nations Mission in Sierra Leone,' Peace and Security Section, Department of Public Information. United Nations. 2009. <https://peacekeeping.un.org/mission/past/unamsil/>

Conclusion to Thesis

Sarah Burns

Section 1: Filling Gaps in the Literature

The focus of this thesis is to investigate private sector development and performance in post conflict environments. As conflicts continue to occur in Africa and across the globe, like the recent war in Ukraine, it is crucial that the peacebuilding literature includes further analysis and emphasis on the private sector. Liberal peacebuilding programs have focused their policies on aid effectiveness, institution building, natural resource management and military intervention. However, the private sector, including SMEs and local businesses, is a key driver for economic growth and has been neglected in the literature. There has also been a disconnect between the private sector and peacebuilding programs. An example of this is literature on Disarmament, Demobilization, and Reintegration (DDR) programs, where combatant reintegration into the private sector is often cited as the most challenging component. Annan & Blattman (2016) find that though there is demand from ex-combatants for job training and placement, there is a lack of private sector opportunities for them. This means that generating jobs and growing businesses is an important step to post conflict reconstruction and reintegration. This thesis provides an analysis of the post conflict private sector, the various stakeholders within it, and the business conduct which helps these actors overcome tremendous barriers to growth.

After a conflict, many governments focus their policies and efforts to attracting large foreign direct investment (FDI) projects. This is often challenging due to the high risk for investors after a conflict has just ended. Yet, the previous literature in this area does not provide a clear analysis on the effects of these large capital inflows in the post conflict era. This contrasts with foreign aid, which is usually the primary capital inflow for a post conflict country. Collier and Hoeffler (2002) find that aid inflows into post conflict countries have a significant positive effect on economic growth, even though foreign aid does not impact growth in other developing countries. Collier et al. (2003) propose that aid helps to push countries out of the “conflict trap”. However, Suhrke et al. (2005) question these methodologies and conduct their own analysis, finding that the magnitude of the impact of aid in post conflict environments is significantly less than Collier and Hoeffler’s work suggests. With respect to FDI inflows, Kaur et al. (2018) find that these have a significant positive relationship with both job creation and equality in Africa. However, this relationship has not been fully investigated in post conflict countries. Past literature shows that the net impact of FDI on economic growth is zero in developing markets due to market-stealing effects (Javorick, 2004, Chowdruy & Mavrotas, 2006). In a post conflict

setting, Paczynska (2016) suggests that in Liberia, FDI projects increase inequality and tensions in post conflict communities. These critiques are more generally brought in when focused on economic growth. Addison et al. (2015) argue that the same consequence results from economic growth in general, since it is the elites who benefit most in post conflict states. Other critiques doubt the growth impact of FDI. Blomstrom & Kokko (2002) found that low levels of education, common in countries that have endured a long conflict, mean that a community is less likely to absorb new technology and knowledge from the FDI project, lessening its overall impact on growth. However, FDI can provide much needed public goods, services and jobs, which may have a greater multiplier effect during the post conflict reconstruction period (Bunte et al., 2018). Nevertheless, Paczynska (2016) and Castejada (2009) question the ability for these benefits to ‘trickle-down’ to local communities.

Chapter 1 of this thesis finds that FDI has a positive and significant impact to economic growth in post conflict countries, which is larger than aid. This aligns with Suhrke et al.’s finding that there may be an over emphasis on aid inflows for peacebuilding processes. The significance of FDI also aligns with Collier et al.’s (2003) recommendations to attract foreign investors into post conflict environments. However, not all FDI is equally impactful. The fact that FDI inflows as measured by UNCTAD are highest per capita in the tertiary sector suggests it is primarily non-extractive sectors producing economic growth. In addition, evidence from Liberia suggests that it is not large FDI projects that are effectively transferring knowledge and skills to local markets, but instead, re-pat and foreign-owned SMEs.

The World Bank finds that formal SMEs contribute to 40 percent of national GDP in emerging markets.¹ This means that research into post conflict SMEs growth, to better understand where support and resources are most effective, is key to economic development and peacebuilding. Past literature has focused on structural barriers to business growth in post conflict settings. Collier (2008), Ganson & Wenmann (2016), Ford (2014), and Bray (2009) provide macro analysis on the effects that weak institutions, poor infrastructure, and systematic corruption in post conflict markets have on businesses. Research conducted for this thesis in Liberia shows that most private sector stakeholders, especially SMEs, have little ability to alter these structural constraints or adapt their conduct to survive.

Existing literature shows that conflict alters the conduct of firms and how the private sector operates. However, the liberal peacebuilding literature puts a stronger emphasis on the structural components of markets and the influence that large organizations, like MNCs, can have. Collier (2015) suggests that economic growth for post conflict countries is driven by large

¹ <https://www.worldbank.org/en/topic/sme/finance>

organizations. Other researchers, motivated by a ‘bottom-up’ approach to peacebuilding, describe SMEs as the main contributors to sustainable peace and growth despite their lack of consideration in the liberal-based work (Newman, 2009, Berdal and Mousavizadeh, 2010). This question is difficult to resolve given the scarcity of literature on this aspect of the private sector in post conflict states, especially in Africa.

Demircuc-Kunt et al. (2008) find that in a post conflict state, businesses owned by wealthier households are more likely to survive, showing the importance of access to finance. Collier & Duponchel (2012) find that the loss of human capital due to the education gap during a conflict has long term negative effects on private sector development. In addition, foreign-owned or influenced businesses, which have higher productivity than domestic businesses, are negatively impacted in the post conflict era due to anti-foreign sentiments and looting (Klapper et al., 2013). An important resource for business growth is social capital, including networks and co-operation. McMillan & Woodruff (2000) find that after a conflict, networks can help offset the effects of poor institutions. However, Efendic et al. (2015) finds that many networks are damaged by a conflict and that a lack of trust in institutions quells business aspirations. Unfortunately, there is little research that analyses the impacts of these four primary changes in conduct on post conflict business growth reconstruction. Furthermore, in least developed countries that are not post conflict, including many African countries, the effects of these resources on business growth may be the same in post conflict contexts. Chapter 2 of this thesis begins to fill this gap by analysing the relationships between formal business growth and access to finance, training, foreign ownership, and networks in post conflict and non-post conflict Africa.

Bray (2009) explores the different types of private sector entrepreneurs in developing country contexts, including local, re-pats, small foreign, and multinational owned businesses. Bray suggests that these entrepreneurs change their business conduct according to their different backgrounds. Chapter 3 of this thesis uses Liberia as a qualitative case study to focus primarily on the conduct of these different types of businesses and how they manage to navigate the post conflict environment. This provides evidence on how certain types of businesses can grow after conflict and determine the main resource needed to generate growth for all stakeholders in the private sector. Separating these different types of businesses provides a clearer distinction in the effects of the conflict on the private sector and modifications that can be made in business conduct to strengthen growth. This enables a more precise analysis of whether ‘trickle-down’ effects to local communities are occurring in post conflict contexts, especially from different types of foreign influences.

The Structure-Conduct-Performance (SCP) Paradigm provides a framework for the entirety of this thesis as it can effectively isolate the conduct of private sector stakeholders in post conflict states. It also provides an opportunity to include both liberal and non-liberal peacebuilding analysis throughout the thesis. As noted above, although the structure of markets is significantly impacted by a conflict, business owners and investors, particularly small business owners, can do little to speed up that reconstruction. This is because structural market reforms like improving the policy environment, building infrastructure, and ensuring political stability can take decades to fully implement. In contrast, changes to private sector conduct may be more effective and timelier in increasing private sector development throughout the post conflict era. The next section summarises the main findings of this thesis on conduct and private sector performance in post conflict settings.

Section 2.0: Main Findings

Chapter 1 of this thesis analyses the impact of capital inflows, both FDI and aid, on post conflict economic growth. As discussed in Section 1.0, this chapter helps determine whether FDI contributes to growth, even in these complex post conflict environments, and whether the effects differ from aid inflows. Using a panel Structural Vector Autoregressive (SVAR) model with country-level data, Chapter 1 finds that lagged FDI per capita inflows have a significant and positive impact on GDP growth within two decades after a conflict has ended. This result suggests that FDI in a post conflict developing country may not have the same market-stealing effect as in non-post conflict countries and provides a significant capital boost after conflict destruction. However, it is important to note that this model is unable to determine whether FDI widens inequality or effectively transfers skills and technology to domestic businesses (this is further analysed in Chapter 3).

In addition, Chapter 1's results show that aid inflows have a significant positive impact on economic growth in the post conflict era. However, the results also show that the impact of FDI on economic growth is significantly larger. This means that an increase in \$1 of FDI per capita has a larger multiplier effect on economic growth than \$1 of aid per capita. This generates modest evidence against Hoeffler and Collier's conclusion on the need for large aid inflows in post conflict environments. Due to the high risk of investing into a post conflict country, FDI inflows are currently significantly lower than aid. For example, between 1970 and 2016 in Africa, the average FDI per capita in post conflict countries is \$3.8, while aid per capita is \$50.²

² UNCTAD FDI Data

Lastly, variations of the SVAR model in Chapter 1 find that the effect of FDI per capita on economic growth is most significant on the African continent. This is one of the reasons why the latter chapters of this thesis focus on post conflict Africa. This paper also finds that FDI's impact on economic growth is largest between 5 and 10 years after a conflict has ended. This suggests that capital investment has the biggest effect once the country has a baseline of governance and systems in place in its transition out of conflict.

As mentioned in Section 1.0, the relationship between business conduct and performance in post conflict contexts requires further investigation. Chapter 2 of this thesis uses WES data from across Africa to determine the relationship between four business resources – finance, training, foreign ownership, and networks – and growth. These associations are compared for businesses that are operating in and out of post conflict environments. Chapter 2 provides suggestions on how conduct directly effects business performance in post conflict contexts based on the existing literature and whether these effects differ in non-post conflict African markets.

The regressions in Chapter 2 find that access to finance has a positive and significant relation with firm growth, which is the same in both environments. However, access to finance only becomes significant in the post conflict environment a decade after a conflict ended. This may suggest that finance for businesses only fosters growth when the basic infrastructure, stability and systems are in place, which aligns with the biggest impact of FDI on growth timing in Chapter 1. The model also shows that conducting employee training has a positive and significant association with firm growth and that the magnitude of this effect is twice as large in post conflict environments. This aligns with Collier & Duponchel's (2012) conclusions about the negative long-term effects of conflict on the private sector from the dearth of human capital. In addition, Chapter 2 finds that foreign ownership in an African company is positively associated with growth in non-post conflict manufacturing companies. There is no association in post conflict businesses, which may be a result of anti-foreign sentiment after conflict (Klapper et al., 2013) and/or a lack of knowledge transfers due to poor human capital (Blomstrom & Kokko, 2002). Lastly, Chapter 2 suggests that business networks are not associated with growth in post conflict environments but have a positive and significant association with non-post conflict business performance. This finding, combined with Efendic et al.'s (2015) research, suggests that business networks in these post conflict markets are not as effective in boosting business growth and opportunities.

Chapter 2 finds that the sector that differs most between post conflict and non-post conflicts markets in Africa is food processing and manufacturing. The model finds that

performance of food businesses in non-post conflict markets is positively associated with foreign ownership and business networks, while neither are associated with a performance boost in post conflict markets. Since many countries after a conflict suffer from high food prices, food insecurity and import dependency, the food sector's conduct and performance is particularly important for reconstruction and peacebuilding (discussed more in Section 3).

The final chapter of this thesis uses a case study where qualitative data from over 50 private sector stakeholders in Liberia was collected. Liberia was chosen as a case study because the private sector has struggled to recover after the Civil Wars ending in 2003, meaning it provides an example of ineffective economic reconstruction. In addition, Liberian businesses are clearly demarcated along the business types described in Bray's (2009) work. Within the private sector there are domestic, re-pat, foreign, and multinational businesses. Due to specific negative citizenship laws in Liberia, foreign, domestic and repat businesses are clearly defined, compared to in Sierra Leone and other nations where ownership can be mixed. Identifying the key changes in conduct that successful businesses have made provides evidence on how to better develop domestic businesses. This qualitative evidence also provides a deeper understanding of the correlational findings from Chapter 2.

Starting with the SCP framework, the first component analysed is the structural makeup of the Liberian private sector and how conflict may have affected it. The most frequently cited structural barrier is poor infrastructure, particularly roads and electrical grids. Many interviewees noted that much infrastructure was destroyed throughout the wars and thus, there has been more to rebuild than other nations. Weak institutions and poor regulations are another commonly cited issue for the private sector, where many businesses are unable to export, import, receive government support, and effectively use law systems. In addition, the government, with debts from the wars, poor infrastructure, and weak institutions, has been unable to effectively manage additional negative shocks, like the Ebola Crisis and the UNMIL exit. Lastly, widespread corruption, which is thought to have been embedded in social norms during the lawless times of conflict, is another common barrier for business growth in Liberia. Although these structural challenges may be worse in a post conflict setting, they are common across the African continent. In addition, numerous entrepreneurs from all the different types of businesses noted that there is little that the private sector, particularly SMEs, can do to make substantial changes to this structure. Instead, many businesses alter their conduct to navigate these barriers and overcome additional lingering conflict legacies.

The evidence shows that conflict significantly affected the conduct of firms. The first is that the loss of savings and the perceived risk of investment has had a long-term effect on

domestic entrepreneurs. The lingering fear of losing investment means that many entrepreneurs do not have ambitions to grow their business by using their savings. Further, the high risk perceived by local banks means that access to finance remains expensive and requires double to triple collateral and unsustainable payback schedules. Re-pat and foreign entrepreneurs navigate this environment by accessing finance outside of the country and through their international suppliers. This helps these businesses grow much more successfully in the Liberian market.

The loss of human capital during the war also has had effects on the conduct of firms today in Liberia. The 15 years of civil war left a critical education and professional experience gap in the country. This means that entrepreneurs require significant business training, and that policy should focus on increasing technical and management training to generate more local skilled labour and middle managers. The interviewees noted that the conflict also developed a mindset that entrepreneurship is used for survival and that good and stable work is with the government. There are few programs focusing on entrepreneurship and the creative thinking required to build innovative solutions. Re-pat and foreign entrepreneurs have altered their businesses by using their business education from outside of the country to build competitive and innovative business models. The evidence shows that these two types of entrepreneurs are also the most effective at transferring skills and knowledge through ‘hands-on,’ ‘on-the-job’ training to local employees. Re-pats can be even more effective as they tend to be slightly better at building trust and understanding culture.

Finally, the evidence collected for Chapter 3 shows that the civil war impacted the level of trust within the local business community, which is negatively affecting private sector performance. This aligns further with the “bottom-up” approach to peacebuilding that is often neglected by programming (Efendic et al., 2015). The conflict instilled a “war-like mentality” where all other businesses are competitors and cannot be trusted. This history has also reduced trust in local institutions and communities, meaning that organizations like agricultural co-ops have been less effective in Liberia than places like Ghana. Since many Liberian firms are small, coming together to help develop better economies of scale is critical for increasing performance. Foreign businesses, particularly within the Lebanese community, build extremely strong networks that they harness to ensure their business succeeds. The challenging business environment has generated a comradery within this community to work together to tackle many of these barriers. Re-pat businesses have a similar community but work together to a lesser extent. They often collaborate for exporting, where they will work together to share the burden of fees and regulatory costs associated with exporting. This shows that building domestic trust

and networks is a key component of private sector reconstruction, which is often neglected by the liberal peacebuilding mandate.

There has been a substantial increase in foreign investment activity across Africa over the past 5 years, especially from alternative financiers like venture capital, impact investing and angel investing. There is potential for these foreign actors to fill the gaps described above in Liberia. The evidence shows that FDI projects do not often engage in local supply chains and the lack of trust within the local community hinders knowledge and technology transfers. This aligns with the researchers questioning the ‘trickle-down’ effect of FDI projects and suggests that working with smaller businesses may be more effective even if it takes longer.

Section 3.0: Policy and Peacebuilding Program Implications

The findings from this thesis, although academic in nature, produce suggestions for future policy and developmental program implementation in post conflict contexts. This research does not discredit the importance and necessity of liberal peacebuilding programs after a conflict occurs. However, these findings do suggest that an increased emphasis on private sector development is beneficial to this process. Presently, a large portion of post conflict economic policies are focused on bettering the overall structure of the market and not focused on the conduct of firms. While improving structure is important and necessary, but it is also extremely costly and slow. Changes in the conduct of firms, including access to finance, employee training (especially in middle management and creative/innovation skills), bettering foreign ownership and investment relations, and building stronger local networks and trust, are also substantial factors in improving private sector performance.

Chapter 1 of this thesis provides evidence that FDI inflows have a significant positive impact on economic growth that is higher per dollar than aid inflows, particularly five years after a conflict and in Africa. This means that policy should focus on improving investment attractiveness after five years of post conflict rebuilding, especially in tertiary sectors. In addition, Chapter 2 and 3 suggest that the transfer of skills and technology through FDI is more challenging in these environments due to the significant education and experience gap caused by conflict. This is also seen from the evidence that employee training effect on firm performance is double in magnitude in post conflict environments. Evidence from Liberia suggests that foreign owners who provide long-term “hands-on training” to their employees see the best results in terms of transfers. Thus, developmental institutions who are implementing training programs will be more successful if they move away from short-term classroom type learning to more integrative learning within the workplace. This also holds true for large multi-national

corporations who are working in these environments, where the evidence suggests that transfers occur slowly if at all.

Currently, many peacebuilding programs focus on increasing human capital. This thesis shows that two areas of importance for private sector development should be in entrepreneurship and trust and networking building. Within entrepreneurship, there needs to be education focused on the opportunities for business growth, while increasing entrepreneurs' ambition. This is because, in many of these countries, entrepreneurship is seen merely as a means of survival, while government and/or NGO work is viewed as a successful career. This change in perception needs to begin through the secondary and tertiary education curriculum, presenting entrepreneurship as a real opportunity for youth to be successful. In addition, programs that work on developing trust and strong networks within business communities have the potential to increase private sector performance, particularly when increasing economies of scale for small businesses.

The interesting divergence in the food sector for post conflict countries found in Chapter 2 shows that programs in agri-processing in post conflict countries would benefit from alterations in their conduct regarding networks and foreign ownership. Thus, programs in this sector should include components focused on building strong networks and trust amongst suppliers and other processors. It also suggests that these programs should include training with foreign investors on how to build stronger and positive relations with domestic businesses.

Access to finance remains a problem for all African countries, and not just post conflict countries. However, the data does show that post conflict countries are having a more challenging time attracting alternative investors like angels, venture capital, and private impact funds. Providing more assistance in business building, like developing acceleration and investment readiness programs, may help to bring in more alternative capital. In addition, Chapter 3 shows the vast challenge faced by SMEs in accessing finance from local banks. Policies and programs that support more reasonable SME lending would have a significant positive impact on private sector performance. Using alternative methods to developing credit scores, like artificial intelligence or financial literacy training, are potential solutions to making lending easier for local banks.

Section 4.0: Future Research

Throughout this thesis, I have mentioned numerous areas where additional research needs to be conducted. This is primarily due to a lack of good quality data related to the private sector in post conflict countries. A key limitation is the inability to infer causal relations within

the SCP framework used here. Outside of qualitative research, it is challenging to delve deeper into the causal impact of a conflict on future private sector performance. As a conflict is unpredictable and generally stops all research and data collection from occurring for long periods of time, it is challenging to develop robust research in this space. However, this thesis provides a strong baseline on post conflict private sector performance to build upon in the future.

Programs such as the UCDP provide high quality and detailed data on armed conflict at the subnational level. However, consistent, high-quality, and longitudinal firm-level data is often not available at this level. In most data collection, including the WES, firms are often only surveyed in large cities plus one or two rural areas. However, there are instances of conflict where it only occurs in a specific region, like Casamance in Senegal. If there was more data on firms at this level, one could use spatial variation in firms' exposure to conflict to produce a robust causal estimate of the impact of intensity, length, and type of conflict on firm performance in the post conflict era. This could also be used to better analyse the structural changes caused directly by the conflict and how they affect private sector performance. Presently, it is difficult to determine how much of the structural challenges in the market are truly caused by the conflict.

An issue across Africa is the lack of data on firm resources, performance, and governance in both the formal and informal sector. To build on the findings from Chapter 2, it would be informative to run several large-scale RCT studies with formal and informal MSMEs across post conflict and non-post conflict regions. Within these trials, one could test interventions in access to finance, employee management and technical training, and business networks. Identifying the impact of foreign ownership is challenging as any foreign investor will not choose their investments randomly and instead base it on past and predicted future performance of each firm, leading to selection bias. This type of study would provide causal findings on how changes in conduct impact firm performance and whether these effects are significantly different in post conflict contexts.

Lastly, within academia there is limited research on alternative foreign investors entering African post conflict markets. As mentioned in Chapter 3, this is primarily angel, venture capital, and impact investors. It would also be helpful to determine the effectiveness of using different types of financial instruments like revenue-sharing, equity, asset-financing, and trade finance. As all these actors are in the private sector, little data is publicly available to help us understand the impacts that these types of stakeholders have on private sector reconstruction in post conflict regions. It is possible that the 'trickle-down' effect better occurs through these investment mechanisms compared to FDI. Chapter 3 suggests that these alternative types of capital, which often includes extensive training and hands-on learning, may be more effective in post conflict

S. Burns
Conclusion

settings. However, more research needs to be conducted in this area in collaboration with these private sector actors.

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