

THE PRICE OF EMPIRE:
BRITAIN'S MILITARY COSTS DURING THE SEVEN YEARS' WAR

A Thesis
by
JEREMY LAND

Submitted to the Graduate School
Appalachian State University
in partial fulfillment of the requirements for the degree of
MASTER OF ARTS

May 2010
Department of History

THE PRICE OF EMPIRE:
BRITAIN'S MILITARY COSTS DURING THE SEVEN YEARS' WAR

A Thesis
by
JEREMY LAND
May 2010

APPROVED BY:

Jari Eloranta
Chairperson, Thesis Committee

Judkin Browning
Member, Thesis Committee

Michael Turner
Member, Thesis Committee

Lucinda McCray Beier
Chairperson, Department of History

Edelma D. Huntley
Dean, Research and Graduate Studies

Copyright by Jeremy Land 2010
All Rights Reserved

ABSTRACT

PRICE OF EMPIRE: BRITAIN'S MILITARY COSTS DURING THE SEVEN YEARS' WAR (May 2010)

Jeremy Land, B.S., Appalachian State University

M.A., Appalachian State University

Thesis Chairperson: Dr. Jari Eloranta

This thesis examines difficult problems faced by all sovereign nations at one point or another: military expenditures and public debt. With current debt and military spending issues commanding attention from nearly all political entities, engaging in a discussion of historical events with similar situations and problems can be useful in a variety of ways. This work is an attempt to participate in the debate on an aspect of history often overlooked by historians. Though there is a large amount of scholarship on recent military spending and debt crises, little exists that examines the Seven Years' War and its impact on Britain's debt. The thesis argues that the war left Britain with historically high debt and a much larger empire that was difficult to consolidate.

Further, this work examines the reasons for the high cost of the war. Though there are numerous reasons for it, some had more impact than others. Most wars of the period saw heavy action on the continent of Europe, and the Seven Years' War was no exception. However, the North American continent became a major theater of conflict for the first time in its history, funded more directly by the British government. Because of this addition, transportation costs became a more pronounced issue than in previous wars. Beyond the

obvious naval aspect, the frontier of North America was dense and difficult to travel; forcing contingents of soldiers to take more time and spend large sums of money traveling.

Furthermore, Native Americans were given gifts and military supplies by British officials in an effort to find support in their war against France. All these factors, and many more, extended Britain's national debt to historically high levels. Because of that debt, British politicians looked to recover those monies spent on the war by taxing their colonies throughout the globe. Unfortunately, the American colonies were not happy with this development and it led to their rebellion and subsequent independence. Though the Seven Years' War is not the only cause of the American War of Independence, it contributed directly to the onset of the rebellion.

ACKNOWLEDGMENTS

To imagine that I could give recognition and credit to every single person who has influenced this work and my career would be foolish. Yet, I must thank a few people and organizations by name. First of all I have to thank my entire family, but in particular I want to thank my parents, James and Sharon Land. Dad, you are my role model; without you I would be lost. To be half the man you are would be to achieve greatness. Mom, thank you for your support and love throughout my entire life. To my grandparents, Bob and Brenda Bridges: thank you for all your support, both emotional and financial. Both of you have kept me on the path by keeping my head grounded. Special thanks are due to my grandmother, Phyllis Land, and her absolute devotion to and love for her grandson. I have to thank the Office of Student Research, Graduate Student Senate and the Omicron-Phi Chapter of Phi Alpha Theta for their generous donations to help me present my research at several conferences. Thanks to Drs. David and Karen Reid for their unending support and advice (both personal and professional). Also, I would like to thank Dr. James Goff and Dr. Lisa Holliday for serving as excellent directors of the graduate program during my tenure here at Appalachian State. The entire history department deserves my gratitude for their support and advice throughout the research and writing of this work. Thanks go to Mr. Brian Bookout for persuading me to attend Appalachian. Finally, I thank my committee, Dr. Judkin Browning and Dr. Michael Turner, for their edits and comments. But most of all I would like to thank my mentor and committee chair, Dr. Jari Eloranta, for continually pushing me to achieve more and supporting me. All will never be forgotten.

TABLE OF CONTENTS

Abstract.....	iv
Acknowledgments.....	vi
Introduction.....	1
I. Paying the Price: Britain’s National Debt Crisis.....	16
Research on Fiscal Aspects of Conflicts, Public Debt and the Seven Years’ War.....	19
Military Spending and the Public Debt.....	28
British Debates about the Public Debt and the Seven Years’ War.....	35
Conclusions.....	41
II. Transportation.....	43
Naval Transportation: The British Navy and the War of Austrian Succession.....	43
Private Merchants.....	46
The Royal Navy.....	47
Problems with Shipping.....	48
Transportation on the Frontier: Road Construction.....	50
Road Maps.....	54
Forts.....	55
Conclusions.....	58
III. Price of Loyalty: Native Americans and British Tactical Changes.....	59
The Economic Impact of the Native Americans.....	60

The Cost of Operating a Frontier War.....	66
Conclusion.....	72
Bibliography.....	76
Vita.....	85

INTRODUCTION

During the 18th century, the British Empire spread across the globe. Britain's wealthiest colonies during the 1700s were the thirteen located on the Atlantic coast of North America. The colonies were occupied by European settlers and allowed to operate nearly independently from the Crown. However, the inhabitants were extremely aggressive in expanding their own territory. At the same time, the French Empire stretched from Louisiana to the Hudson Bay, including Canada and areas west of the Appalachian Mountains. The French were mainly fur traders and trappers and maintained trade relationships with the Native Americans in both zones of influence. The Appalachian Mountains served as a natural barrier between British and French interests, but the British consistently pushed the boundary and encroached on French territory, creating a political, diplomatic and military crisis.

The crisis erupted when the colonies attempted to settle the issue by maintaining that the lands in Ohio territory belonged to the British Empire. As such, British colonists had the right to settle the land. The French had already moved into the region and established good working relationships with many of the Native American tribes living there. They established military outposts and forts all across the region. As a result, the French refused to recognize British claims to the area. A young Virginian, George Washington, was sent on a military expedition in the summer of 1754 to coerce the French into accepting the British land claims. This expedition was decisively defeated. Consequently, the colonies called on the British government to intervene. In response to the colonists' pleas, Parliament sent General Edward

Braddock to confront the French forces in the disputed territory. The French and their Indian allies humiliated the British force, killing Braddock in the process.¹

All the myths and legends that surround Braddock's defeat notwithstanding, the result remained the same: France and Britain were at war. Both states had large empires, which meant that the war was fought on a global scale. North America became perhaps the most hotly contested region during the war, both on the continent and on the oceans. The war brought the two largest navies in the world into a contest to decide the fate of North America and determine who would rule the oceans for the next century and a half. Furthermore, the war would create the opportunities and situations that would lead to the American Revolution. Though Britain defeated France and removed her from North America, the British Empire paid for every inch of soil it conquered. Thus, the high military spending associated with the war nearly doubled Britain's debt compared to its pre-war level. Because of the new debt, the British government had to maximize its income. Soon, it looked to the American colonists for extra revenue to service the debt incurred, in many politicians' minds, on behalf of the American colonies. As nearly every student in school in the United States is taught, the United States was formed in response to these and many more grievances towards the British government.

This thesis does not recount the Seven Years' War in detail.² Rather, it discusses what was different about the Seven Years' War and why it imposed much higher costs than

¹ Walter R. Borneman, *The French and Indian War: Deciding the Fate of North America* (New York: HarperCollins Publishers, 2006), 20-26.

² For thorough examinations of the Seven Years' War, see Fred Anderson, *Crucible of War* (New York: Alfred A. Knopf, 2000) and Borneman, *The French and Indian War*. For historical perspectives on the war's effects on France, see Lee Kennett, *The French Armies in the Seven Years' War: A Study in Military Organization and Administration* (Durham, North Carolina: Duke University Press, 1967) and James C. Riley, *The Seven Years' War and the Old Regime in France: The Economic and Financial Toll* (Princeton: Princeton University Press, 1986). For an examination of the war on the continent of Europe, see Franz A. J. Szabo, *The Seven Years' War in Europe, 1756-1763* (London: Pearson-Longman, 2008).

previous wars. It examines both secondary and primary sources to develop a central argument that it was the addition of North America as the main focus for Britain's strategy that was the main cause of the high levels of military spending. Furthermore, primary sources are used to explain what in particular Britain was spending its money on in North America. Therefore, the thesis contains three distinct chapters not including the introduction and conclusion.

The first chapter examines the overall impact of the war's spending levels on the national debt of Britain. Essentially, the British people and government were concerned with the drastic increases in the national debt before the war, and the war only compounded those fears. Thus, the chapter focuses on theories that help explain how public finances fund a war of this caliber. More secondary research is included in this chapter, explaining the theories and issues in studying national debt in different periods of history. It concludes with a discussion of the methods and ploys used by the government to gather the funds needed to help pay for the debt (and of course the interest on that debt) before the American War of Independence.

The next chapter focuses upon the first major cost of the war and how that affected military spending in Britain. Naval transportation was clearly the most important aspect of the war in North America. Without it, the soldiers on the frontier could not possibly receive the goods they needed to prosecute a war. Using both primary and secondary sources, the chapter examines the overall costs involved in shipping and protecting those goods on the way to North America. Once the goods arrived in the colonies, another and much more difficult trip had to be taken to deliver the matériel to the armies on the frontier. Being a much undeveloped region, the interior of North America was extremely difficult to navigate.

Therefore, many new roads and trails had to be built before the goods could reach their destination. Furthermore, it was necessary to appease Native American tribes before movements through various tribal lands could be attempted. Thus, the chapter examines the different costs associated with transporting goods to North America.

The final chapter examines the economic impact – both the explicit and implicit costs – of dealing with the Native American tribes that dominated the frontier. As armies travelled through the frontier, the British frequently, if not always, appealed to Indian tribes for assistance. Each tribe could change allegiances or provide warriors and scouts to both sides in the same campaign. Thus, it was necessary for the British as well as the French to provide economic incentives in the form of “gifts” and guns in order to garner military support. In some cases, Europeans gave gifts to a particular tribe just to insure its neutrality in a coming battle or campaign. As seen quite often throughout the war, tribes that supported one side for most of the war (the Cherokee tribe is one example) would switch sides or rebel on their own. So, constant supplies of gifts and money were necessary to keep the Native Americans content. Additionally, the frontier Indians, as well as the frontier itself, forced the British army to change its tactics. As smaller units became necessary for quicker and more efficient travel through the frontier, more officers were needed to lead these small contingents, and officers had significantly higher salaries than enlisted men. Therefore, the frontier, Native Americans and tactical changes increased military spending to levels never seen before on the North American continent.

There are several primary sources available for the discussion of this topic. General Jeffrey Amherst’s collection of papers from his time spent as commander of British forces in North America during the war is an essential source. Among other things, the Amherst

papers provide financial figures exemplifying the high cost of prosecuting war on the frontier.³ Along with the Amherst collection, Colonel Henry Bouquet's personal papers also provide valuable evidence for the argument. These two collections of papers allow for a greater examination of the difficulties of making war on the frontier at the micro-level. Such evidence facilitates an appreciation of the overall effect that frontier warfare had upon the British Empire, specifically the national debt.

Other primary sources reveal much about the tactical changes the British army made to succeed on the frontier. William Rogers' journal from his time spent on the frontier provides the major source of information regarding new styles of warfare. He was assigned to create a unit of soldiers that were to be, in effect, an early form of special forces. Rogers was to train the men in a hybrid of Native American and British warfare. Also, Stanley Pargellis compiled a collection of documents, mainly military in nature, from the Duke of Cumberland's collection of resources he kept in his possession from his time spent as an officer in the military and adviser to the Crown. These documents from the Seven Years' War provide evidence to examine and explain the military's view of the resources needed to pursue Britain's goals and agendas effectively.

The primary sources are the major sources of information, but secondary sources are in abundance and cannot be ignored. As stated before, the Seven Years' War has been heavily studied and researched. Yet, the military cost of the war has rarely been addressed. This thesis investigates the economic factors that caused military powers, such as England, to experience substantial increases in military spending during a war that saw fewer pitched

³ Edith Mays ed., *Amherst Papers, 1756-1763: The Southern Sector: Dispatches from South Carolina, Virginia and His Majesty's Superintendent of Indian Affairs* (Bowie, Maryland: Heritage Books, Inc. 1999).

battles and smaller numbers of soldiers involved than other wars. In effect, the work remains a military study at the micro-level.

One of the most important approaches to military history was formulated by Niall Ferguson in *The Cash Nexus*. Ferguson argues that money has always been the determining factor in warfare throughout history. He explains that governments' military ambitions and needs always outweigh the finances that governments have in their treasuries. Ferguson contends, "the history of finance is largely the history of attempts to close that gap."⁴ In Ferguson's mind, finance directly affects the outcome of wars and battles, but those same wars and battles directly affect the financial market and the development of credit. In essence, more money usually equals more military victories. But Ferguson focuses on the 20th century, and few historians have applied his arguments and theories to 18th century warfare.

Newer research like Ferguson's suggests that military spending has a larger influence on public debt than any other factor. Until recently, many historians used narratives and political causality to explain wars and battles, mentioning very little of the impact that financial resources have on militaries across the globe. Fortunately, recent research has shed some light on the subject as it is sorely needed. In *Castles, Battles and Bombs*, Jurgen Brauer and Hubert Van Tuyll take the argument further by suggesting that economic resources and power always determine how militaries operate and affects the outcomes of wars and conflicts. Brauer and Tuyll argue that economic principles can and must be applied in order to fully understand the complex nature of military history.⁵

⁴ Niall Ferguson, *The Cash Nexus: Money and Power in the Modern World, 1700-2000* (New York: Basic Books, 2001), 23.

⁵ Jurgen Brauer and Hubert Van Tuyll, *Castles, Battles and Bombs: How Economics Explains Military History* (Chicago: The University of Chicago Press, 2008), 6.

Interestingly, many were influenced by John Brewer's *The Sinews of Power*, in which he examines Britain's governmental structure and the rise of the fiscal-military state. He argues that the British government during the 18th century was not the weak, decentralized version so often championed by historians. Instead, the British government dramatically increased in size and power. Supporting its growth were the taxation and economic policies capable of providing high levels of military spending. Furthermore, the state enacted radical increases in taxation and developed an efficient public debt system. As a result, the fiscal-military state became the largest factor in the British economy.⁶ This thesis locates itself within this theoretical framework that Brauer, Tuyl, Ferguson and many others have formulated.⁷

There is a large amount of scholarly work on the Seven Years' War written from several different perspectives. In 1884, Francis Parkman wrote an account of the war entitled *Montcalm and Wolfe*. This romanticized the Battle of Quebec as the climax of the war and glorified Wolfe's role in the victory.⁸ Yet, the war was much more than just the Battle of Quebec. In fact, historians across the 20th and early 21st century have attempted to counter Parkman's portrayal. Fred Anderson is one such writer. He has challenged the traditional view that the war should be regarded as primarily a conflict between France and England. This suggests that the war was neither won nor ended with the Battle of Quebec.

Fred Anderson has written several works on the Seven Years' War and its effects on the North American continent. His work, *The Crucible of War*, is perhaps the most complete and critically respected book on the war to date. He argues that the war led to the

⁶ John Brewer, *The Sinews of Power: War, Money and the English State, 1688-1783* (Cambridge, Massachusetts: Harvard University Press, 1988).

⁷ For more information regarding current military spending theory see: Jari Eloranta, *Military Spending*. EH-Net. www.eh-net.org.

⁸ Francis Parkman, *Montcalm and Wolfe* (Boston: Little, Brown and Company, 1897).

independence of the thirteen colonies but did not necessarily make the American Revolution inevitable. Anderson contends that American colonists' bitter hatred for the Native Americans increased following the war, and that Britain's efforts to stop westward expansion to keep settlers and Indians separate further enraged the colonists. But Anderson argues that, initially, the American Independence movement was only an attempt to change the imperial relationship between the colonies that Britain weakened following the end of the Seven Years' War. American colonists did not imagine that following the end of the Seven Years' War they would fight the very same king that had helped them to defeat the French on the North American continent.⁹

Anderson continues that the war is the single most important event in the 18th century for the entire North American continent. Although the Seven Years' War is more important than the American Revolution to the rest of the world, it has been treated with a type of mild neglect as a precursor to the American Revolution, yet Anderson attempts to dispel that myth. Although it is a significant event in American history, it is much more significant to the history of Europe and the Atlantic world in general. Rather than the Seven Years' War being a backdrop for the American Revolution, he contends that the American Revolution is a direct consequence of the defeat of France. He makes it clear that American colonists and British ministers alike did not foresee the coming of the Revolution. Thus, during the Seven Years' War, the British Americans held a strong belief that England was home and that the enemies were France and its Indian allies. Following the war, Americans no longer had to contend with French intrusions, just those of the Native Americans. As a result, Britain alienated its own people by eliminating the common enemy, France, which had held the two

⁹Anderson, *The Crucible of War*, xx-xxi. Also found in Fred Anderson, *The War That Made America* (New York: Viking, 2005).

in close companionship. Anderson's work has been influential, but there is a serious shortcoming in that he limits the effects that economics had upon the rise to Revolution.

Anderson's perception of the relationship between the Seven Years' War and the American Revolution is unique, but his argument that the Seven Years' War had at least some effect on the American Revolution is far from unique. Many scholars have argued that the Seven Years' War and the American Revolution cannot be separated when discussing reasons for the colonies' uprising. J.R. Pole, Harrison Bird, A.G. Bradley and Herbert Osgood have all remarked upon the direct relationship between the two wars. Though they differ in detail, all argue that without the Seven Years' War, there would be no American Independence. They all point to the results of the war, especially the British attempts to stem westward expansion and recoup their financial losses, as the driving force behind the American disillusionment with British policies.¹⁰

A different perspective is that of Howard Peckham. In his work on the wars on the North American continent during the colonial period, he contends that American military history began with the raising of militias to protect colonists from Native Americans and from French intrusion (the French raised militias and formed alliances with the Indians with the same objective). Peckham argues that the American colonists, through the experiences of the colonial wars, developed military ideals quite different from those of their European counterparts. The North American continent was relatively unaffected, barring a few naval engagements, by the Thirty Years' War (1618-1648) and the methods of warfare that were established in Europe. Colonists dealt solely with the Native Americans until King William's

¹⁰ J.R. Pole, *Foundations of American Independence, 1763-1815* (Indianapolis: The Bobbs-Merrill Company Inc., 1972); Harrison Bird, *Battle for a Continent* (New York: Oxford University Press, 1965); A.G. Bradley, *The Fight with France for North America* (New York: Arno Press and The New York Times, 1971) and Herbert Osgood, *The American Colonies in the Eighteenth Century, Volumes 1-4* (Gloucester, Massachusetts: Peter Smith, 1958).

War, which began in 1689. In that war, Europeans, along with their Indian allies, waged war on each other as dictated by the politics of the European continent. North America now became a battlefield in the wars for empire. During these wars, the colonists developed an independent style of fighting using militia instead of regular soldiers. They were much more willing than their European counterparts to adapt their tactics to the frontier and the enemy and less likely to sit through a siege and winter encampments. Consequently, the American colonists developed a new political philosophy dependent upon the militia men who would defend their homes rather than practice war as a career since the frontier offered more opportunity than military life.

Peckham sees the post-1689 period as one of escalation and seemingly useless fighting, culminating in the Seven Years' War that ended the contest between the French and British for ascendancy in North America. From King William's War with barely 2,000 men in arms on both sides to the British government's raising of 25,000 men for regular service in the Seven Years' War, he shows that each successive war marked an escalation in both size and severity. War in North America tended to be on a more modest scale, but it was much more brutal and savage. There was no guarantee that if a soldier surrendered honorably he would live to see a prison, much less home. American militias were therefore averse to regular service for very good reasons. However, the Seven Years' War drastically increased the numbers of men and supplies needed for the frontier war.¹¹

Walter R. Borneman emphasizes that the Seven Years' War resulted in Britain's destruction of the French empire in North America. This eased the anxiety previously associated with the possibility of French attack on the frontier. Now American colonists had

¹¹ Howard H. Peckham, *The Colonial Wars, 1689-1762* (Chicago: The University of Chicago Press, 1964), 120-38.

only the Native Americans to be concerned about, and the war had drastically reduced the ferocity and frequency of Indian attacks. Therefore, when Britain placed heavier taxes on American colonists and created buffer zones to stop westward expansion, the colonies revolted against the Crown because, in the colonists' eyes, there was no more need for Britain's arbitrary boundaries.¹²

An understanding of Britain's military costs during the Seven Years' War is also facilitated by the work of Douglas Edward Leach. In *Roots of Conflict*, he explores the motivations, events and problems that created a divide between the colonists and British regular forces sent to fight in North America. Leach argues that the period from 1677-1763 saw a developing rift between colonial militia and governments on one side and, on the other, the British army and naval forces that were needed to protect the border with France and the Native Americans. He gives examples of cooperation and confrontations between the colonists and regular British forces.¹³ What is clear is that the conflict between British forces and American colonists continued to develop as the colonial period progressed. But one notable gap in Leach's analysis is that he ignores the economic issues that had a bearing on the Seven Years' War.

More importance is given to economic issues in Richard Middleton's work, *The Bells of Victory*, which attempts to retell the story of William Pitt and his role in the ministry that controlled the British government during its most successful war up until that point in British history. Historians before Middleton, and a few since, have given Pitt the credit for the successful operation of the Seven Years' War. However, Middleton argues that Pitt was not the only figure that was responsible for Britain's success. Instead, he contends that Pitt was

¹² Borneman, *The French and Indian War*, xxii-xxiii.

¹³ Douglas Edward Leach, *Roots of Conflict: British Armed Forces and Colonial Americans, 1677-1763* (Chapel Hill and London: The University of North Carolina Press, 1986).

just one of a group of talented men who were able to successfully coalesce into an effective government. Together, they won the Seven Years' War and gained for Britain control over the Atlantic Ocean and North America.¹⁴

Middleton does not rate Pitt as highly as some other historians do, and argues that Pitt had little to offer his office of Secretary of State for the Southern Department, noting that “style and rhetoric were not the only qualities admired and some commentators were inclined to be critical of Pitt’s excessive attention to form.”¹⁵ Pitt was not an incredibly intelligent and talented individual who could control the government single-handedly. Instead, he excelled at speeches and political discussion, able to convince those in power that his agendas were practical. Pitt only had a short career as a soldier and did not study law or financial issues. Pitt’s aggressive attitude towards funding the Seven Years’ War was based on little actual knowledge of how public finance worked. Thus, a high national debt was an expected consequence. Clearly, Middleton focuses on the political significance of the financial issues faced by the Pitt-Newcastle Ministry rather than on the economic issues themselves.

There is one historian who examines the economic aspects of the war – specifically the war at sea. David Syrett, in *Shipping and Military Power in the Seven Years’ War: The Sails of Victory*, argues that the ability to supply goods and men to different areas of the globe was the best advantage Britain had over any other power of the period. The book supplies valuable information on the functioning of the British Navy to supply the massive undertaking to defeat France during the Seven Years’ War. Syrett argues that Britain’s shipping system was the primary reason for its ability to neutralize France’s navy and that it helped the British to defeat French armies around the world. He shows that the Navy Board,

¹⁴ Richard Middleton, *The Bells of Victory: The Pitt-Newcastle Ministry and the Conduct of the Seven Years’ War, 1757-1762* (Cambridge: Cambridge University Press, 1985).

¹⁵ *Ibid.*, 7.

or the Commissioners of the Navy, and the clerical and logistical heads of the Royal Navy, consistently chartered private ships for the purpose of providing the shipping needed for transporting troops, horses and other supplies required by the navy or army. They would use either long-term time charters or space charters. Space charters were used to provide shipping for a small distance, usually between ships out at sea. When large amounts of shipping were necessary, when a huge campaign was on or an extended siege occurred, time charters were used to pay freight to ships that stayed in service and carried goods and troops to where they needed to be. As is made clear by Syrett, the naval and military supplies necessary to conduct the war were expensive.¹⁶ His work provides the basis for the naval shipping section of this thesis in Chapter 2.

Most of the works published on the Seven Years' War focus on the effects it had on the North American continent. Stephen Brumwell, author of *Redcoats: The British Soldier and War in the Americas, 1755-1763*, suggests that there is too much research on the Seven Years' War from the American perspective. He asserts that the British army soldiers were of much better quality than current scholarship allows. He argues that the Seven Years' War was a turning point for the British soldier. Brumwell discusses the effect that the war on the North American continent had on the regular British soldier.¹⁷ He explains how the frontier forced new types of soldiers to be trained and recruited. Although his ideas have certainly influenced the arguments made below in this thesis, he focuses on tactics, morale and performance rather than the economic difficulties that arose from the prosecution of warfare on the frontier.

¹⁶ David Syrett, *Shipping and Military Power in the Seven Years' War: The Sails of Victory* (Exeter: University of Exeter Press, 2008), 5-6.

¹⁷ Stephen Brumwell, *Redcoats: The British Soldier and War in the Americas, 1755-1763* (Cambridge: Cambridge University Press, 2002).

There are many possible explanations for the lack of European perspective on the Seven Years' War in America. For one thing, most of the battles that took place on the American continent were fought by colonists and Indians. The main armies of Britain and France were relatively inactive on the North American continent. Naval battles did take place on an ever-increasing scale during the war, but naval conflicts were continuous throughout the 18th century. There are several publications that examine the role of European powers during the Seven Years' War, especially in the area of diplomacy. Jeremy Black is one historian who has examined the Seven Years' War from the European perspective. His work, *European International Relations, 1648-1815*, is a close examination of the diplomatic relationships between European countries and especially the imperial powers. Black argues that Prussia became a European power following the Seven Years' War because of its alliance with Britain.¹⁸ Karl Schweizer has also examined the alliance between Britain and Prussia that existed before and after the Seven Years' War. He asserts that the alliance was essential to Prussia's survival as a unified state.¹⁹

Even sociologists, like Jeremy Smith, have elucidated aspects of the Seven Years' War. Smith argues that the war led to the establishment of new trade relationships. These were either enforced or occurred spontaneously during and after the war. He says, "During this time commercial advantages became part of the spoils of war."²⁰ Smith thinks that wars during the 18th century were fought primarily to control trade routes and empires, and the Seven Years' War was no exception. Smith argues that institutions, such as the military and

¹⁸ Jeremy Black, *European International Relations 1648-1875* (New York: Palgrave, 2002).

¹⁹ Karl W. Schweizer, *War, Politics and Diplomacy* (Oxford: University Press of America Inc., 2001).

²⁰ Jeremy Smith, *Europe and the Americas: State Formation, Capitalism and Civilizations in Atlantic Modernity* (Boston: Brill, 2006), 234-35.

commercial entities, changed dramatically during the war in order to capitalize on the gains made by Britain and its allies.

In the majority of the published works on the Seven Years' War, frontier warfare is overlooked. Only Stephen Brumwell's *Redcoats* comes close to discussing the economic impact that the new style of warfare created during the war. To overlook this aspect of the war is to overlook the most essential piece of the puzzle that is military history. Today in the early 21st century, it is important to understand the effects that military spending can have on a nation's economy and power more fully, especially with respect to the modern wars fought in the Middle East. In order to properly assess the drastic effect that high military spending has had on the national budgets of nation-states, the reason for the high cost of operating the military at a given point in history must be studied.

I. PAYING THE PRICE: BRITAIN'S NATIONAL DEBT CRISIS

"Osama (bin Laden) doesn't have to win; he will just bleed us to death."²¹ This statement comes from a former CIA counterterrorism agent, Michael Scheuer who led the initial search for bin Laden. He was talking about the substantial amount of money spent by the United States government in order to defeat jihadists in Afghanistan and Iraq. Scheuer's point rings true for nearly every war that has ever been fought anywhere: Money is the main motor of war. As money is not always readily available to governments, national or public debt is accrued in order to prosecute wars. Scheuer was not concerned with actual bloodshed; he was concerned that the debt that had risen drastically higher immediately after the invasion of Afghanistan and that the Iraq conflict would cripple the American economy. He stated this in 2005 a mere two years after the invasion of Iraq. Five years later, American debt continues to rise amid foreign wars and a domestic economic downturn, but American credit has yet to disappear. A little over 250 years ago in Great Britain, Phillip Stanhope, friend of William Pitt the Elder, Secretary of State for the Southern Department under George II and de facto leader of the government for most of the Seven Years' War, sent a letter to a friend that read: "In my opinion, our greatest danger arises from our *expense*, considering the present immense National Debt."²² Similar to Scheuer on the U.S. situation, Stanhope recognized that Britain's debt was already at a record high and that going to war

²¹ As quoted in: James Sterngold, "Casualty of War: The U.S. Economy", *San Francisco Chronicle*, 17 July 2005.

²² Letter from Lord Chesterfield to Solomon Dayrolles, printed in John Bradshaw, ed., *The Letters of Philip Dormer Stanhope, Earl of Chesterfield* (London: Swan Sonnenschein and Company, 1905), 1146.

with France would increase the debt burden like never before. His remark in 1756 quite plainly shows that citizens there was concern with national debt even before debt figures were readily available as they are in today's information age.

It is these very issues with which this thesis is concerned, namely the implications of the cost of warfare and, in particular, the debt burden that may arise from conflicts. This chapter examines how Britain's national debt rose dramatically during the Seven Years' War and analyzes the implications of this growth. There are various reasons for the dramatic rise, but the major reason discussed below is military spending. The addition of the North American continent as a major theater of war created the need for higher public spending and it challenged the British government's ability to shoulder the new burdens effectively. Additionally, this chapter investigates the impact that the military expenditures had upon the national debt and whether it created positive impacts or negative constraints for Britain's economy and government. The British debt nearly doubled from the pre-war total as a result of the capital-intensive war in which she was engaged. Ultimately, the Seven Years' War contributed to the American Revolution via the unexpected fiscal pressures on Great Britain produced by debt.

There are numerous studies on 19th and 20th century military spending patterns, but few address the fiscal behavior of states prior to the French Revolution and the Napoleonic conflicts.²³ The first part of this chapter provides broad comparative figures to illustrate the fiscal strain of wars on Britain as well as other states over centuries. By using Britain in the

²³ On 19th and 20th century military spending, see e.g. Jari Eloranta, "From the Great Illusion to the Great War: Military Spending Behaviour of the Great Powers, 1870–1913," *European Review of Economic History* II, August (2007); Ferguson, *The Cash Nexus*; Mark Harrison, ed., *The Economics of World War II: Six Great Powers in International Comparisons* (Cambridge, UK: Cambridge University Press, 1998). On long-run comparisons in the early modern period, see esp. Richard Bonney, ed., *The Rise of the Fiscal State in Europe C. 1200-1815* (Oxford: Oxford University Press, 1999). On public debt patterns, in addition to Ferguson see James Macdonald, *A Free Nation Deep in Debt: The Financial Roots of Democracy* (New York: Farrar, Straus and Giroux, 2003).

Seven Years' War as a case study, this thesis can focus on a pivotal event that contributed, as it is often claimed, to the separation of the motherland from the thirteen American colonies.²⁴ It is not surprising to find that the majority of public spending (thus public debt burden) was directed to the military and navy. Therefore, it is necessary to examine the particular reasons for the higher military spending and address several key questions, such as: 1) Was the high cost due to the war being much broader in scope than before? Or is it the nature of the conflict as a multi-theater war? 2) Was military spending the primary cause of the increased indebtedness? 3) Was this increase more rapid than in other conflicts, thus forcing Britain to try to shift some of the burden to its colonies? If yes, why? Included is a discussion of the current and past research and theories that shed light on the public spending discussion amongst economists, historians and politicians.

Following the discussion of recent research and British debt figures, the chapter shows that contemporaries were concerned with the debt and that many foresaw the difficulties in paying for the debt once the war was over. As seen in the data on the British state, Great Britain used most of their income during the war on the war itself. Following the war's conclusion, however, British governments spent much more than the national income in servicing that war debt. There was a drastic increase in the amount of income devoted to public spending following rather than during the war.

Finally, it is argued that Britain's financial institutions and government were much more capable of enduring the capital-intensive war than were those of France or her allies. Effectively, Britain was able to, in a fashion, purchase an empire following its victory in the Seven Years' War by merely spending more and negotiating lower interest rates on its debt

²⁴ See e.g. Niall Ferguson, *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power* (New York: Basic Books, 2003).

than the enemy. However, the massive empire gained by Britain became a hollow empire, since the state's debt obligations contained implicit promises of payback and a return on his investment for the buyer. Many prominent British citizens bought into the debt. Thus, the government attempted to equalize the burden of debt. However, it became difficult for Britain to consolidate its new gains, and just a decade later it faced a new dilemma. Britain, because of the larger debt incurred by the war, pressed the American colonies, the least taxed part of the Empire, to help pay it. This became a major reason, or at least a trigger mechanism, for the independence movement that created the United States of America.

Research on Fiscal Aspects of Conflicts, Public Debt and the Seven Years' War

There are certain characteristics that can be discerned in the efforts to study 20th century conflicts and spending patterns in the fields of history, economics and political science. Often the focus has been on the largest conflicts in human history as well as long-run development patterns, which would enable understanding of broad patterns and theories.²⁵ Many historians, economic historians in particular, have recently focused on the big conflicts, especially the world wars. Examples of recent work combining the theoretical aspects of economics with historical case studies are *The Economics of World War II*, edited by Mark Harrison, and its prequel on World War I.²⁶ Unfortunately, the focus of many of these studies has been on the 20th century, especially among economists and political-conflict

²⁵ See Paul Kennedy, *The Rise and Fall of the Great Powers. Economic Change and Military Conflict from 1500 to 2000* (London: Fontana, 1989). Other examples of long-run explanations can be found in Maurice Pearton, *The Knowledgeable State: Diplomacy, War, and Technology since 1830* (London: Burnett Books, 1982). Studies of similar scope include Jeremy Black, *European Warfare, 1660-1815* (New Haven: Yale University Press, 1994); Jeremy Black, "War and the World, 1450-2000," *The Journal of Military History* 63, no. 3 (1999), Jeremy Black, "Britain as a Military Power, 1688-1815," *Journal of Military History* 64 no. 1 (2000); Jeremy Black, *Western Warfare, 1775-1882* (Bloomington: Indiana University Press, 2001), Jeremy Black, *Introduction to Global Military History: 1775 to the Present Day* (London: Routledge, 2005).

²⁶ See Harrison, ed., *The Economics of World War II* See also Stephen Broadberry and Mark Harrison, eds., *The Economics of World War I* (Cambridge: Cambridge University Press, 2005).

scientists. Moreover, even though some cycle theorists and conflict scientists have been interested in the formation of modern nation states and the respective system of states since 1648, they have not expressed any real interest in long-run analysis of the causes of warfare, or in smaller wars that may have had big consequences for world history.²⁷

Another, more specified area of interest for scholars has been economic warfare, which takes a multitude of forms, from fairly benign policy measures and sanctions to outright warfare in the context of total war.²⁸ Lance Davis and Stanley Engerman, for example, have studied naval blockades covering several centuries. Their approach is to study a multitude of conflicts and make informed comparisons about the impact of blockades. As they point out, the success of a blockade is often difficult to assess.²⁹ There is also a resurgence of scholarship focused on pre-20th century conflicts, especially the French Revolutionary and Napoleonic wars. David Bell, in his recent influential monograph, puts the Revolutionary wars and the ensuing Napoleonic conflicts into the same category as the world wars.³⁰ Similarly, Kevin O'Rourke has provided innovative insights into the Revolutionary and Napoleonic era by focusing on the contraction of trade.³¹

²⁷ See Todd Sandler and Keith Hartley, *The Economics of Defense*, ed. Mark Perlman, Cambridge Surveys of Economic Literature (Cambridge: Cambridge University Press, 1995) for a good overview of the defense economics literature. Respectively, on conflict studies, see Edward D. Mansfield and Brian M. Pollins, "The Study of Interdependence and Conflict: Recent Advances, Open Questions, and Directions for Future Research," *The Journal of Conflict Resolution* 45, no. 6 (2001). A classic study of war from the holistic perspective is Quincy Wright, *A Study of War* (Chicago: The University of Chicago Press, 1942).

²⁸ See e.g. Alan S. Milward, "Economic Warfare in Perspective," in *East-West Trade and the Cold War*, ed. Jari Eloranta and Jari Ojala (Jyväskylä: University of Jyväskylä, 2005); R. Thomas Naylor, *Economic Warfare: Sanctions, Embargo Busting, and Their Human Cost* (Boston: Northeastern University Press, 2001). On the variety of methods for engaging in economic warfare, see T. E. Førlund, "The History of Economic Warfare: International Law, Effectiveness, Strategies," *Journal of Peace Research* (1993); James P. O'Leary, "Economic Warfare and Strategic Economics," *Comparative Strategy* 5, no. 2 (1985).

²⁹ Lance E. Davis and Stanley L. Engerman, *Naval Blockades in Peace and War: An Economic History since 1750* (New York: Cambridge University Press, 2006). See also F. Crouzet, "Wars, Blockade, and Economic Change in Europe, 1792-1815," *Journal of Economic History* (1964).

³⁰ David Bell, *The First Total War: Napoleon's Europe and the Birth of Warfare as We Know It* (New York: Houghton Mifflin Harcourt, 2007).

³¹ Kevin O'Rourke, "The Worldwide Economic Impact of the French Revolutionary and Napoleonic Wars, 1793-1815," *Journal of Global History* 1, no. 1 (2006).

It is a common argument in the literature that economic development and military spending are closely interdependent, with military spending being the driving force behind economic cycles. However, as recent studies have shown, economic development is often more significant in explaining military spending rather than vice versa. As some of the hegemonic theorists argue, economic prosperity might be a necessary prerequisite for war and expansion. Therefore, economic growth would induce rising government expenditures, which in turn would enable higher military spending.³² In order for military spending to hinder economic performance, it would have to surpass all other areas of an economy, as is often the case during wartime. However, the long-run fiscal consequences of conflict and excessive military spending can be substantial, depending on the way that those expenditures were financed. In particular, if most of the funding was made possible by increasing public debt levels, those consequences can be far-reaching indeed.

Public debt analysis can be just as interdisciplinary as the investigation of conflicts and their economic consequences. Among economists, the main thrust of the scholarship has been to try to model the impact of debts and deficits vis-à-vis economic growth. Robert Barro's groundbreaking studies on the determinants of public debt and especially the so-called tax-smoothing hypothesis, implying that budget deficits can be used to smooth tax rates over time, are good examples of such scholarship, and Barro also has tested his models

³² Brian M. Pollins and Randall L. Schweller, "Linking the Levels: The Long Wave and Shifts in U.S. Foreign Policy, 1790- 1993," *American Journal of Political Science* 43, no. 2 (1999) e.g. 445-446. Moreover, Alex Mintz and Chi Huang, "Guns Versus Butter: The Indirect Link," *American Journal of Political Science* 35, no. 1 (1991) suggest an indirect (negative) growth effect via investment at a lag of at least five years. Interestingly, this same issue is seen in the historiography of Britain after 1945. The debate on economic performance as compared to military spending can be found in: Malcolm Chalmers, *Paying for Defence: Military Spending and British Decline* (London: Pluto Press, 1985) and Jeffrey Pickering, *Britain's Withdrawal From East of Suez: The Politics of Retrenchment* (New York: Palgrave Macmillan, 1998).

empirically, mostly by using 20th century U.S. data.³³ Using long-run British data, from the 1700s to 1918, he found that temporary military spending was the major determinant of budget deficits, and that British results indicate a one-to-one response of budget deficits to temporary spending.³⁴ Typically, however, economists have not been interested in public debt patterns or the impact of deficits in the long run, or at least by using historical data beyond the 20th century. These studies have been focused either on the impact of the world wars or on the post-war period.³⁵ While it is true that the Great War in particular contributed to higher levels of public debt in its aftermath, given that many countries resisted the idea of funding the conflict through increased taxation, the levels of indebtedness among the industrialized nations during the 20th century were not necessarily very high historically (see Figure 1).³⁶

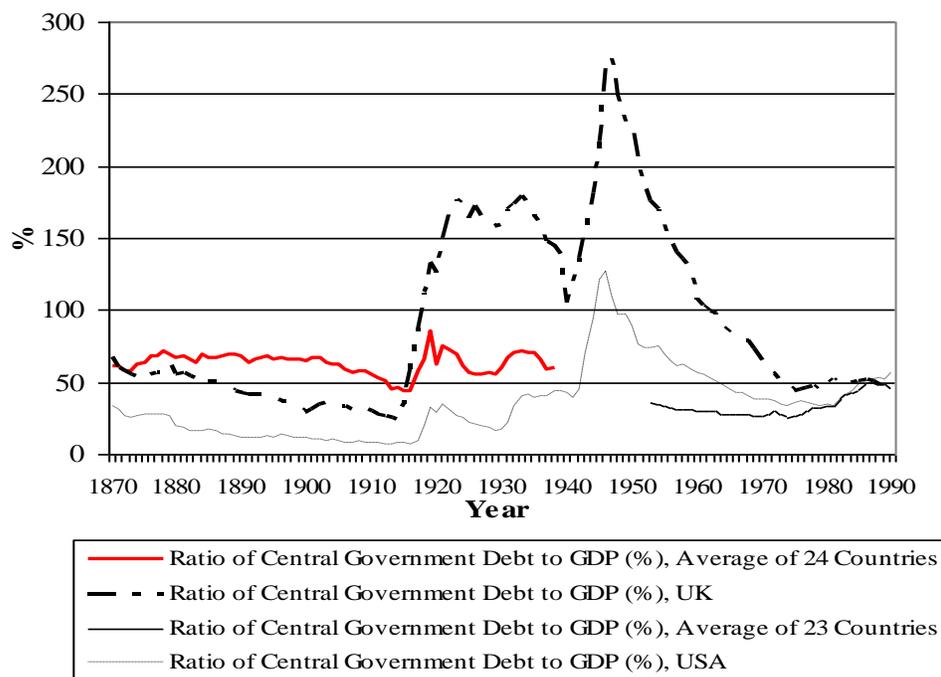
³³ Robert J. Barro, "The Ricardian Approach to Budget Deficits," *The Journal of Economic Perspectives* 3, no. 2 (1989), Robert J. Barro, "U.S. Deficits since World War I," *The Scandinavian Journal of Economics* 88, no. 1 (1986), Robert J. Barro, "On the Determination of the Public Debt," *The Journal of Political Economy* 87, no. 5, Part 1 (1979).

³⁴ Robert J. Barro, "Government Spending, Interest Rates, Prices, and Budget Deficits in the United Kingdom, 1701-1918," *Journal of monetary economics* 20, no. September (1987).

³⁵ See Gail E. Makinen and G. Thomas Woodward, "Funding Crises in the Aftermath of World War I," in *Public Debt Management: Theory and History*, ed. Rudiger Dornbusch and Mario Draghi (Cambridge England; New York: Cambridge University Press, 1990).

³⁶ See especially Stephen Broadberry and Mark Harrison, "The Economics of World War I: An Overview," in *The Economics of World War I.*

Figure 1. Ratio of Central Government Debt to GDP (%), 1870-1990



Sources: Derek Hung Chiat Chen, *Intertemporal Excess Burden, Bequest Motives, and the Budget Deficit* (Washington, D.C.: World Bank, 2003); Ferguson, *The Cash Nexus*; B. R. Mitchell, *British Historical Statistics* (Cambridge: Cambridge University Press, 1988); B. R. Mitchell *International Historical Statistics: Europe 1750-1993*, 4th ed. (Basingstoke: Macmillan Academic and Professional, 1998); B. R. Mitchell *International Historical Statistics: The Americas 1750-1993*, 4th ed. (London: Macmillan, 1998); Maurice Obstfeld, and A. M. Taylor, "Sovereign Risk, Credibility and the Gold Standard: 1870-1913 Versus 1925-31," *The Economic Journal* 113, (April 2003): 241-75; United Nations Department of Economic Affairs Fiscal Division, *Public Debt, 1914-1946* (Lake Success, N.Y., 1948); United States Bureau of the Public Debt, *The Public Debt Online* (Washington, D.C.: United States Bureau of the Public Debt, 2000).

There has also been a lot of interesting scholarship on public debt patterns.³⁷ The most comprehensive accounts of long-term public debt burdens and deficits can be found in James MacDonald's *A Free Nation Deep in Debt. The Financial Roots of Democracy* and in Niall Ferguson's *The Cash Nexus: Money and Power in the Modern World, 1700-2000*.

These books offer broad overviews of the evolution of the practice of public debt and levels

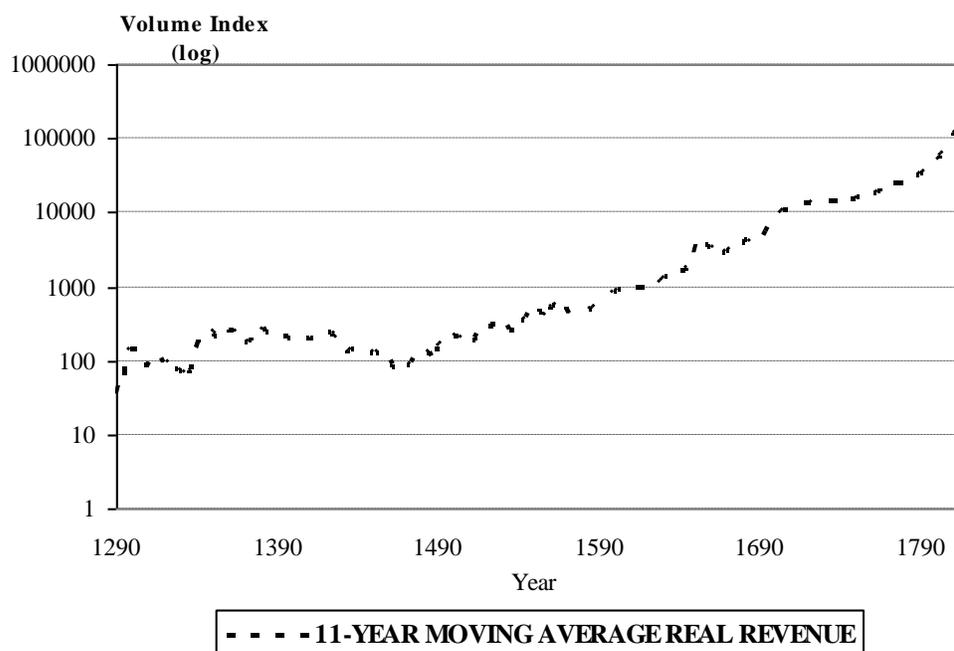
³⁷ See especially Bonney, ed., *The Rise of the Fiscal State in Europe Circa 1200-1815* (Oxford: Oxford University Press, 1999); Barry J. Eichengreen and Peter H. Lindert, *The International Debt Crisis in Historical Perspective* (Cambridge, Mass.: MIT Press, 1989); John Maloney, *Debt and Deficits: An Historical Perspective* (Northampton, Mass.: Edward Elgar, 1998).

of debt over centuries. As both point out, the development of practices with which representative governments were able to borrow money domestically (via government bonds) was a crucial element in the fiscal rise of powerful states like the Netherlands and Great Britain. Their governments were able to borrow more cheaply because there were constraints on what the sovereigns could do with the money, or at least how they could use taxes to finance the repayment. Thus the middle classes in these countries were linked symbiotically to their emerging quasi-democratic governments. In England, this was a notable development after the Glorious Revolution of 1688.³⁸

In the 16th century, monarchies started to utilize various forms of public debts more widely, for example in the form of *rentes* in France. Yet, it was the birth of the *consol* in Britain that marked the beginning of the history of modern public debt. *Consols* were redeemable at par but otherwise perpetual, enabling the government to raise large amounts of capital in a crisis situation. Ultimately, a nation also had to introduce other institutional and organizational innovations, such as stock markets and central banks, to be able to tap into its financial resources more effectively. This Dutch/British model became the cornerstone for the emerging fiscal states, and the British system of public debt was emulated throughout the Western world in the 19th century.³⁹

³⁸ Ferguson, *The Cash Nexus*; Macdonald, *A Free Nation Deep in Debt*; Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge; N.Y.: Cambridge University Press, 1990); D. C. North and B. R. Weingast, "Constitutions and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth-Century England," *The Journal of Economic History* 49, no. 4 (1989). On the discussion of why it is better to borrow domestically, see also the classic article by James M. Buchanan, "External and Internal Public Debt," *The American Economic Review* 47, no. 6 (1957).

³⁹ Ferguson, *The Cash Nexus*, 23-30.

Figure 2. English Real Tax Revenue, 1290-1815

Source: *European State Finance Database (ESFD)*, Patrick O’Brien, *England*
<http://www.le.ac.uk/hi/bon/ESFDB/OBRIEN/obrien.html>, Accessed 22 Feb 2010.

Richard Bonney addresses this problem in his writings on mainly the early modern states. He emphasizes that their revenue and tax collection systems, the backbone of any militarily successful nation-state, have followed a specific evolutionary trajectory over time.⁴⁰ For example, in most European states the government became the arbiter of disputes and the defender of certain basic rights in the society by the early modern period. During the Middle Ages, the European fiscal systems were relatively backward and autarchic, with mostly predatory rulers (or roving bandits, as Mancur Olson has coined them).⁴¹ According to Bonney, the next stage was the so-called tribute state, then the domain state (with stationary bandits, providing some public goods), the tax state (more reliance on credit and revenue collection) and finally the *fiscal state* (embodying more complex fiscal and political

⁴⁰ He outlines most of the following in the introduction of his edited volume *The Rise of the Fiscal State in Europe C. 1200-1815*.

⁴¹ Mancur Olson, “Dictatorship, Democracy, and Development,” *American Political Science Review* 87, no. 3 (1993).

structures). A superpower like Great Britain in the 19th century had to be a fiscal state in order to dominate the world, due to all the burdens that went with an empire. With that fiscal state came an efficient system of taxation, a more democratic form of government, and reliance on public debt during times of crises.⁴²

The English fiscal state came about slowly. In fact, the English crown could only raise short-term debt in the mid-16th century. And by the mid-17th century, the English monarchs had almost no creditworthiness left. Moreover, the Glorious Revolution was not a quick fix; it took until after 1720 for a stable form of parliamentary government to be established, and thus exercise any sort of control over the fiscal affairs of the monarchy.⁴³ It seems that England's fiscal affairs stabilized earlier, though, as seen in Figure 2. The real tax revenues started increasing steadily from the late 15th century onwards, creating at least some constancy for the crown's finances. Of course, given the massive appetite of early modern sovereigns for warfare – resulting in the highest total of years that at least one of the great powers was in a conflict in the 16th century, compared to the other centuries during the last 500 years – it was not enough.⁴⁴

As Niall Ferguson has pointed out, military expenditures were the primary budget item for nation states prior to the 20th century, and the principal cause of fiscal innovation throughout most of history.⁴⁵ It is possible that military expenditures have also had long-term consequences for government budgets, which is an idea known as the “Peacock-Wiseman displacement hypothesis.” Peacock and Wiseman divided the explanatory forces of

⁴² On the British Empire, see especially Ferguson, *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*. Ferguson has also tackled the issue of a possible American empire in the more polemical Niall Ferguson, *Colossus: The Price of America's Empire* (New York: Penguin Press, 2004).

⁴³ Macdonald, *A Free Nation Deep in Debt*, 161-68.

⁴⁴ Ferguson, *The Cash Nexus*; Charles Tilly, *Coercion, Capital, and European States, AD 990-1990* (Cambridge, Mass.: Basil Blackwell, 1990).

⁴⁵ See especially Ferguson, *The Cash Nexus*. See also Jari Eloranta, “National Defense,” in *The Oxford Encyclopedia of Economic History*, ed. Joel Mokyr (Oxford: The Oxford University Press, 2003).

government spending into two groups: 1) permanent influences on government expenditures (income, population growth, prices, level of employment and the “political nature of the society concerned”; 2) displacement effects and the concentration process, such as the idea that wars (and other large economic shocks) may have been the driving force behind changes in government spending patterns. They contend that governments are forced to respond to the challenges posed by such events, especially the commitments arising from debt commitments, war pensions and other similar issues. At the same time, increased wartime taxation would induce a change in the public’s tolerance for taxation.⁴⁶ These changes can bring forth a permanent change or merely a temporary upswing in the government spending levels. As Karen Rasler and William Thompson have maintained, it may be that only global wars (or other global economic shocks) have this effect on government spending. There is evidence to support this notion in connection with the Napoleonic wars and the two world wars.⁴⁷ However, what has not been studied is whether smaller conflicts had similar impacts on spending and, ultimately, taxation and public debt patterns.

Therefore it is necessary to study a smaller conflict, one that has not been studied enough, but focusing in this case on a war that had far-reaching consequences. As Niall Ferguson and others have claimed, the Seven Years’ War contributed to the separation of the motherland from the thirteen American colonies. Great Britain attempted to shift part of the financial burden of this expensive conflict onto the thirteen colonies which were the least

⁴⁶ Alan T. Peacock and Jack Wiseman, *The Growth of Public Expenditures in the United Kingdom* (Princeton: Princeton University Press, 1961), 21-31; Peter H. Lindert, “The Rise of Social Spending, 1880-1930,” *Explorations in Economic History* 31, no. 1 (1994); Peter H. Lindert, “What Limits Social Spending?,” *Explorations in Economic History* 33, no. 1 (1996); Carol Webber and Aaron Wildavsky, *A History of Taxation and Expenditure in the Western World* (New York: Simon and Schuster, 1986).

⁴⁷ Karen A. Rasler and William R. Thompson, *War and State Making. The Shaping of the Global Powers*, vol. 2, Studies in International Conflict (Boston: Unwin Hyman, 1989), 106-109, 121; Karen Rasler and William R. Thompson, “Technological Innovation, Capability Positional Shifts, and Systemic War,” *Journal of Conflict Resolution* 35, no. 3 (1991).

taxed part of the empire.⁴⁸ What is known currently about this conflict, which turned into a truly global war with multiple theaters?

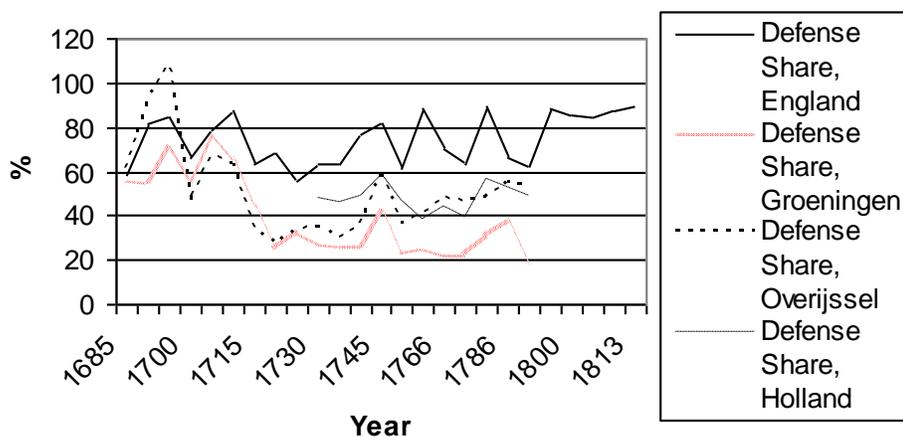
Military Spending and the British Public Debt

England made substantial investments in its military forces, especially the navy, in the 16th century. The technological innovations introduced during Henry VIII's reign, such as heavier cannons and gunports, certainly increased England's fighting capacity. England epitomizes the transition toward a more permanent, commercialized military management system. In the period 1535-1547, the English *defense share* (military expenditures as a percentage of central government expenditures) averaged 29.4 percent, with large fluctuations from year to year. However, in the period 1685-1813, the mean English defense share was 74.6 percent, never dropping below 55 percent.⁴⁹

⁴⁸ See Ferguson, *Empire*.

⁴⁹ Eloranta, "National Defense."

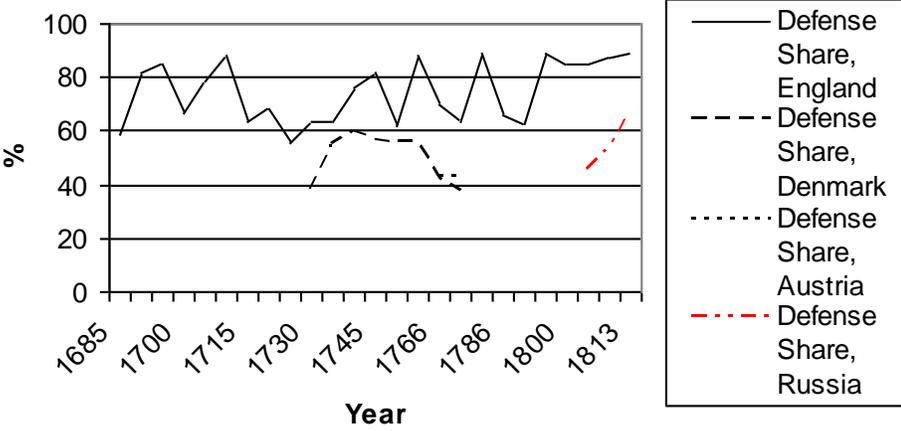
Figure 3. English Defense Share in Comparison with the Low Countries in the Early Modern Period



Sources: Calculated from the various sources in *European State Finance Database* (ESFD), P. O'Brien, *England*, (<http://www.le.ac.uk/hi/bon/ESFDB/OBRIEN/obrien.html>); L. van der Ent, W. Fritschy, E. Horlings and R. Liesker, *Low Countries* (<http://www.le.ac.uk/hi/bon/ESFDB/NETH/neth.htm>), Accessed 20 Feb 2010.

How does this compare to other nations? As seen in Figures 3 and 4, the English defense share was substantially higher than that of the Low Countries in this period, especially during the 18th century, and higher even than the defense shares of Austria, Denmark and Russia, all of which had substantial involvement in the great power wars of the 18th century.

Figure 4. English Defense Share in Comparison with Denmark, Austria and Russia in the Early Modern Period



Sources: Calculated from the various sources in *European State Finance Database (ESFD)*, P. O'Brien, *England*, (<http://www.le.ac.uk/hi/bon/ESFDB/OBRIEN/obrien.html>); B. Poulsen, *Denmark*, (<http://www.le.ac.uk/hi/bon/ESFDB/POUL/poul.html>); *Austria*, (<http://www.le.ac.uk/hi/bon/ESFDB/AUSTRIA/austria.html>); R. Bonney, *Russia* (<http://www.le.ac.uk/hi/bon/ESFDB/RUSSIA/russia.html>), Accessed 20 Feb, 2010.

Table 1. English, French and Prussian Defense Shares in the 17th and 18th Centuries

<i>England</i>		<i>France</i>		<i>Prussia</i>	
Year(s)	Defense Share	Year(s)	Defense Share	Year(s)	Defense Share
1690	82	1620-1629	40	..	-
1700	66	1630-1639	35	..	-
1710	88	1640-1649	33	..	-
1720	68	1650-1659	21	1711-1720	78
1730	63	1660-1669	42	1721-1730	75
1741	77	1670-1679	65	1731-1740	82
1752	62	1680-1689	52	1741-1750	88
1760	88	1690-1699	76	1751-1760	90
1770	64	1726	35	1761-1770	91
1780	89	1751	41	1771-1780	91
1790	63	1775	30	1781-1790	78
1800	85	1788	25	1791-1800	82

Sources: Calculated from the various sources in *European State Finance Database* (ESFD), P. O'Brien, *England* (<http://www.le.ac.uk/hi/bon/ESFDB/OBRIEN/obrien.html>); M. Körner, *France and Prussia* (<http://www.le.ac.uk/hi/bon/ESFDB/KORNER/korner.html>), Accessed 20 Feb 2010.

As Table 1 indicates, France allocated a substantially lower share of its budget to military spending, and only Prussia really compares to the English military spending effort. Whereas Prussia's defense share was continuously high, the English defense share went up and down, influenced by the various conflicts during this period.

In addition, the cost and scale of warfare increased rapidly in the early modern period. For example, during the Thirty Years' War between 100,000 and 200,000 men fought under arms, whereas twenty years later 450,000 to 500,000 men fought on both sides in the War of the Spanish Succession.⁵⁰ With the increasing scale of armed conflicts in the 17th century, the participants became more and more dependent on access to long-term credit, because whichever government ran out of money had to surrender first. For example, although the causes of Spain's decline in the 17th century are still disputed, it is clear that the lack of royal credit and the poor management of government finances resulted in heavy deficit spending as

⁵⁰ Tilly, *Coercion, Capital, and European States, AD 990-1990*, 165; Henry Kamen, "The Economic and Social Consequences of the Thirty Years' War," *Past and Present* (April 1968).

military exertions followed one after another in the 17th century. Therefore, the Spanish Crown defaulted repeatedly during the 16th and 17th centuries, and on several occasions this forced Spain to seek an end to its military activities.⁵¹

A key question for France, as compared to England, was the financing of its military. According to Richard Bonney, the cost of France's armed forces in its era of "national greatness" were stupendous, with expenditure on the army by the period 1708-1714 averaging 218 million livres, whereas during the Dutch War of 1672-1678 it had averaged only 99 million in nominal terms. This was due to the increasing size of the army and the navy and to the decline in the purchasing power of the French livre. However, the overall burden of war remained roughly similar in this period: War expenditures accounted for about 57 percent of total expenditure in 1683, and approximately 52 percent in 1714. As for all the main European monarchies, it was the expenditure on war that brought fiscal change to France, especially after the Napoleonic wars.⁵²

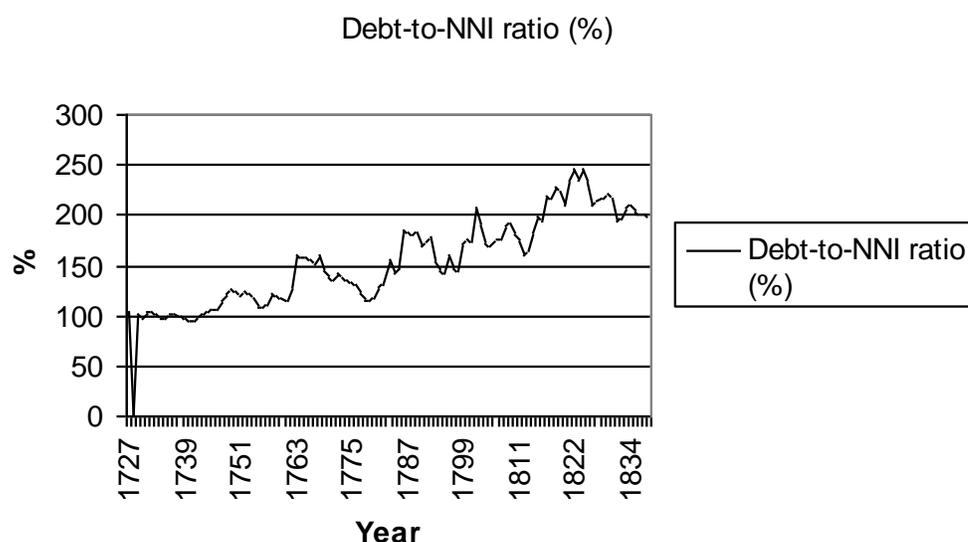
In the 18th century, rapid population growth in Europe swelled the ranks of armies, especially the Russian army. In Western Europe, a mounting intensity of warfare began with the Seven Years' War (1756-1763) and culminated in the French Revolution and Napoleon's campaigns (1792-1815). The new style of warfare brought on by the revolutionary wars, with conscription and war of attrition as new elements, is also reflected in the growth of army sizes. For example, the French army grew over 3.5 times in size from 1789 to 1793, up to 650,000 men. Similarly, the British army grew from 57,000 in 1783 to 255,000 men in 1816.

⁵¹ Eloranta, "National Defense;" Henry Kamen, *Empire: How Spain Became a World Power, 1492-1763*, 1st American ed. (New York: HarperCollins, 2003), North, *Institutions, Institutional Change, and Economic Performance*.

⁵² Richard Bonney, "France, 1494-1815," in *The Rise of the Fiscal State*. War expenditure percentages (for the 17th and 18th centuries) were calculated using the so-called Forbonnais (and Bonney) database(s), available from *European State Finance Database*, <http://www.le.ac.uk/hi/bon/ESFDB/RJB/FORBON/forbon.html>, and should be considered only illustrative.

The Russian army acquired the massive size of 800,000 men in 1816, and Russia kept the size of its armed forces at similar levels in the 19th century.

Figure 5. British (Public) Debt-to-NNI (Net National Income) Ratio (%), 1727-1838



Sources: Data graciously supplied by Gregory Clark. For more details, see Gregory Clark, “The Macroeconomic Aggregates for England, 1209-2008” (Davis, California: University of California at David Department of Economics, 2010).

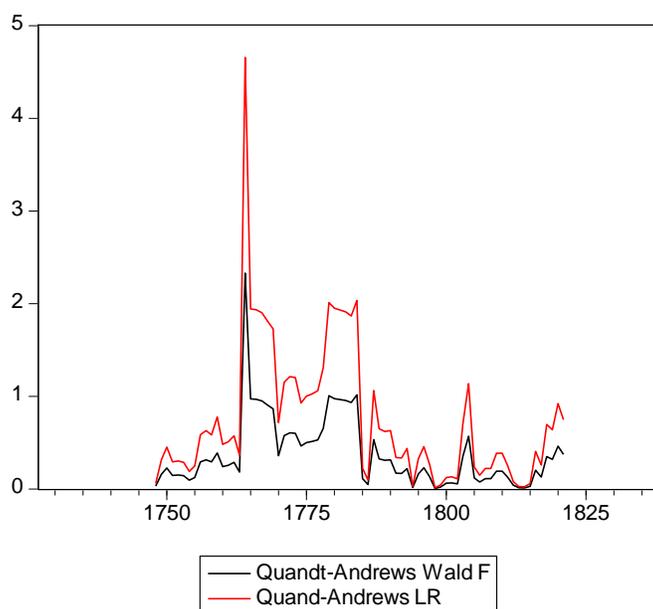
As Niall Ferguson has pointed out, Britain’s military burden and military spending rose and fell based on whether she was at war or not. The military burden levels in the 18th century varied between 4 and 18 percent. Such levels were rarely achieved in the 19th and 20th centuries.⁵³ Britain’s massive military outlays and her quest for supremacy over rivals, including extensive colonization, exerted growth pressures on her public debt as well. For example, after 1715 the British public debt represented more than 80 percent of the GNP, although the French level most likely exceeded 100 percent at that time. While the English fiscal system with its more democratic form of public debt and politics, and more advanced financial structure, enabled her to bear such a burden, France had a different experience. By

⁵³ Ferguson, *The Cash Nexus*, 45.

the eve of the French Revolution in 1788, France had a debt-to-GNP ratio of only 65 percent, and Britain's was as high as 182 percent. Nonetheless, debt servicing in the French case amounted to 4.4 percent of the GDP, yet Britain only paid 6.0 percent of the GDP on interest payments. After 1815, the British debt-to-GNP ratio was over 300 percent, but the broad commitment to paying the public debt across the nation (if not the empire) enabled them to avoid default.⁵⁴

As we can see in Figure 5, a ratcheting-up effect influenced the debt-to-NNI ratios from the early 18th to the 19th centuries. The first upward push was exerted by the Seven Years' War, then the American Revolution and finally by the French Revolutionary and Napoleonic conflicts. By itself, however, this data is not enough to confirm that a Peacock-Wiseman pattern existed.

Figure 6. Quandt-Andrews Breakpoint Tests, Differencing ($I(1)$)



Sources: Jari Eloranta and Jeremy Land, “Hollow Victory: Britain’s National Debt and the Seven Years’ War” (Unpublished Manuscript, 2010).

⁵⁴ Macdonald, *A Free Nation Deep in Debt*.

The breakpoint analysis displayed in Figure 6 suggests that it may in fact be that the Seven Years' War was even more substantial than the initial breakpoint tests suggested. It is quite possible that this shocked Britain's fiscal system into a Peacock and Wiseman path, an upward trend towards more indebtedness due to the cost of transnational conflicts. This seems to have been the trigger toward deficit-spending and public debt as the main source for funding the British war efforts, and it also seems that the British got more used to this tool over time.⁵⁵ If so, it was quite reasonable for British decision-makers, who were aware of the growing debt burden and inherent dangers in this development, to expect the rest of the Empire to share the costs as well. However, all parts of the Empire were not too happy about this, which directly contributed to the onset of the American Revolution.

British Debates about the Public Debt and the Seven Years' War

As Niall Ferguson has argued, the current financial system that governments operate in the modern era developed because of the shortfall of national treasuries in times of conflict. Thus, loans from private citizens and other countries were solicited in order to continue prosecuting war. Yet the Seven Years' War was much more expensive than previous wars in Britain's history. Consequently, a heavier burden was placed on British taxpayers.

At the start of the war, Britain's debt stood at £74.6 million (see Table 2), an enormous figure at the time. Yet, it remained a manageable sum that normally could have been sustained quite efficiently. However, by the end of the war, Britain's debt increased to

⁵⁵ For more information on the Debt-to-NNI ratios and the breakpoint tests to test the impact of the ratio on the fiscal systems of Britain, see Jari Eloranta and Jeremy Land, "Hollow Victory: Britain's National Debt and the Seven Years' War" Unpublished Manuscript, 2010.

£132.6 million, nearly twice the previous amount.⁵⁶ Britain's tax revenue and other sources of income were not enough to cover the cost of the war. Therefore, the funds were borrowed, amounting to approximately £58 million. Soon, prominent citizens were discussing the reasons for entering the war with France and questioning the necessity of the war. Phillip Stanhope, the Earl of Chesterfield and a political ally of William Pitt the Elder, wrote a letter to a friend in which he noted the general excitement over the announcement of war with France in 1756. He stated: "In my opinion, our greatest danger arises from our *expense*, considering the present immense National Debt." He continued, "Where can France annoy us then? I see but two places; in America by slipping over in single ships a considerable number of troops; and next, by keeping us in a state of fear and *expense* at home."⁵⁷ He argued that the war with France was essentially a no-win situation. Whether Britain won or lost, the cost of fighting the war would only accentuate the debt issue. As Table 2 shows, annual tax revenue increased slowly while annual military expenditures increased rapidly to such an extent that total annual tax revenue was doubled by annual military expenditures.

⁵⁶ J. Brewer, *The Sinews of Power*, 30. Though Brewer's work is exceptional, his debt figures differ from J. J. Grellier's figures in his book: *The History of the National Debt from the Revolution in 1688 to the Beginning of 1800* (London: B. Franklin, 1810). Grellier shows that by 5 January 1757 British debt stood at £76,480,886 and by 5 January 1763 its debt had risen to £135,691,313, slightly higher than Brewer's figures. Brewer's figures are based on Parliamentary papers from 1868-1869, and Grellier's book was originally published in 1810, much less removed from the Seven Years' War than Brewer's source. However, during the early 18th century British politicians were obsessed with the national debt problem and the Napoleonic Wars. Thus, in the interest of simplicity and historical accuracy, Brewer's figures are used for this section of the thesis.

⁵⁷ Letter from Lord Chesterfield to Solomon Dayrolles, printed in Bradshaw, ed., *The Letters of Philip Dormer Stanhope, Earl of Chesterfield* (London: Swan Sonnenschein and Company, 1905), 1146.

Table 2. British National Debt: 1689-1784 (in British pounds, £)

War	Average annual expenditure	Average annual tax revenue	Debt	
			Begin	End
1689-97 Nine Years War	5,456,555	3,640,000	--	16,700,000
1702-13 War of Spanish Succession	7,063,923	5,355,583	14,100,000	36,200,000
1739-48 War of Austrian Sucession	8,778,900	6,422,800	46,900,000	76,100,000
1756-63 Seven Years War	18,036,142	8,641,125	74,600,000	132,600,000
1775-84 American War	20,272,700	12,154,200	127,300,000	242,900,000

Source: Brewer, *Sinews of War*, 30.

The debt also became a heated topic of debate in Parliament. William Pitt, Britain's Secretary of State of the Southern Department for most of the war, faced serious opposition in the Parliament. Pitt maintained that his main objective was to secure the French colonies in North America, especially Canada. Therefore, he prosecuted the war in North America more fiercely than on the European continent. In fact, he allied with Frederick the Great of Prussia in an effort to limit the actions of the British military on the continent.⁵⁸ Deriding Pitt's overall strategy for victory, some Members of Parliament insisted that the continuation of the war would be economically ruinous and that it was "perfect suicide to go on conquering what must be surrendered."⁵⁹ These MPs argued that the colonies were not worth the heavy

⁵⁸ Middleton, *The Bells of Victory*, 57-63. See also G. Williams, *The Expansion of Europe in the Eighteenth Century: Overseas Rivalry, Discovery, and Exploitation* (New York: Walker Company, 1966), 78-79. It must be noted that the British paid an annual subsidy to Prussia for her services during the war, further exacerbating to the debt problem beyond just the aspects discussed in this thesis.

⁵⁹ Speech Given before Parliament 13 November 1755, printed in John Almon, ed., *Anecdotes of the Life of the Right Honorable William Pitt, Earl of Chatham: And of the Principal Events of His Time: With His Speeches in*

financial burden, suggesting that any gains would have to be returned as part of a peace settlement.

Furthermore, other politicians insisted that the main concern of the war should be the European continent. They submitted a proposal that would establish an alliance of European powers in the war against France, arguing that British expenditures should be used to buy allies in the war. Pitt adamantly refused to consider such a proposal, reiterating that the major objective should be North America. In a speech reacting to the proposal, Pitt exclaimed: “This unsizable [*sic*] project, impracticable and desperate as it is... will, if fully pursued, bring bankruptcy upon Great Britain.” He added that the amount of money necessary to fulfill such a proposal would greatly harm “the maintenance of our just and necessary war in North America.”⁶⁰ He was greatly concerned about the amount of debt that already existed before the war. He stated:

And when we consider that such immense issues of money, out measuring any experiment of past time, are to be supplied by new loans, heaped upon a debt of eighty millions, who will answer for the consequence, or insure us from the fate of the decayed states of antiquity?⁶¹

Pitt questioned the necessity of an alliance when the war in North America was more important, in his view, and decided that if a war that large was already occurring across the Atlantic, there was no reason to increase the already problematic debt for an unworthy cause. Additionally, he believed that in a free country it was not appropriate “load our posterity with intolerable burdens.”⁶² Thus, even the men who approved of the war against France were

Parliament, from the year 1736 to the year 1778 (London: Printed for L. B. Seeley, 1797) Rhinehart Collection, Appalachian State University, 239-241.

⁶⁰ Speech Given before Parliament 13 November 1755, printed in Almon, *Anecdotes of the Life of the Right Honorable William Pitt, Earl of Chatham: And of the Principal Events of His Time*, 239.

⁶¹ *Ibid.*, 240.

⁶² *Ibid.*, 241.

concerned with the impact it would have on the national debt. Despite his reservations, though, Pitt was the man who sent Britain spiraling into deficit spending and larger public debt.

Why should we focus on Pitt rather than other major players in the government like the Duke of Newcastle? For one, Pitt held an unusual amount of power among the political elite. He was extremely popular with the citizens of the Britain as well. In any case, it is Pitt who proposed, along with several of his supporters, that North America be the primary objective. Though he mistrusted the Prussians, Pitt wanted to pay Frederick the Great and his army to wage the continental war with France, freeing Britain's navy and army to do battle with France on the oceans and in the colonies.

As Howard Peckham points out, the usual cycle of conquest and return in North America shaped policy in the early part of the war under Newcastle. However, when Pitt joined the ministry, the strategy changed drastically. Pitt pushed for permanent control once an area or objective was taken. Thus, it became state policy to pressure France in all corners of the globe, not just on the frontier. As a result, the fighting was not left to frontiersmen and colonists, but the professional military was directly involved. It became clear that new expenses came with the expansion of the military's role in a global war.⁶³

How can we measure the impact of the addition of North America as a major theater? There is not a completely accurate way to do this, but we can compare the Seven Years' War total expenditures with those of the War of Austrian Succession, which was a conflict contained on the European continent. The Seven Years' War cost the British Empire £161 million while the War of Austrian Succession cost £96 million, nearly £70 million less than a

⁶³ Peckham, *The Colonial Wars, 1689-1762*, 161; Middleton, *The Bells of Victory*, 9-13.

war that was two years shorter (see Table 3).⁶⁴ What then caused the Seven Years' War to be so much more expensive for Britain than the War of Austrian Succession? One theory is the global nature of the Seven Years' War. Indeed, many historians call it the first global war. William R. Nester points out that the Seven Years' War was the first fought on several continents at once. Battles were fought in North America, Europe and on the high seas. Both Britain and France used their alliances in Europe and their colonies across the globe for soldiers, supplies and raw materials.⁶⁵ Yet, the War of Austrian Succession was also fought on the high seas. Not only were the navies involved, but colonies were attacked and invaded, especially in British India and the West Indies.⁶⁶ Therefore, it is incorrect to argue that the global nature of the Seven Years' War is the *only* reason for the disparity in total costs.

Table 3. Cost of Major British Wars: 1689-1815

<i>Name, years of war</i>	<i>(millions of pounds, £)</i>
Grand Alliance (1688-97)	49
Spanish Succession (1702-13)	94
Austrian Succession (1739-48)	96
Seven Years' War (1756-63)	161
American (1776-83)	236
Napoleonic Revolution (1793-1815)	1,658

Source: Brauer and Tuyll, *Castles, Battles, and Bombs*, 140.

It is made clear by Peckham and Middleton that the Seven Years' War was the first war in which the British colonies in North America – and the conflict there in particular – were backed by the British Treasury. Pitt promised the colonies that whatever monies were spent in the effort to defeat France would be reimbursed. Furthermore, Pitt and Newcastle sent larger contingents of soldiers to North America in order to fight France, in comparison

⁶⁴ Brauer and Tuyll, *Castles, Battles, & Bombs*, 140.

⁶⁵ W. R. Nester, *The First Global War: Britain, France, and the Fate of North America, 1756-1775* (Westport, Connecticut: Praeger, 2000), viii-ix.

⁶⁶ M. S. Anderson, *The War of the Austrian Succession, 1740-1748* (London: Longman Publishing Group, 1995), 178-92.

with previous wars in the American colonies.⁶⁷ It is important to note that the American colonies were no longer the sole source of money and soldiers to prosecute the war on the frontier for Britain. Finally, Britain pursued the defeat of France in North America with the appropriate economic resources necessary to achieve this goal. The colonists were more willing to cooperate with Britain when promised financial assistance.

Conclusions

As a result of the high levels of military spending by Pitt and his government, Britain saw a debt that doubled from the peacetime conditions before the war. Consequently, the high military spending became the catalyst for the expansion of taxes throughout the British Empire. Politicians and civilians were extremely concerned about the national debt before the war, and they saw their fears realized immediately following the war. As the effort to pay for the war debt exceeded the net national income of Britain in the decade following the war, politicians pushed the colonies for more revenue to cover the costs. Meanwhile, the Seven Years' War led to a period of ratcheting-up in the size and the severity of wars. It was not necessarily its global nature that led to such high expenditures during the Seven Years' War, since the War of Austrian Succession was fought on a similar scale. It was the addition of the American continent as a major theater of war that increased the expenditure to the point of fiscal explosion.

Perhaps the major cause of the fiscal pressure was the substantially higher defense share England was burdened with as compared to other countries in Europe. Especially during the 18th century, Denmark, Russia and Austria all had lower defense shares than England, though each was substantially involved in the great power wars of the 18th century.

⁶⁷ Peckham, *The Colonial Wars, 1689-1762*, 161, 165-68.

However, the most important impact that the Seven Years' War had upon the fiscal system of Britain is revealed by the breakpoint analysis. The war was a watershed for Britain's involvement in major wars of the period and the trigger towards debt-funded wars and conflicts. As major wars increased in size and severity, national and public debt, particularly Britain's, increased dramatically. But the war hit the nation harder than the American Revolution and the Napoleonic wars, because the politicians had yet to figure out a method in order to pay the war debt. Therefore, the Seven Years' War and the period of unrest afterward suggest that the British economy developed the ability to shoulder the burden of heavy war debt as a kind of "normalcy," making the war an example for future wars and conflicts.

II. TRANSPORTATION

If national debt was such an issue, what made it so serious? This chapter focuses on two aspects that led to higher military spending: naval shipping and land transportation. It examines the cost of conveying military supplies and men from Britain to North America and the naval power necessary to protect those shipments. When supplies reached the coast another journey was required to take them to the soldiers in the field. This chapter also addresses the high cost of transporting supplies from the coast to the frontier, showing that the frontier was difficult to travel due to its dense forests and terrain. Thus, the North American theater of war placed ever-increasing strains on the British financial system, creating high levels of debt that eventually led to the independence of the American colonies and the dissolution of the British Empire on the North American continent.

Naval Transportation: The British Navy and the War of Austrian Succession

Throughout the 18th century, France and Britain were constantly at war on the high seas. As a result, Britain continuously operated a large naval force that kept the home islands safe from invasion. John Brewer has argued that the costly navy was an integral part of the powerful fiscal-military state that evolved in Britain during the 18th century.⁶⁸ Yet Brewer was not the first writer to portray the impact of naval operations on war and politics. Perhaps one of the most significant studies analyzing the influence of navy power throughout history is Alfred T. Mahan's *The Influence of Sea Power upon History*, first published at the end of

⁶⁸ Brewer, *Sinews of Power*, 12.

the 19th century. This work examined the long history of modern seafaring and the development of strong navies across the globe. In discussing the Seven Years' War, Mahan contended that Britain's navy was the primary reason for its victory over France.⁶⁹ Yet naval power was an expensive undertaking that further expanded the debt.

Britain's navy was well-established by the beginning of the war. In fact, the War of Austrian Succession is widely regarded as a watershed for the Royal Navy. The Austrian war, lasting from 1739 to 1748, was the first time that Britain's navy outperformed French naval power, and it established Britain as the dominant naval power on earth. Additionally, it was the first time that Britain had to transport a lot of men and supplies across the Atlantic to battlefields in the New World. Therefore, the War of Austrian Succession's supply chains became the foundation on which Britain's administration built its successful campaign during the Seven Years' War.⁷⁰

It is important to bear in mind the high cost of shipping supplies from Britain to America. Although both wars saw battles in the French and British colonies in the Western Hemisphere, the Seven Years' War was fought mainly on the North American continent, a vast area. More men and supplies were needed; consequently, more ships were needed. Throughout the entire war, Britain spent over £45 million on the navy, over twenty-five percent of the war's total cost.⁷¹ In 1758 alone, the net expenditure of the British government was £13.2 million. British naval expenditures totaled £3,803,000, nearly 30 percent of all the government's expenditures.⁷²

⁶⁹ A. T. Mahan, *The Influence of Sea Power Upon History: 1660-1783* (Boston: Little, Brown and Company, 1890), 328-29.

⁷⁰ Syrett, *Shipping and Military Power*, 1-2.

⁷¹ Daniel Baugh, "Why Did Britain Lose Command of the Sea?" in Jeremy Black and Philip Woodfine, eds., *The British Navy and the Use of Naval Power in the Eighteenth Century* (Leicester: Leicester University Press, 1988), 159-60.

⁷² Syrett, *Shipping and Military Power*, 3.

Private Merchants

However expensive the Royal Navy became, one aspect is often overlooked. Private ships were frequently contracted to carry supplies and men to North America and Europe. The normal rate for transport to Europe remained steady at just over £4 per ton.⁷³ Unfortunately for the British, the cost to transport goods to North America was higher. In fact, it became so expensive that long-term charters were given to private owners to carry freight at a lower cost, but on a regular monthly basis. The rate for ships with long-term charters was 10 shillings per ton per month. At a time when travel across the Atlantic took several months one way, the cost increased dramatically. The Naval Board spent more than £46,000 just on shipping basic naval supplies to North America and the West Indies rather than use precious space on Navy vessels.⁷⁴

Admiral Lord Rodney, commander of a fleet under Admiral Richard Hawke, was responsible for shipping supplies and men to the West Indies and North America. In a letter to a comrade in May 1762, he explained his orders to send 1,600 tons of supplies and troop ships to Jamaica. He remarked that only enough ships to carry 700 tons were readily available because the remaining ships required significant repairs to make them sea-worthy. Soon he found enough ships to fulfill his mission, sending the remaining 900 tons when the transports were ready to sail. All the supplies were on private ships chartered for naval service. The cost for each month that the convoys were at sea totaled £800.⁷⁵

⁷³ Syrett, *Shipping and Military Power*, 10-11. A Naval ton is based in volume rather than weight. A complicated equation is used to determine a ship's water displacement levels by which volume can be calculated.

⁷⁴ *Ibid.*, 11-13.

⁷⁵ Lord Rodney to John Cleveland, 31 May 1762, printed in Godfrey B. Mundy, *The Life and Correspondence of the Late Admiral Lord Rodney* (Boston: Gregg Press, 1972), 1:86-93.

Early on in the conflict, troops were sometimes ferried to North America and the West Indies by private ships, but the navy was charged passenger rates. Each ship had various prices for passengers, and soon the Navy Board was overcome with all the differing prices and paper work. Shortly thereafter, the Navy Board called for 10,000 tons of transport ships to be chartered with carrying soldiers to the New World. However, many ships were not suited to the transport of soldiers. Most ships had to be refitted with holds that could safely accommodate the human cargo. During the six months between 1 December 1757 and 4 June 1758, a single dock company, Deptford Dockyard, charged the Navy Board £2,792 in labor and supplies to refit private ships for the transportation of soldiers and horses.⁷⁶

Besides the shipping and refitting costs, the British Navy was financially responsible for chartered ships captured or sunk by the French. A ship named *Generous Friends* was captured by the French, and the Navy Board paid the owners more than £1,200 in order to fulfill its agreement. If a ship was recaptured, the British government would own the deed and the owner forfeited all rights to the vessel. Beyond reimbursing the owners who lost ships to the French, the navy paid for all repairs and refitting needed for chartered ships damaged by actions with enemy vessels. If the owners were forced to pay ransom for ships captured by the French, the navy would cover this in full. One particular case saw the British pay a bounty of nearly £500 for just one ship.⁷⁷ As a result of the continued loss of merchant vessels, the British Navy had to charter more ships each year in order to either replace lost ships or fulfill its growing need to transport soldiers and supplies to North America. Even though the private merchant fleet cost Britain enormous sums of money, the Royal Navy was much more expensive.

⁷⁶ Syrett, *Shipping and Military Power*, 19.

⁷⁷ *Ibid.*, 25.

The Royal Navy

Immediately following the declaration of war by the Crown, the Royal Navy endeavored to increase the size of its battle fleet. The peacetime crew levels numbered around 7,000 men. Within the first six weeks, however, the Royal Navy nearly doubled the amount to 13,000. Only impressments and direct payments were used to achieve this feat, when it took the same amount of time to produce three thousand soldiers in 1739. A 5,000-strong Marine contingent was also formed under the direct control of the Navy Board. Additionally, the dockyards needed more men and supplies in order to meet the large demand for new ships. The Navy Board also needed a larger supply force to feed the increasing number of sailors and soldiers heading to war. By 1756, the Royal Navy had quadrupled in size. In total, the navy had over 200 ships commissioned, including eighty-eight ships of the line. The Austrian war only had a maximum of ninety-four ships of the line commissioned throughout the entire war. Furthermore, over 40,000 men were in the service, slightly below the maximum number used in the previous war as well.⁷⁸

Unfortunately for the British, a series of early defeats and losses to inclement weather reduced the naval force by 14,000 men. The ships that had priority for repairs and reinforcements were those destined for the North American theater. Therefore, a fleet that was to be built for actions in the Mediterranean was put on hold so that the Royal Navy could replace the 14,000 men and ships necessary for the Western fleet. By 1759, the navy reached its maximum size of 300 ships and 82,000 men under arms. Each year following 1759, the number of contracts for new ships fell from the previous year.⁷⁹

⁷⁸ Richard Middleton, "Naval Administration in the Age of Pitt and Anson" in Black and Woodfine eds., *The British Navy and the Use of Naval Power*, 110-12.

⁷⁹ Middleton, "Naval Administration in the Age of Pitt and Anson," 113, 123. See also Daniel Baugh, "Naval Power: What Gave the British Navy Superiority?" in Leandro Prados De La Escosura ed., *Exceptionalism and*

Building new ships was an expensive undertaking. The largest factory operating in Britain during the period cost approximately £5,000 to build. A moderate-sized 74-gun ship for the Royal Navy cost approximately £50,000, ten times the cost of the factory. Once built, the ship only would last an average of ten to fifteen years if it was not sunk or captured by the enemy. Furthermore, repairs, outfitting and supplying each ship forced the British to divert large amounts of money to the navy in order for it to operate efficiently. The Royal Navy used nearly every available port during the war, forcing owners of merchant vessels (which were many times in the pay of the British Navy) to make more costly repairs in friendly ports outside Britain.⁸⁰

Problems with Shipping

Throughout the entire war, supplies from Britain had to be shipped across the Atlantic Ocean. Ships were constantly sailing back and forth between North America and Europe bringing men, supplies and ammunition. Many times, shipments were either delayed or stopped completely by weather, pirates or enemies. Therefore, the most pressing issue for any commander was the securing of shipments and supplies for the men in the field. This was an exhausting and thankless task. General Jeffrey Amherst, commander of British military forces in North America from 1759 until the end of the conflict, was bombarded with requests for supplies by his officers in the field nearly every day. He had to arrange the transportation of goods throughout the colonies once they reached American harbors.⁸¹

Industrialisation: Britain and Its European Rivals, 1688-1815 (Cambridge: Cambridge University Press, 2004), 249-51.

⁸⁰ Baugh, "Naval Power," 238-40.

⁸¹ Necessaries for the Transport of Supplies 15 December 1760, printed in *Amherst Papers*, 157-58.

The tonnage detailed in Amherst's schedule of ships on 15 December 1760, is remarkable in itself. There were only five ships headed to Charleston, South Carolina. Amherst listed each ship with its current tonnage and the particular units of soldiers sent along to help with unloading and distribution. The total tonnage for the five ships was 2,259 tons, a staggering figure for any one man to organize.⁸² Assuming that the ships made it safely to Charleston, the cost of shipping was extremely high.

One can estimate the cost of the entire shipment by examining the charge for a smaller cargo that reached Charleston to Edmund Atkin, superintendent of Indian Affairs in the Southern States, in 1757. Considering that sixty-seven packages, maybe weighing five tons, cost just above £36 to ship to Charleston from England, prices were affixed to the weight of the cargo being shipped.⁸³ Therefore, changing the cost of shipping five tons to £25 to adjust for variables, the cost of shipping the 2,259 tons of cargo would be £11,295. This is just one shipment of supplies to one sector of the continent. The seas were relatively easy to travel by this time as well, but enemy ships and pirates patrolled all major sea lanes and made it difficult to find insurance. Consequently, prices, especially insurance costs, were extremely high even for royal navy vessels. Private ships from Britain and France (and many from neutral nations) made fortunes shipping for both sides during the war.

Naval debt became the most serious problem facing the Navy Board throughout the war. In 1749, British naval debt stood at £3,072,472, a year removed from the end of the War of Austrian Succession. By 31 December 1762, the debt had increased to £5,929,125,

⁸² *Necessaries for the Transport of Supplies 15 December 1760*, printed in *Amherst Papers*, 158.

⁸³ *Invoice of 67 Packages Containing Presents for Indians to Edmund Atkin, 9 May 1758*, printed in *Amherst Papers*, 60-62. The estimation of shipping costs was calculated at the most conservative rate in order to show an example of the potential cost. Therefore, it is quite possible that shipping costs could have been much higher.

demonstrating the war's impact on the entire national debt.⁸⁴ In any case, the Seven Years' War was a milestone for the British Navy. For the first time it gained superiority over the French Navy, and Britain soon emerged as the most influential power on the high seas, not losing that distinction until World War I when the United States achieved predominance. Although the high costs of operating the navy placed an enormous strain on the British economy, Britain's economy was better prepared and able to withstand such a cost better than the economies of its enemies. However, the high costs did not end with maritime forces.

Transportation on the Frontier: Road Construction

Once the maritime shipment was unloaded onto docks, a much more difficult journey was made to reach the place where the supplies were to be delivered. The North American frontier was still dominated by massive forests and dense wilderness. For Europeans whose homelands were completely altered by human hands, vast expanses of forests were problematic. Not only were Indians lurking around each tree and brush (or so the British thought), but the roads that led through the dense forests were barely able to accommodate even a small cadre of soldiers. Supplies had to be carried by soldiers, horses and mules. Rarely could the supplies be moved in wagons and other heavy transport vehicles. In many instances, supplies were distributed wherever there was an open clearing or town. Human labor was insufficient to transport heavy artillery across long distances. Therefore, road construction was necessary in order for heavy artillery to be transported to forts and battlefields.

⁸⁴ Grellier, *History of the National Debt*, 217, 261. Naval debt was the amount of money spent beyond the approved budget of the Royal Navy. In calculations of national debt, Grellier includes the navy's debt.

In *Arms for Empire*, Douglas Edward Leach argues that General Braddock's defeat in 1755 was a direct result of the need to transport heavy artillery to capture Fort Duquesne. In order for Braddock to reach Fort Duquesne with the cannons, a large labor force was necessary to turn the small wilderness trail into a road that could carry artillery and the horse and mule trains that were needed. The large labor force became a burden that required more supplies and transports. Consequently, an already slow-moving force was delayed further by the sheer size of the column. Surprise and stealth were no longer achievable. Native Americans were able to discover the force and its vulnerabilities with little difficulty, leading to the massacre of Braddock's men in the wilderness near the Monongahela River.⁸⁵ After Braddock's defeat, British commanders realized the need for smaller and more effective fighting units. Not only did they require irregular fighting units, they wanted soldiers who could travel lightly and swiftly through dense areas of forests.⁸⁶

Traveling quickly was nearly impossible with the terrible condition of roads throughout the areas under contention. Especially in the wilderness, relatively short trips were made long by sandy or wet roads, making travel with wagons difficult at best. One official in the British ranks complained that it took too long to receive goods to trade with Indians for the immediate needs. In his estimation:

It would delay the expedition too long to wait until they could be carried to Keowee, which is generally the work of a month or five weeks for loaded wagons, the distance is 300 miles, the road very sandy, and the horses are the worst in the world.⁸⁷

⁸⁵ Douglas Edward Leach, *Arms for Empire: A Military History of the British Colonies in North America, 1607-1763* (New York: The Macmillan Company, 1973), 358-69.

⁸⁶ John Grenier, *The First Way of War: American War Making on the Frontier, 1607-1814* (Cambridge: Cambridge University Press, 2005), 118-21. There is further discussion on this topic in Chapter 3.

⁸⁷ W. Bird to Lord Loudoun, 21 March 1758, printed in *Amherst Papers*, 53-54.

As this remark makes clear, poor road conditions and the quality of the horses found in North America made a difficult situation even worse. Since the roads were in such terrible shape, new roads and repairs for those already in existence became necessary for moving troops and supplies consistently and effectively.

The need for an extensive labor force to build and maintain roads through the wilderness was obvious to Colonel Henry Bouquet, commander of a regiment in the southern sector throughout the war (and famous for his capture of Fort Duquesne in 1758). In a bill he sent to Lord Loudoun, Commander in Chief in North America until his removal in 1759, Bouquet listed the costs of blazing trails and supplying the laborers. He explained that the £5,000 sent to him had already been spent and asked Loudoun to send him more money so that he could finish his mission to defend a small town. The town also needed barracks for the soldiers to sleep in and new roads and trails outside the walls to move supplies and troops. Interestingly, Bouquet used black men as his main source of labor. He stated that “we have agreed that they should work 6 hours every day, for 3S. 6d. or 6d. St. (sterling) to which they add a gill of rum.”⁸⁸

Beyond labor costs, trail blazing required enormous sums in supplies and additional transports. British officers were often incapable of providing the large number of transports necessary to supply even small contingents of soldiers. During the war, the British government enacted few laws that allowed the British military to requisition wagons and horses in North America. Even when impressment laws were passed, they were rarely enforced effectively. Instead, horses and wagons not owned by the British government had to be purchased or rented. In 1761, the cost to hire a single wagon was approximately £4 per

⁸⁸ Colonel Henry Bouquet to Lord Loudoun, 16 October 1757, printed in S. K. Stevens, et. al., *The Papers of Colonel Henry Bouquet* (Harrisburg: Pennsylvania Historical Commission, 1972), 1:212-20. Note about monetary abbreviations: 12 pence (d.) equaled one shilling (S.) and 20 shillings equaled 1 pound.

day. Several attempts were made by British officers and officials to lower the cost, with little success.⁸⁹

Bouquet faced the same issues during the Forbes Expedition to capture Fort Duquesne. One of his supply officers sent him an estimate of the total number of wagons needed to carry food stores for the campaign. He sent for over two hundred barrels of pork for the expedition. At the cost of £4 per wagon, the total equaled £120 per day.⁹⁰ One month later the expedition was beginning to move and he needed another 100 wagons, totaling over £400 per day. The expedition did not leave until the latter days of August 1758 and did not complete its mission until 25 November. Only counting from 1 September, the total cost to for the wagons necessary for Bouquet's regiment exceeded £34,400. In addition to the wagons, over a thousand pack horses were needed for the campaign, further adding to the financial costs.⁹¹

Another illustration of the heavy fees associated with transporting military goods to the frontier concerns John St. Clair, officer in charge of supply in Pennsylvania. His attempt to ship 80,000 pounds of flour to Pittsburgh shows how expensive it could be to move basic foodstuffs. He noted that the total cost was slightly more than £4,322 (he was quick to point out that he had made a saving of £1,122 to the Crown because of his negotiations) to send the goods to Pittsburgh. The cost of the flour itself was only £400, just 9.25 percent of the entire cost.⁹² Thus, over 90 percent of the expense was accrued in the procuring of horses, feed, saddle bags and horse drivers. This clearly indicates that by far the largest portion of supply

⁸⁹ James Grant to General Jeffrey Amherst, 17 January 1761, printed in *Amherst Papers*, 174-80. The price was actually set at £4:10S.

⁹⁰ Hoops to Bouquet, 9 June 1758, printed in *The Papers of Colonel Henry Bouquet*, 2:59.

⁹¹ Bouquet to Forbes, 21 July 1758, printed in *The Papers of Colonel Henry Bouquet*, 2:248-53.

⁹² John St. Clair's Calculation, Advertisement and Circular Letter, 4 Jan 1759, printed in *The Papers of Colonel Henry Bouquet*, 3:14-15.

costs on the frontier was used to get the materials from one place to another, rather than to buy the materials themselves.

By 1759, British forces in North America were already experiencing severe budget constraints. In a description of the difficulties faced by his army, Bouquet mentioned the number of wagons that he needed to continue prosecuting the war. Nearly 1,300 wagons were needed, but Virginia and Pennsylvania could only provide 600. Furthermore, he explained that in the course of its operations his army had acquired debts that needed to be paid. He did not think that the colonies would provide the necessary funding to pay off his past debts. The debt totaled nearly £100,000, and unless they could find the money to pay the debts, Bouquet wrote, his forces would have to slow down and wait for funds to be sent from Britain.⁹³

Road Maps

Among the many difficulties that traveling through the frontier caused for the British, the most important part of planning campaigns was gathering the transports and laborers necessary for the long trips. In determining the amount of transports and laborers needed, the distance to be traveled and the time it would take had to be investigated. Bouquet sent men out regularly to investigate roads that already existed or to create new roads along the best possible route. One such man was George Washington. In August 1758, Washington wrote to Bouquet asking “if it requires more time, or is it more difficult and expensive to go 145 miles in a good road already made to our hands, or to cut a road 100 miles in length, great part of

⁹³ Bouquet, State of the Southern Department, 11 May 1759, printed in *The Papers of Colonel Henry Bouquet*, 3:275-76.

which, over almost inaccessible mountains.”⁹⁴ It appears that Washington tired of building roads that only seemed to take longer and cost more money when roads already existed that could be used more quickly and cheaply. Yet the young Virginian completed his mission and continued to determine the distances that could be taken by different routes to Fort Duquesne. He described two different routes, marking each different road and turn in mileage on each. The first route was only 193 miles long, but the route was strewn with broken wagons and was much less likely to suit Bouquet’s force. The second route was listed as 212 miles, but it was much easier and in better shape for use by the British forces.⁹⁵

Bouquet’s papers include many detailed descriptions of roads and distances. One particular officer’s entire mission was to produce reports on roads that could be traveled by Bouquet’s forces once they reached the point that Washington had mapped. Patterson noted that the distance from the last stop to Fort Duquesne was 50 miles. Each road had a description of its condition and capability of holding Bouquet’s soldiers and supplies. Certain areas that were of interest to the Colonel were noted, such as good places to camp and get water and rest.⁹⁶

Forts

The unpredictability of roads, trails, provisioning and natives led to the development of a system of forts for the protection of supply lines throughout the frontier. Small settlements became outposts and small towns were converted into forts.⁹⁷ This new system added to an already existing chain of forts that were inadequate to stem French and Indian

⁹⁴ George Washington to Bouquet, 2 August 1758, printed in *The Papers of Colonel Henry Bouquet*, 2:298-303.

⁹⁵ *Ibid.*, 2:300-01.

⁹⁶ James Patterson, Journal, August 1758, printed in *The Papers of Colonel Henry Bouquet*, 2:327-29.

⁹⁷ Colonel Henry Bouquet to General Daniel Webb, 25 August 1757, printed in *The Papers of Colonel Henry Bouquet*, 1:166-69.

advances. The fort system served several purposes. In order to protect frontier communications and supply routes, forts were needed at crossroads, villages and at the line of defense. In order for Britain to adapt its forces and tactics to frontier conditions, extensive supply routes had to be prepared and protected. Thus, forts became the most essential aspect of this. Soon after the outbreak of war, both Britain and France were forced to begin massive building and repair projects all across the frontier. Though wood was abundantly available, manning the forts and supplying the cannons, guns and ammunition became an expensive undertaking. Not only was it expensive, but all the guns and ammunition had to be brought from the coast, adding further to the time and effort required to wage war on the frontier.

The British were aware that the French were much better prepared with sixty to seventy forts and nearly as many settlements spread across the frontier by the beginning of the war.⁹⁸ Furthermore, those forts the British did have were in a state of disrepair. An official charged with reporting on the condition of fortifications in western New York wrote in June 1756 to convey “a true idea of the nature of these places.” He continued, “[My comrade] is at Oswego and has sent down a much worse report of that place and we are only indebted to the want of ability or bad conduct of the enemy for its being in our possession; as of itself it could have made no defense.”⁹⁹ The British endeavored to equal or surpass the number of French establishments with forts and outposts of their own.

As well as repairing existing forts, the British built new forts and barracks in and around towns all over the coastal and western portions of the southern colonies. In one particular case, Bouquet requested £7,000 to help offset the cost of building defenses around

⁹⁸ Thomas Pownall, *Considerations upon the Site, Interests, and Service of North America, 1755*, printed in Stanley Pargellis, ed., *Military Affairs in North America, 1748-1765: Selected Documents from the Cumberland Papers in Windsor Castle* (North Haven, CT: Archon Books, 1969), 158-63.

⁹⁹ Harry Gordon to Robert Napier, 22 June 1756, printed in Pargellis, *Military Affairs in North America*, 176-77.

the town of Fort Prince, Georgia.¹⁰⁰ Additionally, forts were built to protect coastal areas from the frontier. When Bouquet was sent to Charleston, South Carolina, he noticed that the fortifications in and around the city were not up to standard. He sent a letter to Loudoun asking for more money to supplement the £9,000 already set aside for the development of better forts and works for the city. He made it clear that, without extra funding, Charleston remained in danger of being captured by the French. Yet he was more concerned about the lack of protection from hostile Indian tribes, for Charleston was surrounded by forest, and situated close to the frontier.¹⁰¹

Forts were built by officers all across the frontier. Some forts were more expensive than others. Fort Cumberland, built and named in the Duke of Cumberland's honor, initially cost £10,000 to build and man. It continued to need money for maintenance and supplies. All the while, the fort's bastions were expanded upon as long as the soldiers were stationed there.¹⁰² When French forts were captured, they were repaired and refitted for British use. In one instance, £10,000 was sent to Ohio Territory to repair several forts taken, but budget constraints sometimes forced the British to limit repairs to aesthetic maintenance. A fort could thereby be made to look more formidable even if it was not in fact rendered so.¹⁰³

Fort building was not limited to the frontier or southern colonies. Rhode Island was given £15,000 for repairing, outfitting and enlarging the fort protecting Newport from naval attack. Nearly all the money was spent on cannons, men and supplies, and Rhode Island officials asked for more money to continue expanding the protection the colony considered

¹⁰⁰ Bouquet to Loudoun, 8 December 1757, printed in *The Papers of Colonel Henry Bouquet*, 168.

¹⁰¹ Bouquet to Loudoun, 10 December 1757, printed in *The Papers of Colonel Henry Bouquet*, 1:257-60.

¹⁰² Henry Fox to Governor Charles Lawrence, 14 August 1756, printed in Pargellis, *Military Affairs in North America*, 222.

¹⁰³ Sir Thomas Robinson to Braddock, 13 August 1755, printed in Pargellis, *Military Affairs in North America*, 473.

imperative.¹⁰⁴ Unfortunately, Rhode Island saw little action during the war making the additions an unnecessary expenditure. In preparing for war, the North American colonies quickly petitioned the government for as much monetary support as possible, each group insisting that it was important to protect their colony first. As a result, the costs of shipping and protecting the supplies so desperately needed to continue the war placed a heavy burden on the taxpayers in Britain and the public treasury.

Conclusions

The Seven Years' War experience shows how urgent the need was to provide the goods necessary to conduct effective military campaigns. Martin van Creveld argues that supply is the single most important factor in war. He points to both world wars as examples, though he contends that Napoleon was the one who revolutionized military supply systems.¹⁰⁵ In fact, it could be argued that Britain made the first step in revolutionizing the supply process, using naval transportation as the principal method. However, transporting goods was neither cheap nor easy. Britain discovered that it was very expensive to ship these goods, but of course it was necessary in fighting wars over long distances.

Transporting the goods necessary to conduct a successful war created problems for future generations. Transportation was not the only reason for an increase in Britain's national debt and military expenditures. Many other factors played a role, including the frontier, subsidies paid to the colonies and Prussian states and the growth of the British army. However, transportation affected all other factors. Without the effectiveness of Britain's transportation system, Britain would not have defeated France.

¹⁰⁴ Summary of letters from Spencer Phips, Thomas Fitch, Arthur Dobbs and Rhode Island, July to August 1755, printed in Pargellis, *Military Affairs in North America*, 132-33.

¹⁰⁵ Martin van Creveld, *Supplying War: Logistics from Wallenstein to Patton* (Cambridge: Cambridge University Press, 2004).

III. PRICE OF LOYALTY: NATIVE AMERICANS AND BRITISH TACTICAL CHANGES

Though transporting goods was difficult and expensive, another problem affected transportation and military operations in North America. Native Americans held an advantage when negotiating with both of the belligerent powers. Beyond slowing transportation and participating in military campaigns, the natives had a social, economic and political impact on the Seven Years' War. When armies needed cross tribal lands, their commanders had to deal directly with the chief or chiefs of those tribes. Armies presented "gifts" in order to satisfy the wants and needs of Indian tribes throughout the frontier. This added a significant expense to the already high levels of military expenditure and historically high debt levels.

This practice of giving gifts to Native Americans in order to have better relations was not new, nor was it extraordinary. In *The Middle Ground*, Richard White shows that the Native Americans conducted diplomacy throughout the era of colonization as separate nations or sovereign powers. Though cultural differences were difficult to overcome, Europeans and natives regularly conducted business together by finding a "middle ground" of respect and understanding, and most tribes wanted to trade with the colonizers in order to obtain new weapons, clothes and other goods. During the Seven Years' War, the Indians had no reason to believe that Europeans would treat them any differently.¹⁰⁶ Soon, it became a race to gain native fighters in an effort to find combatants. In fact, American colonists were

¹⁰⁶ Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge University Press, 1991).

more difficult to please than were the Native Americans, as seen with their price gouging and refusal to allow their horses and wagons to be used for military campaigns. Even though it was standard practice to give gifts to natives for cooperation, the Seven Years' War saw a substantial increase in the number and quality of the gifts offered and the costs to satisfy natives.

The Economic Impact of the Native Americans

The frontier forced the British to subdue the Native Americans in their path or be subject to attacks that would disrupt their military campaigns. Therefore, the Indians held an exceptional advantage when in negotiations with British officers and officials. The Indians could never hope to withstand a full-scale war with the British. However, the Indians could cause extremely long delays by quick strikes along the paths through the dense forests. The British could not hope to pass through a particular area of forest without at least one minor skirmish. Although casualties caused by these frequent attacks were few, the delay cost the British time which could determine the outcome of battles.¹⁰⁷ The British, consequently, needed large sums of money to gain native loyalties.

As a testament to this, Edmund Atkin, British Superintendent of Indian Affairs in the southern sector, complained about the inadequate funds he received from the colonial governments to help initiate trade and conclude a military alliance with the Cherokee tribe. In a letter to the lieutenant governor of Virginia in 1757, he explained that the £5,000 already set aside for his use would be “very insufficient” to continue supplying the Cherokees with the goods that they needed. In fact, most of the money was used to hire and feed the horses that carried the goods to the Cherokees. Furthermore, Atkin was forced to pay £200 to buy a

¹⁰⁷ Anderson, *Crucible of War*, 108-10.

license from the colony of North Carolina to trade with the Cherokees.¹⁰⁸ In his letter, Atkin stressed both the costliness of purchasing native loyalties and the concept of treating native tribes as sovereign entities. Rather than use the word “want,” he used the word “need” when describing the goods supplied to the Indians.

General Jeffrey Amherst, who took command of the British forces in North America in 1759, was familiar with the problems of pacifying natives. As described in his papers, the colonial government of Virginia had initially used natives to prosecute the war against the French and their Indian allies. In October 1757, Edmund Atkin gave the colonial government of Virginia a bill that laid out the specifics for gathering more Indian allies. The bill included the cost of traveling for Atkin, goods to trade with the Indians and Indians hired to fight and guide the British through the frontier. The total cost amounted to nearly £900 sterling for just one small tribe of Indians.¹⁰⁹

Once the colonial governments received the bill, they considered the question of who ought to pay Atkin. In a meeting of the governor and other officials in Virginia’s colonial government, a bill for Atkin’s and his aides’ services was challenged by officials. Some members of the government felt that the aides were unnecessary. They suggested that Atkin should apply to the King for repayment rather than to Virginia. They believed that the objective of pacifying natives and encouraging them to fight for Britain was purely the King’s concern and not theirs.¹¹⁰ In another instance, Atkin was forced to pay for certain gifts to supplement the £2,000 given to him by the British Army because the colonial assemblies

¹⁰⁸ Edmund Atkin to Lieutenant Governor and General Assembly of Virginia, 21 Aug 1757, printed in *Amherst Papers*, 22-28.

¹⁰⁹ Edmund Atkin to Colony of Virginia, 14 October 1757 printed in *Amherst Papers*, 29-30. The tribe discussed here is Cherokee, but not the entire tribe. It is a small group who were fighting for the British at the time. The Cherokees will rebel as a whole (supported by the French of course) following the capture of Quebec.

¹¹⁰ At a Council with the Governor, 18 Oct 1757, printed in *Amherst Papers*, 30-31.

refused to give him additional monies. Some of the assemblies declared that he should not go any further “unless entirely at the King’s expense.”¹¹¹ Evidently, the colonies were growing wary of paying for goods to supply Native Americans for war.

Beyond the goods bought for the Indians, Atkin needed men to carry the goods from the storehouse to the Indians. In a bill from 1759, Atkin specified that thirteen men had accompanied him throughout his journeys. For one year’s service he had paid his employees over £500 in wages. Food was not included in the bill and was more than likely included in a separate bill.¹¹² In any case, judge from Atkin’s statement of one year of wages for thirteen men, the total amounted for all such personnel in Britain’s service for one year must have been considerable.

As an example, General Forbes sent Colonel Bouquet £800 worth of Indian goods to help ease his stay in Pennsylvania around the area of Fort Duquesne, near modern day Pittsburgh.¹¹³ Bouquet needed natives for several reasons. He relied upon them to guide his army through the wilderness, and when the British were compelled to stay in a fort or a town, Bouquet sent out Indian scouts to gather intelligence.¹¹⁴ British officers rarely sent their own soldiers into the frontier for scouting purposes, because Indians were better suited for the job. Colonists sometimes replaced natives, but it was a poor substitution at best. Therefore, native intelligence was held in high regard, further supporting the need for Native American allies.

Not only were the British buying their loyalties, but they were paying for every prisoner or dead enemy, French or Indian. In the same bill Atkin sent to the Virginian

¹¹¹ Atkin to General Abercrombie, 20 May 1758, printed in *Amherst Papers*, 63-67.

¹¹² Atkin Account of Wages to Amherst, 24 Dec 1759, printed in *Amherst Papers*, 78.

¹¹³ Forbes to Bouquet, 8 Jan 1759, printed in *The Papers of Colonel Henry Bouquet*, 3:22.

¹¹⁴ Mercer, Indian Intelligence to Bouquet, 17 March 1759, printed in *The Papers of Colonel Henry Bouquet*, 3:204-07.

government, he listed a price for the scalps and prisoners that the Indians had sold to him.¹¹⁵

It is interesting to note that the British openly offered money for prisoners and the scalps of dead enemies (who may or may not have been enemies). In his instructions to his deputy, Christopher Gist, who had been sent on a mission to purchase more Indian allies, Atkin specifically stated what the price was to be for each scalp or prisoner: “A reward of £45 is allowed to any Indian in amity with the inhabitants of this Colony (Virginia) for every Indian enemy taken prisoner by him; and a reward of £40 also for every Indian enemy killed or destroyed,” (for which a scalp could be presented to prove death). Atkin was not too happy about the policy, which was decreed by the colonial government, and advised Gist to exercise caution when paying the reward. Atkin was aware that the Indians were exceptionally adept at cheating the system. As he warned Gist:

Cherokees in particular have found the art of making four [scalps] out of one enemy killed; and moreover, by such large rewards, private scalping is encouraged not only without any public benefit resulting from it... in as much as you know I have, by late experience, found them to be so many temptations to some Indians in amity with us to kill others that are our friends when they think they have a good opportunity...by finding them single or alone.¹¹⁶

Atkin believed that the Indians were untrustworthy, and he knew that some of them were killing friendly Indians in order to receive larger rewards.

On 9 May 1758, a ship full of supplies earmarked for the Indians arrived at Charleston, South Carolina. The shipment included blankets, clothes, tobacco pipes, paint and jewelry, worth nearly £200 altogether. In addition, military supplies, also a part of the cargo, were intended for Indians with whom Atkin had made alliances. There were fourteen casks of bullets along with twelve chests of muskets, rifles and other small arms. To complement the small arms, twenty barrels of gun powder were on the ship. The military

¹¹⁵ At a Council with the Governor, 14 Oct 1757, printed in *Amherst Papers*, 29-30.

¹¹⁶ Letter to Christopher Gist, 16 November 1757, printed in *Amherst Papers*, 35-46.

supplies brought the total cost of the ship's cargo to over £612. Including shipping (discussed in Chapter 2) the total cost of the shipment exceeded £648.¹¹⁷ Every single item was for Native Americans, who rarely fought for the same side throughout the war. Many times the same Native Americans bribed and armed by the British armed would change loyalties and use their weapons against instead of for Britain.¹¹⁸

Figure 7: Example of Goods Used to Buy Loyalties

A Return of Indian Goods to be Sent to Pittsbrough
from Fort Benford

To 25 Dozen of Glasp Knives about	50 Pound Weight	
Thread	10	
10 Peices of Garting	3	
10 Pieces of Yellow binding	3	
Wire	1 1/2	
1 Grose of Aul Blades	6	
6 Dozen Jews Harps	6	
26 Check Shirts	39	
15 Pieces of half thicks	150	
7 Strouds	6	
Vermilion	6	
Tobacco	150	
30 Pipe Tomahoakes	15	
25 Blankets	100	
25 English Match Coats	75	
19 Silver Hair Bobs	} about	4
12 Silver Gorgets		
4 Silver Wrestbands		
4000 White Wompun		
5 Horse Loads . . .	624 1/2 Pound Weight	

Source: List of Indian Goods, 13 Jan 1759, printed in *The Papers of Colonel Henry Bouquet*, 47.

¹¹⁷ Invoice of 67 Packages Containing Presents for Indians to Edmund Atkin, 9 May 1758, printed in *Amherst Papers*, 60-62.

¹¹⁸ Anderson, *Crucible of War*, 267-269.

Further increasing the cost to pacify and satisfy the Indians, each commander had the authority to supply gifts to Indians they met during their campaigns. In two separate requests from commanders on the frontier, Edmund Atkin would give a total of £89 to buy gifts and “presents,” as they were called, to help these commanders befriend the Indians they encountered.¹¹⁹ Requests like these were extremely common throughout the entire North American continent. Not only were the British extensively using bribes, rewards and gifts, but the French were using the same methods. Buying Indian loyalty was an expensive business.

Edmund Atkin sent General Amherst a list of expenses he incurred while traveling to Indian tribes all over the Southern colonies. He included the cost of all the supplies that he had not been paid for already by the colonial governments for the years 1757-1760. This particular list is extremely long and detailed, and it includes non-military items as well, such as necklaces, rings and food. The total amount that Atkin asked for was £2,491, with another £332 to be paid for his own services. The price of keeping Indians allied with the British grew throughout the war, and Atkin’s figures were only for three years at the very beginning of the war.¹²⁰ Moreover, Atkin was not the only official traveling amongst the Indians in order to increase the size of Britain’s Indian forces in North America.

By the end of the war the relationship had soured between British army officials and native tribes. General Amherst began to seek dominance over the Indians and many of the tribes felt betrayed and resented the rejection of the “middle ground” as the basis for trade

¹¹⁹ List of the Remainder of Indian Presents to Edmund Atkin from William Pinckney, Commissary General, 31 August 1758, and List of the Remainder of Indian Presents to Edmund Atkin from David Douglass, 14 November 1758, printed in *Amherst Papers*, 68-69.

¹²⁰ Accounts Received from Edmund Atkin, 24 March 1760, printed in *Amherst Papers*, 108-112.

and cooperation.¹²¹ Soon, tribes revolted against the British. Unfortunately for the French, most of the revolts took place following France's defeat on the continent. One particular rebellion by the Ohio Indians forced Colonel Henry Bouquet back into action against the same Indians he had once helped to arm and supply.¹²² Native Americans expected to be and were treated by the British as equals until the end of French presence in North America.

The Indians knew they had the opportunity to increase their wealth and influence. If one side offered more money, the Indians would change sides. Labor was in short supply on the frontier and the Indians were able to use collective bargaining effectively to make personal and tribal gains where and when they could. Therefore, the Indian labor supply was in high demand and forced the British and French to use more money than ever before to gain the support of the Indians. Both sides were competing for the same labor pool and it drove the price of Indian labor higher and higher. Britain was already operating with a high level of national debt, and the Seven Years' War increased that debt.¹²³ The problems associated with fighting a war on the North American frontier. The conduct of the Native Americans helped to push the British Empire into fiscal crisis and alienated the colonists who were doing what they could to help Britain win the war with France.

The Cost of Operating a Frontier War

During the War of Austrian Succession there were battles with 30,000-60,000 men in arms on both sides. In fact, it was rare for battles to occur with fewer than 10,000 men

¹²¹ White, *The Middle Ground*, 148-50.

¹²² William Smith, *An Historical Account of the Expedition Against the Ohio Indians, in the Year 1764. Under Command of Henry Bouquet* (Philadelphia: W. Bradford, 1765).

¹²³ Nester. *The First Global War*, 241-42.

involved.¹²⁴ The disparity between the two wars in this respect is enormous. The Seven Years' War on the North American continent rarely had battles with more than 5,000 soldiers involved. The only battles on the same scale as those in the War of Austrian Succession took place on the European continent.¹²⁵ How could a war that used far fewer men in much smaller battles cost nearly twice than a war that lasted two years longer and used much larger numbers of soldiers in bigger battles?

Both wars were fought on a global scale and the lasted for nearly the same length of time. The key difference is that the North American continent became a major theater of war for the first time in colonial history. Unlike Europe by this time, North America had very little of its land mass settled and developed. The North American forests and mountains were still the dominant features on the continent. Natives remained a prominent force holding back development and settlers. Therefore, if a settler wanted to push further into the forest to move west, he had to consider how he was going to protect his family from possible Indian attacks. Most of all, the settler had to find a suitable place to build his home in vast and dense forests.¹²⁶

Native American tribes and dense forests made the North American continent difficult to settle and develop. Conventional military forces could not penetrate the forests without taking weeks and months to lay out traversable roads. Therefore, when fighting broke out between France and Britain on the frontier, conventional military methods were ineffective. New units had to be established and new training for old units was developed to fight a war that would require guerilla-style fighting and movements. A New Hampshire-born colonist, Major Robert Rogers, was charged with recruiting a company of soldiers

¹²⁴ Reed Browning, *The War of the Austrian Succession* (New York: St. Martin's Press, 1993), 246-54.

¹²⁵ Harrison Bird, *Battle for a Continent*.

¹²⁶ Borneman, *The French and Indian War*, 13-17.

capable of fighting and moving efficiently in the frontier against the French.¹²⁷ Rogers was well acquainted with life on the frontier and with Native American tactics. This made him invaluable to the British in developing new units that could fight in forests against Indians who knew the terrain better than any European. Rogers used fewer men with fewer supplies, but consistently employed Native Americans as guides and soldiers.¹²⁸

In North America, the Seven Years' War became a frontier war. Frontier engagements differed from pitched battles on the European continent in mainly two ways. For one, forests inhibited the movement of large groups of men; therefore, smaller numbers of soldiers were used so that movement was easier through densely forested areas. As Stephen Brumwell has noted, though some historians claim that the British imposed their way of warfare on the frontier, there is no evidence to support those assertions. In fact, there is more evidence to support the view that the war in North America was irregular at best and that the frontier imposed itself on the British. Consequently, the threat of ambush and irregular fighting forced the British to use small contingents of men in innumerable skirmishes and light engagements. The "gentlemanly" style of fighting – lines of men taking turns shooting and the heavy reliance on cannon – hardly ever occurred on the frontier of North America.¹²⁹

The increasingly smaller commands created another problem that added to the pressure on the already over-stretched military budget. In the British army during the 18th century, to be an officer was to be in an honored position. Aristocrats and higher-class citizens were the ones most able to obtain commissions as officers. For an officer, fraternizing with the lower ranks in his command was "un-gentlemanly." Therefore, officers

¹²⁷ Robert Rogers, *Journals 1731-1795* (New York: Corinth, 1961), iii-v.

¹²⁸ Brumwell, *Redcoats*, 205-06.

¹²⁹ *Ibid.*, 191-194.

had to maintain a decorum that was expensive, and officers were paid much more and received larger rations than the privates under their command.¹³⁰

The small units that operated quite independently of each other on the frontier created a need for more officers. Even for groups of soldiers a hundred in number, an officer had to be in command. During the War of Austrian Succession, officers were in command of much larger groups and units of men. There was no need to separate or divide armies to navigate the European continent.¹³¹ The British army commissioned an enormous number of officers during the Seven Years' War. Each rank carried its own different pay scale and prestige.

Consequently, the high cost of warfare on the frontier was compounded by the number of officers being commissioned to lead these small parties of men. Along with the cost of officers, the pay for soldiers within the rank and file was also high. Many times, the paymaster had to pay soldiers in advance because of the length of time they would be out on the frontier. In 1760, according to records in General Amherst's papers, the paymaster was asked to pay three different units for a month of service in an upcoming campaign. The largest unit of the three required a total of £1,479 for just sixty-one days. The total cost per day for this unit was a little over £24. The other units required total pay for that same month was just over £1,025, about £7 per day.¹³² This is just one example from one particular campaign. With hundreds of campaigns occurring at the same time, the cost of war on the frontier clearly outweighed the ability of the British government to finance it. Therefore, public credit was needed to secure the necessary funds, driving the national debt up to a level never seen before.

¹³⁰ Brumwell, *Redcoats*, 84-95.

¹³¹ Browning, *The War of the Austrian Succession*, 249-54.

¹³² Extract from a Letter at the Pay Office, 11 October 1760, printed in *Amherst Papers*, 171.

Furthermore, the amount of supplies needed to feed and arm the entire army grew at exponential rates. For one soldier to survive the rigors of the march and fighting, one week's rations were as follows:

7 lb of bread – or in lieu thereof – 7 lb of flour
 7 lb of beef – or in lieu thereof – 4 lb of pork
 3 pints peas, 1 lb cheese – or in lieu thereof – 6 oz butter
 1 lb flour – or in lieu thereof – ½ lb rice¹³³

Each soldier was supposed to have these supplies every week, but rarely did supply officers have enough to fulfill the requirements. Many officers would buy whatever they needed and could find on their travels. Indian clothes, shoes and weapons (like knives and tomahawks) were purchased to increase the effectiveness of British soldiers on the frontier, further increasing the amount of money spent on the average soldier.¹³⁴ The cost to keep soldiers and officers in the field increased as the war dragged on.

As Britain's finances were stretched to the limit, American colonists were increasingly wary of supporting the war on the frontier. One officer wrote in 1759 about the trouble he had when trying to gather what was necessary to continue fighting. He remarked that he had no connections with the colonials in the place where he was attempting to buy supplies. In response to his requests, colonists refused to take British credit and promises of payment in place of specie. He was able to procure some of what he needed, and requested that he be sent coin so he could buy the rest.¹³⁵ Bouquet, meanwhile, was having trouble paying the colonial soldiers in his regiment. In response, General Forbes sent £700 to help cover the shortfall in Bouquet's budget.¹³⁶ By doing so, he kept colonists in the ranks for a

¹³³ The Earl of Loudoun to Colonel Henry Bouquet, 24 April 1757, printed in *The Papers of Colonel Henry Bouquet*, 83-86.

¹³⁴ Brumwell, *Redcoats*, 228-36.

¹³⁵ Ourry to Forbes, 3 Feb 1759, printed in *The Papers of Colonel Henry Bouquet*, 100.

¹³⁶ Forbes to Bouquet, 8 Jan 1759, printed in *The Papers of Colonel Henry Bouquet*, 22.

few more months. Colonists were much harder to please in instances where protecting a fort was necessary. At Fort Duquesne, American militia threatened to leave the fort nearly unprotected unless they were given their pay. As the Americans were highly restless, Bouquet wrote to them personally asking for more time. He pleaded with the captain for just another month or two to help resolve the issue.¹³⁷ Ultimately, this was a sign that the colonies were growing dissatisfied with certain aspects of the relationship between them and the Crown.

¹³⁷ Bouquet to Maryland Troops, 22 Jan 1759, printed in *The Papers of Colonel Henry Bouquet*, 68.

CONCLUSION

As shown in this thesis, British military expenditures and public debt increased substantially due to the Seven Years' War. The main reasons for this were unchecked spending and the addition of North America as a major theater of war. The war became the trigger towards a new fiscal practice by the British as they moved to utilize public debt as the main source for funding wars. The scale and scope of warfare only increased following the war, and it became a field test for deficit spending in future major conflicts involving Great Britain. Though the war ended with Britain receiving Canada from France as part of the peace treaty, Canada increased the financial burden in the long term by forcing the British to occupy and defend a huge expanse of land. The British colonies were heavily populated and continued to support colonial militias to protect their borders, but the borders of Canada were nearly defenseless after the French military evacuated the territory. Thus, Britain began to look for other options to pay for their new acquisitions to the empire.

Following the end of the war, Britain replaced France as the dominant power in North America. By doing so, American colonists assumed that they could continue to expand their territory to the west. However, Parliament issued the Proclamation of 1763, prohibiting European expansion west of the Appalachian Mountains. Colonists believed that the war was fought to allow settlements on disputed territory. Instead, Britain realized that the war was an expensive undertaking, considering the few immediate economic gains it made. British

politicians insisted that new taxes should be imposed on the American colonies to help pay off the national debt. Lord Chesterfield, advisor and ally of William Pitt, wrote that the colonies were expected to pay the stamp duty because the war had been undertaken on their behalf, and therefore, the colonies deserved to pay their part.¹³⁸ Britain borrowed the unprecedented sum of £58 million to pay for the Seven Years' War, doubling the national debt.¹³⁹ Most importantly, only £5.3 million was eliminated by 1775, roughly twelve years later.

By the beginning of the American Revolution, Britain's fiscal-military state began to show signs of strain. Britain realized that the colonies were becoming wealthy. The trade between Britain and the thirteen colonies was fluid and profitable. As a result, Britain looked to the colonies as a source of revenue to help pay for the high national debt, which had largely been created by frontier warfare intended to protect the colonies from French encroachment. Britain began to spread the costs of the war among the component parts of the Empire, which offended American colonists as new taxes were imposed on a relatively autonomous region. Though India and other areas of the Empire faced much higher levels of taxation and exploitation, the American colonies were used to preferential treatment. While the British believed that the colonies "owed" the mother country money for the protection she provided, the American colonists saw it differently. Americans protested the new taxes and regulations placed on them by the British government. Soon, the colonists would call for representation in the Parliament in order to protect their interests. Though there were many other causes for the American Revolution, none were held more dearly by Americans than the principle of "taxation without representation." Finally, Americans revolted, took up arms,

¹³⁸ Lord Chesterfield to his Son, 27 December 1765, printed in Bradshaw, *The Letters of Philip Dormer Stanhope, Earl of Chesterfield*, 1332.

¹³⁹ Brewer, *Sinews of Power*, 30. Also found in Macdonald, *A Free Nation Deep in Debt*, 233.

and created a unified governmental structure to govern the colonies independently of Britain. Therefore, the American revolt added to a debt that the Seven Years' War had helped to create, leading to a victory for the Americans. As a result, Britain gradually lost its hegemony in the Western Hemisphere, even though her empire had yet to reach its full potential globally.

What were the main causes of the increased military spending and incurred public debt during and after the Seven Years' War? Transportation was a key problem that affected all other factors. Since armies and soldiers need to be moved from one place to another, traveling to different areas of the globe became problematic and expensive. Beyond the soldiers, transporting military supplies was necessary and costly especially when sent to North America. Land transportation was a problem as well. On the North American continent, large expanses of forests and wilderness increased costs dramatically when compared with the ease of travel on the European continent.

When added to the overall costs of the war, Native Americans placed increasing strains on the British military, both in explicit and implicit costs. It is the first time that British officials treated directly with native tribes using the King's finances. Both sides hoped to gain something from the encounter, and the Indians quickly learned that profit was made when dealing with Europeans. As the war continued, British military tactics were forced to change because of wilderness constraints and the Native Americans impact on transportation and maneuvers. These tactical changes caused larger forces to be divided into smaller contingents of men traveling with more officers. As officers' pay was higher than enlisted men, costs to supply and pay a smaller group of men increased.

Despite the fact that that Britain suffered from higher and higher debt arising from the Seven Years' War and other causes, the British economy thrived, and eventually Britain gained a decisive victory over France in 1815. In the early 21st century, the United States can conceivably continue its debt build-up and still remain dominant in the global market. However, when will that debt become unmanageable? Can America shoulder a debt burden of trillions of dollars while remaining dominant militarily? Military conflicts always involve significant costs, and any attempt to fight major conflicts without spreading out the cost of the war via a combination of taxation and borrowing would be precarious at best. Over-reliance on public debt can lead to a pattern of fiscal behavior that will be difficult to change, a dependence of sorts, whereas the attempt to fund the conflict via taxation alone can lead to societal disharmony and even chaos. Ultimately Britain found the balance and emerged as the military-fiscal superpower of the 19th century. In the short-run, though, she lost a significant section of her empire to a rebellion sparked by the Seven Years' War.

BIBLIOGRAPHY

Primary Sources

- Almon, John. *Anecdotes of the Life of the Right Honorable William Pitt, Earl of Chatham: And of the Principal Events of His Time: With His Speeches in Parliament, from the year 1736 to the year 1778*. London: Printed for L. B. Seeley, 1797. Rhinehart Collection, Appalachian State University.
- Bradshaw, John, ed. *The Letters of Philip Dormer Stanhope, Earl of Chesterfield*. London: Swan Sonnenschein and Company, 1905. Rhinehart Collection, Appalachian State University.
- Mays, Edith, ed. *Amherst Papers, 1756-1763: The Southern Sector: Dispatches from South Carolina, Virginia and His Majesty's Superintendant of Indian Affairs*. Bowie, Maryland: Heritage Books, Inc., 1999.
- Mundy, Godfrey B. *The Life and Correspondence of the Late Admiral Lord Rodney, Vol. I*. Boston: Gregg Press, 1972. Photographic reprint of original 1830 publication.
- Pargellis, Stanley, ed. *Military Affairs in North America, 1748-1765: Selected Documents from the Cumberland Papers in Windsor Castle*. North Haven, CT: Archan Books, 1969.
- Rogers, Robert. *Journals 1731-1795*. New York: Corinth, 1961.
- Smith, William. *An Historical Account of the Expedition Against the Ohio Indians, in the Year 1764. Under Command of Henry Bouquet*. Philadelphia: W. Bradford, 1765.
- Stevens, S. K., et. al. *The Papers of Colonel Henry Bouquet*. Five Volumes. Harrisburg: Pennsylvania Historical Commission, 1972.
- Stevens, S. K. and Donald H. Kent, eds. *Wilderness Chronicles of Northwestern Pennsylvania*. Harrisburg: Pennsylvania Historical Commission, 1941.

Secondary Sources

- Anderson, Fred. *The War That Made America*. New York: Viking, 2005.
- . *Crucible of War*. New York: Alfred A. Knopf, 2000.
- Anderson, M.S. *The War of the Austrian Succession, 1740-1748*. London: Longman, 1995.

- Baugh, Daniel. *British Naval Administration in the Age of Walpole*. Princeton: Princeton University Press, 1965.
- Barro, Robert J. "Government Spending, Interest Rates, Prices, and Budget Deficits in the United Kingdom, 1701-1918." *Journal of Monetary Economics* 20, (September 1987): 221-47.
- . "On the Determination of the Public Debt." *The Journal of Political Economy* 87, no. 5, Part 1 (1979): 940-71.
- . "The Ricardian Approach to Budget Deficits." *The Journal of Economic Perspectives* 3, no. 2 (1989): 37-54.
- . "U.S. Deficits since World War I." *The Scandinavian Journal of Economics* 88, no. 1 (1986): 195-222.
- Bell, David. *The First Total War: Napoleon's Europe and the Birth of Warfare as We Know It*. New York: Houghton Mifflin Harcourt, 2007.
- Bird, Harrison. *Battle for a Continent*. New York: Oxford University Press, 1965.
- Black, Jeremy. "Britain as a Military Power, 1688-1815." *Journal of Military History* 64 no. 1 (2000): 159-77.
- . *European Warfare, 1660-1815*. New Haven: Yale University Press, 1994.
- . *Introduction to Global Military History: 1775 to the Present Day*. London: Routledge, 2005.
- . "War and the World, 1450-2000." *The Journal of Military History* 63, no. 3 (1999): 669-81.
- . *Western Warfare, 1775-1882*. Bloomington: Indiana University Press, 2001.
- . *European International Relations, 1648-1875*. New York: Palgrave, 2002.
- Black, Jeremy, ed. *The Origins of War in Early Modern Europe*. Edinburgh: John Donald Publishers, 1987.
- Black, Jeremy and Philip Woodfine, eds. *The British Navy and the Use of Naval Power in the Eighteenth Century*. Leicester: Leicester University Press, 1988.
- Bonney, Richard, ed. *The Rise of the Fiscal State in Europe Circa 1200-1815*. Oxford: Oxford University Press, 1999.

- Borneman, Walter R. *The French and Indian War: Deciding the Fate of North America*. New York: HarperCollins, 2006.
- Bradley, A.G. *The Fight with France for North America*. New York: Arno Press and The New York Times, 1971.
- Brauer, Jurgen and Hubert Van Tuyl. *Castles, Battles and Bombs: How Economics Explains Military History*. Chicago: The University of Chicago Press, 2008.
- Brewer, John. *The Sinews of Power: War, Money and the English State, 1688-1783*. Cambridge, Massachusetts: Harvard University Press, 1988.
- Broadberry, Stephen, and Mark Harrison, eds. *The Economics of World War I*. Cambridge: Cambridge University Press, 2005.
- Browning, Reed. *The War of the Austrian Succession*. New York: St. Martin's Press, 1993.
- Brumwell, Stephen. *Redcoats: The British Soldier and War in the Americas, 1755-1763*. Cambridge: Cambridge University Press, 2002.
- Buchanan, James M. "External and Internal Public Debt." *The American Economic Review* 47, no. 6 (1957): 995-1000.
- Chalmers, Malcolm. *Paying for Defence: Military Spending and British Decline*. London: Pluto Press, 1985.
- Chen, Derek Hung Chiat. *Intertemporal Excess Burden, Bequest Motives, and the Budget Deficit*. Washington, D.C.: World Bank, 2003
- Citino, Robert M. *The German Way of War: From the Thirty Years' War to the Third Reich*. Lawrence: University Press of Kansas, 2005.
- Clark, Gregory. "The Macroeconomic Aggregates for England, 1209-2008." Davis, California: University of California at David Department of Economics, 2010.
- Conway, Stephen and Julie Flavell eds. *Britain and America Go to War: The Impact of War and Warfare in Anglo-America, 1754-1815*. Gainesville: University Press of Florida, 2004.
- Corbett, Sir Julian S. *England in the Seven Years' War: A Study in Combined Strategy*. 2 vols. 2nd ed. London: Longmans, Green and Company, 1918.
- Crevel, Martin van. *Supplying War: Logistics from Wallenstein to Patton*. Cambridge: Cambridge University Press, 2004.

- Crouzet, F. "Wars, Blockade, and Economic Change in Europe, 1792-1815." *Journal of Economic History* (1964): 567-88.
- Davis, Lance E., and Stanley L. Engerman. *Naval Blockades in Peace and War: An Economic History Since 1750*. New York: Cambridge University Press, 2006.
- De La Escosura, Leandro Prados. *Exceptionalism and Industrialisation: Britain and Its European Rivals, 1688-1815*. Cambridge: Cambridge University Press, 2004.
- Dull, Jonathon R. *The French Navy and the Seven Years' War*. Lincoln: University of Nebraska Press, 2005.
- Eichengreen, Barry J., and Peter H. Lindert. *The International Debt Crisis in Historical Perspective*. Cambridge, Mass.: MIT Press, 1989.
- Eloranta, Jari. "From the Great Illusion to the Great War: Military Spending Behaviour of the Great Powers, 1870–1913." *European Review of Economic History* II, (August 2007): 255-83.
- . "National Defense." In *The Oxford Encyclopedia of Economic History*, edited by Joel Mokyr. Oxford: The Oxford University Press, 2003.
- . "Military Spending." *EH-Net*. www.eh-net.org. 21 November 2008.
- Eloranta, Jari and Jeremy Land, "Hollow Victory: Britain's National Debt and the Seven Years' War" Unpublished Manuscript, 2010.
- Ferguson, Niall. *The Cash Nexus: Money and Power in the Modern World, 1700-2000*. New York: Basic Books, 2001.
- . *Colossus: The Price of America's Empire*. New York: Penguin Press, 2004.
- . *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*. New York: Basic Books, 2003.
- Førland, T. E. "The History of Economic Warfare: International Law, Effectiveness, Strategies." *Journal of Peace Research* (1993): 151-62.
- Fortescue, J.W. *A History of the British Army*, vol. 2. London: MacMillan and Company Limited, 1910.
- Grellier, J. J. *The History of the National Debt from the Revolution in 1688 to the Beginning of 1800*. London: B. Franklin, 1810.
- Grenier, John. *The First Way of War: American War Making on the Frontier, 1607-1814*. Cambridge: Cambridge University Press, 2005.

- Harrison, Mark, ed. *The Economics of World War II. Six Great Powers in International Comparisons*. Cambridge: Cambridge University Press, 1998.
- Hill, J. R. *The Oxford Illustrated History of the Royal Navy*. Oxford: Oxford University Press, 1995.
- Kamen, Henry. "The Economic and Social Consequences of the Thirty Years' War." *Past and Present* (April 1968): 44-61.
- . *Empire: How Spain Became a World Power, 1492-1763*. 1st American Ed. New York: HarperCollins, 2003.
- Keegan, John. *Fields of Battle: The Wars for North America*. New York: Alfred A. Knopf, 1996.
- Kennedy, Paul. *The Rise and Fall of the Great Powers. Economic Change and Military Conflict from 1500 to 2000*. London: Fontana, 1989.
- Kennett, Lee. *The French Armies in the Seven Years' War: A Study in Military Organization and Administration*. Durham, North Carolina: Duke University Press, 1967.
- Leach, Douglas Edward. *Arms for Empire: A Military History of the British Colonies in North America, 1607-1763*. New York: The Macmillan Company, 1973.
- . *Roots of Conflict: British Armed Forces and Colonial Americans, 1677-1763*. Chapel Hill: The University of North Carolina Press, 1986.
- Lindert, Peter H. "The Rise of Social Spending, 1880-1930." *Explorations in Economic History* 31, no. 1 (1994): 1-37.
- Lindert, Peter H. "What Limits Social Spending?" *Explorations in Economic History* 33, no. 1 (1996): 1-34.
- Macdonald, James. *A Free Nation Deep in Debt: The Financial Roots of Democracy*. New York: Farrar, Straus and Giroux, 2003.
- Mahan. A. T. *The Influence of Sea Power Upon History: 1660-1783*. Boston: Little, Brown and Company, 1890.
- Makinen, Gail E., and G. Thomas Woodward. "Funding Crises in the Aftermath of World War I." In *Public Debt Management: Theory and History*, eds. Rudiger Dornbusch and Mario Draghi. Cambridge: Cambridge University Press, 1990.
- Maloney, John. *Debt and Deficits: An Historical Perspective*. Northampton, Mass.: Edward Elgar, 1998.

- Mansfield, Edward D., and Brian M. Pollins. "The Study of Interdependence and Conflict: Recent Advances, Open Questions, and Directions for Future Research." *The Journal of Conflict Resolution* 45, no. 6 (2001): 834-59.
- Middleton, Richard. *The Bells of Victory: The Pitt-Newcastle Ministry and the Conduct of the Seven Years' War, 1757-1762*. Cambridge: Cambridge University Press, 1985.
- Milward, Alan S. "Economic Warfare in Perspective." In *East-West Trade and the Cold War*, eds. Jari Eloranta and Jari Ojala. Jyvaskyla: University of Jyvaskyla, 2005.
- Mintz, Alex, and Chi Huang. "Guns Versus Butter: The Indirect Link." *American Journal of Political Science* 35, no. 1 (1991): 738-57.
- Mitchell, B. R. *British Historical Statistics*. Cambridge: Cambridge University Press, 1988.
- Mitchell, B. R. *International Historical Statistics: Europe 1750-1993*. 4th ed. Basingstoke: Macmillan Academic and Professional, 1998.
- Mitchell, B. R. *International Historical Statistics: The Americas 1750-1993*. 4th ed. London: Macmillan, 1998.
- Modelski, George, and William R. Thompson. *Seapower in Global Politics, 1494-1993*. Houndmills, Basingstoke, Hampshire: Macmillan Press, 1988.
- Naylor, R. Thomas. *Economic Warfare: Sanctions, Embargo Busting, and Their Human Cost*. Boston: Northeastern University Press, 2001.
- Nester, William R. *The First Global War: Britain, France, and the Fate of North America, 1756-1775*. Westport, Connecticut: Praeger, 2000.
- Nester, William R. *The Great Frontier War: Britain, France, and the Imperial Struggle for North America, 1607-1755*. Westport, Connecticut: Praeger, 2000.
- North, Douglass C., and B. R. Weingast. "Constitutions and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth-Century England." *The Journal of Economic History* 49, no. 4 (1989): 803-32.
- North, Douglass C. *Institutions, Institutional Change, and Economic Performance*. Cambridge; N.Y.: Cambridge University Press, 1990.
- Obstfeld, Maurice, and A. M. Taylor. "Sovereign Risk, Credibility and the Gold Standard: 1870-1913 Versus 1925-31." *The Economic Journal* 113, no. April (2003): 241-75.
- O'Brien, Patrick. *European State Finance Database (ESFD)* (1994), <http://www.le.ac.uk/hi/bon/ESFDB/frameset.html>. Accessed 20 Feb 2010.

- O'Leary, James P. "Economic Warfare and Strategic Economics." *Comparative Strategy* 5, no. 2 (1985): 179-206.
- O'Rourke, Kevin. "The Worldwide Economic Impact of the French Revolutionary and Napoleonic Wars, 1793-1815." *Journal of Global History* 1, no. 1 (2006): 123-49.
- Olson, Mancur. "Dictatorship, Democracy, and Development." *American Political Science Review* 87, no. 3 (1993): 567-76.
- Osgood, Herbert. *The American Colonies in the Eighteenth Century, Volumes 1-4*. Gloucester, Massachusetts: Peter Smith, 1958.
- Parkman, Francis. *Montcalm and Wolfe*. Boston: Little, Brown and Company, 1897.
- Peacock, Alan T., and Jack Wiseman. *The Growth of Public Expenditures in the United Kingdom*. Princeton: Princeton University Press, 1961.
- Pearson, Maurice. *The Knowledgeable State: Diplomacy, War, and Technology since 1830*. London: Burnett Books (Distributed by Hutchinson), 1982.
- Peckham, Howard H. *The Colonial Wars 1689-1762*. Chicago: The University of Chicago Press, 1964.
- Pickering, Jeffrey. *Britain's Withdrawal From East of Suez: The Politics of Retrenchment*. New York: Palgrave Macmillan, 1998.
- Pole, J.R. *Foundations of American Independence, 1763-1815*. Indianapolis: The Bobbs-Merrill Company Inc., 1972.
- Pollins, Brian M., and Randall L. Schweller. "Linking the Levels: The Long Wave and Shifts in U.S. Foreign Policy, 1790- 1993." *American Journal of Political Science* 43, no. 2 (1999): 431-64.
- Powell, Martyn J. *Britain and Ireland in the Eighteenth-Century Crisis of Empire*. New York: Palgrave Macmillan, 2003.
- Rasler, Karen A., and William R. Thompson. *War and State Making. The Shaping of the Global Powers*. Vol. 2, Studies in International Conflict. Boston: Unwin Hyman, 1989.
- . "Technological Innovation, Capability Positional Shifts, and Systemic War." *Journal of Conflict Resolution* 35, no. 3 (1991): 412-42.
- Riley, James C. *The Seven Years' War and the Old Regime in France: The Economic and Financial Toll*. Princeton: Princeton University Press, 1986.

- Rogers, Alan. *Empire and Liberty: American Resistance to British Authority, 1755-1763*. Berkeley, University of California Press, 1974.
- Sandler, Todd, and Keith Hartley. *The Economics of Defense*. Cambridge Surveys of Economic Literature, ed. Mark Perlman. Cambridge: Cambridge University Press, 1995.
- Savory, Sir Reginald. *His Britannic Majesty's Army in Germany During the Seven Years' War*. Oxford: Oxford University Press, 1966.
- Schweizen, Karl W. *War, Politics and Diplomacy*. Oxford: University Press of America Incorporated, 2001.
- Scott, H. M. *British Foreign Policy in the Age of the American Revolution*. Oxford: Clarendon Press, 1990.
- Smith, Jeremy. *Europe and the Americas: State Formation, Capitalism and Civilizations in Atlantic Modernity*. Boston: Brill, 2006.
- Sterngold, James. "Casualty of War: The U.S. Economy." *San Francisco Chronicle*, 17 July 2005.
- Stone, Lawrence, ed. *An Imperial State at War: Britain from 1689-1815*. London: Routledge, 1994.
- Syrett, David. *Shipping and Military Power in the Seven Years' War: The Sails of Victory*. Exeter: University of Exeter Press, 2008.
- Szabo, Franz A. J. *The Seven Years' War in Europe, 1756-1763*. London: Pearson-Longman, 2008.
- Tilly, Charles. *Coercion, Capital, and European States, AD 990-1990*. Cambridge, Mass: Basil Blackwell, 1990.
- United Nations, Dept. of Economic Affairs, Fiscal Division. *Public Debt, 1914-1946*. Lake Success, N.Y., 1948.
- United States, Bureau of the Public Debt, *The Public Debt Online*. Washington, D.C.: United States Bureau of the Public Debt, 2000
- Webber, Caroly, and Aaron Wildavsky. *A History of Taxation and Expenditure in the Western World*. New York: Simon and Schuster, 1986.
- White, Richard. *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*. Cambridge: Cambridge University Press, 1991.

White, R.J. *Europe in the Eighteenth Century*. New York: St. Martin's Press, 1965.

Williams, Glyndwr. *The Expansion of Europe in the Eighteenth Century: Overseas Rivalry, Discovery and Exploitation*. New York: Walker and Company, 1966.

Wright, Quincy. *A Study of War*. Chicago: The University of Chicago Press, 1942.

VITA

Jeremy Land was born in Kings Mountain, North Carolina, on 15 June 1985. He attended primary school in Gastonia, North Carolina and received his high school diploma from First Assembly Christian Academy in May 2003. He attended Gaston College immediately following high school and graduated with an Associate of Arts degree in December 2005. He enrolled in Appalachian State University in January 2006 and graduated with his Bachelor of Science degree in History, Secondary Education in May 2008. In the fall of 2008, Mr. Land accepted a teaching assistantship at Appalachian State University as a graduate student in history. He received several travel grants to present his research at conferences ranging from the North Carolina region to San Diego, California, and Braga, Portugal. He received his Master of Arts degree in May 2010 from Appalachian State University.

Mr. Land is a member of Phi Alpha Theta National History Honors Society and Pi Gamma Mu National Social Sciences Honors Society. His permanent address is 115 Mountain Ridge Road, Kings Mountain, North Carolina. His parents are James and Sharon Land of Kings Mountain, North Carolina.