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WHY NOT TAXATION AND REPRESENTATION? A NOTE ON THE AMERICAN REVOLUTION

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ABSTRACT

Why did the most prosperous colonies in the British Empire mount a rebellion? Even more puzzling, why didn't the British agree to have American representation in Parliament and quickly settle the dispute peacefully? At first glance, it would appear that a deal could have been reached to share the costs of the global public goods provided by the Empire in exchange for more political autonomy and/or formal representation for the colonies. (At least, this was the view of men of the time such as Lord Chapman, Thomas Pownall and Adam Smith.) We argue, however, that the incumbent government in Great Britain, controlled by the landed gentry, feared that giving political concessions to the colonies would undermine the position of the dominant coalition, strengthen the incipient democratic movement, and intensify social pressures for the reform of a political system based on land ownership. In particular, allowing Americans to be represented in Parliament was problematic because American elites could not credibly commit to refuse to form a coalition with the British opposition. Consequently, the only realistic options were to maintain the original colonial status or fight a full-scale war of independence.

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" [...] there is not the least probability that the British constitution would be hurt by the union of Great Britain with her colonies. That constitution, on the contrary, would be completed by it, and seems to be imperfect without it. [...] That this union, however, could be easiliy effectuated, or that difficulties and great difficulties might not occur in the execution, I do not pretend." (Adam Smith, The Wealth of Nations, Book IV, Chapter VII, Part III, p. 140).

1 Introduction

Before the American Revolution, the American colonies were very prosperous. They had relatively inclusive institutions and paid much lower taxes than other subjects of Great Britain. The revenue collected in the colonies was not nearly enough to cover the cost of their defense. Nevertheless, the British Empire had demonstrated its willingness to protect the colonies in the Seven Years War. After that war, new taxes to finance fundamental public goods (e.g., defense and public order) were unavoidable. Although France and other British rivals in continental Europe were expected to provide military support, rebellion was nonetheless a dangerous and expensive enterprise for the American elites. Why did the American colonies mount a rebellion? Even more puzzling, Americans elites were willing to accept further taxation on the condition that they were granted political power. Why was so complicated to reach such an agreement? For example, why didn't the British agree to permit American representation in the British Parliament and quickly settle the dispute? We argue that American representation would have shifted the balance of power within Britain in favor of radical political reform. (Americans could not commit to not helping radical reformers within Britain, should be granted representation). Fearful of this outcome, the British chose to go to war rather than provide parliamentary representation to the American elites.

Why did the American colonies mount a rebellion? Until the 1760s, any source of dispute between British authorities and American colonies did not pose much of a problem because the Whig coalition that dominated British politics was sympathetic to the American colonies. Part of the glue that held the Whig coalition together was the fact that the Stuart cause was still alive, but this changed after 1745, which was when the last failed attempt by the Jacobites and the Tories to restore the House of Stuart to the throne occurred. Eventually, this led to a political realignment in British politics which empowered a new alliance of conservative Whigs and Tories with the support of former Jacobite and Catholic groups.

The new dominant coalition proved to be less sympathetic to American interests and less permeable to American influence. After the Seven Years War, the new coalition, menaced with the financial burden of the war and convinced that the colonies had not been properly managed, decided to tighten its control over the colonies.

Simultaneously, major economic changes were taking place in the Atlantic economy. Atlantic trade significantly expanded during the eighteenth century, especially from 1745 to 1775. This consolidated a colonial elite formed by wealthy merchants, landlords and planters, who started pushing for their economic and political interests. More importantly, this expansion in the Atlantic economy was accompanied by a structural change in commercial practices. British companies began to expand their activities in America, bypassing the domestic elites and taking control of the marketing process in several different businesses, which was a source of irritation for the American elites. This expansion was also interrupted by several periods of recession and balance-of-payments crises. During those episodes, American elites and British authorities often disagreed as to what the proper macroeconomic remedies were. Thus, the growth and structural changes taking place in the Atlantic economy from 1745 to 1775 threatened the economic position of colonial elites, thereby inducing a demand for sovereign economic policies. This coincided and clashed with the internal political realignment taking shape in Great Britain. The new dominant coalition in Great Britain pushed for tighter control over the colonies and the dismantling of the informal network of agents who had been lobbying the Crown and Parliament on behalf of American interests precisely when American elites began to demand more political influence on economic policies.

Proposals for resolving the dispute. The combination of colonial elites' increasing demands for sovereign economic policies and internal political changes in Great Britain explain why the American elites had motives to rebel. The Seven Years War removed France as a threat to American colonies, allowing the rebels to safely count with French military support without fear of falling into the hands of France. American had a window of opportunity to mount a credible rebellion against British authorities. Motives and opportunity, however, do not immediately explain why the rebellion evolved into a war of independence. Indeed, several other proposals for resolving the dispute that did not involve gaining independence were being put forward during that period, with the proposals made by Thomas Pownall and Adam Smith being two excellent examples. Both men felt that it was mutually beneficial for Great Britain and the American colonies to find a mechanism for sharing the costs of the global public goods

provided by the Empire (i.e., defense) in exchange for political power and representation for the colonies. Adam Smith considered a system in which the political representation of Great Britain and America would be proportional to the contribution that each polity was making to the public treasury of the Empire. Moreover, he was convinced that the introduction of American representation would have had a neutral effect on the political balance of the Empire. In his view, the strength of Parliament would have increased in proportion to the size of the American contingent in Parliament, while the strength of the Crown would have grown in proportion to the amount of new revenues being received. The puzzle is why such a deal was not reached. We argue that the political calculus in Great Britain was more complicated than the one envisioned by Adam Smith.

Why didn't these proposals work? After the Seven Years War, the core of the dominant political coalition in Great Britain was composed of the landed gentry, whose power rested on a political system based on land ownership. The leader of the coalition, Prime Minister Lord North, had the support of the king. His cabinet was composed of Bedfordite ministers and, when dealing with serious issues, Lord North could always count on the support of Parliament, which was dominated by landed gentry. The coalition also enjoyed the support of the High Anglican Church. The members of this coalition were all loyal to a political system based on land ownership, and they considered the members of the general public to be unfit to participate in politics and objected to the idea of making any concessions to the American colonies.

The opposition, although relatively weak and not well represented in Parliament, was made up of urban groups that were demanding democratic reforms (the Wilkesites), together with remnants of the former Whig coalition that had governed England before the 1760s, namely, Lord Chatham and his small group of followers and the Rockingham Whigs. The Wilkesite movement promptly drew a parallel between American grievances and the situation of unfranchised people in England, and its members therefore backed colonial demands. The Chathamites also supported the colonies' bid for political representation. The Rockingham Whigs were more ambivalent. The opposition faced two critical problems. First, the Wilkesite and Chathamite movements simply did not have enough parliamentary representation. It is possible that the Wilkesites might have represented a majority of the electorate, but their electoral strength came from urban areas that were extremely underrepresented in Parliament. In other words, the democratic movement in England was growing and was starting to pose a threat to the established

power structure but was still in its infancy. Second, the Rockingham Whigs, who were better represented in Parliament, suffered from several structural weaknesses. While they represented the landed gentry, and were against radical democratic reforms, they believed that the cabinet and the king held too much power and they wanted to empower the Parliament.

Once the political disputes taking place in Great Britain at the time are considered, it becomes easier to understand the potentially disruptive effect of the introduction of American representatives. The landed gentry, who controlled the incumbent government, feared that making concessions to the American colonies would intensify the pressure for democratic reforms, thus jeopardizing their economic and political position. The opposition, especially the Wilkesites, would have been happy to accept American representation in the British Parliament. American representatives would most likely become an excellent ally in their fight to push for democratic reforms. The Rockingham Whigs were hesitant for both reasons, as they feared both the authoritarian tendencies of the incumbent government and the threat of radical democratic reform. In this context, the incumbent government preferred to risk a war of independence with the American colonies rather than take the risk of going down a slippery road of democratic reforms that might well accelerate the demise of the existing land-based political system.

A model of independence under internal conflict in the metropolis. In order to check the consistency of our argument, we developed a simple dynamic model of independence that formalizes both the conflict between Great Britain and the American colonies and the internal conflict taking place in Great Britain. We show that both of these elements are necessary to produce a war of independence in equilibrium. In this model, there is a colony and a metropolitan power (metropolis) made up of two groups. Under colonial rule, the metropolis selects how the total output of the colony and the metropolis is divided among the colony and the two groups existing in the metropolis. Sometimes the colony can mount a rebellion and, in such cases, the metropolis offers temporary concessions. The problem for the colony is that these concessions can easily be reversed as soon as the rebels are placated and the metropolis regains control of the colony. The only credible way in which these concessions can be made more permanent is for the metropolis to give political representation to the colony. If there is no conflict of interest in the metropolis or, more generally, if the new representatives do not challenge the political balance in the metropolis, representation is a simple solution that avoids independence and the expense and waste associated with a war of independence. On the other hand, in cases where parliamentary representation

of the colonies could destabilize the political balance in the metropolis, it is possible that at least one of the two groups in the metropolis would prefer to fight a war of independence rather than accept the entry of new representatives. In this case, the only options for the colony are to accept temporary concessions or to fight a full-scale war of independence.

Related literature. There is an extensive body of literature on institutions and institutional change (e.g., North and Weingast, 1989; Acemoglu and Robinson, 2006; North, Weingast and Wallis, 2009). Our approach and formal model take full advantage of this literature. Specifically, there are three elements at the core of our model that are emphasized by many modern game-theoretic treatment of institutional change, namely, inter-temporal transactions, social conflict and commitment problems (see, for example, Acemoglu, 2003). Explicitly or implicitly, most institutional analyses and most formal models, in particular, tend to emphasize these issues within a given political unit. Independence processes, by their nature, necessarily entail the interaction of domestic and foreign factors. A three-group model is the simplest model that can capture these interactions, while a two-group model forces us to approach independence either as an external conflict between two internally homogenous states or as a civil war. Thus, our three-group model is also related to the literature on intra-elite conflict. While, in intra-elite conflict models applied to a given political unit, the relationships between the two elite groups depend on their alignments with the non-elite group (see, for example, Galiani and Torrens 2014), in the present model, intra-elite conflict in the metropolis affects those groups' relationship with the colonies.[1]

We have also relied heavily on the studies conducted by many excellent historians who have analyzed colonial America and the American Revolution. Of course, it is impossible to do justice to the vast literature on the topic. We would just like to point out that, except in the case of Adam Smith, we have not used primary sources. Instead, we have simply employed the available pool of historical knowledge to draw attention to, what we think, is an overlooked issue relating to the American Revolution: Given that the colonies were so prosperous under British rule, why did they mount a rebellion? More puzzling and the crucial focus of this paper, given that the colonies might have been willing to accept taxation if representation were granted, why did the British not agree to have American representation in the

[1] There is a popular view that simply argues that there was no fundamental issue behind the dispute between Great Britain and its American colonies other than the hubris of the elites on both sides of the Atlantic. Although in general we do not favor this view, it is worth mentioning that the strategic interactions we stress lead, in equilibrium, to intransigent positions and unwillingness to compromise, which can be easily misunderstood as arrogance.

British Parliament?

The rest of this paper is organized as follows. Section 2 briefly touches upon some key unresolved issues relating to the American Revolution. Section 3 discusses the developments that led to the rebellion of the American colonies. Section 4 presents the proposals made by Thomas Pownall and Adam Smith for settling the dispute. Section 5 explains why these proposals, which at first glance seem very reasonable, were not implemented. Section 6 develops a simple formal model of the economic and political relationships between a metropolis and its colony. Section 7 concludes.

2 The American Revolution: A Puzzle

This section presents a brief overview of the American Revolution. The goal is not to provide a comprehensive review, but rather to highlight the key issues that lead us to posit the existence of a puzzle that remains to be solved.

1. The American colonies were prosperous. They were richer and had a more equal income distribution than Great Britain and other European nations.

Lindert and Williamson (2016) conduct a recalculation of the historical trends in American incomes and find that America had already achieved world income leadership as early as 1700, when they estimate the purchasing power of income per capita in America was 36% higher than that in Great Britain. This gap grew until 1725 to over 50% and remained steady until the American Revolution. They also show that inequality in colonial America was significantly lower than in England and Wales and the Netherlands around the same time. Furthermore, they show several other indicators that suggest better living standards for the colonists. On average, Americans were taller, had longer life expectancy and lower birth mortality than people in England. Regarding New England, the epicenter of the revolution, Lindert and Williamson (2016) estimate that it was one of the poorest region in the colonies, but nevertheless living standards were close to those in England and Wales. Finally, although growth rates in income per capita during the eighteenth century were modest compared with modern standards (see Mancall and Weiss 1999, Mancall, Rosembloom and Weiss 2003, and Rosembloom and Weiss 2014), there is no doubt that as population expanded, the colonies experienced rapid economic growth in national income. Moreover, growth was accompanied by a significant expansion of foreign trade (as the colonies began

to participate in trans-Atlantic trade flows) and an increasingly diversified economic structure (see, for example, Walton and Shepherd 1979).

2. British mercantilist policies and other economic regulations were not that burdensome for the colonies and membership in the British Empire's trade system was probably quite beneficial for the colonies.

There is no doubt that the British Empire imposed several trade and other restrictions on the American colonies (e.g., monopolistic foreign trade measures, the Navigation Acts). However, most modern economic historians who have studied the subject concluded that some of these restrictions were not binding and that, even in the case of those that were, the burden that they placed on the American colonies was relatively mild. Engerman (1994), following Thomas (1965) and Thomas and McCloskey (1981), summarizes the empirical literature on the quantitative burden which the Navigation Acts and other mercantilist policies instituted by the British Empire imposed on the American colonies. First, he argues that, given the factor endowments of Great Britain and the American colonies and the trade flows before and after independence, many trade restrictions were indeed non-binding or economically irrelevant. For example, he states: *"The restriction of manufactured imports to those produced in Britain had little, if any, effect since, based on pre- and post-Revolutionary War patterns, Britain was the major source of colonial (and then United States) imports of manufactured goods. Similarly, legislation to restrict colonial manufactures was believed to be of limited significance, given the great availability of land and the high productivity of the agricultural sector in the colonies."* (Engerman 1994, p. 199). Second, he considers that the crucial binding and economically relevant restriction was the prohibition to directly export tobacco outside Great Britain. He observes that *"... the major component of economic costs to the colonies was imposed by enumerated commodities, particularly, tobacco, which had to be sent to Britain before being re-exported to continental consumers."* (Engerman 1994, p. 199). Finally, he deduces that the economic burden associated with the enumerated commodities was most likely not enough to be a key economic cause behind the American Revolution. Indeed, he concludes that *"... for plausible estimates of elasticities and of the cost of reshipment, the overall burden of enumeration was relatively small as a proportion of colonial income; adding the various other components of possible gross burden did not increase the general order of magnitude. Subtracting colonial defence costs paid by the British leaves a very small net burden, under 1 per cent of estimated colonial income, too small by itself, Thomas*

argues, to serve as the basis for an argument for economic causation of the American Revolution." Engerman (1994, p. 200). In the same line, McCusker and Menard (2014) conclude that the cost of trade restrictions on the colonies were relatively small (between 1 and 3 per cent of gross domestic product).

Furthermore, these estimations of the burden associated to mercantilist policies implicitly assume an optimistic counterfactual scenario in which trade restrictions are removed without any disruption in the trade flows between the colonies and Great Britain. However, it is also possible to envision a more pessimistic counterfactual scenario in which American independence leads to, at the very least, short run trade retaliations by Great Britain. Given the importance of Atlantic trade, this would have probably been very costly for the colonies. For example, between 1768 and 1772, 55% of American exports went to England and 85% to the British Empire, while 90% of American imports came from England. American colonies were also important for British foreign trade. Indeed, by 1773, America accounted for 32.9% of English manufacturing exports while 37.4% of British imports came from America (Walton and Shepherd 1979). This suggests that Great Britain also had incentives to keep trading with America and, hence, long-term trade retaliations were probably not credible. Nevertheless, the risk of disrupting commercial relationships with the main commercial partner and facing retaliatory trade restrictions from the British Empire should also be counted as a potential trade cost of pursuing independence.

3. The American colonies had relatively inclusive institutions.

There is a fair amount of consensus among historians of colonial America that, despite numerous early attempts to establish institutions that would restrict the economic and political rights of the settlers, it proved impossible to sustain special privileges while at the same time making the colonies economically viable. All the colonies ended up offering land to many of the settlers, removing various political privileges, and allowing local assemblies composed of white male property holders.

Walton and Shepherd (1979) maintain that, except on matters of foreign trade, there were few restrictions on colonial freedom, colonists effectively controlled their own legislatures and had considerable autonomy to deal with several local issues. They also consider a combination of factors that explains the success of North American colonies: permanent settlement, the production for export, and, crucially, that a large proportion of the settlers has a stake in land and a say in local affairs. They argue that these factors significantly contributed to erode the monopoly power of colonization companies, restrict special privileges, and increase the power of local governments. In a similar vein, Engerman and Sokoloff

(2002) maintain that the factor endowment European found in the North American mainland favored the development of *"relatively homogeneous populations with relatively equal distributions of human capital and wealth."* This led to *"more democratic political institutions, to more investment in public goods and infrastructure, and to institutions that offered relatively broad access to economic opportunities."* Greene (2011) also sustains that North American colonies had relatively inclusive institutions, which he attributes in part to the easy access to land by a large share of the male white population. He argues that settlers demanded the same economic and political rights that property holders had in their polities of origin. Moreover, from the colonists point of view, this includes *"not be governed without being consulted or in ways that were patently against their interests."* For example, Greene (2011) documents that colonial officials permanently complained that local assemblies disregarded the king's instructions and did not comply with any instructions they considered *"contrary to existing colonial statutes or [...] incompatible with either the colonists' inherent rights as Englishmen or the customary powers and privileges of their assemblies."*

4. The British Empire had shown its willingness to defend the American colonies and the colonies had shown their willingness to be part of the Empire, especially during the Seven Years War.

The implicit agreement between the Crown and the American colonies, dating back to the original Virginia Company in 1606, was that the Crown would provide protection and the colonists would obey the King. The conflicts with France during the eighteenth century tested this agreement.

In the middle of the eighteenth century, the French began to expand their holdings throughout the Mississippi Valley and their trade with the native inhabitants of the area, threatening to take control of the interior of North America. Despite the insistence of the British authorities, the colonies were not able to coordinate their own defense. Then, however, when the Seven Years War (which ultimately became a world war) broke out between France and England, the British government, led by Prime Minister William Pitt, sent troops to America and mobilized local militias made up of thousands of Americans settlers. The French were defeated and Britain laid claim to vast territories east of the Mississippi (see, among others, Ferguson 2004 and Allison 2011).

The Seven Years War confirmed that the British Empire was ready to defend the colonies, the colonists had serious difficulties coordinating their own defense, but they finally fought against the French under

the leadership of British authorities.

5. The amount that Great Britain was spending on the colonies was considerable, and the colonies did not generate sufficient revenue to make them an advantageous undertaking.

Before and during the Seven Years War, Great Britain had been paying for a significant part of the public goods enjoyed by the colonies, especially in the case of defense. Although it is not simple to allocate the benefits of defense and other expenditures to different areas of the empire, there is a fair amount of consensus that in the eighteenth century defending the empire became a serious financial burden for Great Britain. For example, Brewer (1988) estimates that the cost of the Seven Years War for the British Empire was greater than any major armed conflict until then, and that, due to the conflict, British National Debt nearly doubled from £75millons before the war to £130millons at the end of the war (see also Middlekauff 2007). Moreover, Land (2010) develops the argument that fighting in North America was one of the crucial factors that explains Britain's enormous military costs during the Seven Years War (naval transportation and fighting in the frontier was very expensive).

There are also few doubts that, after the Seven Years War, the British began to pay closer attention to the empire's finances. For example, Davis and Huttenback (1986) argue that *"[i]n the early history of the empire there was a certain air of official indifference associated with the questions of cost and the military. It was only when the drain on the British Exchequer engendered by the colonial phases of the Anglo-French wars became apparent that British officials began seriously considering the financial burdens of imperial defense."* In the same vein, McCusker and Menard (2014) suggest that, after the Seven Years War, British authorities might have started putting more attention to fiscal considerations and not exclusively to preserve a commercial empire.

The expenditures on the defense of colonies did not disappear with the end of the Seven Years War in February 1763, since the British authorities had to keep a substantial army in the colonies to secure the frontier with the Native American tribes at an estimated annual cost of £0.35millons. Pressured to serve the national debt and reduce the fiscal deficit, the British began to devise a series of measures to collect more taxes from the colonies (more on taxes in point 6). The goal was to raise enough revenue to only partially cover for the cost of defending the colonies, while British taxpayers would take care of serving the debt (Middlekauff 2005). Thus, even considering the new taxes, colonial defense was subsidized by the British Empire. Furthermore, unless the colonies believed that Great Britain would continue to subsidize

their defense forever, independence, if anything, would force the colonies to collect more taxes to pay in full for their defense or face the consequences of a militarily weak state.

6. The American colonies paid little in taxes and the British Parliament had been ineffective in increasing their tax burden.

There is no doubt that the colonies paid very low taxes. For example, in 1763, on average, a citizen in Britain paid 26 shillings per year in taxes, while a citizen in New England paid just 1 shilling per year (see, for example, Ferguson 2004). Along the same line, Walton and Shepherd (1979) present an index of per capita tax burden for 1765: Great Britain 100, Ireland 26, Massachusetts 4, Connecticut 2, New York 3, Pennsylvania 4, Maryland 4, and Virginia 2. Moreover, after the Seven Years War, the British Parliament tried and failed to impose new taxes on the American colonies.

The first wave of taxation was the Sugar Act of 1764, which was a refinement of the Molasses Act of 1733. This was a tax on non-British West-Indian products. Taxes on several of these goods were reduced, but new regulations to avoid evasion were expected to raise revenue. American colonies did not oppose the Sugar Act as a matter of principle, but rather for their assumed economic effects (see, among others, Walton and Shepherd 1979 and Middlekauff 2005). Nevertheless, special interest groups prevailed in the British Parliament and the Sugar Act was finally repealed in 1766.

The second wave of taxation was the Stamp Act of 1765, which imposed a direct tax on several types of printed and legal documents, which were required to pay a stamp. The tax infuriated lawyers and newspaper publishers who were the most articulate people in the colonies and had the means to influence public opinion. In retaliation, the colonists organized a successful boycott of British imports, which, ultimately, induced British merchants and manufacturers to lobby against the Stamp Act. George Greville, the prime minister who introduced the act, had to resign and in 1766 the Stamp Act was repealed. Moreover, *"from now on, it was accepted, the Empire would tax only external trade, not internal transactions"* (Ferguson 2004).

The third wave was the Townshend Acts of 1767, which were customs duties on British products imported into the colonies. The measures were intended to raise 1% of colonial income, a relatively small economic burden. Moreover, they met the criteria that only external trade should be taxed. Still, the Townshend Acts were resisted by a successful boycott of British manufactures. According to Walton and Shepherd (1979) *"What stung the highly independent colonists, however, was the manner of enforcement.*

Colonial courts were allowed to issue search warrants, [...], an American Customs Board was created [...] to handle smuggling cases." Once again, British manufacturers convinced Parliament to repeal the new taxes, except the duties on tea.

The Tea Act of 1773 had two goals: save the British East India Company from bankruptcy and induce the colonies to stop smuggling Dutch tea and start paying the corresponding Townshend duties. The British East India Company was granted the right to directly ship tea to the American colonies and duties on tea were reduced. Not surprisingly, the effect was a significant drop in the price of tea in the colonies, which negatively affected New England tea wholesalers and smugglers, who were dealing in Dutch tea. They responded organizing the Tea Party and a boycott of British tea. This time, Parliament retaliated with the Intolerable Acts, suspending the Charter of Massachusetts, closing the Port of Boston, and interrupting western settlement. Again, the colonists responded with a total embargo on trade with Britain and the British West Indies.

7. Although France and other British rivals provided military support, rebellion was nonetheless very costly for the colonies.

During the war of independence, France provided key military support that helped to keep the Royal Navy out of the war and signed two treaties with the patriots in early 1778. The Treaty of Alliance was a defensive agreement under which America would be provided with French military support in the event of an attack by British forces. The Treaty of Amity and Commerce granted the colonies French recognition, together with considerable trade concessions. At the very least, French military support significantly reduced the cost of the war for American patriots. This does not imply that independence was inexpensive for the colonies. Indeed, there is a fair amount of consensus among economic historians that the war had a tremendous negative effect on the American economy.

Lindert and Williamson (2016) estimate that the impact of the war of independence on incomes was large enough to break American worldwide lead in living standards. McCusker and Menard (2014) estimate that the income per capita of the colonies declined 48% from 1774 to 1790 and 14% from 1774 to 1805. The fiscal and financial burden of the war was also very high. McCusker and Menard (2014) summarizes it as follows: *"... the citizens of the new republic were subjected not only to a generally poor performance of their national economy but also to very high taxes. The debts incurred in attaining their independence forced Americans both to tax their own economy and to mortgage the future in order*

to service a tremendous bonded debt. The need to raise revenues to meet the interests and principal payments created havoc in government at all levels. Traditional methods of public finance in the colonies were entirely inadequate to a task of this magnitude, and they would have been so even had domestic and foreign trade not been disrupted. Import duties and land taxes, the traditional methods of raising revenue, simply did not yield enough. The nation had accepted the resort to the printing press as a wartime way of "papering over" the problem."

8. Rebellion was a very risky and dangerous enterprise for the American elites.

Those who sided with the independence cause were risking their properties, livelihoods, slaves, lands and even their lives if the Americans lost the war. Those who signed the Declaration of Independence, if captured, would most surely be tried as traitors and hanged (see, for example, Fehrenbach 2000 and Fisher 2006).

Several historians from the progressive school of thought have also pointed out that American elites faced the risk that the revolution would become too radical and might, for example, start them off on a slippery slope of demands on the part of the lower classes for a more profound democratization of colonial society that would threaten the position of the elites. Egnal and Ernst (1972) summarize this line of argument. *"As the urban lower classes became more involved in the pursuit of their own interests through such programs as non-consumption and domestic manufacturing, they also became more vociferous in articulating other demands of their own, demands for the further democratization of colonial society. This new militancy frightened many of the merchants who now saw the threat of social upheaval. Admittedly, in historical retrospect, there was little change in the structure of society though some in institutions. But there was ample justification for the fears of the wealthy, as numerous editorialists called for far-reaching changes in the nature of government. The mere airing of these demands was enough to convince many in the upper classes that the Revolution had gone too far and that it was better to bear the burdens of membership in the British Empire than to risk social disruption at home. This lower-class militancy helps explain the existence of important loyalist minorities in each of the port cities. On the other hand, most of the Whig elite felt with some prescience that the situation could be kept well under control."* (Egnal and Ernst 1972, pp. 29-30).[2]

In a nutshell, the dispute between the American colonies and Great Britain was not about a tyrannical

[2] On the radicalism of the American Revolution see also Wood (1991).

metropolis strangling the economic development of its colony. As we have seen, the colonies were very prosperous. Restrictions on foreign trade, such as the Navigation Acts, were probably not that influential and membership to the British Empire trade network was quite beneficial for the colonies. The colonies paid very low taxes, the Parliament's attempts to impose new taxes failed, and, nonetheless, the proposed tax increases would have only covered for a fraction of the cost of defending the colonies. So, with or without the metropolis, taxes could not have been avoided. Taxation alone thus cannot have been the reason for the revolt. Although the support of France significantly reduced the military cost of the war of independence for the colonies, the fact remains that, for the American elites, rebellion was very costly and the prospects of success extremely uncertain. There was also the internal risk that the revolt might become too radical.

To solve the puzzle posed by the American Revolution, we must answer two crucial questions. First, why did the North American colonies rebel? Second, why didn't the British authorities and the Americans elites reach a peaceful agreement for sharing the economic burden of defending the colonies in exchange for more political power for the American colonies? For example, why didn't the British agree to have American representation in the British Parliament and thus quickly placate the revolt? After all, the motto of the revolution was "no taxation without representation", suggesting Americans would have been willing to accept taxation if the British Parliament would have granted them political representation and/or greater political autonomy.

3 Why did North American Colonies Rebel?

This section explores the developments in England and North America that led to a rebellion in the colonies after the Seven Years War. It is certainly possible to trace the roots of the American Revolution to the political and religious dynamics of the English Civil War and the Glorious Revolution. Without disregarding this long-run path, however, we focus on developments in the eighteenth century. In particular, we examine the following two factors that fueled the rebellion. First, we show how the internal political struggles in Great Britain and the war with France had an impact on imperial policies and the ability of the colonies to influence them. Second, we explore how the economic and political evolution of the colonies shaped colonial demands and affected imperial policies regarding the colonies.

3.1 British Politics, War with France, and Imperial Finances

Whatever the political and religious differences between England and the American colonies during the first half of the eighteenth century were, they did not constitute a serious problem (see, for example, Phillips 1999). The Whig politicians who governed Great Britain, directly or indirectly, took in account American interests when they made their decisions.

In part, what held the Whig coalition together and kept it in power was that the Stuart cause was still alive. Indeed, there were Jacobite and Tory-linked attempts to restore the House of Stuart in 1715 and 1745, along with several lesser episodes. All of these attempts failed and, after 1745, the Stuart cause finally died out. This led to a sweeping reorganization of internal political coalitions in Great Britain. Conservative Whigs formed an alliance with the Tories, now detached from the Stuart cause. Also, old Jacobite and Catholic groups tried to help the king and secure favors from him by demonstrating their newfound loyalty.

The new political equilibrium in Great Britain would ultimately lead to a change in its relationship with the American colonies. British policies regarding the American colonies gradually shifted from a light-handed approach to a more hard-line position characterized by a series of attempts to tighten Britain's control over the colonies. The Whig coalition, which was sympathetic to American interests, eventually moved over to the side of the opposition, and a new, more conservative coalition began to dominate British politics. However, this political transformation was gradual and did not become consolidated until after the Seven Years War with France.

After France was defeated in the Seven Years War, a new hard-line approach toward the American colonies began to emerge (Brown 1970, p. 24). This newly adopted attitude was based on the belief that the colonies were not well-managed and that administrative reforms were required to regain control of the colonies and increase colonial revenues. Barrow (1970) eloquently summarizes this new approach toward the colonies as follows. *"First, whatever the objective truth may be about the effectiveness of the System prior to 1763, it seems clear that the information made available to the English government by their agents in the Colonies gave the impression that the System was ineffective and highly unsatisfactory; second, the one common thread that seems to run through many of most of the complaints about the ineffective operation of the System was the inherent weakness of English political authority in the Colonies; and third, recommendations for reform tended to center on the creation of a Colonial civil list and the more*

effective use of patronage opportunities, both of which involved an increase in the available Colonial revenues. If these propositions are valid, then the English attitude towards the Old Colonial System might best be characterized as one of increasing impatience both with the attitude of the colonists and with the ineffectiveness of the System itself." (Barrow 1970, p. 137).

There were political and economic factors underlying the attempts made to tighten control over the American colonies. As already mentioned, the death of the Stuart cause eventually weakened the Whig coalition, which had been more permeable to American influence. Indeed, by 1771, George III had removed William Pitt, and the Whig coalition had moved over to the side of the opposition.

The Seven Years War had left the British government with a substantial debt, and it was looking for new sources of revenue to repay it. The colonies, with their low tax burden, were a natural candidate. At the same time, the American colonies continued to grow and expand toward the west, which posed two problems for the British government. First, some in Great Britain fear that the growth of the colonies might eventually shift the center of the Empire from England to America. Second and, much more importantly, the colonies' geographic expansion could give rise to a need for additional resources to defend an enlarged territory (Olson 1992, pp. 134 -135). Indeed, defeating the French in North America paved the way for American colonists to further push their expansion toward the west. This forced the British to face a difficult trade-off: keep a costly army in the colonies to secure the frontier with the Native American tribes or block expansion and clash with colonial demands. Additionally, the removal of the French treat in the continent eliminated a common enemy for Britain and the American colonies, which probably contributed to reduce the risk of fighting an independence war for American colonies (Anderson 2000 and Anderson 2005).[3]

With a new dominant coalition in Great Britain trying to tighten the British government's control over the colonies and the formerly sympathetic Whig coalition in retreat, the Americans also started losing their ability to influence imperial policies by informal means. Indeed, prior to the Stamp Act crisis, many different organizations had effectively lobbied for American interests in London. However, by the end of the 1760s, this dense network of pressure groups had been dismantled, leaving Americans

[3] Bird (1965), Bradley (1971) and Pole (1972) also stress the connections between the Seven Years War and the American Revolution with special emphasis on the financial burden of the war for Great Britain and American incentives to expand to the west. See also Land (2010) for a more recent analysis of Britain's military cost during the Seven Years War.

with few means of influencing imperial politics (Olson 1992). The representation of North American interests was particularly weak in the British Parliament at that time (Kammen, 1970, pp. 151-152). An early example of how little influence the American colonies had in Parliament is provided by the passage of the Sugar Act. Everybody in the colonies, even imperial officials, considered the Sugar Act to be a sacrifice made by the northern colonies, which had to bow to the stronger parliamentary influence wielded by the West Indies. The Board of Trade is a good example of an organization that was open to American interests but that lost much of its power after 1763 (Olson 1992, p. 138).

The American colonists started to realize how the mother country's attitude toward them was changing and, whereas before they had felt that they were somehow represented in Parliament through their agents and correspondents, they now began to feel that they were being discriminated against. They also saw the attempts to increase British authority in the colonies as a serious threat to their self-governance (see Barrow 1970 and De Figuereido, Rakove and Weingast 2006).[4] Equally importantly, they began to pressure their local assemblies to work harder to advance their interests (Olson 1992, p. 160).

3.2 The Atlantic Economy and the American Elites

The eighteenth century witnessed a significant expansion of trans-Atlantic trade. This trend can be roughly divided into two periods. From 1720 to 1745, trade flows rose steadily, but at a moderate rate. From 1745 to 1775, the expansion accelerated, with this upward trend mainly being triggered by the growth of the British economy (Egnal and Ernst 1972, p. 11). This impressive expansion had three major effects on the colonies (Egnal and Ernst 1972). First, growth made a significant contribution to the consolidation of a colonial elite composed of wealthy merchants, landowners and planters.

[4] Barrow (1970) stress the importance of self-governance for American colonists. *"In effect, the struggle between 1763 and 1774 was not over abstract principles, however important rhetoric may have been in communicating the danger. Nor was the dispute simply over such peripheral issues as standing armies or unnecessary burdens on Colonial trade and commerce. The ineffectual operation of the Old Colonial System, as seen in London, suggested the need for the more effective exercise of English authority in America. For the Americans, the efforts at taxation represented a threat to the very self-government that had made their Colonial status tolerable. The consequence was a dispute which ended in revolution."* (Barrow, 1970, p. 139). More recently, De Figuereido, Rakove and Weingast (2006) argue that the American and British elites had different beliefs about the nature of the Constitution that governed the colonies but that, before the Seven Years War, they did not have the chance to test them. Moreover, they show how these conflicting beliefs could have formed part of a self-confirming equilibrium.

Second and, of great importance, this wave of growth was accompanied by a structural change in commercial practices. In the North, British companies began to establish their own trade channels while avoiding local merchants. This posed a serious threat to the colonial elites in urban centers such as Boston, New York and Philadelphia. In the South, the largest Glasgow tobacco companies began to take control of the commercialization of tobacco. At some point, southern planters feared that the Scots were holding too much commercial power and would undermine their economic, political and social status.

Third, the expansion of the Atlantic economy was not a smooth process, but was instead interrupted by periods marked by recessions, debt problems, and balance-of-payments crises. These economic downturns were particularly problematic for the colonial elites because their attempts to mitigate the effects of these recessions on their businesses often clashed with British interests. The non-importation agreements that were used to temporarily shut down British imports avoiding the bankrupt of wealthy colonial merchants in the North are a good example of the ways in which these clashes played out. Another example is the Currency Act of 1764.

In sum, developments in the Atlantic economy from 1745 to 1775 threatened the economic position of colonial elites and spurred their demands for sovereign economic policies (Egnal and Ernst 1972).[5] At the same time, political changes in Great Britain and the pressure exerted by the national debt that had built up during the war against France prompted the British government to tighten its control over the colonies and dismantled the network of informal colonial agents who had lobbied for American interests before the Crown and in Parliament.

[5] Egnal and Ernst (1972) also link the American elites' demand to assert more control over the colonial economy to the post-independence period. *"The upper-class whigs who stood in the forefront of the Revolutionary movement retained their coherence and their momentum after 1776. Independence was no more their ultimate goal than was the repeal of any specific piece of British legislation. The control over the American economy that they sought required a restructuring of government and a comprehensive program of legislation: for those in urban centers, a national banking system and American navigation acts, and for the tobacco planters of the South, the encouragement of national cities. In addition, upper-class whigs showed a continued concern for challenges from the "lower orders." The Constitution of 1789, from the whig elite's viewpoint, was the culmination of the movement for Independence, not its antithesis."* (Egnal and Ernst 1972, p. 32).

4 Proposals for Resolving the Dispute

An understanding of the developments and conditions in England and North America that led to the rebellion in the colonies does not automatically translate into an explanation for the American bid for independence. There were several alternative avenues for peacefully settling the dispute. Two outstanding proposals that were made at the time were those put forward by Thomas Pownall and Adam Smith. Although Pownall and Smith differed on some points, they agreed that it was possible and in the long-run interest of both England and the American colonies to reach a peaceful settlement which provided for some mechanism for sharing the economic burden of defending the colonies in exchange for more political power for the American colonies.

4.1 Thomas Pownall

Thomas Pownall was a political theorist who was advocating the colonies' parliamentary representation well before the revolutionary war. During the 1760s and early 1770s, he unsuccessfully tried to persuade Parliament to adopt conciliatory policies. *"Pownall was one of the most outspoken advocates of a conciliatory approach to America. For a decade, in his writings on the colonies and in his speeches to a rudely inattentive House of Commons, he hammered on the urgent need to listen sympathetically to colonial grievances and demands. [...] his mind also played with the possibilities of a radically different basis for Empire, one similar to that which developed in the nineteenth century and would be called Commonwealth."* (Shy, 1970, p. 157).

Pownall accepted that the Constitution of the British Empire admitted two conflictive interpretations. *"There were current, he admitted, two views of the imperial constitution: the one prevalent in America emphasized the equal rights of all Englishmen, whereas the other, held widely in Britain, stressed the necessary subordination of colonies."* (Shy, 1970, p. 165). However, he was convinced that there was room for a compromise that would preserve the Empire while also taking into account colonial demands.

Pownall was aware of the potential problems for the mother country associated with giving political representation to the colonies, and he devised several institutional mechanisms for dealing with them. He believed that *"[...] the colonial claim to possess 'the right of representation and legislation' was valid and ought to be respected; only some of its abuses and encroachments should be prevented. This would*

mean, above all, guaranteeing to the executive and judicial officers of provincial government an income free from legislative manipulation. Perhaps it would also be well to separate the provincial council into quite distinct bodies for the performance of executive and judicial functions, respectively, and to create several regional supreme courts of appeal which would further the cause of justice and produce greater legal 'conformity'. The legal and judicial systems were critical, for Pownall emphasized 'how little the crown, or the rights of government, when opposed to the spirit of democracy, or even to the passion of the populace', could expect from colonial courts in the way of protection. These minor improvements would create an administration 'that shall firmly, uniformly, and constitutionally govern the colonies'." (Shy, 1970, p. 166).

Finally, Pownall understood that England could be at risk of seeing the political power of the Empire eventually shifting to America. However, he thought that parliamentary representation of the colonies would reduce this risk. He also was aware of the political constraints the could interfere with the implementation of his proposals. *"Later, because of the increasing power of the colonies, he [Pownall] was worried about the shift of political power from England to America. To prevent this problem, he suggested the Parliament should grant representation to the colonies."* (Shy, 1970, p. 172).

4.2 Adam Smith

In "The Wealth of Nations", Adam Smith considers three possible political reforms that could put an end to the conflict between the American colonies and Great Britain.

The first option was a peaceful independence process and some kind of defense and free trade treaty. This was his preferred alternative, but he also believed that it was not very likely to occur. *"To propose that Great Britain should voluntarily give up all authority over her colonies, and leave them to elect their own magistrates, to enact their own laws, and to make peace and war, as they might think proper, would be to propose such a measure as never was, and never will be, adopted by any nation in the world. No nation ever voluntarily gave up the dominion of any province, how troublesome soever it might be to govern it, and how small soever the revenue which it afforded might be in proportion to the expense which it occasioned."* (Smith, 1776, Book IV, Chapter VII, Part III, p. 131). *"If it was adopted, however, Great Britain would not only be immediately freed from the whole annual expense of the peace establishment of the colonies, but might settle with them such a treaty of commerce as would effectually secure to her a*

free trade, more advantageous to the great body of the people, though less so to the merchants, than the monopoly which she at present enjoys. By thus parting good friends, the natural affection of the colonies to the mother country, which, perhaps, our late dissensions have well-nigh extinguished, would quickly revive. It might dispose them not only to respect, for whole centuries together, that treaty of commerce which they had concluded with us at parting, but to favour us in war as well as in trade, and instead of turbulent and factious subjects, to become our most faithful, affectionate, and generous allies; and that same sort of parental affection on the one side, and filial respect on the other, might revive between Great Britain and her colonies, which used to subsist between those of ancient Greece and the mother city from which they descended." (Smith, Book IV, Chapter VII, Part III, p. 132).

The second alternative was to reach a deal on taxation without independence. Smith considered different possible deals whereby y the colonial assemblies could tax their constituents to finance the colonies' share of the cost of the public goods provided by the British Empire. He was extremely skeptical about this solution as well, however, because he thought that the colonies would not collect enough taxes and/or would refuse to do so. *"That the colony assemblies can ever be so managed as to levy upon their constituencies a public revenue sufficient, not only to maintain at all times their own civil and military establishment, but to pay their proper proportion of the expense of the general government of the British empire, seems not very probable."* (Smith, Book IV, Chapter VII, Part III, p. 133). A variant of this option which is also discussed by Smith was that the British Parliament could tax the colonies by requisition. He was also very skeptical about this solution because he believed that not enough revenues would be collected under this arrangement.

Finally, the British Parliament could tax the colonies and give them representation that was proportional to their contribution to the public revenues of the Empire. *"The parliament of Great Britain insists upon taxing the colonies; and they refuse to be taxed by a parliament in which they are not represented. If to each colony which should detach itself from the general confederacy, Great Britain should allow such a number of representatives as suited the proportion of what it contributed to the public revenue of the empire, in consequence of its being subjected to the same taxes, and in compensation admitted to the same freedom of trade with its fellow-subjects at home; the number of its representatives to be augmented as the proportion of its contribution might afterwards augment; a new method of acquiring importance, a new and more dazzling object of ambition, would be presented to the leading men of each colony."* (Smith,

1776, Book IV, Chapter VII, Part III, p. 137).

He was aware that this solution would raise several concerns on both sides of the Atlantic, but Smith thought that all of those concerns were misplaced. He argued that the new American representatives would not disrupt the political balance of the British Empire. *"We, on this side of the water, are afraid lest the multitude of American representatives should overturn the balance of the constitution, and increase too much either the influence of the crown on the one hand, or the force of the democracy on the other. But if the number of American representatives were to be in proportion to the produce of American taxation, the number of people to be managed would increase exactly in proportion to the means of managing them; and the means of managing, to the number of people to be managed. The monarchical and democratical parts of the constitution would, after the union, stand exactly in the same degree of relative force with regard to one another as they had gone before."* (Smith, 1776, Book IV, Chapter VII, Part III, p. 140). He also believed that the American representatives would help to protect colonial subjects from the imposition of oppressive laws or rules. *"The people on the other side of the water are afraid lest their distance from the seat of government might expose them to many oppressions. But their representatives in parliament, of which the number ought from the first to be considerable, would easily be able to protect them from all oppression. The distance could not much weaken the dependency of the representative upon the constituent, and the former would still feel that he owed his seat in parliament, and all the consequence which he derived from it, to the good-will of the latter. It would be the interest of the former, therefore, to cultivate that good-will, by complaining, with all the authority of a member of the legislature, of every outrage which any civil or military officer might be guilty of in those remote parts of the empire. The distance of America from the seat of government, besides, the natives of that country might flatter themselves, with some appearance of reason too, would not be of very long continuance. Such has hitherto been the rapid progress of that country in wealth, population and improvement, that in the course of little more than a century, perhaps, the produce of American might exceed that of British taxation. The seat of the empire would then naturally remove itself to the part of the empire which contributed most to the general defense and support of the whole."* (Smith, 1776, Book IV, Chapter VII, Part III, p.140).

5 Why didn't the British Agree to American Representation?

This section explores why the proposals suggested by Thomas Pownall and Adam Smith did not prosper. We begin with a brief but comprehensive characterization of the positions, socioeconomic composition and leverage of the main political cleavages in Great Britain at the time that the American colonies revolted. We then show how and why the expected effects of the presence of American representatives on the political balance among those coalitions made American representation in the British Parliament unacceptable for the dominant coalition in Great Britain.

5.1 The Incumbent Coalition in Great Britain

The leader of the coalition that took a coercive approach to the American colonies was the prime minister, Lord North. He had the support of the king and led a cabinet composed of Bedfordite ministers who took a very hawkish view of the American colonies. Parliament was dominated by the landed gentry, who also supported North's cabinet. For example, Bunker (2014) estimates that, out of 558 members in the House of Commons, the cabinet counted with the support of 250, including a core of 150 very loyal members who would never opposed North in a serious issue.

The High Anglican Church was also in favor of coercive policies regarding the colonies. Indeed, the Anglican clergy strongly supported coercion, even though dissenters and Anglican parishioners did not agree on the issue (Phillips 1999). The king also obtained the backing of the Highlands Scots, the Irish Catholics and old-line Tories, who, after the failure of the Jacobite rebellion, were striving to show their loyalty to George III. For example, in Scotland, several clan chieftains tried to prove their new loyalty to the Crown raising regiments to fight in America. Similarly, in Ireland, the Catholic middle class supported the war effort to signal its loyalty to the Crown (Phillips 1999). Finally, any organization or group with strong ties with the government (e.g., local corporations, lawyers and businessmen with government contracts) also supported coercive policies (Phillips 1999).

The position of the coercive coalition was unequivocal. Its members regarded the American colonists as rebels and strongly believed in the supremacy of the British Parliament and the king over the colonies. They were loyal to a political system based on land ownership and considered the public and American radicals as unstable and not fit to participate in politics. Consequently, they strongly objected to

any concessions to the American colonies, much less the possibility that the colonies might be granted representation in the British Parliament.[6]

At the core of the coercive coalition were the landed gentry, whose economic power came from their land revenue. More importantly, their political power rested on a political system that was still heavily based on land ownership. The landed gentry were organized based on local strongholds, where few people voted. They controlled the tenancy of the farmers within the shire, financed the church and other local public goods, and designated the vicars as justices of the peace. Therefore, their seats in Parliament were almost impossible to challenge. All this led to a system that Benjamin Disraeli described as "a territorial constitution" (see, among others, Bunker 2014).

In sum, the coercive coalition was solidly based on the political power of the landed gentry, who feared that making concessions to the American colonies would intensify the pressure for democratic reforms that would jeopardize their economic and political position.

5.2 The Pro-American Coalition in Great Britain

London radicals led by John Wilkes were the core opposition group that fought for the American colonies' political rights. The Wilkesites sought to introduce radical democratic reforms, including broader enfranchisement and constituency reform. They also pushed for annual elections, a law against electoral manipulation, and a law that blocks king's officials from the House of Commons. Bunker (2014) summarizes Wilkesites' program for political reform as follows: *"Wilkes and his entourage had drawn up a program for democratic reform. [...] As a way to cleanse the stable of corruption, the Wilkesites called for annual elections, a law against bribery at the polls, and another law to bar the king's officials from sitting in Commons. At their most radical, they called for 'a full and equal representation of the people'. This phrase could mean many things, but it would definitely include an end to tame little boroughs like*

[6] Bunker (2014) summarizes this position as follows: *"How did the cabinet [...] treat the American question? [...] they were hard-liners. In their eyes, the king and his Parliament were legally supreme over each and every colony. [...] Gower, Sandwich, and Suffolk never wavered from this principle, and neither did Lord North. Six years before [...] during the debates on the repeal of the Stamp Act, they opposed severely the repeal of the Stamp Act. [...] It was the duty of the House of Lords, they believed, to stand up against the mob and to resist democracy wherever it appeared. [...] In their opinion, the public was inherently capricious, easily misled by troublemakers such as Wilkesite or his counterparts in Boston. [...] Hand the Americans one concession, and they would ask for more until they won autonomy."* (Bunker, 2014, pp. 98-99).

Lord North's seat at Banbury. It might also imply a wide extension of the franchise and a vote for every householder." (Bunker, 2014, p. 130).

The Wilkesites' program had wide appeal among shopkeepers, skilled artisans and religious dissenters. While the bulk of the Wilkesites were in London, especially in the eastern districts of the city, they were gaining electoral support in other growing cities such as Bristol, Hull, Newcastle, and Worcester. Naturally, the Wilkesites equated the American colonies' grievances with the situation of many unfranchised people in England. As a consequence, they backed colonial demands, denounced coercive polices aimed at the colonies and called for conciliatory solutions (see Olson 1992 and Bunker 2014).

The Bill of Rights Society, probably the first public opinion lobby in British politics, had supported Wilkes' cause when he was repeatedly excluded from Parliament. The Society amalgamated American grievances with those of the electors of Middlesex, effectively combining democratic demands in England and the colonies (see Olson 1992).[7]

Lord Chatham (William Pitt the Elder) and his few followers, including Shelburne, also supported the American cause. Americans respected him because he had helped to fight the French in Canada. He also believed that concessions to the colonies, including political representation, were necessary to hold the empire together (see, for example, Olson 1973). Allison (2011) succinctly describes Lord Chatham's position as follows: *"[...] how Parliament could justify not giving three million Americans representation, when an English 'borough with half a Dozen houses' had a representative. Pitt predicted that this 'rotten Part of our Constitution' would not survive, warning that the struggle with America would force England to reform her own government."* (Allison 2011, p. 10). Consequently, Lord Chatham and his small group of followers (the Chathamites) opposed the Declaratory Act, which asserted the Parliament's sovereignty over the American colonies.

[7] Olson (1992) points out that while the Bill of Rights Society simply added the American grievances to its list of grievances, the Wilkesites made a much coherent connection between the cause of unfranchised people in England and colonial demands for political representation. *"The Bill of Rights Society had added American grievances to those of the electors of Middlesex. In May 1769 the Middlesex freeholders' petition, prepared under the Wilkesites' direction, linked the ministry's mismanagement of American affairs with its violations of subjects' right in England. The Wilkesites went further than merely superimposing American grievances on their own list: at one level they blended American complaints inseparably with their own. They applied the American demand for 'no taxation without representation' to the plight of the people without suffrage in England, using it as the rationale for demanding an expansion of the English electorate."* (Olson 1992, p. 146).

The Rockingham Whigs, including Edmund Burke, also favored some concessions and a "soft" stance on the American colonies. Being part of the landed gentry, they did not advocate radical democratic reforms, but rather wanted to put some limits on what they perceived as the unchecked and growing power of the king. From the perspective of Burke and the Marques of Rockingham, the king and his allies were using favoritism as means of subjugating Parliament (see Bunker 2014). This could explain why the Rockingham Whigs drew up the Declaratory Act, which established Parliament's sovereignty over the American colonies. Their main concern was to defend the political status of the Parliament from the encroachment of the Crown. There was also an opportunistic component in the Rockingham Whigs' position with respect to the American colonies. They claimed that North's ministries did not manage the colonies well and used the dispute as an opportunity to attack the incumbent government in an effort to make themselves a viable alternative in the event that England lost the war. The great majority of the Rockingham Whigs would never have approved of giving political representation to American colonies.[8]

British merchants were divided on the issue, depending on what product they traded and what benefits they derived from the incumbent government's policies. In fact, the first petitions for conciliatory policies were presented to Parliament by merchants who thought coercive policies would hurt their business with America. Merchants' views also differed with respect to the Wilkesites. Some believed that the Wilkesite movement was the best way to advance their interests. Others viewed the movement's radical agenda with suspicion (see Olson 1992). Protestant dissenters were another important pro-American group. They were infuriated by the Anglican Church's attempt to implant the episcopacy in America with the support of George III. Catholicism, popery, and episcopacy were considered to be threats to their liberties (see Phillips 1999).

The pro-American coalition faced two crucial obstacles. First, London radicals and the Chathamites did not have enough parliamentary representation (see Bunker 2014). Although the Wilkesites might have represented a majority of the electorate and eventually won the city of London, they were not even close to forming a parliamentary majority. The root of the problem was the existence of a political system that was heavily biased in favor of the landed gentry. This was a time when the democratic movement was still in its infancy. Indeed, some Members of Parliament represented densely populated areas while others represented virtually unpopulated counties. Moreover, a large proportion of the seats

[8] Among the Rockingham Whigs, only Lord Richmond supported radical democratic reforms.

were effectively uncontested (see, for example, Phillips 1999).

Second, the Rockingham Whigs were better represented in Parliament but, as we have already seen, their support for the American cause was unassertive and opportunistic. Furthermore, their foundations were quickly eroding. On the one hand, they faced the challenge of the Wilkesites and their demands for democratic reforms. Although the Rockingham Whigs agreed with some of the more moderate demands of the Wilkesites, they were extremely suspicious that lesser political reforms would be just the beginning of a more radical program. On the other hand, they were in the odd position of opposing the excesses of the king and his attempts to dominate Parliament, but having to find a way to do so without attacking the institution of the Parliament itself (see, for example, Guttridge 1963).[9]

The complicated nature of the position of the Rockingham Whigs helps to explain why they systematically failed to form a parliamentary majority that could advance their agenda and, specifically, why they were not able to successfully push for conciliatory policies with the colonies. Overall, the pro-American

[9] Guttridge (1963) elegantly summarizes the two dilemmas that Rockingham Whigs faced. Regarding, the tension with the Wilkesites' program, he asserts: *"As yet the reformers were not prepared to lay rude hands on the representative system. Their most vigorous demands were for the instruction of members, more frequent elections, and the exclusion of placemen from Parliament. It is true that tentative proposals were made for an addition to the representation of counties and the disenfranchisement of some rotten boroughs; but these proposals involved only a more equitable distribution of existing votes, not an increase in the electorate. They sought to restore the supposedly ancient practice of the constitution, and were not yet based on a radical philosophy of change. Even so, they were unwelcome to the Whigs, whose suspicions were confirmed in the next few years by the appearance of a genuinely radical program. The future was to show that no party or group could afford to ignore this growing movement, and those who called themselves Whigs would soon have to decide whether their gospel of liberalism was a book closed in 1689 or a living principle of change."* (Guttridge 1963, p. 32). Regarding the tension with the Crown, Guttridge asserts: *"[...] Rockingham Whigs agreed with the king that the existing constitution of Parliament must be preserved. Upon it depended their political power and their following in the Commons. This influence could not be risked in fundamental reform. The instruction of members would break the solidarity of party. Frequent election would put an intolerable strain on private purses. A wider electorate would destroy local control. As a recent historian has remarked, getting rid of the rotten boroughs was for them too high a price to pay for getting rid of the influence of the crown. The old system was essential. And yet it was precisely this system that the king was using. He was no Stuart tyrant. He preferred to govern as a parliamentary leader. He was beating the Whigs at their own game of patronage and influence. The Parliament they wanted to preserve was being discredited by the arbitrary acts of the ministry; and it was not easy to attack the ministerial majority, on behalf of the electorate, without attacking Parliament itself. But the Whigs had to do this. They had to fight the king without destroying the source of his power which was also theirs. They were in the position of a besieging army which could not afford to hurt the fortress it was attacking."* (Guttridge 1963, p. 32).

coalition was poorly represented and divided.

5.3 British Politics and American Representation

Given the economic and social composition and the political agendas of the incumbent government and the opposition, understanding their respective positions regarding the American colonies is a simple task. The landed gentry feared that the arrival of American representatives would strengthen the incipient democratic movement led by the Wilkesites. Opening the door of political representation to the Americans could quickly solve a dispute with a colony, but it would put at risk the landed gentry's dominant position in the British political system and even the territorial constitution itself. Better to risk losing a colony than to face the risk of a new, powerful coalition that would push for further democratic reforms.

On the other side of the political spectrum, the Wilkesites welcomed the rebellion of the American colonies. They were fighting to reform a biased political system that gave little political representation to the modest but growing middle class in London and other urban centers. American representatives could be a formidable ally that would improve the Wilkesites' chance of pushing their reformist agenda through. Indeed, Bunker (2014) documents several connections between American patriots and the Wilkesites: *"A bond of sympathy aligned the Wilkesites with the patriot opposition in America, not only in Charleston, but also in Virginia and New England. From the colonies, men and women followed the politics of London with keen attention. [...] The patriot leader Samuel Adams [...] had two American contacts in London, Arthur and William Lee from Virginia. Both men belonged to Wilkes's inner circle. An even tighter connection existed between the Wilkesites and Adams's Boston ally, John Hancock. [...] Whenever John Wilkes scored a political point, his admirers in America saw it as an extra reason to defy the empire."* (Bunker 2014, p. 131).

The fact that the Wilkesites and their reformist program were considered a serious threat by the landed gentry and the Crown is clearly reflected in the disputes that arose regarding the election of John Wilkes as the Lord Mayor of London. Although the city of London was the closest to having a democratic government of any district in England, there was a small group of powerful aldermen who usually managed to manipulate the elections to ensure that the candidate favored by the Crown won. The first time that John Wilkes won the election, the aldermen resorted to several maneuvers to void enough of the votes for Wilkes to overturn the result. Riots of Wilkes' supporters followed, but the

king's candidate ultimately assumed the mayorship. This did not discourage the Wilkesites, who tried again in the following election. Although the Wilkesites only won a few seats in the Commons, they performed remarkably well, particularly among free urban constituencies. Their platform was simple but appealing. They called for shorter parliamentary sessions, the enfranchisement of more people and justice for the American colonies. They took six seats in the London area, and John Wilkes won the election for Lord Mayor of London. This time, the margin was so wide that there was no room for the aldermen to manipulate the election results (see Bunker 2014).

Although the democratic movement was growing and posing a greater threat to the established order, at the time of the American Revolution it still had little formal representation in Parliament, while the incumbent British government was controlled by the landed gentry. Moreover, the rest of the members of the opposition, especially the Rockingham Whigs, who hold a fairly strong parliamentary coalition, were not able to successfully champion a conciliatory approach. It seems that they were equally fearful of the authoritarian tendencies of the incumbent government and of the threat posed by radical democratic reforms, leading to paralysis and confusion in their ranks.

Taxation in exchange for representation was a reasonable solution for Great Britain and the American colonies. Unfortunately, it appears that the political calculus was more complicated than the one envisioned by Thomas Pownall and Adam Smith. The entry of American representatives would potentially disrupt the balance of power in Great Britain, which would in turn speed the implementation of democratic reforms or, at the very least, this must have been the predominant view in Great Britain in the 1770s.

6 A Simple Model of Independence

This section presents a simple model of independence that captures the basic features of the American Revolution that have been discussed in previous sections. Consider a society with two political units (a colony and a metropolitan power) and three groups of subjects (one group in the colony, denoted by C, and two groups in the metropolis, denoted by 1 and 2, respectively). Let v_t^i indicates the payoff of group $i = C, 1, 2$, in period $t = 1, 2, ...\infty$. The output of the metropolis is $\bar{v}^M > 0$, while the output of the colony is $\bar{v}^C > 0$. The metropolis and the colony bargain over the distribution of $\bar{v}^M + \bar{v}^C$. In

the process, part of $\bar{v}^M + \bar{v}^C$ can be wasted. There are three possible political arrangements between the metropolis and the colony that structure this bargaining process: colonial rule, representation and independence, denoted by $Pol_t = COR, REP, IND$, respectively. Under colonial rule, the metropolis, dominated by group 1, has control over the distribution of the payoffs between the metropolis and the colony, but the colony can start a war of independence. Under representation, the metropolis and the colony share control over the distribution of payoffs. Finally, under independence, the metropolis and the colony become two independent political units, each making its own decisions.

The timing of events under *colonial rule* is as follows.

1. The probability that the colony wins its independence μ_t is realized and observed by all players. μ_t is an i.i.d. random variable that adopts the values $\mu_t = 0, \mu$ with probabilities $(1 - \pi)$ and π, respectively.

2. The metropolis, i.e., group 1, makes an offer to the colony. The metropolis can offer political representation ($r_t = 1$) or not ($r_t = 0$). In the later case, the metropolis also selects the payoff for the colony $o_t \in \left\{v_L^C, v_H^C\right\}$, where v_L^C indicates a low payoff and v_H^C a high one.

3. The colony observes the metropolis's offer and decides whether to start a war of independence ($w_t = 1$) or not ($w_t = 0$).

4. Suppose $w_t = 0$. Then:

   (a) If $r_t = 0$, then $v_t^1 = s^1\left(\bar{v}^M + \bar{v}^C - o_t\right)$, $v_t^2 = \left(1 - s^1\right)\left(\bar{v}^M + \bar{v}^C - o_t\right)$ and $v_t^C = o_t$, with $s^1 \in (0, 1)$, is a measure of the political power of group 1 in the metropolis. Moreover, in the following period, colonial rule persists, i.e., $Pol_{t+1} = COR$.

   (b) If $r_t = 1$, then the colony will start to have representation immediately, i.e., $Pol_t = REP$. Moreover, in the following period the colony will be represented, i.e., $Pol_{t+1} = REP$.

5. Suppose $w_t = 1$. Then, nature determines who wins the war of independence (with probability μ_t that the colony wins the war). $v_t^1 = s^1\beta\bar{v}^M$, $v_t^2 = \left(1 - s^1\right)\beta\bar{v}_t^M$ and $v_t^C = \gamma\bar{v}_t^C$, where $\beta \in (0, 1)$ and $\gamma \in (0, 1)$ is the proportion of the output that the metropolis and the colony lose in the war.

(a) If the colony wins its independence, in the next period, the colony is independent, i.e., $Pol_{t+1} = IND$.

(b) If the metropolis wins the war, then, in the following period, colonial rule persists, i.e., $Pol_{t+1} = COR$, and $\mu_{t+1} = 0$.

Under Independence, we have $v_t^1 = s^1 \bar{v}_t^M$, $v_t^2 = \left(1 - s^1\right) \bar{v}_t^M$ and $v_t^C = \bar{v}_t^C$. Moreover, $Pol_{t+1} = IND$. That is, as soon as the colony wins its independence, each country collects its own output and the two groups in the metropolis divide their output based on their political power.

Under Representation, $v_t^1 = \alpha s^1 \bar{v}_t^M$, $v_t^2 = \left(1 - \alpha s^1\right) \bar{v}_t^M$ and $v_t^C = \bar{v}_t^C$, where $\alpha \in (0,1)$ measures how the new colonial representatives reduce the relative political power of group 1. The intuition is that the new representatives will form a coalition with one of the groups in the metropolis. Note also that $v_t^C = \bar{v}_t^C$, i.e., we assume that, at the least, the colonial representatives can guarantee that the colony will keep its own output. Moreover, $Pol_{t+1} = REP$.[10]

As the notion of equilibrium, we employ a Markov perfect equilibrium, i.e., the decision of a player in period t depends only on the political arrangement in period t, the realization of μ_t and, in the case of the colony, on the offer made by the metropolis.

Finally, we impose the following assumptions:

Assumption 1: $\frac{v_H^C - \delta(1-\pi)\left(v_H^C - v_L^C\right)}{\delta + \gamma(1-\delta)} < \bar{v}^C < \frac{v_L^C}{\gamma}$.

Assumption 2: $\frac{(1-\gamma)\bar{v}^C}{(1-\beta)} \left[\frac{\pi\delta v_H^C + (1-\pi\delta)v_L^C - \bar{v}^C}{\bar{v}^C - v_L^C}\right] + \frac{v_H^C - v_L^C}{(1-\beta)} < \bar{v}^M < \frac{\bar{v}^C - v_L^C}{\delta\pi(1-\beta)}$.

Assumption 1 means that independence is worthwhile for the colony in the long run (even if the metropolis offers temporary concessions), but costly in the short run (even if the metropolis does not offer temporary concessions). Assumption 2 serves two purposes. First, it ensures that the metropolis first considers concessions and then considers the possibility of fighting a war. In other words, the metropolis does not push for a war if simple concessions can solve the dispute. Second, it ensures that the value for the metropolis of fighting a war is increasing in the probability of winning the war.

[10] Alternatively, we might have assumed that, under representation, Nature determines if the wining coalition will be $(1,C)$, $(2,C)$ or $(1,2)$. Moreover, $Pol_{t+1} = REP$. If the winning coalition is $(1,C)$, then $v_t^1 = \bar{v}_t^M$, $v_t^2 = 0$ and $v_t^C = \bar{v}_t^C$. If the winning coalition is $(2,C)$, then $v_t^2 = 0$, $v_t^2 = \bar{v}_t^M$ and $v_t^C = \bar{v}_t^C$. If the winning coalition is $(1,2)$, then $v_t^2 = s^1 \bar{v}_t^M$, $v_t^2 = \left(1 - s^1\right) \bar{v}_t^M$ and $v_t^C = \bar{v}_t^C$. The intuition is that there is uncertainty about the new winning coalition once the new representatives enter Parliament. The main results are not affected if we use this alternative specification.

6.1 Equilibrium Analysis

In order to characterize the Markov perfect equilibrium of the independence model, it is useful to define the following two thresholds for the colony:

$$\begin{aligned}\bar{\mu}^{1,Col} &= \left(\frac{v_L^C - \gamma\bar{v}^C}{\bar{v}^C - v_L^C}\right)\left(\frac{1-\delta}{\delta}\right), \\ \bar{\mu}^{2,Col} &= \left[\frac{v_H^C - \gamma\bar{v}^C + \delta\pi\left(v_H^C - v_L^C\right)}{\bar{v}^C - v_L^C - \delta\pi\left(v_H^C - v_L^C\right)}\right]\left(\frac{1-\delta}{\delta}\right),\end{aligned}$$

and the following threshold for the metropolis:

$$\bar{\mu}^M = \frac{\delta\left(\bar{v}^M + \bar{v}^C - v_L^C\right) + \left[1 - \delta\left(1-\pi\right)\right]\beta\bar{v}^M - \left(1+\delta\pi\right)\alpha\bar{v}^M}{\left(1-\delta\right)\left(\bar{v}^C - v_L^C\right) - \pi\left(1-\alpha\right)\delta\bar{v}^M}\left(\frac{1-\delta}{\delta}\right).$$

Lemma 1 characterizes the equilibrium response of the colony to different offers made by the metropolis.

Lemma 1 ***The Colony***. *Suppose that assumption 1 holds. Then:*

1. *If $\mu \leq \bar{\mu}^{1,Col}$, then the colony accepts colonial rule, i.e., $\left(v_L^C, COR\right)$.*
2. *If $\bar{\mu}^{1,Col} < \mu \leq \bar{\mu}^{2,Col}$, then the colony accepts $\left(v_H^C, COR\right)$, but not $\left(v_L^C, COR\right)$. The metropolis has three alternatives to consider: temporary concessions and avoidance of a war, i.e., $\left(v_H^C, COR\right)$; no concessions and facing a war, i.e., (v_L, COR); and offering representation, i.e., (REP).*
3. *If $\mu > \bar{\mu}^{2,Col}$, then the colony only accepts representation. The metropolis has two alternatives to consider: no concessions and facing a war, i.e., (v_L, COR); and offering representation, i.e., (REP).* ***Proof****: see the online appendix.* ■

The intuition behind lemma 1 is straightforward. For the colony, representation produces a higher expected payoff than temporary concessions, while temporary concessions produce a higher expected payoff than no concession at all. Moreover, these expected payoffs do not depend on μ, the probability that the colony wins its independence. The expected payoff of fighting a war of independence is increasing in the probability of winning the war. Moreover, under assumption 1, when the colony does not have any chance of winning a war, the expected payoff of fighting is lower than the payoff of accepting no concessions, whereas, when the colony definitively wins a war, the payoff is higher than it is for temporary concessions, but lower than it is for obtaining parliamentary representation. Thus, there are three regions

to consider. When the probability of winning the war is low (formally $\mu \leq \bar{\mu}^{1,Col}$), the colony is willing to accept colonial rule. When the probability of winning the war reaches intermediate values (formally $\bar{\mu}^{1,Col} < \mu \leq \bar{\mu}^{2,Col}$), to avoid a war the metropolis must offer temporary concessions or representation. Finally, when the probability of winning the war is high (formally $\mu > \bar{\mu}^{2,Col}$), only representation will avoid a war.

Lemma 2 characterizes the best offer for the metropolis.

Lemma 2 ***The Metropolis***. *Suppose that assumption 2 holds. If $\mu > \bar{\mu}^{1,Col}$, then the metropolis always prefer temporary concessions rather than facing a war or offering representation. Moreover, assume that $\mu > \bar{\mu}^{2,Col}$. Then:*

1. *If $\alpha < (1-\delta)\beta + \delta$, then the metropolis prefers to fight a war rather than to offer representation.*
2. *If $\alpha > (1-\delta)\beta + \delta$ and $\bar{v}^M < \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}$, then the metropolis prefers to fight a war rather than to offer representation when $\mu \in \left(\bar{\mu}^{2,Col}, \bar{\mu}^M\right)$, and prefers to offer representation rather than to fight a war when $\mu \in \left[\bar{\mu}^M, 1\right]$.*
3. *If $\alpha > (1-\delta)\beta + \delta$ and $\bar{v}^M > \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}$, then the metropolis prefers to offer representation rather than to face a war. **Proof**: see the online appendix.* ■

In order to obtain a full characterization of the Markov perfect equilibrium, we simply need to combine lemmas 1 and 2. Define $\tilde{\mu}^M$ as follows:

$$\tilde{\mu}^M = \begin{cases} 1, & \text{if } \alpha < (1-\delta)\beta + \delta, \\ \bar{\mu}^M, & \text{if } \alpha > (1-\delta)\beta + \delta \text{ and } \bar{v}^M < \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}, \\ \bar{\mu}^{2,Col}, & \text{if } \alpha > (1-\delta)\beta + \delta \text{ and } \bar{v}^M > \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}. \end{cases}$$

Note that $\bar{v}^M < \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}$ if and only if $\bar{\mu}^{2,Col} < \bar{\mu}^M$. Proposition 1 summarizes the results.

Proposition 1 *Suppose that assumptions 1 and 2 hold. Before the first time $\mu_t = \mu$, the metropolis implements $o_t = v_L^C$. Thereafter:*

1. *If* $\mu \leq \bar{\mu}^{1,Col}$*, then there is no independence, the colony does not obtain representation and the metropolis always implements* $o_t = v_L^C$*.*

2. *If* $\bar{\mu}^{1,Col} < \mu \leq \bar{\mu}^{2,Col}$*, then the metropolis offers temporary concessions, i.e., whenever* $\mu_t = \mu$*, the metropolis offers* $o_t = v_H^C$*.*

3. *If* $\mu > \bar{\mu}^{2,Col}$*, then either the metropolis offers representation or there is a war of independence. Specifically, there is a war if* $\mu < \tilde{\mu}^M$ *and the colony obtains representation if* $\mu \geq \tilde{\mu}^M$*.* ***Proof****: immediately derived from lemmas 1 and 2.* ■

The intuition behind Lemma 2 and Proposition 1 is as follows. When the probability that the colony will win a war of independence is low (formally $\mu \leq \bar{\mu}^{1,Col}$), the colony is not willing to start a war even if the metropolis does no offer any concession. Since this is the preferred situation for the metropolis, in equilibrium, the metropolis always implements no concessions (i.e., $o_t = v_L^C$) and there is no independence.

The interesting cases occur when $\mu > \bar{\mu}^{1,Col}$. Suppose that the probability that the colony will win the war is intermediate (formally $\bar{\mu}^{1,Col} < \mu \leq \bar{\mu}^{2,Col}$). Then, the metropolis must choose between three alternatives: offer temporary concessions, offer representation, or fight a war. Lemma 2 simply establishes that when temporary concessions are enough to placate the colony, the metropolis prefers to use them rather than any other alternative. Moreover, note that this does not depend on the effect of the arrival of colonial representatives in Parliament on the relative amount of political power held by group 1. Formally, the value of α is irrelevant when $\mu \leq \bar{\mu}^{2,Col}$. Suppose that the probability that the colony wins the independence war is high (formally $\mu > \bar{\mu}^{2,Col}$). Then, the metropolis has only two alternatives: offer representation or fight a war. Lemma 2 establishes the best course of action for the metropolis, i.e., for group 1, which controls the metropolis. When $\alpha < (1-\delta)\beta + \delta$, offering representation would be very costly for group 1 because the new colonial representatives will form a coalition with group 2, which will significantly reduce the bargaining power of group 1. In such a case, the metropolis will choose to fight a war. On the contrary, when $\alpha > (1-\delta)\beta + \delta$, offering representation is less costly for group 1 and, hence, worth considering. Indeed, representation becomes more attractive when the colony has a greater chance of winning the war.

7 Final Remarks

The American Revolution was a complex historical process with multiple causes. We have tried to understand why the American colonies revolted and, in particular, why Britain and the American colonies were unable to reach an agreement that would have avoided war and independence. We have argued that the internal political equilibrium in Great Britain made such an agreement very unlikely. The entry of American representatives would have allowed them to form a coalition with the incipient democratic movement in England, which would have posed a serious threat to the position of the landed gentry. Moreover, there was no way for the American elites to credibly commit to a different course of action. If American representatives had been granted entry into the British Parliament, it would have been in their best interest to form an alliance with the opposition (Wilkesites and Chathamites). Our simple model of independence captures this dynamic.

There are several ways to extend our line of analysis. Here we will mention just three of them. First, the political logic blocking American representation in the British Parliament can be easily generalized to other proposals to peacefully solve the dispute. For example, some authors argue that what American elites wanted was politically autonomy and self-governance rather than better representation in the British Empire affairs (see, for example, Bailyn 1967 and McCusker and Menard 2014). Still, granting American colonists greater political autonomy was a concession the incumbent British coalition was not willing to offer for the same reason as to why it would not grant representation, namely the slippery road effect on democratic demands in Great Britain.

Second, one promising avenue of inquiry would be to build a more general game theoretic model of independence that incorporates internal conflict within the colony and the metropolis. The peculiarity of independence is that it is neither a civil war nor an interstate war, yet it has elements of both. Thus, a good game theoretic model of independence should be able capture how the strategic interactions between internal and external issues lead to different independence paths.

Finally, it would be very interesting to explore the role that the difficulties of giving political representation to the colonies played in the decline of the British Empire.

References

[1] Acemoglu, Daron. 2003. Why Not a Political Coase Theorem? Social Conflict, Commitment, and Politics. *Journal of Comparative Economics*, 31(4).

[2] Acemoglu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy.* Cambridge, MA: Cambridge University Press.

[3] Acemoglu, Daron, and James A. Robinson. 2011. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty.* New York, NY: Crown Business.

[4] Allison, Robert S. 2011. *The American Revolution: A Concise History.* New York, NY: Oxford University Press.

[5] Anderson, Fred. 2000. *Crucible of War: The Seven Years' War and the Fate of Empire in British North America, 1754-1766.* New York, NY: Alfred A. Knopf.

[6] Anderson, Fred. 2005. *The War that Made America: A Short History of the French and Indian War.* New York, NY: Penguin Group.

[7] Barrow, Thomas C. 1970. The Old Colonial System from an English Point of View. In *Anglo-American Political Relations 1675-1775*, edited by Alison Gilbert Olson and Richard Maxwell Brow, pp. 125-139. New Brunswick, NJ: Rutgers University Press.

[8] Bailyn, Bernard. 1967. *The Ideological Origins of the American Revolution.* New York, NY: Alfred A. Knopf Inc.

[9] Bird, Harrison. 1965. *Battle for a Continent.* New York, NY: Oxford University Press.

[10] Bradley, A.G. 1971. *The Fight with France for North America.* New York, NY: Arno Press and The New York Times.

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

[12] Brown, Richard Maxwell. 1970. The Anglo-American Political System, 1675-1775: A Behavioral Analysis. In *Anglo-American Political Relations 1675-1775*, edited by Alison Gilbert Olson and Richard Maxwell Brown, pp. 14-28. New Brunswick, NJ: Rutgers University Press.

[13] Bunker, Nick. 2014. *An Empire on the Edge: How Britain Came to Fight America*. New York, NY: Vintage Books.

[14] De Figueiredo Jr., Rui J. P., Jack Rakove and Barry Weingast. 2006. Rationality, Inaccurate Mental Models and Self-Confirming Equilibrium: A New Understanding of the American Revolution. *Journal of Theoretical Politics*, 18(4): 384-415.

[15] Egnal, Marc, and Joseph A. Ernst. 1972. An Economic Interpretation of the American Revolution. *The William and Mary Quarterly*, 3(29):3-32.

[16] Engerman, Stanley L. 1994. Mercantilism and Overseas Trade, 1700-1800. Chapter 8 in *The Economic History of Britain Since 1700*. Volume 1:1700-1800, edited by Roderick Floud and Deirdre McCloskey. Cambridge, UK: Cambridge University Press.

[17] Engerman, Stanley L., and Kenneth L. Sokoloff. 2002. Factor Endowments, Inequality, and Paths of Development Among New World Economics. NBER Working Paper 8259.

[18] Ferguson, Niall. 2004. *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power*. New York, NY: Basic Books.

[19] Fisher, David Hackett. 2006. *Washington's Crossing (Pivotal Moments in American History)*. Oxford, UK: Oxford University Press.

[20] Galiani, Sebastian, and Gustavo Torrens. 2014. Autocracy, Democracy and Trade Policy. *Journal of International Economics*, 93(1):173-193.

[21] Green, Jack P. 2011. *The Constitutional Origin of the American Revolution*. Cambridge, MA: Cambridge University Press.

[22] Guttridge, G. H. 1963. *English Whiggism and the American Revolution*. Berkeley, CA: University of California Press.

[23] Kammen, Michael G. 1970. British and Imperial Interests in the Age of the American Revolution. In *Anglo-American Political Relations 1675-1775*, edited by Alison Gilbert Olson and Richard Maxwell Brown, pp. 140-154. New Brunswick, NJ: Rutgers University Press.

[24] Land, Jeremy. 2010. The Price of Empire: Britain's Military Costs During the Seven Years' War. Thesis. Appalachian State University.

[25] Lindert, Peter H., and Jeffrey G. Williamson. 2016. *Unequal Gains: American Growth and Inequality since 1700*. Princeton University Press.

[26] Mancall, Peter C., and Thomas Weiss. 1999. Was Economic Growth Likely in Colonial British America? *Journal of Economic History* 59(1): 17-40.

[27] Mancall, Peter C., Joshua L. Rosenbloom and Thomas Weiss. 2003. Conjectural Estimates of Growth in the Lower South, 1720 to 1800. In *History Matters: Economic Growth, Technology and Population*, edited by William Sundstrom and Timmothy Guinnane, 389-424. Stanford, CA: Stanford University Press.

[28] Middlekauff, Robert, 2007. *The Glorious Cause: The American Revolution, 1763-1789* (Oxford History of the United States). 2nd Revised ed. Edition. Oxford, UK: Oxford University Press.

[29] McCusker, John J., and Russell R. Menard. 2014. *The Economy of British America, 1607-1789*. North Carolina: University of North Caroline Press.

[30] North, Douglass, and Barry Weingast. 1989. Constitution and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth-Century England. The *Journal of Economic History*, 49(4):803-832.

[31] North, Douglass, Barry Weingast, and John Wallis, 2009. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorder Human History*. New York, NY: Cambridge University Press.

[32] Olson, Alison Gilbert. 1973. *Anglo-American Politics, 1660-1775: The Relationship between Parties in England and Colonial America*. New York, NY: Oxford University Press.

[33] Olson, Alison Gilbert. 1992. *Making the Empire Work: London and American Interest Groups, 1690-1790*. Cambridge, MA: Harvard University Press.

[34] Phillips, Kevin. 1999. *The Cousins' Wars: Religion, Politics, Civil Warfare, and the Triumph of Anglo-America*. New York, NY: Basic Books. Kindle edition.

[35] Pole, J.R. 1972. *Foundations of American Independence, 1763-1815*. Indianapolis, IN: The Bobbs-Merrill Company Inc.

[36] Rosenbloom, Joshua L., and Thomas Weiss. 2014. Economic Growth in the Mid-Atlantic Region: Conjectural Estimates from 1720-1800. *Explorations in Economic History* 51: 41-59.

[37] Shy, John. 1970. Thomas Pownall, Henry Ellis, and the Spectrum of Possibilities, 1763-1775. In *Anglo-American Political Relations, 1675-1775*, edited by Alison Gilbert Olson and Richard Maxwell Brown, pp. 155-186. New Brunswick, NJ: Rutgers University Press.

[38] Smith, Adam. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by Edwin Cannan.

[39] Thomas, R. P. 1965. A Quantitative Approach to the Study of the Effects of British Imperial Policy upon Colonial Welfare: Some Preliminary Findings. *Journal of Economic History*, 25: 615-38.

[40] Thomas, R. P., and D. N. McCloskey. 1981. Overseas Trade and Empire, 1700-1800. In *The Economic History of Britain, 1700-Present*, vol. 1, edited by Roderick Floud and Donald McCloskey, pp. 87-102, Cambridge, UK: Cambridge University Press.

[41] Walton, Gary M., and James F. Shepherd. 1979. *The Economic Rise of Early America*. Cambridge, MA: Cambridge University Press.

[42] Wood, Gordon S. 1991. The Radicalism of the American Revolution. New York, NY: Vintage Books, a division of Random House Inc.

Online Appendix to "Why Not Taxation and Representation?: A Note on the American Revolution"

In this appendix we present the proofs for all the results shown in Section 6.

Proof of Lemma 1.

Independence. Once independence is successful, the colony remains independent forever. Independence is an absorbing state. Hence, the expected payoff for the colony is given by:

$$V^C(IND) = \frac{\bar{v}^C}{1-\delta}. \tag{1}$$

No Concessions. Suppose that the metropolis always offers $o_t = v_L^C$ and the colony accepts it. Then, the expected payoff for the colony is given by:

$$V^C\left(w=0, v_L^C, COR, \mu_t = \mu\right) = \frac{v_L^C}{1-\delta}. \tag{2}$$

Temporary Concessions. Suppose that every time $\mu_t = 0$, the metropolis offers $o_t = v_L^C$, while every time $\mu_t = \mu$, it offers $o_t = v_H^C$. Assume that the colony accepts this offer. Then, the expected payoff for the colony must satisfy the following Bellman equations:

$$\begin{aligned} V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) &= v_H^C + \delta \left[\begin{array}{c} \pi V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) + \\ (1-\pi) V^C\left(w=0, v_L^C, COR, \mu_t = 0\right) \end{array} \right], \\ V^C\left(w=0, v_L^C, COR, \mu_t = 0\right) &= v_L^C + \delta \left[\begin{array}{c} \pi V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) + \\ (1-\pi) V^C\left(w=0, v_L^C, COR, \mu_t = 0\right) \end{array} \right]. \end{aligned}$$

Solving this system of equations, we obtain:

$$V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) = \frac{\left[1-\delta(1-\pi)\right] v_H^C + \delta(1-\pi) v_L^C}{1-\delta}. \tag{3}$$

Note that $V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) > V^C\left(w=0, v_L^C, COR, \mu_t = \mu\right)$ because $v_H^C > v_L^C$.

Representation. Once the colony gets representation, it has representation forever. Representation is an absorbing state. Hence, the expected payoff for the colony under representation is given by:

$$V^C(REP) = \frac{\bar{v}^C}{1-\delta}. \tag{4}$$

War. Suppose that the colony does not accept a temporary concession. Then, whenever $\mu_t = \mu$, the colony embarks in a war of independence, which means that the expected payoffs for the colony must satisfy the following Bellman equations:

$$\begin{aligned} V^C\left(w=1, COR, \mu_t=\mu\right) &= \gamma\bar{v}^C + \delta\left[\mu V^C\left(IND\right) + \left(1-\mu\right)V^C\left(w=0, v_L^C, COR, \mu_t=0\right)\right], \\ V^C\left(w=0, COR, \mu_t=0\right) &= v_L^C + \delta\left[\begin{array}{c} \pi V^C\left(w=1, v_L^C, COR, \mu_t=\mu\right) + \\ \left(1-\pi\right)V^C\left(w=0, v_L^C, COR, \mu_t=0\right) \end{array}\right]. \end{aligned}$$

Solving this system of equations, we obtain:

$$V^C\left(w=1, COR, \mu_t=\mu\right) = \frac{\left[1-\delta\left(1-\pi\right)\right]\left[\left(1-\delta\right)\gamma+\delta\mu\right]\bar{v}^C + \left(1-\mu\right)\delta\left(1-\delta\right)v_L^C}{\left(1-\delta\right)\left[1-\delta\left(1-\pi\right)-\left(1-\mu\right)\delta^2\pi\right]} \tag{5}$$

Since whenever $\mu_t = \mu$, the colony embarks in a war of independence, while, whenever $\mu_t = 0$, the metropolis always offers v_L^C, this expression does not depend on the metropolis's offer. Moreover, $V^C\left(w=1, COR, \mu_t=\mu\right)$ is an strictly increasing function of μ for $\mu \in [0,1]$. Formally:

$$\frac{\partial V^C\left(w=1, COR, \mu_t=\mu\right)}{\partial\mu} = \frac{\delta\left[1-\delta\left(1-\pi\right)\right]\left\{\left[1+\delta\pi\left(1-\gamma\right)\right]\bar{v}^C - v_L^C\right\}}{\left[1-\delta\left(1-\pi\right)-\left(1-\mu\right)\delta^2\pi\right]^2} > 0,$$

where we have used $\bar{v}^C > v_L^C$.

Representation versus Temporary Concessions and War. Note that representation induces a higher expected payoff for the colony than any temporary concession. Formally, $V^C\left(REP\right) > V^C\left(w=0, o_t, COR, \mu_t=\mu\right)$ for $o_t = v_L^C, v_H^C$. Although, under representation, the colony obtains the same stream of payoffs that it would under independence, representation is always better than fighting a war of independence. Formally, $V^C\left(REP\right) > V^C\left(w=1, COR, \mu_t=\mu\right)$. Summing up, for the colony, representation predominates over any other alternative.

War versus Concessions. $V^C\left(w=1, COR, \mu_t=0\right) < V^C\left(w=0, v_L^C, COR, \mu_t=\mu\right) < V^C\left(w=0, v_H^C, COR, \mu_t=\mu\right) < V^C\left(w=1, COR, \mu_t=1\right)$ if and only if $\frac{v_H^C-\delta(1-\pi)\left(v_H^C-v_L^C\right)}{\delta+\gamma(1-\delta)} < \bar{v}^C < \frac{v_L^C}{\gamma}$, which holds due to assumption 1. The colony accepts no concession if and only if $V^C\left(w=0, v_L^C, COR, \mu_t=\mu\right) \geq V^C\left(w=1, COR, \mu_t=\mu\right)$. Since $V^C\left(w=1, COR, \mu_t=0\right) < V^C\left(w=0, v_L^C, COR, \mu_t=\mu\right) < V^C\left(w=1, COR, \mu_t=1\right)$ and $V^C\left(w=1, COR, \mu_t=\mu\right)$ is an strictly increasing function of μ for $\mu \in [0,1]$, the intermediate value theorem implies that there exists a unique

$\bar{\mu}^{1,Col} \in (0,1)$ such that the colony accepts no concession if and only if:

$$\mu \leq \bar{\mu}^{1,Col} = \left(\frac{v_L^C - \gamma \bar{v}^C}{\bar{v}^C - v_L^C} \right) \left(\frac{1-\delta}{\delta} \right). \tag{6}$$

Analogously, the colony accepts a temporary concession $o_t = v_H^C$ if and only if $V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) \geq V^C\left(w=1, COR, \mu_t = \mu\right)$. Since $V^C\left(w=1, COR, \mu_t = 0\right) < V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) < V^C\left(w=1, COR, \mu_t = 1\right)$ and $V^C\left(w=1, COR, \mu_t = \mu\right)$ is an strictly increasing function of μ for $\mu \in [0,1]$, the intermediate value theorem implies that, there exists a unique $\bar{\mu}^{2,Col} \in (0,1)$ such that the colony accepts the temporary concession $o_t = v_H^C$ if and only if:

$$\mu \leq \bar{\mu}^{2,Col} = \left[\frac{v_H^C - \gamma \bar{v}^C + \delta\pi\left(v_H^C - v_L^C\right)}{\bar{v}^C - v_L^C - \delta\pi\left(v_H^C - v_L^C\right)} \right] \left(\frac{1-\delta}{\delta} \right). \tag{7}$$

Finally, since $V^C\left(w=0, v_H^C, COR, \mu_t = \mu\right) > V^C\left(w=0, v_L^C, COR, \mu_t = \mu\right)$, while $V^C\left(w=1, COR, \mu_t = \mu\right)$ is strictly increasing in μ, it must be the case that $\bar{\mu}^{2,Col} > \bar{\mu}^{1,Col}$. ■

Proof of Lemma 2.

Independence. Independence is an absorbing state. Hence, the expected payoff for player 1 is given by:

$$V^1\left(IND\right) = \frac{s^1 \bar{v}^M}{1-\delta}.$$

No Concessions. Suppose that the metropolis always offers $o_t = v_L^C$ and the colony accepts it. Then, the expected payoff for player 1 is given by:

$$V^1\left(w=0, v_L^C, COR, \mu_t = \mu\right) = \frac{s^1\left(\bar{v}^M + \bar{v}^C - v_L^C\right)}{1-\delta}. \tag{8}$$

Temporary Concessions. Suppose that the metropolis always offers $o_t = v_H^C$ and the colony accepts it. Then, the expected payoffs for player 1 must satisfy the following Bellman equations:

$$\begin{aligned}
V^1\left(w=0, v_H^C, COR, \mu_t = \mu\right) &= s^1\left(\bar{v}^M + \bar{v}^C - v_H^C\right) + \delta \left[\begin{array}{c} \pi V^1\left(w=0, v_H^C, COR, \mu_t = \mu\right) \\ +\left(1-\pi\right) V^1\left(w=0, v_L^C, COR, \mu_t = 0\right) \end{array} \right], \\
V^1\left(w=0, v_L^C, COR, \mu_t = 0\right) &= s^1\left(\bar{v}^M + \bar{v}^C - v_L^C\right) + \delta \left[\begin{array}{c} \pi V^1\left(w=0, v_H^C, COR, \mu_t = \mu\right) \\ +\left(1-\pi\right) V^1\left(w=0, v_L^C, COR, \mu_t = 0\right) \end{array} \right].
\end{aligned}$$

Solving this system of equations, we obtain:

$$V^1\left(w=0,v_H^C,COR,\mu_t=\mu\right)=s^1\left[\frac{\left(\bar{v}^M+\bar{v}^C-v_H^C\right)+\delta\left(1-\pi\right)\left(v_H^C-v_L^C\right)}{1-\delta}\right]. \tag{9}$$

Representation. Once the colony obtains representation, it has representation forever. Representation is an absorbing state. Hence, the expected payoff for player 1 under representation is given by:

$$V^1\left(REP\right)=\frac{\alpha s^1\bar{v}^M}{1-\delta}. \tag{10}$$

War. Suppose that the colony does not accept a temporary concession. Then, the expected payoff for player 1 must satisfy the following Bellman equations:

$$\begin{aligned}
V^1\left(w=1,COR,\mu_t=\mu\right) &= s^1\beta\bar{v}^M+\delta\left[\mu V^1\left(IND\right)+\left(1-\mu\right)V^1\left(w=0,v_L^C,COR,\mu_t=0\right)\right]\\
V^1\left(w=0,v_L^C,COR,\mu_t=0\right) &= s^1\left(\bar{v}^M+\bar{v}^C-v_L^C\right)+\delta\left[\begin{array}{c}\pi V^1\left(w=1,COR,\mu_t=\mu\right)\\+\left(1-\pi\right)V^1\left(w=0,v_L^C,COR,\mu_t=0\right)\end{array}\right]
\end{aligned}$$

Solving this system of equations, we obtain:

$$V^1\left(w=1,COR,\mu_t=\mu\right)=s^1\frac{\left[1-\delta\left(1-\pi\right)\right]\beta\bar{v}^M+\delta\left(\bar{v}^M+\bar{v}^C-v_L^C\right)+\mu\delta\left[\frac{\delta\pi}{1-\delta}\bar{v}^M-\left(\bar{v}^C-v_L^C\right)\right]}{1-\delta\left(1-\pi\right)-\delta^2\pi\left(1-\mu\right)}.$$

Since whenever $\mu_t=\mu$, the colony embarks on a war of independence, while whenever $\mu_t=0$, the metropolis always offers v_L^C, this expression does not depend on the metropolis's offer. Moreover, $V^1\left(w=1,COR,\mu_t=\mu\right)$ is a decreasing function of μ for $\mu\in[0,1]$. Formally:

$$\frac{\partial V^1\left(w=1,COR,\mu_t=\mu\right)}{\partial\mu}=\frac{\delta\left[1-\delta\left(1-\pi\right)\right]\left[\delta\pi\bar{v}^M\left(1-\beta\right)-\left(\bar{v}^C-v_L^C\right)\right]}{\left[1-\delta\left(1-\pi\right)-\delta^2\pi\left(1-\mu\right)\right]^2}<0,$$

where we have used $\bar{v}^C>v_L^C+\delta\pi\bar{v}^M\left(1-\beta\right)$, which holds due to assumption 2.

Representation versus Temporary Concessions. $V^1\left(w=0,v_H^C,COR,\mu_t=\mu\right)>V^1\left(REP\right)$ if and only if $\bar{v}^C>\delta\left(1-\pi\right)v_L^C+\left[1-\delta\left(1-\pi\right)\right]v_H^C-\left(1-\alpha\right)\bar{v}^M$, which holds due to assumption 1. Thus, for the metropolis, temporary concessions are always better than representation. Since, $V^1\left(w=0,v_L^C,COR,\mu_t=\mu\right)>V^1\left(w=0,v_H^C,COR,\mu_t=\mu\right)$, no concession is also preferred to representation.

War versus Temporary Concessions. When $\mu = \bar{\mu}^{1,Col}$, the metropolis prefers to offer temporary concessions rather than to engage in war. Formally, $V^1\left(w=0, v_H^C, COR, \mu_t = \bar{\mu}^{1,Col}\right) > V^1\left(w=1, COR, \mu_t = \bar{\mu}^{1,Col}\right)$ if and only if $\bar{v}^M > \frac{(1-\gamma)\bar{v}^C}{(1-\beta)}\left[\frac{\pi\delta v_H^C + (1-\pi\delta)v_L^C - \bar{v}^C}{\bar{v}^C - v_L^C}\right] + \frac{v_H^C - v_L^C}{(1-\beta)}$, which holds due to assumption 2. Since $V^1\left(w=0, v_H^C, COR, \mu_t = \bar{\mu}^{1,Col}\right)$ does not depend on μ and $V^1\left(w=1, COR, \mu_t = \mu\right)$ is decreasing in μ, the metropolis prefers temporary concessions to war in all cases.

Representation versus War. When $\mu_t = 1$, we have $V^1(REP) > V^1(w=1, COR, \mu_t = 1)$ if and only if $\alpha > (1-\delta)\beta + \delta$. When $\mu_t = \bar{\mu}^{2,Col}$, we have $V^1\left(w=1, COR, \mu_t = \bar{\mu}^{2,Col}\right) > V^1(REP)$ if and only if $\frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)} > \bar{v}^M$.

Thus, we must distinguish among three possible cases:

Case i: If $\alpha < (1-\delta)\beta + \delta$, then $V^1(w=1, COR, \mu_t = 1) > V^1(REP)$. Since $V^1(REP)$ does not depend on μ and $V^1(w=1, COR, \mu_t = \mu)$ is decreasing in μ, this implies $V^1(w=1, COR, \mu_t = \mu) > V^1(REP)$ for all $\mu \in \left[\bar{\mu}^{2,Col}, 1\right]$.

Case ii: If $\alpha > (1-\delta)\beta + \delta$ and $\bar{v}^M < \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}$, then $V^1\left(w=1, COR, \mu_t = \bar{\mu}^{2,Col}\right) > V^1(REP) > V^1(w=1, COR, \mu_t = 1)$. Since $V^1(w=1, COR, \mu_t = \mu)$ is decreasing in μ, there exists a unique $\bar{\mu}^M \in \left(\bar{\mu}^{2,Col}, 1\right)$ such that $V^1\left(w=1, COR, \mu_t = \bar{\mu}^M\right) = V^1(REP)$, $V^1(w=1, COR, \mu_t = \mu) > V^1(REP)$ for all $\mu \in \left(\bar{\mu}^{2,Col}, \bar{\mu}^M\right)$, and $V^1(w=1, COR, \mu_t = \mu) < V^1(REP)$ for all $\mu \in \left(\bar{\mu}^M, 1\right)$. $\bar{\mu}^M$ is given by:

$$\bar{\mu}^M = \frac{\delta\left(\bar{v}^M + \bar{v}^C - v_L^C\right) + \left[1-\delta(1-\pi)\right]\beta\bar{v}^M - (1+\delta\pi)\alpha\bar{v}^M}{(1-\delta)\left(\bar{v}^C - v_L^C\right) - \pi(1-\alpha)\delta\bar{v}^M}\left(\frac{1-\delta}{\delta}\right).$$

Case iii: $\alpha > (1-\delta)\beta + \delta$ and $\bar{v}^M > \frac{(1-\delta)\delta\left(1-\bar{\mu}^{2,Col}\right)\left(\bar{v}^C - v_L^C\right)}{[\alpha-(1-\delta)\beta-\delta][1-\delta(1-\pi)]+\delta^2\pi\left(1-\bar{\mu}^{2,Col}\right)(1-\alpha)}$, then $V^1(REP) > V^1\left(w=1, COR, \mu_t = \bar{\mu}^{2,Col}\right)$. Since $V^1(REP)$ does not depend on μ and $V^1(w=1, COR, \mu_t = \mu)$ is decreasing in μ, this implies $V^1(REP) > V^1(w=1, COR, \mu_t = \mu)$ for all $\mu \in \left[\bar{\mu}^{2,Col}, 1\right]$. This completes the proof of lemma 2. ■