The Democratic Advantage: Institutional Foundations of Financial Power in International Competition

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Skepticism about the quality of democratic foreign policy has a long lineage in international relations scholarship.[1] It goes at least as far back as Thucydides's concerns about the "inconstant commons."[2] It reappears in Alexis de Tocqueville's famous assertion that democratic governments are "decidedly inferior" when it comes to foreign affairs.[3] It is evident in A. J. P. Taylor's indictment of the West's response to Nazi Germany in the 1930s, as well as more recent analyses of this period.[4] And it was particularly influential during the Cold War, when many analysts saw the United States' political institutions as a source of weakness in its rivalry with the Soviet Union. Democracies were thought to be indecisive, slow to act, weak of purpose, squeamish about using force, and subject to the changing whims of public opinion. Democracies risked the politicization of the "national interest" by ill-informed publics and short-sighted legislatures.[5] Because these writers took as given that leaders of democratic states lack the freedom of action enjoyed by their nondemocratic counterparts, they anticipated that democracy would face an uphill battle in its struggle against authoritarianism.

The outcome of the Cold War has led to a reassessment of this conventional wisdom. Despite the supposed defects of democracy, the historical record suggests that democratic states have, in fact, done quite well in international compe-

We gratefully acknowledge thoughtful comments from Bruce Bueno de Mesquita, James Conklin, Shinju Fujihira, Peter Gourevtich, David Lake, Jean-Laurent Rosenthal, François Velde, and the anonymous referees.

1. Nincic 1992, chap. 1.
2. Thucydides 1950, 70.
3. de Tocqueville 1969, 226–27.
4. Taylor 1962; see also Groth 1999.
5. See, for example, Kennan 1977; Morgenthau 1973, 146–48; Lowi 1967; Lippmann 1955, chap. 2; Friedrich 1938. One notable exception to this view among realist scholars is Waltz 1979. In his study of American and British foreign policy, Waltz concludes, "Coherent policy, executed with a nice combination of caution and verve, is difficult to achieve in any political system, but no more so for democratic states than for others" (311).

International Organization 57, Winter 2003, pp. 3–42
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DOI: 10.1017/S0020818303571065

TABLE 1. *World leaders and challengers as identified by long-cycle theorists*

Years	*Leader*	*Challenger*
1609–1713	Netherlands	France
1714–1815	Great Britain	France
1816–1945	Great Britain	Germany
1946–(1990)	United States	Soviet Union

Sources: Thompson 1983a; Modelski 1983.

tition. Systematic evidence to this effect can be found in recent studies of war outcomes. Lake reports that democracies tend to prevail in wars against authoritarian states.[6] Reiter and Stam confirm this finding using more sophisticated models.[7] Siverson, and Reiter and Stam show that democracies are more likely to win wars that they initiate and to suffer lower costs in the process.[8]

A similar pattern emerges when we expand the empirical domain from individual wars to prolonged hegemonic struggles, such as those identified by "long cycle" theorists.[9] Table 1 shows one classification of world leaders and challengers identified in this literature. It is striking that all of the leading states in this table had, if not democratic governments, at least limited or liberal governments. Although the franchise in seventeenth-century Holland and eighteenth-century Great Britain was too restricted for these states to qualify as democracies by current standards, both had representative institutions and a sense of appropriate limits on state action—the basic characteristics of a liberal polity. In every prolonged conflict in modern history, such states have prevailed over their illiberal rivals.

The effort to explain such observations is ongoing. Lake argues that democratic institutions constrain rent seeking by the state, therefore leading to a more efficient allocation of resources and enhanced economic growth.[10] Reiter and Stam suggest that democracies enjoy greater legitimacy and thus have an easier time mobilizing popular support for war and motivating soldiers to fight efficiently.[11] Bueno de Mesquita et al. argue that democratic leaders have stronger incentives to spend their resources on delivering successful public policies—such as victory in war—while nondemocratic leaders devote their resources toward paying off a small

6. Lake 1992.
7. Reiter and Stam 2002; see also Stam 1996.
8. Siverson 1995; see also Reiter and Stam 2002.
9. Thompson 1983a; see also Thompson 1983b; and Modelski 1983.
10. Lake 1992.
11. Reiter and Stam 2002; see also Stam 1996.

set of "selectors."[12] Bueno de Mesquita and Siverson take a different approach, suggesting that democratic leaders have an incentive to select wars in which they have a high expected probability of winning; in this view, the correlation between democracy and victory reflects the selection process and not necessarily an inherent war-fighting superiority.[13]

We contribute to this literature by showing that institutional features generally associated with liberal democratic states provide a significant advantage in prolonged international competition. The argument builds on previous research highlighting the crucial role of financial power in determining the outcomes of conflicts such as those listed in Table 1.[14] It has long been appreciated that money forms the "sinews of power." The victorious state in protracted competition is generally the one that can sustain a superior military effort—in war and peace—over a period of many decades, without succumbing to political and economic exhaustion. We argue that it is no coincidence that, over the past four centuries, states with representative, limited governments have been particularly successful in this respect.

Although such governments may at times suffer from the constraints placed on their leaders, these constraints also provide the political foundations for financial power. Building on literature on sovereign debt, we show that representative institutions enhance a state's borrowing power by making it easier for those with a stake in the repayment of debt to punish the sovereign in the event of default.[15] The commitment technology provided by these institutions means that states possessing them have superior access to credit than states that are not similarly constrained.[16] As a result, liberal states are better able to finance large wars and long arms races that require expenditures well in excess of normal receipts. Moreover, easy access to credit facilitates a policy of "tax smoothing," whereby sharp increases in spending are financed through debt rather than through onerous tax increases. As economists emphasize, tax smoothing provides considerable advantages over the long run, lowering distortions in the economy and promoting investment.[17] These advantages are particularly useful for lowering the social and economic burden of sudden rises in expenditures associated with large wars. Thus institutions of limited government underpin a financial system that is capable of sustaining large expenditures on military competition in a manner that is consistent with long-term economic growth.

We illustrate the effects of these institutions by looking at two cases of competition between a liberal and an illiberal state: the rivalry between Britain and France from 1689 to 1815 and the Cold War between the United States and the Soviet

12. Bueno de Mesquita et al. 1999.

13. Bueno de Mesquita and Siverson 1995. See Reed and Clark 2000 for a comparison of explanations building on war-fighting prowess and explanations building on strategic selection.

14. Rasler and Thompson 1983; see also Kennedy 1987; Brewer 1988; and Gilpin 1981.

15. Eaton, Gersovitch, and Stiglitz 1986; see also Bulow and Rogoff 1989; Conklin 1998.

16. North and Weingast 1989.

17. Barro 1979; see also Lucas and Stokey 1983.

Union.[18] Both cases involve prolonged, militarized competition pitting the two most powerful states in the international system against each other. Although the outcomes of such rivalries depend on no single factor, we show that the ability of the liberal states to finance the competition through voluntary debt bestowed an important advantage. Britain was able to greatly outspend France in several crucial wars, despite its smaller population and economy. The United States was able to finance the Cold War without large tax increases and to use its impressive access to debt to outspend the Soviet Union militarily without undermining investment and consumption. The Soviet Union, by contrast, financed its deficits with distortionary mechanisms that contributed to the decline of economic growth and played a major role in undermining economic reform.

Our argument implies, then, that there is a trade-off associated with representative government. Earlier writers emphasized the liabilities of democracy, failing to see its compensatory advantages. Although democratic institutions may hamper state decision making, their constraints bestow previously unrecognized advantages. This explanation may have limited relevance in accounting for the outcomes of short wars, but it does explain the success of liberal states in the prolonged military conflicts that have determined the outcomes of hegemonic struggles. The historical record suggests that this trade-off yields a net advantage.

This article proceeds as follows. We first develop our theoretical arguments, showing how the constraints of limited government also serve as a source of state power. We next turn to the historical record to examine the success of liberal states in extended conflicts with illiberal rivals. The third section studies the 125-year rivalry between England and France throughout the eighteenth century, ending with the defeat of Napoleon. The fourth section focuses on the rivalry between the United States and the Soviet Union during the Cold War. Our conclusions follow.

Institutional Sources of the Democratic Advantage

Why have states with representative political institutions been particularly successful in prolonged international competition? Our strategy in addressing this question is to build on previous work identifying the economic and financial bases of state power. We seek to show that these factors are themselves a function of political institutions. The argument presented here provides a theoretical link between two observations: (1) states that can bring to bear superior financial resources over the long run have an advantage in prolonged rivalries, and (2) the states that have historically done so have had representative, limited governments.

There are in general three different ways that states can pay for the extraordinary expenses associated with international competition: raising taxes, borrowing,

18. A related paper reveals a similar pattern in the Dutch revolt against Spain. See Schultz and Weingast 1998. Likewise, Kugler and Domke show similar effects in the British and American victory over Germany in World War II. See Kugler and Domke 1986.

or printing money. Borrowing can be further broken down into voluntary and involuntary forms. The former usually involves the sale of government bonds or, in earlier periods, short-term loans to the crown; the latter involves coerced loans or forced savings plans. Any of these strategies can raise significant funds in the short term, and states have historically relied on a mix of funding mechanisms in times of war.[19] Over the course of an extended rivalry, however, one strategy is clearly superior in terms of promoting economic efficiency: raising public debt through voluntary borrowing. It is here that liberal states have enjoyed a systematic advantage relative to their illiberal rivals.

Public Debt and Financial Power

The importance of public debt in determining the outcomes of international competition has been known for some time. In the seventeenth century, the rivals of the Dutch Republic expressed "despairing admiration" at that country's seemingly inexhaustible supply of cheap credit in wartime.[20] Likewise, French officials in the eighteenth century came to envy the ease with which Great Britain could raise money at low interest rates.[21] By 1795, Immanuel Kant would consider public debt to be so vital to the conduct of war that his "fourth preliminary article for perpetual peace among nations" proscribes the raising of debt for use in foreign affairs.[22] More recently, scholarship on the rise and fall of world leaders has identified the key role played by public borrowing. The most explicit formulation comes from Rasler and Thompson, who surveyed the experiences of Portugal, the Dutch Republic, and Great Britain and concluded that

> . . . early winners in the struggle for world leadership owed a significant proportion of their success to their ability to obtain credit inexpensively, to sustain relatively large debts, and in general to leverage the initially limited base of their wealth in order to meet their staggering military expenses.[23]

Moreover, Rasler and Thompson suggest that the losers of these contests, notably France and Spain, failed to maintain uninterrupted access to credit and experienced frequent bankruptcies.[24]

19. For an excellent cross-national analysis of war finance during World Wars I and II, see Fujihira 2000.

20. Barbour 1950, 81–82.

21. Sargent and Velde 1995.

22. Kant 1983, 109. At the outbreak of the Crimean War, William Gladstone, then Britain's chancellor of the exchequer, tried to integrate this philosophy into his policy of war finance. He argued in the House of Commons that paying for war with loans obscured the true costs of war and that reliance on taxes alone would serve as a "salutary and wholesome check" on "ambition and lust of conquest." Six weeks later, the Treasury sold £6 million in bonds, and, in his final weeks as chancellor in 1855, Gladstone was contemplating borrowing £12 million more. Anderson 1967, 195–97.

23. Rasler and Thompson 1983, 490.

24. Rasler and Thompson 1983.

The most obvious advantage of cheap and abundant credit is the ability to finance large and recurrent wars without relying solely on taxation. Since the military revolution of the seventeenth and eighteenth centuries, warfare has become exceedingly expensive, forcing governments to leverage their tax base through public borrowing.[25] Whereas taxation taps into a country's income, public borrowing taps into its capital stock, which is generally much larger than its income in any one year. During the eighteenth century, for example, Britain's average military spending in war years amounted to 1 to 1.5 years' worth of normal revenue, a level of expenditures that could not be financed through taxation alone.[26] All else equal, a state with access to more funds can outspend and outlast its competitor, thereby gaining a competitive advantage.[27]

Easy access to credit also permits a state to maintain stable tax levels during periods of unusually high expenditures. The greater a state's ability to raise revenue through debt, the less it has to rely on tax increases to cover the sharp rises in spending needed to pay for large wars or substantial arms buildups. Rather than impose dramatically higher taxes at such times, the state can cover its expenses through loans and then pay off the debt over a long period, a policy known as "tax smoothing."[28] If the debt is sufficiently long term, the tax increase needed to pay it off can be small, especially if economic growth provides a sufficient increase in revenues.

Hence, debt allows the state to spread the financial costs of war across many years, in the same way that a mortgage allows home buyers to spread the expense of a house over a long period. Though such a policy increases the total costs that have to be paid, due to interest on the loan, debt has two advantages: first, it avoids the shocks to consumption and investment that would otherwise be required in war years; and second, it allows the state to finance a larger war and thus, by brining greater resources to bear, to increase its chances of winning. Moreover, as long as economic growth is sustained, future payments will shrink as a percentage of total income.

Economists have long argued that tax smoothing has a beneficial effect on the long-term health of the economy. Higher tax rates typically lead to greater economic distortions. Thus tax smoothing lowers the total economic costs of raising a given amount of revenue.[29] Moreover, variance and unpredictability in tax rates affect the investment decisions of private economic agents. Higher variance implies a greater risk that future returns will be appropriated by the state, generally leading to lower levels of investment. This effect is permanent, as the potential for future tax increases influences investment decisions in all periods, whether or not a war actually breaks out. Higher levels of investment promote greater long-term

25. Parker 1988; see also Kennedy 1987, chap. 3.
26. Sargent and Velde 1995.
27. Organski and Kugler 1980; see also Kugler and Domke 1986.
28. Barro 1979; see also Lucas and Stokey 1983.
29. Barro 1979.

economic growth with all the attendant advantages for international competition, including a larger tax base and political stability. Access to cheap and abundant credit thus permits states to raise substantial funds and to do so in a way that lowers the economic costs of sustaining military conflict.

This is not to suggest that government deficits are good for economic health. Prolonged deficits and debt accumulation can lead to higher interest rates, which raise the costs of borrowing for private actors. Given that a state has international ambitions that require extraordinary expenditures, however, a tax-smoothing policy based on the use of public debt is the most efficient strategy for financing those expenditures.[30] Thus our argument speaks to the contrast between different strategies of public finance for states involved in international competition but is silent as to whether those states could do better by retreating from their international ambitions in the first place.

This logic helps link Rasler and Thompson's argument about public debt to other strands of the literature on hegemonic rivalries.[31] Two prominent schools deserve mention.[32] "Long cycle" theorists, such as Modelski, and Modelski and Thompson, have emphasized the role of sea power in establishing global leadership and defeating potential challengers.[33] They show that every hegemonic power managed to amass overwhelming power projection capabilities—primarily naval power, but also long-range aircraft and intercontinental missiles. "World economy" theorists, such as Wallerstein and Chase-Dunn, have argued that global leadership rests on a combination of economic, commercial, and financial power.[34] While acknowledging the role of public credit, they consider uneven economic growth to be the primary factor in determining the relative power of states. Global leaders, in this view, were those states that managed to outgrow their competitors economically.

Rather than contradicting these arguments, we suggest both depend in part on differential access to public debt; indeed, this factor links the two strands in a hitherto unappreciated way. States that prevailed in the conflicts identified by this literature were able to amass and sustain preponderant power projection capabilities and to do so without compromising economic growth. As we just saw, efficient use of public debt plays a crucial role in making this possible.

30. While access to credit makes tax smoothing possible, it does not guarantee that states will always enact such a policy. Other factors, such as short-term political needs or international strategic conditions, affect the actual mix of taxes and debt that states use to finance any particular war. During World War II, for example, Britain departed from 200 years of tradition and relied heavily on the taxation of capital income, largely because of the ideas and influence of Keynes. Cooley and Ohanian show that postwar economic growth in Britain was lower as a result of this policy than it would have been if the government had kept taxes level and raised the same amount of money through debt. See Cooley and Ohanian 1997.

31. Rasler and Thompson 1983.

32. For a more complete comparison of the long cycle and world economy schools, see Thompson 1983b.

33. Modelski 1978; see also Modelski 1983; and Modelski and Thompson 1988.

34. Wallerstein 1979; see also Wallerstein 1980; and Chase-Dunn 1981.

The Theory of Sovereign Debt and the Need for Credible Commitments

Access to public debt thus constitutes an important determinant of power for states engaged in international competition. However, the need to raise money through voluntary loans also creates a dilemma. To understand this, we turn to the theory of sovereign debt.[35] The central issue motivating this literature is how private lenders enforce loan agreements with a sovereign who possesses a monopoly on the state's judicial and coercive power. When private citizens and firms make loans to one another in modern economies, enforcement is relatively easy. The lender often demands some form of collateral for the loan, and if the borrower defaults, the lender obtains the right to the collateral. Such an agreement is generally enforceable through the courts, backed by the policing powers of the state. When the borrower *is* the state, these means of enforcement are typically unavailable.

How, then, do lenders induce the sovereign to honor his loan agreements? In general, lenders must have some way of penalizing the sovereign in the event of default. Consider a simple model of the creditor-debtor relationship known as the "willingness to pay" model.[36] Suppose that a sovereign seeks a loan of value L at an interest rate of i and that the lenders can impose a penalty of P in the event of a default. For now, we ignore the source of the penalty and how it is imposed. When the loan becomes due, the sovereign must choose to repay the creditors $L(1 + i)$ or default and suffer the penalty P. Obviously, the sovereign will honor the loan agreement if and only if the following relationship holds:

$$L(1 + i) < P. \qquad (1)$$

This seems to present a problem for potential creditors who must somehow devise a penalty to ensure their loan agreements are honored. In fact, the problem is the sovereign's. Creditors presumably understand the sovereign's incentives and act accordingly. The result is a form of credit rationing: for a given penalty, P, the sovereign's credit is limited to that consistent with inequality (1); rearranging terms, the maximum debt as a function of P is given by $L = P/(1 + i)$. No lender would ever extend loans that exceeded the maximum amount the sovereign could be induced to repay. If the penalty that others can impose is zero, then the sovereign cannot obtain any loans.

The sovereign's credit limit arises from his inability to make credible commitments. The sovereign can promise to repay a loan and even sign a contract to that effect, but unless he has incentives to carry out that pledge once the loan is due, the promise is not credible. And without a credible commitment, no rational lender would ever extend a loan. This insight yields an important, seemingly paradoxical, implication: because the credit available to the sovereign is limited by the

35. Bulow and Rogoff 1989; see also Eaton, Gersovitch, and Stiglitz 1986; and Rasmusen 1992.
36. Bulow and Rogoff 1989; see also Eaton, Gersovitch, and Stiglitz 1986.

ability of potential lenders to sanction him for default, the sovereign benefits from an increase in the penalties that can be imposed on him.

It might seem that reputational considerations alone would be sufficient to induce the sovereign to honor his commitments. After all, once the sovereign defaulted, lenders would think twice before extending further loans. The possibility of a credit boycott would then create a strong incentive for the sovereign to repay his debts. As a number of writers have suggested, however, this reputational mechanism is insufficient to ensure that the sovereign will honor his agreements.[37]

Two major obstacles hinder the lending community's ability to police the sovereign. First, credit boycotts are difficult to organize and sustain. Because the sovereign is unlikely to renege on all of his creditors at once, their interests will be divided, and the sovereign will be able to play some off against others. At the same time, creditors face the usual free-rider problems associated with this kind of collective action, as there would be significant incentives to defect from a boycott in order to become the state's sole source of credit.[38] Second, a credit boycott is costly to the lenders themselves, because they must forgo their source of livelihood. As Bulow and Rogoff demonstrate, this puts lenders in a bad bargaining position, allowing the sovereign to force them to accept less attractive terms than those originally agreed to.[39]

In addition, reputational mechanisms only work when the actor places sufficient weight on future costs. If the sovereign discounts the future quite heavily, the threat of a credit boycott may have little impact on his calculus. A sovereign is likely to have a short time horizon in times of war or major crises, precisely when his need for credit will be greatest.[40] This does not mean that reputational considerations will never cause the sovereign to honor his debts—only that reputation alone is unreliable.

In practice, this difficulty rations the amount of credit available to the sovereign and often raises the costs of borrowing.[41] Lending money to someone who cannot be forced to repay is a risky business, so creditors demand a "risk premium" in the form of higher interest rates. Ironically, then, the sovereign's unfettered power makes it quite costly for him to raise money through voluntary loans.

Limited Government as a Commitment Technology

The institutions of limited government provide a solution to this problem. Institutions constrain individuals' actions by shaping the incentives they face.[42] In particular, institutional arrangements can modify the incentives of the sovereign by

37. Alesina et al. 1992; see also Bulow and Rogoff 1989; Greif, Milgrom, and Weingast 1994; and Veitch 1986.

38. Weingast 1997a.

39. Bulow and Rogoff 1989.

40. North 1981, chap. 11.

41. We provide a model incorporating many of these details in a companion article, Schultz and Weingast 1998.

42. North 1990.

increasing the ability of those with a stake in the repayment of debt to impose penalties on him. By raising the maximum value of P, institutions provide greater inducements for the sovereign to honor his loan agreements and, thereby, render his promises to do so credible. Higher penalties raise the maximum amount of debt that the sovereign will credibly repay and hence the amount lenders will provide. Institutions can thus serve as a form of commitment technology by taking discretion away from the ruler and increasing his incentive to carry out his contracts.

Throughout history, a number of institutional mechanisms have been created to serve this function. Root and Hoffman, for example, argue that the French monarchy fostered corporate lending structures that made it easier for potential creditors to boycott the crown in the event it reneged on their loans.[43] Given that these structures were intended to operate within a monarchical system, they are clearly not "democratic" or "liberal" in the usual sense. Nevertheless, the institutions associated with representative political systems are particularly well suited to serve as commitment mechanisms.[44]

Two related features of liberal government are particularly salient in this respect: the diffusion of political authority to a parliament or representative legislature and the establishment of low-cost mechanisms for sanctioning representatives and state leaders. Effective legislative assemblies with some "power over the purse" place an important constraint on our hypothetical sovereign. No longer can he unilaterally decide matters of fiscal policy; instead he must bargain with a representative assembly on such issues. At a minimum, this creates a new "veto player" who can prevent actions that are contrary to constituents' interests. In more advanced democracies, power over the purse can entail considerable influence in the drafting and passage of budgets.

Representation is further guaranteed by the introduction of low-cost mechanisms—such as elections—for sanctioning those officeholders who renege on their agreements. To the extent that politicians value holding office, electoral institutions help to align the incentives of representatives with the interests of their constituents. In modern democratic systems, this form of sanction can be imposed on the executive as well, whether that authority resides in a parliamentary cabinet or an elected president. In these cases, the unaccountable sovereign disappears altogether, and all state officials can be penalized in a relatively easy manner.

In the emerging liberal states of early modern Europe (for example, seventeenth-century Holland and eighteenth-century Britain), representation was limited to substantial wealth-holders. In the case of debt, this had a remarkably salutary effect, for—as detailed below—default required not only the inclination of the crown, but also the approval of parliament. In effect, this gave the representatives of the bondholders a veto over decisions about honoring loan agreements, dramatically lowering the probability of default.[45]

43. Root 1989; see also Hoffman 1994.
44. North and Weingast 1989.
45. Ibid.

In modern democracies, a much wider range of interests is represented. There is nothing inherent in such systems to prevent nondebtholders from seeking to default, especially when the debtholders are not an important constituency of the party in power. Nonetheless, default is costly to the rest of the economy and hence to other important constituencies such as labor or nondebtholding capitalists.[46] Economists list several such costs, and two are relevant for us.[47] First, default implies that debt finance will be more difficult in the future. Any future increments to spending are therefore likely to require new taxes. Moreover, the demise of debt finance removes the state's ability for tax smoothing, implying lower economic growth and hence a smaller economy. Second, a major default is likely to have substantial ripple effects throughout the economy. For example, to the extent that financial institutions hold a considerable amount of government debt in their portfolios, they may be forced into bankruptcy, potentially threatening the entire financial and savings system.

These effects do not prevent modern democracies from defaulting. Rather, they reveal that there are political costs from default, suggesting that only when the value of default is particularly large is it likely to be considered an option.[48] This calculus does not depend on a special political role for bondholders but on the costs of default for nonbondholders. For political institutions to serve as a solution to the sovereign debt problem, effective representation need not be limited to those who hold public debt. What is crucial is that representation cover those who have a stake in the repayment of debt, a group that is generally much larger in contemporary economies.[49]

Liberal institutions typically impose additional constraints on default. As noted above, one way in which reputational mechanisms failed to control sovereigns in medieval and early modern Europe was that they could pursue "divide and conquer" strategies, allowing sovereigns to renege successfully on one group while raising money from another.[50] To pursue a divide-and-conquer strategy, the sovereign must be able to discriminate finely among categories of lenders. It is precisely here that the universality rules of liberal polities—namely, institutions requiring that like individuals be treated alike—have an important effect. Debt contracts in such sys-

46. Alesina 1988.

47. See Alesina et al. 1992.

48. Furthermore, economists have developed an empirical literature studying the likelihood of default in modern developed democracies. Using empirical measures of risk assessed by the market, they are able to investigate the circumstances under which modern democracies risk default. Results from studies of the developed West since World War II suggest that the debt to GNP ratio must be particularly large, over 0.5, for default to become a noticeable risk. See Alesina et al. 1992. For countries, such as the United States, which have remained well below that level, the value of default has remained below the costs.

49. Notice that this argument will be weaker in the case of developing countries whose debt is held almost entirely by foreigners. In such countries, the constituencies in favor of repaying debt can be less potent politically, especially in times of severe financial crisis, when the "ripple effects" of default discussed above are likely to seem small.

50. This principle is modeled in Greif, Milgrom, and Weingast 1994. Veitch 1986 presents evidence of this behavior.

tems include fine details such as prioritization and cross-default clauses, limiting the ability of the government to discriminate among bondholders.

Institutions of limited government thus serve to constrain political officials and increase the punishments that can be imposed in the event of default. At the same time, these institutions decrease the costs of imposing such penalties. Bulow and Rogoff show that, because a credit boycott hurts lenders as well as the sovereign, the threat of such a boycott lacks credibility: lenders would always be better off renegotiating the loan to get back whatever they can.[51] Representative institutions mitigate this problem by providing means of punishing sovereigns, such as electoral accountability, that are less costly to implement. All else being equal, then, a state with institutions of the kind identified here will enjoy greater access to credit, and lower rates of interest, than a state whose political leaders are less constrained. And because access to public debt is a crucial determinant of financial power, such states should enjoy commensurate advantages in international competition.

Of course, illiberal states often have access to credit. The theory suggests, however, that these states must pay a premium to do so, and they may face credit rationing. Thus international competition puts a greater strain on their financial resources, both by limiting the amount that can be raised through debt and by increasing their borrowing costs. As a result, illiberal states generally must resort to other, more distortionary mechanisms for raising revenue, such as expropriation or printing money. Moreover, this problem gets worse the more unconstrained is the sovereign, as we will see below. In the case of France, limited reforms aimed at increasing the power of debtholders meant that the crown had access to credit, but at higher cost than did its counterpart in Britain. Over the long run, the state could not keep up with its mounting obligations, leading to financial, and ultimately political, crises. The Soviet Union represents a more extreme case of a totalitarian state with a command economy that effectively ended its domestic bond market in 1957 and opted instead to rely on direct and indirect expropriation and money creation. Although this strategy permitted the state to raise substantial sums, it proved inferior over the long run, exacerbating the inefficiencies in the economy and helping to undermine efforts at reform. Thus illiberal states can raise money in ways that do not depend on their credibility, but these strategies are distinctly second-best.

Case Selection

The next two sections apply this logic to two cases of prolonged international competition: the rivalry between Britain and France from 1689 to 1815 and the Cold War between the United States and the Soviet Union. Elsewhere, we demonstrate similar patterns in the seventeenth-century conflict between the Dutch Re-

51. Bulow and Rogoff 1989.

public and Spain.[52] Though the liberal states in these conflicts do not all conform to modern images of democracy, the theory developed here still applies, because it employs a functional definition of democracy, rather than an ideal one based on criteria such as universal suffrage. We raised a problem—the need for credible commitments to repay sovereign debt—and then identified political institutions that help solve this problem. These include representative legislatures with power over budgeting, mechanisms for removing representatives from office, universality norms—institutions, in short, which ensure that debtholders and those with a stake in the repayment of debt have reliable means to punish the sovereign in the event of default. All or most of these institutions tend to be present in democratic polities, and yet, on their own, they are not sufficient to qualify a polity as democratic by current standards.[53] In particular, our analysis is silent with respect to the extent of franchise—a factor that separates competitive oligarchies from true democracies.[54] Thus, though we may use the term "democracy" as a shorthand, our interest is not in democracy per se, but in a more basic set of institutions.[55] For this reason, it is appropriate to place the twentieth-century United States, eighteenth-century Britain, and seventeenth-century Holland into the same grouping.

It must be noted at the outset that there are substantial difficulties to testing this theory. We do not claim, nor do we attempt to prove, that differential access to credit is the sole reason for the pattern of outcomes observed. In a military competition fought over a period of several decades, a large number of factors come into play, including geography, population growth, technological advances, and the quality of military leadership. Moreover, the determinants of economic growth are many and varied. While the efficient use of debt to finance international competition contributes to long-term development, it is by no means wholly responsible for the different growth rates we observe. Given the need to weigh the influence of one factor among many, a small *n*, case study analysis has inherent limitations.

Nevertheless, there is still value in the exercise. Our argument not only posits a causal connection between the domestic political institutions of the rival states and the outcomes of these conflicts but also specifies a number of intervening processes through which this connection plays out. It suggests that states with representative government should enjoy superior access to public credit, and that this should translate into fiscal, economic, and military advantages: in particular, the ability to pursue optimal tax-smoothing policies and to sustain high levels of military expenditures without compromising long-term economic growth. Despite its limitations in dealing with events that may be over-determined, case analysis can corroborate the plausibility of a causal argument by confirming that hypothesized

52. Schultz and Weingast 1998.
53. Doyle 1983; see also Gurr 1990.
54. Dahl 1971, 7.
55. We are grateful to an anonymous reviewer for this point.

intervening processes are indeed present.[56] Hence, our goal in these case studies is to show that major implications of our argument are borne out in the empirical record.

We selected the cases not only because of their intrinsic historical importance, but also because they have several methodological advantages. By looking at extended rivalries rather than single wars, we hope to cancel out the effects of short-term idiosyncrasies and uncover a longer-term pattern. The cases examined here involved prolonged, militarized competition that required the participants to mobilize enormous resources over a long period of time. Even if access to credit was not decisive in any one war, its effects can be discerned over decades of costly conflict.

The cases considered here also permit us to mitigate the potentially confounding effects of selection bias. As a growing number of authors have pointed out, the sample of observed international wars and conflicts is not randomly generated, but rather the product of self-selection by the participating states.[57] This selection effect is particularly worrisome in view of the work of Bueno de Mesquita and Siverson, which suggests that democratic states have incentives to select wars in which they have a high *ex ante* probability of victory or large stake in the outcome.[58] If this is so, then conflicts that democracies are likely to lose or for which they have little motivation may never appear in the sample—in these cases, the democratic state would simply make concessions and bow out. Accordingly, we need to be careful that an observed correlation between democracy and the outcome of conflicts is not simply a product of this effect.

We believe the case selection employed here helps avoid this problem. The Anglo-French rivalry and the Cold War were not picked at random from a potentially biased sample; rather, their selection was because of the fact that both pitted the two most powerful states in the international system in a conflict for global primacy. Because of this criteria, it cannot be said that the democratic states in these cases simply selected weak adversaries; of all the conflicts available to Britain and the United States at the time, these were the rivalries with the lowest *ex ante* probability of victory. Moreover, given the nature of the prize, there is little reason to believe that the outcome reflects different levels of motivation. Though the logic of our argument applies to any long-term international competition, such as the "enduring rivalries" identified by Goertz, there would be a greater danger of selection bias if the analysis were extended to a less restricted sample with greater potential variation in capability and motivation levels.[59]

56. King, Keohane, and Verba 1994, 226–28.
57. For example, Reed and Clark 2000.
58. Bueno de Mesquita and Siverson 1995; see also Reiter and Stam 2002.
59. Goertz 1993. Focusing on the most powerful states in the system also helps minimize the impact of third-party participation, since the ability of third parties to significantly affect the balance of power decreases as the power of the primary rivals increases.

TABLE 2. *Wars between Great Britain and France, 1689–1815*

War	*Dates*	*Years*
Nine Years' War	1689–97	9
War of Spanish Succession	1703–14	11
War of Austrian Succession	1738–47	10
Seven Years' War	1756–63	7
American Revolution	1774–83	10
Revolutionary and Napoleonic Wars	1793–1815	22
Total		69

Competition Between England and France, 1689–1815

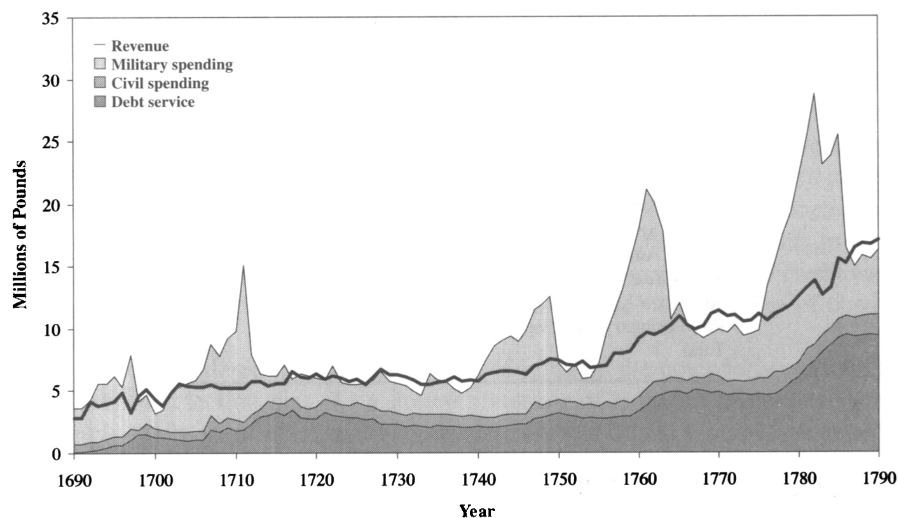
The intense political, military, and commercial rivalry between England and France began with England's Glorious Revolution of 1689 and lasted more than 125 years. These states fought six major wars and were at war more years than not—69 of 126 years, as Table 2 shows. Furthermore, when not at war, they were often preparing for it. This section reports on the institutional and financial advantages that helped England surpass France.

In the beginning, immediately following the Glorious Revolution, England was not expected to defeat France. France had three times the population, an economy twice as large, and considerably more resources to draw upon. Yet in two wars in quick succession—the Nine Years' War (1689–97) and the War of Spanish Succession (1701–14)—England first held off France and then defeated it. Part of this unexpected success was because of superior finance: although England's economy was considerably smaller than France's, its new constitutional institutions underpinned a surprising ability to raise revenue via debt, greatly expanding the scale and scope of war that England could finance.[60] Over the next century, Britain's financial capacity seemed almost unlimited, allowing it access to more and more credit at cheap rates, far outstripping the ability of its rival to finance wars.

Financial Aspects of the Anglo-French Rivalry

Before analyzing the sources of Great Britain's advantage, we present some evidence to illustrate our claims. Figure 1 shows the breakdown of spending and rev-

60. Behrens 1967; see also Brewer 1988; Dickson 1967; Kennedy 1987; and North and Weingast 1989.



Source: Sargent and Velde 1995.

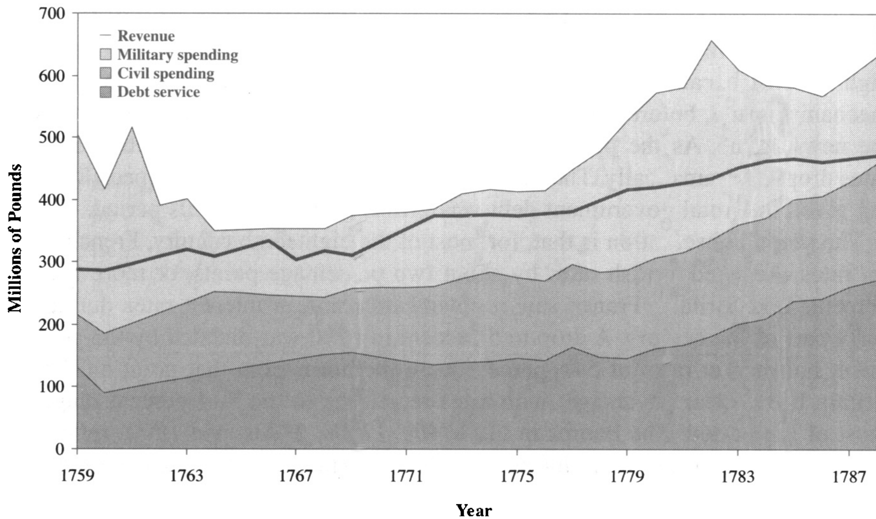
FIGURE 1. *British spending and revenue, 1690–1790*

enues in Britain in the eighteenth century. The data reveal striking evidence of tax smoothing. Although expenditures undergo dramatic increases during wars, tax receipts are much less volatile. After wars, modest tax increases help cover the additional spending needed to service the debt. Peacetime budgets were largely balanced or in surplus to help pay off the government's obligations.

The corresponding data for France are in Figure 2. Unfortunately, the French kept very poor records, so the time span of this figure is limited (1759–88). The data reveal that government spending dropped off after the Seven Year's War (ending in 1763) and then rose again for the War of the American Revolution. Unlike the British, the French government was unable to balance its budget after the two wars and could not run the surpluses necessary to reduce the total debt. Although France was at war in only one year out of three during this period, the government ran a deficit for all but a brief span in the early 1770s. Taxes were thus insufficient to cover the government's obligations, and, furthermore, the problem was getting worse over time. Following the War of the American Revolution, budget deficits came down only temporarily before rising again. This new round of debt was not the result of war; rather, it reflected the workings of compound interest, setting the stage for fiscal crisis and, ultimately, revolution.[61]

Figure 3 compares the interest rates paid by the two governments on long-term debt. Although the data for Britain during the eighteenth century are quite thor-

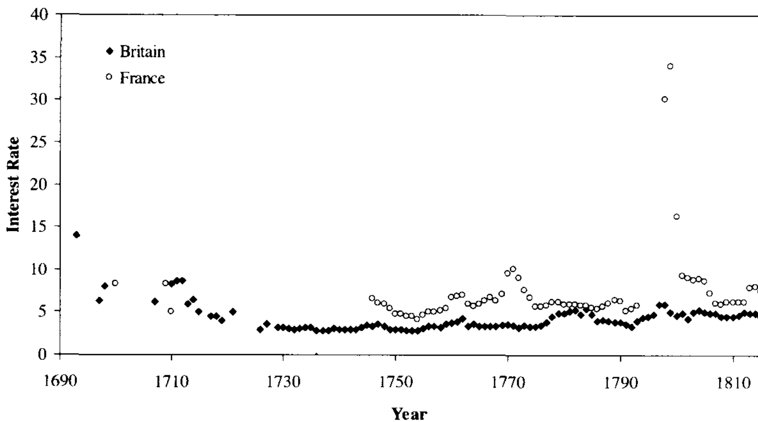
61. Sargent and Velde 1995.



Source: Sargent and Velde 1995.

FIGURE 2. *French spending and revenue, 1759–88*

ough, interest rate data on France are incomplete. This problem is compounded by partial default, where, on several occasions, the French government unilaterally cut interest rates on outstanding issues as a way of reducing its debt burden. The data for France in this figure reflect market rates. Two observations stand out. The



Sources: For Great Britain, in 1693–1707, North and Weignast 1989, 824; in 1710–1815, Homer and Sylla 1991, 156, 161–62, 195. For France, in 1746–93, Velde and Weir 1992, 14; in 1700–10 and 1798–1815, Homer and Sylla 1991, 172, 122.

FIGURE 3. *British and French long-term interest rates, 1690–1815*

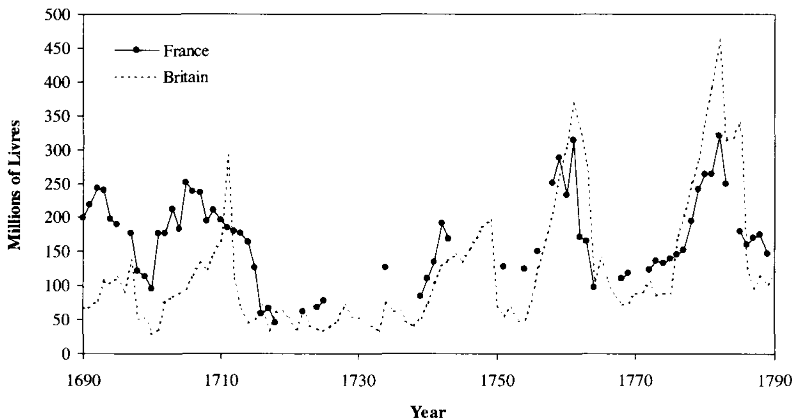
first is the salutary effect of Britain's political revolution on its ability to obtain cheap credit.[62] Immediately following the Glorious Revolution, interest rates were high, in part because of the uncertainty surrounding the nature of the financial mechanisms and, before England's success in the Nine Years' War, the stability of the new regime. As the parliamentary system became more entrenched, interest rates dropped dramatically. The fall in interest rates in the 1720s is especially striking given that total government debt was growing throughout this period.

The second observation is that, for most of the eighteenth century, French interest rates exceeded British rates by about two percentage points, or more than 50 percent. Like Britain, France saw a downward trend in interest rates during the early part of the century. A drop to 5 percent in 1710 was dictated by the government, but market rates of 5–6 percent were the norm from that point on.[63] Still, Britain had a clear advantage, with rates remaining in the 3–4 percent range for most of the period. The bumps in the 1740s, 1760s, 1770s, and 1800s reflect the increased demand for credit during periods of warfare; in all of these periods, we can see that Britain enjoyed substantially better borrowing terms. Largely as a result of these higher borrowing costs, France's ratio of debt service to total debt was, by 1788, twice as large as Britain's, even though the latter's debt was three times larger as a percentage of gross national product (GNP). Put another way, Britain sustained a much larger debt than France even though interest payments consumed a roughly equivalent share of tax revenues in both states.[64]

An interest rate differential can, of course, result from any number of factors. Velde and Weir, however, find that the persistent two-point differential between Britain and France in this century was attributable neither to differences in inflation expectations nor to differences in the risk-free rate of return.[65] Instead, they consider France's higher borrowing costs to reflect a risk premium demanded by lenders because of a higher perceived danger of default. While Britain did not default on its debt obligations for the first 100 years of this rivalry, there were three major episodes of French default during that period.[66] As Riley notes, these defaults were unwittingly "prepaid" by the high interest rates the French government had to offer.[67]

Figure 4 illustrates the final comparison between military spending in the two countries for the period 1689–1790. These data should be read with caution because data on military spending have important limitations. First, although one state may spend less than another, this observation does not imply that it was unable to spend more had it wanted to. Second, one state might spend more than another because it is involved in a costlier undertaking, not because it is somehow

62. Dickson 1967; see also North and Weingast 1989.
63. Homer and Sylla 1991.
64. Weir 1989; see also Riley 1980.
65. Velde and Weir 1992.
66. Britain went off the gold standard during the Napoleonic campaigns, allowing some inflation.
67. Riley 1986, 84–90.



Source: Sargent and Velde 1995.

FIGURE 4. *British and French military spending, 1690–1790*

better at raising revenue.[68] The data pictured in Figure 4 thus cannot distinguish between the need and the ability to spend money. Nevertheless, the intense military and political competition points to two states stretching their resources to the limits. France experienced a prolonged financial crisis from the end of the Seven Years' War in 1763 until the revolution, suggesting that the sums raised were at the limit of France's capacity. Even at this limit, however, Britain was able to raise considerably larger sums in wartime, despite a lower national income and a smaller population. The magnitude is especially noteworthy when we consider that, at the beginning of this period, England's ordinary annual revenue was only one-fifth of France's.[69] In the average war year, Britain's military spending amounted to 1–1.5 years' worth of revenue; in France, the comparable figure was only 0.5–0.8 years' worth. During the Seven Years' War, France went to the brink of bankruptcy, and yet Britain still outspent France by 40 percent.[70] Britain's financial advantage was not lost on its contemporaries. In 1781, during the War of the American Revolution, French Finance Minister Jacques Necker lamented, "England still today can find 300 millions to borrow at 3 per cent each year, and exerts amounts of efforts and power out of proportion with its wealth and population".[71]

68. For example, the Nine Years' War (1689–97) cost France much more than Britain in part because it had to fight alone against a large coalition, of which Britain was one member. The War of the American Revolution (1775–83) was more costly for Britain than for France in part because Britain faced a second, formidable foe in the colonies.

69. Dickson and Sperling 1970, 285.

70. Sargent and Velde 1995, 488–89.

71. Quoted in Sargent and Velde 1995, 489.

This pattern continued through the wars of the French Revolution and the Napoleonic campaigns. From 1793–1815, the British spent £1,434 million, an extraordinary sum given that its GNP was estimated to be approximately £199 million in 1800.[72] During this period, the British raised £987 million through taxes, with the additional £446 million, or roughly 45 percent, being financed by debt. According to two economic historians, Bordo and White, the factors we have mentioned were critical to Britain's military defeat of Napoleon: the credibility of its debt commitments gave it the ability to tax-smooth and access to cheap credit.[73] France, by contrast, faced notably higher interest rates after the massive revolutionary defaults destroyed whatever credibility the new government had. As a result, the French had to rely overwhelmingly on taxation and could not follow a tax-smoothing policy. This reliance on tax receipts worked relatively well as long as Napoleon's armies kept conquering new territories. The disastrous Russian campaign, however, broke the bank.[74]

Institutional Underpinnings of the "Sinews of Power"

What accounted for Britain's surprising financial superiority? The answer lies in the different political institutions that developed in these countries at the end of the seventeenth century. Early modern European sovereigns had considerable problems raising debt because the risk of default was substantial. The theory developed above provides the reason: these sovereigns were above the law—often ruling by virtue of divine right, a stature that placed them beyond the limits of mere worldly courts—making it difficult to impose costs on them. As the theory suggests, this lack of constraints curbed their access to credit. Before their rise as preeminent powers, both Britain and France faced such problems. The institutional routes taken by the two states had similar aims—to increase access to credit by "tying the king's hands"—but had differential effects.[75]

Great Britain. A series of institutional changes following the Glorious Revolution helped underpin limits on the British sovereign. To begin with, sovereignty itself was redefined so that it no longer resided solely in the king. Instead, the "crown in Parliament" became sovereign.[76] At the same time, a consensus was forged regarding the appropriate limits on the crown's power and the responsibilities that citizens had to enforce those limits. In particular, all parties agreed that Parliament should retain exclusive powers over taxation, that it should gain power over the purse, and that parliamentary laws should be sacrosanct. As Weingast

72. All financial figures are from Mitchell 1988, chap. 11: revenue, tabs. 1, 3; expenditure, tabs. 2, 4; and debt, tab. 7. The GNP figure is from Crafts 1985, tab. 2.1.
73. Bordo and White 1991, 312.
74. Ibid., 315.
75. Root 1989.
76. Jones 1972.

argues, this kind of "constructed consensus" creates a focal point around which citizens can coordinate their actions to punish the crown for transgressing the agreed-upon limits.[77] Following the Glorious Revolution, then, willfully violating acts of Parliament became grounds for removing the crown.

This abstract principle had direct relevance for debt. After 1688, public borrowing occurred through acts of Parliament. As a result, revising the terms of debt, including default, required a new act of Parliament. Thus the crown no longer had unilateral discretion to repudiate its commitments. Instead, the crown had to propose revisions to the Parliament, which could then approve or disapprove them. In the context of representation centering on wealth-holders, this implied that the crown had to obtain the permission of its lenders in order to revise the terms of debt. Failing to do so entailed a risk of removal.

In terms of the theory above, these and related institutions, such as the Bank of England, raised the costs of default.[78] Lenders not only had increased leverage over the crown, but they were also in a better position to coordinate their activities and hence defeat the divide-and-conquer strategies typical of previous early modern European sovereigns. Because the sovereign risked being deposed in the event of a unilateral default, the lending community did not have to rely on a costly credit boycott as their sole means of enforcement. Debtholders also benefited from the fact that the issue of debt repayment was now linked with the broader issue of parliamentary sovereignty. Thus debtholders found natural allies in those who sought to limit the power of the crown by defending the Parliament. Moreover, these innovations mitigated the risk of default in precisely the circumstances where it was most likely: a fiscal crisis in which the crown defaults as a means of surviving the crisis.[79] Under the new circumstances, such an act might mitigate the financial trouble, but it raised another, powerful threat to the crown's survival.

Several other institutional changes during this period also enhanced England's credit. For example, with each new bond issue, Parliament earmarked new taxes to pay off the bonds, greatly reducing the uncertainty over whether the government would honor the bond's financial commitments.[80] This period also saw the rise of an efficient tax administration, largely above corruption and politics, which greatly lowered the costs of the tax system.[81] By contrast, scholars emphasize the divergence between the taxes paid and the amount received by the French crown. Riley, for example, reports that for the year 1752, overhead on royal taxes amounted to 40.2 million *l.* on a total revenue of 270 million, or nearly 15 percent.[82] By contrast, the English system, led by the Treasury, did not suffer from this problem.

77. Weingast 1997b.
78. Weingast 1997a.
79. North 1981, chap. 11.
80. Dickson 1967.
81. Brewer 1988, chaps. 3, 4, and 8.
82. Riley 1986, 60.

The effects of these reforms are evident in the figures presented earlier. In the decades following the Glorious Revolution, interest rates fell dramatically, even as the amount of outstanding debt increased. The timing of these developments is important for an additional reason. A long tradition in comparative politics argues that democracy can only arise under certain, favorable economic conditions.[83] This line of argument raises the possibility that we have the causal arrow the wrong way: it could be that states with the right economic conditions to raise large amounts of debt are more likely to become democracies. The pattern we observe, however, shows the opposite relationship. The decline in British interest rates took place *after* the Glorious Revolution, as the institutional innovations associated with that regime change came into force.[84]

We do not deny that country endowments matter when it comes to the ability to raise debt. Instead, we argue that, all other things being equal, different institutions lead to differential access to debt. The pattern just described confirms this hypothesis: holding the country constant, a change in political institutions led to an improvement in the terms of debt.[85] Thus a series of pragmatic decisions about how to limit the crown, aimed largely at mitigating past ills, had remarkable if unforeseen effects.

France. Substantial institutional and financial innovation occurred in France during the reign of Louis XIV (1661–1715), greatly increasing the crown's access to credit.[86] A central institutional innovation involved the officers' corps, corporate bodies of lenders who exchanged funds for a set of rights and honors (for example, a title, an office, and often, an exemption from taxes). These corporate bodies had significant advantages in coordinating the action of lenders, limiting the ability of the crown to play off subsets of financial interests against one another. Moreover, as the recent work of Hoffman, Postel-Vinay, and Rosenthal reveals, the crown had substantial access to direct credit in the eighteenth century.[87]

Nonetheless, France's political institutions placed three great limits on its ability to raise revenue via debt.[88] First, in contrast to England, France had no centralized representative assembly to negotiate with and counterbalance the sovereign. The crown retained unilateral authority over the terms of the debt. Although default was not without reputational costs, it did not require permission of the debt-

83. Lipset 1960; see also Dahl 1971; and Moore 1966.

84. Similarly, the rise in private capital markets follows, not precedes, the Glorious Revolution. See North and Weingast 1989.

85. A similar institutional shift in sixteenth-century Netherlands shows the same pattern. In 1515, the Spanish crown shifted the responsibility for debt collection and repayment from the Habsburg regent in Belgium to the provincial estates, which represented local wealth-holders and merchants. The government's access to credit improved dramatically as a result. See Tracy 1985; and Schultz and Weingast 1988.

86. Bien 1987; see also Hoffman 1994; Hoffman and Rosenthal 1997; and Root 1989 and 1994.

87. Hoffman, Postel-Vinay, and Rosenthal 1998.

88. Hoffman and Rosenthal 1997; see also Root 1994.

holders' representatives.[89] Nor did unilateral default by the crown, in itself, risk removal from office. Second, the absence of parliamentary oversight permitted the government to obfuscate its total indebtedness. Poor accounting went hand in hand with poor accountability. Not even the crown knew the full extent of its obligations. As a consequence, lenders could not accurately gauge the magnitude of the state's commitments, raising considerable uncertainty about prospects for payment. Third, the French king had considerable difficulty raising new taxes during the eighteenth century. The inability to raise taxes increased the uncertainty over debt repayment, in part because of the "unpleasant monetarist arithmetic" requiring that all debt either be paid by future taxes or be wiped out via inflation or default.[90] Limits on the ability to raise new taxes, therefore, translated into limits on the state's ability to raise new funds.[91]

In an interesting way, France's inefficient tax system was partly due to earlier attempts to circumvent the crown's credibility problem. Throughout the *ancien régime*, an important source of revenue came from the sale of offices. Although an absolute monarch could not be trusted or forced to pay back a loan, granting offices was a way to ensure that lenders would receive compensation. Wealthy individuals would loan the crown money in exchange for judicial, police, or administrative positions, including tax collection. They could then pay themselves the interest on their loan by deducting it from the amount collected. The king could tap substantial funds in this way but at a steep price: the loss of control over taxation. Although the sale of offices was less prevalent during the eighteenth century, the obligations inherited from the past remained and played a significant role in the crown's inability to pay off loans with new taxes.[92]

As we have seen, these and other limitations meant that the French crown had less favorable access to credit, which hampered it over the course of the rivalry. Although total debt increased with each new war, it did not exhibit the smooth trends seen in the British case. The relatively frequent defaults—including massive ones in 1720 and during the 1790s—reflect a public financial system inadequate for the demands placed on it by the state.[93]

Moreover, the country's financial situation worsened over time. Whereas the British consistently ran surpluses after wars, France was unable to sustain such a policy for long. Riley shows that the crown ran small surpluses in the late 1720s and again in the mid-1730s, after the War of Polish Succession.[94] As debt and

89. Root 1994 provides a good comparison of the French and English systems of negotiation between crown and constituents, including their implications for economic growth and public finance.

90. Sargent and Velde 1995.

91. A further factor concerns the "state contingent" nature of debt, the notion that debt is far more likely to be paid off after a war if the war is won. To the extent that the loss of a series of wars lowered French expectations about the likely of winning the next conflict, this implies that borrowing would become harder over time because lower expectations of success also imply lower expectations of being repaid.

92. Sargent and Velde 1995, 483–84.

93. Hoffman 1994; see also Riley 1986; and Sargent and Velde 1995.

94. Riley 1987.

defeats mounted, however, the costs of debt service and opposition to higher taxes both increased. As France consistently lost wars throughout its conflict with England, citizens' willingness to pay taxes decreased.[95] A persistent "structural" deficit emerged, with expenditures outpacing receipts from the Seven Years' War through the Revolution, even in peacetime (Figure 2). Notice, however, that this "structural" problem in taxes is in part endogenous, reflecting the fact that France was losing the competition with England. The crown's fiscal arrangements had shifted revenue to earlier periods, to fight earlier wars, while restricting its ability to raise more money later. Put simply, France's military ambitions exceeded its capacity to finance them, whether through taxes or debt.

Summary

Britain and France provide a stark contrast in the eighteenth century. At the outset of their rivalry, Britain was the weaker state according to traditional indicators of power such as population and size of the economy; yet, in the end, Britain emerged the victor. With the exception of the War of the American Revolution, France lost every major war in this period, including the disastrous Seven Years' War in which it was stripped of its American colonies. With the defeat of Napoleon, France ceased to be a serious military threat to Britain, though it was not until the end of the nineteenth century that a real friendship between these countries would arise.

It has been understood for some time that Britain's financial power played a major role in this surprising outcome.[96] We have shown in this section that the institutions of liberal democracy, emerging in nascent form in the late seventeenth century, provided the political foundations for British power. The political revolution in Great Britain also ushered in a financial revolution, which gave the country remarkable access to credit at low interest rates. This not only provided an efficient means of raising revenue but also allowed the benefits of tax smoothing. The consequence was a more predictable system of public finance. In contrast, France made only modest reforms in this period and clearly suffered from the sovereign debt problem. Not only did it face considerably higher costs of borrowing, but it was unable to engage in optimal tax-smoothing policies. The state's high interest rates and numerous defaults reflected a system taxing its limits to tap the funds of private capital holders.

Competition Between the United States and the Soviet Union, 1945–91

The Cold War, pitting the United States and its allies against the Soviet Union, shares many similarities with the eighteenth-century Anglo-French rivalry. Both

95. Sargent and Velde 1995.
96. Dickson 1967; see also Brewer 1988; and Kennedy 1987.

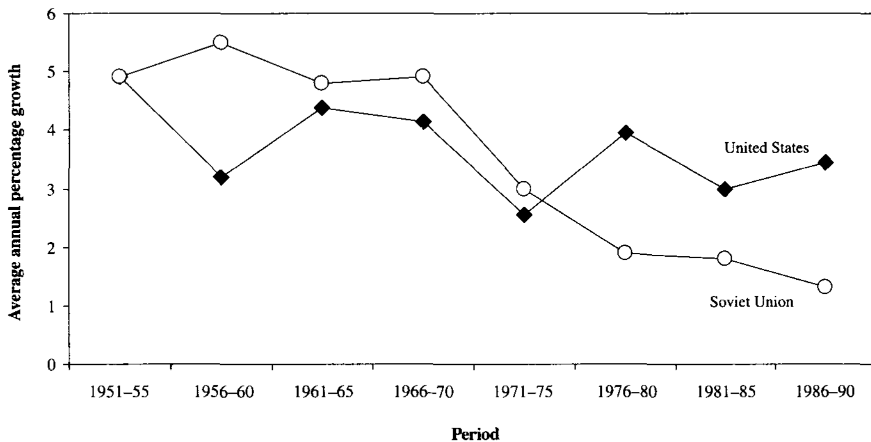
were prolonged, militarized struggles not decided by any one conflict or war. Both pitted the world's most powerful liberal state against the world's most powerful illiberal state. And, by the end, it became clear in both cases that the illiberal state was locked in a contest that it simply could not afford. Like France, the Soviet Union underwent dramatic social and political upheaval, in part resulting from the economic strain of international competition.

Despite these similarities, substantive differences make a good case comparison difficult. Britain and France both had vibrant economies relying on free markets, though somewhat less so with France. The argument about England's ultimate success does not significantly hinge on the eventual economic collapse of France because of burdensome political restrictions on the economy. In the Cold War case, by contrast, the difference in political systems is coincident with a fundamental difference in economic systems, making it difficult to sort out the influence of these two considerations. Whereas the United States has a free market with considerably less government intervention, the Soviet Union had a centrally planned economy in which the government owned virtually all the means of production, setting production quotas, prices, and wages according to an overarching plan and political criteria. The authoritarian nature of the Soviet polity was clearly a necessary condition for central planning, but it by no means made such a system inevitable. It is thus hard to divorce the poor insulation of the economic system from political intrusion from the direct inefficiencies of the planning system.

Given the relative merits of the free market and central planning, it is clear that the difference in economic systems contributed to the outcome of the Cold War. The Soviet system was rife with inefficiencies and distorted incentives that, by the mid-1970s, began to drag down economic growth.[97] The United States, by contrast, enjoyed relatively robust economic growth, despite the recurrent booms and busts normally associated with capitalist systems (Figure 5). Our examination of how the two countries' political systems affected their ability to raise debt must therefore be viewed in the context of this larger story.

A further issue is that the end of the Cold War is sufficiently recent that scholars are still sorting out the possible explanations. In an early review of the literature, Kegley cites no fewer than eighteen arguments that have been offered to account for this event.[98] As Kegley correctly points out, part of the confusion stems from a difficulty in specifying exactly what is to be explained: the collapse of the Soviet Union, the overthrow of communist regimes in Eastern Europe, the end of military tensions between the two blocs, and so on. From our perspective, the phenomenon of interest is the Soviet Union's inability, starting in the mid-1980s, to sustain an intense, militarized competition with the United States. On this point, there is a reasonable consensus among scholars: the decision to retrench was rooted in the economic crisis facing the Soviet system. Economic stagnation, especially relative to the West, created the impetus for reform, and a temporary withdrawal

97. For example, Bergson 1989; see also Brooks and Wohlforth 2000/01.
98. Kegley 1994.



Note: Economic growth is determined using real GDP for the United States and real GNP for the Soviet Union.
Sources: For the United States, OMB 2002, Table 10.1; for the Soviet Union, Joint Economic Committee 1990, 88, and CIA 1992, 26.

FIGURE 5. *Real economic growth in the United States and Soviet Union, 1951–90*

from international competition was seen as a prerequisite for those efforts to succeed.[99] The failure of Gorbachev's reform program led to the social and political unraveling of the country and ensured that a resumption of conflict would not occur.

We will argue that the different financial mechanisms employed by the United States and the Soviet Union contributed to several crucial features of this outcome. The United States's ability to finance deficits through government borrowing helped it to pursue an efficient tax-smoothing policy throughout the Cold War, with attendant economic benefits. This was especially evident during the 1980s, when the use of public debt allowed the United States to intensify the competition with the Soviet Union without compromising economic growth. The Soviet Union, by contrast, did not have access to a robust market for government debt and instead had to rely on distortionary mechanisms to finance its deficits. The distortions introduced by increasing budget shortfalls in the late 1970s and 1980s exacerbated the process of economic stagnation, reinforced the drop in Soviet living standards, and are a major proximate cause of the failure of economic reform in the last years of the Cold War.

Financing the Cold War

We first consider how the political institutions of the two countries affected the fiscal practices they adopted during the Cold War. Consistent with the argument

99. Wohlforth 1995; see also Brooks and Wohlforth 2000/01.

laid out above, the political institutions of the United States were conducive to public borrowing through the sale of government bonds. The Soviet Union, by contrast, was an unreliable debtor that regularly reneged on its debt obligations; in 1957, the government ended the practice of selling bonds, and from then on it relied on distortionary methods of deficit finance, such as loaning money to itself.

The United States. An impressive political commitment technology underpins government finance in the United States. Under Article 1, Section 8, of the U.S. Constitution, the power to borrow money resides with the Congress. This means that decisions about debt issuance and repayment must be debated openly and codified into law by elected representatives. Reneging on the debt would injure a substantial number of debtholders, risking the loss of their votes and monetary support. Moreover, the ripple effects throughout the financial system would affect a much larger set of voters than just those holding debt. Many savings accounts are in banks holding government debt, and a large number of pension plans have government securities in their portfolios. Hence, legislators would face substantial political costs should they attempt to renege on the state's obligations.

The 1995–96 budget showdown provides an interesting glimpse into the possible ramifications of a default on U.S. Treasury bonds. Such a default became possible when Congress refused to extend the debt ceiling, calling into question whether the government would be able to make interest payments. Carroll provides a detailed discussion of the financial and economic dislocations that might have accompanied such an event.[100] Given the central role of U.S. Treasury bonds in national and global financial markets, the possible repercussions would have reached well beyond those who held the affected securities. When Republican leaders received a briefing to this effect from Federal Reserve Chairman Alan Greenspan, they emerged "scared silly"—in the words of one congressional aide—and backed down shortly thereafter. Interestingly, the bond and currency markets seem to have shared Treasury Secretary Robert Rubin's assessment that default was "unthinkable" and consequently did not waver much in response to the political maneuvering.

A series of legal provisions, enforced by the courts, provide additional protection for lenders. As discussed above, a major problem with imposing costs following default is the ability of the financial community to coordinate their reactions. Because credit boycotts are costly for the lenders as well as the borrower, the potential ability of the government to "divide and conquer" the financial community facilitates its ability to renege on agreements to some lenders while negotiating new agreements with others. In the United States, a variety of constraints make this technique difficult. Prioritizing debt issues fixes *ex ante* the order in which debtholders are paid off, preventing the state from manipulating payoffs *ex post.* Cross-default clauses extend a default on one debt issue to a default on others.

100. Carroll 1996.

Such factors hinder the government's ability to discriminate among lenders, as was typical in early modern Europe.

The effects of these provisions are perhaps best illustrated in the case of foreign bondholders, who enjoy similar protection even though they have no direct political influence or representation. Bonds are issued and redeemed in series, and a mixture of domestic and foreign investors has a stake in each series. Because lenders are grouped by type of security, not by politically relevant characteristics, the government cannot single out a specific constituency, such as foreign lenders, who might be tempting targets of opportunity for default. A default on any particular series of bonds would inevitably injure domestic interests. Indeed, domestic investors would probably make up the vast majority of those injured by such a move because foreigners generally held between 10 and 20 percent of the U.S. debt.

There are also judicial protections against the government's reneging, although the strength of these protections is unclear. Twice during the 1930s, the Supreme Court ruled that government securities are binding contracts between the Congress and its creditors, abrogation of which runs counter to the due process clause of the Fifth Amendment.[101] Although a post–World War II Supreme Court would probably not apply the due process clause in this way, the Court is likely to require something like a national emergency to allow default.[102]

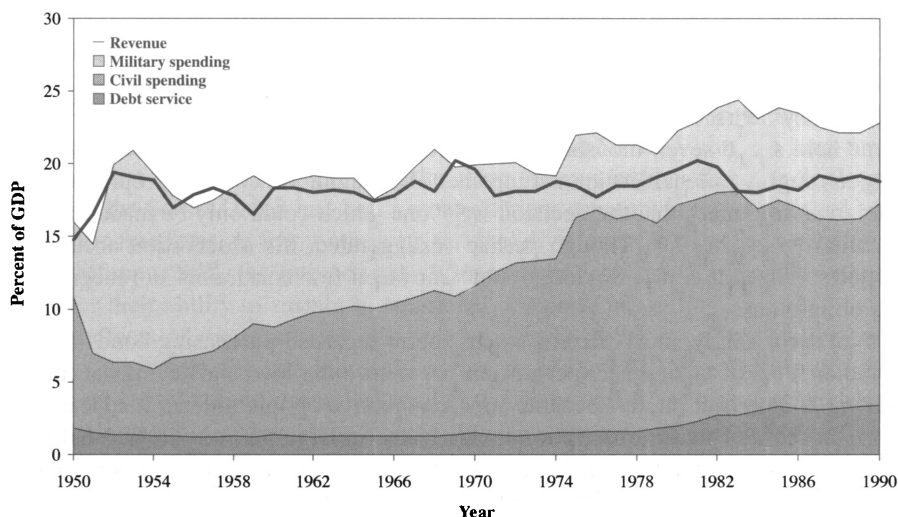
Finally, and most obviously, default cannot be decided by the executive alone. Rather, it requires an act of Congress signed by the president (subject to the veto considerations). Although not binding in all circumstances, this constraint requires that a larger fraction than a mere majority of the nation favor default.

The nature of its domestic political institutions thus ensured that the United States enjoyed easy access to credit with advantageous consequences for its long-term economic health and its capacity to sustain international competition. In addition to providing extra revenue during periods of high expenditures, the government's ability to raise large sums through the sale of securities permitted it to pursue a policy of tax smoothing.[103] Figure 6 shows U.S. revenues and spending as a percentage of gross domestic product (GDP) for the period 1950–90. As is clear from the figure, tax receipts remained a relatively stable fraction of national wealth. This stability is especially remarkable when we consider that this period included two wars (Korea and Vietnam) and a massive arms buildup in the 1980s. During these years, military spending averaged 7.8 percent of GDP with a standard devi-

101. *Lynch v. United States* (1934) 292 U.S. 571 and *Perry v. United States* (1935) 294 U.S. 330.

102. The Constitution's contract clause further constrains the government. Consider *United States Trust Co. v. New Jersey* (1977) 431 U.S. 1, in which the Supreme Court ruled that "a law impairing a state's *own* obligations was entitled to less deference than legislation interfering with *private* contracts." Gunther 1980, 562, emphasis in the original. This strict scrutiny implies that the state must have a compelling reason for breaking its contractual promises, and, as this case indicates, redistribution, even for worthy causes, is insufficient. Because this case focused on the obligations of the states, not on the federal government, there remains some uncertainty about how the Court would apply this standard in the case of federal bonds. These considerations suggest, however, that the Supreme Court is unlikely to defer to Congress in the event of a default, as it does, for example, in regulatory legislation.

103. Barro 1979.



Source: OMB 2000.

FIGURE 6. *Spending and revenue in the United States, 1950–90*

ation of 2.5 percent. By contrast, tax revenue averaged 18.4 percent of GDP with a standard deviation of only 1.0 percent. Clearly, access to credit in large amounts made it possible for the United States to maintain stable and predictable tax levels despite the vicissitudes of international competition.

The Soviet Union. The Soviet Union, by contrast, could not rely on a robust market for government debt to finance the Cold War. The absence of such a market seems not to have stemmed from an ideological distaste for borrowing. Mass subscription bonds played a large role in financing the industrialization drive in the early 1930s and World War II.[104] Bond sales were also used to finance budget deficits in the late Stalinist period.[105] Nevertheless, the practice was ended, with minor exceptions, in 1957.

The Soviet experience with public borrowing displays many of the difficulties predicted by the theory of sovereign debt. As would be expected, the Soviet government was not the most reliable and attractive debtor, often reneging on or altering the terms of bond agreements.[106] On numerous occasions, the government reduced its debt service obligations through partial default: by making adjustments in face value, maturities, and rates of return on outstanding issues. Both the

104. Millar 1990, 114–20.
105. Harrison 1986.
106. Holzman 1957; see also Millar 1990, 114–31.

industrialization effort and the war were followed by drastic conversions of the state debt. When the sale of bonds was terminated in 1957, the state suspended interest payments on outstanding bonds and postponed redemption of some issues for twenty years. According to Franklyn Holzman, the average household at the time held six to seven thousand rubles' worth of bonds—an amount corresponding to roughly one-half its annual income. The magnitude of the expropriation led Holzman to remark that the decision was "one which could only be made under a totalitarian system."[107] Though perhaps exaggerated, his observation accurately reflects the fact that the Soviet government faced few constraints in reneging on its obligations.

Not surprisingly, most citizens by that point regarded purchasing bonds as just another form of taxation. Expected returns were quite low, and savings accounts giving 2–3 percent interest became a more attractive option. Indeed, it appears the early success of mass subscription bonds rested in large part on the fact that purchases were not wholly voluntary. Sales took place in factories and community organizations, where significant moral, economic, and political pressure could be brought to bear.[108] In ending the use of bond subscriptions, the government essentially eliminated the tax burden represented by this practice.

Lacking bond sales as a reliable source of revenue, the Soviet Union resorted to other, more distortionary, mechanisms of finance. One common approach was simply to create more money through the "Loan Fund" of the State Bank.[109] This was typically accomplished by issuing credits to state-owned enterprises. If a firm could not afford to pay the amount of taxes prescribed by the economic plan, it would receive credits from the State Bank and then return those credits to the government in the form of taxes. Because the enterprises were under no obligation to repay these "loans," this practice was equivalent to creating more money. The growing deficits of the late 1970s and 1980s were accompanied by dramatic increases in the amount of money in the economy.[110]

The Soviet government also financed its deficits by borrowing against household savings deposits.[111] In principle, there is nothing wrong with this kind of borrowing; in most economies, it would represent a noninflationary act of monetary absorption by the government. In the Soviet case, however, this practice created substantial distortions because of the absence of long-term debt and savings instruments. Household savings were held as demand deposits, meaning that the money could be withdrawn at any time. Thus by borrowing from these accounts, the government did not reduce the stock of money available to households. As a result, this practice generated inflationary pressure and increased volatility in the monetary system.[112]

107. Holzman 1957, 47.
108. Ibid., 48; see also Millar 1990, 115–18, 127.
109. Birman 1981; see also Shelton 1989, chap. 1; and Ofer 1989.
110. Ofer 1989; see also Ellman 1992; and McKinnon 1993, 124.
111. Birman 1980, chap. 7; see Shelton 1989, 43–47.
112. Ofer 1989, 121–24; see also Ellman 1992, 120.

Finance and the End of the Cold War

How did these different financial practices contribute to the outcome of the Cold War? We do not claim that this differential ability to raise debt was the sole reason for the end of the Cold War or the dissolution of the Soviet Union. In long-term rivalries that appear, *ex ante*, to be quite close, many margins affect the final outcome. If the Soviet Union had had a more efficient economy, greater political and economic freedoms, or fewer ethnic or national divisions, the outcome might have been different. Still, the two countries' financial policies had important implications for their ability to sustain international competition.

The effects of these policies can best be seen by focusing on their divergent paths in the 1980s, the last and decisive decade of the Cold War. During this period, both states' "grand strategies" lead to the accumulation of large public debts. In the United States, President Ronald Reagan's strategy of increasing defense expenditures and cutting taxes generated large and persistent budget deficits. In the Soviet Union, Mikhail S. Gorbachev's strategy of retrenchment and reform had a similar effect.[113] By 1989, the United States' publicly held debt stood at 40.5 percent of GDP, while the Soviet Union's debt amounted to 43 percent of GDP.[114]

These years of deficit spending, however, brought about very different outcomes in the two states. We have already described how U.S. economic growth in this period greatly exceeded that of the Soviet Union. Moreover, as can be seen in Figure 7, the United States outstripped the Soviet Union in the growth of real military spending and real per capita consumption. The United States not only outspent its rival in the military realm, but it did so in a way that was consistent with economic growth. The arms buildup of the 1980s was accompanied by a substantial cut in tax rates as well as increases in entitlement spending. Public borrowing filled the resulting deficits.

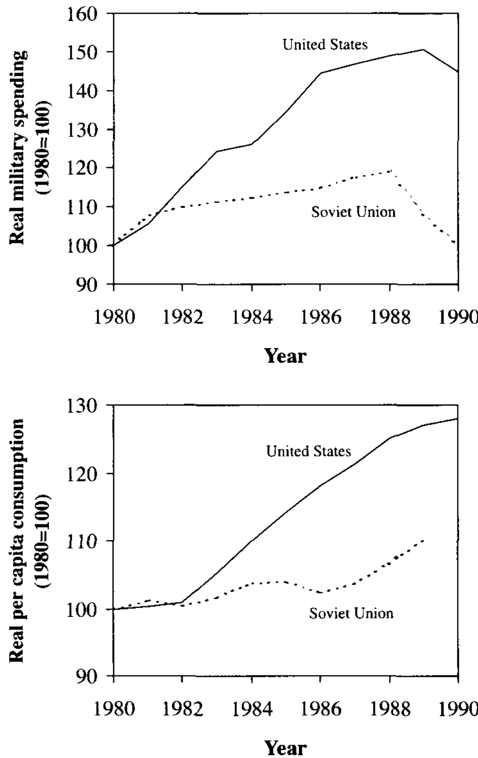
None of this is meant to imply that increased borrowing during this period had no costs. International competition necessarily imposes costs on those that engage in it; the main question to answer is whether or not those costs were borne in an efficient manner. Given that the United States was engaged in competition, and given that the president considered increased military spending to be prudent, the state's access to credit permitted it to spread the expense over a long period. Indeed, the growth of the American economy in the decade after the Cold War led to a marked decline in the debt burden. The amount of publicly held debt as a percentage of GDP fell from 45.3 percent in 1991 to 32.7 percent in 2001.[115]

In the Soviet Union, by contrast, increasing deficits in the 1980s were unambiguously damaging to its economy. Early on, there were warnings that financial disequilibrium caused by hidden budget deficits constituted a drag on Soviet economic

113. Wohlforth 1995 and Evangelista 1993 discuss the nature and origins of the Soviet Union's grand strategy in this period.

114. U.S. Office of Management and Budget 2002, tab. 7.1; McKinnon 1993, 121.

115. U.S. Office of Management and Budget 2002, tab. 7.1.



Source: For the United States, military spending data are from OMB 2000; and consumption data are from *Economic Report of the President, 2000*, 341. For the Soviet Union, military spending data are from ACDA 1994, 81; and consumption data are from Joint Economic Committee 1990, 92; and CIA/DIA 1990, Table C-3.

FIGURE 7. *Military spending and consumption in the 1980s*

growth.[116] The degree to which this factor was responsible for the stagnation of the economy is difficult to determine precisely. The distortionary financial practices discussed above were only one of many problems afflicting economic performance, and we do not mean to imply that the slowdown of growth starting in the late 1970s is solely attributable to this factor.[117]

We do know, however, that the issuance of credits from the State Bank had a deleterious effect on economic performance and private consumption. At the microeconomic level of the Soviet firm, economists have demonstrated that the system of "soft-budget constraints" had debilitating incentive effects. Because credits were issued automatically to firms that could not meet their projected revenues,

116. Birman 1980.

117. Moreover, the unreliability of Soviet financial and economic statistics makes it difficult to know for certain the true size of the deficit. See Birman 1981 for a discussion of these issues.

the government essentially subsidized the inefficient and unprofitable.[118] At the macroeconomic level, creating money in this fashion led to an increase in the stock of money relative to available goods. This phenomenon of "monetary overhang" was in large part responsible for the scarcity of consumer goods and hence the low consumption levels of Soviet citizens.[119]

These effects were particularly strong during the period of economic reform in the late 1980s, which was accompanied by massive budget deficits. In part, these deficits reflected longer-term trends: the general slowdown of economic growth and the high levels of spending on defense, agriculture, and construction. However, the explosion of the deficit from 1985 onward was largely because of Gorbachev's economic reform program.[120] The move to privatize industries and farms was particularly debilitating, because it deprived the budget of its main source of revenue: income from state-owned enterprises.

The massive increases in money and credit that were used to finance these deficits played a large role in the economic and political failure of *perestroika*. On the economic front, the monetary overhang and inflationary pressures caused Soviet leaders to postpone two reforms that were considered necessary to revitalize the economy: the introduction of a flexible pricing system and liberalization of external economic relations.[121] On the political front, worsening shortages in food and other consumer goods undermined popular support for Gorbachev's program.[122] A 1990 CIA report noted that dissatisfaction because of food scarcities "contributed to rising social tensions and played a role in the growing number of strikes and ethnic clashes."[123] It is no wonder that both Western observers and Soviet economists considered the fiscal mess, and the resulting monetary disequilibrium, to be one of the most pressing problems facing the Soviet Union in its waning days.[124]

Summary

As noted earlier, the outcomes of extended rivalries such as the Cold War are influenced by many factors, and the plethora of arguments that have been advanced suggests that this event was over-determined.[125] We are not claiming to have identified the reason that the United States prevailed in this conflict. Instead, our aim has been to show that the implications of our argument are borne out empirically. The United States was able to rely on extensive use of public debt to finance the Cold War in a way that was consistent with long-term economic growth and minimized the trade-off between guns and butter. The Soviet Union's experience with public borrowing, on the other hand, was much as expected given the theory of

118. Shelton 1989, 33.
119. Ellman 1992; see also McKinnon 1993, 124; Shelton 1989, chap. 2; and Birman 1981.
120. Ellman 1992; see also Ofer 1989; and McKinnon 1993 121–24.
121. Ofer 1989, 108.
122. Moskoff 1993, chap. 2.
123. CIA/DIA 1990, i.
124. Ofer 1989 107–8; see also Moskoff 1989, 16–17; and Ellman 1992, 129–31.
125. Kegley 1994; see also Brooks and Wohlforth 2000/01.

sovereign debt. The government's lack of political constraints made it an unreliable debtor, and bond sales in the early part of the Cold War resembled taxation more than borrowing. The suspension of bond sales did not mean that the Soviet Union could no longer raise substantial sums of money to finance its international ambitions. Instead, the Soviet government resorted to other techniques that did not depend on its credibility. But these techniques came with drawbacks that imposed mounting costs over the long term. The distortions they introduced were a drag on economic growth, generated scarcities in consumer goods, and helped undermine economic reform in the late 1980s. In short, the United States enjoyed a relative advantage because it could finance competition in a manner that was less damaging to the economy and less burdensome to its citizens than were the methods available to the Soviet Union.

Conclusion

Neorealism has often been challenged for its inability to explain changes in the distribution of state power.[126] The end of the Cold War makes this shortcoming particularly apparent.[127] The collapse of the Soviet Union was the most significant event in international relations in the past fifty years, and yet neorealism has little to say about its causes. Explaining such events requires that we depart from the systemic perspective and look inside the state for the determinants of its power—or its weakness.[128]

In this article, we identify aspects of liberal political institutions that can, on the margin, improve a state's ability to compete in the international system. Our central argument is that the limits associated with liberal democracy provide a competitive advantage in sustained conflict against states that lack such limits. Although many Cold War writers bemoaned the constraints on democratic leaders, these constraints in fact constitute an important source of state power. Indeed, the advantage imparted by representative political institutions has permitted liberal states to prevail in a series of major conflicts dating from the Dutch revolt against the Habsburgs in the late sixteenth century.

Our argument rests on the observation that the institutions of representative government provide the political foundation for financial power. Because the constraints on liberal government increase the likelihood that the state will honor its debts, these states typically have superior access to credit than their nondemocratic rivals. This has several implications for international competition. It implies that, ceteris paribus, liberal states can sustain larger and longer wars, relying on credit to expand the scale and scope of military activity far beyond the limits of any given year's tax receipts. In addition, easy access to credit means that sharp increases in the demand for funds need not result in large increases in taxes. Through

126. Keohane 1986.
127. Gaddis 1992.
128. Organski and Kugler 1980.

the use of tax smoothing, these states have more predictable tax rates, thus mitigating the distortions and risks to the economy from sudden rises in taxes. Illiberal states, by contrast, have a harder time paying for international competition in this way. As a result, they must rely on financial mechanisms that are less efficient over the long run. Although many factors influence the outcomes of international competition, this difference gives liberal states an important advantage on the margin.

We illustrated these arguments with two cases of sustained rivalry between a liberal democratic state and an imperialistic authoritarian state. In the Anglo-French conflict from the late seventeenth century to the defeat of Napoleon, Britain's access to credit helped it win all but one of the six major wars. Britain's ability to raise vast amounts of debt meant that, in war years, it could spend 1 to 1.5 times its normal annual revenue on defense, while France was limited to around 0.5 to 0.8 times its annual revenue. Moreover, France consistently paid higher rates on its funds. As a result, France underwent recurrent fiscal crises and, eventually, revolution while Britain emerged as the predominant world power.

A similar pattern is observed in the Cold War rivalry between the United States and the Soviet Union. The vast credit of the United States permitted it to keep tax levels remarkably stable despite frequent periods requiring high military expenditures. By financing deficits through the sale of public securities, the United States managed to devote substantial resources to defense while at the same time fostering impressive economic growth. The Soviet Union, by contrast, had great difficulty raising debt through voluntary means. Instead, it had to rely on distortionary mechanisms of finance that exacerbated the problems of a centrally planned economy carrying an onerous defense burden. In the end, the contest drove the Soviet Union to economic ruin and political upheaval. The United States, by contrast, emerged with a large debt but a vibrant, growing economy.

As noted at the outset, this article is part of a growing chorus that touts the previously overlooked advantages of democracy in international politics. Indeed, the pendulum of scholarly thought on this matter has swung from one extreme to another within the last half century. Heavily influenced by the events of the interwar period—when Western democracies were too vindictive when it was time to make peace and too squeamish when it was time to make war—realist writers doubted that democratic government was suited to the rigors of international competition.[129] With the end of the Cold War, on the other hand, skepticism has been replaced by triumphalism. Democracies are now seen to be "powerful pacifists": more efficient in the extraction of resources,[130] superior in commanding the loyalty and morale of their troops,[131] less susceptible to having their foreign policies hijacked by private interests,[132] better at using coercive diplomacy,[133] and, accord-

129. Friedrich 1938; see also Lippmann 1955; Morgenthau 1973, especially 146–48; and Kennan 1977.
130. Lake 1992.
131. Reiter and Stam 2002.
132. Snyder 1991; Bueno de Mesquita et al. 1999.
133. Fearon 1994; Schultz 2001; Partell and Palmer 1999.

ing to democratic peace theorists, able to avoid wars with one another. Dissidents from this new consensus are rare.[134]

How can one reconcile these drastically different assessments? We suggest that disagreements over the qualities of democracy depend in large part on the fineness of one's view: whether one is looking at the short or long run, individual cases or aggregate performance over many cases. Much of the negative view of democracy expressed in the early literature was based on a set of cases that, while important in their effects, are not necessarily representative of the total picture. It is true that the constraints of democracy underlay the appeasement policies of Britain and France in the 1930s and the United States' inability to get involved in European affairs early enough to be an effective counterweight to Nazi Germany.[135] It is also likely that the costs of confronting Hitler might have been lower had the West chosen to do so at an earlier stage. Similarly, a strain of pacifism in British public opinion helps to explain that country's failure to make an effective deterrent threat against Germany in the lead-up to World War I.[136]

Nonetheless, these cases have to be set against the overall track record. States with limited governments have done rather well in the modern era, however one measures performance. As we have shown, these states have outlasted their main rivals in extended competition. They tend to win the wars they fight. And, despite the notable failures mentioned above, they actually have a better overall success rate than nondemocracies in cases of immediate extended deterrence.[137] Indeed, if Waltz is right that anarchic systems exert selection pressures that tend to weed out modes of organization that are ill-suited to competition, then the dramatic expansion of democracy over the last two centuries belies the claim that democracies are systematically disadvantaged in international politics.[138] Hence, while one need not accept that democracies are better in every respect, the evidence suggests that the trade-offs associated with democracy yield a net advantage over the long run.

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134. See, for example, Finel and Lord 1999; Groth 1999.
135. Taylor 1962.
136. Ferguson 1999.
137. Schultz 2001.
138. Waltz 1979.

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