Chapter 1: Sovereign credibility and public revenue

Rulers throughout history have sought monetary and labor contributions from their subjects, in exchange for promises to provide future benefits. Military officers have been asked to serve now, in exchange for a promise of salary and pension later. Contractors have been asked to supply goods now, in exchange for a promise of remittance later. Investors have been asked to loan money now, in exchange for a promise of repayment later.

In all these promissory markets, rulers have been beset by credibility problems. In 17th-century Europe, for example, elites would have known Niccolò Machiavelli's notorious advice that a "wise ruler...should not keep his word when such an observance of faith would be to his disadvantage..." (1979[1532], ch. 18). Many would also have known Hugo Grotius's related observation that "almost all jurists believe that the contracts, which a king enters into with his subjects, [cannot be enforced] by [manmade] law" (1949[1625], bk. 2, ch. 14).

Scholars such as Root (1989), North and Weingast (1989) and Myerson (2008) have highlighted the fiscal consequences that ensue when agreements with sovereigns cannot be legally enforced. Simply put, subjects will not willingly buy the king's promises, if they are not credible, whereupon the flow of revenues from voluntary sales will dry up. Thus, we arrive at a fundamental question in political economy: how can sovereigns make their promises credible enough to sell, if they cannot be legally enforced?

In this book, I analyze the English solution to this problem—focusing mostly, but not entirely, on the Glorious Revolution of 1688. In outline, their solution entailed three main steps: (1) giving parliament a monopoly right to make sovereign promises; (2) giving certain actors a monopoly right to broker the resulting sales (and earn commissions); and (3) removing the legal discretion of executive officials, both at the policy-making and administrative levels, over performance. Before explaining the logic of this tripartite system, which I dub "monopoly brokerage," I first review previous ideas about sovereign credibility—both in general and in the specific case of England.

Theories of sovereign credibility

Extant theories of sovereign credibility hinge on different visions of how sovereign promises are crafted, sold and redeemed. To take the simplest example first, suppose promises can be made and unmade by royal decree, the monarch can emit decrees at will, and performance is costly. In this case, royal promises can be credible only if the monarch's cost of performance falls short of the costs that promise-holders can impose in retaliation to default. This is the bleak Machiavellian conclusion of the *punishment school* of sovereign credibility (e.g. Eaton and Gersovitz 1981 on debt; Haber, Maurer and Razo 2003 on property).

Now suppose that sovereign promises can be made and unmade only by statutes, parliament can emit statutes at will, and performance is costly. In this case, promise-holders may again seek to deter default by threatening retaliatory punishment. In addition, however, they can seek to block the statutes needed to repudiate or revise the promises they hold.

The *constitutional school* assumes that new statutes require approval by several constitutional veto players. In the English case, for example, acts of parliament required formal approval by the House of Commons, House of Lords, and crown. From this perspective, England's promises—to provide a pension, pay an invoice, and so forth—were credible to the extent that promise-holders could expect at least one veto player to oppose statutes undermining performance of their promises (North and Weingast 1989; Stasavage 2003).

The *majoritarian school* takes a different view of the statutory process, one that emphasizes the freedom of governing majorities to act on their preferences. Indeed, pure majoritarian theories assume that a sovereign commitment will be honored if and only if a majority of voters wish to do so, when performance comes due (e.g. Dixit and Londregan 2000 on debt; Lamoreaux 2011 on property).

In both the punishment and majoritarian schools, promise-holders are at the mercy of a Machiavellian state. A monarch or ruling majority can solemnly promise at time t to perform at time t+1. Yet, when t+1 arrives, the then-monarch or then-majority can decide afresh what to do. If new circumstances render it disadvantageous to perform as originally promised, then no veto players exist to prevent default. In contrast, in the constitutional school, promise-holders need not continuously maintain the support of the ruler or ruling majority. They can rely on past promises, if they or their political allies have blocking power.

The case of England

By far the best-known single case in which punishment, majoritarian and constitutional arguments have been debated is that of England. Interpretations of England's (and, after 1707, Great Britain's) rise to power have long divided into a Whig school, emphasizing the importance of the constitutional settlement after the Glorious Revolution, and an anti-Whig school, emphasizing the freedom that parliamentary majorities have had to act on their political preferences.

North and Weingast (1989) provided such an analytically sharp statement of the Whig position that it has framed the scholarly debate ever since. They argued that the

emergence of parliamentary supremacy after the Revolution enabled the crown to commit much more credibly to sovereign promises, because revising such commitments now required approval by the commons and lords. The crown's enhanced ability to commit, in turn, had enormous consequences. Investors were willing to lend vastly larger amounts of money over longer time horizons—financing global conquest and colonization. Entrepreneurs were willing to invest much larger amounts of money over longer time horizons—financing global conquest and colonization. Entrepreneurs were willing to invest much larger amounts of money over longer time horizons—sparking the Industrial Revolution.¹

No one doubts that explaining why Great Britain became the world's hegemonic power in the 19th century and why it led the world into the Industrial Revolution are explananda of the first order. Yet, scholarly opinions on the North-Weingast thesis divide sharply. I shall review supportive work later but for now focus on their critics.

Several scholars aver that England's constitution simply did not change much after the Revolution. Epstein (2000), O'Brien (2002, 2005), Murrell (2009) and others argue that England's reforms were more technical than political and accrued slowly during the Civil War, Commonwealth and Restoration. The Revolution was just one step in a gradual process. Relatedly, Pincus and Robinson (2011) point out that not one of the specific constitutional reforms highlighted by North and Weingast constituted a sharp or unprecedented break with the past.

Other critics argue that the credibility of England's sovereign promises simply did not improve at the Revolution. As Murphy (2012, p. 58) puts it, "by 1696...faith in parliament's ability to honour its financial commitments was not substantially increased, as North and Weingast argue, but significantly eroded." Moreover, when interest rates on English debt did eventually improve, critics claim they were driven by factors other than constitutional reform—such as lobbying by creditors (Carruthers 1996; Murphy 2013), the emergence of a stable pro-creditor majority party (Stasavage 2003, 2007; Pincus and Robinson 2011), victory at war (Sussman and Yafeh 2014), and the maturation of secondary markets (Carlos et al. 2014). At least when one looks at the interest rates on England's national debt, it seems hard to escape Sussman and Yafeh's (2006, p. 907) blunt conclusion: "the notion that financial markets swiftly reward countries for the establishment of investor-friendly institutions is not grounded in historical facts."

North and Weingast's thesis about property rights has fared no better. If such promises became more credible after the Revolution, their critics say, then rates of return on property should have declined. Yet, studies by Clark (1996), Epstein (2000) and Quinn (2001) find no reduction in such rates at the Revolution, not even a delayed

¹ North and Weingast were circumspect in connecting the Glorious to the Industrial Revolution but, as we shall see in chapter 8, others have asserted such a connection forcefully.

one. Hoppit (2011, p. 94), based on a detailed study of property confiscation by the state, concludes that "property rights became *less* secure after 1688" (italics added).

All told, then, North and Weingast's critics have said there was neither a large constitutional change at the Revolution nor an improvement in the English state's credibility afterwards. Whatever drove England's global conquest and Industrial Revolution, it wasn't the Revolution settlement.

Promises and performance

In this book, I reconsider the debate between punishment, majoritarian and constitutional theories. To help organize the discussion, Figure 1.1 displays the sequence of events in an abstract promissory market, from sale to performance.

Figure 1.1 about here.

In stage 1a, the state offers to sell some sovereign promises. In England, for example, the Treasury sold interest-bearing Treasury Orders; while the Exchequer sold common-law writs. Each of these scraps of parchment or paper promised that bearer would receive something of value—whether as simple as "payment" or as complex as "legal recourse"—in future.

After subjects purchase them (stage 1b), the government in office when performance comes due (stage 2) might be able unilaterally to revise the initial promises (e.g., via a decree). If so, then the state's performance is *Machiavellian*.

Otherwise, if the government is not able unilaterally to revise the legal terms of performance, then it has two legal options. One is to revise the promise by negotiation with the other veto players. I call this *negotiated* performance and ignore it here. One can imagine, for example, that one of the veto players rejects all revisions. The only other legal option is to abide by the terms of the original promise, in which case I say that the government's performance is *reversionary* or *constrained*.

Most analyses of sovereign promises assume Machiavellian performance. In economic models of sovereign debt, for example, the state *always* reconsiders how to perform, in light of conditions prevailing at maturity. The ruler-at-issuance cannot constrain the ruler-at-maturity. Similarly, in majoritarian models of debt, the medianvoter-at-issuance cannot bind the median-voter-at-maturity.

Let's consider a more general model, in which both Machiavellian and constrained governments can exist. Let P be the probability, as gauged by purchasers in stage 1, that the government in stage 2 will *not* be able unilaterally to revise a promise sold in stage 1. Let $E(V_r)$ be what investors expect to get if the government is constrained (reversionary performance); and $E(V_M)$ be what they expect when the

government is not constrained (Machiavellian performance). The overall expected value of the sovereign promise—the maximum price that risk-neutral investors would be willing to pay for it—can be written as

$$E(V) = PE(V_r) + (1-P)E(V_M).$$
 (1)

The expected value of constrained performance, E(V_r), depends both on the *face value* and the *transfer value* of the original promise. The face value is what the bearer of a promise expects to get at maturity, if performance is strictly as promised (discounted to the date of purchase). The transfer value reflects investors' option of selling their promises before maturity. Throughout the book, I consider how improvements in the credibility of constraint, face value, and transfer value affected the English (and later the British) state's ability to raise revenues from the sale of sovereign promises.

Credibility of constraint (P)

I begin with two conceptual points about the nature of commitment. First, commitment is not a feature of a state or constitutional order; rather, it is a feature of an individual sovereign promise. A given state can simultaneously issue some promises that its government-of-the-day will be legally free to revise (royal or Machiavellian promises) and other promises that its government-of-the-day will not be legally free to revise (parliamentary or rule-of-law promises). Second, a government can legally evade complying with a given promise in three main ways: (1) revising (in the extreme, voiding) the promise; (2) eroding the value of the promise by issuing more promises of the same or similar type (e.g., inflation); and (3) transferring the promise to another party (e.g., eminent domain).

In any state, the government-of-the-day will seek to evade an inconvenient commitment by pursuing the most convenient legal tactic—whether revision, erosion, or transfer—via the most convenient legal device—whether statute, decree, or court decision. Thus, *legal commitment to a particular sovereign promise is only as strong as the weakest link in a chain of legal constraints placed upon the executive.*

Because the pre-revolutionary English crown could potentially evade promises in multiple ways, achieving "limited government" was no easy task. Although parliament had fettered the prerogative before 1688, the overall constraint it succeeded in imposing was quite limited. Some crown prerogatives, such as the right to borrow money, remained legally unchallenged. Other prerogatives, such as the right to levy taxes, were trammeled by chains that still had weak links (which the crown identified and exploited).

What made the Revolution a watershed, rather than merely another signpost, in England's constitutional development was its comprehensiveness. *All* sovereign

promises were brought under parliament's monopoly control, through the introduction of ministerial responsibility; and *all* legal devices by which the executive might escape a particular commitment were put under parliament's regulation. Thus, the English body politic, which had received many small and ineffective doses of limited government throughout the short 17th century, received its first large and effective dose after the Revolution.

How did parliamentarians convert sovereign promises from merely royal to fully parliamentary commitments? North and Weingast summarize the crucial element as *parliamentary supremacy*, whereas I shall argue—both as a matter of abstract logic and of English history—for a stronger condition: a *parliamentary monopoly* on making sovereign promises combined with *monopoly brokerage* of the resulting sales. In the next two subsections, I explain the logic of these twin monopolies.

Why credibility of constraint requires a parliamentary monopoly

In standard usage, "parliamentary supremacy" means that parliament can make or unmake any law; no court can revise or reject its decisions; and no executive decree can in any way alter statute law. So defined, parliamentary supremacy ensures that the formal statutory process—requiring approval by the commons, lords and crown—cannot be circumnavigated by royal decrees or executive-dictated judicial decisions. To put it in the lingo of contemporary political science, parliamentary supremacy ensures that revising statutes really does require the approval of the formal veto players.²

A "parliamentary monopoly" means both parliamentary supremacy as just defined, plus a further stipulation: that only an act of parliament (or a decree approved by parliament) can authorize the sale of sovereign promises. When this additional stipulation does not hold, sovereign promises can be sold on both royal initiative (by decree) and parliamentary initiative (by statute). The market, in other words, becomes a sort of duopoly.

When promises are embedded in statutes, parliamentary supremacy protects them against unilateral *revision* by the executive. However, supremacy does not protect promise-holders against unilateral executive actions that *erode* the value of their promises.

Consider, for example, an entrepreneur who has purchased a royal patent conferring the right to build a turnpike road. Even if the legal terms of the original grant remain in force, the value of those rights can be eroded if the crown later authorizes a competing turnpike road or canal in the near vicinity (cf. Lamoreaux 2011). Another example concerns inflation. When James I put baronetcies up for sale, he initially charged £1,095 and promised that only a fixed number would be created. Later,

² On veto player theory in general, see Tsebelis (2002), Cox and McCubbins (2001).

however, he reneged on his pledge, selling more baronetcies and driving the market price down to £220 (North and Weingast 1989, p. 811). The general point is that the value of many sovereign promises can be eroded by the sale of further promises of the same type.

Parliamentary monopoly defends promise-holders against erosion of their promises' value, by removing the crown's ability to sell future promises. Indeed, because it is easier to issue new royal promises (just the crown has to think this is a good idea) than to issue new parliamentary promises (which requires assent by the commons, lords and crown), a parliamentary monopoly removes the larger of the two erosion risks.

All told, then, only a parliamentary monopoly can protect promise-holders against both *direct revision* and *indirect erosion*. English promise-holders of various kinds—e.g., public creditors holding debts, landowners holding titles to real property, and entrepreneurs holding corporate charters—cared deeply about both kinds of risk. Thus, they pushed for a parliamentary monopoly.

Constructing parliamentary monopolies

To secure a parliamentary monopoly required ensuring that only a statute, or a decree with equivalent support, could authorize the sale of a particular kind of sovereign promise. Decrees issued unilaterally by the monarch had to be rendered either illegal or unconstitutional.

The oldest tactic was to render decrees explicitly illegal. For example, by 1285 only an act of parliament could authorize the sale of new common-law writs; decrees for this purpose were illegal. Explicit prohibition, however, left the crown free to find close substitutes of the promises it was forbidden to sell, which could then indirectly erode the value of parliamentary promises. In the case of common-law writs, for example, the crown created entirely new prerogative courts and transferred politically sensitive cases to those courts.

Thus, a safer approach was to control how the royal prerogative was used. Once established, ministerial responsibility enabled parliament to exert such control and thereby take over markets in which the royal prerogative remained legally intact. For example, the prerogative right to borrow has never been questioned at law. Yet, *unilateral* borrowing by the crown became unconstitutional. The crown could only borrow on advice of ministers who could be removed by a vote of no-confidence.

The brokers' monopolies

When parliament solidified its monopoly over a particular kind of sovereign promise, specialists quickly emerged to broker the resulting sales to the public. For example, lawyers purchased writs for litigants, parliamentary solicitors steered private bills for entrepreneurs seeking development rights, and bankers handled the flotation of sovereign debts.

In most cases, brokers earned commissions per sale and thus sought to *monopolize* the conduct of sales. In this book, I explore several different species of monopoly broker in distinct markets—such as the Inns of Court (property rights), the Bank of England (sovereign debt) and the somewhat different case of the ministry (which acquired a monopoly right to propose public expenditures after 1706). In each case, I describe when and how the brokers secured their monopolies; how they were compensated; and why they were consistently more opposed to default than the crown.

Limiting executive discretion (to increase E(V_r))

Even if a sovereign promise remained legally binding, it might not be worth much. In particular, the wording of some promises left executive officials complete discretion over how and when to perform. Officials constrained to comply with such vacuous promises could be just as Machiavellian as those able to unilaterally revise the legal terms of performance. Thus, the expected value of a state's reversionary performance depended on crafting the original promise in order to limit executive discretion.

As more of England's sovereign promises came to be embedded in statutes, a sea change occurred in the elaboration and precision of those promises. The content of these more elaborate promises varied but investors sought two key features that limited executive discretion.

First, purchasers of sovereign promises wanted *senior claims*. Debt-holders, for example, wanted specific revenue streams earmarked to repay them, and they wanted their claim on these revenues to have priority over all other claims. Landowners (who held sovereign promises known as titles) wanted their usage rights to be exclusive and absolute. MPs wanted the expenditures they were promised to have first claim on specific revenue streams; unfunded mandates were no more popular with MPs than junior debt claims were with investors.

Second, investors wanted the state to line up *sufficient resources to perform*. Debt-holders, for example, wanted the revenues dedicated to repaying them to be obviously enough to retire the entire debt. Landowners wanted the resources dedicated to enforcing their rights to be clearly adequate to the task. MPs wanted the revenues dedicated to their pet expenditure items to cover all costs.

By enhancing the seniority and sufficiency of their claims, promise-holders could deprive administrative staff in the executive branch of any legal discretion. I describe some of the battles for seniority and sufficiency in later chapters. Not all sovereign promises could be spelled out completely, however. Promises to expend public revenues in particular ways, for example, were by their nature "incomplete contracts." In such cases, the highest executive officials—ministers—had to be left with some residual discretion. The English method of policing this residual discretion was, again, ministerial responsibility.

Reconsidering the Revolution

In contrast to those who argue that the Revolution brought gradual or only *de facto* political changes, I argue that a series of important *de jure* constitutional reforms occurred. While the specific reforms differed from market to market, in each case they promoted a parliamentary monopoly, thereby preventing the crown from unilaterally revising, eroding or transferring sovereign promises.

In Part I of this book, I describe how parliament's monopoly was established in several distinct markets. I begin with public expenditure (chapters 2-3), an area that North and Weingast and their critics have relatively neglected, and then proceed to debt (chapters 4-6) and property rights (chapters 7-8), before providing a summary overview in chapter 9.

Did reforms matter for taxation and public expenditure?

Many scholars have modeled taxation as an exchange: a ruler promises public goods in return for the citizenry's payment of taxes (Bates and Lien 1985; Levi 1988; Tilly 1990; Congleton 2011). A central issue in such models is whether citizens can hide their taxable assets from the crown. The more they can do so, the more their payment of taxes must be voluntary rather than coerced.

Here, I focus on a different exchange, not between crown and subjects but rather between crown and representatives. The crown offers what I call a *platform*—a sovereign promise to expend specific state revenues on specific purposes. Those purposes might include providing public goods or redressing various "grievances." The House of Commons can "buy" the platform by voting for the associated supply bill.³

The exchange of tax grants for platforms just described is only a slight stylization of deals actually struck in England over many centuries. However, many negotiations between crown and commons foundered because the crown's platforms lacked credibility. Indeed, the crown was legally free to spend any money it got in whatever fashion seemed appropriate in light of changing circumstances. This unfettered ability to control expenditure meant that royal platforms—typically articulated in the Summons

³ Throughout the book, I focus on the crown-commons relationship, in light of the superior constitutional position the House of Commons had established vis-à-vis money bills. In particular, the commons exclusively proposed such bills and the lords could not amend them (it could only accept or reject).

to Parliament, the Speech from the Throne, or other royal communications—could be revised at royal will.

After the Revolution, three interlocking reforms substantially improved the credibility of platforms. First, and most fundamentally, expenditure promises were embedded in the appropriations clauses of statutes. That is, platforms were no longer merely royal; they became parliamentary. Second, the commons acquired much more information—via reporting requirements and audits—about how public revenues were actually being spent. Indeed, it is no accident that standardized statistics on English public revenues and expenditures begin in 1689. Third, to punish ministers for misappropriation, the commons shifted from impeachment (cumbersome, legalistic and extreme) to removal via votes of censure.⁴

These reforms, together with the emergence of ministers as monopoly brokers in arranging exchanges between the tax-granting commons and platform-peddling crown, amounted to what I call a budgeting revolution. England for the first time had an annual statutory budget for the armed forces. Moreover, if parliament failed for any reason to enact a budget for the new fiscal year, then the government's legal authority to expend money on the armed forces lapsed. The budgetary reversion was a "government shutdown" (see chapters 2, 3, 10, 11).

The various reforms just sketched rendered platforms much more credible, meaning that MPs were willing to grant much greater tax revenues in exchange for them. Indeed, tax receipts tripled the Restoration average within a decade of the Revolution (Brewer 1988; O'Brien 1988).

Did reforms matter for loans and debts?

The fiscal cost of England's sovereign debt after the Revolution varied substantially but this was not because investors feared their promises would be revised by a Machiavellian government-at-maturity. English debt faced high interest rates and stiff price discounts because much of it was either junior or under-funded. The senior and better-funded debts were paid off reliably; but the junior and under-funded debts accumulated until they reached crisis proportions. In the first quarter century after the Revolution, England suffered two such cycles, driving the fiscal cost of debt sharply upward in both cases. The problem was not solved until the seniority and funding of the debt was addressed; and this could not happen until a parliamentary monopoly on debt issuance had emerged, which required ministerial responsibility.

⁴ The credibility of the crown's platforms depended on all three reforms working together. If promises were not statutory, then crown officials could revise them at will. If either information or punishment were lacking, then crown officials could skirt appropriations with impunity.

In other words, I argue (in chapters 4-6) that English sovereign debts became very credible almost immediately after the Revolution, through the simple device of making them parliamentary. However, in the first generation after the Revolution, England issued a lot of debt promises with low face values (because they were junior and/or under-funded). The reason England sold debt with low face value was entirely political: parliament refused to grant the long-term taxes that were essential to fund long-term debts, until they had wrested control over the expenditure of public revenues from the crown. The capstone achievement in this regard was again ministerial responsibility. Once that occurred, the debt market was quickly rationalized: almost all debt became long-term and funded.

Did reforms matter for property rights?

The credibility of domestic real property rights did not change at the Revolution because monopoly brokerage in that market had emerged long before, as I describe in chapter 7. Thus, one does not expect to see, nor does one find, a decline in rates of return on domestic property after 1688.

That said, the right to transfer one's usage rights to others was underdeveloped in England before 1688. The key change in property rights after 1688 was not an improvement in credibility but rather an improvement in transferability. I explore this point in connection with the tremendous boom in turnpikes, canals, and estate acts which ensued after the Revolution (Bogart 2005, 2011; Bogart and Richardson 2011).

Britain's private bill procedure was unique among its European competitors; and it enabled substantially more efficient bargaining between local stake-holders in development contests. The result was that Britain experienced exponential growth (literally) in its turnpike road mileage, along with sharp improvements in canal density and coastal waterway transport. By the mid-18th century Britain had by far the best transportation system in the world, which created the largest national market in Europe. In combination with high labor and low energy costs, the size of England's market sparked the series of innovations and workplace reorganizations known as the Industrial Revolution (see chapter 8).

Exporting the Revolution

England's Glorious Revolution had admirers aplenty—not just the Whig grandees whose interests were served by publicizing a particular account of events (Pincus 2009); and not just Montesquieu, whose *Spirit of the Laws* echoed revolutionary ideas. Thus, one great spreader of revolutionary ideas was imitation.

In addition to imitation, however, there was inheritance. Great Britain and her imitators colonized much of the world and imposed forms of rule with features tracing to the Revolution. In Part II of the book (chapters 10-12), I consider one aspect of the constitutional diaspora from the Revolution: how the world's constitutions have regulated the power of the purse. The major European states all adopted constitutions in the late 18th and 19th centuries. All these charters announced that parliament must henceforth approve taxes and annually approve the plan of expenditure (budget). Yet, the credibility of planned expenditures (platforms) was seriously undermined in several cases by the failure to mandate a shutdown reversion. Thus, while all European imitators of England's budgetary revolution experienced revenue growth, such growth was substantially greater in countries adopting shutdown reversions and ministerial responsibility (the latter being the consequence of the former). See chapter 10.

Much the same story played out when western constitutionalism spread to the rest of the world. While the British parliament's right to deny supply was unquestioned after the Revolution, the analogous right has been engineered away in many of the world's constitutions, notwithstanding their lip service to the legislature's financial power. This has had significant consequences both for the fisc and for liberty. See chapter 11.

The purpose of focusing on the power of the purse is to bring down to earth a range of natural and perennial questions, of the form: if the Revolution was so important for generating tax and loan revenues, then why can an autocracy like X tax and borrow so freely? Is the revolutionary elixir necessary or sufficient for either the proximal effects (taxes, loans, development) or the distal effects (conquest, industrialization)? I take up some of these issues in the final chapter.



