Preliminary draft

Marketing sovereign promises: The English model

by

Gary W. Cox
Department of Political Science
Stanford University
gwcox@stanford.edu

First draft: November 23, 2010

This draft: July 30, 2012

Abstract: The size of modern democratic governments, measured by revenues and expenditures, is remarkable, given the ample opportunities those governments have to act opportunistically, the enormous informational disadvantage under which ordinary citizens must labor, and the crudeness of elections as tools to control action. In this paper, I argue that the English repeatedly used *institutions of monopoly brokerage* to mediate trades between the sovereign (offering various promises) and subjects (offering taxes, fees and loans). The central logic of these institutions—which included Parliament, the Inns of Court and the Bank of England—was to ensure that the brokers had a monopoly and that their compensation was proportional to the aggregate value of trades undertaken, so that they would combine the means and motive to facilitate trade. Some threats to this central logic were difficult to manage: it took centuries to thwart the Crown's strategy of divide and conquer, first by denying it the ability to erect competing institutions; then by denying it the ability to exploit shifting coalitions within the monopolist institutions. Once set up in their mature form—well before the emergence of modern electoral democracy—the English institutions of monopoly brokerage sparked substantial growth in the state and, relatedly, constituted important limits on the state.

Marketing sovereign promises: The English model

As have other rulers throughout history, English Kings sold promises of various sorts to their subjects. They sold, for example, bonds (promises to repay the purchaser's loan with interest), writs (promises to enforce the purchaser's usage rights in real property), and tax farms (promises to allow the purchaser to collect taxes in a stipulated area and time). In all these promissory markets, Kings were beset with credibility problems, such as those highlighted by Root (1989), North and Weingast (1989) and Myerson (2008). Simply put, prospective purchasers worried that Kings might not fulfill their promises; and recognized that it would be very difficult to punish them in that event. If such worries became too serious, the King could not find any voluntary buyers of his promises.

In this paper, I consider four important markets in sovereign promises—viz., those in which the Crown sold (1) common-law writs in exchange for legal fees; (2) *platforms* (i.e., royal promises to ward off stipulated threats) in exchange for taxes; (3) bonds in exchange for loans; and (4) local development rights in exchange for fees. Each of these markets developed what I call *institutions of monopoly brokerage* centered on Parliament.

In each of these markets, subjects purchased written promises (writs, platforms, bonds, private acts) from the sovereign via monopolist brokers. As their compensation increased with total trade, the brokers' had substantial interest in maximizing the value of trade in whatever market they were responsible for making. Their position also

allowed them better access to relevant information and gave them some ability to coordinate boycotts in retaliation to sovereign default. Thus, as long as the public had confidence that the brokers could not be bribed by the Crown, the market was subject to fewer inefficient interruptions. When the promises sold were private (writs, bonds) or club (private bills), rather than public (platforms), increasingly large and liquid secondary markets developed—albeit with many bumps along the road—and these secondary markets placed much stronger and more precise limits on English governments than did elections well into the nineteenth century. Or so I shall argue.

The rest of the paper proceeds as follows. First, I relate my work to the literatures on political agency and intermediation. Second, I sketch the evolution (over several centuries) of the main English markets in sovereign promises, along with the main institutions of monopoly brokerage: Parliament, the Inns of Court, the Ministry, the Bank of England, and the parliamentary committee system. In particular, I discuss battles over the brokers' monopoly; regulations of the brokers' compensations; and the brokers winning control over the manufacture of promises. When the brokers' control over their respective markets solidified, sharp increases ensued in (a) the aggregate value of trade; (b) the variety of products traded; and (c) the efficiency of trade. Finally, I argue that the institutions of monopoly brokerage placed important limits on state action, in large part because the markets constituted important new actors capable of sending strong and timely signals.

Political agency and intermediation

The role of (secondary) markets in my story is similar to that of an electorate in the political agency literature (for a recent review, see Besley 2006). Electorates can

threaten removal from office to mitigate moral hazard (e.g., Barro 1973; Ferejohn 1986) and adverse selection (e.g., Besley 2005). Markets can threaten removal of funds (whether future taxes, fees, or loans) to mitigate the same problems, although here I focus solely on moral hazard.

The role of brokers in my story is similar to that in the literature on intermediaries. In principle, brokers in any market can reduce the credibility problems that afflict trade by providing information that helps identify cheaters; and/or by punishing cheaters (cf. Milgrom, North and Weingast 1990; Ramey and Watson 2002; Dixit 2009).

To illustrate, consider a market in which subjects purchase sovereign promises and the King later decides whether to honor or repudiate those promises. As is well known, such a market fails if the transaction is once-off, because no subject will expect the King to bear the costs of performance, once he has the subject's money in hand. If the market is repeated, the King may be able to sell some promises, if subjects reckon current repudiation will cost the Crown too much in lost future sales. Such considerations alone, however, may not suffice to create much of a market for the King's promises, as the literature on sovereign debt points out. Arellano and Heathcote (2008), for example, show that even a *credible* threat of *permanent* exclusion from credit markets yields maximum sustainable sovereign debt levels at least ten times smaller than those observed in the contemporary world.

Now suppose that a broker is introduced to the mix and has the following rights. First, the broker has the monopoly right to propose that a particular kind of sovereign promise (e.g., writs of novel disseisin, bonds offering 8% interest) should be sold. The King can either accept or reject the broker's proposal. Second, if the King accepts the

broker's proposal, then the latter has the monopoly right to sell the promises and earns a commission equal to a fixed percentage of the total revenue generated. After the promises are sold, the broker bears no cost of performance and gains no benefit from repudiation. Moreover, third, the broker has the legal right to impose a penalty on the Crown for repudiation, such as refusing to broker future deals or delaying the disbursement of funds in the broker's possession (from previous or on-going sales).

If an institution of monopoly brokerage such as that just sketched exists, the market for sovereign promises can expand well beyond its sustainable size when the King markets his promises directly.[1] However, brokers must have transparent incentives to make a market, if their addition to the *dramatis personae* is to improve the efficiency of exchange. The more firmly that market participants believe brokers seek primarily to increase the volume and value of trade, the more they can entrust the brokers with the business of policing sovereign opportunism. Accordingly, in this paper, I focus mainly on brokers' motivation and how it was engineered in the English state.

My initial aim is descriptive: to convince the reader that the English state *in fact* developed institutions of monopoly brokerage in each of four major markets for state revenue—fees of justice, taxes, loans and development fees. I then show that, once these institutions were perfected, trade boomed and state revenues grew apace. Thus, my ultimate aim it to defend a theoretical claim—that state growth in England depended crucially on the perfection of institutions of monopoly brokerage.

To put this claim in context, note that most analyses of the commitment problems that beset sovereign states—e.g., those in the vast literature on sovereign debt—envision direct or unmediated trade. In these models, the key to state growth is

---

[1] This point is easily formalized, adapting Dixit 2009.

enhancing the ability of promise-holders to launch retaliatory boycotts against non-performance. Here, in contrast, the key to state growth is creating a class of intermediaries with the "right" incentives and capacities.

Two complications should be noted at the outset. First, the English divided the task of brokerage into two parts. Initially, Parliament had the monopoly of assent (or authorization of a new revenue stream); and an actor subordinate to Parliament had the monopoly of sales (or revenue collection). Second, contrary to the sequence outlined above, initially the King proposed and Parliament fought for the right to approve or reject the royal proposal. Only later do their roles reverse. Thus, Parliament's monopoly of proposal (as opposed to assent) is in some cases a long time coming.

Table 1 provides an initial statement, for each revenue market, of when Parliament first gained its exclusive right of assent; when a subordinate partner emerged with a monopoly on sales (or revenue collection); and when Parliament's monopoly of assent extended to include a monopoly of proposal. The first market to develop was that for the fees of justice, with Parliament's exclusive right to assent to new common-law writs first asserted in 1285; and the Inns' of Court monopoly of the sale (and pleading) of such writs attaining legal recognition by 1590. The second market to develop was that for taxes, with Parliament's exclusive right to assent to new taxes first asserted in the 1340s; and the state bureaucracy's monopoly of collection established in 1671. The third market to develop was that for loans, with Parliament's exclusive right to assent to new loans asserted as early as 1681; and the Bank of England's monopoly of the sale of sovereign debt established between 1694 and 1708. The last market to develop was that for local development rights, with Parliament seeking an exclusive

right to grant such rights in the later Stuart years; and parliamentary committees' monopoly on selling such rights established soon after the Glorious Revolution.

Table 1 about here.

In the next three sections, I consider the developments sketched in Table 1 in greater detail. In particular, I first consider the brokers' monopolies: Parliament's exclusive right of assent; and the subordinate's exclusive right of collection. Second, I show that brokers earned fees in proportion to the trade they brokered; had no legal right to partake of any revenue freed when the sovereign reneged on promises; and bore none of the costs of promise fulfillment. Third, I show that brokers eventually secured control over the manufacture of promises, subject only to a royal veto. This enhanced their incentives, especially for innovation.

The brokers' monopolies

Historically, the first right that English brokers gained was their monopoly. In this section, I describe the development of monopoly in the market for writs, the market for platforms, the market for bonds, and the market for local development rights. For each market, I first describe what was traded, then describe when Parliament first secured a monopoly of assent, and finally describe when subordinate institutions emerged with monopolies on the sale of promises. As will be seen, the Crown repeatedly challenged the brokers' monopoly by creating wholly new institutions—new bodies in which litigants could seek justice, new bodies that could grant taxes, new syndicates from which loans could be procured, or alternative sources from which to buy development rights. The details of how the brokers' monopoly was asserted, challenged and decisively re-asserted differ in each market, but they all bear a family resemblance.

The market for writs

Pursuant to Henry II's famous legal innovations, royal justices began touring the country on regular judicial circuits (eyres or assize circuits) in 1166, offering justice directly to a mass market. In particular, nonbaronial freemen could soon litigate possession and ownership of property before royal justices, via an array of writs (cf. van Caenegem 1973).

At an abstract level, the canonical sovereign promise sold to freemen via the royal judiciary was *title* to land, a promise to protect stipulated uses of real property. Importantly, titles were (eventually) transferable: every time someone bought property, or acquired it through inheritance, the bundle of standard protections automatically conveyed to the new owner. Thus, one can view the property market as a secondary market in sovereign promises.

As a concrete example of a sovereign promise related to title, consider the writ of novel disseisin. This particular writ allowed a recently dispossessed property owner to secure a trial in which a jury would render a verdict based largely on specific questions of fact, including whether the plaintiff had occupied the disputed land as of certain dates and whether he had been dispossessed without judgment. The court's verdict would then be enforced by the Crown. Thus, subjects who paid "a moderate fee" (van Caenegem 1973, p. 43) secured a sovereign *promise* of a jury trial before royal justices in eyre, with subsequent enforcement of the court's verdict.

Parliament

In the earliest years of Henry's system, new kinds of writ could be issued at royal pleasure. Because writs allowed the transfer of cases from local to royal courts, however, local elites sought to regulate their use. In 1215, the Magna Carta required

baronial permission to transfer some cases to royal courts. In 1258, the King was forced to accept the principle that new kinds of writ could be created only with the sanction of the King's council. After 1285, new writs could be created only with the express sanction of Parliament.

The Inns of Court

Graduates of the Inns of Court may have sought exclusive rights to broker purchases by their clients of writs, as early as their origins in the 1390s. In any event, it became increasingly common to purchase writs via solicitors; and the Inns of Court secured a legal monopoly on pleading cases before the superior common law courts after the decision rendered in *Broughton v. Prince* in 1590. Thus, lawyers trained in the Inns of Court secured exclusive rights both to purchase writs for clients and to execute those writs in court, over the period 1390-1590.

The challenge of the prerogative courts

The Inns of Court's monopoly extended only as far as the jurisdiction of the common law courts, however. Just as the Merchant Staplers challenged Parliament's status as the unique source of taxes (on which more below), the prerogative courts—most notoriously, the Star Chamber—threatened the common law courts' status as the unique suppliers of justice.

The common law courts won a great victory during the Long Parliament and the sole prerogative court to survive the Restoration was the Court of Requests (which had reduced business and did not survive to see the 18th century). Thus, the monopoly of the common law courts was largely established by 1660; and completed after the Glorious Revolution in 1688 (North and Weingast 1989). In the process, the Inns of Court

profited, because their monopoly rights were much better established in the common-law courts than in the prerogative courts.

The Inns of Court remained subordinate to Parliament, however. Because Parliament could enact legislation that specified the kinds of writ solicitors could sell, the Inns of Court had every incentive to establish a firm presence in Parliament, in order to protect their monopoly and to ensure parliamentary authorization for new writs that looked profitable. The large and continuous presence in Parliament of members of the legal profession suggests they pursued this strategy vigorously.

The market for platforms

Consider next the King's promise to use taxes he collected from his subjects for agreed or legitimate purposes, such as fighting off foreign invaders. Since such a promise—a *platform* in my lingo—pertained to a public good, it was not sold separately to individual subjects, as were writs and bonds. Nonetheless, platforms were *written* promises, typically articulated in the summons to Parliament and/or the speech from the throne. For example, in 1295 Edward I's summons to Parliament promised to protect the Kingdom from an impending invasion by the King of France, who "proposes to destroy the English language altogether from the earth, if his power should correspond to the detestable proposition of the contemplated injustice, which God forbid" (Cheyney 1897, pp. 33-35).

Offering defense of the realm in exchange for new taxes clearly risked free riding by prospective taxpayers. Thus, Edward further stipulated that the knights of the shire and burgesses attending his Parliament must have "full and sufficient power" to grant any taxes he might demand in exchange for his protection.

In essence, then, Members of Parliament were put in the role of platform brokers. The King wanted them to "sell" their localities on both the platform—vague and dodgy though it might be—and the tax price.

An important feature of this market was that the brokers quickly realized that their collective bargaining position vis-à-vis the King would be stronger, were they given the *exclusive* right to grant or withhold new taxes. I turn to this topic in the next subsection.

Parliament

Kings predictably faced temptations to change the terms of the deal outlined in their platforms—for example, by diverting the initial tranche of funds to other purposes and then demanding new funds, when danger loomed again. In other words, Kings were prone to what one might call moral hazard, ex post opportunism, or simply reneging.

One of the most obvious ways a King could signal his intent to forbear from such actions was by forswearing the right to levy new taxes or alter old ones unilaterally. Before this right was forsworn, subjects could stage tax revolts to punish the King's opportunism only by undertaking illegal acts—viz., refusing to pay new taxes that the King had legally demanded. Once the right to levy new taxes had been forsworn (willingly or not), the tax-payers of the realm were in a better constitutional position to stage retaliatory tax boycotts, thereby enhancing their willingness to grant new taxes.

Whether recognizing this logic or not, medieval Kings throughout Christendom mitigated their credibility problems by creating councils or Parliaments with monopoly rights to grant new taxes (cf. Marongiu 1968; Barzel and Kiser 2002). The council's or Parliament's monopoly helped ensure that the sovereign could not simply find new sources of taxation after reneging on whatever commitments he had made to procure his

original taxes, a pattern with which the English were most famously familiar in the crisis over the wool tax granted by the Merchant Staplers (Power 1942, p. 14):

> …the wool tax was one of the principal new sources of royal revenue at the end of the thirteenth century…and it was the one tax round which the early constitutional struggles revolved, and on which the young Parliamentary institutions tried their first teeth. The struggles ended in a compromise by which the King was left in possession of a very high subsidy on wool, Parliament was left in possession of [monopoly] control over taxation, and a body of English merchants, known as the Company of the Staple, was left in possession of a quasi-monopoly of the wool trade.

Waugh (1991, p. 203) reckons that "Parliament's monopoly [over the granting of taxes] was not firmly established until the 1340s," while Payling (2009, p. 76) casts the 1350s as the crucial decade.

The tax collectors

Because taxpayers "purchasing" platforms had incentives to free ride that litigants purchasing writs lacked, the specialized agents "selling" platforms (tax farmers) had to be given stronger incentives than those selling writs (solicitors). Thus, tax farmers were residual claimants to the tax streams they farmed, while solicitors (and barristers) worked for a share of the state revenues they generated.

Tax farmers sought a monopoly of tax collection, just as the Inns of Court sought a monopoly on writs and the associated pleading. However, a monopoly in tax farming posed a threat to the state. Indeed, the end of tax farming in England came about in part because "there were fears that the successful bidder, William Bucknall, had secured control over too large a share of national revenues" (Braddick 1996, pp. 64). The Crown thus introduced a system of direct collection in 1671. In essence, after 1671 various state

agencies held a monopoly in tax collection; but the compensation earned by individual tax collectors consisted of a fixed salary, rather than a share of revenues collected or a residual claim. Their method of compensation weakened the incentive of tax collectors collectively to lobby Parliament for new platforms that might attract new taxes, certainly in comparison to the incentives solicitors had to lobby Parliament for new writs that might attract new fees.

The challengers

Even after the struggle with the Merchant Staplers had ended successfully, exceptions and threats to Parliament's monopoly right to grant new taxes continued. The *Parliamentum* of the County Palatine of Chester had, until Henry VIII's time, the right to assent to taxes there (cf. Morrill 1974, p. 1). The Tudors' policy of fiscal feudalism "threatened to diminish the importance of the Commons' right of assent to taxation" (Payling 2009, p. 77). The early Stuarts secured revenues in exchange for grants of monopoly to various entrepreneurs, thereby essentially repeating the tactic that had been earlier used with the Merchant Staplers (Harris 2000, pp. 46-7). More generally, North and Weingast (1989, pp. 809-812) list an array of tactics the Stuarts used to avoid Parliament's monopoly of tax grants, all of which can be put under the general rubric of "divide and conquer."

It was not until the Glorious Revolution that Parliament's monopoly was decisively (re)asserted. Although that monopoly might have been lost later in history, Parliament introduced several reforms to strengthen its power over taxes (cf. Cox 2012) and to date that power has remained a central element of the English (British, UK) constitution.

The market for sovereign bonds

The market for sovereign debt involved the sale of a sovereign promise to repay with interest (later) in exchange for a loan (now). Early on, the sovereign promise was non-transferable. Eventually, however, royal promises took the form of bonds that could be exchanged on secondary markets.

Parliament

Parliament formally sought to prevent the King borrowing unilaterally as early as 1682: "the House of Commons resolved that anyone who lent to the Crown without Parliamentary authority would be judged an enemy of Parliament" (O'Brien 2005, 25). Yet, it was not until 1693 that Parliament succeeded in convincing William III to accept the principle of funded national debt. Henceforth, all sovereign debt would be both funded (backed by specified taxes dedicated to repayment) and national (approved by Parliament). The consequence was not that Parliament obtained a veto over debt repudiation (per North and Weingast 1989; Stasavage 2003) but rather that it obtained a veto over the issuance of new debt, similar to its veto over the granting of new taxes (per Cox 2011, 2012).

The Bank of England

The Bank of England secured a monopoly right to float new sovereign bonds (authorized by Parliament) over the period 1694-1708 (Broz and Grossman 2004). Thus, just as in the market for writs, Parliament retained monopoly control over authorizing new promises, while a subordinate institution secured monopoly control over the sale of those promises.

The challenge from the Land Bank

Just as the Merchant Staplers challenged Parliament's status as the unique source of taxes, and the prerogative courts threatened the common law courts' status as the unique suppliers of justice, so the Land Bank challenged the Bank of England's monopoly on debt (and other matters).[2] It was not till this and other similar challenges had been beaten off that the Bank's monopoly looked secure. Indeed, because Parliament could de-charter it, or transfer its privileges elsewhere, the Bank took care to maintain a large enough "interest" in Parliament to defend its monopoly (Broz and Grossman 2004).

The market for local development rights[3]

Entrepreneurs seeking to build turnpike roads, bridges or canals faced the daunting task of cutting through a maze of existing property rights. Negotiating with all rights-holders was typically too costly and so developers often sought royal patents or private acts of Parliament to confer the needed development rights. In either case, they paid an array of fees to obtain their rights.

Parliament

It is unclear when parliamentarians first sought the exclusive right to approve new development rights. De facto, they obtained such a right soon after the Glorious Revolution, when competition from royal patents ended.

The parliamentary committees

Once the only route to obtaining local development rights lay through Parliament, its private bills committees quickly emerged as the monopoly "sales force"

---

[2] The main sponsor of the Land Bank was not the Crown, as had been the case with the prerogative courts and Merchant Staplers.

[3] This section is based on Bogart and Richardson (2008) and Bogart (2010).

for such rights. Both backbench MPs and a specialized class of solicitors emerged to handle the booming business in private bills, for which proportional fees were collected (cf. Rydz 1979).

The challenge from royal charters

The challenge to Parliament's monopoly of assent in this market had come from the royal court, where courtiers offered to arrange royal patents in direct competition with MPs offering to shepherd private acts. This bifurcation in the market stunted its growth considerably, as entrepreneurs either purchased rights only from one source (and then feared predation by the other); or bore the double costs of buying both a royal patent and a private act.

The brokers' compensation

When brokers established their monopoly right to sell sovereign promises of a particular kind, they also established compensation schemes with three important features. First, individual brokers received fees roughly proportional to the value of the trades they brokered. Second, no broker could share in the fruits of promise repudiation. Third, no broker bore a share of the cost of promise performance. Thus, to the extent that market participants believed that brokers could not be suborned, they were well positioned to make a market.

Base compensation

Lawyers and judges both received fees proportional to the value of the litigation undertaken in the common law courts: "The usual scale was 6 s. 8 d. for every 100 marks claimed" (Encyclopedia Britannica, 11th edition, p. 848). The Bank of England's fees for bond flotations were also indexed to the total revenue secured.

MPs' compensations were more complex. Some MPs tried to extract "fees" in the platform-for-taxes trade. But the Crown was very unhappy with individual MPs' attempts to secure payment for their votes in support of supply. After the Glorious Revolution, new standing orders forbade anyone but a Minister to propose new charges upon the public funds, thereby greatly eroding backbenchers' ability to salt supply bills with payments for their votes (Todd 1867, v. I, pp. 428-29).

Instead of demanding a commission on the state's total tax revenues, unofficial MPs secured their own market in sovereign promises—namely, the trade of private bills in exchange for fees. Beginning in the 14th century (cf. Payling 2009, p. 78), Parliament established the principle that statutes were void without its assent and began crafting its own bills, usually at the behest of interested external parties. Many of these bills embodied sovereign promises to protect assets, rights or profits (Bogart and Richardson 2008; Bogart 2010).

If MPs could discover a private actor willing to pay, they classified a bill as "private" and extracted an array of fees (Rydz 1979, p. 3). Otherwise the bill was "public" and MPs' compensation depended on their being placed on boards of directors, offered shares of stock, or otherwise cut in on the deal.[4] In both cases, MPs' compensation was roughly proportional to the value of the legislation purchased.

While backbench and opposition MPs plied the waters of private and parochial legislation, Ministers took care of the platforms-for-taxes trade and it was they who effectively received a commission on the state's total tax revenues. I describe their rise to power below.

[4] See Broz and Grossman (2004) for a study of the Bank of England's parliamentary strategy; and Eggers and Hainmueller (2010) for a study of MPs' compensation in more recent times.

The fruits of repudiation

Brokers never had a legal right to share in the profits that the Crown might secure by reneging on its promises. If the Crown failed to enforce a court judgment, no solicitor had a right to get a portion of the cost savings. If the King decided not to carry out his war platform, and thereby freed up the taxes previously granted for that purpose, no MP had a right to get any tax money back. If the government refused to pay its debts, no banker had a right to share in the revenue gained by repudiation. If the Crown failed to enforce the terms of a private act conferring development rights, no individual MP or parliamentary solicitor had a legal right to share in the cost savings.

The cost of performance

Similarly, brokers never bore a legal share of the costs the Crown incurred in fulfilling its promises. The money used to pay for the enforcement of court judgments, to fight wars, to repay loans and to enforce development rights, had already been appropriated and was beyond the legal control of both the "sales force" (lawyers, tax collectors, bankers, parliamentary solicitors) and of individual MPs. The only way to claw back these appropriated funds would be to install a Ministry committed to such a claw-back.

Subornation

To the extent that the brokers enjoyed a durable monopoly and that their compensation depended strictly on the value of trade in the market, market participants should have been more willing to buy promises offered through the brokers than ones offered directly by the King. The whole system would collapse, however, if the King could suborn the brokers.

One strategy of subornation was individual—e.g., buying a single MP's vote, a single judge's decision, or a single banker's support. To stop the purchase of MPs' votes, Parliament enacted a string of bills to prevent the Crown from buying "influence" in constituencies and from offering MPs remunerative posts in the King's service.[5] To prevent the purchase of judicial decisions, judges were given lifetime tenure on good behavior (Bills of Rights 1689). To prevent the purchase of bankers' support, it sufficed that re-chartering depended more on parliamentary than on purely royal support.

Another royal strategy of subornation consisted of playing "divide and conquer" *within Parliament*. For example, the King could offer some package of public and private promises to one majority, in exchange for taxes, and then move on to an entirely new majority, as proved expedient. Parliamentarians erected a three-pronged defense against this threat of royal divide and conquer. First, they deterred individual vote buying, as described above. Second, they presented a united front, in the form of political parties.[6] Third, they removed the King's ability to control the legislative agenda, via the new system of ministerial responsibility (Cox 2011).

The manufacture of sovereign promises

Historically the last element to fall into place was securing the brokers' exclusive right to control the manufacture of sovereign promises, determining their content, volume, and price. In the rest of this section, I consider when English brokers secured exclusive control of the manufacture of writs, platforms, bonds and development rights. I also show that, when brokers secured such rights, their respective markets expanded

[5] Early students of this battle include Foord (1947) and Kemp (1957). Cox and Morgenstern (2001, pp. 185-6) review their findings.

[6] For a formal discussion of how disciplined parties can counteract divide and conquer strategies exercised through agenda power, see Dewan and Spirling 2010. On the development of political parties after the Revolution, see Hill 1976; Stasavage 2003.

greatly and relatively abruptly, both in terms of the aggregate value of trade and the variety of traded products. Important efficiency gains also accrued, in the form of more frequent efforts to trade and higher proportions of successful trades.

Lawyers and the manufacture of writs

Prior to the Assize of Clarendon (1166), Englishmen increasingly sought the King's help to protect themselves against unlawful dispossession, which had been a growing problem in the rough times of Stephen and Maud. The typical sequence (see van Caenegem 1973, pp. 34-39) was that A went to the King, paid the appropriate fees, talked persuasively about B's depredations, and with luck emerged with a writ that commanded B to surrender the land back to A. Unfortunately, B might then visit the King, pay the appropriate fees, talk persuasively about A's misleading account of events, and with luck emerge with a writ countermanding the previous writ. Such a sequence, among other things, lessened litigants' incentives to seek the King's protection in the first place.

The genius of Henry II's writ of novel disseisin, one of four major new writs introduced in 1166, was manifold. First, the price was fixed and moderate, whereas the price of a pre-Henrician writ was negotiated and as immoderate as the King could make it.

Second, one could purchase the promises through solicitors, who in turn bought them in a standardized exchange with the Chancery or Exchequer. In contrast, buying a pre-Henrician writ involved a personal visit to the King's court.

Third, buying the writ secured both a procedural promise (that a trial by jury would be held) and a conditional substantive promise (that the plaintiff's property

would be restored to him, if the evidence supported such an action). In contrast, buying a pre-Henrician writ conveyed an unconditional substantive promise of restoration.

Fourth, the procedural promise was virtually always performed. If one purchased a writ of novel disseisin, one really did get a jury trial. The King never had much incentive to renege on this promise because the jury was financed by a labor tax (jurors had to serve if called); the justices got their fees; and the King got more fees and fines when the process went forward, too. The standardization of the procedure, in turn, allowed one better to predict whether the substantive promise (about which one really cared) would be fulfilled.

Once Parliament had secured a monopoly of assent (1285), its veto further enhanced the credibility of the substantive promises embodied in writs. For, when new writs could be manufactured at royal pleasure, a valid writ might in principle be upended by a wholly new kind of writ, essentially putting the market back in the pre-Henrician dilemma in which writs failed because counter-writs were bought, lessening the incentive to make the initial purchase.

The post-1285 system of writ manufacture and sale had, in embryo, the main features of monopoly brokerage. The solicitors brokered the traffic in writs and were the main innovators of new writs, subject to both a royal and a parliamentary veto. That is, most new kinds of writ emerged on the initiative of litigants with clever lawyers. Once these elements of monopoly brokerage were in place, one observes a rapid increase in the aggregate value, variety, and efficiency of the trade in writs.

I know of no firm statistics on the total number of writs purchased. Nonetheless, van Caenegem (1973, ch. 2) makes clear that the number of writs sold expanded greatly after Henry's reforms.

The variety of writs also evolved rapidly. Whereas only four original writs existed in 1166, as the 13th century English jurist Henry de Bracton noted, "if some new wrong were perpetrated, then a new writ might be invented to meet it" (quoted in van Caenegem 1973, p. 54). Thus, by 1227 an early Register of Writs had 56 entries and "the number of writs was vastly expanded" by 1531, when the first printed version of the Register of Writs appeared (van Caenegem 1973, pp. 30, 117).

Finally, market efficiency undoubtedly increased. Those seeking pre-Henrician writs must often have left disappointed, having been unable to negotiate a mutually acceptable deal; and many more must have been deterred by the anticipation of high transaction costs and uncertain rewards. In contrast, standardized writs could always be purchased; their procedural rewards were quite certain; and their substantive rewards were estimable with some precision.

Ministers and the manufacture of platforms

In the earliest days, the King controlled the manufacture of platforms. He chose when to convene Parliament and his written summons stipulated the danger against which he promised protection and for which he demanded taxes. The speech from the throne further articulated the royal platform.

After the Glorious Revolution, a new breed of monopolist broker—Ministers—arose to manage the increased flow of Parliament-Crown trade (Cox 2011). The Ministry soon determined the content of the speech from the throne and, more generally, of the bills that embodied sovereign promises intended as bait for taxes. By the mid-1690s, the Ministry also controlled the construction of supply bills (cf. Hayton 2002, pp. 393, 425-26); and by 1707 the Ministry had a monopoly right to propose new expenditures to

Parliament. Once the Ministry controlled the manufacture of both platforms and supply bills, the value, variety and efficiency of trade surged.[7]

One can estimate the aggregate value of the taxes-for-platforms trade by the aggregate value of taxes granted. During the Restoration, notwithstanding the many improvements in tax *collection* (Roseveare 1991), tax *receipts* showed a shallow decline from 1665 to 1685, averaging £1.53 million. After the Glorious Revolution, tax receipts more than doubled the Restoration average by 1695 and tripled it by 1700 (O'Brien 1988, Table 2).

I have no evidence on the variety of platform promises. My conjecture, however, is that post-Revolution speeches from the throne should (controlling for war/peace) have become more varied—less reliant on war promises, and more reliant on legislative tax bait.

A key index of the efficiency of the taxes-for-platforms market is simply the frequency with which Parliament met.[8] By that index, the Revolution's effect is clear. In the decade before the Revolution, Parliament did not sit in six of the ten years 1680-89. In contrast, Parliament met in every year of the decade 1690-1699 and typically stayed in session for longer periods than it had under the Stuarts.

The efficiency of the taxes-for-platforms trade also increased, after the Ministry secured better control of supply bills. To wit, the success rate of supply bills increased,

---

[7] The market here involved MPs granting supply in exchange for the Crown's promise of future performance on its platform. The compensation of the brokers (Ministers) is less clear than in the other markets examined. First, the brokers' base compensation was not formally a commission on the tax and loan revenues they succeeded in getting Parliament to approve. Nonetheless, I assume that the value of their offices did increase proportionally to this revenue. Second, it is not so clear that the brokers could not enjoy the fruits of repudiation and bore no cost of performance. On the other hand, they could be removed at any time by a vote of censure.

[8] Early European Parliaments that refused to grant taxes—indicating that the sovereign's credibility problems were too great to overcome in that particular forum and time—were generally not called. The most famous exemplar of this logic—why convene a platform-for-tax assembly, if no trade could forseeably be arranged?—was the Estates General in France. But the logic, as noted by Major (1960), was more general.

from 47% in the first four post-Revolution sessions, to 71% in the first four sessions after the Ministry secured dominance on the drafting committees that crafted supply bills (Hayton 2002, pp. 393-4, 425-26). Thereafter, supply bills became even more predictable winners, reaching an 84% success rate in the sessions 1706-07 to 1714.

Bankers and the manufacture of bonds

A similar story can be told about sovereign bonds. When the King could unilaterally borrow—that is, sell sovereign promises to repay loans with interest—the voluntary market often failed and the King had to resort to forced loans.

When the Bank of England was created in 1694, the two sets of brokers (MPs and central bankers) controlled the manufacture of bonds. Indeed, after the system of ministerial responsibility was more firmly established in the next decade (on which see Cox 2011), the Crown could not even ask Parliament for new debt, except via the Ministry; and could not ask the public to buy bonds, except with parliamentary assent and via the Bank. The result was an explosion in the aggregate value, variety and efficiency of the bonds trade. [9]

England's long-term funded debt stood at zero from 1600-1693, and then increased to £1,200,000 in 1695, £4,100,000 in 1705, and £29,600,000 in 1715. Short-term debt, which had been roughly constant at £1,000,000 from the mid-1630s to the end of the Restoration, increased five-fold after the Revolution (cf. North and Weingast 1989, p. 822; Mitchell 1962, p. 401; Cox 2012).

[9] My prediction differs in both logic and content from North and Weingast (1989). They argue that parliament gained a veto over debt repudiation (p. 817), thus making debt safer, boosting the polity's access to credit, and lowering the price it paid. I argue that Parliament gained a veto over debt initiation, bankers gained a monopoly on bond flotation, and the two jointly controlled the content of bonds (interest rate, payment schedule, and so on), with all this leading to a larger, more efficient and more innovative market in sovereign debt.

The variety of products in the bond market increased, too. Indeed, in addition to the introduction of long-term funded debt, the first generation after the Revolution saw experimentation with a wide range of new bond types and debt securitization schemes (cf. Dickson 1967; Quinn 2008).

To assess the efficiency of the bond market, consider how often the Crown asked Parliament to co-sign loans but Parliament refused to do so. Before the Glorious Revolution, the Crown rarely succeeded in getting Parliament to authorize new debt, just as it rarely succeeded in getting it to authorize new taxes. Indeed, Cox (2012) shows that loans backed by Parliament equaled only about 5% of the King's annual tax income before the Revolution. The King typically sought purely royal loans directly from his subjects. Even then, he often had trouble finding any subjects willing to lend, whereupon he resorted to forced loans. Both unilateral royal borrowing and especially forced loans were symptoms of market failure. In the first decade after the Glorious Revolution, in contrast, parliamentary loans equaled almost 75% of the King's annual tax income (Cox 2012). Thus, especially after the grand bargain that gave birth to the Bank of England, Kings sought parliamentary backing for loans far more often and successfully than the Stuarts ever had.

MPs and the manufacture of private bills

Once royal patents were no longer available, the content of private bills delineating development rights was almost wholly controlled by Parliament. Moreover, Parliament delegated to its committees. Thus, backbench MPs and parliamentary solicitors had every incentive to improve the operation of the market from which they earned their fees.

The consequence of empowering the brokers was that the market for local development rights boomed. Bogart (2010, p. 25), exploiting a new and comprehensive database of investments in roads and rivers, reports as follows: "The difference in completed investment before and after the Glorious Revolution is striking. Approximately the same amount was completed in the fifteen years from 1695 to 1709 as in the previous 85 years from 1604 to 1688… [A]verage investment was £11,600 from 1689 to 1749 which is more than double the average of £5,000 from 1660 to 1688."

Complementing these data on total investments, Albert (1972, pp. 202-3) shows that the number of acts creating turnpike trusts was nil during every year of the Restoration save one; but that almost no year goes by without a turnpike act after the late 1690s (with the running average below five until mid-century). Examining the broader category of "acts pertaining to property rights," Bogart and Richardson (2008, p. 41) show the number of such acts increased sharply after the Revolution; while Bogart and Richardson (2010) focus particularly on estate acts.

As to the efficiency of trade, the MP-hours spent in committee—where the vast bulk of legislative action took place—increased greatly, indicating that the MPs, lobbyists and agents who attended those meetings expected successful bargaining. Hayton's (2002, p. 385) examination of all legislative initiatives—based on Hoppitt (1997)—shows a (slowly declining) decadal success rate at or below 30% throughout the Restoration, jumping to 44% in 1690-1700 and then to 59% in 1701-1715. MPs, with a little practice, doubled the chance of a legislative deal being done.

Monopoly brokerage as a limit on the state

In addition to their effects on the value and variety of trade, the institutions of monopoly brokerage constituted important limits on the state. In this section, I explain how they facilitated three distinct kinds of limit on executive action.

Parliament's veto

The first and most straightforward limits on Crown action were the exclusive rights of assent—or vetoes—that Parliament gained over the main revenues of the state. Once Parliament's veto was established, the Crown could not unilaterally establish new writs (opening new streams of fee revenue), new taxes, new loans, or new development rights. While the Crown sometimes sought to evade or redefine these constitutional limits, parliamentarians coordinated in their defense in increasingly effective ways. After the Glorious Revolution, none of these constitutional vetoes were seriously challenged.

Punishment by brokers

Another limit on the Crown took the form, not of prohibiting unilateral actions, but rather of raising the expected cost of repudiating sovereign promises. In this section, I consider in particular costs expected to arise from retaliation by the monopoly brokers.

Retaliation by the brokers depended on two considerations. First, would brokers disapprove of promise repudiation? Second, could brokers punish the Crown for such repudiation?

As regards the first question, the central elements of monopoly brokerage—that brokers received no benefit from promise repudiation, bore no cost of promise performance, and earned fees proportional to sales—helped to ensure their disapproval

of any promise repudiation. Thus, solicitors disliked failures to enforce legal judgments, because they depressed demand for writs; Ministers disliked failures to perform on platform promises, because they depressed demand for supply bills; bankers disliked failures to repay loans, because they depressed demand for bonds; and backbench MPs disliked failures to enforce the terms of private acts conferring development rights, because they depressed demand for private bills.

As regards brokers' ability to punish promise repudiation, two mechanisms allowed them to do so. First, everyone understood that votes in Parliament could translate into effective punishments of various sorts for Crown misbehavior. Thus, the legal and banking sectors worked hard to maintain a strong position in the House of Commons. Backbench MPs and parliamentary solicitors, here cast in the role of development brokers, had a strong presence in Parliament *ex officio*. Finally, the Ministry, cast in the role of tax brokers, had an even stronger presence, again *ex officio*.

Second, some brokers held an independent (non-parliamentary) power of punishment. In particular, bankers held a certain amount of funds destined for Crown coffers; and had a certain amount of discretion in forwarding those funds speedily or tardily (as noted by Dickson 1967, p. *).

Punishment by markets

It was not just the brokers who could punish the repudiation of sovereign promises, once the institutions of monopoly brokerage were set up. Even more importantly, the markets could. In particular, the secondary bond market acted to some extent as a prediction market in future tax revenues. Like a canary in a mine, bond prices on the secondary market could send an early warning signal to the Crown.

Sometimes the message might be relatively specific: "The bond market thinks you are going to lose the war with the current strategy." More generally, however, the message could be construed as: "The bond market thinks your taxpayers will never stand for that. If you continue on this course, you will face a tax revolt."

This ability of the bond markets to send an *immediate* signal of future tax revolts (which might be coordinated by parliamentarians and subordinate brokers) was new in English politics. Moreover, the bond market's ability to influence Crown action was much greater and more continuous than the electorate's, until well into the 19th century. It was greater because the Crown could manipulate elections more than it could manipulate the markets. It was more continuous because the electorate was guaranteed a voice only every seven years (after the Septennial Act 1715), while the markets could voice an opinion at any time.

The bond markets clearly influence governments today. James Carville's observation holds for many more polities than just the contemporary United States: "I used to think if there was reincarnation, I wanted to come back as the president or the pope or a .400 baseball hitter. But now I want to come back as the bond market. You can intimidate everybody." In the case of the English polity, one can date the emergence of the bond market as an important *political* actor to the Glorious Revolution.[10]

Conclusion

Besley (2006, p. 9) suggests that "the growth of government to its modern proportions," with the citizenry surrendering increasing revenues in exchange for an

[10] Other secondary markets in sovereign promises—e.g., the property market, the market for buying and selling turnpike roads, canals or railroads—were much slower-paced than the bond market; and were not tied so completely to anticipated future tax revenues.

increasing array of sovereign promises to provide services and goods, "may constitute a remarkable act of public trust." What makes this exchange remarkable are the ample opportunities governments have to act opportunistically, the enormous informational disadvantage under which ordinary citizens must labor, and the crudeness of elections as tools to control action. How could the market for the exchange of fees for promised justice, taxes for promised services, loans for promised repayment, and fees for promises embodied in private bills have grown so large?

In this paper, I have argued that the English repeatedly used institutions of monopoly brokerage to mediate trades between the sovereign, offering various promises of protection, and subjects, offering taxes, fees and loans. The central logic of these institutions was to ensure that the brokers had a monopoly and that their compensation was proportional to the aggregate value of trades undertaken, so that they combined the means and motive to facilitate trade. Some threats to this central logic were easily avoided: brokers never bore a legal share of the cost of promise fulfillment; and never had a legal right to any benefits of promise repudiation. Other threats were more difficult to manage: it took centuries to thwart the Crown's central strategy of divide and conquer, first by denying it the ability to erect competing institutions; then by denying it the ability to exploit shifting coalitions within the monopolist institutions.

Once set up in their mature form—which entailed the brokers seizing control of the manufacture of the promises that would be sold—the English institutions of monopoly brokerage sparked substantial growth in the state and, relatedly, constituted important limits on the state. Let's consider these two points at greater length.

The state grew in the sense that it sold more sovereign promises for more contributions of various sorts. Some of the contributions—such as the labor tax known

as jury duty and the fees paid directly to judges—did not generate revenue for the central state but instead paid costs that it might otherwise have borne. Other contributions—such as taxes and loans—did generate revenue for the central state. State growth, moreover, was abrupt, permanent and intimately tied to perfecting the institutions of monopoly brokerage (Cox 2012).

The institutions of monopoly brokerage also limited the state. Parliament gained veto power over the initiation of new revenue streams. Subordinate brokers had good incentives to disapprove and some ability to punish promise repudiation. And, once mass markets in sovereign promises existed, the state was limited by its anticipation of those markets withdrawing funds in reaction to promise repudiation.

References

Albert, W. 1972. *The Turnpike Road System in England, 1663-1840*. Cambridge: Cambridge University Press.

Barro, Robert. 1973. "The control of politicians: An economic model." *Public Choice* 14:19-42.

Barzel, Yoram. 1992. "Confiscation by the Ruler: The Rise and Fall of Jewish Lending in the Middle Ages." *Journal of Law and Economics*, Vol. 35, No. 1 (Apr., 1992), pp. 1-13.

Barzel, Yoram and Edgar Kiser. 2002. "Taxation and Voting Rights in Medieval England and France." *Rationality and Society* 14(4):473-507.

Bates, Robert, and Da-Hsiang Lien. 1985. "A Note on Taxation, Development, and Representative Government." *Politics and Society* 14(1):53-70.

Besley, Timothy. 2005. "Political Selection." *Journal of Economic Perspectives* 19(3):43-60.

Besley, Timothy. 2006. *Principled Agents? The Political Economy of Good Government*. Oxford: Oxford University Press.

Bogart, Dan. 2010. "Did the Glorious Revolution contribute to the transport revolution?" Unpublished typescript, University of California, Irvine.

Bogart, D. and Richardson, G. 2008. "Parliament and Property Rights in Industrializing Britain." Forthcoming Journal of Law and Economics.

Braddick, Michael. 1996. *The nerves of state*. Manchester: Manchester University Press.

Broz, J.L., and R. Grossman. 2004. "Paying for privilege: The political economy of Bank of England charters, 1694-1844." *Explorations in Economic History* 41:48-72.

Cheyney, E. P. 1897. *Translations and Reprints from the Original Sources of European History*, Vol. 1, No. 6. Philadelphia: University of Pennsylvania Press.

Cox, Gary W. 1987. *The Efficient Secret*. Cambridge: Cambridge University Press.

Cox, Gary W. 2011. "War, Moral Hazard and Ministerial Responsibility: England after the Glorious Revolution." *Journal of Economic History* 71(1):120-148.

Cox, Gary W. 2012. "Was the Glorious Revolution a Constitutional Watershed?" *Journal of Economic History* 72(3):567-600.

Cox, Gary W., and Scott Morgenstern. 2001. "Latin America's Reactive Assemblies and Proactive Presidents." *Comparative Politics* 33(2):171-190.

Dewan, Torun and Arthur Spirling. 2011. "Strategic Opposition and Government Cohesion in Westminster Democracies." *American Political Science Review* 105(2):337-358.

Dickson, P.G.M. 1967. *The Financial Revolution in England*. London: Macmillan.

Dixit, Avinash. 2009. "Governance institutions and economic activity." Delivered as the presidential address at the American Economic Association meetings on January 4, 2009.

Eggers, Andrew, and Jens Hainmueller. 2009. "MPs for Sale: Estimating Returns to Office in Post-War British Politics." *American Political Science Review* 103 (4):513-533.

Elton, G. R. 1986. *The Parliament of England, 1559-1581*. Cambridge: Cambridge University Press.

Ferejohn, John. 1986. "Incumbent performance and electoral control." *Public Choice* 50:5-25.

Foord, A.S. 1947. "The waning of the influence of the crown." *English Historical Review* 62(245):484-507.

Harris, Ron. 2000. *Industrializing English Law*. Cambridge: Cambridge University Press.

Hayton, D. W. 2002. *The House of Commons 1690-1715*. Cambridge: Cambridge University Press.

Hill, B. W. 1976. *The Growth of Parliamentary Parties 1689-1742*. Winchester: Allen and Unwin.

Jha, Saumitra. 2008. "Shares, coalition formation and political development: Evidence from seventeenth century England." Stanford Graduate School of Business, Research Paper No. 2005.

Kemp, Betty. 1957. *King and Commons, 1660-1832*. London: Macmillan.

Major, J. Russell. 1960. *Representative Institutions in Renaissance France, 1421–1559*. Madison: University of Wisconsin Press.

Marongiu, Antonio. 1968. *Medieval Parliaments: A Comparative Study*. London: Eyre and Spottiswoode.

Milgrom, Paul, Douglass North and Barry Weingast. 1990. “The role of institutions in the revival of trade: The law merchant, private judges and the Champagne fairs.” *Economics and Politics* 2(1):1-23.

Mitchell, B.R. 1962. *Abstract of British Historical Statistics*. Cambridge: Cambridge University Press.

Morrill, John Stephen. 1974. *Cheshire 1630-1660: county government and society during the English revolution*. Oxford: Oxford University Press.

Myerson, Roger. 2008. “The autocrat’s credibility problem and foundations of the constitutional state.” *American Political Science Review* 102(1):125-140.

North, Douglass. 1981. *Structure and Change in Economic History*. New York: Norton.

North, Douglass, and Barry Weingast. 1989. “Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century Britain.” *Journal of Economic History* 49(4): 803–32.

O’Brien, Patrick. 1988. “The political economy of British taxation, 1660-1815.” *Economic History Review* 2d series 41(1):1-32.

O’Brien, Patrick. 2001. “Fiscal exceptionalism: Great Britain and its European rivals from Civil War to Triumph at Trafalgar and Waterloo.” Working Paper No. 65/01. Department of Economic History, London School of Economics.

O’Brien, Patrick. 2005. “Fiscal and Financial Preconditions for the Rise of British Naval Hegemony 1485-1815.” Working Paper No. 91/05. Department of Economic History, London School of Economics.

Payling, Simon. 2009. “The House of Commons, 1307-1529.” In *A Short History of Parliament*, ed. Clyve Jones. Woodbridge: The Boydell Press.

Power, Eileen. 1942. *The Wool Trade In English Medieval History, Being The Ford Lectures*. London: Oxford University Press.

Pincus, Steve. 2009. *1688: The First Modern Revolution*. New Haven: Yale University Pess.

Quinn, Stephen. 2008. "Securitization of Sovereign Debt: Corporations as a Sovereign Debt Restructuring Mechanism in Britain, 1694 to 1750." Unpublished typescript, Texas Christian University.

Ramey, Garey, and Joel Watson. 2002. "Contractual intermediaries." *Journal of Law, Economics and Organization* 18(2):362-84.

Root, Hilton. 1989. "Tying the King's Hands: Credible Commitment and Royal Fiscal Policy During the Old Regime." *Rationality and Society* 1(2):240-58.

Roseveare, Henry. 1991. *The Financial Revolution: 1660-1760*. London: Longman.

Rydz, D.L. 1979. *The Parliamentary Agents*. London: Royal Historical Society.

Schumpeter, Joseph A. 1918[1954]. "The Crisis of the Tax State." In *International economic papers: Translations prepared for the International Economic Association*, ed. Allan Peacock et. al. New York: MacMillan.

Scott, William Robert. 1912. *The constitution and finance of English, Scottish and Irish joint-stock companies to 1720: Companies for foreign trade, colonization, fishing and mining*, Vol. 2. Cambridge: Cambridge University Press.

Stasavage, David. 2003. *Public Debt and the Birth of the Democratic State.* Cambridge: Cambridge University Press.

Stasavage, David. 2007. "Partisan politics and public debt: The importance of the 'Whig Supremacy' for Britain's financial revolution." European Review of Economic History 11:123-53.

Sussman, Nathan, and Yishay Yafeh. 2006. "Institutional reforms, financial developments and sovereign debt: Britain 1690-1790." Journal of Economic History 66(3):906-35.

Todd, Alpheus. 1867. *On parliamentary Government in England*. London: Longmans, Green and Co.

van Caenegem, R. C. 1973. *The Birth of the English Common Law*. Cambridge: Cambridge University Press.

Waugh, Scott L. 1991. *England in the Reign of Edward III*. Cambridge: Cambridge University Press.

Table 1: Institutions of monopoly brokerage in England

Type of promise sold; and revenue generated	Parliament's monopoly of assent	Subordinate's monopoly of the sale of sovereign promises	Parliament's monopoly of proposal
Writs; Fees of justice	Parliamentary assent to new writs required 1285-	Monopoly of sale of writs (and associated pleading) developed by the Inns of Court beginning 1390s, solidified 1590	?
Platforms; Taxes	Parliamentary assent to new taxes required 1340s-	Monopoly of collection of taxes (by state agencies): 1671-	Ministerial responsibility solidified this power (and delegated it to the Ministry)
Bonds; Loans	Parliamentary assent to new loans required 1693-	Monopoly of flotation of sovereign bonds developed by the Bank of England 1694-1708	Ministerial responsibility solidified this power (and delegated it to the Ministry)
Private bills; Fees for local development rights	Parliamentary assent for new development rights required 1690s-	Monopoly of "sale" of private bills conferred on parliamentary committees after 1689	After 1689