

# “I Intend therefore to Prorogue”: The Glorious Revolution and Conflict in Parliament

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## Abstract

This paper provides evidence that the Glorious Revolution improved parliament’s functioning by studying parliament’s passage of estate bills, a legislation that allowed land and resources to be used more efficiently. It documents that the monarchs suddenly prorogued, or ended, sessions of parliament at the end of the 17th century. When a session was prorogued, unfinished estate bills automatically failed. Econometric evidence shows estate bills were about 18 percentage points more likely to fail in these sessions. Conflicts in government and the monarch’s independence from parliament made this interference more likely under the late Stuarts, but not under William and Mary after the Glorious Revolution. The evidence is consistent with arguments that the Glorious Revolution resolved or changed the nature of key conflicts in government and that constitutional changes made the new monarchs more dependent on parliament. It provides new insight to how the Glorious Revolution was important for England’s economic development.

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# 1 Introduction

Scholars debate the role of political and institutional change in seventeenth-century England in its economic development. The debate has centered on whether or not changes with the Glorious Revolution in 1688 were in fact revolutionary and if there is evidence that property rights of private economic actors became more secure using the framework of North and Weingast (1989).<sup>1</sup> This paper studies a different aspect of political and institutional change that is also important for understanding England's economic development. Specifically, it analyzes how conflict in England's government hindered parliament's functioning at the end of the 17th century and provides evidence that changes with the Glorious Revolution were important for improving its functioning.

Functioning parliaments, and legislatures more generally, are important for understanding economic efficiency both in historical and modern societies.<sup>2</sup> They can contribute to economic efficiency through a variety of channels, such as guarding private property from expropriation by the monarch as conceptualized by North and Weingast (1989). A functioning parliament can also provide legislation that solves market failures. We know less about how England's parliament actually functioned or provided legislation that could contribute to economic efficiency during this important era of English economic history.<sup>3</sup> This paper examines how political conflict in government influenced the passage of an important economic legislation, so-called estate bills, under the late Stuarts and after the Glorious Revolution.

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<sup>1</sup>See Cox (2012) for a summary of the theoretical arguments as well as an overview of the evidence. Acemoglu, et. al. (2005), Dincecco (2011), and Bogart (2011) find evidence that the Glorious Revolution was important. Others, however, present evidence that there was little change in private economic actors' behavior. See, for example, Clark (1996). See Pincus and Robinson (2014) for an overview of the debate in the historiography on whether the constitutional changes were revolutionary or if they were a return to conservative principles. See Hoppit (2011), Bogart and Richardson (2011), and Hodgson (2016) for discussions of the Glorious Revolution and changing property rights in this era.

<sup>2</sup>See van Zanden et. al. (2012) for an overview of the historical development and rationale for parliaments across Europe from the 12th to the 18th century and evidence that active parliaments help explain urban economic growth. This is also related to work on the role of state capacity supporting economic activity in modern societies. For a historical perspective, see Dincecco (2011).

<sup>3</sup>Much of the historiography focuses on parliament and politics under the specific regimes or under James II and after the Glorious Revolution. In the historical literature, Harris (1993) is the only analysis of political change from the Restoration in 1660 to 1715. See Introduction for an overview and in particular pp. 1-3.

I study parliament's provision of estate bills for two reasons. First, they were a constituent service provided by parliament that were important for economic efficiency in England.<sup>4</sup> Estate Acts gave landholders and their families powers of selling, leasing, and mortgaging land, a key economic asset that was restricted by an inflexible, complex inheritance institution called the strict settlement.<sup>5</sup> The bills studied also clarified titles to land.<sup>6</sup> An Act passed in 1677, for example, was titled "An Act to enable the Sale of certain Lands in Winterborne Whitechurch in the County of Dorsett, lately belonging to Lawrence Squib Esquire, deceased."<sup>7</sup>

Second, the passage of estate bills serve as a good proxy for parliament's productivity and functioning because they were quantitatively important relative to other types of legislation.<sup>8</sup> Estate bills comprised a majority of personal legislation, which made up 42.9 percent of all bills from 1660 to 1688 and 48 percent of all bills from 1689 to 1714.<sup>9</sup> For comparison, there were 9 other "types" of legislation that made up the other half of parliament's legislative output. Examples of other types of bills include legislation regarding religion, armed services, and trade.<sup>10</sup>

Figure 1 plots the success rate of estate bills from parliament, and thus shows changes in its functioning, from 1660 to 1714. A "successful bill" passed through the entire legislative

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<sup>4</sup>As a constituent service, they are most similar to regulatory exceptions for geographic constituencies (Baron 1994). The bills had concentrated benefits for families, land markets, and Members of Parliament (MPs) representing those constituencies. The bills had diffuse costs, perhaps time costs of working on the legislation relative to more general legislative alternatives, to MPs. Historians and legal scholars have also noted similar patterns: the powers and rights granted were "unlikely to cause broad problems [...] as Maitland put it [...] 'A vast majority of statutes he would class rather as *privilegia* than as *leges*'" (Hoppit 1996).

<sup>5</sup>Estate Acts, or successful estate bills, and their provision lowered transaction costs of land conveyancing created by the *strict settlement*. See Bogart and Richardson (2009, 2011) on this argument. See also Bond (1964) on estate acts. On the strict settlement and the English system of inheritance, see Habakkuk (1965) and English and Saville (1983).

<sup>6</sup>I study a larger set of bills regarding property rights in land. I document below that a majority of the bills were estate bills. Clarification of ownership was important after political confiscations that were specific to this era. For example, few bills were introduced to restore or reclaim estates after Interregnum land confiscations as well as seek reparations at the Restoration in 1660. See Smith (1999), pg. 40-41 and Seaward (1988). For simplicity and consistency with other research, I refer to the set of bills analyzed here as estate bills.

<sup>7</sup>29 Cha. II, c. 24.

<sup>8</sup>Using this as a proxy also builds on and provides insight to the "activity index" of parliamentary meetings in van Zanden, et. al. (2012).

<sup>9</sup>Hoppit (1996), Table 3.

<sup>10</sup>*ibid.*

process: it was approved by the House of Commons, the House of Lords, and received the royal assent from the monarch to become an Act of Parliament. The era spanned the reigns of five different monarchs: Charles II (1660-85), James II (1685-8), William and Mary (1689-94), William III (1694-1702) and Anne (1702-14). The monarchs' reigns are marked by vertical lines. Gaps show years when parliament did not meet.

Several features of the data stand out. First, annual gaps in parliament's meeting begin in the middle of Charles II's reign. The gaps in parliamentary meetings become more frequent and increase at the end of his reign and for the entirety of James II's reign. There are no longer gaps in meetings after 1688. Second, the success rate of estate bills is highly variable from 1660 to 1688. There were three years parliament met but had no successful estate legislation and the average success rate is 40%. The average success rate of estate bills, however, show a shift after the Glorious Revolution in 1688. From 1688 to 1702, the success rate is about 70%. Most scholarship discusses the role of the the Glorious Revolution in establishing annual, frequent meetings of parliament, i.e. closing the gaps in the success rate. No research explicitly analyzes what drives the changes in the success rate.

**Figure 1:** Success Rate of Estate Bills: 1660-1702



Notes: Success rate for years sessions of parliament met. Gaps denote years when parliament did not meet. Vertical lines denote new monarch.

A main hypothesis from the historiography is that intense political conflict and instability in England's government during this era explains the low average success rate before 1688.<sup>11</sup> Specifically, the hypothesis is that political tensions and conflict would lead the monarch, who held broad legal powers over parliamentary meetings, to suddenly prorogue, or end, a session of parliament. When a session of parliament was prorogued, all bills that were still active in the legislative process automatically failed.

This paper presents new evidence that sudden prorogations hindered parliament's passage of estate bills and therefore functioning. I first collected and compiled a dataset on the "legislative life-cycle" of estate bills from the *Journals* of the two Houses.<sup>12</sup> The dataset includes the exact dates of each bill's progress through the intermediate stages of the legislative process; for example, when a bill was introduced, sent to committee, and received amendments in both Houses of Parliament. The data illustrate that the monarchs' sudden prorogation of parliament caused estate bills to fail.

Second, I analyze the effect of sudden prorogation on parliament's passage of estate bills using probit and OLS models of bill success. I create proxies for sessions that were suddenly prorogued from the monarch's speeches in parliament and historiographies. I control for alternative explanations that could have changed parliament's ability to pass bills over time, such as changes in England's state capacity or sessions meeting during war years. The new dataset on estate bills also allow me to include detailed observable bill-level variables, such as legal and landholder type, to help control for the effect of selection from unobserved bill-level characteristics. The evidence shows that estate bills were 17 to 20 percentage points less likely to succeed in sessions that were suddenly prorogued.

The monarch no longer suddenly prorogued sessions of parliament after 1690: evidence of what explains the immediate upward shift in the average success rate after 1688 in Figure 1. Last, I study the the role of the Glorious Revolution in this change. I draw on the his-

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<sup>11</sup>Hoppit (1996); Smith (1999).

<sup>12</sup>Work analyzing the legislative effectiveness of Members of Congress in the United States (1973-2014) uses similar data and, to my knowledge, coined the term legislative life-cycle. See [www.thelawmakers.org](http://www.thelawmakers.org) and Volden et al. (2013).

torical literature to create proxies for three political factors that summarize the political conflict and tensions of the era that likely led the monarch to suddenly prorogue sessions of parliament. The historiography suggests the monarch decided to prorogue sessions of parliament to influence and interfere with parliamentary proceedings unrelated to estate bills. The proceedings centered on three factors related to the crown-parliament relationship: (1) conflict that stopped the passage of revenue bills, (2) conflict in parliament with a monarch's policies, and (3) the monarch's independence from parliament. The coding simplifies internal political tensions, which were often related to the development and workings of political factions and parties in parliament to focus on the crown-parliament dimension. I use a bivariate probit model and 2SLS to show that the three factors positively predict sudden prorogations under Charles II and James II and have a null or different effect after the Glorious Revolution. I then draw on the historical and economic history literatures to discuss several specific changes that made proroguing sessions a less effective strategy for William and Mary.

The absence of sudden prorogations shortly after the Glorious Revolution shows how one political barrier to passing estate bills and parliament's operation was removed during the era, providing new evidence on the role of the Glorious Revolution in parliament's development. First, it complements work documenting and emphasizing that the onset of predictable and longer meetings of parliament was an important change that occurred with the Glorious Revolution.<sup>13</sup> The evidence in this paper shows that improvements in parliament's legislative operations was connected to the time parliament had to legislate as well as to crown-parliament politics. Second, it complements work focusing on the political and institutional changes with the Glorious Revolution that led to annual meetings of parliament.<sup>14</sup>

Last, and related to the literature above, the findings also present new evidence to a growing body of research that argues parliament and its operation is important for England's economic development.<sup>15</sup> Specifically, it provides insight to political changes that

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<sup>13</sup>Hoppit (1996, 2011).

<sup>14</sup>Randall (1916), Cox (2012), van Zanden, et. al. (2012), and Hodgson (2016).

<sup>15</sup>See Hoppit (1996, 1997, 2011), Bogart and Richardson (2009, 2010, 2011), Mokyr and Nye (2007),

allowed parliament to elastically provide estate and other Acts of Parliament to individuals, families, and communities to reorganize their property rights in England from 1700 to 1830 improving economic efficiency.<sup>16</sup>

## 2 Background

### 2.1 Crown in Parliament

The Triennial Act of 1664 broadened the monarch’s royal prerogatives that controlled parliamentary meetings.<sup>17</sup> *Parliaments* were called and dissolved, requiring general elections. A *session of parliament* formally began when the monarch called it and ended when the monarch decided to prorogue it. I focus on legislative activity in *sessions of parliament* in this paper because legislation had to be passed during single sessions. When the monarch prorogued, or ended, a session, any unfinished or still active bills automatically failed. The monarch’s decision to convene and prorogue a session in practice was not random but a function of two general factors: (1) the monarch’s independence from parliament and (2) political conflict in government.

First, both parliaments and sessions were generally called by the monarch to receive revenue. From 1660 to 1702, the monarchs had two main sources of revenue: hereditary revenues and parliamentary grants of revenue. Parliament settled hereditary or ordinary revenue on a monarch at the beginning of his or her reign. A monarch’s independence from parliament depended on his or her income from ordinary revenue as well as the terms of the ordinary revenue. Charles II and James II were granted ordinary revenues

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Cox (2012), and Hodgson (2016). From a comparative perspective, work by van Zanden, et al. (2012) has shown that frequently meeting parliaments were part of an institutional “Little Divergence” that is positively associated with regional economic growth across Europe from 1188 to 1789.

<sup>16</sup>Bogart and Richardson (2009, 2011). Predictable meetings of parliament could also have had an impact on demand after this period. The onset could alter families’ future expectations and release “pent-up demand” for personal acts that were not introduced because of uncertainty (Hoppit 1996, pg. 124).

<sup>17</sup>See Randall (1916) for an overview of the evolution of the monarchs’ legal powers over parliament in England. At the end of the 17th century, the royal prerogatives over parliament were still real powers. The Act of 1664 repealed the previous Triennial Act of 1641, which had a far more detailed and “vigorous wording” regarding the monarch’s powers. See Randall (1916), pp. 655-657, 663.

for life from indirect sources of customs and excise.<sup>18</sup> Parliament settled ordinary revenue on William and Mary after the Glorious Revolution, but significantly altered the terms after the first several sessions of the new reign. I discuss this further in Section 5. The second source of income were additional parliamentary grants that were often requested to fund war efforts. Both hereditary revenue bills and parliamentary grants of revenue, so-called supply or money bills, were legislated on during single sessions.

The monarch opened a session of parliament by making a speech in parliament and requesting revenues. Once convened, parliament as an organization had legislative, judicial, and administrative functions that were essential to the workings of the English state. While in session, parliament began legislating on the requested revenues and two other broad classifications of legislation. It worked on (1) private bills, for example estate bills, and (2) public bills, for example regarding religion and trade.<sup>19</sup> The House of Lords also took up their judicial functions as the highest appellate court and heard cases.

Parliament faced a problem when passing legislation because it did not have a preset or fixed amount of time to work. The monarch decided when to end a session, which was, in theory, unknown. Two broad patterns from the *Journals of the House of Lords* suggests parliament took strategic steps to pass estate bills with supply bills or other important public measures, when the monarch could be expected in parliament and perhaps prorogue the session. First, Table 1 shows there is a connection between supply and public measures and the day a session was prorogued. There were 38 sessions of parliament that met from 1660 to 1702. The monarchs approved at least one supply or public measure on the last day of 30 sessions. Important public measures were often in line with royal policies regarding military, law and order, and religion.<sup>20</sup> Columns (1)

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<sup>18</sup>Parliament first settled revenue from customs and excise on the monarch in 1660. It was an important change in the transition from the demesne state to the modern state because it was done in exchange for abolishing the Court of Wards, a last source of feudal income for the monarch. See Ogg (1962) and Braddick (1996). Examples of direct sources of revenue are taxes on land or people. See Ogg (1962), ch. 12 for an overview of the methods of parliamentary taxation.

<sup>19</sup>See Hoppit (1996) for an overview of different types of parliamentary legislation as well as Tables 3 and 4 for general patterns in content during this era.

<sup>20</sup>For example, under Charles II, parliament passed measures on the Royal Navy and regulating meetings of catholics (or conventicles). See ‘House of Lords Journal Volume 11: 17 May 1664’, in *Journal of the House of Lords: Volume 11, 1660-1666* (London, 1767-1830), pp. 619-621. British History Online [accessed May 2017]. Under William and Mary, parliament had passed legislation authorizing Queen



and (2) show the distribution of this activity under the four reigns. The 8 sessions that were prorogued without a supply or public measure occurred under Charles II and James II. The patterns show that changes on this dimension of crown parliament politics with the Glorious Revolution were important to the time parliament had to legislate. I these further analyze in detail in Section 5.

The patterns suggest that parliament could expect the session to end when a supply bill or public measure was passed. Historians have noted that parliament used their power of supply in a strategy known as “redress before supply” where parliament presented its grievances to the monarch, expecting redress, and not passing a supply bill until the grievances were acknowledged or remedied. They could also use the strategy to pass other bills. This was a tactic acknowledged by Charles II, James II, and William.<sup>21</sup>

The second set of evidence in Table 1 shows that parliament had estate bills ready for the royal assent when the monarch came to parliament to approve supply and public bills.<sup>22</sup> There is a correlation between time parliament had to legislation and how often the monarch approved estate bills. Sessions under Charles II were shorter and he also came to parliament about once a session to pass estate bills. Under William and Mary and William III, sessions were longer and they came to parliament to pass estate bills more often (columns (2) and (3)). Columns (4)-(6) show that the four monarchs gave the royal assent to estate bills at the same time as supply or public bills. For example, Charles II came to parliament 27 times to sign estate bills during his reign. There were 19 days when he approved of supply bills and estate bills. There were 7 days he signed only public bills and estate bills. While it may not have been part of the strategy of “redress before supply”, the evidence in Table 1 and Figure 3, shown next in Section 2.2, shows

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Mary to run the government when William left England to fight wars. See ‘House of Lords Journal Volume 14: 20 May 1690’, in *Journal of the House of Lords: Volume 14, 1685-1691* (London, 1767-1830), pp. 503-504. British History Online [accessed May 2017].

<sup>21</sup>Three of the monarch’s are recorded as criticizing this strategy. See Smith (1999), pg. 60; James II’s speech on 22 May 1685 in the *Journal of the House of Lords: Volume 14, 1685-1691* (London, 1767-1830), pp. 9-12, and Horwitz (1977), pg. 42.

<sup>22</sup>The types of legislation were identified from the *Journals* because there were different phrases of approval from Norman French that were used for three types of legislation. For supply bills: *La Roy [or Reine] remercie ses bons Subjects [or Clergy], accepte leur Benevolence, et ainsi le veult*; public bills: *La Roy [or Reine] le veult*; private bills: *Soit fait come il est desiré*.

parliament took strategic steps to pass estate bills with supply bills or other important public measures.

**Table 1:** Royal Assent: Estate Bills & Supply

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	sessions	prorogue & RA supply, public	avg # days per session	avg. # RA days, per session	given RA on estate bill		
					# days RA, estate	# days RA, supply & estate	# days RA public & estate
Charles II	23	16	96.9	1.2	27	19	7
James II	1	1	57	2	2	2	0
William & Mary	7	7	135.7	4	28	24	4
William III	8	8	159.6	3.27	27	22	4

Source: *Journals of the House of Lords*. Author's calculations. RA: Royal Assent, days when monarch (or royal commission) gave assent to bills and became Acts of Parliament.

Historians have noted that the strategy of redress before supply was not always effective.<sup>23</sup> In particular, conflict and debates in parliament could make the monarch more likely to directly interfere or influence parliamentary proceedings by suddenly proroguing the session.<sup>24</sup> Hoppit (1996) hypothesizes that, in general, political tensions led to the “sudden and unexpected end of a session” that killed bills, such as estate bills, which otherwise would have passed.<sup>25</sup>

The monarchs’ speeches in parliament are illustrative. Charles II, for example, admonished the House of Commons when he suddenly prorogued the sixteenth session of parliament and explained his reasoning to the House of Lords:

I have received an Address of such a Nature from the House of Commons, as I cannot but resent very highly, from the ill Consequences I have lived to see from such Addresses. *I intend therefore to prorogue* them for some short Time, in Hopes they will consider better what they ought to do at their Return. I have chosen to tell this to you first, because I would have you know I am very well satisfied with the dutiful Behaviour of this House; and you will by that Time be more enabled to give Me your Advice.<sup>26</sup>

<sup>23</sup>See, for example, Smith (1999) pg. 61.

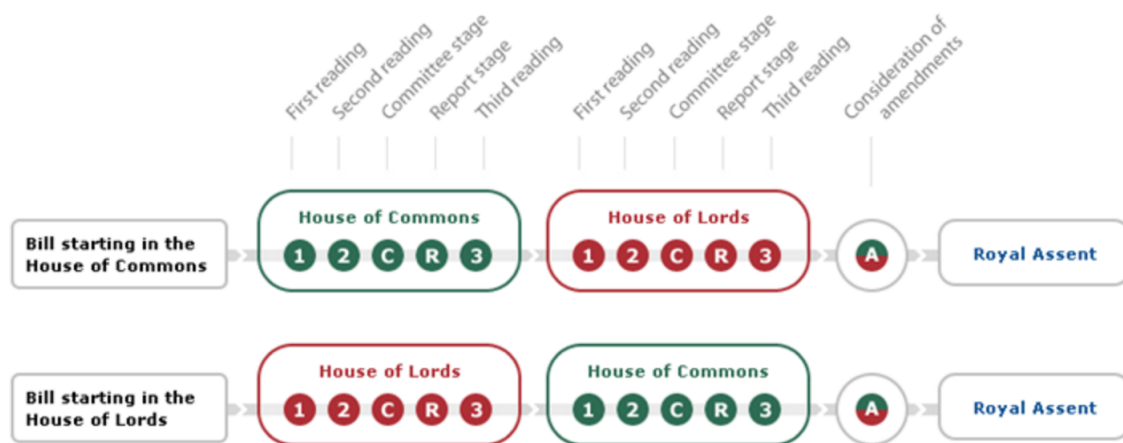
<sup>24</sup>The monarchs could also use their ministers and patronage to influence MPs and peers (Harris 1993).  
<sup>25</sup>p. 113.

<sup>26</sup>Emphasis added. ‘House of Lords Journal Volume 13: 13 May 1678’, in *Journal of the House of Lords: Volume 13, 1675-1681* (London, 1767-1830), pp. 219-220 [accessed February 2016].

## 2.2 Impact of Sudden Prorogations

Political conflict had a measureable impact on parliament’s legislative functioning, in particular on the passage of estate bills. Once convened, parliament also received petitions for and introduced estate bills. The process of passing estate bills was multi-layered, requiring attention and approval by both Houses of Parliament. The process allowed for input from interested parties at various stages of the legislative process. It is summarized in Figure 2.

**Figure 2:** Legislative Process



Source: <http://www.parliament.uk/about/how/laws/passage-bill/>

The legislative process formally has 12-steps and represents a joint decision by the legislature and executive. During this era, estate bills could enter in either the House of Commons or the House of Lords but the method of approval was identical in both Houses. After a first and second public reading in the first house, a bill was sent to committee, where the committee would hear all concerned parties and make amendments (stages 1-3). It was then reported on from committee and amendments could be made. After a third public reading, the bill was approved by first house (stages 4-5) and was sent to the second house for a similar process (stages 6-10). Any amendments made in the second house would be approved by the first house (stage 11). After the legislature’s approval, a bill received the royal assent from the monarch to become an Act of Parliament (stage 12). The monarch could also withhold the royal assent and veto the bill, which was only

done 4 times on estate bills during this era.<sup>27</sup>

The *Journals of the House of Commons* and *Journals of the House of Lords* record the date and relevant information for each estate bill's progress in the successive stages.<sup>28</sup> Entries were collected and entered into a spreadsheet. Theoretically each bill could have 12 separate entries reflecting the 12 stages. Parliament often combined several of the stages for estate bills, resulting in 10 potential entries in the dataset. Bills that were successful and became an Act of Parliament have 10 entries.<sup>29</sup> Each cell or entry thus records the stage of the process. It also contains information on house of origin, committee members, the reporter from committee, if amendments were made or if a vote was held.

Bills could fail for various reasons. Parliament could reject estate bills, possibly because a bill did not meet legal standards.<sup>30</sup> The *Journals* sometimes record if a bill was outright rejected, failed by a vote, as well as if a petition or counsel were heard on a bill. A bill could also fail by veto.

Figure 3 shows estate bills' "legislative life-cycle" in a session of parliament under William III that was not suddenly prorogued. The figure plots the stage of the legislative life-cycle (1-10) as a function of the ordered days in the session. Stage 1 is when a bill was introduced; Stage 5 is when the bill was sent to the second house. Stages 2 and 7 are when the bill was sent to committee in either of the two Houses. Stage 10 is when the bill received the royal assent. An estate bill's progress in a session of parliament over time is represented as a line (its "legislative path") with the slope showing how quickly parliament passed a bill. Acts of Parliament, successful bills, reached stage 10 and are full lines. The failed bills have shorter paths and are also marked by bold lines. Solid lines entered in the House of Commons; dashed lines entered in the House of Lords.

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<sup>27</sup>See Hoppit (1996, 1997) for additional information on parliament's passage of bills and Bogart and Richardson (2009) for parliament's passage of estate bills in particular.

<sup>28</sup>From 1660 to 1699, both *Journals* are available online at British History Online (BHO) (<http://www.british-history.ac.uk/>). From 1699 to 1702, the *Journals of the House of Lords* are available at BHO; the *Journals of the House of Commons* are available through U.K. Parliamentary Papers.

<sup>29</sup>Some Acts have missing entries. I assume these steps to have occurred since entries are recorded for later steps in the legislative process. The four estate bills that were vetoed also have 10 entries.

<sup>30</sup>There is currently no work discussing why MPs would reject estate bills in general. Several historiographies discuss the politics and failure of specific estate bills. See for example Seaward (1988).

Figure 3 complements the information in Table 1. The session met for about 200 days but estate bills moved relatively quickly through parliament, with few bills taking the entire session to be passed. Estate bills were given the royal assent on 5 days during the session, on each of those days William III also signed at least one supply bill or an important public measure.<sup>31</sup> Table 2 summarizes information on the failed bills. It includes each bill's reference name, its house of origin, the stage in which it failed, the date of failure, the reason the bill failed if recorded by the *Journals*, as well as if the bill became an Act in a later session. Parliament rejected the failed bills (bold lines in Figure 3). A rejection is one where the *Journals* explicitly record the reason for bill failure. About 85% were rejected or have evidence of political and legal influence (e.g. a petition or counsel was heard).

Figure 4 shows the same information as Figure 3, but for a session of parliament that was suddenly prorogued under Charles II. Comparing Figures 3 and 4 summarizes how sudden prorogation impacted the passage of estate bills. The session suddenly prorogued was shorter, meeting for about 40 days (Figure 4). Fewer bills entered parliament than in the normal session, but at least two were legislated on quickly enough to be passed before the end of the session. It may seem puzzling that two bills (marked with an x) were introduced during the last few days of the session, when there was presumably not be enough time to pass the entire legislative process. The evidence shows that the end of the session was suddenly decided by the monarch. The decision spilled over onto parliament's passage of estate bills: cutting short parliament's time but causing estate bills to fail.

Charles II's decision to suddenly prorogue the session was a function of political tension and conflict, demonstrating the interactions between the two Houses, growing factions and parties, and how conflict could disrupt revenue bills, leading the monarch to interfere with the proceedings of the session. Charles II had asked for further revenues at the beginning of the session in October 1675, but divisions between the nascent Court and

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<sup>31</sup>The one day he did not sign a supply bill, January 11, 1697, William signed a bill for the prosecution of individuals after the Assassination Plot of 1696 was discovered.

Country parties led to a vote against grant the requested revenue in supply, opting for a lesser sum and on less favorable terms to Charles II.<sup>32</sup> The Commons instead discussed their grievances. The “pretext for prorogation” came from a revival in heated debate between the House of Commons and the House of Lords over the court case *Shirley v. Fagg*, which also detracted from advancing additional supply bills.<sup>33</sup> Charles II prorogued the session on November 22, 1675. He made no speech and parliament was prorogued for the unprecedented period of fifteen months.

If a session of parliament was suddenly prorogued, then we can expect there to be less evidence of parliament rejecting bills as we saw in Table 2. Table 3 shows that no bill is recorded as being rejected, but the eight failed bills were still active when the session was suddenly prorogued.<sup>34</sup> I interpret the evidence in Table 3 as evidence that the bills failed during this session because of the sudden prorogation by Charles II. The evidence in Table 3 also illustrates that this specific sudden prorogation did not have a permanent effect on failed bills: 75% of the failed bills became Acts over the next two sessions.

The decision to prorogue a session was often done to directly influence and interrupt parliamentary proceedings. In particular, sudden prorogation interrupted parliament’s legislative or administrative initiatives when they conflicted with the monarch’s revenue bills and conflicted with the monarch’s other “policies” or interests. Monarchs were aware that a sudden prorogation would have real effects on parliament’s legislative output.<sup>35</sup> Regarding estate bills, however, the evidence from the *Journals* and historical literatures provides little evidence to suggest it was done intentionally to end the estate bills themselves. As figure 4 shows, estate bills could receive the royal assent when the monarch came to prorogue the session, even if it was sudden.

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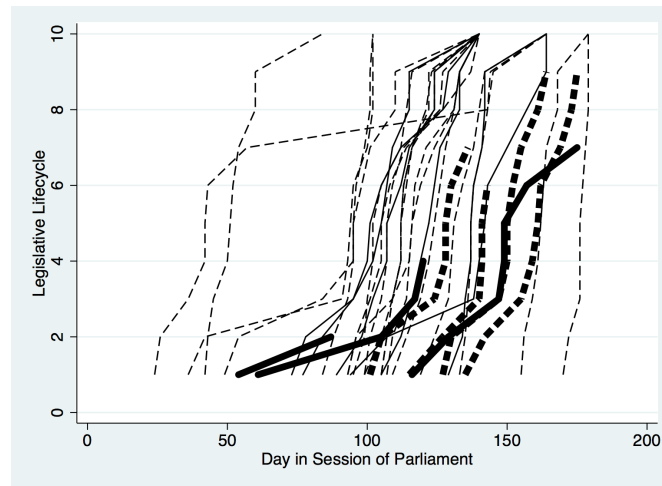
<sup>32</sup>Ogg (1962), pg. 535.

<sup>33</sup>The court case raised constitutional issues regarding MPs’ rights. The peers, as the highest appellate court in England, were deciding if an MP could be tried in court while serving as an elected official. The Commons vigorously defended this right. See Ogg (1962), pg. 536.

<sup>34</sup>The data show that the *Journals* do not record a reason for failure for 38% of bills while 62% were in committee. The committee stage is where petitions were often sent and counsel was heard on a bill’s content. If a bill was rejected in committee, then it would not be reported in the *Journals*.

<sup>35</sup>Upon suddenly proroguing a session, Charles II noted in his speech: “It is with great Unwillingness that I make Use of this Expedient; having always intended an Adjournment, for the preserving of such Bills as were unfinished’ (‘House of Lords Journal Volume 12: 9 June 1675’, in *Journal of the House of Lords: Volume 12, 1666-1675* (London, 1767-1830), pp. 728-729. British History Online).

**Figure 3:** Normal Session, Session 33 (20 October 1696 - 16 April 1697)



Source: Journals. Solid lines - entered in HoC. Dashed lines - entered in HoL.

**Table 2:** Reason for Failure, Session 33 (20 October 1696 - 16 April 1697)

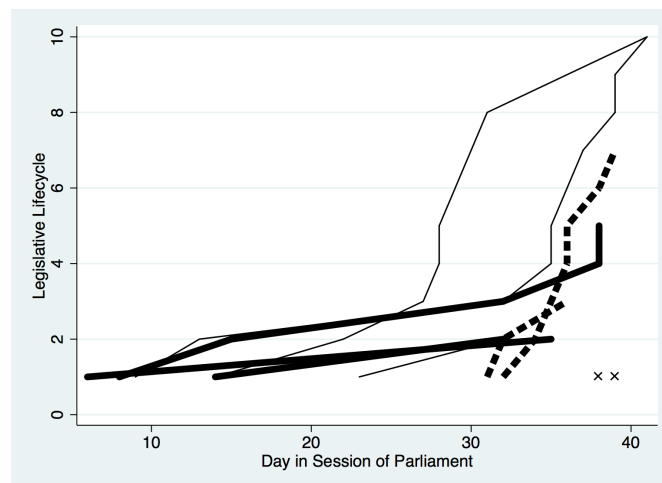
name	origin	stage	date	reason failed	future Act? - session passed
Courtney's Estate	C	H1 - comm	14/1/1697	pet to comm	no
Stopford's Estates	C	H1 - 3rd R	16/2/1697	pass neg	no
Knott's Estate	L	H2 - 2nd R	27/2/1697	pet & rejected	yes - 34
Cock's Estate	L	H2 - 1st R	11/3/1697	still active	no
Warburton's Estate	L	H2 - 3rd R	1/4/1697	pass neg	no
Moyle's Estate	L	H2 - comm	12/4/1697	still active - in comm	no
Lord Fairfax's Estate	C	H2 - 2nd R	13/4/1697	counsel to full house	no

Source: Journals. Reason failed is as recorded in the Journals.

Future Act records if bill became an Act of Parliament in a later session and the specific session it was passed.

Sessions are numbered from the restoration of the monarchy.

**Figure 4:** Sudden Prorogation in Session 15 (13 October 1675 - 22 November 1675)



Source: Journals. Solid lines and Xs - entered in HoC. Dashed lines - entered in HoL.

**Table 3:** Reason for Failure, Session 15 (13 October 1675 - 22 November 1675)

name	origin	stage	date	reason failed	future Act? - session passed
Robinson's Estate	C	H1 - comm	13/11/1675	still active - in comm	no
Barkley's Estate	C	H1 - comm	13/11/1675	still active - in comm	yes-16
Henry Marchant's Estate	C	H1 - comm	16/11/1675	still active - in comm	no
Squib, Laurence, Estate	L	H1 - report/re-comm.	17/11/1675	still active - re-comm	yes-16
Lord Kilmorey's Estate	C	H1 to H2	19/11/1675	still active	yes-16
Lord Cullen's Estate	C	H1 - 1st R	19/11/1675	still active	yes-16
Plater's Estate	C	H1 - 1st R	20/11/1675	still active	yes-17
Lord Maynard's Estate	L	H2 - comm	20/11/1675	still active - in comm	yes-16

*Source: Journals.* Reason failed is as recorded in the *Journals*.

Future Act records if bill became an Act of Parliament in a later session and the specific session it was passed.

Sessions are numbered from the restoration of the monarchy.

## 3 Data

### 3.1 Estate Bills

I analyze the effect of sudden prorogation on estate bill success using a dataset on estate bills. I compiled the population of bills from a dataset of failed bills (Hoppit 1997) and a dataset of Acts of Parliament (Bogart and Richardson 2010). I then used the *Journals of the House of Commons* and *Journals of the House of Lords* to collect entries for each bill in the legislative process. The final dataset includes information on bill characteristics, such as bill type and landholder type, and information on each bill's legislative life-cycle. Bill and landholder types were coded from a bill's first entry.

Table 4 shows summary information on estate bills. The main outcome to be explained is bill success from a session of parliament. From 1660 to 1702, bills were mostly successful (Panel A of Table 4), but Figure 1 shows how success varied under each monarch and improved markedly after 1688. Estate bills could fail because they were rejected by parliament as shown in Table 2 or could still be active at the end of the session as shown in Table 3. The records indicate that parliament rejected 26% of failed bills (Panel B). I do not attempt to explain why parliament rejected bills in this paper, although it is an important area for future work that may provide insight to English political and legal history. My focus is on the fact that more bills were technically still active when the session ended, and thus failed during this era for no recorded reason in the *Journals*.

The patterns from the data suggest that factors other than sudden prorogation may



**Table 4:** Failed Bills and Acts of Parliament, 1660-1702

Panel A: Total Failures and Acts		
	Number	% of Total
Failed	321	33.6
Act	633	66.3
Total	954	
Panel B: Reason for Failure		
	Number	% of Failed
No Reason	120	37.2
In Committee	105	32.6
Rejection	83	25.7
Panel C: Bills with Petitions		
	Number	% of Total
Failed	55	17.1
Act of Parliament	86	13.6
Total	141	14.7
Panel D: House of Origin		
House of Commons		
	Number	% of Total
Failed	201	21.0
Act of Parliament	262	27.4
Total	463	48.4
House of Lords		
Failed	120	12.6
Act of Parliament	371	38.8
Total	491	51.5

*Source:* see text.

have influenced parliament's passage of estate bills, complementary to the evidence on rejection in Panel B. Panel C of Table 4 shows information on the private costs of bills. As a type of constituent service legislation, theory predicts that estate bills generate little influence activity, like lobbying.<sup>36</sup> We could, however, expect bills with higher or more concentrated private benefits or costs to generate more petitions influencing the content of the legislation or the bill outcome. About 15 percent of all estate bills had at least one petition regarding its content. This is likely an understatement because petitions by family members or other interested parties could be reported in committee but were not recorded in the *Journals*. The descriptive evidence suggests that petitions may have played a role in bill success or failure because more failed bills had at least one petition on them (17.1%).

The patterns also suggest that bills were introduced non-randomly into parliament. Approximately the same number of bills entered the House of Commons and House of Lords (Panel D of Table 4). The House of Lords would eventually become the only house of

<sup>36</sup>Baron (1994).

entry after a series of standing orders were issued at the beginning of Queen Anne's reign, but it has typically been thought that most or all estate bills entered through House of Lords for this period as well.<sup>37</sup> Bills that entered the House of Lords were also more successful, potential evidence of selection by landholders' ranking into the two Houses or better organization in the House of Lords, which had fewer members.<sup>38</sup> It could also be that bills introduced in House of Lords represent better quality bills or more connected and powerful families. Figure 8 in Appendix Section A.2 shows more nobility and clergy entered into the House of Lords. Including information on estate bills' house of origin will help control for other unobservable factors, like resources or connections, influencing bill success and failure.

Figures 6-10 in the Appendix Section A.2 present summary information on bill and landholder characteristics that were coded from a bill's first entry. For example, a bill was read for the first time in the House of Lords on February 22, 1677 with the title: "An Act to enable the Sale of certain Lands in Winterborne Whitechurch in the County of Dorsett, lately belonging to Lawrence Squib Esquire, deceased."<sup>39</sup> This is coded as naming an esquire and an estate bill specifically to sell land. The main patterns from the coding show that most bills (60%) named a member of the gentry (knight, baronet, esquire, gentleman, dame) and confirms that most bills (85%) were estate bills. Further details and discussion on bill characteristics are found in Appendix Section A.2.

In the session that was suddenly prorogued, Table 3 shows most of the bills failed would eventually be passed and become an Act of Parliament. The bills were not necessarily independent observations across time, i.e. bills can be thought of as "projects." A project is defined as a bill entering in more than one session and where the bill type and landholder's name were an exact match. Details are in Appendix Section A.1. A project could have one of four outcomes: (1) fail after one attempt, (2) fail after multiple attempts, (3) succeed after one attempt, and (4) succeed after multiple attempts. Table 9 in Appendix

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<sup>37</sup>On procedure of passing bills see William (1948).

<sup>38</sup>Hoppit (1997).

<sup>39</sup>'House of Lords Journal Volume 13: 22 February 1677', in *Journal of the House of Lords: Volume 13, 1675-1681* (London, 1767-1830), pp. 49-51. British History Online <http://www.british-history.ac.uk/lords-jrnl/vol13/pp49-51> [accessed January 2017].

Section A.2 presents the number of projects that have these different outcomes. There were 833 projects (as opposed to 954 bills). Most of the projects (68%) succeeded in their first and only session of parliament. Most projects that ultimately failed did so in their first and only session of parliament. In the analysis below I include controls for bills that entered in multiple sessions. Table 10 in Appendix Section A.2 presents descriptive evidence that bills experienced a delay to passage by several years if they entered in sessions that were suddenly prorogued.

### 3.2 Political Variables

The main variable of interest is the monarch’s decision to suddenly prorogue a session of parliament. I used the *Journals of the House of Lords* and the historical literature to identify which sessions were suddenly prorogued. The *Journals of the House of Lords* record the monarch’s speeches given at the end of every session. The content of the speeches sometimes reflects that the decision was sudden and also the conflict that occurred during the session. I also read detailed historiographies of each session, found in Ogg (1962) and Horwitz (1977), to identify if the session was suddenly prorogued by the monarch.<sup>40</sup>

The historiographies’ description of “prorogation events” is stark. For a session meeting under Charles II, for example, Ogg (1962) describes the prorogation as “suddenly interrupting” the proceedings.<sup>41</sup> For a session meeting during the Exclusion Crisis, the Black Rod’s “ominous tap at the door” signaled the monarch’s decision.<sup>42</sup> Horwitz (1977) describes that “the actual prorogation [of the second session under William and Mary] came as a surprise.”<sup>43</sup> The coding and data appendix with references to the historical text is available from the author. The monarch’s speeches in parliament on the last day

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<sup>40</sup>Ogg (1962) gives a summary of the events in each session under Charles II from 1665 to 1681. Horwitz (1977) does the same from 1688 to 1702. Both include information on the main issues in each session as well as the proximate reasons why and how the monarch ended each session with a brief description of the prorogation event. For James II, I used his speeches recorded in the *Journals of the House of Lords* and Smith (1999).

<sup>41</sup>pg. 590.

<sup>42</sup>pg. 606.

<sup>43</sup>pg. 43.

of a session, as was seen in Section 2.1, were also used.

Figure 5 shows years in which there was a sudden prorogation of a session relative to the success rate of estate bills. There is a higher concentration of sessions that were suddenly prorogued prior to and immediately after the Glorious Revolution in 1688, capturing the period of growing political instability after 1665 under Charles II through the first few sessions of William and Mary's new reign. Sudden prorogations no longer occurred after 1690.

A second political variable of interest related to the political tensions of the era is conflict between the two Houses of Parliament. As was seen above with the court case *Shirley v. Fagg*, conflict between the two Houses may have hindered parliament's functioning. The main idea is that the general conflict between the two Houses could cause congestion of or deliberate blocking of legislation.

The political variables are summarized in Table 5. All political variables are measured at the session level. The descriptive evidence is illustrative of the impact that conflict had through the monarch's power of prorogation in making parliamentary meetings shorter. Forty percent of sessions were suddenly prorogued, but only 17% of estate bills were introduced during these sessions. Fewer bills entering could be evidence of selection or a function of shorter meetings.

Panel B of Table 5 summarizes three additional political variables that could have influenced parliament's passage of estate bills over time. First, the time parliament had to legislate is a main alternative factor hypothesized to influence estate bill success. Figure 12 in the Appendix shows that sessions that were suddenly prorogued were shorter on average, meeting for about 74 days compared to 130 days in normal sessions. Figure 3 shows few estate bills required an entire session to be passed. Time could be important to parliament's ability to pass a greater quantity of estate bills and improve its success rate.

Second, sessions meeting during war years could have made parliament more effective or less effective depending on the support for the specific war effort. A near majority of

sessions met while England was at war (40%). The influence of war on estate bill success could be positive or negative and also correlate with the monarch's decision to end a session. For example, the need for resources could influence the monarch's decision to keep a session open longer, giving parliament more time to legislate on estate bills.

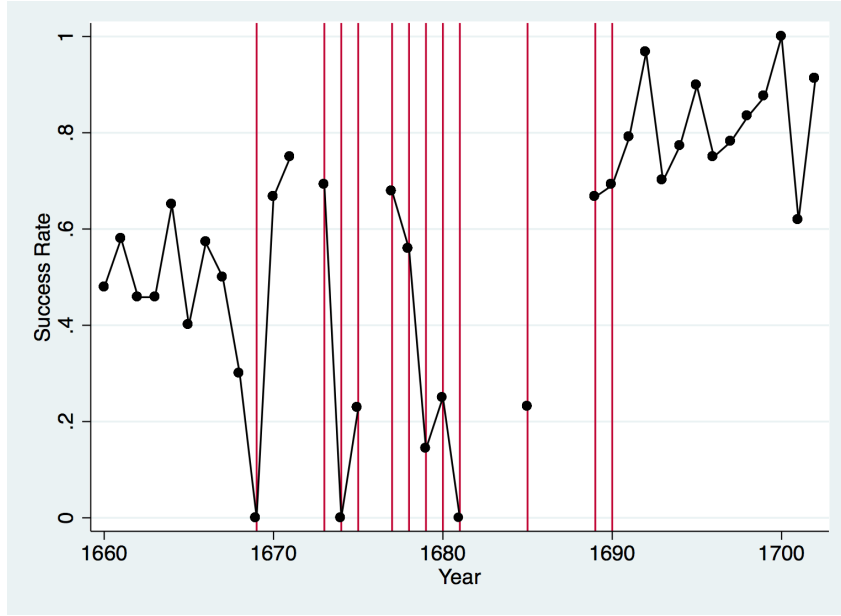
Last, important changes in England's fiscal capacity could also account for changes in its legislative functioning. The government altered its fiscal institutions, improving both the bargaining position of parliament relative to the monarch as well as its state and fiscal capacity.<sup>44</sup> I use the government deficit ratio from Dincecco (2011) to proxy for changes in state and fiscal capacity. It will account for changes in parliament's fiscal prudence and also capture relative improvements in its ability to collect revenues. Improving fiscal prudence could also improve parliament's organization or administration and thus parliament's organizational capacity to pass estate bills. The deficit ratio series is measured at yearly intervals rather than by session of parliament. To account for the discrepancy, I used the corresponding year observation for sessions of parliament meeting only once during a single year. I took the simple average of the yearly data for sessions of parliament spanning multiple years.

Table 10 in the Appendix Section A.2 shows the difference in success rates of sessions that were suddenly prorogued compared to those that were normal. On average sessions that were suddenly prorogued had a 44% success rate while normal or non-sudden prorogue had a 71% success rate. The patterns also show differences when thinking of bills as projects: a project first entering in a session that was suddenly prorogued was less likely to succeed than if it had entered into a normal session (65% to 78%). If the project was re-introduced, it would have a greater likelihood of success (79% to 66%). Bills entering or projects first entering in sessions that were suddenly prorogued and were eventually successful were delayed by a little over two years. While the effect was not permanent, the reintroduction of bills could also have displaced new bills.

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<sup>44</sup>Chandaman (1975); Braddick (1996); Smith (1999); Cox (2012); Dincecco (2011); Johnson and Koyama (2014).

**Figure 5:** Sudden Prorogation, 1660-1702



Source: *Journals*, Ogg (1962), and Horwitz (1977). Notes: Red vertical lines mark years where a session was suddenly prorogued.

**Table 5:** Political Variables

	n	avg. (wtd.)	st. dev. (wtd.)	(min, max)
Panel A: Main Political Variables				
<i>SP</i>	15	0.39 (0.17)	0.49 (0.38)	(0,1)
<i>ConflictHouses</i>	10	0.26 (0.89)	0.44 (0.30)	(0,1)
Panel B: Political Controls				
<i>WarSession</i>	15	0.39 (0.35)	0.49 (0.48)	(0,1)
<i>Days</i>		116.24 (161.22)	76.87 (66.27)	(8, 294)
<i>DeficitRatio</i>		0.13 (0.22)	0.31 (0.33)	(-0.27, 1.02)

Source: See text. Measured at the session-level. There were 38 sessions of parliament from 1660 to 1702.

## 4 Sudden Prorogation and Estate Bill Success

I first estimate the effect of sudden prorogation on estate bill success from a session of parliament using econometric models of the form:

$$Act_{it} = \beta_0 + \beta_1 SP_t + X_t' \gamma_1 + X_{it}' \gamma_2 + \epsilon_{it}, \quad (1)$$

for bill  $i$  in session  $t$ . The outcome  $Act_{it}$  takes the value of 1 if a bill  $i$  became an Act in session  $t$  and 0 if it failed.  $X_t$  is a matrix of session-level political variables that could also influence parliament's functioning over time. It includes  $ConflictHouses_t$ , an indicator for sessions where there is recorded conflict between the two Houses. It also includes a year trend to control for any trend in bill success over time,  $WarSession_t$ , an indicator for sessions meeting during war years, and  $DeficitRatio_t$ , the deficit ratio as a measure of England's fiscal capacity.

$X_{it}$  is a matrix of bill-level characteristics summarized in Appendix Section A.2 that help control for the effects of omitted variable bias at the bill-level. It also includes an indicator for bills that repeated in any session. The patterns highlight that I observe a selected sample of estate bills entering each session because it was a decision made by a landholding family. This decision is a function of unobserved characteristics, such as the legal or economic quality of the bill or family connections. I include  $X_{it}$ , which contains bill type and landholder social and economic status, to help mitigate concerns about selection.

The main variable of interest is  $SP_t$ , an indicator for sessions of parliament that were suddenly prorogued. This was a decision by the monarch that I assume was exogenous to individual estate bills. It was not a random decision but a function of conflict and political developments in a specific session of parliament. Understanding this political dimension is the focus of Section 5.

Omitted variable bias is the main concern in estimating the effect of  $SP_t$ . I assume any unobserved characteristic influencing a landholder's decision to introduce a bill is also independent of the monarch's decision to suddenly prorogue a session of parliament. The historical literature and evidence suggests this is a reasonable assumption. First, the conflict that unfolded during the session and if it would lead to a sudden prorogation was largely unknown to a landholder deciding to introduce a bill. Second, as evidence to support this assumption, Figure 11 in Section A.2 shows the distribution of when bills entered in normal sessions and sessions that were suddenly prorogued. While the volume

of bills entering each type of session is clearly different, a function of the difference in the length of sessions, the shapes of the two distributions are not obviously different from one another. For example, we might think that if landholders were expecting a session to be suddenly prorogued, they would introduce their bills earlier in the session and we would thus see a large spike of bills entering during the first days or weeks of a session that was suddenly prorogued.

I estimate equation 1 using a probit model and thus assume  $\epsilon_{it}$  is distributed standard normal. For comparison and robustness I also use OLS and cluster standard errors on sessions of parliament. In probit models, assuming that unobserved characteristics and sudden prorogation are independent leads to a downward bias (towards zero) in the estimate of sudden prorogation because of a rescaling effect due to the assumption on the error structure.<sup>45</sup>

Table 6 presents results from estimating equation 1. Columns (1)-(3) report the average marginal effect (AME) for the probit model. Columns (4)-(6) report OLS estimates. For the probit specifications, column (1) reports the raw correlation between sudden prorogation and estate bill success. Column (2) introduces political variables contained in  $X_t$  and column (3) includes bill-level covariates in  $X_{it}$ . For the OLS specifications, column (4) includes political variables and column (5) clusters standard errors on sessions of parliament. Column (6) includes bill-level covariates and clusters standard errors on sessions of parliament.

The results show that the monarch's decision to suddenly prorogue a session of parliament had a significant effect on parliament's passage of estate bills. Estate bills were about 20 percentage points less likely to succeed if a session was suddenly prorogued. The negative effect is robust across all specifications and the magnitude is little changed by the specification. Comparing the AME to the OLS estimates suggests that the independence assumption is reasonable and leads to downward bias (towards zero) in the estimated

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<sup>45</sup>See Yatchew and Griliches (1985). If the independence assumption is violated, however, selection could bias the estimate of sudden prorogation either upward or downward, depending on the sign of the bias term. There are logical scenarios where the bias would lead to an overestimate of the effect of sudden prorogation, they do not seem likely given the evidence discussed above.



AME.

The results also provide insight to other factors influencing estate bill success. There is no statistical evidence to support that conflict between the two Houses directly impacted the passage of estate bills. Bills entering in sessions that met for more time were more likely to succeed. This supports one aspect of the hypotheses in the historical literature, that time was important for parliament's passage of estate bills. Second, bills entering into the House of Lords were also more likely to succeed, confirming descriptive statistics in Table 4. Understanding this selection and process is important for future work. Last, there is some evidence that bill-level characteristics are important for estate bill success. The last two rows of columns (3) and (6) report the F-statistic and p-value testing the hypothesis that the bill type and landholder estimates are jointly equal to zero. Bill types seem to be important to parliament's decision to pass (we reject the null that they are zero). The evidence for landholder types is mixed.

## 5 Political Conflict, Sudden Prorogation, and the Glorious Revolution

### 5.1 Political Conflict & Sudden Prorogation

The sudden closure of sessions of parliament had a significant impact on parliament's functioning at the end of the 17th century. The success rate in Figure 1 shows that its functioning improved after the Glorious Revolution in 1688. The immediate factor explaining the shift upwards in the success rate is the absence of sudden prorogations. The evidence shows that William and Mary no longer suddenly prorogued sessions after 1690. The monarchs retained the constitutional right to prorogue sessions at any time.

I first provide evidence that the monarch used the power of prorogation to interrupt and influence parliamentary proceedings. Three factors likely led the monarch to suddenly prorogue a session: (1) a monarch's independence from parliament, (2) conflict influencing

**Table 6:** Effects of Sudden Prorogation on Estate Bill Success: Probit and OLS Results

	Probit			OLS		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>SP</i>	-0.27*** (0.04)	-0.22*** (0.04)	-0.20*** (0.04)	-0.22*** (0.04)	-0.22*** (0.05)	-0.21*** (0.05)
<i>ConflictHouses</i>		0.02 (0.03)	0.00 (0.03)	0.03 (0.03)	0.03 (0.04)	0.01 (0.03)
<i>Days</i>		0.10*** (0.03)	0.10*** (0.03)	0.11*** (0.03)	0.11*** (0.03)	0.11*** (0.03)
<i>Year</i>		0.01*** (0.00)	0.00*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.00*** (0.00)
<i>WarSession</i>		0.05 (0.03)	0.05 (0.03)	0.06* (0.03)	0.06* (0.03)	0.06* (0.03)
<i>DeficitRatio</i>		-0.05 (0.05)	-0.08 (0.05)	-0.06 (0.05)	-0.06 (0.04)	-0.10** (0.04)
<i>EnterHoL</i>			0.14*** (0.03)			0.14*** (0.03)
Constant				-14.90*** (1.74)	-14.90*** (1.98)	-6.23*** (2.00)
observations	954	954	954	954	954	954
pseudo- $R^2$ ( $R^2$ )	0.03	0.11	0.24	(0.14)	(0.14)	(0.28)
LR test	42.46	138.22	292.15	-	-	-
standard errors					cluster	cluster
type	no	no	57.59 [0.00]	no	no	20.74 [0.00]
landholder	no	no	24.1 [0.51]	no	no	8.63 [0.00]

Standard errors in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Clustered at session of parliament (34 clusters).  
Reported probit coefficients are average marginal effects (AME).

parliament's passage of revenue bills, and (3) conflict with the monarch's "policies." The three political factors simplify the internal politics and focus on the crown-parliament relationship, which was one of the dominant political themes of the era.<sup>46</sup> I provide evidence that political and institutional changes with the Glorious Revolution help explain the absence of sudden prorogations after 1690.

First, as discussed in Section 2.1, the monarch had an independent stream of income, so-called ordinary revenue, that could make him or her less dependent on calling parliament or keeping it in session to receive parliamentary grants of revenues. Parliament re-granted or re-settled ordinary revenues with the succession of a new monarch. In 1660 parliament settled tax revenue from customs and excise (indirect sources) on Charles II and his heirs for life. James II also received this ordinary revenue in 1685. Parliament, however, did not settle the ordinary revenue on William and Mary until 1690 because it could not agree on the terms. When it did pass the legislation, parliament made significant constitutional changes to the terms, only settling the excise for life and the customs for a term of 4 years. The settlement thereby "shortened the financial leash of the monarch."<sup>47</sup>

Two types of political conflict likely led the monarchs to interfere and suddenly prorogue a session of parliament. First, conflict in a session of parliament could prevent or stall the passage of a revenue bill. The monarch could suddenly prorogue parliament to interfere with parliamentary proceedings when it was not passing a revenue bill, conditional on the monarch's independence. For example, parliament investigated the administration of finances rather than passing a new revenue bill during a session under Charles II in 1669.<sup>48</sup> Under William and Mary, in 1689, there was disagreement in parliament over the settlement of revenue, slowing down the process and making amendments that "were not to William's taste."<sup>49</sup>

Second, there could be conflict in parliament with a monarch's interests or policies. It

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<sup>46</sup>In the historical literature, see especially Harris (1993), Introduction as well as Ogg (1962), ch. 13; Jones (1979).

<sup>47</sup>Cox (2012).

<sup>48</sup>Ogg (1962), pg. 342.

<sup>49</sup>Horwitz (1977), pg. 58.

occurred when there was disagreement in parliament regarding a royal policy or legislation was initiated that was divergent from royal interests. A prorogation would be a particularly effective strategy to stop these proceedings. For example, under Charles II, groups in parliament worked on bills to influence and alter the succession of the monarchy. In 1673, parliament approved an address to notify Charles II that they did not want his brother James, Duke of York and heir to the throne, to marry a Catholic.<sup>50</sup> From 1679 to 1681, a growing opposition in parliament initiated legislation that would exclude James from becoming monarch because of his conversion to Catholicism. In 1699, under William III, parliament “had failed to act on most of the king’s recommendations” by not passing legislation to pay off debts incurred by war, to provide relief of the poor, and to advance trade.<sup>51</sup> As the examples suggest, the nature of conflict with the monarch changed with the Glorious Revolution. I discuss further in Section 5.2.

The econometric model for sudden prorogation is:

$$SP_t = \pi_0 + \pi_1 ConflictRevenue_t + \pi_2 ConflictMonarch_t + \pi_3 IndirectRev_t + X_t' \delta_1 + X_{it}' \delta_2 + \nu_{it}. \quad (2)$$

for session  $t$ . I use a bivariate probit model and 2SLS to estimate both equations 1 and 2, discussed further below.  $X_t$  and  $X_{it}$  are as defined above.

$ConflictRevenue_t$  and  $ConflictMonarch_t$  are indicators for sessions that had the two types of conflict discussed above. They were coded from two historiographies (Ogg 1962 and Horwitz 1977) discussed in Section 3.2. The single session of parliament meeting under James II is coded as having conflict over revenue because there was some debate over the settlement of his ordinary revenue.<sup>52</sup> Table 7 provides summary information on the variables. The two are coded as mutually exclusive for simplicity, but as one historian

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<sup>50</sup>Ogg (1962), pp. 378-379.

<sup>51</sup>See his speech in ‘House of Lords Journal Volume 16: 4 May 1699’, in *Journal of the House of Lords: Volume 16, 1696-1701* (London, 1767-1830), pp. 463-468. British History Online [accessed May 2017] and Horwitz (1977), pp. 249-256.

<sup>52</sup>See James II’s speech in parliament on November 9, 1685. ‘House of Lords Journal Volume 14: 9 November 1685’, in *Journal of the House of Lords: Volume 14, 1685-1691* (London, 1767-1830), pp. 73-75. British History Online <http://www.british-history.ac.uk/lords-jrnl/vol14/pp73-75> [accessed April 2017].

notes, the effectiveness of the principle of redress before supply depended on parliament’s “perception of royal policies.”<sup>53</sup> Coding of the specific sessions and references to the historiographies is available from the author. The monarch’s independence is proxied by indirect revenues,  $IndirectRev_t$ , and measured using data on indirect revenues from O’Brien and Hunt.<sup>54</sup> I expect  $ConflictRevenue_t$ ,  $ConflictMonarch_t$ , and  $IndirectRev_t$  to positively predict sudden prorogation.

**Table 7:** Political Conflict & Monarch’s Independence

	n	avg. (wtd.)	st. dev. (wtd.)	(min, max)
$ConflictRevenues$	8	0.21 (0.10)	0.41 (0.29)	(0,1)
$ConflictMonarch$	8	0.21 (0.12)	0.41 (0.32)	(0,1)
$IndirectRevenue$ (£)	1,398.96	(1,516.87)	662.64 (819.24)	(123, 2811.5)

*Source:* See text. Measured at the session-level. There were 38 sessions of parliament from 1660 to 1702.

Wtd.: weighted avg. by number of estate bills entering that session.

The economic history and historical literature argues the Glorious Revolution resolved or altered the nature of this conflict and made the monarch more dependent on parliament. This in turn would make the monarch less likely to interfere with parliamentary proceedings via sudden prorogation. I include interactions of political conflict and monarch independence proxies with a post-1688 indicator to test this hypothesis:

$$\begin{aligned}
SP_t = & \pi_0 + \pi_1 ConflictRevenue_t + \pi_2 ConflictMonarch_t + \pi_3 IndirectRev_t \\
& + \pi_4 post1688 * ConflictSupply_t + \pi_5 post1688 * ConflictLegis_t \\
& + \pi_6 post1688 * IndirectRev_t + X'_t \delta_1 + X'_{it} \delta_2 + \nu_{it}.
\end{aligned} \tag{3}$$

I expect the interaction terms to have a different relationship with sudden prorogation. I also use a bivariate probit model and a two-stage OLS strategy to estimate equations 1 and 3. First, because the two outcomes ( $Act_{it}$  and  $SP_t$ ) are binary, I estimate the system

<sup>53</sup>Smith (1999), p. 61.

<sup>54</sup>O’Brien and Hunt’s data is available from Bonney, R.J., O’Brien, P., Smith, J.G. *European State Finance Database* available online at [www.esfdb.org](http://www.esfdb.org). Direct revenues include income from taxes that were set by parliamentary grant (e.g. on hearths or land). Similar to the deficit ratio, the indirect revenues series is measured at yearly intervals rather than by session of parliament. I used the corresponding year observation for sessions of parliament meeting only once during a single year. I took the simple average of the yearly data for sessions of parliament spanning multiple years.

of equations using maximum likelihood on a SUR-bivariate probit model where I assume the errors  $\epsilon$  and  $\nu$  are jointly distributed standard normal.

As an additional robustness check, I estimate the system of equations using two stage least squares (2SLS). There are several problems with this technique in this setting. First, both the variable of interest ( $SP_t$ ) and two of the “instruments” ( $ConflictRevenue_t$  and  $ConflictMonarch_t$ ) are binary. It is difficult to consistently estimate parameters of binary endogenous regressors ( $SP_t$ ) using binary instruments.<sup>55</sup> The second problem is that  $ConflictRevenue_t$  and  $ConflictMonarch_t$  may not be excludable from the second stage. I assume that the two conflict variables were independent of parliament’s passage of estate bills. The bills would have been passed, conditional on all other covariates, had the session not been suddenly prorogued.

Since the focus of this section of the paper is to explain why sudden prorogation stopped after the Glorious Revolution, I focus on the estimates in equations 2 and 3. Estimates of equation 1 using the different models are reported in the last row of 8 reference and results from the full specification are found in Table 11 in Appendix Section B. Across most specifications, the estimates of sudden prorogation are largely unchanged from the basic probit and OLS results. The exception is Column (4) when  $ConflictMonarch$  is used to explain sudden prorogation. I discuss this relationship further below. The results show estate bills were between 17-22 percentage points more likely to fail in sessions that were suddenly prorogued.

Table 8 reports the results of estimating equations 2 and 3 and from estimating equations 2 and 3. All specifications include political variables and bill characteristics. Estimates of equation 2 using MLE are reported in column (1). Column (2) introduces the interaction terms. The Wald test on the covariance parameter between the two errors ( $\rho$ ) shows that estimating the full bivariate probit model is equivalent to separately estimating the bill success and sudden prorogation equations. Columns (3)-(6) report estimates from the

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<sup>55</sup>See Dong and Lewbel (2015) for an overview of the drawbacks and benefits of the different approaches. Techniques are available for estimation, e.g. a special regressor method in Dong and Lewbel (2015), but is not feasible in this setting because of data limitations that allow me to create a special regressor.

first stage of 2SLS. Standard errors are clustered on sessions of parliament. Column (3) includes *ConflictRevenue<sub>t</sub>*, column (4) includes only *ConflictMonarch<sub>t</sub>*, and column (5) includes all three political variables. Column (6) reports results from including the interactions with post-Glorious Revolution indicator. The F-statistics generally meet the threshold for strong instruments. *ConflictMonarch<sub>t</sub>* does not meet the threshold as a single predictor of sudden prorogation, but the three are jointly significant.

The evidence generally supports that the three factors led the monarch to suddenly prorogue a session of parliament and that the relationship changed with the Glorious Revolution. First, the results show that the monarch was between 52 percent and 92 percentage points more likely to suddenly prorogue a session when there was conflict that impacting the passage of revenue bills. The large coefficient suggests resolving this particular conflict would be important for improving parliament's functioning. There is evidence that conflict influencing revenue bills also made sudden prorogations more likely after the Glorious Revolution. The first several sessions of parliament after the Glorious Revolution had conflict over terms and conditions of the monarch's ordinary revenue, leaving it an open issue until 1690. The evidence supports that when this issue was resolved, sudden prorogations stopped.

Second, there is statistical evidence to support parliament's conflict with the monarch's other policies led the monarch to suddenly prorogue a session (columns (1) and (2)). This, however, changed with the Glorious Revolution. The interaction term (*post1688 \* ConflictMonarch*) is either negative or not statistically significant. Last, the evidence on indirect revenues shows that increasing the monarch's independence before the Glorious Revolution increased the likelihood of sudden prorogation (columns (2) and (6)). There is discrepancy between the two models (columns (2) and (6)) because standard errors are clustered on sessions of parliament using 2SLS. Not shown in this statistical evidence is that Charles II did not call parliament at the end of his reign and James II ruled for most of his reign without parliament convened when their income from ordinary revenue was the greatest.<sup>56</sup> Parliament altered the terms of monarchs ordinary revenue by 1690. The

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<sup>56</sup>Ogg (1962) and Smith (1999).

estimate of the interaction  $post1688 * IndirectRev$  shows that sudden prorogations were less likely as the indirect revenue increased after 1688.

**Table 8:** Political Conflict, Sudden Prorogation, and the Glorious Revolution

	Bivariate Probit: SP Equation		2SLS: First Stage			
	(1)	(2)	(3)	(4)	(5)	(6)
<i>ConflictRevenue</i>	0.92*** (0.07)	0.91*** (0.24)	0.89*** (0.07)		0.92*** (0.08)	0.52*** (0.18)
<i>ConflictMonarch</i>	0.10*** (0.03)	0.04** (0.01)		0.02 (0.15)	0.08 (0.18)	-0.05 (0.16)
<i>IndirectRev</i>	-2.33** (15.53)	22.5*** (0.25)			3.2 (16.49)	35.00** (16.32)
<i>post1688</i>		-0.56*** (0.01)				-0.18 (0.26)
<i>post1688 * ConflictRevenue</i>		0.61*** (0.20)				0.28 (0.21)
<i>post1688 * ConflictMonarch</i>		-0.05** (0.01)				0.09 (0.18)
<i>post1688 * IndirectRev</i>		-28.85*** (6.01)				-69.01*** (16.81)
Constant			2.37 (3.14)	5.52 (5.09)	0.04 (14.90)	-58.12*** (15.53)
estimate of <i>SP</i>	-0.18*** (0.06)	-0.17*** (0.05)	-0.21*** (0.06)	-0.35 (0.28)	-0.22*** (0.06)	-0.19*** (0.04)
observations	954	954	954	954	954	954
Wald test $\rho = 0$	0.07 [0.79]	1.26 [0.26]	-	-	-	-
F-stat	-	-	159.44 [0.00]	0.09 [0.76]	81.99 [0.00]	26.91 [0.00]
$R^2$	-	-	0.62	0.22	0.63	0.88
standard errors	-	-	cluster	cluster	cluster	cluster
political vars	all	all	all	all	all	all
type	yes	yes	yes	yes	yes	yes
landowner	yes	yes	yes	yes	yes	yes
origin	yes	yes	yes	yes	yes	yes

Standard errors in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Clustered at session of parliament (34 clusters).

Reported probit coefficients are average marginal effects (AME) for  $pr(SP = 1)$ .

## 5.2 Political and Constitutional Changes with the Glorious Revolution

The results in Table 8 provide evidence that political conflict is not as strongly associated with sudden prorogations and that the monarch was less likely to suddenly prorogue sessions of parliament with increasing revenues after the Glorious Revolution. The econo-



metric evidence supports the argument that important changes in sessions meeting from 1689 to 1690 resolved conflicts over revenue and made the monarch more dependent on parliament. There is some statistical evidence to suggest that resolving conflict between parliament and the monarch's interests were also important to decreasing the likelihood of sudden prorogation. In this section, I draw on the historical and economic history literatures to discuss the specific political and constitutional changes that help explain how the Glorious Revolution resolved conflict and made the monarch more dependent on parliament and therefore less likely to interfere by suddenly proroguing sessions of parliament. I discuss three changes made within the institution of parliament.<sup>57</sup>

First, there is some econometric evidence to support the hypotheses that resolving conflict between parliament and the monarch's interests was important to stop sudden prorogations. The effect is better reflected or captured by changes in the nature of conflict between the policies and parliament after the the Glorious Revolution. Under Charles II, conflict between parliament and monarch's interests centered on the succession of the throne and his religious policies. There was a growing opposition that was vocally against Charles II's position on toleration of catholics and actively legislated for more strict religious policy from the beginning of his reign.<sup>58</sup> The opposition activity peaked with the Exclusion Crisis from 1679 to 1681, where a majority of MPs supported excluding James, then Duke of York and a catholic, from the succession of the monarchy. The Glorious Revolution resolved this aspect of the conflict by forcing James II to leave England and vacate the throne in 1688. William and Mary, who was the daughter of James II, were next in the hereditary succession and protestant.<sup>59</sup>

Second, conflict over supply was resolved during the first few sessions of parliament under William and Mary. This had two effects. It first contributed to annual parliamentary

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<sup>57</sup>For a discussion and analysis of larger societal changes, especially because parliament did not meet at the end of Charles II's and for most of James II's reign, see Harris (1993), Pincus (2009), and Pincus and Robinson (2014).

<sup>58</sup>See Harris (1993), ch. 2 for an overview of the role in the Restoration Settlement in leaving religious issues as a source of tension in government.

<sup>59</sup>Much of the economic history has abstracted from or focused less on the role of religion during this era. See Roberts (1993), Harris (1993), Pincus (2009) for overviews and synthesis on how interactions between religion and politics in parliament as well as in English society during this era. See also North and Weingast (1989), pg. 805.

meetings. MPs worked to pass the mutiny act in 1689 and limited the terms of parliamentary grants of revenue. The passage of the two “quietly added to the body of English constitutional principles the rule that parliamentary sessions must henceforth be annual.”<sup>60</sup> Annual and predictable meetings of parliament was one aspect of the improvement in parliament’s functioning, shown in Figure 1, because parliament could not function because if it did not meet.<sup>61</sup> Second, resolving conflicts over revenue made the monarch more dependent on parliament and less likely to suddenly prorogue sessions of parliament.

The debates and conflict over revenues during the first three sessions of parliament regarded the terms of the ordinary revenue. William and Mary wanted the same terms as James II, which gave him the most wealth of any English monarch since Henry VIII.<sup>62</sup> MPs did not immediately settle the ordinary revenue but debated the terms throughout the Convention Parliament of 1689. The question of settlement raised more “fundamental questions about the future relationship between the crown and parliament” among the law-making MPs.<sup>63</sup> MPs were aware that granting a lesser sum than that which was granted to James II and putting term limits would “ensure the frequent meetings of parliament.”<sup>64</sup>

That William and Mary did not have “settled revenues over the first two years of their reign alter[ed] their bargaining relationship” with parliament.<sup>65</sup> The evidence reveals that William “cut deals” with parliament to be granted the ordinary revenue.<sup>66</sup> William made costly political gestures, offering to “consent to the elimination of the widely-disliked hearth tax; ‘abuses and oppressions’ in its collection and had been among the heads in the preliminary version of the Declaration of Rights.”<sup>67</sup> In 1689, parliament passed a temporary measure that granted customs for only three years in which “He

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<sup>60</sup>Randall (1916), pg. 665; see also Cox (2012) and Hodgson (2016).

<sup>61</sup>Hoppit (1996).

<sup>62</sup>Henry VIII’s wealth was not from indirect revenue sources. See Smith (1999), pg. 61 and Horwitz (1977), pg. 26.

<sup>63</sup>Horwitz (1977), pg. 27.

<sup>64</sup>Horwitz (1977), pg. 26.

<sup>65</sup>Cox (2012), pg. 573.

<sup>66</sup>Cox (2012), pg. 570, 577.

<sup>67</sup>Horwitz (1977), pg. 27.

[William] was unhappy with the Commons' vote [...] to give him the customs for only three years.”<sup>68</sup>

Thus a priority for William in 1690 was for parliament to legislate on a settlement of the ordinary revenue that could be “used as ‘a fund of credit’ to secure loans to supply the armed forces’ in preparation for carrying on war against France.”<sup>69</sup> Whigs and Tories agreed to put terms on William and Mary’s ordinary revenues.<sup>70</sup> Revenues from excise for was granted for their lives; the customs, however, was limited to four years.<sup>71</sup> Altering the terms of the customs also influenced William’s decisions later on when he “conceded a major principle of lasting constitutional significance” by reaching an agreement on the “national debt” in 1693 because the expiry for the customs loomed.<sup>72</sup> Resolving the conflict over supply forced constitutional concessions by William, but allowed and raised sufficient resources for him to continue the war against France. The evidence suggests that using prorogation to influence and interfere with parliamentary proceedings was no longer necessary to achieve some of his goals.

Last, historians and economic historians have highlighted the that changes in the composition of MPs in parliament and their relationship to the monarch were also crucial to the era. The historiography has highlighted the importance of the Whig party to make the constitutional changes credible.<sup>73</sup> Others suggest that Whigs and Tories working together played a key role to pass the revolutionary constitutional statutes discussed above.<sup>74</sup> Most work has focused on the role of the Whigs and Tories under James II and the period after the Glorious Revolution. There is less quantitative analysis of changes in the composition of parliament from 1660 to 1702, but is important to understand in future work.

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<sup>68</sup> *ibid.*

<sup>69</sup> Horwitz (1977), pg. 53.

<sup>70</sup> Cox (2012), pg. 573.

<sup>71</sup> Horwitz (1977), pg. 53.

<sup>72</sup> Cox (2012), pg. 578.

<sup>73</sup> See Stasavage (2007), Randall (1916), Horwitz (1977), Harris (1993), Pincus (2009) and Pincus and Robinson (2014) discuss the importance of Tories and Whigs in parliament.

<sup>74</sup> Cox (2012), 573.

## 6 Conclusion

This paper provides new evidence that conflict in England's government at the end of the seventeenth century hindered parliament's functioning. Specifically, it shows that the monarchs' decision to suddenly prorogue, or close, sessions of parliament made estate bills, an important economic legislation, more likely to fail. Conflict over revenue bills, conflict with the monarch's policies, and the monarch's independence from parliament made this an effective strategy to interfere with parliamentary proceedings under the late Stuarts. The evidence suggests that political and constitutional changes with the Glorious Revolution of 1688 resolved or changed the nature of key conflicts in government, made the monarch more dependent on parliament and thus made this a less effective strategy for William and Mary. The evidence supports previous hypotheses in the historical and economic history literatures on the changes that led to the supremacy of parliament and provides insight to how removing one barrier to passing estate bills, sudden prorogations, improved parliament's functioning. A functioning parliament would be important for improving economic efficiency in England by providing legislation like estate bills that allowed individuals, families, and communities to reorganize their property rights in preindustrial England.

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## A Data Appendix

### A.1 Bill Data Coding

To identify the interests on bills, a keyword search was conducted for the specific titles; general categories were then aggregated from this detailed coding. Within class, some individuals have more than one title; below, I also note how I coded these interests.

- *Nobility*. The nobility consists of dukes, marquesses, lords, countesses, duchesses, earls, viscounts, barons, and ladies (nobility). Lord was a common way to refer to a member of the peerage. As such, some entries refer to a single person with multiple titles. For example, a bill naming a Lord and Baron was for “restoring [land] to Charles Lord Gerrard, Baron of Brandon.” In this event, I coded the individual by the more specific title. In the previous example, Baron. Some individuals had titles Marquis and Earls. These individuals are infrequent; as such they are coded as separate titles, but I include a dummy for multiple titles. A Lady could refer to a woman in the nobility or the gentry. This was inferred if she was also referred to as a Dame, a title given to a woman in the gentry, or if the bill named her in relationship to a gentry man or a noble man. For example, a bill in 1670 named the “Lord Viscount of Stafford and the Lady Mary his Wife.”<sup>75</sup> Thus, Lady Mary is a member of the nobility.
- *Gentry*. Individuals titled sir, knight, dame, baronet, ladies (gentry), esquires, or gentleman fall into the landed gentry. The distinction of a Lady was inferred from other information in the first reading (e.g. if her husband was named; if a woman was referred to a Dame and a Lady, the bill is coded as having a ‘Dame.’) Some individuals are referred to as Sir only, Sir Knight, Sir Baronet, or Sir Knight and Baronet. Because these cases are more numerous I code them separately.
- *Without Rank*. The third category, those with no rank, contains untitled individu-

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<sup>75</sup>‘House of Lords Journal Volume 12: 7 November 1670’, in *Journal of the House of Lords: Volume 12, 1666-1675* (London, 1767-1830), pp. 358-359.

als, professionals, individuals addressed as ‘Mrs.’ or ‘Mr.’ While ‘Mr.’ can also refer to someone as “Master” indicative of legal training, or as a type landholder. An argument can be made for including ‘Mr.’ as a gentry, but the reasoning is to distinguish between those given the title of esquire and Mr., perhaps due to subtleties in norms. Some bills refer to the same person as a ‘Mr.’ and as an Esquire. These are coded as ‘esquire’ only. Some individuals did not have their own title but were “daughter of” or “son of” a titled individual. These individuals were not classified as untitled. Professionals are doctors, merchants, ironmonger and scrivener.

- *Other interests.* Other interests includes individuals who were not a part of the social and political ranking system but interests were important in English society. These are government officials (serjeants at law, clerks and aldermen), military (colonels and captains), copyholders, creditors, infants, and Royalty. Copyholder and tenants were held ancient rights, these held special legal status. Data on these are found below.

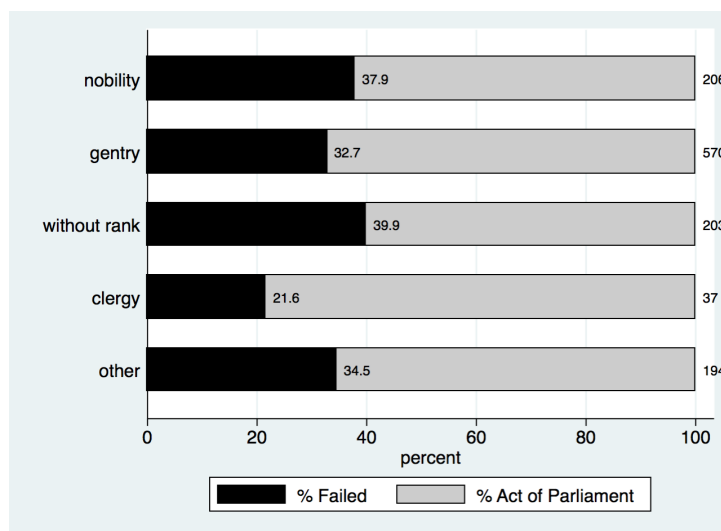
Individuals without rank were identified as Mrs., Mr., professionals, untitled, and a single yeoman. For this dataset, professionals are doctors and clerks. Two groups, the clergy and other interests, were also coded and are included in all regressions. Other interests are not explicitly a part of the ranking and honors system.

## A.2 Descriptive Statistics on Bill Data

Figures 6-8 show the social and economic composition of landholders petitioning parliament for an estate bill. The descriptive evidence suggests that no specific group was disproportionately likely to fail or succeed. Most bills named a member of the gentry (570/955=60%) with esquires, like Lawrence Squib above, named the most often (see Appendix Figure 7). The details on bill characteristics in Figures 9-10 provide additional insight to economic, legal and historical dimensions of the legislation. It confirms that most bills touching property rights in land were estate bills (819/955 = 85.2%). The two other largest categories of bills were generated by important economic events in this era,

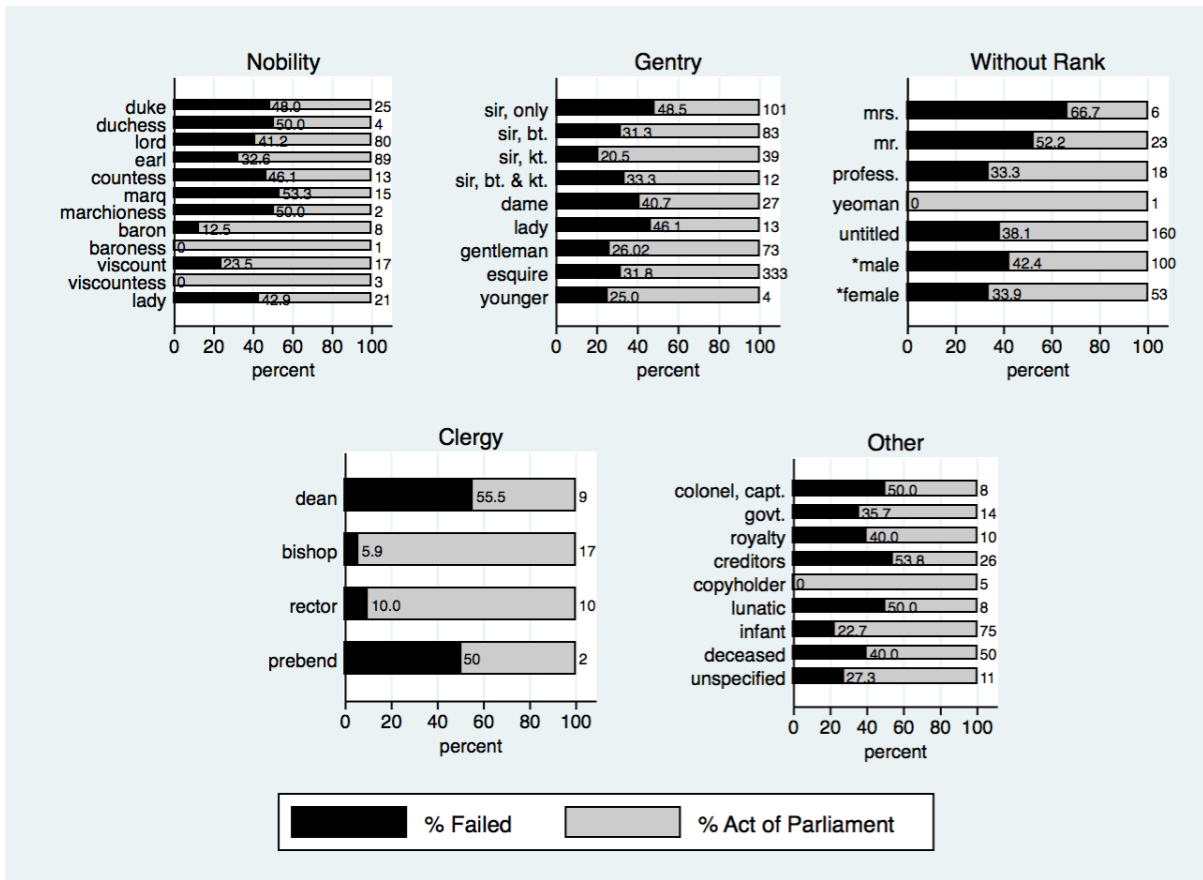
e.g. restoration of land after the Restoration of the Monarchy in 1660. The patterns suggest that the non-standard “event” bills failed in greater proportion than estate bills. Including these observable characteristics will help isolate the effect of political conflict and sudden prorogation on parliament’s passage of estate bills.

**Figure 6:** Landholder Characteristics



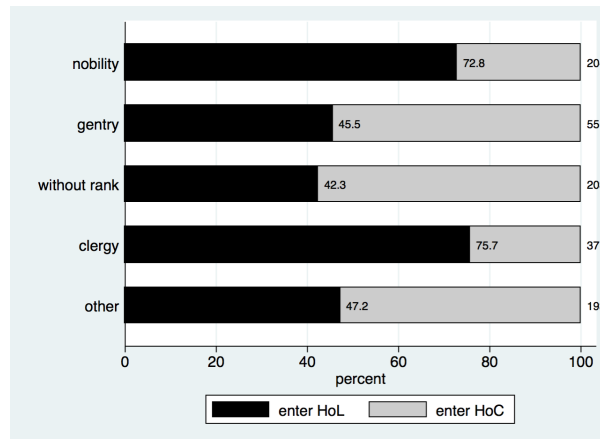
*Source:* See text. The total number of each bill is reported at end of bar. See Appendix for definitions and coding.

**Figure 7: Landholders by Rank**



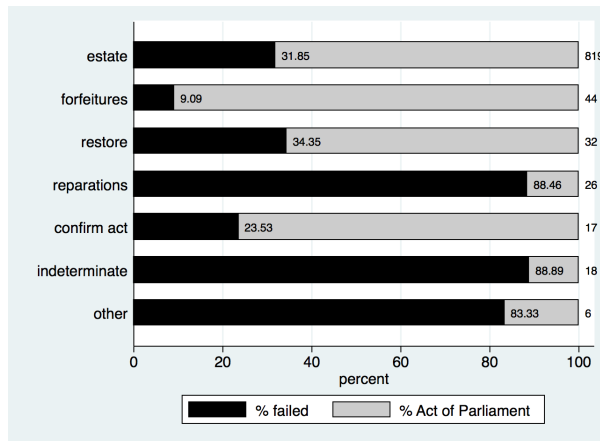
Notes: Source: see text.

**Figure 8: Selection into Houses by Landholders**



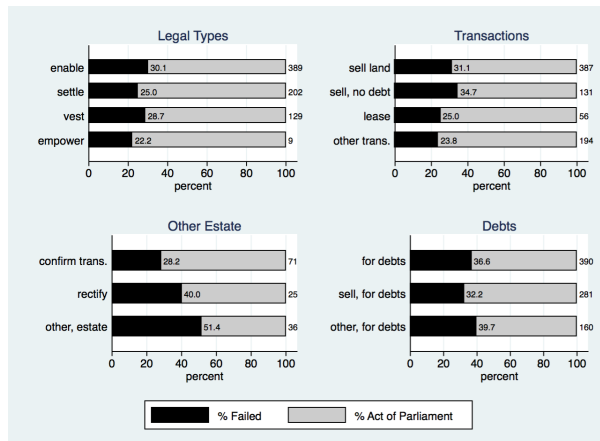
Source: See text. The total number of each bill is reported at end of bar. See Appendix for definitions and coding.

**Figure 9: Type of Bills**



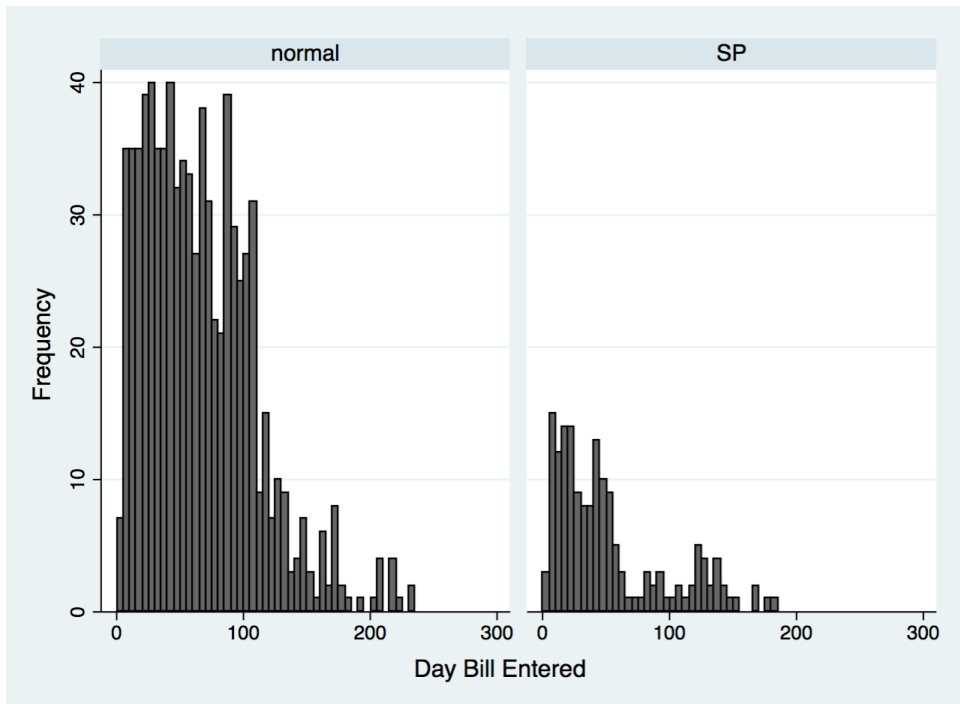
Source: See text. The total number of each bill is reported at end of bar. See Appendix for definitions and coding.

**Figure 10: Type of Estate Bills**



Source: See text. The total number of each bill is reported at end of bar. See Appendix for definitions and coding.

**Figure 11:** Bill Selection



Source: *Journals*.

**Table 9:** Project Outcomes

outcomes	n	%
fail, one attempt	172	0.21
fail, multiple attempts	28	0.03
success, multiple attempts	66	0.08
success, one attempt	567	0.68
	N = 833	

**Table 10:** Estate Bill Success by Sudden Prorogation

Panel A: Success & Session Type			
	(1)	(2)	(3)
	% success	% success, first entry	% success, if return
SP	0.44	0.65	0.79
Normal	0.71	0.78	0.66

Panel B: Time to Success			
if entered:			
	avg (years)	st. dev.	min., max
SP	2.32	2.9	(0.08, 12.75)
Normal	1.89	1.37	(0.25, 6.3)

if first entry:			
	avg (years)	st. dev.	min., max
SP	2.46	2.9	(0.08, 12.75)
Normal	1.88	1.3	(0.67, 6.33)

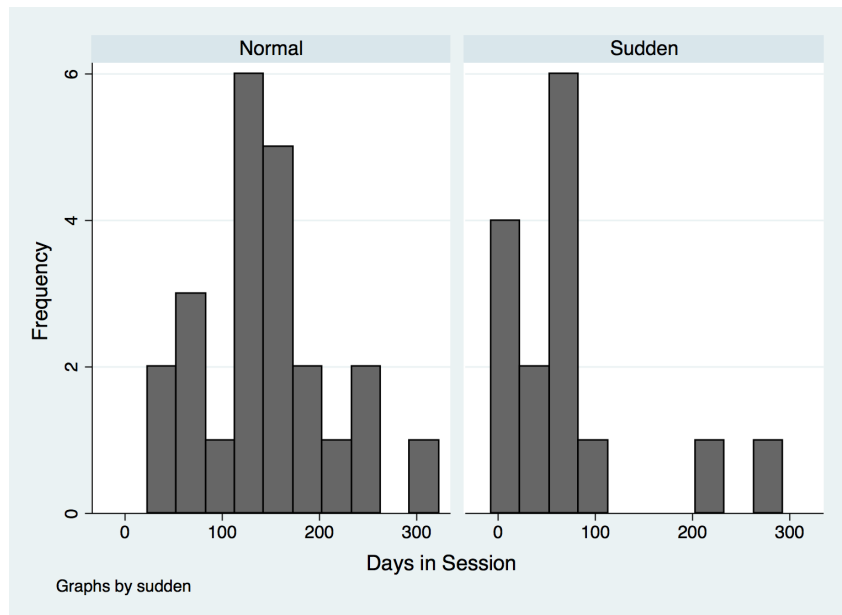
Source: *Journals*.

Notes: SP indicates sessions that were suddenly prorogued by monarch.

Normal indicates sessions that were normal. See text for details.

### A.3 Session Data

**Figure 12:** Distribution of Time in a Session of Parliament



Source: see text.

## B Results Appendix

**Table 11:** Sudden Prorogation on Estate Bill Success: Bivariate Probit & 2SLS-OLS

	Bivariate Probit: Bill Success		2SLS: Second Stage	
	(1)	(2)	(3)	(4)
<i>SP</i>	-0.18*** (0.06)	-0.17*** (0.05)	-0.22*** (0.06)	-0.19*** (0.04)
<i>ConflictHouses</i>	-0.01 (0.04)	-0.01 (0.03)	-0.03 (0.04)	-0.03 (0.04)
<i>Days</i>	0.11*** (0.03)	0.12*** (0.03)	0.13*** (0.03)	0.13*** (0.03)
<i>WarSession</i>	0.07** (0.03)	0.07** (0.03)	0.05* (0.03)	0.05* (0.03)
<i>Year</i>	0.00*** (0.00)	0.00*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
<i>DeficitRatio</i>	-0.10* (0.05)	-0.11* (0.05)	-0.14*** (0.04)	-0.14*** (0.04)
<i>EnterHoL</i>	0.14*** (0.03)	0.13*** (0.03)	0.13*** (0.03)	0.13*** (0.03)
Constant			-9.04*** (2.02)	-9.16*** (2.06)
observations	954	954	954	954
$R^2$	-	-	0.27	0.87
LR test	311.20	235.55	-	-
standard errors	-	-	cluster	cluster
interaction terms	no	yes	no	yes
type	yes	yes	yes	yes
landowner	yes	yes	yes	yes

Standard errors in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Clustered at session of parliament (34 clusters).

Reported probit coefficients are average marginal effects (AME).