

Conformity and the Certificate of Discharge:  
Bankruptcy in early eighteenth century England

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## **Introduction**

Perhaps as a result of the Enlightenment, perhaps due to wars with France, perhaps because of losses suffered as a result of the Stop of the Mint in 1672, or the Great Fire of London in 1666 or the outbreak of the plague in the same year, in 1706 and 1707, Parliament passed the first legal rights for bankrupts. Moving from an environment in which bankruptcy was perceived to be the result of malfeasance or fraud on the part of the debtor and where only creditors had rights in a bankruptcy situation, *4 & 5 Anne c 22* allowed a bankrupt the right to a small part of his or her estate as an allowance and, more importantly, it allowed the bankrupt the possibility to emerge from bankruptcy prior to paying off all debts owed. This act represents a fundamental change in the configuration of the rules regarding debt. From the first English bankruptcy law in 1546 through the acts of Elizabeth and James, once a person had been found to be bankrupt, all assets were seized, sold and distributed pro rata to creditors, and the creditors retained the right to importune the bankrupt for the remaining debts owed until the debt was completely repaid.

In this paper we explore the impact of the changes in the bankruptcy law that came about with *4 & 5 Anne 1 c 4* (1706) and *6 Anne 1 c 22* (1707). The law now allowed for a second chance. A bankrupt deemed to have conformed to the rulings of the bankruptcy court could receive an allowance up £200 and a ‘certificate of discharge’ which would protect him or her from any future calls on prior debts.<sup>1</sup> At the same time that these statutes provided rights for debtors, the statute also increased the penalty for malfeasance, for example ‘wilfully’ hiding assets or attempting to flee the country to evade the bankruptcy commissioners. Those who were lawfully convicted of having behaved in such a manner “shall suffer as a felon without the benefit of clergy”, in other words could now face capital punishment.<sup>2</sup>

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<sup>1</sup> . Although the term bankruptcy court is used in the literature, there was no specific bankruptcy court until the legal changes in the mid nineteenth century. For each case, a separate bankruptcy commission was created with its own commissioners.

2. *4 & 5 Anne c 4*, § 1. As we discuss later in the paper, some scholars have interpreted this to mean that a person could be hanged because he or she was a bankrupt. A person was not hanged because he or she was a bankrupt, rather because he or she had ‘wilfully’ attempted to steal those assets that belonged to the creditors.

Contemporary debate, as exemplified in the work of Daniel Defoe, differentiates between those who became bankrupt as a result of misfortune and those who behaved fraudulently. Indeed, Defoe is continuing in a tradition found through most of the seventeenth century debate on how to deal with debtors by differentiating between who became insolvent because of their won actions and those who became insolvent as a result of actions outside their control. As with the earlier debate, Defoe also differentiates between moderate creditors and grasping creditors, arguing that the behavior of creditors could exacerbate the situation.<sup>3</sup> The rhetoric of misfortune on one side and greed on the other leading to a destitute debtor resonated then as today. Yet the fundamental problem was that each side had signed a legal contract that could not be fulfilled. The various bankruptcy statutes provided the legal framework within which a settlement could be achieved.

The preamble to *4 & 5 Anne* continues a long tradition of seeing bankruptcy as the result of a willful attempt to defraud; it does, however, mention misfortune for the first time in a bankruptcy statute. More importantly, the statute for the first time gave power to the bankruptcy commissioners to decide if the bankrupt had ‘conformed’ with the court in all matters relating to the disposition of assets. If the bankrupt had done so, the commissioners could provide him or her with an allowance and also with a certificate of discharge from the state of bankruptcy. Giving this power to the commissioners alienated the rights of creditors. *6 Anne I c 22*, passed in the following year, modified this power by requiring the consent of four/fifths of creditors by number and value of debts before any such certificate could be issued.<sup>4</sup>

In issuing a certificate of discharge, creditors gave up a call on all future earnings by the bankrupt. They (or at least four fifths of them) voluntarily relinquished a potential asset stream. Using a game theoretic framework, we explore how the new statute affected the conduct and welfare of a debtor and a creditor relative to the previous statute. We explore, in particular, the extent to which this new legislation encouraged a debtor to reveal his or her assets more

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3. *Remarks on the Bill to Prevent Frauds Committed by Bankrupts*, 1706.

truthfully. We show that debtors who found themselves in bankruptcy due to malfeasance were more inclined to report assets truthfully under the new statute than under the old. Such bankrupts were generally better off under the new statute. There are, however, some cases where this was not the case and this depends on the transaction costs of continued pursuit by creditors and the size of the future income stream. Debtors who found themselves in bankruptcy due to misfortune were inclined truthfully to report assets under both the old and new statutes but were better off under the new statute. No matter the reason for bankruptcy, creditors were better off under the old statute as long as the transaction costs associated with collecting the remainder of the debt from the bankrupt's future stream of income were not too large.

We begin with a short discussion of the literature and then we describe the structure of creditor and debtor rights during the early modern period. In section three, we elaborate on the game theoretic framework used to explore the impact of the new legal environment relative to the old for bankrupts and creditors. Section four presents the first documented evidence on discharge in the first half of the eighteenth century.

## **Literature Review**

There exists a vast literature informing us that institutional arrangements and the rules of the game matter. Institutions help determine growth outcomes for countries (North, 1990, 1991; North and Weingast, 1989; North, Wallis, Weingast, 2009). The type of institutional arrangements affects not only economic performance at any point in time but also plays out through the impact of institutional overhang within the region or country (Acemoglu, Johnson and Robinson, 2001; Banerjee and Iyer, 2005; Dell, 2010). The rule of law has been shown to affect the development of financial markets and hence economic growth more generally (La Porta et al. 1998; Glaeser and Schleifer, 2002), while the ownership of differing financial instruments has implications for the conduct and behaviour of firms and agents (Hart and Moore, 1990). In the event that firms or agents are unable to repay their debts, there are implications for growth from creditor- versus debtor-friendly bankruptcy laws (White, 2008).

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<sup>4</sup>. Because *6 Anne* is merely an adjustment to *4&5 Anne*, we consider these to be a single Act for the purposes of discussion.

A key issue is the protection of property rights for actors in the system and the corresponding incentives created for agents operating in any given economy. As La Porta et al note the “law and the quality of its enforcement are potentially important determinants of what rights security holders have and how well these rights are protected.”<sup>5</sup> Here we focus on one aspect of those rights; what happens when there is a fundamental change in English bankruptcy legislation. Until the passing of *4&5 Anne c 4*, a bankrupt had no property rights. With this statute and its companion statute *6 Anne c 22*, the rights of creditors were reduced. The bankrupt now had the right to an allowance and the possibility of exiting the state of bankruptcy prior to paying off all his or her debts. At the same time, a bankrupt who did not conform to the rules and was found guilty by the courts could be hung. Some creditors, at least, lost the right to pursue debtors for full repayment of the debt owed.

The pre-eminent work on bankruptcy in England was conducted by Julian Hoppit (1987). In *Risk and Failure in English Business 1700-1800*, Hoppit uses the failure of firms both to understand what is happening by industry and by region and as an antidote to a perception of unalloyed successful English growth during the eighteenth century. To do this, Hoppit uses the bankruptcy docket books (PRO B4) which are extant from 1710.<sup>6</sup> Those listed in these ledgers are debtors who faced the ultimate sanction of failure, to be declared bankrupt. However, all the analysis takes place with a given set of bankruptcy rules those put in place in 1706 and remain as statute law until the various changes in the mid-nineteenth century. Thus the focus is not on the rules per se but on the extent of bankruptcy in England by region, occupation and time.

In a long monograph, Jones (1979) provides a detailed overview of the bankruptcy statutes in England from that of Henry VIII in 1525 to Anne in 1706. Jones discusses each statute in turn and places it somewhat in the context of the rules regarding insolvent debtors. Jones, however, sees the bankruptcy statutes as “mundane attempts to establish new rules within

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5. La Porta et al, “Law and Finance”, p. 1114.

6. The bankruptcy writ docket books give the date, name of the debtor, his or her location and occupation. The writs also name the creditor(s) who had the writ issued with his or her location and occupation and the names of the commissioners. Hoppit makes much less use of the creditor and commissioner information.

the limited field of debt.” Indeed, he goes on to state that the statutes “were commonplace measures intended to provide solutions to a selection of immediate problems.”<sup>7</sup> Thus there is no investigation of the ways in which the rule changes could affect the actions undertaken by economic actors. In contrast, Blackstone, the leading jurist of the eighteenth century, saw bankruptcy legislation as “capital alterations of our legal polity” which he argued were “highly convenient to that character ... of a great commercial people.”<sup>8</sup>

Analysis of the impact of bankruptcy statutes on the behavior of debtors and creditors in early modern England is surprisingly thin. To the extent that scholars have focussed on this issue, most attention has been paid by legal scholars. Writing in a legal tradition, Tabb (1991, 1995) has discussed the evolution of discharge over the course of American legal history. To do this, he begins with a description of English law and how the legal tradition pertaining to discharge was carried over to the colonies and to the new Republic. Also writing for legal scholars, Kadens (2009) focuses on the central question in a bankruptcy proceeding; how to encourage bankrupts to take part in their own financial demise. She argues that the focus of 4&5 *Anne* was capital punishment and that the discharge was an afterthought. She does not, however, analyse how the statute might affect actual conduct by economic agents.<sup>9</sup> The statute provided both for capital consequences for bad behaviour and allowance and discharge for compliance. The capital consequences were used very sparingly. At most only six individuals were hung over a century and a half. They were hung not because they were bankrupts, but rather, having been declared a bankrupt, they subsequently tried to evade the law and abscond with their assets. They were prosecuted for fraud and theft not bankruptcy.

Placing bankruptcy in the wider context of insolvent debtors, Sgard examines debt renegotiation, bankruptcy and discharge in France and England from the sixteenth to eighteenth centuries. As discussed in the following section, bankruptcy was available only to a subset of

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7. Jones, “Foundations of English Bankruptcy,” p 7.

8. *Ibid.*, p 7.

9. She is also not correct that discharge was an afterthought. As we note below in our discussion of the statute, discharge was a fundamental part of the statute, what was added as an

insolvent debtors. Once in this category and a writ of bankruptcy issued, Sgard is correct that there could be no renegotiation of the debt contract. Renegotiation was, however, always possible up until the bankruptcy writ was issued. Indeed, one could consider the bankruptcy outcome as a statutory composition imposed on all creditors. Sgard's focus, however, is on the ways in which these differing responses emerged across countries, especially conflicts between courts over trade related issues. Our focus is narrower, examining the impact of the changes in property rights for creditors and debtors as a result of *4&5 Anne* and *6 Anne*. To understand these changes, we first discuss the structure of bankruptcy legislation in early modern England that preceded this legislation.

### **Bankruptcy Legislation in Early Modern England**

Bankruptcy involves two parties, a lender/creditor and a borrower/debtor, and arises as a result of the borrower's inability (or unwillingness) to meet the terms of the contract with the lender or, perhaps, an inability to meet even the terms of a renegotiated contract. A debtor might have a short-term situation that could be solved with some restructuring of the contract, or the insolvency could be the result of a more serious structure problem which ultimately ends in bankruptcy. Bankruptcy is a subset of insolvency. Although often used colloquially, bankruptcy is a term with a precise legal meaning. This legal meaning has changed over time with changes in the legislation and the interpretation of that legislation by the courts.<sup>10</sup> What happens in a bankruptcy situation depends on the rules laid out in the legislation. At the same time, the extent to which people are willing to lend or borrow also depend on the rules laid out in the bankruptcy code. Thus, the rules of the game, as shown in Figure 1, do not just determine the allocation of assets in the event of a bad outcome; they also affect the very willingness of people to negotiate at the beginning of the contract. The goal of all the bankruptcy statutes passed was to repay to the creditor as much of his or her debt as possible. Doing so required finding and then selling all of a debtor's assets and encouraging compliance and truthfulness on the part of the debtor.

The first major piece of English legislation was passed in the reign of Henry VIII, 35 &

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addendum was how the discharge would be issued; the mechanics of the process.

*36 Henry VIII c 4* (1546).<sup>11</sup> Between 1546 and the legislation in 1706, there were three other major bankruptcy statutes: one in the 1571 under Elizabeth and two under James 1 in 1603 and again in 1624 (See table 1). The law passed by Elizabeth set the ground rules for two centuries until the broad-based changes in the middle of the nineteenth century, with the legislation under Anne changing the rights of bankrupts. The focus here is not to provide a detailed analysis of the statutes, rather to lay out the basic mechanisms and the rights of debtors and creditors prior to Anne 1.<sup>12</sup>

Passed in 1543, *An Act against such persons as do make Bankrupt (34 &35 Hen. VIII c 4)* is a relatively short statute and one in which the term bankrupt appears only in the title. The preamble lays out a broadly held view that debtors behaved fraudulently not just in the final stages of the contract but even when they signed the contract, and thus debtors were deemed to have stolen another man's money. It is this view of bankruptcy as theft that pervades the language of the statutes and helps explain the lack of debtor rights. *34 &35 Hen. VIII* lays out the formal procedures that would continue through all subsequent statutes. The first step was a letter of complaint to "the Lord Chancellor of England or Keep of the great Seal ...," by any of the "parties grieved". As a result, any single creditor could set in motion a procedure which would be binding on all creditors. The statute provided equal access for all creditors regardless of social standing or wealth.<sup>13</sup> Upon receipt of such a letter, the Lord Chancellor had to create a commission of bankruptcy. The commissioners were mandated to find, seize and sell all the

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10. The focus here is not on how the courts defined the terms of the statute.

11. There was an earlier statute in 1350 (*25 Edw. III 5 c. 23*) but this applied only to Italian merchants. This statute imposed liability on an Italian company for the debt incurred by any of its representatives. Schick, "Globalization, Bankruptcy", p. 254.

12. The implications of these statutes are discussed in Carlos and Lamping (2009) "Search, Seizure, Sale: Bankruptcy Statues in Early Modern England".

13. It did not require that the complainant be literate. It only required that the letter of complaint about debts unpaid be in writing. It might be that the creditor or creditors had already extended the terms of the original contract. While documentary evidence on compositions do exist for some cases, we do not know the population of such cases.



bankrupt's assets. The statute required the "land tenement fees annuities offices fees chattels wares merchandises and debts to be searched viewed rented and appraised, and to make sale of said lands tenements fees annuities and offices" ... "for true satisfaction and payment of the said creditor."<sup>14</sup> The statute was careful to focus on the nature of the such property transfers, stating that the Act legalized all sales of the debtor's assets by the commissioners as if the "sale had been made by the said Offender or Offenders at his or their own free will and liberty, by writing indented enrolled in any of the Kings courts of record" therefore, protecting the property rights of those who purchased assets in a bankruptcy case.<sup>15</sup>

A slide into insolvency could obviously induce a change in behavior and a debtor might well try to shelter assets for the future. The commissioners were empowered not just to seize the debtor's assets but also to find and sell any assets, even land, tenement fees, annuities and offices, which might be held in the "right of their wives".<sup>16</sup> Persons suspected of holding assets for the debtor could be summoned and questioned; and if found guilty, was liable for a fine equivalent to double the value of the assets hidden. The statute recognized that all agents involved could act with impropriety. Not only might the debtor hide assets but there could also be fraudulent claims by creditors. The penalty was symmetric; a person making a fraudulent claim was also liable to a fine double the value of the claim.<sup>17</sup>

The statute specified that every legitimate creditor was to be paid "a portion, rate and rate like, according to the quantity of their debts."<sup>18</sup> Each creditor would thus receive the same pro rated amount of shillings per pound, creating an equality of claims across all creditors, with no seniority rules, and was binding on all creditors. This removed the power of any one creditor to

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14. *34 & 35 Hen. VIII § 1.*

15. *Ibid.*

16. Of course given that a wife was *fême coverte*, in that she had no legal status independent of her husband, selling her assets was essentially selling those of her husband.

17. *34&35Hen c 4 §2 and §3*

18. *Ibid.*, §1

hold out for a better outcome and thwart the division of assets.<sup>19</sup> It also did away with what could be a socially inefficient race among creditors to access assets.<sup>20</sup> In effect, this statute created a socially and financially level playing field among all creditors at a time when the social structure did not regard all as equal. In its final paragraph the statute declared that in the event that the value of the estate did not meet all of the debts outstanding, creditors could pursue the debtor until all residual debts were repaid.<sup>21</sup> This provision makes it impossible for a debtor to exit bankruptcy until all debts are paid. At the same time, the provision of the Act leave the bankrupt with zero assets either for subsistence or to set up again in business. In this regard, the act is wasteful of entrepreneurial skills and makes no provision for a ‘second chance’. Even though the law wanted bankrupts to reveal truthfully the location of their assets, it provided little to encourage truthfulness.

*An Act touching Orders for Bankrupts (13 Eliz.I c 7)* passed in 1571 sets out more precisely the parameters that were to define bankruptcy for the next two hundred and fifty years. It maintained the same mechanisms as the prior statute but now stratifies insolvent debtors into those whose creditors could use the bankruptcy procedure and those who could not. With *13 Elizabeth* only debtors who were a “Merchant or other person using or exercising the trade of Merchandise by way of Bargaining Exchanging Rechange Barter Chevisance (making of contracts) or otherwise, in gross or by retail, of seeking his or her trade of living by buying and selling” could be declared bankrupt.<sup>22</sup> All other debts would now have to be resolved under the

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19. Many examples exist of how the wishes of one or two creditors could thwart those of the majority in trying to come to a voluntary accommodation or ‘composition’ with the insolvent debtor. See Jones (1979). The law then imposed a statutory composition on all creditors.

20. Of course, a creditor could decide to wait but then he could only try to get repaid from what remained after the assets were sold.

21. 34&35 Hen c 4 §6

22. Ibid. Although a legal issue would be what it meant to make one’s living by buying and selling, the act covered all trading activity. Jones (p.21) provides a discussion of how making a living by buying and selling came to be conceived.

rules relating to insolvent debtors.<sup>23</sup> The statute makes two further amendments. The first broadens access in that it specifically refers to debtors as either man or woman, unlike *Henry* which referred only to men. But it narrows access in that only debtors who were a “subject borne of this realm or any of the Queen’s Dominions, or Denizen” could have a writ of bankruptcy issued against them.<sup>24</sup>

*13 Elizabeth* clearly recognizes the incentive for an insolvent debtor to hide or shelter some assets. The objective of the statute is to make it costly for someone to shelter assets or help the bankrupt to evade his or her creditors with no recognition given in the act to providing a counter incentive to ensure compliance. The statute is purely punitive. As in 4&5 Henry, if the sale of assets did not cover all the debts outstanding, creditors were able to pursue the debtor until all debts were fully paid. The act does, however, recognize that the sale of all assets might more than cover the debts outstanding. In this case, the act did not allow any confiscation of assets beyond the value claimed by creditors; any ‘overplus’ remaining had to be paid back to the bankrupt or his heirs.<sup>25</sup>

Two bankruptcy statutes were passed in the first quarter of the seventeenth century (*1 Jac I c. 15* in 1603 and *21 Jac I c. 19* in 1624). The first is *An Act for the better relief of the creditors against such as shall become bankrupt* and the second, *An Act for the description of a bankrupt and relief of creditors*. Both statutes focus solely on the needs of the creditors and on the opportunity cost of the funds tied up. They continued to see the bankrupt as a fraudulent debtor, but the preamble focuses not merely on bankruptcy as the abuse of other men’s money but now showed an understanding between the role of security of contracts and economic growth in the

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23. These rules created a race amongst creditors. They also allowed individual creditors to put the debtor in prison. Single creditors did not have to agree to a division of assets, nor to any restructuring of contracts.

24. *13 Eliz. I c 4 §1*

25. But in the case of an ‘overplus’ occurring as a result of the doubling fine on those sheltering a bankrupt’s assets, half was to go to the Crown and the other half to be “employed and distributed to and among the poor within the hospitals in every city town or county where any such bankrupt shall happen to be.” *Ibid.*, §7

state:

For that frauds and deceit as new diseases daily increase amongst such as live by buying and selling, to the hindrance of traffic and mutual commerce, and to the general hurt of the realm, by such as wickedly and wilfully become bankrupt.<sup>26</sup>

Reflecting the growing commercialization of the mercantile system, the bankrupt had to submit to the commissioners, not only all “land, tenements, goods, chattels, and bonds” as in prior statutes, but now all bills and “books of account and such other things that may tend to disclose his her or their estate.”<sup>27</sup> The focus on account books would continue to grow, though perhaps with little expectation of well-maintained account books. As with prior statutes procedures surrounding search, sale and seizure were further refined, with a focus on the powers of the commissioners but now there is a consideration given to the timeliness of the mechanisms put in place and attempt to ensure that all creditors were aware of the issuance of a writ. The statute required a notice in writing posted at the bankrupt’s dwelling place or house on three separate occasions, and “upon five several proclamations made in some public place.”<sup>28</sup>

*1 James I* did not merely maintain a tradition of creditor-friendly policies with no exit for the debtor excepting the payment of all debts in full; it went further specifying explicit physical punishment for those who had tried to hide assets and lied to the commissioners.<sup>29</sup> For those bankrupts who “committed any wilful or corrupt perjury tending to the hurt of damage of he creditors ... to the value of ten pounds ...or above” the offending party could be brought to court and if convicted there, “shall stand upon the pillory in some public place by the space of two

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26.1 Jac 1 c. 15, §1

27.1 Jac 1 c. 15, §1 The focus on account books would continue to grow though perhaps with little expectation of well-maintained account books.

28. *Ibid.*, §4.

<sup>29</sup>. It was always possible for an individual creditor to allow the debtor relief.

hours, and have one of his ears nailed to the pillory and cut off.”<sup>30</sup>

Passed during a period of extensive contemporary discussion about the role of malfeasance versus misfortune as the underlying cause for non-payment of debts, *21 Jac 1 c. 19* maintained a creditor-friendly focus. The statute focused not only on the conditions under which a person can be declared a bankrupt but also on the penalties for non-compliance. It expanded the set of those who could use the bankruptcy procedure, moving beyond those who made their living by buying and selling, to include those “that shall use the trade or profession of a scrivener, receiving other men’s money or estates into his trust or custody.” Another major change also suggesting the growing importance in international trade and the growth of the international trading community in the net of credit relationships particularly in London is the fact that the act was extended to cover not just those who were borne or denizens of the country but to all “citizen and alien alike.”<sup>31</sup> This provision meant that a foreign creditor could now use the English system to obtain redress for debts owing.<sup>32</sup>

The statute however narrowed access to the bankruptcy mechanism by setting a requirement on the size of the debt. The potential bankrupt now had to be “indebted to any person or persons in the sum of one hundred pounds or more” before creditors could make use of the statute.<sup>33</sup> Anyone owing a debt less than £100 irrespective of whether s/he worked as a merchant, or in trade, or as a scrivener or made one’s living by buying and selling could not use the bankruptcy mechanism and rather would be considered an insolvent debtor with individual creditors racing to find redress through those mechanisms.<sup>34</sup> Despite the contemporary debate on

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30. *I James I* §4. Although the bankruptcy commissioners and the creditors might believe that a bankrupt had lied or had sheltered assets. The commissioners had to provide the case for perjury in a court of law before the sanctions of pillory and physically punishment could be carried out.

31. *Ibid.*, §14.

32. It is possible that this provision led creditors to consider the location of bankruptcy proceedings.

33. *Ibid.*, §2.

34. £100 in 1624 would be the equivalent of £14,000 in 2008 using the retail price index or

the subject of malfeasance versus misfortune, or the fraudulent versus the honest bankrupt, *21 Jac I* maintained purely punitive with respect to debtor rights.

Thus at the turn of the eighteenth century the bankruptcy structure provided only penalties and no rights for debtors. If found to be a legal bankrupt, he or she had all assets seized, sold and had a legal requirement to repay any debts unsettled, and might face the pillory if found to have lied or sheltered assets.<sup>35</sup> The Acts passed in 1706 and 1707 maintain the same procedures and rules regarding the issuance of a writ of bankruptcy as laid in prior statutes. Indeed, the preamble to *4&5 Anne c. 4 An Act to prevent frauds frequently committed by bankrupts* continues to argue for bankruptcy as a result of fraud rather than “by reason of losses and unavoidable misfortunes”, yet these Acts laid out for the first time rights for bankrupts. The Act provided three benefits for compliant debtors. The first was that the debtor, wife and children’s necessary wearing apparel could not be seized along with other assets. The second was the provision for an allowance of five percent of the net value of the estate up to £200 in total, but only if the creditors are receiving at least 8/- in the pound of their debts and the debts were not incurred by gambling. The third was that the statute provided the right of discharge stating that the debtor “shall be discharged from all debts by him her or them due and owing at the time he she or they did become bankrupt”.<sup>36</sup> At the same time, the Act increased the potential penalty allowing for death by hanging for non-compliant debtors who were found to have willfully defaulted on the writ.<sup>37</sup> The benefits could only be obtained by those bankrupts who were deemed by the commissioners to have complied with all requests and actions.<sup>38</sup> The statute also gave a monetary incentive of three pounds per

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£188,000 using average earnings. Officer, *Measuring Worth*. One hundred pounds in 1673 is a large sum of money and raises issues as to why this amount was chosen as the lower bound, but it also does point to a growth in wealth within the mercantile class and perhaps a perception that financially larger creditor/debtor relationships required a special position before the law.

35. Debts unpaid did not end with the death of a creditor but became part of that estate.

36. *Ibid.*

37. *Ibid.*, §1.

38. No matter how compliant, bankrupts deemed to have lost assets as gambling could not receive an allowance or discharge.

cent on the amount discovered to those individuals who helped uncover the bankrupt's estate.<sup>39</sup>

The discharge and allowance provided the bankrupt with the potential for a second chance and allows for the reinvestment of potential entrepreneurial talent in the economy. It also should encourage bankrupts more truthfully to reveal their assets. At the same time, this statute removed from the creditors the right to recoup the remainder of their debts in the future, thus removing what might have been a valuable asset. The statute specified a right to discharge for the bankrupt but what is not specified in the body of the act is the mechanism by which the discharge comes about. This was annexed to the act. The addendum to *4&5 Anne* stated that the commissioners would awarded a discharge to all bankrupts whom they deemed to have complied with the commission and with the Act. This further removed creditors from an adjudicatory role. The act did allow that creditors could 'be heard' if they thought the discharge should not be granted but it did not allow creditors the right to refuse the discharge. The mechanism set out a two stage procedure: the commissioners issued a certificate of conformity to the Lord Chancellor stating that the bankrupt has conformed to all requests and is 'entitled to the benefits of the act'; then if there were no objections or the Lord Chancellor did not find for the creditors, the certificate of discharge was granted. In the language of the act, the commissioners issue a writ of conformity and the Lord Chancellor issues the writ of discharge.

The reduction in creditor rights explicit in *4&5 Anne* was quickly amended. Passed in the following year, *6 Anne I c. 22*, now required permission of four-fifths of the creditors by number and value before a certificate of discharge could be granted. Given the pressure that could be put on creditors to get them to comply, the statute stated that if it was discovered that a bankrupt tried to induce a creditor to provide a certificate, then the discharge would be void. The act also put in a bonding requirement for creditors. Each now had to post a bond of £200 which would be returned only if their claims were justified. If, however, it was found that the creditor was making a false claim, then the bond would be used to compensate the individual for the damages done.

The act also specified that the commissioners must not only continue place a notice on the

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39. One allowance that is removed is the right of the commissioners to charge food and drink during their meetings against the estate.

bankruptcy's place of residence but now also in the London Gazette on three separate occasions. Notices were required for all meetings of the commissioners and must specify the time and place of all meetings so that all parties could appear. Although the potential bankrupt had to know that debts were owing, this notice on his or her house or in the Gazette might be the first that the debtor heard about his or her impending bankruptcy proceedings. Overall, these two acts change legal rights for bankrupts and their creditors. It provides rights to bankrupts for the first time (although also providing for capital punishment if in violation of the act) but it also reduced the rights of creditors. All allowances paid to other parties would previously have gone to creditors and some could lose the right to the future stream of income. What we now wish to explore is the impact of these changes on the actions of debtors truthfully to reveal assets and the extent to which debtors and creditors were made better off by this shift in regulatory regime.

### **Theoretical Framework and Results**

We consider a model with a single borrower and a single creditor. Both agents are risk-neutral. The borrower has a project that requires  $I = 1$  in investment funds. Once  $I$  is invested in the project, the project takes a value  $X \in \{0, H\}$ , where  $H > 1$ . The probability the project takes the higher value  $H$  is denoted by  $p \in (0, 1)$ . The values  $H$  and  $p$  are common knowledge, but the realization of  $X$  is the private information of the borrower.

The creditor offers the funds  $I$  at an interest rate of  $r > 0$ . Hence, a borrower who accepts the loan  $I = 1$  must repay  $1 + r$  to the creditor in order to comply with the lending agreement. It is assumed that  $pH \geq 1 + r$  so that the expected value of the project is at least as great as the required repayment.

The timing of the game is as follows. First, the borrower accepts the loan  $I = 1$ , thereby agreeing to a repayment of  $1 + r$ . Acceptance of the loan is taken as given. Second, the borrower either

- Invests the funds  $I$  and awaits the realization of the project's value  $X$  or
- Does not invest the funds  $I$  but rather holds on to (or consumes) the funds with the intention of defrauding the creditor at a later point.



If the borrower is unable to repay the creditor because the realized value of  $X$  is 0, we say that the borrower is bankrupt due to *misfortune*. If the borrower is unable to repay the creditor because he did not invest but rather absconded with the funds, we say that the borrower is bankrupt due to *malfeasance*. In this paper, we will treat the choice between investing and absconding as exogenous. That is, we will simply assume that there are two types of borrowers: the honest type that invests and the dishonest type that absconds. We will then examine the effect of the policy change on each type of borrower. In future work, this choice will be endogenized.

Third, the borrower's assets  $\alpha \in \{0, I, H\}$  are determined. If the borrower invests the funds and the realized value of  $X$  is 0,  $\alpha = 0$ . If the borrower invests the funds and the realized value of  $X$  is  $H$ ,  $\alpha = H$ . If the borrower absconds with the funds,  $\alpha = I$ . The value of  $\alpha$  is the private information of the borrower as he enters the repayment phase.

Fourth, the borrower is asked to repay the creditor  $1+r$ . If the borrower's assets are either 0 or  $I$ , he is unable to comply with the lending agreement and enters bankruptcy. If the borrower's assets are  $H$ , he may choose either to comply with the lending agreement by repaying the creditor  $1+r$  or to hide his assets and enter bankruptcy. (This choice is modeled explicitly.) The bankruptcy game is detailed below, and it is here that the focus of the paper lies. The next section lays out the bankruptcy game under the old statute and then does the same under the new statute.

### *The Bankruptcy Game under the Old Statute*

In the first stage, the borrower reports his assets to the court. The report need not be truthful, and as such, we denote the report by  $a \in [0, \alpha]$ . In the second stage, the court conducts an investigation in an effort to determine whether or not the bankrupt is hiding assets. The court uncovers the bankrupt's true assets  $\alpha$  with probability  $q \in (0,1)$ . If the court fails to uncover  $\alpha$  (which occurs with probability  $1-q$ ), it assumes the bankrupt's report was truthful (i.e.,  $\alpha = a$ ).

In the third stage, the debt is paid from current assets. If the report was truthful ( $a = \alpha$ ), the court seizes the smaller of  $\alpha$  and  $1+r$  and turns it over to the creditor. If  $\alpha \geq 1+r$ , the borrower emerges from bankruptcy with his debt paid, free to enjoy his remaining assets  $\alpha - (1+r)$  as well

as his future stream of income, which we denote by  $S \geq 0$ . In this case, the utilities of the borrower and creditor are

$$U_B = \alpha + S - (1+r) \quad (2.1)$$

and

$$U_C = 1+r \quad (2.2)$$

respectively. If  $\alpha < 1+r$ , the borrower emerges from the bankruptcy procedure penniless. Moreover, the creditor retains the right to collect the remainder of the debt  $(1+r) - \alpha$  from the borrower's future stream of income  $S$ , although doing so imposes costs on both parties. It is assumed that the creditor always pursues collection of the remaining debt. In this case, the utilities of the borrower and creditor are as follows:

$$U_B = \max\{0, \alpha + S - (1+r)\} - T_B \quad (2.3)$$

$$U_C = \min\{\alpha + S, 1+r\} - T_C \quad (2.4)$$

where  $T_B$  and  $T_C$  are the transaction costs associated with continued pursuit of the remaining debt borne by the borrower and creditor respectively.

If the report was not truthful ( $a < \alpha$ ) and the court's investigation uncovered the borrower's true assets  $\alpha$ , the court seizes the smaller of  $\alpha$  and  $1+r$ , turns this amount over to the creditor, and imposes a penalty  $\delta > 0$  on the borrower for hiding assets. The utilities of the borrower and creditor are as follows:

$$U_B = \begin{cases} \alpha + S - (1+r) - \delta & \text{if } \alpha \geq 1+r \\ \max\{0, \alpha + S - (1+r)\} - \delta - T_B & \text{if } \alpha < 1+r \end{cases} \quad (2.5)$$

$$U_C = \begin{cases} 1+r & \text{if } \alpha \geq 1+r \\ \min\{\alpha + S, 1+r\} - T_C & \text{if } \alpha < 1+r \end{cases} \quad (2.6)$$

If the report was not truthful ( $a < \alpha$ ) and the court's investigation failed to uncover any hidden assets, the court seizes the smaller of  $a$  and  $1+r$  and turns this amount over to the creditor. No penalty is assessed since no hidden assets were uncovered. The utilities of the borrower and creditor are as follows:

$$U_B = \begin{cases} \alpha + S - (1+r) & \text{if } a \geq 1+r \\ \max \{ \alpha - a, \alpha + S - (1+r) \} - T_B & \text{if } a < 1+r \end{cases} \quad (2.7)$$

$$U_C = \begin{cases} 1+r & \text{if } a \geq 1+r \\ \min \{ a + S, 1+r \} - T_C & \text{if } a < 1+r \end{cases} \quad (2.8)$$

The benefit of hiding assets can be seen most clearly in equation (2.7). In the event that the court fails to uncover the hidden assets, the bankrupt turns over only  $a$  and retains  $\alpha - a$ . Moreover, it is assumed that if the bankrupt is able to conceal  $\alpha - a$  from the court, then he is also able to keep this amount from the creditor both during the bankruptcy proceeding and in the future.

### *The Bankruptcy Game under the New Statute*

In contrast with the previous regime which recognized only the rights of creditors, 4&5 Anne permitted the bankrupt to retain a small portion of his estate and to emerge from bankruptcy having paid less than the totality of his debt. However, the new statute took a harder line with respect to hiding assets from the court by raising the associated penalty. These three modifications are incorporated in the bankruptcy game specified here.

The first and second stages of the game are unaffected by the policy changes. In the first stage, the borrower reports his assets to the court with the report denoted by  $a \in [0, \alpha]$ . In the second stage, the court conducts its investigation and uncovers the borrower's true assets  $\alpha$  with probability  $q$ .

All three policy changes are reflected in the third stage of the game when the court seizes assets from the bankrupt and transfers them to the creditor. If the report was truthful ( $a = \alpha$ ), the court seizes the smaller of  $\gamma\alpha$  and  $1+r$ , where  $\gamma \in (0,1)$  is the portion of the bankrupt's assets that may be seized by the court and  $1-\gamma$  is the portion the bankrupt is permitted to retain.<sup>40</sup> The amount seized is turned over to the creditor, and the debt is considered settled. The creditor is forbidden from collecting any portion of the original debt that remains unpaid. The utilities of the borrower and creditor are as follows:

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<sup>40</sup> 4&5 Anne grant the bankrupt an allowance of 5 percent of the value of his assets up to 200 pounds.

$$U_B = \alpha + S - \min\{\gamma\alpha, 1+r\} \quad (2.9)$$

$$U_C = \min\{\gamma\alpha, 1+r\} \quad (2.10)$$

If the report was not truthful ( $a < \alpha$ ) and the court's investigation uncovered the borrower's true assets  $\alpha$ , the court seizes the smaller of  $\alpha$  and  $1+r$ , transfers this amount to the creditor, and imposes a penalty  $\delta_A > \delta > 0$  on the borrower for hiding assets. Note that the borrower loses his right to the  $1-\gamma$  share when he is found to be hiding assets. The utilities of the borrower and creditor are as follows:

$$U_B = \alpha + S - \min\{\alpha, 1+r\} - \delta_A \quad (2.11)$$

$$U_C = \min\{\alpha, 1+r\} \quad (2.12)$$

If the report was not truthful ( $a < \alpha$ ) and the court's investigation failed to uncover any hidden assets, the court seizes the smaller of  $\gamma\alpha$  and  $1+r$  and transfers this amount to the creditor. No penalty is assessed. The utilities of the borrower and creditor are as follows:

$$U_B = \alpha + S - \min\{\gamma\alpha, 1+r\} \quad (2.13)$$

$$U_C = \min\{\gamma\alpha, 1+r\} \quad (2.14)$$

### ***Theoretical Results***

We now examine how the policy changes affect the incentive to truthfully report assets. We also assess the welfare effects of the new legal regime for both the borrower and the creditor.

#### *Incentives to Truthfully Report Assets*

4&5 Anne recognized that insolvency could result from misfortune rather than malfeasance. The statute adopted a softer posture towards the bankrupt by permitting him/her to retain a small share of his/her assets and emerge from bankruptcy free from continued pursuit by creditors. We begin by examining how these two more lenient measures affect the bankrupt's propensity to conceal assets. At the same time, the statute raised the penalty for failing to comply with the bankruptcy commission. We consider this separately.

Propositions 1 and 2 establish conditions under which the two measures implemented by 4&5 Anne raise the incentive to conceal. Let  $\underline{\delta}$  denote the minimum penalty necessary to induce a truthful report under the old statute and let  $\underline{\delta}_A$  denote the same under the new statute.

**Proposition 1** *Consider a borrower who enters bankruptcy due to malfeasance (i.e.,  $\alpha = I = 1$ ).*

- (i) *If  $1 - \gamma > (1 - q)(S - r)$ , then  $\underline{\delta} > \underline{\delta}_A$ .*
- (ii) *If  $1 - \gamma = (1 - q)(S - r)$ , then  $\underline{\delta} = \underline{\delta}_A$ .*
- (iii) *If  $1 - \gamma < (1 - q)(S - r)$ , then  $\underline{\delta} < \underline{\delta}_A$ .*

**Proof:** See Appendix.<sup>41</sup>  $\square$

Proposition 1 restricts attention to those borrowers who abscond with the investment funds  $I = 1$  and hence enter bankruptcy due to malfeasance rather than misfortune. The proposition indicates that if the borrower's future income stream  $S$  is sufficiently small, the propensity to truthfully report assets is greater under the Anne statutes than under the previous legal regime. This runs counter to an argument that the measures implemented by 4&5 Anne raised the incentive to conceal assets causing an increase in the associated penalty. The result suggests that some aspect of the policy change induces truthful reporting and that this aspect is dominant when  $S$  is sufficiently small.

The aspect in question is the introduction of an allowance for the bankrupt, or equivalently, the reduction of  $\gamma$  from 1 to a fraction less than 1. Under the old statute, the incentive to conceal derives from the gain associated with retaining the hidden assets,  $\alpha - a$ . When  $\gamma < 1$ , that gain is reduced to  $\gamma(\alpha - a)$ . The smaller  $\gamma$ , the smaller are the incentive to conceal assets. In effect, the reduction in  $\gamma$  and the increase in  $\delta_A$  are substitutes as instruments for inducing truthful reporting.

Proposition 1, however, also indicates that when the borrower's future income stream  $S$  is sufficiently large, the incentives for truthful reporting are weakened by the Anne statutes. Hence, there must be some other aspect of the policy change that raises the appeal of concealing assets.

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<sup>41</sup> Appendix is available on request from the authors.

Under the old statute, the creditor can pursue collection of the remaining debt after the bankruptcy proceedings have concluded; that is, the creditor can demand payment from the borrower's future income stream  $S$ . In particular, when  $S \geq 1+r$ , the creditor can collect the entire amount owed him. In this case, truthful reporting is guaranteed: the bankrupt has nothing to gain from successful concealment since he ends up paying the debt at a later point anyway. Moreover, concealing assets exposes the bankrupt to the transaction costs associated with continued debt collection  $T_B$ . In contrast, the Anne statutes shield the bankrupt's future income stream  $S$  from seizure by the creditor. In doing so, the statutes introduce an incentive to hide assets: successful concealment generates a gain of  $\gamma(\alpha - a)$  without exposing the bankrupt to continued debt collection.

**Proposition 2** *Consider a borrower who enters bankruptcy due to misfortune (i.e.,*

$$\alpha = X \in \{0, H\}.$$

(i) *If  $X = 0$ , then  $\underline{\delta} = \underline{\delta}_A = 0$ .*

(ii) *If  $X = H$  and  $\gamma H < (1+r) - (1-q)(S + T_B)$ , then  $\underline{\delta} > \underline{\delta}_A$ .*

(iii) *If  $X = H$  and  $\gamma H = (1+r) - (1-q)(S + T_B)$ , then  $\underline{\delta} = \underline{\delta}_A$ .*

(iv) *If  $X = H$  and  $\gamma H > (1+r) - (1-q)(S + T_B)$ , then  $\underline{\delta} < \underline{\delta}_A$ .*

**Proof:** See Appendix.  $\square$

The  $X = 0$  case is trivial: the borrower has nothing to conceal when, in fact, he has nothing. It follows that the borrower always reports his assets truthfully ( $a = \alpha = 0$ ) and that the penalty thresholds are zero under both the old and new statutes. However, when  $X = H$ , there is an incentive to conceal under both statutes.<sup>42</sup> Whether the incentive is stronger or weaker under Anne depends on which of the two policy changes dominates. When the bankrupt's future income stream  $S$  is sufficiently large, the effect associated with shielding the stream from seizure

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<sup>42</sup> Hiding assets when  $X = H$  can certainly be construed as malfeasance, but we offer that this sort of malfeasance is of second order in that it occurs only at a later stage when assets are being reported and not at the initial stage when funds are being invested.

dominates, and the incentive to conceal assets is strengthened by the Anne statutes ( $\underline{\delta} < \underline{\delta}_A$ ). When the income stream  $S$  is small, the effect associated with providing an allowance to the bankrupt dominates, and the incentive to conceal is weakened by the Anne statutes ( $\underline{\delta} > \underline{\delta}_A$ ). The argument is identical to the one following Proposition 1.

Finally, we note that the propensity to conceal assets is weakened by 4&5 Anne only in the following two cases:

- The bankrupt is of the malfeasance variety and  $1 - \gamma > (1 - q)(S - r)$  or
- The bankrupt is of the misfortune variety,  $X = H$ , and  $\gamma H < (1 + r) - (1 - q)(S + T_B)$ .

Both inequalities are violated whenever  $\gamma$  is close to 1 and  $S$  is sufficiently large. We offer that these conditions on the parameters are in line with the data (in particular, the Anne statutes set  $\gamma$  at 5 percent). As such, it is reasonable to conclude that in most cases, the incentive to conceal assets was magnified by 4&5 Anne and that the penalty increase implemented was an appropriate countermeasure.

### *Welfare Effects*

Here we assess the welfare effects of the Anne statutes for both the borrower and the creditor. Propositions 3 and 4 establish that the borrower generally prefers the new legal regime while Propositions 5 and 6 detail the conditions under which the creditor prefers the old regime.

**Proposition 3** *Consider a borrower who enters bankruptcy due to malfeasance (i.e.,  $\alpha = I = 1$ ).*

- (i) *If  $\delta_A = \delta$ , then the borrower is strictly better off under the new statute.*
- (ii) *Suppose that  $\delta_A > \delta$  and that  $\delta_A$  is large enough to ensure truthful reporting (i.e.,  $\delta_A \geq (\gamma - q)/q$ ). Then the borrower remains strictly better off under the new statute except when  $S < 1 + r$  and  $\delta < (\gamma - q - S - T_B)/q + \max\{0, S - r\}$ .*

**Proof:** See Appendix.  $\square$

**Proposition 4** Consider a borrower who enters bankruptcy due to misfortune (i.e.,

$$\alpha = X \in \{0, H\}.$$

- (i) Suppose  $X = 0$  and  $\delta_A = \delta$ . Then the borrower is strictly better off under the new statute except when  $S = T_B = 0$ .
- (ii) Suppose  $X = H$  and  $\delta_A = \delta$ . Then the borrower is strictly better off under the new statute except when  $\gamma H \geq 1+r$  and  $\delta \geq \left[\frac{(1-q)}{q}\right](1+r)$  or when  $S = T_B = 0$  and  $\delta < \left[\frac{(1-q)}{q}\right](1+r)$ .
- (iii) Suppose  $X = 0$  and  $\delta_A > \delta$ . Then the borrower is strictly better off under the new statute except when  $S = T_B = 0$ .
- (iv) Suppose  $X = H$ ,  $\delta_A > \delta$ , and  $\delta_A$  is large enough to ensure truthful reporting. Then the borrower is strictly better off under the new statute except when  $\gamma H \geq 1+r$  or when  $\gamma H < 1+r$  and  $\delta \leq \left(\frac{1}{q}\right)\left[\gamma H - q(1+r) - (1-q)(S + T_B)\right]$ .

**Proof:** See Appendix.  $\square$

The Anne statutes implemented three policy changes: the bankrupt could retain a small portion of his estate; the creditor could no longer seize the bankrupt's future income stream; and the penalty for hiding assets was increased. The first two changes clearly benefit the borrower. Hence, in the absence of the third change, the borrower is better off under the Anne statutes. This result is obtained in Propositions 3(i), 4(i), and 4(ii).

The two exceptions outlined in Proposition 4(ii) merit some discussion. In the first, the penalty  $\delta$  is high enough to ensure truthful reporting under both the old and new regimes, and the allowance share  $1-\gamma$  is low enough that the entire debt can be paid from the borrower's remaining assets  $\gamma H$ . Since the borrower pays the debt in full under both regimes, s/he gains nothing from the changes introduced by Anne. The second exception favors the old regime by positing a  $\delta$  low enough to induce hiding assets and setting  $S + T_B = 0$  so as to reduce the borrower's post-bankruptcy liability to zero. Even under these conditions, the borrower does not prefer the old regime; he is merely indifferent between the two.



Propositions 3(ii), 4(iii), and 4(iv) introduce a penalty increase large enough to ensure truthful reporting. We find that the borrower still prefers the new statute except when the original penalty  $\delta$ , the probability of discovering hidden assets  $q$ , the future income stream  $S$ , and the borrower's transaction costs  $T_B$  are sufficiently small. Under this strict set of conditions, hiding assets under the old regime is exceptionally attractive since both the expected penalty ( $q\delta$ ) and the cost associated with the creditor's continued pursuit ( $S + T_B$ ) are negligible.

We now turn our attention to the welfare effects for the creditor. Propositions 5a and 6a address the creditor's preferences over the two regimes when the penalty is held fixed (i.e.,  $\delta_A = \delta$ ). Propositions 5b and 6b examine how the creditor's preferences change when the penalty is raised by enough to ensure truthful reporting.

**Proposition 5a** *Consider a borrower who enters bankruptcy due to malfeasance (i.e.,  $\alpha = I = 1$ ) and a creditor whose transaction costs are zero (i.e.,  $T_C = 0$ ). If  $\delta_A = \delta$ , the creditor is strictly better off under the old statute except when*

- (i)  $S = 0$  and  $\delta < (\gamma - q)/q$ ,
- (ii)  $S < r$ ,  $\gamma - q \geq S$ ,  $\delta \geq (\gamma - q)/q$ , and  $\delta < (1 - q)/q$ , or
- (iii)  $S \in [r, 1 + r)$ ,  $\gamma - q \geq qr + (1 - q)S$ ,  $\delta \geq (\gamma - q)/q$ , and  $\delta < [(1 - q)/q][(1 + r) - S]$ .

**Proof:** See Appendix.  $\square$

**Proposition 6a** *Consider a borrower who enters bankruptcy due to misfortune (i.e.,  $\alpha = X \in \{0, H\}$ ) and a creditor whose transaction costs are zero (i.e.,  $T_C = 0$ ). Suppose  $\delta_A = \delta$ . If  $X = 0$ , the creditor is strictly better off under the old statute except when  $S = 0$ . If  $X = H$ , the creditor is strictly better off under the old statute except when*

- (i)  $\gamma H \geq 1 + r$  and  $\delta \geq [(1 - q)/q](1 + r)$ ,
- (ii)  $\gamma H \geq 1 + r$ ,  $S = 0$ , and  $\delta < [(1 - q)/q][(1 + r) - T_B]$ ,

- (iii)  $\gamma H < 1+r$ ,  $(1+r)-\gamma H \leq (1-q)[(1+r)-S]$ ,  $\delta \geq (\gamma H/q)-(1+r)$ , and  $\delta < [(1-q)/q][(1+r)-(S+T_B)]$ , or
- (iv)  $\gamma H < 1+r$ ,  $S=0$ ,  $\delta < (\gamma H/q)-(1+r)$ , and  $\delta < [(1-q)/q][(1+r)-T_B]$ .

**Proof:** See Appendix.  $\square$

The model assumes pursuit of the remaining debt is compulsory under the old regime. Consequently, the creditor prefers to operate under the new regime whenever the transaction cost associated with continued pursuit is sufficiently high. In order to eliminate this effect, we set  $T_C$  equal to zero. Once the creditor can costlessly collect the remaining debt from the borrower's future income stream, he finds the old regime to be quite appealing.

Nevertheless, there remain several cases in which the creditor prefers to operate under the Anne statutes. The ones detailed in Propositions 5a(ii), 5a(iii), and 6a(iii) are of particular interest. In these cases, the borrower's future income stream  $S$  is small, and the penalty  $\delta$  is such that the borrower hides assets under the old regime but discloses them under the new regime. The creditor prefers the new regime because he gains more from truthful reporting in the bankruptcy stage than he loses from forgoing continued pursuit in the post-bankruptcy stage.

Raising the penalty  $\delta_A$  should make the new regime even more appealing to the creditor. This idea is formalized in Propositions 5b and 6b.

**Proposition 5b** *Consider a borrower who enters bankruptcy due to malfeasance (i.e.,  $\alpha = I = 1$ ) and a creditor whose transaction costs are zero (i.e.,  $T_C = 0$ ). Suppose that  $\delta_A > \delta$  and that  $\delta_A$  is large enough to ensure truthful reporting (i.e.,  $\delta_A \geq (\gamma - q)/q$ ). Then the creditor is strictly better off under the old statute except when*

- (i)  $S < r$ ,  $\gamma - q \geq S$ , and  $\delta < (1-q)/q$  or
- (ii)  $S \in [r, 1+r)$ ,  $\gamma - q \geq qr + (1-q)S$ , and  $\delta < [(1-q)/q][(1+r)-S]$

**Proof:** See Appendix.  $\square$

**Proposition 6b** *Consider a borrower who enters bankruptcy due to misfortune (i.e.,  $\alpha = X \in \{0, H\}$ ) and a creditor whose transaction costs are zero (i.e.,  $T_C = 0$ ). Suppose that  $\delta_A > \delta$  and that  $\delta_A$  is large enough to ensure truthful reporting. If  $X = 0$ , the creditor is strictly better off under the old statute except when  $S = 0$ . If  $X = H$ , the creditor is strictly better off under the old statute except when*

(i)  $\gamma H \geq 1+r$  or

(ii)  $\gamma H < 1+r$ ,  $(1+r) - \gamma H \leq (1-q)[(1+r) - S]$ , and  $\delta < [(1-q)/q][(1+r) - (S + T_B)]$

**Proof:** See Appendix.  $\square$

In sum, the creditor is generally worse off under the new regime because he foregoes his right to continued debt collection. However, the creditor does benefit from the Anne statutes in cases where (1) the penalties are such that truthful reporting occurs under the new regime but not under the old regime and (2) the borrower's future income stream is negligible thereby limiting the costs associated with the forgone debt collection. What 6 Anne 1 did was to give creditors a choice in whether they 'effectively' operated under the old or new statutes. We next explore the extent to which certificates of conformity and discharge were issued.

### **Certificates of Conformity and Discharge**

The various bankruptcy statutes prescribed the mechanisms and procedures to be followed. Once a written request was received by the Lord Chancellor, a writ of bankruptcy had to be issued. The Lord Chancellor would assign five commissioners for each case from inception to conclusion. The information that we use here come from the bankruptcy records (B1-B7) housed at the National Archives, Kew, England. Documentation for the nineteenth century is extensive but as one moves earlier in time, the documentary record becomes more fragmented. Fortunately, although not complete, there exist some useful records for the first half of the eighteenth century.

Starting in 1710, there is a complete record of all bankruptcy writs issued which can be found in the Bankruptcy Commission Docket Books (PRO B4). Each writ gives the date, the name of the bankrupt and hence gender, his or her occupation and location. It also lists the name of the creditor(s) - his or her name, occupation and locations- who had the writ issued and the names of the five commissioners. These are the records which Hoppit used for his work on business failures in England.<sup>43</sup> Archival information on the disposition of bankruptcy cases is less complete. Little material on the outcome of cases exists. Fortunately two ledger books on the issuance of certificates of conformity in the eighteenth century have survived and it appears that no one has worked with these ledger books. The first covers a period just after the Anne statute, from September 1710 to April 1713; the second ledger covers the years 1733-1751 (PRO B6). We use the earlier ledger book here.

In order for a bankrupt to emerge from bankruptcy prior to payment of all debts, the Anne statutes mandated a two-step procedure. The first occurred when the commissioners declared themselves ready to issue a certificate of conformity, stating that the bankrupt had conformed with the commission and had met all of the requirements laid out by the various statutes. Notice was then posted in the London Gazette for the benefit of all creditors. In order to send the Certificate of Conformity to the Lord Chancellor for the issuance of a certificate discharge, *6 Anne 1* required that four-fifths of the creditors by number and by value sign off. As noted in the theoretical framework, there are only a particular set of circumstances in which the creditors would sign off. In its internal documentation, the National Archives makes a similar point: “creditors frequently withheld consent until they had been paid what they considered a reasonable proportion of their debtors and many, it is said, refused for spite or because they thought bankrupts had acted fraudulently.” (PRO B Glossary of Terms)

At issue is whether the creditor would always prefer the old statute. If so, then one might expect that given a choice, the creditor would not sign off on a certificate of discharge. Yet even within the very stylized model, it is not the case that a creditor would always prefer the old statute. As we discussed in the previous section, with a particular constellation of circumstances,

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43. In *Risk and Failure*, Hoppit uses the information on date, location and occupation.

the creditor would prefer to operate under the Anne statute and issue a discharge. This would occur if the expectation of future income on the part of the bankrupt was very low, if the allowance paid to the bankrupt is sufficiently small, and if the increase in the penalty led to more truthful revelation of assets. In essence, the creditor prefers a larger upfront payment rather than getting less initially and having to capture the remainder later. This result holds even if the transactions costs for dunning the creditor are very low.

Although not specifically modeled, there are other circumstances that one might expect to lead to creditors signing off on a certificate. First, Lending money or credit might not be just a one-off situation for the creditor. He or she might see the market in a repeated game context. In this situation, one might expect that some creditors want to establish a reputation for fair dealing or to establish a reputation, in Defoe's words, as a moderate creditor and not a grasping one. Second, under the older statutes, all creditors had the right to try to extract the remainder their debts over the lifetime of the bankrupt and then from his or her estate. But each creditor had to do this individually. Yet if any one of them went to the effort to find the bankrupt and search to see if s/he had hidden any assets from the initial payout, that creditor would create a positive externality for the others which could not be internalized. This would lead to less search and so some subset of the creditors might sign off on the certificate of discharge. An implication is that the greater the number of creditors, the more likely that an individual creditor would sign off.

The Certificate of Conformity Ledger (PRO B 6/1) for 1710-1713 contains a considerable amount of information. Each entry, as shown in Figure 2, contains a date, the name of the bankrupt, his or her occupation and location. It gives the names of the three commissioners who were in charge of the proceedings and most importantly, it gives the names of the creditors who have signed off on the certificate. We know the list of creditors is at least four-fifths of those involved but it could be the complete set. We have no way to distinguish. What is not given is the amount of the debts nor the pro-rated amounts received by the creditors. Though, as we note below, in two cases, the file gives the amounts received. The ledger also notes when the case was disputed by the creditors and sent to two judges. The Certificate of Conformity Ledger for 1733-1751 covers a longer time span but contains much less information. It gives only the names of the bankrupt, his or her occupation and location. No information on creditors' names is included.

Over the course of the nearly four years covered by this Certificate of Conformity ledger, there are 549 certificate entries. This was an average of 12 certificates per month. There was, of course, some annual variation with 167 certificates entered in 1711, 159 in 1712 and 158 in 1713. The Bankruptcy Commission Docket Books and the Certificate of Conformity ledger are contemporaneous in time. We are in the process of entering the Docket ledger books into a machine readable form. When this is completed, we will be able to match the date of initial bankruptcy against the certificate of conformity issuance date. From a page count of the docket ledgers, the contemporaneous data for the number of writs of bankruptcy issued during these same years was roughly 250 per year.<sup>44</sup> Indeed, the number of bankruptcies writs issues is relatively constant for this period. If this represented a true mapping from the Writ ledger to the Conformity ledger, this suggests that about 65% of those entering bankruptcy would see a certificate of conformity eventually issued and argues that discharge was certainly not routinely refused.

As required by law, four fifths of the creditors by value and number had to agree to the discharge. Unlike later ledgers, this particular ledger gives the actual names of the creditors. Here we work only with the number of creditors per entry. In total, there are 9,333 creditors listed across these 549 certificates. This is an average of 17 creditors per bankrupt. This seems to us to be a very large number and speaks to an intricate web of debt and credit in England in the early part of the eighteenth century. There were only 121 people of the nearly ten thousand who were unable to sign their names: both men and women. Their presence in the data shows that numeracy might have been more widespread than literacy among this group. The large number of creditors per filing would also make it more likely that a certificate would be issued. As we suggested above, this might be because of the larger payout due to increased truthfulness promoted by the new legislation, or it might be due to the free rider problem that emerges with many creditors trying to get further repayment.

Of course, there is dispersion on the number of creditors per case. The certificate of conformity was the first state in the process of discharge. This was the stage in which the

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44. These numbers come from a count of the entries in the Bankruptcy writ ledger PRO B4/1.

creditors could agree or disagree. In 34 entries no creditors are listed and there is a notation that the case was sent for appeal. We assume that there are cases in which the creditors disagreed. But this did not mean that these cases might not eventually obtain a discharge. Bankrupts could reapply for a certificate of conformity. A notice for Sir Stephen Evance and William Hales, both goldsmiths, was posted in the London Gazette in February 1711 as having conformed to all the acts, but clearly the creditors disagreed, and we see it posted again in January 1712.<sup>45</sup> In November 1711, the Certificate of Conformity register lists only William Hales and lists eight creditors but the entry is crossed out. The first creditor listed is Caesar Child and it was at his house that Sir Stephen Evance hung himself in March 1712. Most of the other cases were, we hope, less dramatic.

In only ten of the cases was there only one creditor listed. Indeed, in one entry the clerk wrote the number 'one' in capitals to ensure someone that this is not a mistake. While the average number of creditors per case was 17, this is driven by extremely large numbers of creditors in a subset of cases. A histogram of the number of creditors and cases is given in Figure 3. Over 277 of the cases had more than 10 creditors, 199 had more than 15, and 44 had more than forty creditors. Nineteen cases had more than 60 creditors and two more than 100. As the law required only the agreement of four fifths of the creditors by value and number, the numbers given here could be a lower bound for total population of creditors involved in any given bankruptcy case. That these creditors all signed also shows that how well information was flowing through the mercantile community and the role played by the London Gazette. But this does suggest an extraordinary complex web of credit in early eighteenth century England.

The data again confirm the presence of women in these credit networks. Given differences in wealth between men and women, it is not surprising that there are fewer women than men listed as creditors. However over all, 7% of the creditors were women, which is less than the 10% of women who were shareholders in the Bank of England in the same period. But we need to be careful with such an average. In roughly half of all entries (264), there were no women creditors. For the other half, the absolute number of women creditors rose with the

absolute number of creditors; the largest number of women listed for any single case was eleven. If present, the percentage of woman present was roughly between 5%, when only one woman creditor, and closer to 10% if more than one.

There are two folios in the Ledger which list a monetary amount by the name of each creditor.<sup>46</sup> The two cases are those for Thomas Collet, Distiller and James Hartum, Merchant. Both lived in Bristol. The ledger lists 16 creditors for Thomas Collet and 8 for Hartum. The total amounts listed were £1158:16:3 and £545:3:0. The first point that should be made is that these are not trivial sums of money in 1710. For Collet, £1158 corresponds to £138,000 measured in terms of the retail price index and nearly £2,000,000 in terms of average earnings. What must also be recognized is that in order to receive a discharge, the creditors must receive at least 8/- in the pound. If we assume that the creditors received only 8/- in the pound, then the debt owing by Thomas Collet would have been close to three thousand pounds. The distribution across the creditors shows that Collet had three large creditors and many smaller ones. The list of creditors and amounts is shown in Table 2. The largest amount was £361 received by Cornel Serjean and the smallest, £1:14:4, received by John Barrow. There were two other creditors receiving over £100 and four others getting less than £5. In the case of James Hartum, the debts owed were somewhat more evenly distributed, with Francis Freeman received £121 at the top to £25 to Henry Pyne at the bottom. These data too speak to an intricate web of debt and credit within the community.

## **Conclusions**

The legal rights of bankrupts and creditors changed in the middle of the first decade of the 18<sup>th</sup> century. For the first time ever, bankrupts had the possibility of a second chance. Prior to *4&5 Anne* and *6 Anne*, a bankrupt could emerge from bankruptcy only by paying all debts. Under this new legislation, debtors could receive an allowance from the estate and the possibility of a writ of discharge from bankruptcy, although those convicted of behaved fraudulently would face

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<sup>45</sup> . <http://www.oxforddnb.com/view/article/49172>

<sup>46</sup> . These are folio 25 and 27, PRO B6/1.



death by hanging. Especially in those cases where bankruptcy was the result of misfortune outside the control of the debtor, the economy had the possibility of re-using that entrepreneurial talent. A writ of discharge, however, was contingent on at least three quarters of the creditors by number and value agreeing to the issuance of such a writ. Explicit in this agreement was a relinquishing of the remainder of the debt owing. Here we have explored the extent to which a bankrupts and creditors would be better off under this new statute relative to the older statute.

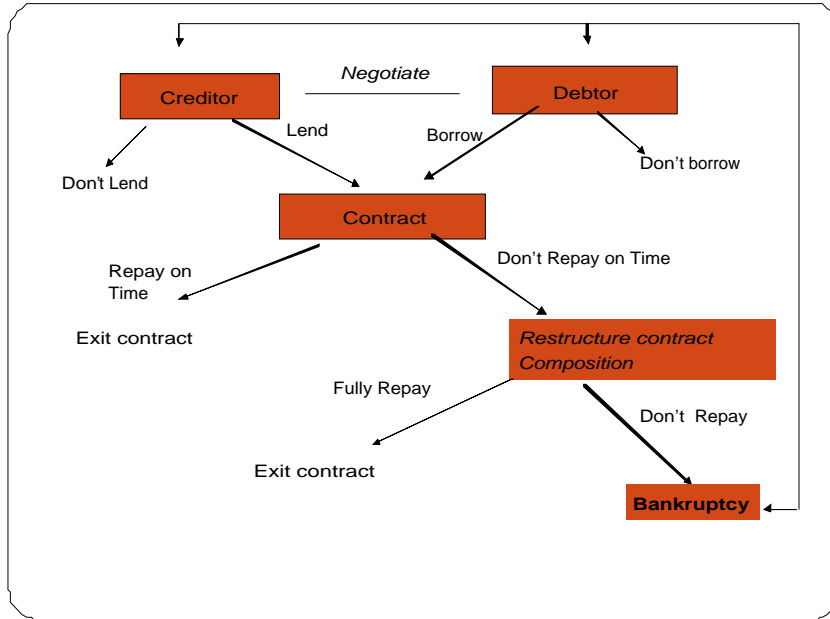
The contemporary literature describes two types of bankrupts, the honest and dishonest bankrupt, where an honest bankruptcy is the result of misfortune and the dishonest bankruptcy is the result of malfeasance. The same literature also speaks about the moderate and the grasping creditor. Using a game theoretic framework we explored how the welfare of an honest bankrupt and a fraudulent bankrupt changed with this change in the legislation. In particular we examined the extent to which the legislation increased the likelihood of truth-telling about assets on the part of the bankrupt. We show that in most cases the welfare of the bankrupt was increased under the new statute, but not always.

The change in legislation which provided the bankrupt an allowance from the estate and also the possibility of discharge if four fifths of the creditors (by number and value of debts) agreed appears almost *a priori* to decrease the welfare of creditors. The estate to be divided is now lowered by the amount of the allowance and if they agree to a discharge they lose a potential stream of future income. We show, however, that there are circumstances under which the creditors' welfare is increased under the new statute. The smaller the allowance given, the greater the estate left for the creditor, but more important is the way in which truthfulness regarding assets is engendered on the part of the bankrupt. More truthfulness leading to a bigger initial payout combined with a low allowance and a low expectation of any future income payout enhances creditor welfare under the new statute relative to the old.

Using previously ignored bankruptcy ledgers, we document for the first time the extent of discharge in the wake of the change in the legislation. Using the Certificate of Conformity Ledgers for 1710-1714, nearly six hundred certificates were issued. This represents about 65% of the contemporaneous bankruptcy writs issued. Thus creditors were willing to and did agree to forgo the right to dun the debtor into the future. We suggest that this occurred not only because

the future income stream was limited but also because of the free rider problem inherent in the large number of creditors involved in each bankruptcy case. The ledgers tell us that the average number of creditors per case was seventeen and many cases had more than fifty creditors. For each, the future payout was low. The network of debt and credit revealed by these cases speaks to a highly leveraged mercantile sector and a wide range of individuals involved in the financing of trade and financial services at this time.

Figure 1



**Figure: 2 Folio from the Certificate of Discharge Ledger 1710-1714**

30. Sept  
1710

Philip Sullie Maurice Kellie & Thomas London being  
the Major part of the Com<sup>rs</sup> authorized by a Comicon of  
Bankrupt awarded ag<sup>t</sup> John Tonison of London Linen  
Draper the 11<sup>th</sup> Day of February last past have this Day  
certified to the R<sup>ts</sup> Hon<sup>ble</sup> the Lords Com<sup>rs</sup> for the Custody  
of the Great Seal of Great Britain that the said John  
Tonison had in all respects conform'd himself to the sev<sup>l</sup>  
Acts of Parliam<sup>t</sup> made concerning Bankrupts And also  
that the sev<sup>l</sup> Persons whose names are subscribed being  
full four parts in five in number and value of the Cr<sup>ts</sup>  
of the s<sup>d</sup> John Tonison consented to and subscribed the  
said Certificate

Wm Toone  
Sam<sup>l</sup> Linooshaw  
Wm Burdett  
S. Ward  
Rich<sup>d</sup> Bridgman for  
Self & Co<sup>s</sup>  
Math. Jones  
Tho. Dodd  
John Grandy  
Henry Gardiner  
John Scot  
for self & Wholpoale  
Gabriel Glover  
For John Travel & self  
Rob<sup>t</sup> Concut  
For Akkin Windham & self  
Edw<sup>d</sup> Dodd  
Scawon & Stockdale  
Isaiah de Coalporgen  
Abraham Griston

For Rich<sup>d</sup> Cook & self  
John Spillet  
For Nath. Downham & self  
Nath Garland  
Wm Sedgwick for my Ma<sup>ty</sup>  
Law. de La Chambre  
Noah de la fountain  
For my self & Tho Raynton  
Rob<sup>t</sup> Shaw  
In<sup>o</sup> Snowell 1710  
In<sup>o</sup> Wood for partner &  
self  
For John Smith & self  
Henry Rowater  
John Goddard  
Joseph Golden  
for self & Partner  
John Cook  
Is<sup>ac</sup> Gibson  
W<sup>m</sup> Knight

11 Oct 1710

Witness  
Will Naylor

28<sup>th</sup> Oct 1710

Figure 3

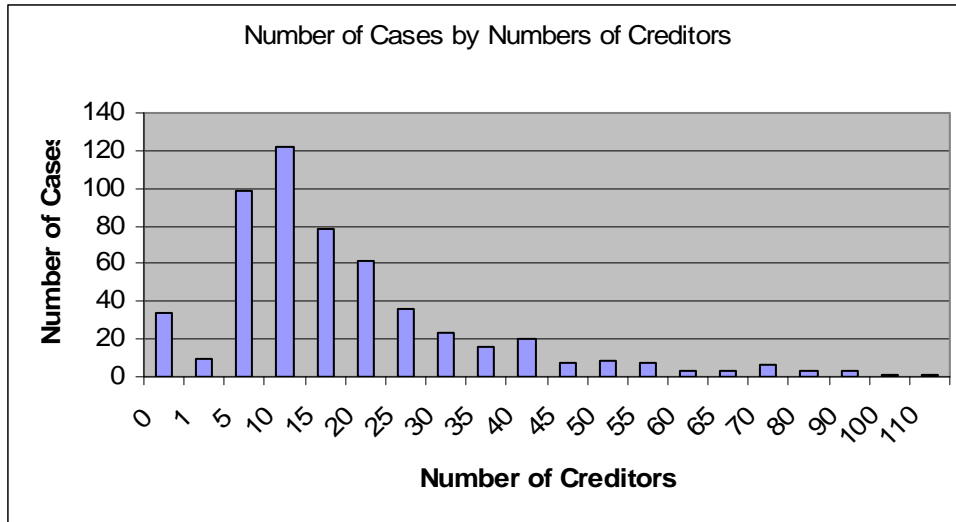


Table 1: Bankruptcy Statutes in Early Modern England		
34&35 Hen. VIII c 4	<i>An Act against such persons as do make bankrupt</i>	1546
13 Eliz.I c 7	<i>An Act touching orders for bankrupts</i>	1571
1 Jac I c. 15	<i>Act for the better relief of the creditors against such as shall become bankrupt</i>	1603
21 Jac I c. 19	<i>An Act for the description of a bankrupt and relief of creditors</i>	1624
4&5 Anne c. 4	<i>An Act to prevent frauds frequently committed by bankrupts</i>	1706
6 Anne c. 22	<i>An Act to explain and amend an act of the last session of Parliament for preventing frauds frequently committed by bankrupts</i>	1708

**Table 2: Payout in Two Bankruptcy Cases 1710**

<b>Amount Listed (£)</b>	<b>Creditor</b>	<b>Amount Listed (£)</b>	<b>Creditor</b>
66:02:02	Francis Whitchurch	118:00:00	Thomas Cole
31:00:00	Benjamin Paget	25:00:00	Henry Pyne
68:02:11	Benjamin Turner	57:00:00	Stephen Richardson
90:14:00	Francis Pinnell	44:00:00	Manaseth Whitehead
43:17:03	John Froman	50:00:00	William Williams
50:00:00	Mary Fisher	75:00:00	Philip Tailer
4:07:06	Elizabeth Arnald	54:10:00	Edward Freeman
127:08:03	John Cullett	121:13:00	Francis Freeman
50:00:00	William England Junior		
14:00:00	Thomas Cadwallader		
230:10:00	Mary Knight		
13:06:04	Arthur Plomer		
4:05:00	John Shettleworth		
361:00:00	Cornel Serjean		
4:08:06	Daniel Hoch		
1:14:04	John Berrow		
		<b>Total</b>	
		<b>£545:03:00</b>	
<b>Total</b>			
<b>£1158:16:03</b>			

Source: Folio 25 PRO B 6/1.



## **Bibliography**

London Gazette

National Archives, Public Records Office, Kew, England

Office of the Commission of Bankrupts and the Court of Bankruptcy: Bankruptcy  
Commission Docket Books, PRO B 4.

Court for the Relief of Insolvent Debtors and Supreme Court of Judicature, High Court of  
Justice in Bankruptcy and Predecessors: Registers PRO B 6.

Statutes of the Realm

34&35 Hen. VIII c 4 *An Act against such persons as do make bankrupt*

13 Eliz.I c 7 *An Act touching orders for bankrupts*

1 Jac I c. 15 *Act for the better relief of the creditors against such as shall become  
bankrupt*

21 Jac I c. 19 *An Act for the description of a bankrupt and relief of creditors*

4&5 Anne c. 4 *An Act to prevent frauds frequently committed by bankrupts*

6 Anne c. 22 *An Act to explain and amend an act of the last session of Parliament for  
preventing frauds frequently committed by bankrupts*

Acemoglu , Daron, Simon Johnson, and James A. Robinson. "The Colonial Origins of  
Comparative Development: An Empirical Investigation." *American Economic Review* 91  
(December) 2001: 1369-1401.

Aghion Philippe, Oliver Hart, and John Moore, "The Economics of Bankruptcy Reform", NBER  
Working Paper no. 4097, 1992.

Alsop J. D., "Ethics in the Marketplace: Gerrard Winstanley's London Bankruptcy, 1643,"  
*Journal of British Studies*, vol 28, no. 2, 1989, pp. 97-119.

Anderson, B. L., "Money and the Structure of Credit in the Eighteenth Century," *Business  
History*, vol XII, 1970, pp 85-101.

Banerjee, Abhijit and Lakshmi Iyer, "History Institutions and Economic Performance: The  
Legacy of Colonial Tenure Systems in India, *American Economic Review*, vol 95, no. 4, 2005:  
1190-1213.

Burley, K. H., "An Essex Clothier of the Eighteenth Century," *Economic History Review*, vol 11,  
no. 2, 1958, pp. 289-301.

Clasessens Stijn and Leora F. Klapper, "Bankruptcy around the World: Explanations of its

Relative Use,” *American Law and Economics Review*, vol 7, Spring 2005, pp. 253-283.

Dell Melissa, “The Persistent Effects of Peru’s Mining Mita”, forthcoming *Econometrica*,  
[\[http://econ-www.mit.edu/grad/mdell/papers\]](http://econ-www.mit.edu/grad/mdell/papers)

Frouté Phillipe, “Theoretical Foundation for a Debtor Friendly Bankruptcy Law in Favour of Creditors,” *European Journal of Law and Economics*, vol 24, 2007, pp. 201-214.

Glaeser Edward L. and Andrei Schleifer, “Legal Origins,” *Quarterly Journal of Economics* vol 117, no 4, November 2002, pp. 1193-1229.

Grassby, Richard, “The Personal Wealth of the Business Community in Seventeenth-Century England,” *Economic History Review*, vol. 23, no.2 1970, pp. 220-234.

Hart Oliver and John Moore, “Property Rights and the Nature of the Firm,” *Journal of Political Economy*, vol. 98, no.6, 1990, pp. 1119-1158.

Hoppit Julian, “Financial Crises in Eighteenth-Century England”, *Economic History Review*, vol 39, no. 1, February 1986, pp. 39-58.

Hoppit Julian, *Risk and Failure in English Business 1700-1800*, Cambridge: Cambridge University Press, 1987.

Jones W. J. “The Foundations of English Bankruptcy: Statutes and Commissions in the Early Modern Period,” *Transactions of the American Philosophical Society*, vol. 19, part 3, 1979, pp. 5-63.

Joslin D. M., London Private Bankers, *Economic History Review*, vol 7, no 2, 1954, pp. 167-186.

Kadens Emily, “The Last Bankrupt Hanged: Capital Punishment for Bankruptcy in 18<sup>th</sup>-Century England” Working Paper accessed [ssrn.com/abstract=1446818](http://ssrn.com/abstract=1446818), 2009.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, Robert W. Vishny, “Law and Finance,” *Journal of Political Economy*, vol 106, no. 6 December 1998, pp. 1113-1155.

Marriner Sheila, “English Bankruptcy Records and Statistics before 1850,” *Economic History Review*, vol 33, no. 3, 1980, pp. 351-366.

McCoid II John C. “Discharge: The Most Important Development in Bankruptcy History”, *American Bankruptcy Law Journal* vol 70, pp 163-196, 1996.

Musacchio Aldo, “Can Civil Law Countries Get Good Institutions? Lessons from the History of Creditor Rights and Bond Markets in Brazil,” *Journal of Economic History*, vol 68, no. 1, 2008,

pp. 80-108.

North, Douglass C. *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press, 1990.

North, Douglass C. "Institutions," *Journal of Economic Perspectives*, 5, Winter (1991), pp. 97-112.

North, Douglass C. and Barry R. Weingast, 'Constitutions and Commitment: The Evolution of institutions Governing Public Choice in Seventeenth-Century England', *Journal of Economic History*, 49, December (1989), pp. 803-832

North, Douglass C., John J. Wallis and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*, Cambridge University Press, 2009.

Officer Lawrence H. , "Purchasing Power of British Pounds from 1264 to Present," *MeasuringWorth*, 2009. URL <http://www.measuringworth.com/ppoweruk/>

Pomykala Joe, "Bankruptcy's Origins in Debtor Perpetrated Crime", Working Paper Towson University, 1999.

Safley Thomas Max, "Business Failure and Civil Scandal in Early Modern Europe," *Business History Review* 83 Spring 2009, pp. 35-60.

Schick Sandor E., "Globalization, Bankruptcy and the Myth of the Broken Bench," *American Bankruptcy Law Journal*, vol. 80, 2006, pp. 219-260.

Sgard Jérôme, "Do Legal Origins Matter? The Case of Bankruptcy Laws in Europe 1804-1914", *European Review of Economic History*, vol 10, 2006, pp. 389-419.

Sgard Jérôme, "The History of Market Discipline: Bankruptcy, Renegotiation, and Debt Discharge in England and France (Sixteenth-Nineteenth Century), working paper, Sciences Po, Centre d'Etudes et de Recherches Internationales (CERI), 2009.

Tabb Charles Jordan, "The Historical Evolution of the Bankruptcy Discharge," *American Bankruptcy Law Journal*, vol 65, pp. 325-372, 1991

Tabb Charles Jordan, "The History of the Bankruptcy Laws in the United States," *American Bankruptcy Institute Law Review*, vol 3 pp 5-51, 1995.

Tribe John, "Bankruptcy and Capital Punishment in the 18<sup>th</sup> and 19<sup>th</sup> Centuries" *Insolvency*

Intelligence, 2008.

Welbourne E., "Bankruptcy before the era of Victorian Reform," *Cambridge Historical Journal*, vol IV, 1932, pp. 51-62.

White Michelle, "Bankruptcy: Past Puzzles, Recent Reforms and the Mortgage Crisis," National Bureau of Economic Research, Working Paper # 14594, 2008.

Wilson Charles, *England's Apprenticeship 1603-1763*, Longmans: Longmans, Green and Co, 1965.