# AN EMPIRICAL INVESTIGATION OF THE TERMS OF CORPORATE CHARTERS AND INFLUENCES ON TERM STANDARDIZATION IN A LAISSEZ-FAIRE ENVIRONMENT

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#### **Abstract**

More than fifty years before the debate about the contractibility of corporate law in the United States, English and then Australian lawmakers truncated what had been substantial scope for contracting around directors' duties. Legislation imposed mandatory rules concerning conflicts of interest and release of officer liability which substantially survive to this day. This article offers evidence on the form that corporate governance contracts took in Australia prior to the introduction of this legislation. Evidence demonstrates pervasive alteration of default rules. Although there is evidence of increasing standardisation in the terms selected and of the extent of previous adoptions influencing the choice of terms, the evidence does not support the distinctive lock-in claims made by theories of network externalities. The paper also demonstrates the critical role of precedents manuals in contract innovation.

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## AN EMPIRICAL INVESTIGATION OF THE TERMS OF CORPORATE CHARTERS AND INFLUENCES ON TERM STANDARDIZATION IN A *LAISSEZ-FAIRE* ENVIRONMENT

#### I. Introduction

A major contribution of the economic analysis of corporate law is its advocacy of legal rules that yield to private ordering. This 'contractarian' theory describes American corporate law well. The federal structure of corporate law production and the fiscal incentives for attracting incorporations encourage the production of legal rules that are substantially contractible. Compared to the United States, the corporate laws of other jurisdictions are thought to include more mandatory rules. Historically, English and Australian corporate law rules were strongly contractarian. However, legislation in the 1920s and 1930s wound back the substantial private ordering that judgemade law permitted. This paper uses Australian data to examine the contractual equilibria adopted in corporate charters in the *laissez-faire* period prior to the enactment of these mandatory rules. The specific focus is on the private ordering of the director's duty of loyalty and his liability for negligence.

This paper does two things. First, it describes the frequency of opting out of defaults and the terms that parties use to do so. I demonstrate that a very large majority of charters opt out of the duty of loyalty and negligence liability, subject to various limitations designed to mitigate moral hazard. This indicates that the mandatory rules had negative welfare effects.<sup>4</sup>

Second, the paper uses these data to test theoretical arguments that contract terms may be suboptimal in content and in the degree of their standardization, as a result of the presence of learning and network externalities,<sup>5</sup> or cognitive biases to the status quo.<sup>6</sup> Contractual equilibria may be characterised by 'lock-in' effects — that is, particular terms become dominant and resist displacement by

inherently superior terms. Although my evidence supports a weaker claim of this literature that standardization of terms will increase over time, it is inconsistent with the 'lock-in' hypothesis. The data also demonstrate the importance of precedents manuals in the dissemination of learning about contract terms.

Part II of the article overviews Anglo-Australian law on the director's fiduciary duties of loyalty and care and their susceptibility to contract. Part III specifies the research hypotheses. Part IV describes the research design and results. Part V is a conclusion.

#### II. Doctrinal Analysis

#### A. The Duty of Loyalty

In Anglo-Australian law, fiduciary duty prohibits a director from entering transactions or acquiring property that would cause his interests to conflict with those of the corporation. The duty is strict in the sense that judges refuse to consider whether the terms of the transaction are fair or beneficial to the corporation. The director may avoid the consequences of that rule in two ways. The first is to seek ex post ratification of a proposed transaction by a resolution of a majority of stockholders. The second is to vary the rule in the corporate charter. A number of cases uphold charter terms that permit a director to contract with the corporation, or to be interested in another firm that contracts with the corporation. In these cases, it is common for such a term to require, as preconditions, that the interested director disclose his interest to the board, or to abstain from voting on the matter when it comes before the board.

The English Companies Act, 1929, and corresponding legislation in the Australian states enacted in the following decade, introduced a requirement that any director who is interested in a contract with the company must declare the nature of the interest in a board meeting. This legislation was anticipated by the listing rules of stock exchanges. For example, from 1912, the Sydney Stock Exchange's

Official Listing Requirements imposed a virtually identical disclosure requirement in relation to conflicts, but imposed a further requirement that a director abstain from voting on any arrangement or transaction in which he is interested.<sup>12</sup>

Neither the legislation nor the listing rule changed the strict fiduciary prohibition on conflicts of interest. Instead, they imposed a mandatory disclosure obligation (and for listed companies, a voting abstention requirement) on any article that opted out of the strict conflict rule. Thus, a corporation whose contract was silent would remain subject to the strict rule that required stockholder approval for conflicting transactions. If a charter did opt out of the conflict rule, it could only do so on terms that the director disclose his interest and (if the corporation was listed) abstain from voting.

## B. The Duty of Care

English law subjects a director to liability for failure to observe a standard of care. Directors are held liable under a gross negligence test which asks whether they "were cognisant of circumstances of such a character, so plain, so manifest, and so simple of appreciation, that no men with any ordinary degree of prudence, acting on their own behalf, would have entered into such a transaction as they entered into." The law allowed directors to delegate responsibilities to management and to rely on management's advice; the director would only be negligent in doing so if there were strong grounds for suspicion.<sup>14</sup> Although fiduciary duties are usually thought to find their justification in the interests of stockholders, liability for negligence was, in the nineteenth and early twentieth centuries, invariably enforced on a "misfeasance summons" brought by a liquidator. That is, the liquidator sued the directors for damages with the aim of increasing the size of the insolvent corporation's estate available for distribution to creditors. A derivative suit by stockholders was possible, subject to the restrictive standing requirements of English law. 15 However, there are no reported cases during this period in

which stockholder-plaintiffs sought to enforce liability for negligence by derivative suit.

The duty of care was capable of exclusion by charter provision. There are two ways by which charters might opt out of the duty. One is by a provision that obliges the corporation to *indemnify* any director found liable for negligence. The other is where the charter *releases* directors from liability for negligence, so that no primary liability arises. The difference is important if the company is insolvent. A director is fully protected by a release. Where the charter only provides an indemnity, the director can only offset his primary liability by a claim against the insolvent corporation. Since liquidators of insolvent corporations were the typical plaintiffs in negligence cases, the indemnity seems inherently inferior to the release.

Charter releases are considered and upheld as valid in several reported cases. 16 The release provisions in these cases are not absolute — they usually qualify the director's entitlement to rely on the release. The two formulae that appear in reported cases are that the release does not apply where the liability arises from the director's 'wilful default" or "dishonesty". 18 Although the reported cases do not provide insight into the meaning of the terms, they would presumably allow a court to deny the benefit of the release in certain verifiable states of the world, such as an undisclosed conflict of interest. The same legislation that imposed mandatory disclosure obligations on provisions modifying the conflict rule, proscribed liability releases. The legislation rendered prospectively void any provision, whether contained in the charter, a contract, or anywhere else, exempting a director, manager or officer from, or indemnifying such a person against, liability in respect of any negligence, default, breach of duty, or breach of trust in relation to the corporation.

## III. Hypotheses

The truncation of contractual freedom described in part II provides an opportunity to examine the contracts between stockholders and

managers entered in the laissez-faire period. This examination has two objects. The first is to shed light by descriptive survey evidence on the frequency of contracting around legal rules. Corporate law rules reduce the costs of transacting for governance constraints. However, legal rules do not function costlessly. For example, parties may wish to limit liability for negligence where they believe that there is a risk of judicial error in affirmative findings of negligence. Constraining these sorts of contracts by mandatory rules may decrease welfare. Likewise, the benefits to stockholders of precluding transactions in which directors are interested, but which occur at a competitive market price, are minimal. The inflexibility of fiduciary doctrine picks up conflicts of interests in which moral hazard problems are minimal. I therefore report in Part IV the form and frequency of terms used in corporate contracts to opt out of the duty of loyalty and the duty of care, and the provisions used to limit the moral hazard problems those opt-outs might create. In relation to the duty of loyalty, I analyse the adoption of disclosure and voting abstention requirements prior to their imposition on listed companies in 1912. In relation to the duty of care, I analyse the reliance on indemnities versus releases, the degree of specificity or generality in relation to the subjects of liability for which the director was released or indemnified, and the kinds of limitations on releases and indemnities that parties opt into.

My second object is to use these data to test theoretical claims that contract terms may be suboptimal in content and in the degree of standardization. Recent research addresses the possibility that in choosing contract terms, parties are influenced by contracting choices made in the past, and to be made in the future, in other contracts. Two overlapping explanations are important here.<sup>19</sup> The first draws on the economics of path dependence, and is associated with the research of Marcel Kahan and Michael Klausner.<sup>20</sup> They use two related concepts, learning and network externalities, to explain why returns to users of standardized terms increase with selection of these terms in earlier contracts. Learning externalities are associated with the use of a term commonly used in past contracts. Relying on a term used in the

past rather than developing a customised term has several advantages. The term is almost costless to draft, its operation and validity are more certain, and it is better known to those who deal with the firm and analyse its securities. These benefits are conferred by early adopters of the term on subsequent adopters.

Network externalities inhere in the use of a term that is simultaneously used in other contracts. By analogy to products such as operating systems, the value of a contract term may depend on the number of people expected to use it in the future. For example, adopting a term in common use may reduce the cost of professional advice, based on the higher degree of familiarity professionals have with the term, and may increase the likelihood of capturing benefits from future judicial interpretation. If learning or network externalities apply to contract terms, contracts may display substantial, perhaps excessive, standardisation. Particular terms may become "locked in", despite the inherent superiority of another term.

The second explanation of standardisation is cognitive.<sup>21</sup> Economic analysis assumes the exogeneity of preferences — the terms that parties prefer to contract on are independent of the law's default rules. Arguing that this assumption may be false, Russell Korobkin posits that default rules affect contractor preferences in a way that encourages the maintenance of the status quo represented by the default rule. The deal cut by contractors may differ according to the default starting point in a way that cannot be explained by the transaction costs of negotiating around the default or by signaling effects. Korobkin offers experimental evidence consistent with a status quo bias but does not offer empirical evidence from actual contracts.<sup>22</sup> A status quo bias would be expected to increase standardisation by diminishing the number of cases in which parties contract around the default. Korobkin's second article varies somewhat the thrust of the first. He argues that the status quo bias will constrain variation, not only of the default provision, but also of a range of other terms that enter standard use, such as the provisions of precedent manuals.<sup>23</sup> Thus, Korobkin also asserts the possibility of locked-in equilibria.

It is difficult to differentiate empirically learning and network effects from status quo biases, especially if the latter apply to non-default standard terms. It is, however, possible to formulate joint tests of these theories. The first is a test of the lock-in claim. I test whether it is possible for markets to develop new terms despite the apparent dominance of others. Thus:

H1 Where an existing term has more users than any other term, another later-developed term should not displace it as the most often-selected term.

H1 is demanding. The *absence* of any new forms emerging does not "prove" lock-in, since the original term simply may not warrant displacement. Thus, the rejection of H1 would be strong evidence against the discussed theories of standardisation.

If lock-in is the stronger claim of the theories of standardisation, increasing standardisation is its weaker claim. Although the terms adopted initially by early adopters may demonstrate some variation, the increasing returns of learning and network benefits are likely to result in the subsequent adoption of a smaller number of boilerplate terms. A status quo bias may intensify over time, as it will take time for some terms to be accepted as a status quo, or to be embodied in an influential precedent. However, increasing standardisation does not demonstrate that the terms actually adopted are suboptimal. In a stable environment, the marginal inherent benefit of a new term may not justify the cost of new innovation. Thus:

**H2** Standardisation in the content of interested contract provisions and liability releases will increase over time.

Whereas H1 and H2 test the choice of contract terms across time, an alternative test of Kahan and Klausner's claim is to examine whether

the choice of contract terms has any systematic relationship to the number of adoptions of a contract term.

H3 Parties' preferences for contract terms are positively related to the extant number of adoptions of those terms.

The theories of standardisation invite examination of charter amendments. If the theories of standardisation do not hold, a null hypothesis would assert that the likelihood of the parties changing charter terms is independent of the term used prior to the change. Changes would be influenced by shifts in the corporation's circumstances, which are likely to be distributed randomly across the users and non-users of different terms. We can also test a hypothesis as to the relationship between switching terms, and change in the proportions of firms adopting the pre-switch term and the post-switch term. These two hypotheses are formulated thus:

- **H4** Change in contract terms is not related to the termused prior to the change.
- H5 Change in contract terms is not related to the number of firms adopting the pre- and post-switch terms, or to the change in the number of adopters between the time of adoption and switch.

Both theories posit a relationship between term choice and a term's official imprimatur. Where a term is the subject of a favorable adjudication, the term is conferred with a positive learning externality. Its operation is more certain than rival formulations. Particular cases may entrench a particular term's claim to be a "reference transaction" in a cognitive sense. Part II refers to some of the important cases in this area. While it is difficult to perceive any particular case which could be used as a central precedent for interested contract provisions, *Re Brazilian Rubber* in 1911 is the earliest authority adjudicating a limitation on liability releases.

**H6** The use of a particular formulation of an interested contract provision or a liability release should increase following the arrival of a judicial precedent upholding that formulation.

Some mandatory rules impose a "floor" on contracts, but not a "ceiling". Contractual freedom remains at levels above the floor, because the term can be made more onerous. Network effects suggest that this may lead to increased standardisation, because it is likely that there will be a larger network of users of the single-sided rule, since all firms that would have chosen a term below the minimum permitted will, presumably, choose the minimum permitted. A single-sided mandatory rule also has arguably even more "status quo" than an equivalent default, so cognitive arguments should be the same. This can be tested by examining the Sydney Stock Exchange's requirement that charters include an interested contract provision requiring disclosure and abstention. As noted above, it imposed a limit on the provision used to opt out of the default, but did not in fact change the (strict) default.

H7 The imposition of single-sided mandatory rules or other constraints on freedom of contract are likely to increase the incidence of standardization of interested contract provisions and liability releases even in the areas in which contractual freedom remains.

#### IV. Empirical Analysis and Results

### A. Data Collection and Sample Characteristics

The empirical analysis examines charter provisions of Australian companies whose securities were publicly traded before the introduction of mandatory rules. The data capture involves the following steps. First, I ascertained the companies whose securities were listed on the Sydney Stock Exchange (SSE) on the last trading day of 1935. I selected the SSE as the oldest and best archived stock exchange in the country. Companies with a different home exchange often cross-listed on the SSE. I chose the last trading day in 1935 to

divide the pre- and post-mandatory rules periods, since the state of New South Wales, of which Sydney is the capital and in which a majority of the sample was incorporated, introduced its legislation with effect from 22 July 1936.<sup>25</sup> Four hundred and fourteen companies fitted these criteria. Second, I obtained copies of the corporations' charters from the microfiche records of the Australian Securities & Investments Commission took over in 1990. As a result of gaps and inconsistencies in records, records were sought for 213 companies. The Commission supplied complete information for 150 companies, of which 106 were incorporated in New South Wales; 36 in Victoria; six in Queensland; and two in South Australia. Figure 1 summarizes dates of incorporation and listing.

#### B. Survey Description of Contract Terms

My survey of terms is based on an examination of charter terms as they stood at 31 December 1935 (the cutoff date for the sample).<sup>26</sup>

Provisions varying the standard of care As noted above, charter provisions can relieve directors from liability by indemnities or releases. Both are observed in this sample. The indemnity provisions specify the subjects of liability against which the director is indemnified (some of which overlap), and may also provide for qualifications on the availability of indemnity. Most companies opt for a limited indemnity which does not extend to damages for negligence and may not add much to the director's "default" indemnity rights.<sup>27</sup> Table 1 analyses the patterns of usage of the individual subjects and of principal combinations (in square brackets)

The main observed limitation is that the indemnity is not available where the liability arises from the director's "wilful default". That constraint is closely linked to the expansive indemnities, particularly the "damages" subject. Presumably, the qualification limits the greater moral hazard potential associated with the wider indemnity. Four contracts limit the indemnity to liability arising from acts of the director "done in or about the execution of duties", which is a way of

limiting indemnity to business judgments rather than deliberate misfeasance.

Releases are also directed at specific heads of liability. First, directors may be released from liability for the acts of other persons, such as other directors. By releasing such vicarious liability, the provision reduces mutual monitoring incentives. 88.7% of the charters had a release of liability relating to other officers. A second group of releases relate to damage associated with agents or contractors. The most common provision is a release of liability associated with the acts or defaults of the corporation's bankers or depositaries — 84.7% of the charters included this term. The third group releases directors from liability for their own responsibilities. Table 2 describes how these releases are formulated. Of the five formulations in Table 2, two are confined to limited fact situations addressing deficiencies in receipts and title defects, none of which are typically in a director's field of comparative advantage. The "error of judgment or oversight" release is phrased alike the typical language of the business judgment rule. "Loss, damage, or misfortune" is restricted, connoting cases of nonfeasance, compared to the very broadrelease which refers to "acts, neglects or defaults".

Liability releases are often qualified, but in standardized ways. The principal qualifications refer to "wilful default" or "dishonesty". 43.3% of the charters are qualified by reference to wilful default; 39.3% refer to "dishonesty"; 6% refer to both in the alternative. Only three liability releases were unqualified and none of these included the broadest form of release.

There are distinct patterns in how these provisions are grouped together. I will refer in this paper to *standard terms* and *standard forms*, where the latter is a commonly occurring group of standard terms. There are three identifiable standard forms, plus a residual group of charters that either use customised terms or which mix and match standard terms. The most common standard form uses four terms. These are (i) a limited indemnity (costs, losses and expenses);

(ii) a release of liability for acts of other officers, bankers and depositaries; (iii) a release of liability for loss, damage, misfortune, errors of judgment and oversights; and (iv) a release qualification based of the officers' dishonesty. This standard form constitutes the boilerplate form offered in *Palmer's Company Precedents* from the eighth edition onwards,<sup>30</sup> and it is also the provision litigated and upheld in *Re Brazilian Rubber*.

The second standard form provides the expansive indemnity and a narrower release, lacking the "business judgment" head but including "loss, damage, or misfortune". Both are qualified for wilful default. The other standard form provides no liability release other than for banker default, and either no indemnity or the "costs, losses and expenses" indemnity only. This is the minimalist charter that is close to the law's default rules. The members of these three standard forms make up over 70% of the sample. Table 3 lists the names and conditions for membership of the standard forms. The other charters in the sample mostly mix and match the standard terms in the other standard form, although some genuine customisation exists.

Provisions varying the prohibition on conflicts of interest Corporate charters frequently vary the strict fiduciary duty regarding interested contracts. Just five charters — 3.3% of the sample — stayed with the default at the end of the survey period. The rest opt out of the conflict rule. How many companies would have contracted around the mandatory abstention and disclosure requirements imposed by the SSE? Forty-two of the companies in my sample were listed before that rule was introduced. At that time, four remained with the default. Nineteen charters — half the remaining companies which opted out of the default — were inconsistent with the listing rules' requirement that there be both disclosure of the interest and abstention from voting, as Table 4 shows.

#### C. Hypothesis Tests

Lock-in phenomena H1 asserts that where an existing term has more users than any other term, another later-developed term should not displace it. We can examine this for both standard forms and standard terms. Figure 2 graphs the respective market share of each standard form plus the OTHER group (taking into account any switches between standard forms) over the sample period. It is inconsistent with the existence of a lock-in effect in this sample. Figure 2 demonstrates that RLSHI has an approximately S-shaped curve, which only starts in 1905. By 1935, it has more than three times the market share of the other two standard forms, and over 70% more adoptions than OTHER. Yet, the other standard forms began two decades before. It was not until 1914 that RLSHI surpassed INDEMHI; it was not until 1921 that it surpassed MIN. MIN itself has an inverse S shape. Here, then, we have an equilibrium that seems substantially free of lock-in attributes.

To examine this more formally, I analyse whether or not there are statistical regularities in when particular standard forms or terms were adopted. H1 can only be rejected if there is a statistically significant difference between the time at which companies opted into RLSHI, compared to the other standard forms, MIN and INDEMHI. My analysis focuses on the time at which the standard form is adopted and the time at which the company listed. It is at the time a firm adopts a new contract that it will be capable of observing the choices that other firms have made at earlier times, and that any status quo bias will affect it. To operationalise "adoption", I computed the difference (in years) between the year of adoption of the charter provision and December 31, 1935. The difference is larger for "early" adopters. The variable is referred to as ARTTO. To test H1 for standard forms, I use a one-way analysis of variance, partitioning according to which standard form the firm's last charter adopts. Table 5 reports the results of the ANOVA.32

The significant F-stat demonstrates that the firms opting into these standard forms did so at substantially different times. Around the time the mandatory rules were introduced, the RLSHI network was the dominant network. In doing so, it took over from the MIN and INDEMHI networks, which were the competing dominant forms of the past. Post-hoc comparisons of means, using Tamhane's T-2 test (which does not assume equal variances), reveal a significant difference (p<.05) between the adoption times for RLSHI, on one hand, and MIN and INDEMHI, on the other. A less clear picture emerges from the OTHER network. Here, the difference in adoption time, compared to other networks, is not statistically significant. This could be for two reasons. First, it could be an artifact of combining dissimilar charters in one group. Second, the OTHER charters mostly combine provisions used in other standard forms. We should not expect a greatly different mean age or adoption time.

To test H1 for standard terms, I use an independent samples t-test to compare the time at which charters were adopted, as between those firms adopting and not adopting particular standard terms. The results in Table 6 confirm the results of the test for the standard forms. In several cases, such as the indemnities against liability for actions, charges, and damages (which are the hallmarks of INDEMHI), we find that charters not using these terms are adopted at later times than charters using those terms. This shows that individual terms do not become locked in despite earlier adoption. In much the same way, most of the liability releases display the opposite trend — the corporations using them adopt their charters laterthan those not doing so. Thus, a standard term can emerge despite the existence of substantially older standard terms. Dominant paths of charter equilibria may change over time.

Table 4 reveals five possible contractual standard forms for provisions addressing fiduciary conflicts of interest. I call them DEFAULT (the charter does not alter the default), DISCVOTE (there is both a disclosure and a voting abstention requirement), NODISC (there is a voting abstention requirement only), NOVOTE (there is a disclosure

requirement only) and NOREQS (where there are no requirements addressed to conflicts). Despite the small size of some groups, the ANOVA reveals differences in adoption time, as reported in Table 7.<sup>33</sup> Post-hoc comparison of means, using Tamhane's T-2 test reveals a statistically significant difference (*p*<0.05) between the adoption times for the two substantial networks, DISCVOTE and NODISC. The DISCVOTE firms adopt their charters significantly later than NODISC firms. Thus, gradually a larger number of companies moved away from the NODISC network towards the DISCVOTE network, the contract terms of which would eventually be the subject of the SSE and legislative mandate. I graph market share in Figure 3.

Thus, for both standard terms and standard forms, the evidence does not support H1, given evidence of displacement of dominant networks with other networks at significantly later times. These results also do not support Korobkin's claim that a default represents a barrier to opting out of it — MIN, the default network, was initially dominant but later declined. In respect of both the standard of care and conflict of interests, we find that the contracts displaced (INDEMHI; NODISC, NOVOTE and NOREQS) are supplanted by other contract terms, which seem better adapted to the reduction of agency costs. RLSHI avoids the problems with corporate insolvency than INDEMHI has, whereas DISCVOTE constrains moral hazard by requiring abstention and facilitating mutual monitoring through the disclosure requirement.

Increasing standardization. H2 asserts that standardization in the content of contract terms should increase over time. I operationalise H2 by counting the number of "customised" terms for each charter. By customised terms, I count (a) genuinely individualised terms, (b) terms used in a small number of charters (less than 5 at the time of adoption, but excluding provisions adjudicated in cases or appearing in precedents manuals); (c) terms serving similar purposes to standardised terms but with substantial differences in expression and drafting, and (d) uncommon combinations of standard terms that normally appear only in a particular configuration (e.g. the

indemnities against actions and damages). The variable which counts the number of these terms I call CUST. The correlation between CUST and ARTT0 is 0.236, which is significant at p<0.01.<sup>34</sup> The significant positive correlation supports H2 as it indicates that is, customisation decreases in later adopted charters.<sup>35</sup> There is no inconsistency with the results of H1. Standardization can increase without constraining further adaptation, especially if the business and legal environment remains stable.

Term choice and rate of adoption. H3 asserts that preferences for contract terms are positively related to the extant number of adoptions of those terms. I examine this for standard forms. I use two measures for adoptions — the market share that Figure 2 graphs (NETMS) and the average number of per annum adoptions of that standard form over the preceding two years (NET#2). NETMS proxies for learning externalities by estimating familiarity with the standard form in the market. NET#2 proxies for the network externalities from future adoptions, extrapolated from present adoptions. I model standard form choice by using logit regressions in which the dependent variable is a dummy variable for each standard form, which takes the value of 1 when that standard form is adopted. The independent variables are ARTTO, the NETMS and NET#2 variables for each standard form, and ARTPL. ARTPL takes the value of 1 where the firm adopted its charter before it is listed (i.e., there is a "compliance" listing on the SSE and no IPO). It is included to examine the effect an IPO has on standard form choice. A separate regression for each standard form is estimated.<sup>36</sup> The general form of the regression is:

STDFM = 
$$a + b_1$$
.ARTT0 +  $b_2$ .RNETMS +  $b_3$ .INETMS +  $b_4$ .MNETMS +  $b_5$ .ONETMS +  $b_6$ .RNET#2 +  $b_7$ .INET#2 +  $b_8$ .MNET#2 +  $b_9$ .ONET#2 +  $b_{10}$ .ARTPL

Table 8 sets out the results. The R<sup>2</sup> indicates that the independent variables explain much of the variation in choice of network. Time continues to have substantial explanatory power (except for OTHER), and coefficients take the signs that the results of H1's tests suggest.

ARTPL has little explanatory force. The variables proxying for network and learning externalities offer a complex story. The measures for RLSHI and MIN seem to effect network choice, which is consistent with their character as the dominant early and late standard forms. Yet the results are peculiar, since the signs for the coefficients for the two variables for each standard form are opposed, the market share variable is *negative*, but the number of adoptions per annum is *positive*.<sup>37</sup> This opposition does not hold for the coefficients for the other standard forms (although these are not significant). This may be a consequence of the properties of adoption of these two standard forms. If one re-examines Figure 2, one sees a substantial rise in market share in RLSHI in 1909 and in 1914, despite low the preceding years. There in are the discontinuities in MIN, as firms adopted other standard forms despite its high market share. These may drive the peculiar opposition in sign. I conclude that there is some weak support for H3 and the relevance of the extant number of term adoptions, given the significant coefficients for NET#2 for RLSHI and MIN.

Standard form switching: independence effects. H4 asserts that party agreement to amend charter terms should be independent of the terms that parties have adopted prior to the change. In my sample, changes occurred either before or after listing. A number of the companies in the sample carried on business years before they were listed, and SSE practice at the time permitted compliance listings without an IPO. Thus, switches made prior to listing are also of interest in these cases. Table 9 provides summary statistics on charter amendments.

There are 17 pre-listing and 10 post-listing charter amendments. 8 pre-listing and 2 post-listing amendments do not switch standard forms. The trends of the 17 charters where standard form switches occur are consistent with overall trends in standard forms. Six out of nine pre-listing switches are *out of* MIN, and *into* RLSHI. Half of the post-listing switches fall into a single category -- from OTHER to RLSHI. These moves (one from an older standard form to a newer

standard form, the other from a less standardised to a more standardised standard form) suggest that changes are not random.

I test this using a logit regression, in which a switch of standard form, NETCH, is the dependent variable which takes the value of 1 where a switch occurs. The independent variable, PRENETF, codes the standard form in which the charter is located.<sup>38</sup> I run this test for the whole sample, so the independent variables for firms that did not switch are coded according to the only standard form they ever use. I use the pre-switch standard form for other firms. Thus, the regression calculates the probability of change given a standard form usage. Thus:

#### NETCH = CONSTANT + PRENETF

The results in Table 10 indicate that H4 is false — network membership does influence switching. The positive coefficient for PRENETF1 indicates a weakly significant relation between membership of RLSHI and staying with that network, and the negative coefficient for PRENETF3 indicates a weakly significant relation between membership of MIN and switching.

When the details of the amended charters are studied, the above analysis comes into sharper perspective. Of the two RLSHI-OTHER switches, one charter deletes the liability releases associated with bankers and receipt of property, and the dishonesty qualification to liability releases. The other charter changes only in two respects — it replaces dishonesty with wilful default as the liability release qualification and it deletes the expansive indemnities against damages and charges (which is not a defining feature of RLSHI). Clearly, most of RLSHI remains intact in both charters. A similar story can be told of the MIN-OTHER changes. Both charters opt into a set of terms similar to the INDEMHI network, except that there is no indemnity against actions, and no qualification on the indemnity.

The five charters that amend within the OTHER network add standardized provisions familiar from RLSHI or INDEMHI, although their overall configuration excludes them from membership of either network. The changes were these: adding voting abstention requirements to conflict provisions (two charters), adding low-level indemnities against costs, losses or expenses (three charters), and changes in high-level indemnities against actions and damages (one addition, one deletion). Two firms also made amendments to the release of liability in relation to other officers to bring the term up to the standardised term addressed to "acts, receipts, neglects and defaults". So, here, too, changes tend to increase standardisation. In all of these changes within the OTHER network, no charter added a genuinely customised term, so the formal support for H4 is strengthened on examining individual cases.

Does the degree of customisation change after a charter amendment? I use a paired samples t-test to test the hypothesis that there is no difference between the number of customised terms in the earlier (PCUST) and later charters (CUST). In the event, however, that hypothesis is rejected. Customisation is lower in post-switch charters, but the t-stat is only 0.648. Thus, although there is evidence of a trend towards choosing RLSHI on amendment, there is no observed change in customisation in the firms that amend their charters.

Standard form switching: rate of adoption. H5 asserts that change in contract terms is not related to the number of firms adopting the preand post-switch terms, and the change in the number of adopters between the time of adoption and switch. Univariate tests support H5. To examine this, I compare the change in the market share of the prechange standard form between the time at which the articles were originally adopted and the amendment of the articles. The average change in switchers in the pre-change network is a drop of 13.5%; the average change in non-switching amenders is a drop of 0.2%. The difference is not, however, statistically significant. This is a consequence of a single outlier in the non-switching group which remains in MIN (whose market share had fallen 62%), but adds a

release of liability for other officers. This is a Palmer-inspired term, and thus characteristic of RLSHI, but which is not definitive of that standard form in my coding. If that case is excluded, the mean change in non-switching amenders is actually an *increase* of 6.67%, and the t-test holds the difference statistically significant at p<0.05. This result indicates that non-switchers have not experienced substantial market share changes, but switchers have. There is also a mean difference of 25% between the market shares of the standard form the switching firms had adopted and the standard form they switch into, at the time of the switch, which is statistically significant at p<0.01. Thus, H5 is supported.

I also model changes to articles and standard form choices econometrically in order to provide multivariate tests of H4 and H5. To test H4, I estimate two logit regressions for the whole sample, one of which uses a dummy variable, ARTCH, for an amendment to the charter (when an amendment occurs, ARTCH=1), while the other uses a dummy variable, NETCH, for standard form switches (when a switch occurs, NETCH=1). The independent variables are ARTT0, the selected standard form (or the pre-switch standard form for switchers), and the charter's score for customization (the score prior to amendment for amenders and switchers). The latter variable is included on the basis of the intuition that firms with customized charters may, in an environment which is increasing in its standardization, feel some pressure to amend. To test H5, I estimate, for the 27 firms that amend their charters, the second of the two H4 regressions modeling NETCH, and add a further variable. CHPNETMS. This measures the change in the market share of the standard form between the time the pre-amendment charter was adopted and the time of the amendment. The form of the regressions are:

$$ARTCH=a+b_1.ARTT0+b_2.PRENETF+b_3.PCUST$$
 (H4)

NETCH=
$$a + b_1$$
.ARTT0 +  $b_2$ .PRENETF +  $b_3$ .PCUST (H4)

NETCH= $a + b_1$ .ARTT0 +  $b_2$ .PRENETF +  $b_3$ .PCUST +  $b_4$ .CHPNETMS (H5)

Table 11 shows that the first two models have explanatory power. The coefficients for each standard form have predictable signs, although only PRENETF(1) (which represents RLSHI when it takes the value of 1) is consistently significant. This confirms that firms opting into RLSHI are not likely to amend or switch. ARTTO has a significant negative coefficient, which indicates that older charters are less likely to change, a result that may reflect a status quo bias. The customization variable is not significant. The third regression testing H5 has a high R² but none of the coefficients, including CHPNETMS, are significant. This may be a consequence of the smaller sample size. The support for H5 is thus limited to the univariate results.

Effects of Precedents. H6 asserts that the use of a particular formulation of a contract term should increase if it receives judicial imprimatur. I noted that the key precedent is the Brazilian Rubber case in 1911, which authorized a term identical to the RLSHI boilerplate. Two goodness-of-fit tests may shed light on this. Table 12 crosstabulates post-1911 adoption of charter provisions and the RLSHI standard form membership.

The case seems to have had substantial effect on the charters parties use. However, the adoption of RLSHI could equally be attributed to the revision of the boilerplate release term in the eighth edition of Palmer in 1902. A chi-square test partitioning on the year of the eighth edition's appearance rejects the null hypothesis of no association. The  $\chi^2$  statistic (12.125) is marginally higher. Further, there are *no* observations of the dishonesty qualification or RLSHI membership before the appearance of the eighth edition.

To reinforce this conclusion, consider also that the other major precedent decided around this time was the *Mt Oxide Mines* case, which used a release, not unlike RLSHI, but qualified by wilful default, not dishonesty. The provision was upheld. In principle, this is

much more important than *Brazilian Rubber* in Australia, since it emanates from the highest court in the land, rather than a first instance judgment of a foreign court. A chi-square test reveals that *Mt Oxide Mines* had no apparent effect on the use of the wilful default qualification on releases.<sup>39</sup> This suggests the real driver is Palmer, rather than *Brazilian Rubber*.

To test this hypothesis further, I determined, for each charter a "Palmer score", PALM. It measures the number of terms contained in the charter which are substantially identical to those in the edition of Palmer then extant (noting the change between  $7^{\text{th}}$  and  $8^{\text{th}}$  editions), as at the date of the charter's adoption. The maximum score is eight. The correlation coefficient between PALM and ARTTO (the time between adoption and 1935) is -0.348 (p<0.001). This indicates that Palmer's influence rose over time. This could reflect an increase in the extent to which the Palmer precedent began to be perceived as a reference transaction. Or it could demonstrate an increased learning externality from a rising number of adoptions.

Firms which amend their charters are likely to adopt Palmer boilerplate. They increase their Palmer scope by a mean of 2.64. Using a one-sample t-test, the t-statistic for the difference is 4.48 (df=26, p<0.001). The firms that switch networks drive this result. For these firms, the mean difference between their Palmer scores is 4.24; non-switching amenders only score a meagre 0.2. This is driven by the fact that eight of the ten non-switching amenders belonged to RLSHI and OTHER in which Palmer scores are high.

Effects of Single-sided Mandatory Rules. H7 asserts that imposing single-sided mandatory rules should increase the standardization of contract terms even in the remaining areas of contractual freedom. I test this by comparing the number of firms not adopting a conflicts provision prior to 1912 and those firms not adopting a conflicts provision after that time, when the SSE imposed what was in effect a single sided mandatory rule. We saw in the survey evidence that only a small number of firms ever remained with the fiduciary default. Of

42 pre-1912 firms, 4 did not adopt a conflict provision. Of the 108 post-1912 firms, only 2 did not adopt a conflict provision. The null hypothesis of no association between the one-sided mandatory rule and the use of the strict fiduciary default is rejected with two-sided probability of 0.05, using Fisher's Exact Test. H7 is therefore supported, although the number of observations is small.

## D. Alternative Explanations of Results

*Industry* The choice of standard terms and forms might be influenced by the firm's production and investment opportunities and other aspects of its governance structures. Such a hypothesis is not easy to test because of difficulties in obtaining financial information for the sample. However, it is possible to test the effect of industry, which may proxy for differences in assets. I coded industries into eight groups (the number is indicated in brackets) — (i) manufacturing and engineering (37); (ii) finance and insurance (26); (iii) media and publishing (12); (iv) mining and metals (10); (v) merchants (24); (vi) food and drink (21); (vii) property (3); and (viii) other (17). Univariate chi-square and Fisher's exact tests (not reported here) indicate some weak regularities of association between industry group and standard form choice. The null of no association is rejected with two-sided probability of less than 0.1 in the following cases: the use of RLSHI by manufacturing, finance, mining and the miscellaneous companies; and the use of INDEMHI by manufacturing and finance companies. Examining these results more closely, I modeled the selection of RLSHI and INDEMHI in logit regressions using as ARTTO, and dummy independent variables variables for manufacturing and finance. The results (not reported) for the industry dummy variables are not statistically significant at conventional levels.

Does industry explain differences in the usage of standard terms varying the conflict rule? The principal attributes on which charters varied in this respect during the *laissez-faire* period prior to the SSE Listing Rule were: (1) the adoption of a term varying the conflict rule;

(2) a provision in that term which obliged the director to disclose details of the conflict; and (3) a provision obliging the director to abstain from voting on that interest. Finance/insurance companies are closely associated with standard terms that do *not* require disclosure of the conflicting interest. Of the thirteen finance companies varying the conflict rule, only two required the conflict to be disclosed. The chi-square test of a null hypothesis of no association is rejected at p<0.001. Econometric modelling confirms this result. I estimated a logit regression modelling the disclosure obligation as the dependent variable, and ARTTO and a dummy variable for finance/insurance companies as the independent variables. Both variables are significant. The results are set out in Table 13.

Why would this effect hold? First, the business of finance/insurance companies is especially likely to create conflicts of interest, because they regularly trade marketable securities in which their directors may have an interest, either as stockholders or as directors. These interests suffice to violate the strict fiduciary prohibition. Second, if directors in these companies were drawn from other companies in the industry, conflicts would also be frequent because finance/ insurance companies frequently transact with each other (e.g., subunderwriting, loan/insurance tying, finance syndication). Third, the dependence of these companies on private market information may oblige them to engage well-connected directors, for whom a disclosure obligation may undermine their access to confidential information. Thus, private information is protected, while moral hazard is limited through the voting abstention. This result suggests an efficiency explanation for these contracting practices, and a weaker case for a mandatory rule obliging disclosure.

Board size Is the choice of standard forms and terms influenced by the structure of the board? Board size and contract terms may be related because of their mutual connection to the structure of ownership. Boards are thought to be endogenous to the separation of ownership and control.<sup>41</sup> Manager-controlled firms would be expected to involve more outside directors. Outside directors may be more likely than

internal directors to demand releases of liability as a necessary part of their compensation for serving on the board The incentive effects of substantially stronger equity interests of inside directors in stockholder-controlled firms may dominate any effect of the standard of care. However, they may also be more inclined to relax the conflict rule because they anticipate more self-dealing.

The charters usually specify a minimum and maximum number of directors. I ran tests on these minimum and maximum numbers.<sup>42</sup> Univariate and multivariate tests conducted with respect to the choice of standard form varying the duty of care do not demonstrate significant relations to board size (not reported). The same is also substantially true of terms included in provisions varying the conflict rule. The only aspects of charters which board size influences are some of the standard terms. I use a logit regression to model the decision to use or to not use particular standard terms, in which the independent variables were ARTTO and the board size variables. Table 14 shows that *maximum* board size has explanatory power in modeling three important standard terms (damages indemnity; release of liability for errors of judgment, release of liability for loss, damage and misfortune<sup>43</sup>) at p < 0.05, and in one other term (the use of the wilful default limit on liability releases) at p<0.1. Minimum board size has less explanatory power in every test. The coefficient for board size takes, in each regression, the same sign as the time variable. Thus, these variables indicate that damages indemnities are associated with larger boards. Liability releases in respect of errors of judgment, loss, damage and misfortune are associated with smaller boards. If there is an inverse relation between board size and the riskiness of assets, this correlation would be logical. The advantage of a release over an indemnity will be positively correlated with the riskiness of the assets (where insolvency is higher) and their firmspecificity (where asset salvage value is low). Analysis of board size intensifies the argument that parties choose standard terms for their inherent benefit, rather than on the basis of learning or network externalities.

#### E. Implications

What are the normative implications of my evidence? First, the duties of care and loyalty, in their English law formulations, are by no means majoritarian since in excess of 90% of charters excluded them. Second, the rules contracting around the standard of care do not appear to be systematically unfair to stockholders. On the contrary, they are specifically directed to the areas where the imposition of liability seems least efficient (such as liability for business judgments and the defaults of other agents). The incidence of expansive indemnities in a large number of companies is more puzzling given my comments above that such provisions seem unsuited to the context in which negligence liability is enforced. However, many of these contracts also opt into a liability release of loss, damage and misfortune, which seems to address some of the problems left where an indemnity is invoked under insolvency conditions. The qualification of releases and indemnities provides discretion which allows courts to respond to moral hazard problems ex post. This implies that mandatory rules that limit the entitlement to contract into liability releases and indemnities are welfare-decreasing. They preclude parties from contracting for rules that appear to be of value in most corporations.

Third, the contracts varying the duty of loyalty are somewhat different. The inefficiency of the legislation does not seem very great since there was an increasing momentum amongst listed companies to opt into a disclosure requirement before Listing Rules were imposed. Nonetheless, the industry evidence suggests that there may be defensible reasons to abrogate a disclosure requirement in at least some corporations. The abstention requirement would be more usefully mandated than the disclosure requirement, given its more frequent adoption.

Fourth, the tests of the theories of standardisation reveal a mixed set of conclusions. My evidence supports the claims of increasing standardization over time and of a relation between term choice and the extent of adoption of that term in the marketplace. It shows the importance of precedents as a source of disseminating learning — possibly more important than the case-law itself. My evidence does not support Korobkin's claim that defaults constrain opting out or Kahan and Klausner's claim that terms with a substantial constituency of adopters can become locked in. These latter claims are the most important of the literature on standardization in their normative implications for the welfare consequences of corporate contracts; my paper suggests that any efficiency effects are likely to be minor.

#### V. Conclusion

Although the results in this paper do not support the case for mandatory rules in corporate law, they do not purport to measure the welfare effects of the legislation, as manifested in stock price reactions. That finding is in one sense the crucial one, yet it may not have been very large. It should have been nil for SSE listed companies, as regards the provision regulating conflicts given its anticipation in the listing rule and the earlier trend towards disclosure and abstention. Likewise, the effect in relation to releases may have been small, too, since there had not been many successful findings of negligence against honest directors at that time. Nonetheless, this remains an important hypothesis to test in the future. The stock price reaction accompanying switches between standard terms is also an important object of study. The world has not stood still since the 1930s. It is unlikely, though, that the case for contract has weakened, given the increased sophistication of financial markets and greater information processing capacity. The fact that these mandatory rules continue to endure in England and Australia suggests the importance of robust interjurisdictional competition, as in the USA, in preserving contractual freedom.

#### **Notes**

- See generally Bernard S. Black, Is Corporate Law Trivial: A Political and Economic Analysis, 84Nw. U. L. Rev. 542 (1990); Frank H. Easterbrook & Daniel R. Fischel, The Economic Structure of Corporate Law (1991).
- "[A] fair generalization is that the [corporate] law of Great Britain and other Commonwealth countries is far more mandatory in character than is ours.": John C. Coffee, Jr, The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role, 89 Colum. L. Rev. 1618, 1621 (1989).
- See Michael J. Whincop, Of Fault and Default: Contractarianism as a Theory of Anglo-Australian Corporate Law, 21 Melb. U. L. Rev. 187 (1997).
- It would be ideal to provide capital market evidence on the effects of the legislation. I have not done this. The legislation introduced other changes, making it difficult to identify the effect of the provisions I study. Welfare conclusions in this paper must therefore presuppose the optimality of terms existing prior to mandatory rules.
- Michael Klausner, Corporations, Corporate Law and Networks of Contracts, 81 Va. L. Rev. 757 (1995) [hereinafter, Networks]; Marcel Kahan & Michael Klausner, Standardization and Innovation in Corporate Contracting (Or 'The Economics of Boilerplate'), (1997) 83 Va. L. Rev. 713 [hereinafter, Standardization].
- Russell B. Korobkin, The Status Quo Bias and Contract Default Rules, 83 Cornell L. Rev. 608 (1998) [hereinafter, *Status Quo Bias*]; Russell B. Korobkin, Inertia and Preference in Contract Negotiation: The Psychological Power of Default Rules and

- Form Terms, 51 Vand. L. Rev. 1583 (1998) [hereinafter, *Inertia*].
- <sup>7</sup> Aberdeen Railway Co. v. Blaikie Bros (1854) 1 Macq. 461, 473; Parker v. McKenna (1874) L.R. 10 Ch. 96, 124.
- <sup>8</sup> Parker v. McKenna (1874) L.R. 10 Ch. 96, 124.
- The rule precluding conflicts of interest and duty is "open to contract between the parties, for it is not a principle the benefit of which parties cannot waive by express and direct contract for the sake of other advantages which they suppose they derive": *Imperial Mercantile Credit Association v. Coleman* (1871) L.R. 6 Ch. 558, 569. For further references, see Whincop, *supra* note 3, at 209-11.
- See, e.g., Bluck v. Mallalue (1859) 27 Beav. 398; 54 E.R. 156; Imperial Mercantile Credit Association v. Coleman (1871) L.R. 6 Ch. 558; (1873) L.R. 6 H.L. 189, North-West Transportation Co v. Beatty (1887) 12 App. Cas. 589; Costa Rica Railway Co. Ltd v Forwood [1900] 1 Ch. 756 (Ch. Div.), [1901] 1 Ch. 746, 758, 763, 766 (C.A.); Transvaal Lands Co. v New Belgium (Transvaal) Land and Development Co. [1914] 2 Ch. 488, 504; A.M. Spicer & Son Pty Ltd (in liq.) v. Spicer and Howie (1931) 47 C.L.R. 151, 175.
- Companies Act 1931 (Qld); Companies Act 1934-5 (S.A.); Companies Act 1936 (N.S.W.); Companies Act 1938 (Vic.); Companies Act 1943 (W.A.); Companies Act 1959 (Tas.).
- Sydney Stock Exchange, *Official List Requirements*, rule 4(g), 29 July 1912 (copy on file with the author). Archive searches indicate that Official List Requirements were only introduced

- with effect from 6 March 1911; those requirements do not have a provision similar to rule 4(g).
- Overend & Gurney Co. v. Gibb (1872) L.R. 5 H.L. 480, 487; Re City Equitable Fire Ins. Co. [1925] Ch. 407, 428.
- Re City Equitable Fire Ins. Co. [1925] Ch. at 429.
- <sup>15</sup> Foss v. Harbottle (1843) 2 Hare. 461; 67 E.R. 189.
- Re Brazilian Rubber Plantations & Estates Ltd [1911] 1 Ch. 425; Re City Equitable Fire Ins. Corp. [1925] Ch. 407; Gould v. Mt. Oxide Mines Ltd. (in liq.) (1916) 22 C.L.R. 490.
- Re City Equitable Fire Ins. Corp. [1925] Ch. 407; Gould v. Mt. Oxide Mines Ltd. (in liq.) (1916) 22 C.L.R. 490.
- Re Brazilian Rubber Plantations and Estates Ltd [1911] 1 Ch. 425.
- See also Charles J. Goetz & Robert E. Scott, The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms, 73 Cal. L. Rev. 261 (1985).
- See Klausner, *Networks*, *supra* note 5; Kahan & Klausner, *Standardization*, *supra* note 5; Marcel Kahan & Michael Klausner, Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases, 74 Wash. U. L.Q. 347 (1996).
- Korobkin, *Status Quo*, *supra* note 6; Korobkin, *Inertia*, *supra* note 6.

- Korobkin, *Status Quo*, *supra* note 6.
- Korobkin, *Inertia*, *supra* note 6.
- Ian Ayres, Making a Difference: The Contractual Contributions of Easterbrook and Fischel, 59 U. Chi. L. Rev. 1391, 1402 (1992).
- Eight corporations in the sample were incorporated in Queensland and South Australia where the mandatory rules in 1931 and 1934. This does not affect my results as none of these amended their charters in the period between the introduction of the rules and the end of 1935. The 36 Victorian companies are not subject to the mandatory rules until 1938; here, too, there are no relevant changes in the period 1936-1938.
- As to the charters subject to mandatory rules before 1935, see note 25 *supra*.
- The limited indemnity may go no further than a directors' common law right to indemnity: Alfred F. Topham, Alfred R. Llewellyn-Taylor & Alexander M. R. Topham, 1 Palmer's Company Precedents 771 (13<sup>th</sup> ed, 1927).
- A further contract imposes a customised limitation referring to "culpable negligence".
- Of 38 charters with an indemnity against damages, 30 qualify the indemnity for "wilful default". Of the remaining 112 charters, only five are similarly qualified. The  $\chi^2$  statistic is 87.99 (df = 1, p < 0.0001).
- Francis B. Palmer, 1 Company Precedents 663 (8th ed., 1902). Earlier editions included a similar liability release, but qualified

by "wilful default", as the release in INDEMHI is, although without the wider indemnity.

- 31 I also ran the other statistical tests documented in this paper with two other timing variables, specifically the time at which the firm was incorporated and the time at which the firm listed. An 'old firm' may differ from a 'young firm' in its inclination to opt into standard forms. Younger firms may be subject to greater asymmetries which constrain customisation. information Alternatively, existing contractual commitments may limit the capacity of older firms to customise: Nicholas Argyres & Julia Porter Liebeskind, Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory, 24 Acad. Mgt. Rev. 49 (1999). The "age" variables are collinear with the time of adoption and produce substantially similar results.
- A non-parametric Kruskal-Wallis ANOVA gave similar results  $(\chi^2 = 23.405, df = 3; p < .001)$ .
- Virtually identical results were obtained using a non-parametric Kruskal-Wallis analysis of variance ( $\chi^2 = 12.309$ , df = 4; p < .05).
- The use of Spearman's rho, a non-parametric correlation coefficient, produced substantially similar results.
- I do not report the econometric modeling of CUST in an ordinary least squares regression, in which the dependent variables include ARTTO, the standard form selected, and variables measuring the market share of each standard form and the average number of adoptions in the last two years. H2 continues to be supported as time has a significant, positive coefficient. The other consistently supported factor is selection of the RLSHI standard form, which has a negative coefficient,

- indicating that RLSHI adopters do not customise. The rate of adoption variables are not consistently supported.
- The alternative is to use a multinomial logit regression. My estimation of that regression does not produce significantly different results to those reported.
- This is despite significant positive correlation between the two variables. (The Pearson coefficient is 0.69).
- PRENETF is a categorical variable that takes the value of 1 (for RLSHI), 2 (INDEMHI), 3 (MIN) and 4 (OTHER). Contrast coding is used to represent this by means of three variables taking 0/1 values (OTHER is represented by zeros for all three of these dummies.)
- Seventy four charters limit releases by wilful behaviour. Forty seven charters were adopted before Mt Oxide; 23 limit releases by wilful behaviour; 103 were adopted after Mt Oxide; 51 limit releases by wilful behaviour. ( $\chi^2 = 0.004$ , df = 1).
- To fill out the picture, finance/insurance companies are not any more likely to waive the voting abstention; indeed, there is weak evidence that they are less likely to do so. None of the thirteen finance companies adopting a provision varying the conflict rule waives the voting abstention. It is also worth noting that of the four companies retaining the default, two are finance/insurance companies.
- Eugene F. Fama & Michael C. Jensen, Separation of Ownership and Control 26 J. L. & Econ. 301 (1983).

- Board size is not constant with respect to time. In fact, the maximum number of directors is U-shaped. The quadratic function fitted to the data is significant at p < 0.005.
- Table 14 does not report the results for modelling this last term as they are extremely close to the results for modelling releases for errors of judgment.