

Engert, Andreas; Hornuf, Lars

Article

Market Standards in Public Sector Debt Contracting

CESifo DICE Report

Provided in Cooperation with:

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Engert, Andreas; Hornuf, Lars (2013) : Market Standards in Public Sector Debt Contracting, CESifo DICE Report, ISSN 1613-6373, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 11, Iss. 3, pp. 16-20

This Version is available at:

<https://hdl.handle.net/10419/167128>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



MARKET STANDARDS IN PUBLIC SECTOR DEBT CONTRACTING

ANDREAS ENGERT¹ AND
LARS HORNUF²

Introduction³

Contracts are supposed to reflect individual preferences – if they did not, the parties would write a different contract. Of course, drafting an alternative provision may not be worthwhile in some cases. Economizing on transaction costs can lead the parties to use off-the-rack terms instead of fine-tuning their agreement. Yet when the gains are significant, one would expect the parties to deviate from their standard model and devise better provisions. It thus seems that only drafting costs stand in the way of the optimal contract for any given transaction.

In fact, an additional impediment to efficient contracting arises when a contracting standard is shared by most players in the market. A market standard, by definition, is well known to potential contract partners, which reduces the transaction costs not just of writing contract terms, but also of understanding and evaluating them. Because it is frequently used, there is considerably more experience with the standard contract design than with any potential alternative. Using the integration of the European bond markets as a case study, we present evidence that standardization occurs in contracting over sovereign or government-backed debt. Following the Maastricht Treaty, and particularly with the advent of the euro, European governments and government-backed entities issued debt securities increasingly under English law. Apparently, the forces of standardization are strong enough to overcome even governments' inborn preference for their own national laws.

¹ University of Mannheim.

² University of Munich.

³ This article builds on Engert and Hornuf (2013).

Network effects in financial contracting

In economic theory, the advantages of market standardization are referred to as 'network effects' (Farrell and Klemperer 2007). Network effects occur when users of a good derive a benefit from others using the same or a compatible good. Contract terms and legal rules can also exhibit network effects (Klausner 1995; Druzin 2009). Klausner (1995) was the first to observe that contract parties may wish to rely on contract terms that are widely used in order to benefit from network effects. A popular contract term, according to Klausner (1995), confers a number of advantages (see also Kahan and Klausner 1997; Goetz and Scott 1985): widespread contract terms are often interpreted by the courts. A large body of precedents implies that the term's legal content is more clearly defined. In a similar vein, one can learn from the experience of others so that the pitfalls of commonly used terms are better known and can be avoided. The repeated use of a term exposes unforeseen consequences and fosters an evolutionary process of refinement. As lawyers tend to be more familiar with frequent contract terms, legal advice is less costly and more reliable. As Druzin (2009) points out, negotiating a contract is also less costly when each of the parties to a particular contract is familiar with the same terms. Using a contract term for the first time requires an upfront learning investment to understand the term's scope and implications. Contract management processes have to be adapted to different terms. Variation of terms over contracts tends to sacrifice economies of scale. Therefore, parties will want to limit the range of different terms under which they conclude their contracts. Since the parties must agree on one and the same contract, there is a benefit from being familiar with the same contract terms as one's potential contract partners. Shared use of the same contract terms, in this regard, resembles a common language that equally reduces the cost of transacting (Druzin 2009, 18–19).

Network effects have important policy implications: combined with the difficulties of coordination, they raise the concern that the market could come to adopt a standard that is suboptimal for all contract parties (mis-standardization); in a similar vein, all contracts may use uniform terms or the same legal rules, even

though a subset would be better served with a different legal design (over-standardization). If either of these happened, network effects would impede the development of socially optimal contracts. Considerably less confidence would be justified in the efficiency of an observable market practice. From a policy perspective, a possible response is explicit standard setting to enable market coordination on a superior standard, or several standards. Beside the substantive quality of contractual choice, there is an additional normative aspect: there can be too little standardization because market participants remain stuck in different practices and fail to coordinate up to a level that constitutes a tipping point (under-standardization).

Choice of law in public sector debt contracts

To detect network effects in public sector debt securities, we consider an important feature of contract design, the choice of governing law. Standardizing the contract design of debt securities can confer important benefits by enhancing liquidity in the secondary market. The parties to a contract are free to stipulate which national law applies to their contract.⁴ As the contract law consists of a full set of legal rules, rather than just a single term, network effects may carry particular weight. The applicable law guides the interpretation of the contract and limits the scope of permissible arrangements. For instance, English law allows the indenture to provide for majority decisions even on reducing the principal amount or the interest to be paid under a bond, thereby enabling debt restructuring. By contrast, ‘collective action clauses’ were not permissible under German law prior to 2009.⁵ On a similar note, the US Trust Indenture Act 1939 prevents collective action clauses for corporate issuers. Until 2009 German law also restricted ‘no-action clauses,’ which delegate the enforcement of bondholder rights to a trustee (Häseler 2010; Allen 2012, 72–73). German courts can review the indenture *ex post* and invalidate terms they consider unfair. Another difference is that English law offers a comprehensive body of fiduciary duties that apply to bondholder trustees. Continental European jurisdictions typically lack the general concept of a trust (Allen 2012, 75–80; Hill and Beech 2010; Rawlings 2007).

⁴ See art. 3 Rome Convention on the law applicable to contractual obligations of 1980 and now art. 3 Regulation (EC) No 593/2008 on the law applicable to contractual obligations (Rome I).

⁵ To be more precise, German law prohibited majority decision-making on payment terms for issuers located in Germany. Whether the ban extended to foreign issuers remained an unsettled issue.

An additional concern is that a jurisdiction can amend its laws to alleviate its own liabilities (Choi, Gulati and Posner 2012a, 139–40). The sovereign debt of Greece provides for a recent and prominent example. At the onset of the Greek debt crisis in 2009, the Hellenic Republic had issued 90 percent of its outstanding bonds under Greek law; the remainder was mostly governed by English law. Choi, Gulati and Posner (2011) suggest that investors have appreciated the difference: they document that Greek-law bonds commanded a considerable yield spread over a single English-law Greek bond even before the outbreak of the crisis. The difference can be attributed to the political risk of an amendment in Greek law to change the terms of sovereign debt contracts *ex post*. The risk materialized when the Greek Parliament, on 23 February 2012, retroactively introduced collective action clauses for a restructuring of outstanding Greek-law debt securities, requiring a 66.7 percent majority among the holders of *all* Greek-law bonds combined (Zettelmeyer, Trebesch and Gulati 2012). The lower yield for English-law bonds thus compensated the Greek government for the greater holdout power of investors in English-law bonds, where a change in payment terms typically required the consent of 75 percent of the holders for each debt security.

Empirical evidence of network effects in public sector debt contracting

Under standard financial contracting theory, one would expect the terms of a debt security to reflect agency costs. An example of this view is the design of covenants in loan contracts and bond indentures (Smith and Warner 1979; Gârleanu and Zwiebel 2009; Nikolaev 2010; Miller and Raiser 2012). The choice of law for a debt security, including sovereign and government-backed bonds, should be guided by substantive differences between contract laws, including the political risk of opportunistic *ex post* amendments. By contrast, the benefits of standardization (i.e., network effects) can impede agency cost minimization when issuers include terms that are commonly used rather than those that are optimal for the particular issuer and security.

A first look at contract law choices reveals a high degree of concentration. For a sample of US corporate debentures in 2002, Eisenberg and Miller (2009, 1491) report a market share of 89 percent for New York law. In a similar vein, Das, Papaioannou and Trebesch (2012, 41–43) show that the great majority of sovereign bonds are issued under domestic law or under the laws of ei-

ther of two jurisdictions, namely New York and England. In our own study (Engert and Hornuf 2013), we document that English law has become the dominant contract law for corporate and sovereign issuers throughout Europe. In what follows we report on a sub-sample of this study covering debt issues at the central, state and local government level, as well as government-guaranteed debt issues. The data source is the Thomson Reuters SDC Platinum Global New Issues Database. The sub-sample contains 11,106 sovereign or government-backed debt issues in the initial member states of the Economic and Monetary Union (EMU)⁶, as well as Denmark, Norway, Sweden, Switzerland and the United Kingdom for the period from 1992 to 2008.

Figure 1 documents a significant rise in the use of English law since 1992, when the Treaty of Maastricht laid the legal foundation for the EMU, and again from 1999 onwards, when eleven countries entered the final stage of the EMU by introducing the euro as legal tender. Starting from below ten percent, the market share of English law in European sovereign debt issues rose to around 80 percent in 2004. Figure 1 also reveals that the growing popularity of English law was not driven by a surge of debt issuers located in the UK. As indicated by the dotted line, including UK issuers increases the market share of English law only marginally without changing the time trend. Use of domestic laws declined enormously over the entire observation period and remained stable at around 14 percent in the period from 2004 to 2008.

Figure 2 depicts the market share of English law for each of the six largest sovereign debt markets in Europe (excluding the UK). English law played no major role in any of these markets in 1992 as market shares were

⁶ Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

Figure 1

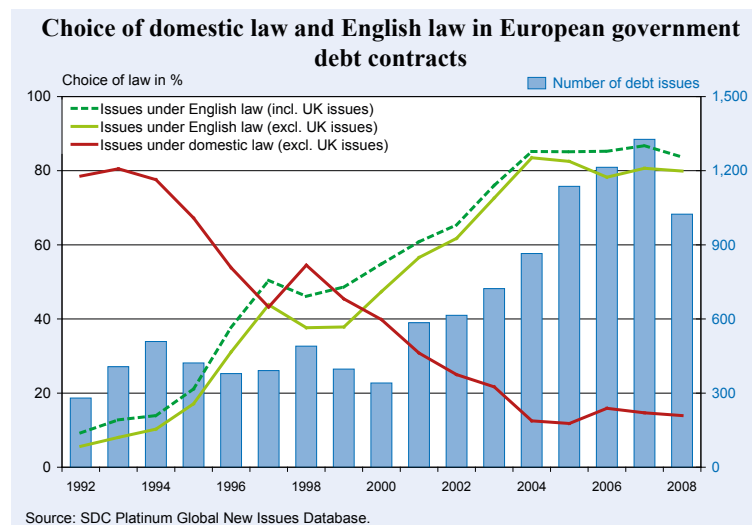
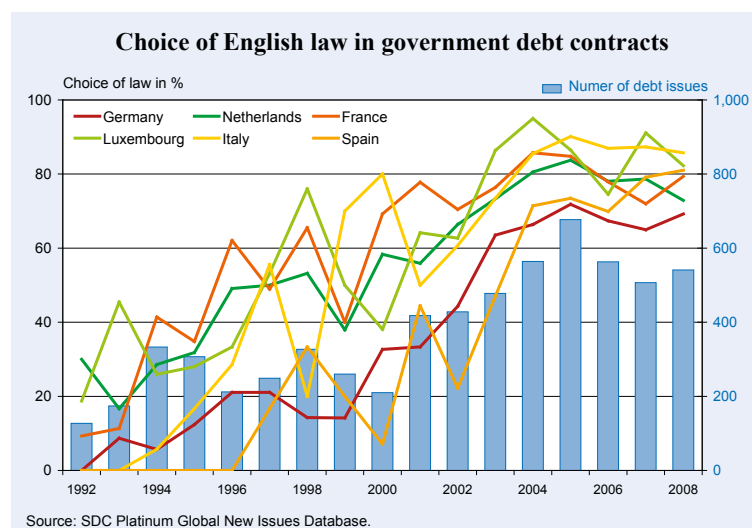


Figure 2



consistently below 20 percent. German and Spanish sovereign and government-backed issuers chose English law hardly at all. From 2004 onwards, however, English law captured a market share of 60 to 90 percent in all of these countries, with Germany being most reluctant to adopt the new market standard.

There is evidence that the surge in standardization was driven by the move to the EMU. As early as 1995, governments of EMU member states decided that they would denominate their debt issues in euro starting in 1999. EMU member states found themselves in a race to make their sovereign debt the benchmark for the emerging Eurozone (Pagano and von Thadden 2004, 536). With the advent of the euro, the conversion rates of the respective national currencies were irrevocably fixed.

As a result of this development, the investor base of public sector debt securities expanded beyond the respective member states, thus greatly increasing the benefits of a pan-European contracting standard. Using a broader sample of corporate and sovereign debt issues, for the introduction of the euro in 1999, Engert and Hornuf (2013) demonstrate that the shift towards English law is significantly more pronounced for debt securities in EMU member states than in other European countries. That is, the introduction of the euro convinced those issuers to switch to English law who benefited the most from using a pan-European market standard. One can hardly miss the irony of the story: the United Kingdom steadfastly opposed the EMU, and yet the common currency led English contract law to dominate EMU's market in debt securities.

Of course, one could argue that English law offers advantages over other contract laws in terms of substantive quality. English law may provide the most suitable tools for balancing the interests of investors and public sector issuers efficiently. The example of Greek law illustrates that English law could serve as a legal safeguard against government opportunism. However, whatever the merits of English law, they did not change at the time when the EMU member states introduced the euro as a common currency. Likewise, there is no reason to assume a change in the preferences of issuers and investors in the EMU member states as opposed to other European countries – except for the fact that a more integrated bond market increased the demand for a common contracting standard.

The literature provides additional evidence on network effects in debt securities contracting. Choi and Gulati (2004) carefully examine the move towards collective action clauses in sovereign bond contracts governed by New York law based on a sample of 155 offerings. They document an abrupt shift in 2003 and conclude that the dominance of unanimous action clauses did not reflect uniform issuer preferences. More recently, Choi et al. (2012a, 2012b) generalize and extend these earlier findings for a larger sample of 1,385 sovereign bonds from 1960 to 2011 and for various contractual provisions. On this broader basis, they are able to show that the terms in sovereign bonds often remain stable over extended periods of time before suddenly shifting towards new market standards in reaction to external shocks. Again, this finding of 'clustered change' is consistent with network effects in contracting. Likewise, Kahan and Klausner (1997, 740–60) track the evolution of 'event risk covenants' in 101 corporate bond indentures issued

in the years 1988 to 1993. They argue that the drafting quality of these contractual provisions both converged and improved over time, which they read as evidence of collective learning and hence network effects.

Conclusion

English law has become the contract law of choice for sovereign and government-backed issuers throughout Europe. The empirical evidence points to the benefits of using a law that most contract partners and complementary service providers are familiar with. From a normative angle, our findings cast doubt on the efficiency of contracting. They are consistent with at least two different interpretations:

1. One could suppose that English law unequivocally is the optimal contract law for public sector debt securities. In this case, our analysis implies that the introduction of the EMU had the beneficial side-effect of unlocking domestic markets. As issuers, investors, lawyers, underwriters and other parties in the domestic markets were more familiar with their own national laws, they were unable (or unwilling) to orchestrate a switch to English law as the more efficient contracting alternative. In this view, it took the external shock of the euro to overcome the excess inertia and lock-in created by network effects.
2. A second story is that English law is, in fact, less suitable for debt securities than all or some of the national laws it replaced. If this were the case, then the demand for a pan-European standard would have caused less efficient contracting in debt securities. Similarly, it may be that the various contract laws cater to different issuer and investor needs. English contract law accordingly might suit some public sector issuers or investors, but not others. Under this reading, the move to the euro and the concomitant change in network effects forced at least some parties to forego their most preferred contract law.
3. A final possibility is that the substantive differences between contract laws are, in fact, less important. While lawyers have to consider the technicalities of the applicable law when drafting a contract, it may be that the laws of most jurisdictions effectively permit the most important contract designs that the parties desire. Contract laws could be 'different but equivalent.' Under this reading, network effects in the choice of applicable contract law are fully consistent

with efficient contractual design. In either event, the demand for a common standard appears to be a powerful determinant of debt securities contracting.

Rawlings, P. (2007), "The Changing Role of the Trustee in International Bond Issues", *Journal of Business Law* 2007, 43–66.

Smith, C. W. and J. B. Warner (1979), "On Financial Contracting. An Analysis of Bond Covenants", *Journal of Financial Economics* 7, 117–61.

Zettelmeyer, J., C. Trebesch and M. Gulati (2012), "The Greek Debt Exchange: An Autopsy", SSRN <http://ssrn.com/abstract=2144932>.

References

Allen, J. G. (2012), "More than a Matter of Trust: The German Debt Securities Act 2009 in International Perspective", *Capital Markets Law Journal* 7, 55–85.

Choi, S. J. and G. M. Gulati (2004), "Innovation in Boilerplate Contracts", *Emory Law Journal* 53, 929–96.

Choi, S. J., G. M. Gulati and E. Posner (2011), "Pricing Terms in Sovereign Debt Contracts: A Greek Case Study with Implications for the European Crisis Resolution Mechanism", *Capital Market Law Journal* 6, 163–87.

Choi, S. J., G. M. Gulati and E. Posner (2012a), "The Evolution of Contractual Terms in Sovereign Bonds", *Journal of Legal Analysis* 4, 131–79.

Choi, S. J., G. M. Gulati and E. Posner (2012b), "The Dynamics of Contract Evolution", *Chicago Institute for Law and Economics Working Paper* no. 605.

Das, U. S., M. G. Papaioannou and C. Trebesch (2012), "Sovereign Debt Restructurings 1950-2010: Literature Survey, Data, and Stylized Facts", *IMF Working Paper* WP/12/203.

Druzin, B. (2009) "Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities", *Tulane Journal of International and Comparative Law* 18, 1–47.

Eisenberg, T. and G. P. Miller (2009), "The Flight to New York. An Empirical Study of Choice of Law and Choice of Forum Clauses in Publicly-Held Companies' Contracts", *Cardozo Law Review* 30, 1475–512.

Engert, A. and L. Hornuf (2013), "Can Network Effects Impede Optimal Contracting in Debt Securities?", *Stanford Law and Economics Olin Working Paper* no. 434.

Farrell, J. and P. Klemperer (2007), "Coordination and Lock-In: Competition with Switching Costs and Network Effects", in M. Armstrong and R. Porter, eds., *Handbook of Industrial Organization*, Vol. 3, North Holland, Amsterdam, 1967–2072.

Gârleanu, N. and J. Zwiebel (2009), "Design and Renegotiation of Debt Covenants", *Review of Financial Studies* 22, 749–81.

Goetz, C. J. and R. E. Scott (1985), "The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms", *California Law Review* 73, 261–322.

Häseler, S. (2010), "Trustees Versus Fiscal Agents and Default Risk in International Sovereign Bonds", *European Journal of Law and Economics* 34, 425–48.

Hill, S. and T. Beech (2010), "The Credit Crisis: Have Trustees Lived Up to Expectations?", *Capital Markets Law Journal* 5, 5–20.

Klausner, M. (1995), "Corporations, Corporate Law, and Networks of Contracts", *Virginia Law Review* 81, 757–852.

Kahan, M. and M. Klausner (1997), "Standardization and Innovation in Corporate Contracting (or "The Economics of Boilerplate")", *Virginia Law Review* 83, 713–70.

Miller, D. P. and N. Reisel (2012), "Do Country-Level Investor Protections Affect Security-Level Contract Design? Evidence from Foreign Bond Covenants", *Review of Financial Studies* 25, 408–38.

Nikolaev, V. V. (2010), "Debt Covenants and Accounting Conservatism", *Journal of Accounting Research* 48, 137–75.

Pagano, M. and E. - L. von Thadden (2004), "The European Bond Markets under EMU", *Oxford Review of Economic Policy* 20, 531–54.