Novelty and the Risks of Uniform Sales Law

STEVEN WALT*

TABLE OF CONTENTS

| I. | Introduction | 671 |
|------|---|-----|
| II. | Novel Uniform Law: Preliminaries | 674 |
| III. | Novelty and Uncertain Uniform Law: The CISG | 676 |
| | Three Sources of Suboptimal Implementation | |
| | A. Agency Costs | |
| | B. Network Externalities | |
| | C. Learning Externalities | 692 |
| V. | Some Implications | |
| | Conclusion | |

I. INTRODUCTION

Comparativists and law reformers tend to think that uniformity in international commercial law is a good thing. To them, a single set of applicable rules is considered to be a worthwhile goal. One reason is that uniform rules promote efficiency. Diverse national laws create legal costs of determining and complying with the laws of multiple jurisdictions. Ex post litigation costs of forum shopping and deciding sometimes difficult choice of law issues are also produced. Because uniform law subjects a transnational commercial transaction to a single set of rules, it reduces the legal costs as-

^{*} Professor of Law, University of Virginia School of Law.

I am grateful to Clayton Gillette, Kevin Kordana, Frank Partnoy, Robert Scott, George Triantis and Christopher Wonnell for comments or discussions on an earlier draft of this paper. Nathaniel Pietela provided valuable research and suggestions. The usual disclaimer applies.

sociated with the transaction. Diversity in domestic law can also create negative externalities when the principal costs of national law can be incurred by transactors beyond a nation's borders.¹ Uniform law, if produced by a centralized transnational lawmaking or quasi-lawmaking authority which internalizes these costs, presumably can take them into account. In this way, harmonization makes the production of efficient law more likely. Efficiency concerns no doubt partly explain the enthusiasm for recent products of the effort to generate uniform law, including the United Nations Convention on Contracts for the International Sale of Goods² (the "CISG"), and the International Institute for the Unification of Private Law's (UNIDROIT's) Principles of International Commercial Contracts.³

However, uniformity in law is a mixed blessing and not an unqualified good. There are at least three risks in subjecting transactions to a single set of legal rules. First, a uniform law can increase the impact of inefficient rules. Even when uniform law only sets default rules, inefficient uniformity increases net contracting costs on the class of affected transactions. Inefficient domestic law potentially affects fewer transactions because it leaves unregulated transactions subject to regulation by other domestic law. The inefficient law therefore increases comparable contracting costs less than its uniform counterpart. Second, uniformity in law risks differences in implementation. Without a single hierarchy of national courts or arbitral tribunals to implement uniform law, serious divergences in case outcomes are possible. Seeming clarity in a rule applicable to a transaction can mask significant differences in the rule as applied by courts or arbitrators. Divergent results in uniform law may actually exceed the divergent results prevailing under domestic law. Third, novelty in uniform law risks uncertainty in what the legal rule itself requires. Novelty occurs when harmonized law contains new rules which stand independently of

^{1.} See Joel P. Trachtman, International Regulatory Competition, Externalization, and Jurisdiction, 34 HARV. INT'L L.J. 47, 65-66 (1993); cf. ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW 5-6 (1993) (discussing state exportation of cost of providing goods to nonresidents); Ronald J. Daniels, Should Provinces Compete? The Case for a Competitive Corporate Law Market, 36 MCGILL L.J. 130, 148-49 (1991) (discussing the internalization of benefits and costs).

^{2.} See United Nations Convention on Contracts for the International Sale of Goods, Apr. 10, 1980, U.N. Doc. A/CONF.97/18, Annex I, reprinted in 19 I.L.M. 671 [hereinafter CISG].

^{3.} International Institute for the Unification of Private Law, UNIDROIT Principles of International Commercial Contracts (1994), *reprinted in* 33 I.L.M. 1395 (1994).

domestic law rules and background case law. Lacking information upon which to base reliable estimates about prospective outcomes under the law, transactors might avoid application of the rule. Thus, novelty can create a barrier to the adoption of uniform law. Even if uniformity in law is an attainable ideal, the risks of inefficiency, diverse application and novelty of rule threaten it.

The full case for or against uniform law must take into account all three risks described above. The possible impact of uniform law on efficiency is self-evident. Divergences in the implementation of uniform law can result from either resort to different decision makers or the novel content of the rule being implemented. The barrier to uniformity raised by multiple hierarchies among national courts and arbitrators is well understood. Novelty in uniform law, however, is underappreciated as a risk to the implementation of uniform law. This Article considers only the risk novelty presents to uniform sales law. It argues that novel uniform sales law can create a serious collective action problem which decreases the rate at which the law is adopted and implemented. Under specified conditions, even efficient uniform sales law will not be made applicable to sales contracts. When background case law or decisive extrinsic interpretive materials are lacking, new default rules increase uncertainty about case outcomes. In short, novelty in uniform sales law can retard the adoption of even optimal sales law. Recognition of this possibility should matter both to doctrinal debates and to the design of uniform sales law. Since this Article's concern is only with impediments to the implementation of uniform sales law, it assumes throughout that uniform sales law contains optimal rules.

The Article proceeds as follows. Part II more precisely describes the features of novel uniform law at issue. Part III describes the increase in uncertainty often produced by new uniform rules using the CISG as an illustration. Part IV identifies agency costs, "learning externalities" and network externalities as three possible sources of the barrier novelty creates for uniform sales law. It also argues that learning externalities are the only serious barrier to uniformity in international sales law and describes the collective action problem they create. Part V outlines some of the implications of Part IV's conclusion for uniform sales law. Part V concludes by briefly summarizing the discussion.

673

II. NOVEL UNIFORM LAW: PRELIMINARIES

In order to describe the collective action problem posed by novelty, two preliminary points need to be made. One preliminary point is conceptual. Whether novel uniform law presents any problem of course depends on what is meant by novelty and uniformity. I understand these terms merely in their informal, intuitive senses. A novel term or rule is one not contained in a prior body of law or interpretation of that law. For example, the notion of revocation of acceptance was not part of the Uniform Sales Act; it appears in § 2-608(1) of the Uniform Commercial Code ("Code"). Against the background of American domestic sales law, revocation was a novel term. Uniformity or harmonization is the adoption of a single set of rules to govern a particular sort of transaction.⁴

So understood, uniformity and novelty are matters of degree. The extent of uniformity depends on the content of rules adopted. Absolute identity of result and complete recognition of diversity in domestic law constitute the possible opposite extremes. For instance, the United Nations Convention on the Limitations Period for Contracts for the International Sale of Goods adopts a fouryear statute of limitations.⁵ Signatory countries apply the same limitations period to sales contracts covered by the Convention. Here there is complete uniformity in results. At the other extreme is complete diversity of result. The Hague Convention on the Law Applicable to Contracts for the International Sale of Goods is a good example. In general, where the sales contract is silent as to applicable law, the Hague Convention chooses the law of the seller's place of business.⁶ Since the domestic law of sellers varies according to their location, the same rule selects different law.

^{4.} I treat uniformity and harmonization of law as synonyms. Cf. David W. Leebron, Lying Down with Procrustes: An Analysis of Harmonization Claims, 1 FAIR TRADE AND HARMONIZATION 41, 43 (Jagdish Bhagwati & Robert E. Hudec eds., 1996) (explaining the meaning of "harmonization"); Rene David, The International Unification of Private Law, in 2 INTERNATIONAL ENCYCLOPEDIA OF COMPARATIVE LAW 35 (1974) (contrasting the meanings of "unification" and "harmonization"). For employment of a distinction between the two based on a musical analogy, of questionable use in comparative law, see Martin Boodman, The Myth of Harmonization of Laws, 39 AM. J. COMP. L. 699, 700-02 (1991).

^{5.} United Nations Convention on the Limitations Period for Contracts for the International Sale of Goods, June 13, 1974, art. 8, U.N. Doc. A/CONF.63/14, Part I, *reprinted in* 13 I.L.M. 952 (1974), as amended by the 1980 Protocol.

^{6.} See The Hague Convention on the Law Applicable to Contracts for the International Sale of Goods, Oct. 30, 1986, art. 8(1), 24 I.L.M. 1573 (1985).

Application of the same rule yields different results.⁷ The CISG opts for an intermediate degree of uniformity. Article 7(2) of the CISG requires resort to applicable domestic law when the CISG's provisions and underlying principles do not resolve an issue.⁸ When a CISG provision or principle applies, domestic law is displaced. The CISG instead gives a single result. When none are available, Article 7(2) requires application of domestic law and therefore requires different results depending on the domestic law selected.

The second preliminary point concerns the sort of uniform law being discussed. This is uniform law governing international commercial transactions among private parties which contains default rules. That is, at least some of the terms provided by the uniform law must be capable of alteration by the contracting parties to suit their transaction-specific preferences. At one extreme, the entire uniform law can be altered, for example, by contracting around its application. Confining attention to uniform law containing default rules makes sense because they comprise almost all of the law of sales. Mandatory rules are excluded from consideration because novelty can have no effect on whether mandatory rules are implemented, aside from a sheer refusal to enforce them. Novelty can only affect how, not whether, mandatory rules are implemented. The same is not true with default rules.

For my purposes, the way in which default rules may be altered by contract also is unimportant. The transaction costs associated with different sorts of default rules are therefore ignored. The uniform law or some of its terms might be ones which apply unless the parties provide otherwise. Alternatively, uniform law might be one which governs only if the parties expressly or implicitly opt into it, the law's provisions thereafter applying unless the parties derogate from them. The CISG is an example of the typical set of default rules, which apply unless the parties opt out of it.⁹ The

675

^{7.} The bankruptcy clause of the Constitution is an example of a domestic law in which the same rules give different results. The clause grants Congress the power to "establish... uniform Laws on the subject of Bankruptcies throughout the United States." U.S. CONST., art. I, § 8, cl. 4. The Supreme Court has interpreted the bankruptcy clause to require only geographical uniformity. See Hanover National Bank v. Moyses, 186 U.S. 181 (1902). Federal bankruptcy law, if enacted, must apply to all the states, but the content of the enacted law is left open. This means that federal bankruptcy law can incorporate state law, including state exemptions. The consequence is that federal bankruptcy law can yield different results depending on applicable state law.

^{8.} CISG, *supra* note 2, arts. 7, 4(a).

^{9.} See CISG, supra note 2, art. 6.

Uniform Customs and Practice for Documentary Credits and Incoterms sets default rules which apply only when the parties incorporate them into their contract.¹⁰ Once made applicable, however, the set of rules all apply unless the parties derogate from specific ones. Thus, my focus is on uniform default rules, not the particular way in which the default rules operate. For the same reason, the organizational means through which uniform law is adopted is unimportant. If uniform law contains default rules governing commercial transactions among private parties, it is the concern of this Article. Whether the law is part of a multilateral or bilateral treaty, community directive or uncodified international trade usage does not matter.

III. NOVELTY AND UNCERTAIN UNIFORM LAW: THE CISG

Uniform law containing new provisions can create uncertainty about case outcomes. It does this by increasing their variance as compared to formerly applicable law. Uncertainty about case outcomes can result from doubts about facts, their interpretation or how a fact finder will resolve them. Although not peculiar to uniform law, these sources of uncertainty are an inevitable risk of having third parties resolve disputes. Even courts applying domestic laws can reach different results based on differences in fact finding and interpretation. Novelty in uniform law can create doubt, however, about the content of a legal rule. Uncertainty about applicable law exists even if the uniform law is being construed within a single hierarchy of courts or arbitral fora and even if the facts are undisputed. The following four important instances of uncertainty in the CISG's provisions illustrate this phenomenon.

1. The CISG does not appear in a single canonical text. There are instead Arabic, Chinese, English, French, Russian and Spanish official language texts of the treaty. The penultimate paragraph of the CISG provides that each of these texts are equally authentic.¹¹

^{10.} Incorporation may be express or implied. The most recent version of the Uniform Customs and Practice for Documentary Credits appears to require that incorporation be express; *see* International Chamber of Commerce, Uniform Customs and Practice for Documentary Creditors, I.C.C. Pub. No. 500, art. 1 (1993) ("where they are incorporated into the text of the Credit"). The application of Incoterms to the contract may be express or implied. *See* International Chamber of Commerce, Incoterms 1990 (I.C.C. Pub. No. 460).

^{11.} CISG, supra note 2 ("Done at Vienna ... in a single original, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic"). Apparently the production of multiple language versions of treaties is common; see Dinah Shelton,

Thus, no single text was deposited with the United Nations. This means that no canonical version of the CISG can be consulted to resolve differences of translation between the language texts. In fact, there are points at which differences in translations can produce differences in results. For instance, a question can arise as to whether a contract is a contract for sale. Contracts sometimes call for the buyer to provide materials for the seller to use to produce a good for sale to him. According to the English version of Article 3(1), these are sales contracts unless the buyer is obligated to supply "a substantial part" of the materials needed to produce the good.¹² The French language version of the quoted phrase is "une part essentielle." Given the difference in phrases, a contract can be a sales contract under the French version of Article 3(1) but not under the English version. For example, assume that a contract obligated the buyer to provide the seller with a small, low-cost component for incorporation into the final product. Manufacture of the product by the seller cannot occur without it. Arguably the component is not a "substantial part" of the materials needed to produce the final product. It is, however, essential to the seller's manufacture of the good. Thus, the contract is a contract for sale under the English language version of Article 3(1) while not a contract for sale under the French language version of the Article.

2. The presence of undefined terms in the CISG articles make its provisions difficult to apply. It is hard to know in advance what they provide. For instance, Article 4 limits the scope of the CISG to "formation of the contract of sale and the rights and obligations of the seller and buyer arising from such a contract."¹³ Because issues going to the enforceability of a contract do not concern contract formation or the parties' rights and obligations under the contract, Article 4 excludes matters of enforceability from the CISG's scope. Article 4 expressly states: "[i]n particular, except as otherwise provided in this Convention, it is not concerned with: (a) the validity of the contract or any of its provisions or any usage."¹⁴ Since issues of "validity" are excluded from the CISG, they

- 12. CISG, supra note 2, art. 3(1).
- 13. CISG, supra note 2, art. 4.
- 14. CISG, *supra* note 2, art. 4(a).

Reconcilable Differences? The Interpretation of Multilingual Treaties, 20 HASTINGS INT'L. & COMP. L. REV. 611 (1997). The Vienna Convention on the Law of Treaties does not help to resolve the choice of text because its default rule treats all official language texts as equally authoritative; see Vienna Convention on the Law of Treaties, May 23, 1969, art. 33(1), 1155 U.N.T.S. 331, 8 I.L.M. 679.

are governed by applicable domestic law.¹⁵ The question, of course, is what issues are considered by the CISG to be matters of "validity." Although "validity" is a term appearing in the CISG and therefore plausibly must have meaning within it, the term is left completely undefined. The diplomatic history makes it reasonably apparent that matters of capacity, mistake and perhaps even unconscionability touch on "validity." Beyond this, the history is again inconclusive.¹⁶ Thus, there is doubt where other potentially significant issues fall. Warranty disclaimers, economic duress, export restrictions and other regulations of sales contracts bearing on enforceability, for example, may or may not raise issues of validity. Questions about the meaning of "validity" certainly will arise in future litigation under the CISG. My point is that the outcome of such litigation is uncertain because the relevant provision is itself vague.

3. "Good faith" are implied terms that are also left unclear under the CISG. Article 7(1) states that in interpreting the CISG, attention is to be paid to the "observance of good faith in international trade."17 Domestic laws differ as to the obligations described by the requirement of good faith.¹⁸ They at least characterize the notion of good faith, with more or less success depending on one's view.¹⁹ The notion of good faith at work in the CISG is undefined and completely uncharacterized. Thus, it is unclear what obligations are imposed by a requirement of good faith. Is the obligation of good faith one of interpretation imposed on courts or arbitrators applying the CISG's provisions, so that the requirement is addressed to them? Or is it an obligation imposed on the contracting parties, so that the requirement of good faith is one of contractual performance? Alternatively, even if the obligation is imposed on the contracting parties, does it extend to bar-

^{15.} Article 4's coverage of issues of validity "otherwise expressly provided in this Convention" has no application. *Id.* No other provision in the CISG expressly addresses validity. The only Article that mentions validity is Article 55, and the reference there is to a "validly concluded" contract. Article 55 does not itself describe conditions of validity. CISG, *supra* note 2, art. 55. Thus, if "expressly provided" means "mentioning by name and addressing," the CISG is not concerned with issues of validity.

^{16.} See Clayton P. Gillette & Steven D. Walt, Sales Law: Domestic and International 39-40, 163-64 (1999).

^{17.} CISG, supra note 2, art. 7.

^{18.} For a recognition of the point, see Arthur Rosett, Unification, Harmonization, Restatement, Codification, and Reform in International Commercial Law, 40 AM. J. COMP. L. 683, 688 (1992); see also Arthur Rosett, Critical Reflections on the United Nations Convention on Contracts for the International Sale of Goods, 45 OHIO ST. L.J. 265, 289-90 (1984). 19. See, e.g., U.C.C. §§ 1-201(9), 2-103(1)(b).

gaining, so that contracting parties are under a duty to negotiate in good faith? These questions indicate the vagueness of the requirement of good faith in Article 7(1). The language of Article 7(1) suggests that the obligation of good faith is imposed only on courts or arbitrators applying the CISG ("In the interpretation of this Convention . . ."). But the diplomatic history is characteristically inconclusive. Apparently the participants in the 1980 Vienna Diplomatic Conference achieved consensus by leaving an initially vague term vague. A lawyer counseling his client would be hardpressed to describe the CISG's requirement of good faith.

4. An inconsistency in the CISG's formation rules makes them difficult to interpret. Part II of the CISG consists of Articles 14-24, which are the Convention's requirements for contract formation. Article 14(1) states that a proposal is an offer if among other things, it is "sufficiently definite." The Article adds that "[a] proposal is sufficiently definite if it indicates the goods and expressly or implicitly fixes . . . the price."²⁰ Article 14(1) therefore requires a definite price requirement: to constitute an offer, a proposal must expressly or implicitly fix price. If it does not do so, the proposal is not "sufficiently definite" and cannot count as an offer. Article 55, however, does not utilize a definite price requirement. It provides that "[w]here a contract has been validly concluded but does not expressly or implicitly fix . . . the price, the parties are considered, in the absence of any indication to the contrary, to have impliedly made reference to the price generally charged "² By assuming that a contract can be "validly concluded" without adopting a specific price, the article presupposes that a contract can be formed under the CISG without price being expressly or implicitly fixed. Otherwise, under Article 55, the purpose of fixing price when the contract has not done so would be unnecessary. Thus, Articles 14(1) and 55 appear to be contradictory: Article 14 requires that an offer expressly or implicitly fix price while Article 55 allows an offer to leave price unfixed.

At least four different positions can be taken with respect to the relation between Articles 14(1) and 55. First, it can simply be acknowledged that the articles in fact contradict one another. The problem then is to choose whether to insist on the definite price requirement and use Article 14(1) or eliminate the requirement

679

^{20.} CISG, supra note 2, art. 14(1).

^{21.} CISG, supra note 2, art. 55.

and use Article 55.²² Second, it can be claimed that Articles 14(1) and 55 do not apply at the same time. Article 92 allows a contracting state to declare that it will not be bound by Part II of the CISG, which includes Article 14. If not bound by Part II, Article 14(1) does not apply; only Article 55 applies. The problem is that both articles continue to apply when a contracting state has not made an Article 92 reservation (To date only Finland, Norway and Sweden have made Article 92 reservations). Third, it can be claimed that the articles are consistent because they apply to two different ways of forming a contract. Article 14 applies to a contract formed by an offer and acceptance. Article 55 applies to contracts formed by a single document, multiple communications or exchanges which cannot be analyzed as offers and acceptances.

A fourth position is that the inconsistency between the articles is only an appearance, not genuine. This is because Article 14, when carefully read, does not state the definite price requirement. Carefully read, it only states a sufficient condition for a proposal being an offer. That is, Article 14(1) says that if a proposal expressly or implicitly fixes price, it is an offer. The article does not say that a proposal which does not do so is not an offer. Thus, Article 14(1)does not state that a proposal cannot be an offer unless it fixes price. It leaves open the possibility that a proposal is "sufficiently definite" even though the proposal lacks a price term. Under this interpretation, Articles 14 and 55 are consistent: both reject the definite price requirement. I favor this position. However, my judgment here does not matter.²³ It is enough that each of the four positions is more or less reasonable, and one cannot be confident that the CISG favors one of the positions over the others. Certainly one's confidence cannot be a basis for advising clients on the matter in advance.

Obviously, novelty and uncertainty of legal rules are not necessarily connected. Some novel rules can diminish uncertainty or leave it unaffected, and some nonnovel rules can increase uncertainty, particularly when twinned with novel rules. Recent statutory changes to domestic letter of credit law offer examples of new rules which reduce uncertainty. The revised version of § 5-108 of

^{22.} For a recent decision by the Hungarian Supreme Court which seems to endorse Article 14's apparent definite price requirement, see Pratt & Whitney v. Malev Hungarian Airlines, Legfelsbb Birosag, Gf. I. 31 349/1992/9 (Hung. 1992), *reprinted in* 13 J.L. & COM. 31 (1993). Given the opaque reasoning in the case, it is not even clear that the Court is endorsing the requirement.

^{23.} See GILLETTE & WALT, supra note 16, at 99-102.

the Code precludes an issuer of a letter of credit from relying on documentary discrepancies not relayed to the presenter within at most, seven business days after the documentary presentation (excluding discrepancies based on fraud, forgery or expiration of the credit).²⁴ The directive does not allow the issuer a defense of estoppel, as was allowed by many courts under the pre-revision § 5-112 via § 1-103.²⁵ By eliminating detrimental reliance, the result under revised § 5-108(c) is noticeably clearer than under its statutory predecessor. Revised § 5-108(a)'s statutory statement of a strict compliance standard, replacing diverse judicially created standards, is another instance of a novel rule increasing certainty. An example of a nonnovel rule increasing uncertainty occurs when uniform law includes both the nonnovel rule and a contradictory novel rule.²⁶

The above four examples from the CISG are instances of novel provisions increasing uncertainty in applicable law. Their effect is typical of novel uniform sales law, where the diversity of transactions and preferences among contracting parties requires highly general and open-ended default terms. Innovation in default terms in uniform sales law therefore involves the replacement of select course-grained terms with other course-grained terms. A change from less specific to more specific terms, apparent in letter of credit law for instance, is exceptional in sales law. My point here is not that novel uniform law generally creates more uncertainty in case outcomes than nonnovel law. It may or may not do so. The point is that new law containing highly general and openended terms creates uncertainty. And when new uniform law creates uncertainty, the resources typically available in nonnovel law to reduce it cannot be used. This makes the uncertainty created by novel uniform law more serious. A crucial missing resource is supporting case law and more generally, precedent.

In this respect, novel uniform international sales law is unlike prominent uniform domestic sales laws. Article 2 of the Code's statutory predecessor, the Uniform Sales Act, developed a rich case law around it. Although Article 2 contains a number of im-

^{24.} See U.C.C. § 5-108(c).

^{25.} See U.C.C. §§ 5-112, 1-103 (1994); Crocker Commercial Services v. Countryside Bank, 538 F. Supp. 1360 (N.D. Ill. 1981); Board of County Commissioners v. Colorado Nat'l Bank, 607 P.2d 1010 (Colo. Ct. App. 1979); East Bank of Colorado Springs v. Dovenmuele, Inc., 589 P.2d 1361 (Colo. 1978).

^{26.} See *infra* text accompanying notes 19-22 for a possible example of the phenomenon in the CISG.

portant provisions differing from those in the Sales Act (e.g., risk of loss rules, rejection rules, Statute of Frauds details), there is significant continuity in the rules. There is also continuity of interpretation of general notions which are otherwise undefined or underdefined (e.g., good faith, reasonable notice, seasonable performance). In fact, the Code assures continuity via § 1-103, and allows pre-Code law to supplement the Code, except where a Code provision displaces such law. Existing case law concerning background rules therefore can provide information that reduces the range of possible outcomes allowed by novel rules. In short, decisional law reduces the legal uncertainty otherwise produced by some novel rules.

New uniform international sales law cannot use a similar informational device to reduce legal uncertainty. This is because continuity in decisional law does not exist. Both the novelty and frequent structure of uniform sales law makes background domestic sale law inapplicable. The effect of novelty and structure is that there is less information available than otherwise would be available to reduce the range of possible case outcomes under uniform law. The CISG illustrates the role of novelty and treaty structure in producing informational discontinuity. Consider novelty first. The CISG's two predecessor treaties, the Uniform Law on the International Sale of Goods (ULIS)²⁷ and the Uniform Law on the Formation of Contracts for the International Sale of Goods (ULIF),²⁸ attracted few signatory countries and produced sparse case law. Thus, the information provided by supporting case law was initially slight. However, even such slight case law might be irrelevant to the CISG's interpretation because of the significant differences among CISG and ULIS and ULIF.

As to treaty structure, the CISG's provisions exclude application of much extra-CISG law. Article 7(2) includes the directive that "[q]uestions concerning matters not governed by this Convention which are not expressly settled in it are to be settled in conformity with the general principles upon which it is based or, in the

^{27.} Convention Relating to a Uniform Law on the International Sale of Goods, July 1, 1964, annex, Uniform law on the International Sale of Goods, 834 U.N.T.S. 109 (1964), reprinted in 13 AM. J. COMP. L. 453, 456 (1964).

^{28.} Convention Relating to a Uniform Law on the Formation of Contracts for the International Sale of Goods, July 1, 1964, annex, Uniform Law on the Formation of Contracts for the International Sale of Goods, 834 U.N.T.S. 123 (1964), *reprinted in* 13 AM. J. COMP. L. 453, 472 (1964).

absence of such principles ... "29 by applicable domestic law. Article 7(2)'s directive, by making the CISG's "general principles" applicable, displaces both domestic law and pre-CISG treaty law. This makes both resources irrelevant to the CISG's interpretation. To be sure, Article 7(2) substitutes the CISG's "general principles" for domestic law as a device for informing parties about the contents of the CISG's provisions. But the "general principles" underlying the CISG are entirely unspecified. Their elaboration does not rise above, portentiously put, vague demands for uniformity, contract enforcement and the like. Thus, unspecified "general principles" are a poor substitute for information about case outcomes provided by domestic law and pre-CISG treaty law. True, domestic law continues to apply when the CISG's general principles do not resolve an issue. The vagueness of its principles, however, makes it hard to tell when a particular CISG-supported principle supplements a term in a sales contract or when supple-mentation is left to domestic law.³⁰ Article 7(2)'s prioritization of the CISG's "general principles" over extra-CISG law, with no specification of those principles, combine to create doubt about the continued application of extra-CISG law. Uncertainty about case outcomes under the CISG therefore is not reduced.

IV. THREE SOURCES OF SUBOPTIMAL IMPLEMENTATION

It is not enough to produce a uniform law containing optimal terms. To be successful, the law has to be implemented. As a practical matter, there is no difference between widespread avoidance of a law and its not being implemented. In the case of a uniform sales law, implementation requires contracting parties to use

^{29.} CISG, supra note 2, art. 7(2). The CISG is not unusual in containing a provision of the sort described by Article 7(2). For similiar provisions in treaties or drafts of treaties produced by the United Nations Commission on International Trade Law, see UNCITRAL Model Law on Electronic Commerce, art. 3(2), G.A. Res. 51, U.N. GAOR 6th Comm., 85th plen. mtg., U.N. Doc. A/51/628 (1996); UNCITRAL Draft Uniform Rules on Assignment of Receivables Financing, art. 8, U.N. Doc. A/CN.9/WG.II/Wp.9323 (1997); UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange and Related Means of Communication, art. 3(2), U.N. Doc. A/CN.9/426 (1996). See also UNIDROIT Convention on International Financial Leasing, art. 6, May 28, 1988, reprinted in 27 I.L.M. 943 (1988); Proposed UNIDROIT Convention on International Factoring, art. 4, May 28, 1988, reprinted in 27 I.L.M. 943 (1988); Proposed UNIDROIT Convention on International Factoring.

^{30.} For confirmation of the observation based on some case law under ULIS, see Jan Hellner, Gap-filling by Analogy: Art. 7 of the U.N. Sales Convention in its Historical Context, in FESTKRIFT TILL LARS HJERNER: STUDIES IN INTERNATIONAL LAW 219, 227-28 (J. Ramberg ed. 1990).

its terms. This is because uniform sales law contains default terms, and default terms apply to the parties' contract only when the parties have not opted out of their application or selected different terms. Under some conditions, the parties will refuse to incorporate default terms into their contract. Thus, even if uniform sales law contains optimal terms, the terms may not be made applicable to the parties' contracts. By itself there is nothing problematic about the failure to use default terms. The parties' transactionspecific preferences might call for the use of customized terms. Under some plausible conditions, however, the novelty of a default term might systematically prevent parties from selecting it. The widespread failure to adopt new default terms can result in the failure to use these terms which have a net social benefit. In other words, in some plausible circumstances, novelty can result in a suboptimal implementation of even optimal uniform sales law.

The suboptimality of uniform law can have supply- or demandside sources. On the supply-side, the terms contained in the uniform law adopted can be suboptimal, both socially and for particular contracting parties. For example, vague terms which do not alter the status quo can impose contracting costs on parties while providing political advantage or academic prestige to public or quasi-public lawmakers.³¹ Since I am concerned with barriers to the implementation of uniform law, not its production, I will continue to assume that the law produced contains optimal terms. Only the value contracting parties place on existing default terms is considered. Accordingly, supply-side impediments to optimal law are ignored and demand-side factors involving novel law alone are considered. This Part of the Article identifies a role for novelty in three demand-side variables that could produce a suboptimal adoption of uniform sales law: agency costs, "learning externalities" and network externalities. It argues that "learning externalities" are the only serious barrier that novelty presents to adoption of uniform sales law. Although possible, agency costs and network externalities are unlikely to be significant sources of suboptimal implementation.

^{31.} Cf. Paul B. Stephan, Accountability and International Lawmaking: Rules, Rents and Legitimacy, 17 NW. J. INT'L L. & BUS. 681 (1997); Alan Schwartz & Robert E. Scott, The Political Economy of Private Legislatures, 143 U. PA. L. REV. 595, 648-49 (1995); Robert E. Scott, The Politics of Article 9, 80 VA. L. REV. 1783, 1821 (1994). These articles argue that vague terms are either the product of successful rent-seeking behavior by drafters or a compromise among interests well-represented in the drafting process.

A. Agency Costs

Novel default terms might increase agency costs among lawyers. In its informal details, the possibility is familiar. Lawyers are no more faithful custodians of their clients' interests than a firm's managers are of the interests of debt and equity. Over a range of decisions, the interests of lawyers and their clients (the contracting parties) diverge. At a minimum, a lawyer cannot be assumed to draft contract terms that maximize the value of the contract to her client. The attorney instead will draft terms that further her (risk adjusted) interests. If information about the lawyer's drafting decisions is costly for the client to observe, contracting through lawyers produces agency costs. Additional agency costs can result from the presence of novel default terms. This is because the incorporation of a novel default term or opting out of it can satisfy the drafting attorney's preferences without satisfying those of her client. Thus, contracting against a background of novel default terms can increase agency costs.

Two different accounts of how novelty increases agency costs are available. Both accounts note that novel terms can expand the range of possible case outcomes as compared to the range of outcomes under nonnovel law. Novel terms increase legal risk. Because the contracting party requires more information (or information more difficult to obtain) to assess the quality of the terms chosen by her lawyer, her cost of detecting the use of wrong contract terms increases. The accounts differ in the conclusions drawn from the inference. One account appeals to the drafting attorney's attitudes toward risk. The attorney, according to the account, is risk averse and therefore prefers mean-equivalent outcomes with less variance to outcomes with greater variance. This could be because the drafting attorney cannot diversify her career risk, in the same way that a firm's manager cannot completely diversify her career risk.³² Novel default terms typically have a higher variance of possible case outcomes than nonnovel terms. Thus, the drafting attorney will most likely be biased against the use of novel terms.

The second account invokes a postulated relationship between novelty of contract terms and litigation fees. By increasing the

^{32.} For a similar motivation for the assumption of risk aversion among drafting attorneys, see Marcel Kahan & Michael Klausner, Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases, 74 WASH. U. L.Q. 347, 354 (1996).

range of possible outcomes, novel terms increase fees paid for litigating disputes. At the same time, novel terms can create so much uncertainty that the contracting parties' expectations about litigation outcomes converge. In these circumstances the parties will reach settlement without litigation. The use of too novel a contract term therefore can induce settlement; but the use of too standard a term yields lower litigation fees received for "standard term" litigation. Thus, assuming that litigation fees are higher than fees received upon settlement, the litigating lawyer trades off novelty of terms against settlement to maximize its expected fees. For the litigator, the optimal contract term has an intermediate degree of novelty.³³ Litigators, according to this fee-producing account, are biased in favor of clients using somewhat new contract terms.

Unelaborated, both agency cost explanations of novelty are weak. One trouble is in their details. The risk aversion account relies on the attorney's attitude toward risk, and these attitudes are likely to change with the effect of a decision on income. Some evidence suggests that decisionmakers are risk averse when a choice offers a prospect of gain while risk-seeking when the choice is among losses only.³⁴ As bankruptcy approaches, the decisionmaker might stop making risk averse choices and begin making risk-preferring decisions.³⁵

Although less common, attorneys can also exhibit the same range of risk preferences. For instance, if the attorney is owed money by the client and the client is insolvent, then the attorney becomes the client's unsecured creditor. Therefore, the attorney might recommend that the client take action that increases the likelihood of full repayment. Where applicable, the recommendation might be for the client to commingle nonproceeds with proceeds of collateral in order to eliminate the secured creditor's pri-

^{33.} For a similiar argument in the case of complex legal terms, see Michelle J. White, Legal Complexity and Lawyers' Benefit From Litigation, 12 INT'L REV. L. & ECON. 381 (1992); but cf. Louis Kaplow, Rules Versus Standards: an Economic Analysis, 42 DUKE L.J. 557, 586-87 (1992) (distinguishing complexity from the choice between rules and standards); RICHARD A. EPSTEIN, SIMPLE RULES FOR A COMPLEX WORLD 21-36 (1995) (discussing the possibility of reducing the complexity of legal terms).

^{34.} See, e.g., ZUR SHAPIRA, RISK TAKING: A MANAGERIAL PERSPECTIVE 69 (1995); KENNETH R. MACCRIMMON & DONALD WEHRUNG, TAKING RISKS: THE MANAGEMENT OF UNCERTAINTY 106 (1986); Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 ECONOMETRICA 263 (1979).

^{35.} See Susan Rose-Ackerman, Risk Taking and Ruin: Bankruptcy and Investment Choice, 20 J. LEGAL STUD. 277 (1991).

ority position in the proceeds. The upside risk for the attorney now is full payment; the downside risk is equitable subordination or disallowance of its entire claim by the bankruptcy court. The attorney might prefer the increased variance of outcomes in such circumstances. More generally, it would be sheer coincidence if novel terms consistently affected the drafting lawyer's income so as to produce risk averse behavior. In short, the supposition of risk aversion seems ad hoc.

The fee-producing account has equally serious difficulties in its details. It supposes that the litigator trades off settlement fees against litigation fees to prefer contract terms having an intermediate degree of novelty. This supposition requires that attorneys drafting and litigating a contract be in the same firm. Otherwise, the litigator's preferences have no effect on the choice of contract terms. Prevalent patterns of law practice, however, are inconsistent with this supposition. Litigation is typically conducted by different firms from those drafting the contract. Further, the feeproducing account focuses on the effect of contract terms on the litigator's fees. Since a term can affect the fees of the drafting attorney too, determination of the optimal novelty of a term has to estimate the marginal effects of the term's use on the incomes of both litigating and drafting attorneys. In the case of sales law, were drafting fees can be reduced by standardized terms, intelligent estimations are difficult to make.

Another trouble with agency cost accounts concerns their testable implications. The two accounts make different predictions about the contracting parties' use of novel default terms. The risk aversion account forecasts a bias of lawyers against the use of novel default terms. Given that different attitudes toward risk likely depend on prospective outcomes, the direction of bias is unlikely to be systematically against novelty. An initial problem here is falsifiability. A choice of contract terms is always open to two different explanations. One is to postulate a drafting lawyer's utility function whose arguments contain more than just the mean and variance of outcomes. A second is to postulate a risk neutral choice by a risk averse lawyer due to the client's ability to cheaply monitor the quality of the lawyer's performance. The first explanation is inconsistent with risk aversion; the second is consistent with it. The fee-producing account predicts a bias in favor of terms having an intermediate degree of novelty.

Impressionistic evidence of early experience with the CISG falsifies the forecast. Parties appear to be opting out of the CISG,

687

688 VIRGINIA JOURNAL OF INTERNATIONAL LAW [Vol. 39:671

with its novel default terms.³⁶ The relatively few disputes in which the CISG has governed are overwhelmingly cases in which the parties were unaware that the CISG even applied to their contract.³⁷ Only the hapless tend to have their contracts governed by the CISG. Thus, early case law is consistent with contracting parties, when apprised of the law, seeking to avoid having novel default terms govern their international sales contracts. For these reasons, agency costs are unlikely to explain a preference for avoiding novel contract terms.

B. Network Externalities

Network externalities created by contract terms, if present, could retard the adoption of novel uniform sales law. Network effects exist when the benefit a user derives from an asset increases with the number of others currently using the asset.³⁸ Computer software and telephones are stock examples of assets which exhibit network effects. Contract terms can also be considered assets whose value to contracting parties depends in part on information about how a court or arbitrator will interpret them. The more parties currently make a term applicable to their contract, the more likely contemporaneous use is to generate such information. If so, pervasive use of specific contract terms exhibit increasing returns to scale over a range as the per contract cost of employing them decreases. Contemporaneous use of terms by other contracting parties therefore could increase their value to a particular contracting party using one or more of the same terms. Thus, it is possible that contract terms, once widely employed, may produce network effects.³⁹

^{36.} See, e.g., Steven Walt, The Risks of Uniform Sales Law, 4 INT'L CONT. ADVISOR 36 (1998); V. Susanne Cook, The U.N. Convention on Contracts for the International Sale of Goods: A Mandate to Abandon Legal Ethnocentricity, 16 J.L. & COM. 257, 258 (1997).

^{37.} See, e.g., Pratt & Whitney, reprinted in 13 J.L. & COM. 31 (1993); GPL Treatment v. Louisiana-Pacific Corp., 894 P.2d 470, 477 n.4 (Or. App. 1995) (Leeson J., dissenting) (the CISG should govern the contract; contract silent as to applicable law); Delchi Carrier v. Rotorex Corp., 71 F.3rd 1024 (2d Cir. 1995) (contract silent as to applicable law).

^{38.} See, e.g., Michael L. Katz & Carl Shapiro, Network Externalities, Competition, and Compatibility, 75 AM. ECON. REV. 424 (1985); Michael L. Katz & Carl Shapiro, Systems Competition and Network Effects, 8 J. ECON. PERSP. 93 (1994); Joseph Farrell & Garth Saloner, Standardization, Compatibility, and Innovation, 16 RAND J. ECON. 70 (1985); S. J. Leibowitz & Stephen E. Margolis, Network Externality: An Uncommon Tragedy, 8 J. ECON. PERSP. 133 (1994). The characterization in the text is of positive "direct" network effects; "direct" negative network effects of course are possible too.

^{39.} The possibility is described in Marcel Kahan & Michael Klausner, Standardization and Innovation in Corporate Contracting (or "The Economics of Boilerplate"), 83 VA. L. REV. 713 (1997); Michael Klausner, Corporations, Corporate Law, and Networks of Con-

Network effects alone do not produce a suboptimal adoption of sorts of contract terms. They do so only if the market for contract terms exhibits network externalities. Network externalities exist when the full benefit produced by contemporaneous use cannot be realized by the user. If the value of a contract term to a contracting party depends on how many others are currently using it, and the party cannot realize the value flowing to others from its use, she might not use the term. The party's decision instead will be based on matching private benefits and costs. She might therefore select a contract term even when selection of an alternative, novel term would generate more social benefit. Of course every potential contracting party faces the same decision about term use. Because some benefits are not realized by those employing a term, a suboptimal supply of nonnovel contract terms is produced. Described in this way, a contract term is a public good, and network externalities identify a collective action problem associated with the provision of a public good. Over a range of use, a contract term exhibits nonexclusivity: a contracting party cannot feasibly exclude others from benefiting from her own use of a contract term. The infeasibility of exclusion means that the party cannot realize the entire benefit resulting from her use. A suboptimal implementation of nonnovel contract terms is the result of the nonexclusiveness in supply of contract terms.

The question is whether network externalities are a serious impediment to novel uniform sales law. It is not whether network externalities are a possible barrier to the adoption of novel terms. Obviously, that possibility exists. To be a serious impediment, two conditions must obtain: (1) network effects affect the terms of a wide range of international sales contracts, and (2) there are no market mechanisms which operate to internalize the benefits of using novel contract terms. Otherwise, there is no reason to believe that contracting parties will systematically select a suboptimal level of novel uniform sales law to govern their contracts. The second condition may obtain: there may be few market mechanisms which allow a contracting party to capture the benefits of her use of a novel term to contemporaneous users of the same term. In principle, legal devices for creating property rights in intellectual property, such as patents and copyrights, can be ex-

tracts, 81 VA. L. REV. 757 (1995). For a critical assessment, see Mark A. Lemley & David McGowan, Legal Implications of Network Economic Effects, 86 CAL L. REV. 479 (1998).

tended to novel express contract terms.⁴⁰ They cannot be extended when contract innovation takes the form of using novel default terms. Arbitration clauses can function only as an imperfect means of keeping the terms of a contract private and therefore withholding informational benefits from contemporaneous users of contract terms. Thus, the positive externalities created by novel default terms might not be internalized through the allocation of property rights in them.⁴¹

The first condition, however, is unlikely to obtain: network effects do not affect a wide range of international sales contracts. Such contracts do not reliably produce benefits among contemporary users of the same contract terms. This is because international sales contracts typically are not of extended duration, either calling for repeat performance over time or a significant gap in time between the conclusion of the contract and completion of performance. The bodies of such contracts are more in the nature of "one shot" transactions than relational contracts. Or, more carefully, the default rules of the uniform law governing international sales of goods concern discrete transactions.⁴² A deal to deliver a specified quantity of widgets in the near future is the paradigmatic case, not a long-term requirements contract for widgets. In this respect sales contracts are unlike other sorts of agreements, such as bond indentures or other debt instruments, where performance obligations usually extend over significant periods of time. The focus on discrete transactions means that a contracting party derives little or no benefit from the contemporaneous use of the same contract terms by other parties. After all, if the sales

^{40.} Cf. Lemley & McGowan, supra note 39, at 571 n.399 (although patent or copyright protection "theoretically possible" for drafted contract terms, in practice lawyers copy contractual innovations).

^{41.} There are instances of innovations in financial products occurring without the creation of property rights. See Peter Tufano, Financial Innovation and First-Mover Advantage, 25 J. FIN. ECON. 213 (1989). Tufano speculates that innovating underwriters of securities enjoy a continued cost and marketing advantage in underwriting public offerings of their innovations. The advantage depends on the innovator entering into a series of similar contracts over time. A comparable speculation about sellers and buyers in international sales contracts is questioned below. See infra text accompanying notes 51-58.

^{42.} Of course, the relative frequency of types of contract ultimately is an empirical matter. Ripstein & Kobayashi make the undefended assertion that Article 2 of the Uniform Commercial Code applies to discrete sales made without advance planning. See Larry E. Ribstein & Bruce H. Kobayashi, An Economic Analysis of Uniform State Laws, 25 J. LEGAL STUD. 131, 150-51 (1996). The claim in the text is different and weaker: namely, that the typical international sales contract involves a discrete transaction. It is consistent with the obvious presence of long-term sales contracts (and advance contractual planning).

contract does not call for repeat performance and is completed within a relatively brief time, there is a limited period in which the contracting parties can derive value from others' use of the same contract terms. Thus, there is little information gained from the use of the same terms by others during their transaction that are useful to the parties in a separate transaction. Therefore, increasing the value of a term through clarification produced by the subsequent judicial or arbitral interpretations of others' terms is a remote possibility.

The default rules of the uniform law governing international sales are tailored for discrete transactions. Article 14(1) of the CISG requires that the offer contain a quantity term.⁴³ There is plenty of room for debate about what language in a proposal suffices, but the requirement excludes open-quantity terms characteristic of output and requirements contracts. Article 14(1)'s demand significantly restricts the sort of long-term contracts that can be formed under the CISG. Again, the CISG's single duty of good faith is limited to the "interpretation" of the treaty's provisions." The absence of a broader duty of good faith limits the CISG's application to the distinctive aspects of long-term contracts. For example, the CISG's duty of good faith cannot plausibly be used as a device for readjusting the contractual surplus or allocating unforeseen contingencies that eventuate over the course of a contract of extended duration. The limited duty of good faith signals the CISG's concern with short-term contracts. In addition, the CISG's concern provides some evidence about the typical international sale of goods.

My point here is that the run of international sales contracts involve discrete transactions of limited duration. Of course, contracting parties can contemplate entering into a series of discrete contracts with different partners. But not only is it unsafe to assume that this is true of the prevalent pattern of international sales contracts, but more importantly, the discreteness of each contract in the series means that it is unlikely that the contracting parties derive benefit from the contemporaneous use of the same terms by others. Benefits of term use, when present, more plausibly derive from others' prior use of terms or the party's own selection of terms in earlier contracts in the series. These benefits are not

^{43.} See CISG, supra note 2, art. 14(1) ("A proposal is sufficiently definite if it indicates the goods and... fixes or makes provision for determining the quantity...").

^{44.} See CISG, supra note 2, art. 7(1). See also supra text accompanying notes 17-19.

692 VIRGINIA JOURNAL OF INTERNATIONAL LAW [Vol. 39:671

network effects. Kahan and Klausner acknowledge that network effects are "primarily relevant"⁴⁵ to long-term contracts. If the typical international sales contract is a short-term affair, network effects affecting the terms of such contracts will not be significant. Contract terms for such contracts therefore will be selected on the basis of a term's value to the contract independent of the contemporary use of the term by others. Thus, network externalities are unlikely to retard the implementation of novel uniform sales law.

C. Learning Externalities

Unlike agency costs and network externalities, learning externalities are likely barriers to the implementation of novel sales law. Learning effects are benefits derived from previous experience.⁴⁶ A contract term exhibits learning effects when its value increases as more information is gained from prior uses of the term. The most salient sorts of information are judicial or arbitral interpretations of the term in other parties' contracts. Therefore, case law arising from disputes over contract interpretation serve as a good proxy for the presence of learning effects. As described above, the difference between learning and network effects in contract terms is temporal. Learning effects produce benefits flowing from earlier to later users of contract terms; and the benefits produced by network effects flow between current users. Both effects affect the value of a contract term to the user, and it is difficult in practice to separate them. This is because the value a user assigns to its term based on expectations of others' contemporaneous use is likely to be dependent on the frequency of previous use of the term by others. In principle, however, the distinction between learning and network effects is clear. A contracting party can value a contract term even if the term is no longer being used by anyone. Conversely, it is possible (although unlikely) that the term can be valued based just on expectations of contemporary use without a history of term use. Thus, learning effects can be present without network effects, and vice versa.

As with network externalities, the question is whether learning externalities present a serious impediment to the adoption of novel uniform sales law. A serious impediment exists if (1) learning effects affect the terms of a wide range of international sales contracts; and (2) there are no market mechanisms which reliably

^{45.} See Kahan & Klausner, supra note 39, at 727.

^{46.} For use of the term, see Klausner, supra note 39, at 786-89.

internalize the benefits of using contract terms. Unlike network externalities, both conditions are likely to be satisfied here. Consider the conditions in turn. The first condition is easily satisfied. Judicial or arbitral interpretation of an earlier user's contract term tells a later user how the same term might be treated in her contract. A developed case law involving the same term raises the confidence of a later user that a court or arbitrator will interpret the term in the same way if her contract is litigated. Doctrinal devices such as precedent, over a range, increase the later user's confidence even further.⁴⁷

The information provided by case law reduces the variance in outcomes for later users of terms. This is true whether the information provided is about an express term or a default term. The effect on the value of both terms for later users is the same. Contracting parties generally consider the increased predictability of outcomes of litigation a benefit. They are saved the expense of anticipating and planning for a broader range of contingencies. In selecting among corporate codes, for instance, firms prize developed corporate case law.⁴⁸ Firms are willing to incur costs to incorporate in legal regimes having such laws, including decisional law interpreting default rules. Learning effects resulting from background law therefore include the selection of default terms. There is no reason to think that the same is not true of the default terms in sales law. Similarly, the enhanced predictability resulting from existing decisional law affects the terms of both discrete and long-term contracts. More information about the prospective outcome of litigation sometimes might have a higher value in a relational, rather than a "one shot" contract. For example, the outcome of litigation of your term might matter more to me later when I am contemplating using the same term in a relational contract. However, litigation still provides valuable information to me if my contract is of limited duration and the array of future contin-

^{47.} For a discussion of the role of precedent in the persistence of common law rules, see Clayton P. Gillette, *Lock-In Effects in Law and Norms*, 78 B.U. L. REV. 813, 822-26 (1998). The qualification "over a range" in the text is needed. It is possible that a proliferation of precedent touching on a contract term might diminish, not increase, confidence in subsequent authoritative interpretation of one's own use of the term.

^{48.} See ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW, supra note 1, at 33-34; Roberta Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J.L. ECON. & ORG. 225, 250-51 (1985). For the possibility that banks choose to issue select innovative financial products based on cost-revenue information produced by banks which have issued the same products, see Phil Molyneux & Nidal Shamroukh, Diffusion of Financial Innovations: The Case of Junk Bonds and Note Issuance Facilities, 28 J. MONEY, CREDIT & BANKING 502 (1996).

694 VIRGINIA JOURNAL OF INTERNATIONAL LAW [Vol. 39:671

gencies are known. How a court or arbitrator has interpreted a contract term remains important to discrete contractors. Thus, learning effects are present even here. Learning effects therefore affect the terms of typical international sales contracts.

Since use of a novel contract term benefits later users of the same term, its employment creates a learning externality. Novel customized contract terms are express terms tailored for the parties' transaction which have not been judicially interpreted. In the context of learning externalities associated with the use of novel customized terms, Goetz and Scott note that once judicially interpreted, customized terms might better suit other transactions than the previously existing supply of interpreted terms.⁴⁹ This benefits later users of the same customized express term. Goetz and Scott's point is applicable to novel default terms in uniform sales law too. Judicial interpretation of a new default term governing a contract benefits later contracting parties using the same default term. Whether the term used is express or default is irrelevant. Interpretation of the novel term produces benefits for later users in both cases. Because most of the terms in uniform sales law are default rules that lack supporting case law,⁵⁰ their incorporation in a sales contract is a legal innovation. Use of new uniform sales law creates learning externalities.

Consider now the second condition mentioned: that there are no market mechanisms which reliably internalize the benefits of using novel terms. It too is satisfied. To see this, note first that learning externalities involving novel uniform sales law have the characteristics of a public good. The employment of new default terms creates a positive externality across time. Nonexcludibility of access to judicial interpretations is the most important feature here. Interpretations of terms creates benefits for later users that cannot be captured by the initial user of a novel term. Thus, a contracting party will consider only the private benefits the term brings to its contract. Use of the novel term is a cost to the initial user because of legal uncertainty and the risk of judicial error associated with it.⁵¹ The cost associated with its use can be higher than the compa-

^{49.} 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, 294 (1985), Klausner, supra note 39, at 786-89, and Kahan & Klausner, supra note 39, at 720-21, rely on Goetz and Scott's observation.

^{50.} See infra text accompanying notes 15-16.

^{51.} See Goetz & Scott, supra note 49, at 267-72, 278, 301 (noting risk of what they call "formulation" errors).

rable cost of a judicially interpreted term. In maximizing the value of their contract to them, contracting parties therefore might select time-tested terms over novel terms, even when using novel terms would yield greater social benefits. Novelty produces a collective action problem across time: All users of the same term would be better off if novel terms were employed by earlier users, but early users do better by selecting nonnovel terms to govern their agreements. A suboptimal level of new uniform sales law will not be made applicable to parties' contracts.

Strictly, the public goods aspect of novel default terms by itself only denies that an optimal level of new uniform sales law will be used. It does not predict the direction of nonoptimal term use. The level of use may be suboptimal or superoptimal: there may be "too little" or "too much" uniform sales law governing contracts. This is because the use of contract terms can produce positive or negative externalities across time. This characterization treats novel uniform terms as benefiting later users of the same terms. If so, early users of novel terms do not internalize the full benefits realized by their use. A suboptimal level of novel terms therefore governs international sales contracts.

However, in principle, the use of novel terms could increase risks to existing users of nonnovel contract terms. These would be costs not fully internalized by the user of the term. For instance, the proliferation of precedent produced by litigation surrounding novel terms could undermine the precedents governing nonnovel terms. Negative externalities associated with employing novel terms therefore could produce a "superoptimal" level of novelty. Although possible, negative externalities associated with term use are unlikely. They do not obtain in the everyday life of contracts. Over a range of precedent, the judicial interpretation of existing contract terms is unlikely to be affected by the introduction of novel default terms.⁵² Adding a rule interpreting a new term to the stock of precedent usually leaves existing rules which interpret other terms unaltered. Case law applicable to time-tested terms remains relevant even when new terms receive subsequent judicial

^{52.} Cf. Roberta Romano, Answering the Wrong Question: The Tenuous Case for Mandatory Corporate Laws, 89 COLUM. L. REV. 1599, 1603 (1989). Romano does not add the qualification made in the text, "over a range." She simply judges the possibility described as "unlikely." It is unlikely that the existing supply of precedent usually is such that a precedent interpreting a novel term undermines the precedential effect of rules interpreting time-tested terms. The qualification in the text therefore is consistent with Romano's point.

696 VIRGINIA JOURNAL OF INTERNATIONAL LAW [Vol. 39:671

interpretation. The proliferation of precedent needed to undermine existing judicial glosses on currently employed contract terms would be large and exceptional.⁵³ Therefore, the argument for a serious prospect of a superoptimal supply of novel terms is a weak one. Hence, a suboptimal supply of novel default terms is the common, and a superoptimal supply, is the infrequent case.

The final issue is how frequently the suboptimality occurs. This depends on whether market mechanisms can reliably internalize the benefits of using novel default terms. If market mechanisms reliably do so, the public goods aspect of novel terms is not a serious impediment to their use. There is reason to believe that none exist. An initial trouble is the size of transaction costs, not the presence of externalities. Because learning effects describe benefits that flow from early to later users, users typically will not be in contractual relations with each other. In fact, the potentially large class of later users of terms need not even exist at the time an earlier user must select terms governing its contract. Given the number and temporal remoteness of potential bargainers, the connections between early and later users more resemble the "large number, high bargaining cost" settings of tort law than those of contract law. In such circumstances, early users are unlikely to incorporate into their contracts an optimal set of novel terms.

The more serious trouble is the absence of market devices for internalizing the benefits of using novel terms. This is because the creation of ownership rights in novel contract terms is infeasible. For example, copyright or patent law cannot operate to exclude later users from employing novel default terms of uniform law used by earlier contracting parties.⁵⁴ Protection by contract design,

^{53.} Llewellyn describes a state of commercial law in which the proliferation of precedent undermines the predictability of outcome: "Our whole body of authoritatively accepted ways of dealing with authorities, ways in actual use in the daily work of the courts, is a body which *allows* the court to select among anywhere from two to ten correct alternatives in something like eight or nine appealed cases of of ten." KARL LLEWELLYN, COMMERCIAL TRANSACTIONS 17 (1946). He intends the description to be of a temporary phenomenon, remedied by enactment of the Uniform Commercial Code. *Cf.* Grant Gilmore, *Legal Realism: Its Cause and Cure*, 70 YALE L.J. 1037, 1041 (1961) (describing the accumulation of precedent as a "store of raw material" which can become excessive and varied, resulting in random operation of the court), Douglas M. Branson, *Indeterminacy: The Final Ingredient in an Interest Group Analysis of Corporate Law*, 43 VAND. L. REV. 85, 109 (1989) (indeterminacy of Delaware corporate law precedent offers possible explanation of variance in Delaware case outcomes).

^{54.} See supra text accompanying supra note 40. Even where exclusion is possible, learning advantages, secrecy, and sales services may be more important mechanisms for appropriating rents from innovations. See RICHARD LEVIN ET AL., Appropriating the

as it were, also cannot work perfectly to restrict the flow of benefits of novel terms to later users. Contract provisions such as arbitration clauses illustrate this difficulty. Arbitration clauses can be drafted to stipulate that both the arbitral proceedings and decisions be kept secret. In this way, the terms of a contract can restrict access to information about the use of novel terms, including the use of default terms. But arbitration clauses do not guarantee privacy. Enforcement of such clauses requires action by third parties, and such action allows private information to be made public. So, for example, a contracting party can challenge the existence or validity of the arbitration agreement ex post, and all legal systems allow judicial assessment of validity.⁵⁵ Similarly, there is some judicial vetting of arbitral awards. In regulating these aspects of the arbitration agreement, some of the terms of the main contract almost inevitably will be disclosed.

The disclosure recreates the learning externalities that an arbitration clause was designed to avoid. This does not mean that learning externalities always result in an undersupply in the use of novel terms. Sometimes they have no effect on the choice of a contract term. An early user occasionally might find it a net benefit to use novel terms even without capturing the benefits produced by the use. This situation describes what Olson calls a privileged group: a collection of users in which the private benefits to at least one of them from providing the public good, exceed that user's costs.⁵⁶ In privileged groups, learning externalities do not affect the supply of novel terms and market mechanisms for internalizing benefits therefore are unnecessary. For example, it might be worthwhile for a seller or buyer contemplating a series of contracts to employ novel terms to govern all of them. The novelty in terms could increase the value of each contract, their costs being amortized over the set of contracts. But the possibility is remote. Certainly it cannot be assumed that sellers and buyers of goods form a privileged group frequently enough to make learning externalities unimportant. The sounder assumption is that learning externalities characteristically affect the supply of applicable contract terms.

Returns from Industrial Research and Development, in 3 BROOKINGS PAPERS ON ECONOMIC ACTIVITY 783 (1987).

^{55.} See Steven Walt, Decision by Division: The Contractarian Structure of Commercial Arbitration, RUTGERS L. REV. (forthcoming 1999).

^{56.} See MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION 49-50 (5th prtg. 1975); RUSSELL HARDIN, COLLECTIVE ACTION 20 (1982).

698

V. SOME IMPLICATIONS

The possibility that learning externalities retard the use of uniform sales law is not just interesting as a theoretical matter. It also has practical consequences. If novelty can create learning externalities, it is not enough to produce a set of uniform default terms which minimize contracting costs for most contracting parties. Most parties must also incorporate them into their contracts. The legal uncertainty associated with novel default terms can induce them to avoid doing so. How novel uniform law is implemented over time therefore matters. It makes a significant difference to legal doctrine and the design of uniform law. The following are four implications that the presence of learning externalities associated with novelty has for uniform sales law.

1. One doctrinal consequence concerns the way in which gaps in uniform law should be filled. When the parties' contract is silent and uniform law does not expressly provide a term, the question arises as to how their contract should be interpreted. Uniform treaty law shows a pulse-quickening debate between two views: "Universalism" and "Particularism." Broadly characterized, unless the treaty law indicates otherwise, Universalism construes it to state comprehensive, systematic, and preclusive terms governing a subject matter. Universalists take the treaty's terms to be comprehensive because complete, systematic because internally coherent, and preclusive because displacing nontreaty national law. The position mimics the received view of civil codes.⁵⁷ Particularism denies that treaty law is comprehensive, systematic, and preclusive. The provisions of treaties reflect agreement on a limited set of terms, which may or may not exhibit coherence, and do not displace all national law. Particularism therefore allows supplementation by consistent national law when the treaty is otherwise si-This view treats treaty law like statutes.⁵⁸ lent on a matter. Universalism supports filling gaps in a treaty by principles dis-

^{25.} See, e.g., William D. Hawkland, The Uniform Commercial Code and the Civil Codes, 56 LA. L. REV. 231 (1995); Bruce W. Frier, Interpreting Codes, 89 MICH. L. REV. 2201 (1991); Jean Louis Bergel, Principal Features and Methods of Codification, 48 LA. L. REV. 1073 (1988).

^{26.} The fight between treating treaties as civil codes or as ordinary statutes can extend to domestic law. The perrenial debate as to whether the Uniform Commercial Code is a "true" code or an ordinary statute replicates the fight; for a sample, see William Hawkland, Uniform Commercial "Code" Methodology, 1962 U. ILL. L. F. 291 (1962); John L. Gedid, UCC Methodology: Taking a Realistic Look at the Code, 29 WM. & MARY L. REV. 341 (1988), Robert A. Hillman, Construction of the Uniform Commercial Code: UCC Section 1-103 and "Code" Methodology, 18 B.C. INDUST. & COM. L. REV. 655 (1977).

cerned to underlie it. Particularism supports gap-filling by national law in the same circumstances.

The difference in views affects the interpretation of the CISG. Article 7(2) of the CISG allows resort to underlying "general principles" when an issue is not "expressly addressed" by its provisions. Universalists take the directive to support the filling of gaps in contracts by finding terms covered by the appropriate principles. Because Particularists have no commitment to suitable general principles backed by the CISG in every case, they allow completing the contract with terms provided by national law. Article 7(2)'s terms, however, are perfectly neutral between the positions.

The possibility of learning externalities in novel terms under uniform sales law supports Particularism. Novel terms among the CISG's provisions create legal uncertainty when applicable to a sales contract. Particularly, legal uncertainty is increased by Article 7(2)'s reference to "general principles," which make non-CISG law irrelevant to it.⁵⁹ Without reliable market mechanisms for internalizing benefits produced by early use of the CISG's terms, parties will tend to opt out of novel provisions. The incentive potential early users of the CISG use is enhanced if legal uncertainty associated with early use is reduced. One way to do so is to avoid reliance on unspecified "general principles" whenever appropriate to fill gaps in contracts. By not relying on them, well developed national law can be used to complete otherwise incomplete terms of parties' contracts. Since contracting parties have more information about the distribution of case outcomes when decisional law is well developed, recourse to national law reduces legal uncertainty. Particularism allows more reliance on national (nonuniform) law than Universalism permits. This is because it considers the CISG to state an incomplete set of rules, even when Article 7(2)'s underlying "general principles" are taken into account. The position functions to reduce the novelty in terms under the CISG. For this reason, Particularism is the preferable interpretive approach to gap-filling.[∞]

699

^{59.} See supra text accompanying notes 29-30.

^{60.} For arguments against particularist interpretive strategies in connection with the CISG, made without considering learning externalities, see Michael P. Van Alstine, Dynamic Treaty Interpretation, 146 U. PA. L. REV. 687 (1998); Mark N. Rosenberg, The Vienna Convention: Uniformity in Interpretation for Gap-Filling--An Analysis and Application, 20 AUSTL. BUS. L. REV. 442 (1992); Michael J. Bonell, Interpretation of Convention, in COMMENTARY ON THE INTERNATIONAL SALES LAW 72-77 (C. M. Bianca & M. J. Bonell eds. 1987); Franco Ferrari, Uniform Interpretation of the 1980 Uniform Sales Law, 24 GA. J. INT'L & COMP. L. 183 (1994).

700 VIRGINIA JOURNAL OF INTERNATIONAL LAW [Vol. 39:671

2. Another doctrinal consequence concerns the interpretation of terms in uniform sales law. Undefined or undercharacterized terms in uniform law require interpretation, and the issue is similar to the issue in gap-filling: How are the terms of the law to be construed? The CISG contains no definitions and leaves crucial default terms unspecified. Article 7(1) calls for interpretation of the CISG's provisions to proceed to achieve "uniformity," but the degree of uniformity demanded is also left open. In anticipation of future case law, commentators have warned against a "homeward trend" in interpretation: the apparent vice of interpreting the terms of uniform law through national law.⁶¹ Given that learning externalities are produced by using novel terms, a "homeward trend" is not such a bad thing. Interpreting the terms of uniform law in the same way as under national law enhances predictability. Information based on domestic case law can be brought to bear on uniform law. In this way, parties in advance can be reasonably confident that with respect to a term, the range of possible case outcomes under uniform law will be the same as under national law. Thus, as with gap-filling by national law, interpretation by national law functions to reduce the legal uncertainty associated with novel terms. Reduced legal risk also reduces the cost of using novel default terms and increases the likelihood of their use.

Delchi Carrier Spa v. Rotorex Corporation⁶² nicely illustrates the virtues of a "homeward trend" in interpretation. In Delchi Carrier, the Second Circuit was required to determine whether the District Court's calculation of damages under the CISG was proper. Article 74 of the CISG allows the victim of the breach to recover lost profits resulting from the breach.⁶³ The Article is silent, however, as to how lost profits are to be calculated. The Delchi Carrier court had to decide whether the seller's cost of performance included only its total variable costs or whether fixed costs were to be included too. Detecting no answer in the CISG, the Second Circuit upheld the District Court's reliance on Ameri-

^{61.} See, e.g., Timothy N. Tuggey, Note, The 1980 United Nations Convention on Contracts for the International Sale of Goods: Will a Homeward Trend Emerge?, 21 TEX. INT'L L.J. 540 (1986); John O. Honnold, The Sales Convention in Action—Uniform International Words: Uniform Application?, 8 J.L. & COM. 207 (1988).

^{62. 71} F.3d 1024 (2d Cir. 1995) [hereinafter referred to as Delchi Carrier].

can domestic law in finding that cost of performance included only total variable costs.⁶⁴

It is easy to criticize both courts for violating Article 7(1)'s directive to achieve uniformity in interpretation by looking to domestic law. But uniformity is not a self-applying notion, and ignoring domestic law makes it more unlikely that parties will select the CISG's terms. This is because doing so increases the contracting parties' uncertainty ex ante about the relevant variables to use in measuring damages. Background case law cannot be used by them. Further, the appeal to uniformity gives the parties no information about what the CISG considers to be performance costs. Facing legal uncertainty, the parties might prefer to opt out of the CISG's damage measurements even when the contractual surplus might be increased by using them. A "homeward trend" in calculating lost profits gives the parties more information about damage measurements. It thereby reduces the cost of using the CISG and increases the likelihood of the CISG's application to the contract.

A stock response is to note the consequence of appealing to national law in interpreting uniform sales law: there is less uniformity in the result of applying the same law. The observation is correct but the response inadequate. True, the consequence of invoking national law in interpretation detracts from the harmonization achieved by uniform sales law. But the realistic alternatives are not between a single interpretation and diverse interpretations based on different national laws. Judicial interpretation of uniform law requires that the law governs disputed contracts in the first place. Since parties can opt out of using novel default terms, an interpretation of uniform law affects the frequency with which the law applies to contracts. The applicability of uniform law therefore is an exogenous variable. Thus, the realistic alternatives are between a single interpretation of terms that are rarely applied to contracts and diverse interpretations of terms that are rarely more frequently applicable to contracts. A single interpretation of terms frequently applied is not really an option. If the use of novel terms can produce learning externalities, more common use can sometimes be the preferred alternative. Some difference in inter-

^{63.} See CISG, supra note 2, art. 74 ("Damages for breach of contract by one party consist of a sum equal to the loss, including loss of profit, suffered by the other party as a consequence of the breach.").

pretation is the price of a more frequent application of uniform law.

3. The most direct implication of learning externalities affects the design of uniform sales law. If novel default terms produce a suboptimal use of uniform law, other things being equal, uniform law should contain less novelty. Its terms instead should be ones which have a basis in national case law. The basis can either be a direct incorporation of national law into uniform law or provisions which make national law the background for construing its provisions. As stated before, continuity with national law reduces legal uncertainty associated with the use of uniform sales law and therefore reduces its cost to early users.

Two remarks about the recommendation against novelty are in order here. First, the recommendation is general because the implication of learning externalities for legal design is also general. Less novelty is urged without specifying exactly how much novelty, or what sort of novel terms, are desirable. Parties also sometimes prefer novel default terms to govern international sales contracts simply because they cannot agree on default terms dictated by their respective national laws.⁶⁵ In these cases, novelty is the consequence of selecting a "neutral" law. The recommendation against it, however, is not trivial since it places a limit on the design of default terms. Uniform laws which contain novel terms without concern for their effect on adoption violate this recommendation. Second, some degree of novelty in default terms is inevitable simply because national law is diverse. Uniform law always contains novel terms judged against the background of some national law. The recommendation against novelty, when uniform law on a matter must be new, advises that there be less rather than more novelty. Other things being equal, when national law on a matter is reasonably consistent, the advice is against creating new uniform law.

4. Learning externalities associated with novelty have another implication for legal design: Their presence gives a reason for creating temporarily mandatory terms in uniform sales law. The argument for doing so is straightforward. Parties can opt out of novel uniform sales law entirely or the novel default terms in it. If

^{64.} Delchi Carrier, 71 F.3d at 1030.

^{65.} The observation has been used as a reason for countries to adopt the CISG. See Roy Goode, Why Compromise Makes Sense, TIMES (London), May 22, 1990, at 32; Letter of Submittal from George P. Schultz to President Ronald Reagan (Aug. 30 1983), 15 U.S.C.A. (App. at 71) (1997).

early users of uniform law fail to incorporate novel terms into their contracts, informational benefits flowing to others from use of the terms will not be produced. Given learning externalities, terms will be adopted by users at a suboptimal rate. Making a term mandatory forces the parties to produce benefits associated with term use. It substitutes a regulatory mechanism for private ordering as a device for producing information. As mandatory, the use of novel terms produces informational benefits for subsequent contracting parties even when the user does not capture the benefits. In these cases, the terms function as a "reverse" patent of sorts as subsequent users receive the benefit derived from the earlier use of terms. As only temporarily mandatory, novel terms can become default terms when their use no longer produces learning externalities. When enough case law surrounding a term has developed so that further judicial interpretation of the term would produce no useful information, it can be treated as a term which contracting parties can alter. Learning externalities therefore provide a reason for making the novel terms in uniform law temporarily mandatory.

The precise nature of this implication for legal design needs to be emphasized. The implication is not a recommendation that novel default terms in uniform sales law be made (temporarily) mandatory. It is only that learning externalities give a reason for doing so where none might otherwise exist. The reason ultimately might be very weak. There are familiar, and serious, objections to mandatory terms in sales law. Making a term mandatory increases the consequence of legal error in assessment of the efficient allocation of contracting costs of even typical parties. It inefficiently allocates contracting costs among atypical parties. And because parties can avoid the effect of uniform law by careful planning of the transaction or not transacting at all, mandatoriness does not guarantee an optimal use of novel terms. Finally, making terms temporarily mandatory only adds a further level of potential regulatory distortion of contractual resources. Thus, the case against making novel terms temporarily mandatory might be overwhelming. Even if true, learning externalities associated with novel terms give some support for recommending what on balance is a bad idea.

HeinOnline -- 39 Va. J. Int'l L. 703 1998-1999

703

VI. CONCLUSION

The legal literature on uniform international sales law often moves between two extreme positions: that uniform sales law is an unqualified good thing or that uniformity is an illusion. The former position ignores barriers to the adoption of a single set of rules; the latter position finds barriers to uniformity insurmountable (usually by assertion). Neither position identifies in any detail the possible impediments to adoption of uniform law. In different ways, both ignore problems presented by transition in commercial law. The neglect of transitional problems is signaled when calls are made for the support of uniform law, without more.⁶⁶

Learning externalities associated with novel terms are an important constraint on contracting parties' adoption of new uniform sales law. Here, agency costs and network externalities do not present serious impediments to adoption. The use of its novel default terms is a public good and creates a collective action problem across time. All users of such terms benefit from their widespread incorporation in sales contracts. Given legal uncertainty, however, each potential current user is better off not making novel terms applicable to its contract. How serious a constraint learning externalities present depends on whether other factors operate to facilitate adoption of novel terms in uniform law. Judges' and some contracting parties' incentives for novelty are prominent possibilities. This Article only identifies a barrier to the prevalent use of novel international sales law. Put generally, learning externalities associated with novelty mean that optimal uniform sales law, which might require novelty, can deviate from the terms likely to be used by parties to govern their sales contracts. Indeed, terms likely to be used by parties might militate against novelty.

The deviation between the optical and actual use of novel uniform terms cannot be eliminated by defining it away. The optimal use of terms could be defined as use that maximizes the joint value of the contract costs, given the presence of learning externalities. Given learning externalities in novel terms, contractors ignore uncapturable benefits, calibrating individually realized benefits and

^{66.} See, e.g., Joseph M. Lookofsky, Loose Ends and Contorts in International Sales: Problems in the Harmonization of Private Law Rules, 39 AM. J. COMP. L. 403, 416 (1991). For a general discussion of institutional design under additional constraints, see Bruce Talbot Coram, Second Best Theories and the Implications for Institutional Design, in THE THEORY OF INSTITUTIONAL DESIGN 90 (Robert E. Goodin ed. 1996).

costs from term use to maximize joint returns. Their use of nonuniform terms in the circumstances is optimal. Defining optimality by reference to learning externalities, however, just hides the additional constraint novelty places on the implementation of uniform sales law. It does not therefore remove novelty as an impediment to the optimal use of novel contract terms. In an easily recognizable sense, the actual rate of term use remains suboptimal because it fails to realize all the potential (net) benefits that could be realized by more frequent use. Comparativists and law reformers should pay as much attention to impediments to optimal use as they have paid to the particular terms of uniform sales law.