

# Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities

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*This Article applies network effect theory to transnational commercial law, arguing that commercial parties selecting law through choice of law and choice of forum clauses can be likened to consumers selecting a product, and thus equally susceptible to the effects of network externalities. The number of “consumers” who subscribe to the same legal norms is analogous to the number of consumers who use a product. As the number of “consumers” increases, so too does the inherent value of selecting that jurisdiction, inducing even more parties to “purchase” that body of law. This is a network effect. I argue that transnational commercial law is ideally calibrated so as to generate a network effect. This stems from the inherent nature of commerce. The discussion distinguishes between two kinds of externalities, direct and indirect network externalities, concluding that network systems that possess both kinds of network externalities (as is the case with law-selection decisions in commercial contracts), are the best candidates to produce a robust network effect. I then examine how the twin ingredients of fluid interaction and frequent choice present in commerce precipitate a network effect. Expansive interaction places a higher premium on the need for synchronization, and frequent opportunities to select law in the contracts of fresh commercial relationships allow for an incremental drift toward a specific jurisdiction. The Article ultimately concludes that, as a result, network externalities play an influential role in the ascension of particular jurisdictions over others in law-selection decisions—an important conclusion because it points to an unrecognized influence underpinning the current development of transnational commercial law.*

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## I. INTRODUCTION

As commercial relations reach across the threshold of national jurisdictions, the obstruction of conflicting laws and regulations becomes increasingly problematic. As one justice opined, there is “a jungle of separate, broadly based, jurisdictions all over the world.”<sup>1</sup> In having to deal with this plethora of jurisdictions, choice of law issues inevitably arise. In response to this problem, commercial actors<sup>2</sup> typically tackle the

1. *Airbus Industrie GIE v. Patel*, [1999] 1 A.C. 119, 132 (H.L.) (appeal taken from Eng.).

2. For the purposes of this discussion, commercial actors, and the term “commercial law” specifically, concerns the private law circumstances that involve business and commercial transactions between two or more parties. The focus here is commercial relationships of a transnational character. This definition embraces the actual terms of the contracts these parties

challenge of concurrent jurisdiction head-on by preemptively agreeing upon a particular jurisdiction in advance. “[P]arties to international contracts often include contractual dispute resolution provisions in their agreements.”<sup>3</sup> These provisions usually take two forms: forum selection clauses or arbitration agreements, both of which are typically followed by a choice of law clause selecting the substantive law that will apply in the case of a dispute.<sup>4</sup> The reasons for this selection of a particular body of law are many, ranging from merely procedural to substantive issues of law.<sup>5</sup> To be sure, one or more of these issues will factor into these considerations, influencing parties’ decisions as to jurisdiction.<sup>6</sup> While this is no doubt the case, the discussion which follows will look at the idea that there is, however, an underlying path-dependent process at work which plays a major contributing role in both choice of forum and choice of law decisions. Although distinct from one another, for the purposes of this Article, when we speak more broadly of “law-selection decisions,”

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formulate or choose to adopt, together with any default rules or mandatory provisions related to the parties’ transactions that come into play for any issues not settled by the parties themselves, as well as any enforcement mechanisms the parties can use when things go wrong. Still, a far more precise description is offered by Dalhuisen. See JAN H. DALHUISEN, DALHUISEN ON TRANSNATIONAL AND COMPARATIVE COMMERCIAL, FINANCIAL AND TRADE LAW 2-3 (Hart Publishing 2007) (2001) (“In common law countries commercial law is traditionally associated with the sale and transportation of goods . . . and with the related shipping, insurance and payment methods and therefore traditionally with the contract for the sale of goods and with specialised modern trade terms like *Fob* and *Cif*, bills of lading, bills of exchange, promissory notes and other methods of payment. Commercial law covers the entire area, that is to say the contractual as well as proprietary aspects of the trade in goods . . . therefore also the transfer of ownership and any secured interests in these assets, e.g. to protect payment or raise finance, and the protection of *bona fide* purchasers. . . . In civil law terms the coverage of commercial law is traditionally different, being much broader on the one hand and narrower on the other. It is broader in that it is not unusual, for example, to find company law and insolvency law and much of financial law covered by it, and therefore also services . . . . But it is also narrower, as this coverage is only partial, and major topics in the commercial law area may remain covered by the general law or legal system, as mentioned above. This concerns particularly the proprietary aspects (like transfer of ownership in goods and investments and the creation of any security interests therein even if connected with the sale of goods), and their operation in a bankruptcy, and brings with it the civil law restriction to only a small number of internally closely connected property rights. But it also concerns the general notions of contract law and of partnerships which in the commercial law area are in civil law equally derived from the general private law system.”).

3. GARY B. BORN, INTERNATIONAL ARBITRATION AND FORUM SELECTION AGREEMENTS 2 (1999).

4. *Id.* at 2-3.

5. *Id.* at 1.

6. Throughout the discussion, the term “jurisdiction” is used to indicate both forum and a particular body of law.

this should be understood as inclusive of both choice of forum and choice of law.<sup>7</sup>

I will suggest that similar to the emergence of natural monopolies of certain products in the market through the workings of a network effect, the common selection of certain jurisdictions such as the United Kingdom and New York State in choice of forum and choice of law provisions may likewise be attributed, in some measure, to network externalities.<sup>8</sup> In this sense, commercial parties selecting law can be likened to consumers selecting a product, and are thus equally susceptible to the effects of network externalities. They are, in effect,

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7. It is, of course, important to note that choice of law clauses and forum selection clauses are wholly distinct; while the former stipulates the use of a particular jurisdiction's law, the latter specifies the actual forum in which the legal proceedings will be held. *Black's Law Dictionary* defines a choice of law clause as "[a] contractual provision by which the parties designate the jurisdiction whose law will govern any disputes that may arise between the parties." BLACK'S LAW DICTIONARY 258 (8th ed. 2004). A forum-selection clause rather is defined as "[a] contractual provision in which parties establish the place (such as the country, state, or type of court) for specified litigation between them." *Id.* at 681. Thus, the parties may choose as a forum the courts of Greece, but may agree that the applicable law should be English law. The present discussion, however, seeks to examine the prevalence of certain jurisdictions in both choice of law and choice of forum clauses. We are exploring the presence of network externalities in both cases. Both are susceptible to the influence of a network effect. Thus, most of what we say about, for instance, choice of forum decisions applies equally to choice of law determinations, as both are subject to the influence of network externalities and for the same reasons. We are concerned with situations where the choice of forum and the jurisdiction indicated by the choice of law provision are one and the same, which, in the vast majority of cases, it is. However, in cases where a specific forum is selected by the contracting parties while a choice of law clause stipulates another body of law, although choice of law provisions point more directly to actual substantive matters of law, many aspects of the forum choice seen in the light of the present subject-of-law selection and network externalities may be conceptualized as procedural, or perhaps logistical issues of law, because the choice of forum will invariably affect the practical course of the legal dispute.

The distinction, however, becomes important when we go on to examine some of the factors typically cited as influencing choice of forum decisions, as we do in the first half of the Article. This is because here we identify the measure of expertise and general competence (among several other factors) that an actual court may glean from having a large number of cases brought before it as a network externality. Obviously, in situations where a specific body of law is selected while the actual case is tried in a completely separate venue, that body of law's courts will not, as a consequence, be in a position to further hone their expertise. Thus, this situation would not contribute towards a network effect per se. However, even when a certain jurisdiction's law is invoked through a choice of law clause but the actual court proceedings are held in a different venue, some of the "support system" that benefits from increased usage, such as legal expertise as embodied in precedent, will nevertheless still function as network externalities, if these decisions themselves in turn supplement the case law. For a fuller explanation, see *supra* Part II.E ("Motivations for Forum Selection Other Than Network Effect Are in Fact Network Externalities").

8. The actual extent to which network externalities help shape choice of venue and choice of law determinations, and indeed a great many other aspects of commercial interaction, is a matter for further empirical investigation. The aim of this Article is merely to lay out the idea in its broad strokes.

“consuming” a legal jurisdiction. The number of “consumers” who subscribe to the same legal norms is analogous to the number of consumers who use a product. As the number of “consumers” increases, so too does the inherent value of selecting that jurisdiction, thus inducing even more people to “purchase” that body of law (a network effect).<sup>9</sup> The end result is that a network effect comparable to what is often witnessed with consumer products is discernable in law-selection decisions in transnational contracts, inducing the emergence of certain jurisdictions as standard selections recognized throughout the world as, in the language of economics, a “natural monopoly.”<sup>10</sup> Arguably, the very same path-dependent process that precipitated the use of, for instance, VHS recorders has contributed to the widespread designation of English commercial law in transnational contracts. As network effects often arise within commercial networks, they may likewise emerge from the law constructed around commerce.

There is fascinating literature on network effects and the law.<sup>11</sup> Yet, the application of network theory on legal processes has not yet been fully developed, nor the full extent of its implications properly assessed. Some of the more prominent examinations of the idea include Kahan and Klausner, Gillette, and Lemley and McGowan, with Klausner perhaps being the most commonly cited in reference to network effect and law.<sup>12</sup> Kahan and Klausner (and Klausner alone) examine increasing returns in corporate contract terms, arguing that network externalities can induce standardization in firm contracts.<sup>13</sup> Building somewhat on their findings,

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9. A simple definition of a network effect is: “Network effects arise where current users of a good gain when additional users adopt it.” Paul Klemperer, *Network Goods (Theory)*, in THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW {pinpoint?} (Steven Dunlaup & Lawrence Blume eds., 2d ed. 2008) (1987). See *supra* Part II.B (“So What Exactly Is a Network Effect?”) for a fuller explanation.

10. See, e.g., WILLIAM G. SHEPHERD, THE ECONOMICS OF INDUSTRIAL ORGANIZATION 210-12 (3d ed. London: Prentice-Hall Int’l 1990) (1979).

11. The topic has been treated in various aspects by several authors. See Marcel Kahan & Michael Klausner, *Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases*, 74 WASH. U. L.Q. 347, 348 (1996); Avery Katz, *Standard Form Contracts*, in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW, *supra* note 9, at 503.

12. See Kahan & Klausner, *supra* note 11, at 350; Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 759 (1995); Clayton P. Gillette, *Lock-In Effects in Law and Norms*, 78 B.U. L. REV. 813, 814-15 (1998); Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 488 (1998).

13. See Kahan & Klausner, *supra* note 11, at 351; see also Klausner, *supra* note 12, at 759. Here Klausner argues that the contractarian view that the value of a corporate contract term is unrelated to the number of firms that adopt it is not true because the value of a term often increases in relation to the network of users that employ it. Thus, Klausner concludes that

Gillette also looks at the idea of network externalities, and more specifically at the related notion of lock-in, in an effort to assess the strengths and weaknesses of adjudication versus legislation as well as regulation through norm formulation.<sup>14</sup> Lemley and McGowan also provide important insight on exactly how network effects should be treated in the law with a view to correctly integrate network theory into legal doctrine.<sup>15</sup>

This Article, however, will step beyond these ideas and suggest that commercial law as a whole, particularly its transnational variety where a clear central authority is absent, is uniquely susceptible to the effects of network externalities in aspects that go far beyond a mere interdependence between contract terms, as Klausner suggests,<sup>16</sup> or the potential hazards of lock-in, as is the case with Gillette.<sup>17</sup> The central contention of this Article is that transnational commercial law, for reasons directly related to the basic nature of trade, is, more so than its noncommercial counterpart, ideally calibrated so as to induce a network effect. There are two central reasons I make this claim of heightened susceptibility. First, commercial activity entails a relatively fluid shifting of partnerships, animated by a powerful incentive to form new relationships between actors. Second, the unique ability of these actors to formulate through contract terms, and/or to simply choose the law that will oversee their relationships, allows for the emergence of standardization through the corraling process of a network effect. As we will see, these two elements of interaction between actors (or at least potential interaction), as well as choice, are the key ingredients for the emergence of a network effect. Both elements are manifestly present in commercial relationships. The element of choice in particular sets commercial law apart from other forms of law. While there may be a certain intermingling of actors within noncommercial variants of law, say criminal law for example, the ability of parties to select (or to some degree formulate) the relevant law themselves is simply not present as it is in commercial dealings. My basic task then is to explain how these twin ingredients of commercial law, fluid interaction and choice, together with two different kinds of network externalities, can induce the emergence of a powerful network effect. The main thrust of the discussion lies here.

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“market forces cannot be relied upon to promote socially optimal corporate contracts.” Klausner, *supra* note 12, at 759.

14. See Gillette, *supra* note 12, at 814.

15. See Lemley & McGowan, *supra* note 12, at 609.

16. See Klausner, *supra* note 12, at 762.

17. See Gillette, *supra* note 12, at 814.

To be sure, merchants sometimes give only modest consideration to law-selection decisions when entering into commercial relationships, falling back instead on what is commonly done or, alternatively, opting for some “neutral” forum without giving the matter much thought.<sup>18</sup> As a consequence of this inattention, these same parties are perhaps even more susceptible to a network effect, because they will typically opt for the jurisdiction that is already the prevailing standard in “boiler plate” clauses in their commercial sector. More sophisticated commercial actors, however, (or merchants who simply engage frequently in transnational contracts) can hardly afford such a lackadaisical approach. In fact, merchants that regularly operate in a transnational setting must prudently consider the legal consequences of law-selection decisions; to not do so would be to undertake a considerable financial risk. Indeed, responsible legal counsel for large transnational commercial operators will certainly make clear to their clients the potential significance of their law-selection decisions.<sup>19</sup> For these actors, the benefits generated by network externalities may emerge as an important factor in their law-selection decisions.<sup>20</sup> Thus, we have an interesting situation involving two tiers of actors: parties who, because they are more finely attuned to network benefits, tend to gravitate to a certain jurisdiction or body of law, and commercial actors who typically pay less attention to law-selection decisions but nevertheless succumb to the identical pattern *precisely* because they are less attentive. The end result in both cases is the same: a network effect emerges.

Arguably, the spread of legal standards, business usages, standard terms of contract, rules of arbitration, centers of arbitration, and even

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18. See Henry D. Gabriel, DeVan Daggett Professor of Law, Loyola Univ. (New Orleans), Address at the Congress To Celebrate the Fortieth Annual Session of UNCITRAL: Choice of Law, Contract Terms and Uniform Law in Practice (July 12, 2007) (“[T]here is strong evidence to suggest that choice of law clauses are often put in agreements with no particular thought of the effect or outcome of the provisions. Thus, for example, it is not uncommon for the parties to provide for the law of a specific domestic jurisdiction only to discover later in litigation that their agreement is bound by the CISG because, unknown to the parties, that was the applicable domestic law by treaty.”).

19. Another possible way of explaining, for instance, the prevalence of English law in choice of law decisions may be to point to historical reasons involving the effects of British military colonialism. This may very well be true, and the present discussion need not reject this reasoning out of hand. Historical events may have, to some extent, determined the initial trajectory of certain legal regimes. However, the path-dependent dynamic latent in commercial interaction more or less insured that once this legal trajectory was set, the tendency to gravitate to this one body of law would become more deeply entrenched over time, propelled by an underlying network effect.

20. In fact, this is particularly true for commercial entities selecting a forum for arbitration, where so much is pinned to the specific arbitration tribunal.

entire legal systems—in short, all the elements of the modern law merchant—may be attributed to the effects of network externalities.<sup>21</sup> A case could be made that increasing returns underlie the development of the modern law merchant, as was equally true for its medieval forerunner.<sup>22</sup> This is a compelling topic that indeed invites further study.<sup>23</sup> However, for the purposes of this short Article, our theoretical focus will be confined to that of the issues of choice of law and forum selection, because this topic offers a clear illustration of how parties define the law that applies to their immediate dealings, in this case through an outright selection of an entire body of law. Network theory may go far in explaining why international parties gravitate to certain jurisdictions over others. In this sense, a law-selection decision offers itself up as a concise snapshot of the potential impact of network externalities on commercial law. It should be firmly borne in mind, however, that the reach of the idea extends far beyond the outer edges of this one specific example, which points to a much larger path-dependent pattern discernable within the growth of transnational commercial dealings.

At this point it might also be useful to clarify what else is left out of the discussion. The related issue of lock-in induced inefficiency and the potential generation of sub-optimal equilibria, though an interesting and

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21. This idea forms a core component of my present Ph.D. dissertation.

22. See *infra* note 116 and accompanying text. For a fascinating, succinct treatment of spontaneous law theory as applied to the medieval Law Merchant, see B.L. Benson, *The Spontaneous Evolution of Commercial Law*, 55 S. ECON. J. 644 (1989). For a more general study of the Law Merchant of the middle ages, see LEON E. TRAKMAN, *THE LAW MERCHANT: THE EVOLUTION OF COMMERCIAL LAW* (1983).

23. The concept of norm cascades has been put forward by many norms scholars as an explanation of norm change, who have themselves borrowed the idea from game theorists, evolutionary biologists, and economists of information. See Robert C. Ellickson, *The Evolution of Social Norms: A Perspective from the Legal Academy* 3 (Yale Law Sch., Program for Studies in Law, Econ., & Pub. Policy, Working Paper No. 230, 1999); Robert Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585, 585-86 (1998); Timur Kuran, *Ethnic Norms and Their Transformation Through Reputational Cascades*, 27 J. LEGAL STUD. 623, 628 (1998); Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 358-60 (1997); Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 646-47 (1996); Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 909, 967 (1996).

no doubt pertinent consideration, is not addressed, because this too lies slightly outside the scope of the present discussion.<sup>24</sup> Carbonara and Parisi provide some inquiry along these lines.<sup>25</sup> They offer an interesting game theoretic analysis of divergent choice of law regimes and consider their impact on the evolution of formal law and commercial practices, concluding rather counterintuitively that less restrictive choice of law regimes<sup>26</sup> may in fact allow countries to actually maintain inefficient rules, with private firms opting out of domestic law through choice of law provisions. It should be noted that their emphasis is to examine the process of convergence of state substantive law in the presence of legal competition through choice of law, rather than network-induced inefficiencies per se. Carbonara and Parisi look at network effect and choice of law only in terms of how such situations ultimately affect the efficiency of national laws. For our purposes, issues of legal efficiency or inefficiency are left entirely out of the picture. Rather, our focus here is on deconstructing the key constituents of commercial interaction that precipitate a network effect in the first place, and how these components tend to coalesce in law-selection situations. This Article extends the literature on network externalities and law by providing such a systematic examination.

The discussion is laid out in two parts. The first Part discusses some of the standard reasons to which choice of forum decisions are attributed, which by and large affect choice of law decisions as well, and deals generally with the basic notion of network effect, along with its past treatment in the network effect in law literature. I begin with an overview of the various reasons for forum choice other than network externalities. After then clarifying the nature of a network effect, I map out a model of *direct* and *indirect* network externalities. I then revisit the reasons usually cited for choice of forum and choice of law decisions, concluding that the majority of these factors are indirect network externalities. The basic conclusion of this section is that systems that exhibit both direct and indirect network externalities are most apt to produce a network effect.

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24. The hazards of inefficiency have been the focus of much of the literature discussing law and network effect, and much of the network effect literature in general. See Emanuela Carbonara & Francesco Parisi, *Choice of Law and Legal Evolution: Rethinking the Market for Legal Rules 2* (Minn. Legal Studies, Paper No. 07-38, 2007); Klausner, *supra* note 12, at 765.

25. See Carbonara & Parisi, *supra* note 24, at 2.

26. Less restrictive in the sense that these jurisdictions allow firms to opt out of domestic law via choice of law provisions. Carbonara and Parisi define three general types here: (1) restrictive regimes, (2) semi-restrictive, and (3) liberal regimes. *Id.* at 5.

The second Part of the discussion traces the effects of network externalities specifically on commercial law, supporting my main claim that commercial law is particularly inclined to produce a network effect. I examine the elements of interaction and choice inherent in commercial interaction, concluding that network externalities play an influential role in the ascension of particular jurisdictions over others in law-selection decisions. This important conclusion points to a heretofore unrecognized influence underpinning the development of transnational commercial law as a whole.

The idea of network externalities sheds much light on the predominance of certain jurisdictions over others, as well as a great many other aspects of commercial law. The discussion that follows will briefly lay out the bare bones of the idea, though the topic is deserving of a far more in-depth, intricate, and empirical discussion than can be presented here.

## II. LAW SELECTION AND NETWORK EFFECTS UNPACKED

### A. *Reasons for Forum Choice Other than Network Externalities*

On the face of it, it seems that there are other factors besides network externalities influencing forum selection and choice of law decisions. Indeed, there are a great many reasons for selecting a specific body of law and selecting one venue over another.<sup>27</sup> Such distinctions regarding jurisdiction have fueled the rise of the phenomenon of “forum shopping,” a term used to describe litigants actively seeking some form of advantage through lawsuit venue.<sup>28</sup> In recent decades forum shopping has only accelerated in pace with the swift advance of economic globalization.<sup>29</sup> “In a world where daily transactions routinely involve multiple countries, litigants are increasingly likely to find themselves embroiled in simultaneous contests in several theaters.”<sup>30</sup> In such a setting, it is not uncommon for a litigant to “attempt ‘to have his action tried in a particular court or jurisdiction where he feels he will receive the most favorable judgment or verdict.’”<sup>31</sup> Forum shopping, however, is not

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27. See ANDREW S. BELL, FORUM SHOPPING AND VENUE IN TRANSNATIONAL LITIGATION 24 (2003).

28. WILLIAM W. PARK, INTERNATIONAL FORUM SELECTION 12 n.21 (1995). *Black's Law Dictionary* defines “forum shopping” as “[t]he practice of choosing the most favorable jurisdiction or court in which a claim might be heard.” BLACK'S LAW DICTIONARY, *supra* note 7, at 681.

29. BELL, *supra* note 27, at 4-5.

30. L.E. Teitz, *Taking Multiple Bites of the Apple: A Proposal To Resolve Conflicts of Jurisdiction and Multiple Proceedings*, 26 INT'L L. 21, 22 (1992).

31. *Forum Shopping Reconsidered*, 103 HARV. L. REV. 1677, 1677 (1990) (citing BLACK'S LAW DICTIONARY, *supra* note 7, at 590 (5th ed. 1979) (defining “forum shopping”).

what we are chiefly concerned with here. Choice of forum clauses and arbitration agreements differ from forum shopping, “principally because the forum is in theory selected mutually by both parties. In most cases, a freely accepted prorogation agreement may mean no more than an attempt to find relatively neutral procedures and fair judges.”<sup>32</sup> Parties frequently make express provisions in their contractual arrangements for litigation or arbitration in a neutral venue, such as London, that is acceptable to all of the parties to the agreement.<sup>33</sup> In *MacShannon v. Rockware Glass Ltd.*, Lord Salmon notes that “[h]undreds if not thousands of commercial contracts, having nothing to do with the United Kingdom, are made all over the world every year between foreigners, containing a clause that . . . any difference or dispute between the parties shall be arbitrated in London.”<sup>34</sup> Some estimates contend that

in about 80 per cent of cases in the [English] Commercial Court at least one of the parties is not resident in the United Kingdom, and that in about 50 percent of cases all parties are foreign . . . . [I]n many cases, parties to a transnational dispute are perfectly content to litigate in England (or other large commercial centres such as New York or Sydney).<sup>35</sup>

Even in situations, however, where parties have decided in advance, through mutual consent, on a specific forum, there are a host of exogenous factors that may influence their decision. For instance, “[t]he reasons [that] lead foreigners to start proceedings in England are very complex. They may include some particular substantive or procedural advantage. More often, they are based on general considerations of cost, convenience and confidence in the system.”<sup>36</sup> Let us now look at some of these underlying considerations in greater detail, bearing in mind that most of them apply equally to choice of law decisions.

### 1. Unfamiliar and Not Competent

Chief among these considerations is the quality of justice, that is, whether or not a particular jurisdiction is able to provide convenient, competent, and fair decision making.<sup>37</sup> That many transnational actors tend to prefer their own jurisdictions is not surprising when one considers

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32. PARK, *supra* note 28, at 12.

33. BELL, *supra* note 27, at 13.

34. *MacShannon v. Rockware Glass Ltd.*, [1978] A.C. 795, 820 (H.L.) (appeal taken from Eng.).

35. BELL, *supra* note 27, at 13-14.

36. A.G. Slater, *Forum Non Conveniens: A View from the Shop Floor*, 104 L.Q. REV. 554, 561 (1988).

37. BORN, *supra* note 3, at 3.

the degree of lingering uncertainty that a foreign and unfamiliar system of law may present. Certain courts may be more familiar to counsel. Cultural differences, alien legal traditions, and even linguistic obstructions may create a heightened atmosphere of ambiguity.<sup>38</sup> When selecting a particular body of law, the jurisdiction's general reputation as a competent legal system is sure to rank as a primary consideration.

## 2. Expertise

As well, there is the issue of court expertise. Choice of forum clauses offer up an important advantage in terms of giving commercial actors the freedom to select jurisdictions that are not only competent, but also uniquely qualified to resolve disputes associated with specific areas of law. Parties can select a court with a high degree of commercial expertise related to the parties' particular transaction.<sup>39</sup> For instance, the "courts of England, Switzerland, New York, and a few other jurisdictions are able to resolve complex transnational disputes with a fairly high degree of reliability."<sup>40</sup> English law is widely used in the areas of finance and commerce. This expertise will also be embodied in precedent and the general honed efficiency of the evolved rules.

## 3. Corrupt

Many national courts may also suffer from appallingly low standards of judicial integrity, the presence of corruption, and so forth.<sup>41</sup> Adding to this, there may be the very real fear that courts are subject to possible popular political pressure or other forms of coercion that can result in a lack of objectivity, which may sully the courts' rulings.

## 4. Efficiency of Litigation and Quality of Legal Services

Beyond this, practical considerations such as the speed of litigation and general quality of the legal profession, as well as potential legal costs in certain jurisdictions, also help to distinguish one forum from another, influencing parties' selection of venue.<sup>42</sup> In the case of arbitration, some jurisdictions have at their disposal many facilities to speed the arbitral

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38. *Id.* at 9.

39. *Id.* at 4.

40. *Id.* at 9.

41. *Id.*

42. BELL, *supra* note 27, at 24.

process, such as experienced arbitrators, institutions for administering the arbitration, hearing rooms, interpreters, reporters, communications, etc.<sup>43</sup>

#### 5. Procedural Matters

Procedural matters may also be a factor. For instance, issues such as the nature and scope of discovery or disclosure, the rules for allocation of the parties' costs for legal representation, and trial by a lay jury or judge recovery of costs, in the right context, may all be decisive considerations equal in importance to that of, or perhaps even surpassing, more substantive issues of law.<sup>44</sup>

#### 6. Preclude Other Jurisdictions

Even when a party fails to agree on its preferred forum, it may still successfully preclude the selection of a particularly unfavorable jurisdiction.<sup>45</sup> The party may secure a relatively benign, neutral third state jurisdiction with which it is familiar. For instance, parties from Hong Kong and Norway may agree (in the case of arbitration) to dispute resolution in London, New York, or Switzerland. Moreover, this agreement may offer a private commercial benefit by avoiding the costs of conducting litigation in a distant forum.<sup>46</sup>

#### 7. Multiple Litigation

The danger of litigation in multiple fora is also prevented by the selection of a single venue at the outset of the commercial relationship.<sup>47</sup> The likelihood of overlapping jurisdictions giving rise to parallel court proceedings in more than one state is high and represents a distinct hazard. Such litigation may result in "protracted jurisdictional litigation, inconsistent (and perhaps unenforceable) judgments, and multiple sets of lawyers and legal fees."<sup>48</sup> The importance of choice of forum clauses in this aspect cannot be overstated; transnational commercial actors have a

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43. INTERNATIONAL COMMERCIAL ARBITRATION IN NEW YORK 9-11 (J. Stewart McClendon & Rosabel E. Everard Goodman eds., 1986).

44. BORN, *supra* note 3, at 5.

45. *Id.* at 3.

46. David H. Taylor, *The Forum Selection Clause: A Tale of Two Concepts*, 66 TEMP. L. REV. 785, 785 (1993).

47. BORN, *supra* note 3, at 4.

48. *Id.*

clear interest in limiting the number of fora where they may potentially be drawn into litigation.<sup>49</sup>

#### 8. Predictability and Certainty

Finally, achieving a measure of accord regarding venue places the parties to the contract in a position where they may better assess with relative certainty their rights and duties in the event of actual litigation.<sup>50</sup> Forum selection, in this way, provides a degree of predictability to the contractual relationship. The selection of a neutral forum can give parties “predictability and certainty about the outcome of the dispute. Particularly when coupled with a choice of law agreement, a forum selection clause removes uncertainties about jurisdiction, procedural rules and other matters.”<sup>51</sup> A predetermined forum for dispute resolution “helps the parties consider the costs of potential litigation when determining their rights and obligations under a contract.”<sup>52</sup> There may be additional considerations as to costs, because choice of forum clauses can “reduce expenses and delay in the litigation, permitting the parties more promptly to focus on the merits of the case without expensive procedural distractions.”<sup>53</sup>

Several, or in some cases, all of the aforementioned factors work in partnership, compelling actors to select a certain jurisdiction over others. The majority of these factors are also equally relevant in choice of law decisions, and undoubtedly influence parties’ choice of the substantive law that will govern their contracts. Issues related to judicial competence, familiarity, expertise (as embodied in precedent), legal efficiency, procedural considerations, the preclusion of the law of other jurisdictions, and the desire for certainty are also factors in choice of law decisions. Because the selected forum and body of law are typically one and the same, the reasons underpinning choice of forum and choice of law selections often end up intermeshed. Although these considerations undoubtedly help shape both choice of forum and choice of law decisions, and are widely recognized as doing so, the influence of network externalities also plays an important role in this process, and

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49. Nicholas S. Shantar, *Forum Selection Clauses: Damages in Lieu of Dismissal?*, 82 B.U. L. REV. 1063, 1080-81 (2002).

50. BORN, *supra* note 3, at 4.

51. Igor Volner, *Forum Selection Clauses: Different Regulations from the Perspective of Cruise Ship Passengers*, 8 EUR. J.L. REFORM 439, 442 (2006).

52. *Id.*

53. *Id.*

thus should not be discounted. With this in mind, let us now examine the extent of this previously unrecognized influence.

*B. So What Exactly Is a Network Effect?*

Migrating from the domain of economic theory, the notion of network externalities,<sup>54</sup> or network effect (also called external increasing returns), has been put forward as a way of explaining the ascendancy of particular products over others.<sup>55</sup> It is a useful concept drawn from the field of economics that accounts for how certain commercial products proliferate in use in a path-dependent manner.<sup>56</sup>

The principle of network effect, or the closely associated concept of “bandwagon,”<sup>57</sup> is the idea that the implicit value of a certain product derived by an agent increases as the number of other agents using the same product grows, which in turn draws more users.<sup>58</sup> For example, your fax machine will increase in value to you as more consumers also purchase fax machines. Obviously, if only you owned a fax machine, its utility would be limited to that of a large paperweight. Thus, “the utility that a given user derives from the good depends upon the number of

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54. Network effects are considered network externalities if participants in the market fail to internalize these effects. See S.J. Liebowitz & Stephen E. Margolis, *Network Externalities*, in THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW, *supra* note 9, at 671. However, we use both terms here more or less interchangeably, as the points made here should apply to some extent to situations even where actors have not internalized the effects. For our purposes, the distinction is not pertinent.

55. The phenomenon was observed by early economists such as Alfred Marshall and Adam Smith (Smith noted that certain businesses tend to congregate geographically, attracting customers to that particular location, which in turn attracts more businesses to move to the location). In the 1980s and 1990s, the idea was reintroduced into mainstream economics by scholars such as Arthur, David, and Krugman. See W. BRIAN ARTHUR, INCREASING RETURNS AND PATH DEPENDENCE IN THE ECONOMY 6-8 (1994); Paul A. David, *Clio and the Economics of QWERTY*, 75 AM. ECON. REV. 332, 335 (1985); PAUL KRUGMAN, PEDDLING PROSPERITY: ECONOMIC SENSE AND NONSENSE IN THE AGE OF DIMINISHED EXPECTATIONS 226 (W.W. Norton & Co. 1995) (1994).

56. For how the concept of network effect has been applied in the literature of path dependence, see W. Brian Arthur, *Competing Technologies, Increasing Returns, and Lock-in by Historical Events*, 99 ECON. J. 116, 116 (1989); W. Brian Arthur, *Positive Feedbacks in the Economy*, 262 SCI. AM. 92, 92, 95 (1990) [hereinafter Arthur, *Positive Feedbacks*]; David, *supra* note 55, at 335; S. J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-in, and History*, 11 J.L. ECON. & ORG. 205, 205 (1995).

57. The “bandwagon” principle is in fact more accurately understood as one result of network effect.

58. LIEBOWITZ & MARGOLIS, *supra* note 54, at 671. See also Katz and Shapiro’s paper on network externality in the *American Economic Review*, in which they define network effect thusly: “There are many products for which the utility that a user derives from consumption of the good increases with the number of other agents consuming the good.” Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985).

other users who are in the same ‘network.’”<sup>59</sup> As more users begin to use the product and its utility grows, more consumers begin using the product, creating a snowball effect as more and more users jump on the bandwagon. Positive feedback mechanisms like bandwagon and network effect lie at the heart of path dependency; such mechanisms reinforce burgeoning patterns in a particular field, causing these patterns to become progressively more entrenched. There is a fascinating conversation going on in the literature regarding the possible negative effects of such phenomenon in terms of natural monopolies and the emergence of inefficient standards. This concept, however, lies just slightly outside the scope of the present discussion.<sup>60</sup>

A popular real-world example of network effect is the predominance of VHS format over its rival Beta in the early 1980s as video recording became popularized. Some have argued that as more consumers bought VHS players, videocassette rental stores, observing this trend, stocked up on VHS videocassettes, which in turn caused more people to opt for VHS players over Beta, ultimately leading to complete vendor lock-in.<sup>61</sup> Manufacturers, predicting that VHS would win this standardization war, began to produce even more VHS players as a result (an example of bandwagon).<sup>62</sup> By 1984, VHS videocassettes became the standard format for videocassettes, with every manufacturer in the industry (with the exception of Sony) adopting the VHS format.<sup>63</sup>

Another oft-cited illustration, first pointed out by David,<sup>64</sup> is the use of the QWERTY keyboard as a standard layout for keyboards.<sup>65</sup>

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59. Katz & Shapiro, *supra* note 58, at 424.

60. Liebowitz and Margolis examine what they call “third degree” path dependency in which standards are locked in an inefficient trajectory because participants cannot coordinate and switch to more efficient standards en masse. They conclude that, although rare, third degree path dependence has “significant normative policy implications, as it would constitute economic inefficiency.” S.J. Liebowitz & Stephen E. Margolis, *Should Technology Choice Be a Concern of Antitrust Policy?*, 9 HARV. J. L. & TECH. 283, 287-89 (1996); see also Arthur, *Positive Feedbacks*, *supra* note 56, at 99.

61. The idea of vendor lock-in, or customer lock-in, also known as proprietary lock-in, occurs when a customer becomes dependent on a vendor’s products or services, unable to switch to an alternative vendor as a result of high switching costs.

62. Liebowitz and Margolis, however, dispute the veracity of this argument (as they also do with the QWERTY keyboard example), citing other possible factors that may have led to VHS dominance in the market. Liebowitz & Margolis, *supra* note 60, at 312-16; see also S.J. Liebowitz & Stephen E. Margolis, *The Fable of the Keys*, 33 J.L. & ECON. 1, 21-22 (1990).

63. Liebowitz & Margolis, *supra* note 60, at 316.

64. David, *supra* note 55, at 332-36.

65. Thus termed because the first six letters in the upper left-hand corner of the keyboard’s layout are Q-W-E-R-T-Y.

Alternative layouts for keyboards are arguably more efficient.<sup>66</sup> In fact, the QWERTY layout was originally “designed . . . to slow down typing speed to prevent the jamming of old-fashioned mechanisms.”<sup>67</sup> As more typists became trained in typing on the QWERTY design, manufacturers increasingly produced the QWERTY keyboard, which in turn encouraged more people to learn to type using this particular design of keyboard. The more common the QWERTY keyboard was, the more valuable it was to learn to type on keyboards of that design. And there we have network effect, a process that reinforces itself. The QWERTY keyboard is a good example of network effect because for one trained in typing on a QWERTY keyboard, the value of the skill, and thus owning a QWERTY keyboard, increased in relation to how many QWERTY keyboards were in use. This was due to the value of the “network” of such keyboards. This example is often pointed to as a definitive illustration of increasing returns-path dependence.<sup>68</sup> Beyond VHS and QWERTY keyboards, however, one could find many other real-world examples of network effect in the marketplace.<sup>69</sup>

### C. Synchronization Value and Language

Network effect, however, manifests in a more pronounced fashion with certain types of products. This has to do with the nature of the product. The more it depends upon direct interaction with other products within a network, or a synchronization with a larger support system, the more predisposed it will be to a network effect.<sup>70</sup> A certain “synchronization value,” as Liebowitz and Margolis call it,<sup>71</sup> is the essence of network effects.<sup>72</sup> Thus, the value of a telephone is more directly affected by an increase in users than say a Ferrari. Of course, as more people buy Ferraris, the price of parts and service might decrease

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66. One such model was the Dvorak layout which claimed a forth percent increase in typing speed. Liebowitz & Margolis, *supra* note 60, at 313.

67. *Id.*

68. David, *supra* note 55, at 332.

69. Another interesting example of network effect is the competitive pressure Apple computers were feeling from the growth of PCs and PC-related computer software and service in the 1990s. This pressure arose from synchronization issues. See discussion *infra* Part II.C (discussing synchronization). Because the operating systems of Apple computers were not compatible with PC software, this induced a network effect for the larger PC market. Many speculated on whether or not Apple computers would survive. LIEBOWITZ & MARGOLIS, *supra* note 54, at 671. Interestingly, after Apple made its operating systems compatible with PCs, this network effect was undercut.

70. See discussion *infra* Part II.D (“Distinguishing Externalities: Direct and Indirect Network Externalities”).

71. LIEBOWITZ & MARGOLIS, *supra* note 54, at 671.

72. *Id.*

and spur more people in turn to buy Ferraris. However, a telephone is more attuned to the effects of network externalities precisely because its value is largely derived from its place within a larger network. I can always go cruising in my Ferrari whether my neighbor has one or not, but what am I to do with my telephone if I have no one to call? If more people own telephones, then I have more people I can potentially call. The difference between a telephone and a Ferrari is the level of their response synchronization values.

The classic example of this is language. Because the purpose of language is to facilitate interaction between individuals, a high synchronization value lies at its heart. The linguistic dominance of the English language in international business (and the world) over the last thirty years can be attributed in large part to a network effect. As more people speak English, the inherent synchronization value of the language increases, in turn drawing even more people into the classrooms of ESL teachers. Because the sole purpose of language is to facilitate interaction within a larger network of people, the effects of network externalities on systems of language are readily discernable. Like my lonesome telephone, what good is fluency in a language if I am the only one who speaks it? Conversely, the value of speaking English grows as the number of people with whom one can communicate increases; that is, as its inherent synchronization value increases. This is clear in language. Now that the world has in effect tacitly nominated the English language as the *lingua franca* of the modern age, it is becoming progressively more unlikely that the entire globe will collectively jump to a new language, regardless of possible geopolitical shifts in world power. As the English language grows in popularity, so too does its implicit value, encouraging further growth and a continued network effect.

Returning to the focus of our discussion, all of this applies in equal measure to commercial law. Like language, its purpose is to facilitate interaction within a larger network. It is no coincidence that Fuller suggests that customary law might best be conceptualized as a "language of interaction."<sup>73</sup> It is a language of interaction because it is an

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73. Fuller writes:

I shall argue that the phenomenon called customary law can best be described as a *language of interaction*. To interact meaningfully men require a social setting in which the moves of the participating players will fall generally within some predictable pattern. To engage in effective social behavior men need the support of intermeshing anticipations that will let them know what their opposite numbers will do, or that will at least enable them to gauge the general scope of the repertory from which responses to their actions will be drawn.

instrument of communication between people, synchronizing their interactions. Fuller is describing customary law in general, but the description applies readily to commercial law and commercial interaction.

*D. Distinguishing Externalities: Direct and Indirect Network Externalities*

1. Direct and Indirect Network Externalities

Before proceeding, it is important at this point that we draw a clear distinction when we speak of network effects. As previously discussed, network externalities may manifest differently. In explaining what they refer to generally as “positive consumption externalities,” Katz and Shapiro tender a rather expansive definition, arguing that a network in fact embraces many goods beyond physically networked items such as telecommunications.<sup>74</sup> They argue that positive consumption externalities include indirect support networks.<sup>75</sup> For instance, “an agent purchasing a personal computer will be concerned with the number of other agents purchasing similar hardware because the amount and variety of software that will be supplied for use with a given computer will be an increasing function of the number of hardware units that have been sold.”<sup>76</sup> They also point out that “[p]ositive consumption externalities arise for a durable good when the quality and availability of postpurchase service for the good depend on the experience and size of the service network, which may in turn vary with the number of units of the good that have been sold.”<sup>77</sup> They use an example drawn from the American automobile market in the twentieth century where “foreign manufacturers’ sales initially were retarded by consumers’ awareness of

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LON L. FULLER, *Human Interaction in the Law*, in THE PRINCIPLES OF SOCIAL ORDER: SELECTED ESSAYS OF LON L. FULLER 213 (1981).

74. Katz and Shapiro actually distinguish three kinds of “positive consumption externalities”: direct physically networked items (e.g., telephones), nonphysically connected goods (e.g., computer software for computers), and the post-purchase service for a durable good (e.g., a luxury car). Katz & Shapiro, *supra* note 58, at 424. Lemley and McGowan define these three positive consumption externalities respectively as “actual networks,” “virtual networks,” and “positive feedback effects.” Lemley & McGowan, *supra* note 12, at 488-94.

75. In their footnote, Katz and Shapiro also indicate several other subtle positive consumption externalities such as: “(i) the fact that product information is more easily available for more popular brands; (ii) the role of market share as a signal of product quality; and (iii) purely psychological, bandwagon effects.” Katz & Shapiro, *supra* note 58, at 424 n.1.

76. *Id.* at 424.

77. *Id.*

the less experienced and thinner service networks that existed for new or less popular brands.”<sup>78</sup>

For our purposes, however, it is important to understand the slightly differing nature of these kinds of network externalities from those driven principally by direct interaction. Liebowitz and Margolis draw such a distinction, contrasting the idea of network externalities with what they identify as “pecuniary externalities”<sup>79</sup> (the effect one person has on another).<sup>80</sup> They distinguish between network externalities<sup>81</sup> that involve direct interaction among network participants and those that involve “mediation through the market” in the form of decreased costs, etc.<sup>82</sup> In the literature, this distinction is also defined by the terms “actual networks,” “virtual networks,” and “positive feedback effects,”<sup>83</sup> or alternatively as “*direct network effect*” and “*indirect network effect*.”<sup>84</sup> The important difference here is one of direct interaction. Explaining this first class of network externalities, which for purposes of clarity I will call direct network externalities (in contrast to indirect network externalities),<sup>85</sup> Liebowitz and Margolis point out that it occurs “through some direct interaction among consumers,”<sup>86</sup> and as a result, as the network grows it “gains advantages relative to smaller competing networks.”<sup>87</sup>

The distinction between direct and indirect network externalities is important because with direct networks—systems that rely on network externalities arising as a result of direct interaction between network participants—the probability that a network effect will take root is far greater. Why is this? It is simply because the sum value of the system is

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78. *Id.*

79. A term borrowed from economics.

80. See S.J. Liebowitz & Stephen E. Margolis, *Are Network Externalities a New Source of Market Failure?*, 17 RES. L. & ECON. 1, 2 (1995); Liebowitz & Margolis, *supra* note 60, at 287.

81. The reasons for doing so, however, are because nonpecuniary externalities do not involve any inefficiency. Liebowitz & Margolis, *supra* note 60, at 287.

82. *Id.*

83. Katz & Shapiro, *supra* note 58, at 424; see Lemley & McGowan, *supra* note 12, at 488-94. It is important to note that positive feedback effects are distinct from virtual networks in that they involve less direct interaction between users. See Katz & Shapiro, *supra* note 58, at 424.

84. Klemperer, *supra* note 9.

85. Although Katz and Shapiro (as well as Lemley and McGowan) distinguish three general classes, the terms *direct* and *indirect network externalities* are used here and throughout the discussion because the relevant point at issue is how network externalities are unique in so far as the network is based on direct interaction as opposed to an indirect interconnection mediated through the market or by other means. Liebowitz and Margolis rightly point out this distinction, and the present discussion takes it as a defining feature of network externalities.

86. They also argue that the interaction may occur “through increasing production returns of some network-related good.” Liebowitz & Margolis, *supra* note 60, at 287.

87. *Id.*

measured by the extent to which it can facilitate interaction (with our example of the telephone, this would be the ability to call people). Or as Lemley and McGowan explain, these are products “whose entire value lies in facilitating interactions between a consumer and others who own the product. The benefit to a purchaser, in other words, is access to other purchasers.”<sup>88</sup> Such products are marked by “the absence of material inherent value and the necessity for common standards among goods incorporated into the network.”<sup>89</sup> Systems exhibiting direct network externalities, therefore, are far more sensitive to any increase in the network than systems displaying only indirect network externalities, whose value may lie in other aspects beyond merely their ability to facilitate interaction (recall the example of the lone Ferrari). Lemley and McGowan insightfully point out that this may be conceptualized as a continuum of sorts, with “actual networks—in effect communications systems—the strongest, and virtual networks—frequently involving interfaces between vertically related goods—providing a range of examples of differing strength.”<sup>90</sup> At the far end of the spectrum, they argue, are goods in which the scale of the system itself “rather than interactions among users of the good”<sup>91</sup> creates the value.

While the concept of a continuum is indeed illustrative, Lemley and McGowan do not consider that it is also possible for a system to simultaneously possess both direct and indirect network externalities. In a sense, the system is on two points along this continuum. A system of this kind, in fact, often provides the most fertile soil in which a network effect may grow. This is, for instance, the case with a telephone, whose value will increase primarily from the ability to call more people, but also from any corresponding improvement in service (quality, speed, etc.) that may result from the increase in users.

Arguably, a system that in essence exhibits both direct and indirect network externalities is even more inclined to generate a network effect, because both classes of network externalities will work towards such an end. The system or item would respond to the network effect arising from the indirect interconnection between participants in the network mediated through the market, as well as the potentially more powerful effects stemming from increased direct interaction amongst agents. The example of a telephone illustrates how a single system may concurrently possess network externalities on two different places on Lemley and

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88. Lemley & McGowan, *supra* note 12, at 488.

89. *Id.* at 489.

90. *Id.* at 609.

91. *Id.*

McGowan's continuum, as is also the case for much commercial law, as we shall soon see. It is for this reason that I use the terms direct and indirect network externalities (though the distinction might be somewhat overly blunt) rather than a continuum to distinguish between these two network effects.

Systems that, in effect, span this continuum, possessing both direct and indirect network externalities, are most likely to produce powerful network effects. This is because, in many cases, the effects of network externalities on a system will be offset by other considerations unrelated to synchronization value. These other considerations work against the emergence of a network effect. For instance, to return to the example of Beta versus VHS, a user might be reluctant to use VHS because they prefer Beta's shorter tape length, or even because of something as simple as a fondness for the one-spool look of a Beta tape. The indirect network externality, in the form of greater availability of VHS tapes, might not be enough to persuade our Beta tape devotee to make the switch to VHS. The inherent value of a product or switching costs incurred from a competing network system may negate the impact of an indirect network externality. Alternatively, to take an example involving solely direct network externalities, such as language,<sup>92</sup> a speaker might be dissuaded from learning a widely spoken language because transaction costs such as language lessons or time expenditures may outweigh any potential network benefit. The direct network externality alone might not be enough.

A system exhibiting direct as well as indirect network externalities thus offers a wider entrance through which a network effect may enter, superseding other considerations in importance in the eyes of its users. Our above example of a telephone network provides both kinds of network externalities. There is a far greater likelihood of enticing users away from competing telephone networks if, along with the more straightforward benefit of an increase in the size of the network (a direct network externality), a telephone network can also offer higher quality of service or cheaper prices as a consequence of an increase in users (an indirect network externality). Having, therefore, both direct and indirect network externalities will render a system most likely to spawn a network effect.

In such cases, between these two classes, direct network externalities will play the most important and forceful role in producing a network effect, while any indirect network externalities that may arise

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92. A language perhaps can be said to possess indirect network externalities as well.

will, in a sense, supplement this process. The telephone is in fact the perfect example of this: because its primary use is in direct communication, an increase in the network will have an immediate and significant effect on its value, while issues of quality, although taking a relative backseat to this principal function, may also contribute to the emergence of a network effect. Thus, our lone direct network externality system (viz. language<sup>93</sup>) would be far more likely to produce a powerful network effect than one possessing only indirect network externalities (viz. the availability of VHS tapes or repair parts for your Ferrari), a system that exhibits both classes of network externalities will be the most likely candidate in which to find a strong network effect. If for some reason the direct network externality is not enough, an indirect network externality might be adequate to tip the balance and set off a network effect. As we shall see, commercial law is such a system, displaying both direct and indirect network externalities. Possessing both direct and indirect network externalities, commercial law is therefore, on a fundamental level, better primed to produce a network effect.

## 2. Klausner Cites Indirect Network Externalities

In his analysis of the effects of network externalities on corporate contracts, Klausner (as well as Gillette in his examination of lock-in) fails to draw a distinction between classes of network externalities. The network externalities that he cites to make his case, which he terms “interpretive network externalities,” “common practice network externalities,” “legal services network externalities,” and “marketing network externalities,” are in fact all indirect network externalities, in that they are not predicated on direct interaction, but rather involve network benefits that are “market mediated.”<sup>94</sup> As Klausner himself explains, “[u]nlike a telephone network . . . a contractual network (like a PC network) is linked together by commonly used complementary products.”<sup>95</sup> Klausner’s entire analysis is limited to network effects of only this kind, which is an important point because network effects of this nature are arguably not as robust as networks involving direct interaction between agents.

Klausner’s primary argument—interpretive network externalities—is based on the notion that the widespread use of a particular contract

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93. Although one could argue that with the example of language we might distinguish indirect network externalities, such as the available pool of books, films, and other materials available in that language.

94. See Klausner, *supra* note 12, at 759-85.

95. *Id.* at 775.

term will generate a greater body of judicial precedent clarifying the legal interpretation of the term. As litigation enhances the term's clarity, Klausner argues, its value increases as the uncertainty that may otherwise cloud the term is reduced. A court's interpretation of one corporation's contract term, Klausner explains, "in effect embeds that interpretation in the contracts of all firms that use the same term."<sup>96</sup> The more firms that employ the term, "the more likely it is the term will be litigated, and therefore the more likely that future judicial interpretations will be provided."<sup>97</sup> The benefit is essentially a reduction in uncertainty. Parisi and Carbonara proffer a similar supposition, arguing that "[w]orking within the same legal system increases the frequency and the profitability of commercial transactions as it reduces the uncertainty stemming from not knowing the legal rules governing the contract."<sup>98</sup>

To be sure, uncertainty is costly and diminishing it adds to the value of a given term. However, the strength of a network effect arising from this may not be all that significant, as this benefit must be weighed against the host of other considerations that typically compel a firm to adopt a contract term in the first place. Lemley points out that although

interpretation through litigation may add *some* value to open-ended contract terms by increasing their clarity, there are fairly strict limits to the value of such effects . . . . [T]he marginal gains in clarity that might be obtained through future litigation are [not] high enough to create benefits sufficient to lock firms into any particular term. . . .<sup>99</sup>

The benefit of lessening uncertainty is an indirect network externality, comparable to an increase in value of one's Ferrari as repair parts become easier to obtain as a result of more people purchasing Ferraris. That is, it does not involve direct interaction between network users, but rather it is a benefit conferred indirectly through the network. As a consequence, the resulting network effect is comparatively weaker than a network effect predicated upon direct interaction.

The same holds true for Klausner's other points. Klausner argues that "the accumulation of business practices implementing the term reduces uncertainty, just as the accumulation of precedent does."<sup>100</sup> A firm can utilize this base of business practices to inform their choices so as to avoid litigation altogether, or failing this, settle disputes more

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96. *Id.* at 776.

97. *Id.*

98. Emanuela Carbonara & Francesco Parisi, *The Economics of Legal Harmonization* 5 (George Mason Univ. Sch. of Law, Working Paper No. 05-40, 2006).

99. Lemley & McGowan, *supra* note 12, at 572.

100. Klausner, *supra* note 12, at 780.

efficiently.<sup>101</sup> Again, this is an indirect network externality, because the benefit accrued does not involve any direct interaction between network members.

Similarly, Klausner contends that as more firms adopt a specific contractual term, legal services able to competently execute the term generally increase so that “the legal services available for a commonly used term may be superior, either in terms of cost or quality, to those provided for a less commonly used term.”<sup>102</sup> The benefit here is a greater availability of legal support services boasting expertise in the particular contract term. This too, upon analysis, does not entail any direct interaction between parties. The benefit is, instead, conferred through the market, much as an increase in computer users spawns a greater availability of quality computer service. The pull of a network effect of this nature is thus less powerful. Lemley and McGowan agree. Such indirect “market mediated” effects, they opine, “are materially weaker than direct network effects, or even indirect network effects in the presence of actual interoperability, as is the case with computer software.”<sup>103</sup>

What Klausner calls marketing network externalities are also indirect network externalities. Klausner argues that firms will be reluctant to adopt new terms with which investors may be unfamiliar out of fear that the investors will not price the nonstandard term correctly. In this way, the “cost and reliability of analyzing and pricing these terms [for the investor] may be affected by their similarity to the terms that other firms use.”<sup>104</sup> Commonly used terms with which investors are acquainted thus offer an implicit value in that they increase the marketability of the firm to potential investors. Although upon initial inspection this benefit might appear to involve direct interaction, this too is an indirect network externality even though it does seem to touch upon a modicum of interaction. It is an indirect network externality analogous to vendors pricing items in a commonly used manner with which potential customers are familiar. For instance, a menu priced in an advanced algebraic formula would quite likely impede a restaurant’s sales. Again, the network benefit here is not one based upon direct interaction but rather is an indirect advantage derived through an increase in the larger network.

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101. *Id.*

102. *Id.* at 782.

103. Lemley & McGowan, *supra* note 12, at 577.

104. Klausner, *supra* note 12, at 785.

Klausner's analysis of corporate contract terms, though insightful, is limited to indirect network externalities, and thus the strength of the network effect produced by these externalities will likely be comparatively weak where they can be found.<sup>105</sup>

### 3. Delaware Effect

Klausner also speculates that network externalities play an instrumental role in the apparent predominance of Delaware in the market for corporate charters in the United States.<sup>106</sup> Upon analysis, however, this too is predicated upon indirect network externalities for the same reasons as in the case of corporate contracts.

Much has been written on the "Delaware effect."<sup>107</sup> In the market for corporate charters in the United States, Delaware reigns supreme, with over "50% of all public firms . . . incorporated in Delaware, while New York, the state with the second highest share, attracts fewer than 5% of public firms."<sup>108</sup> Klausner argues that the

value of a Delaware charter depends in part on interpretive network externalities and legal services externalities—the present value of future judicial decisions interpreting Delaware law and the net present value of legal services applying Delaware law. Consequently, as the number of firms incorporated in a state increases, the value of its charter increases.<sup>109</sup>

Daines points out that Delaware is "the only state with a specialized Chancery Court for resolving corporate law disputes and its laws are relatively certain and well-known."<sup>110</sup>

While, as in the case of contract terms, these factors may indeed yield a network effect, issues of cost, clarity, and quality are indirect network externalities that do not rest upon direct interaction between

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105. *Id.* at 789-814.

106. *Id.* at 843; *see also* O. Bar-Gill, M. Barzuza & L. Bebchuk, *The Market for Corporate Law 2* (Harvard Law Sch., Working Paper No. 377, 2005) ("[E]xternalities include the benefits that a company may enjoy from having more precedents to rely on and from being subject to rules and practices with which capital market participants are well familiar?").

107. The Delaware effect is understood as Delaware corporate law improving firm value and facilitating the sale of public firms, and thus the resulting dominance of Delaware corporate charters. *See* ROBERTA ROMANO, *THE GENIUS OF AMERICAN CORPORATE LAW* 14-31 (1993); Robert M. Daines, *Does Delaware Law Improve Firm Value?*, 62 J. FIN. ECON. 525, 529 (2001); Guhan Subramanian, *The Disappearing Delaware Effect*, 20 J.L. ECON. & ORG. 32, 57 (2004); Marcel Kahan & Ehud Kamar, *Price Discrimination in the Market for Corporate Law*, 86 CORNELL L. REV. 1205, 1207 (2001); Daniel R. Fischel, *The 'Race to the Bottom' Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 NW. U. L. REV. 913, 942-94 (1981).

108. Daines, *supra* note 107, at 526.

109. Klausner, *supra* note 12, at 843-44 (footnotes omitted).

110. Daines, *supra* note 107, at 526.

agents. Thus, as with contract terms, the strength of these network externalities will likely be obstructed. Other more substantive issues, such as state corporate arrangements that enhance shareholder value, takeover rules, a “home-state preference,” the desire of firms to benefit from local favoritism, and the higher costs of out-of-state incorporations, will inevitably work to offset the impact of such externalities in corporate charter decisions.<sup>111</sup> The influence of network externalities, even where present, is invariably blunted by other important considerations.<sup>112</sup> In practice, network externalities must often counteract such considerations. As discussed earlier, for this reason, networks involving direct network externalities are apt to be stronger, while networks that incorporate both direct and indirect network externalities will likely generate the most powerful network effects.

*E. Motivations for Forum Selection Other than Network Effect Are in Fact Network Externalities*

Now, when we stop and reexamine some of the motivations for choice of forum (and choice of law) that we listed at the outset of our discussion, we find that the majority of them are network externalities. They are in fact indirect network externalities. For instance, certain jurisdictions may enjoy a reputation for competence in dealing with certain legal issues. This may prove to be a primary consideration in law-selection decisions. This is in fact a network externality. A body of law that is widely recognized, deeply entrenched, and pervasively utilized provides a certain reassurance that, in the case of a dispute, the law will

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111. For a detailed examination of these influences on corporate incorporation selections, see Lucian Bebchuk & Alma Cohen, *Firms' Decisions Where To Incorporate*, 46 J. L. & ECON. 383, 397-400 (2003). Moreover, it should also be noted that other substantive issues, which in fact contribute to choosing Delaware incorporation, may wholly eclipse the significance of any network externalities and may alternatively account for the dominance of Delaware incorporation. For example, Delaware does not “raise its prices to the highest level that companies would likely be willing to pay for Delaware incorporation; Delaware’s franchise tax is capped at \$150 thousand a year even for companies with stock market capitalizations in the dozens of billions of dollars.” Bar-Gill, Barzuza & Bebchuk, *supra* note 106, at 4 (citing Kahan & Kamar, *supra* note 107, at 1208, 1253).

112. The effect of such indirect network externalities may be quite marginal. Regarding interpretive effects, in the case of opportunity costs of future clarification of governance terms and legal service effects, Lemley and McGowan argue that such legal service effects do not create significant material efficiencies:

[T]o the extent laws of other states mimic Delaware’s, the marginal cost of learning such laws will be minimal and, given competition among firms and the inframarginal nature of such effects, likely be internalized. The desire to avoid such costs is therefore unlikely to play much of a role in maintaining Delaware’s lead.

Lemley & McGowan, *supra* note 12, at 585 (footnotes omitted).

be effectively enforced. A system of law's overall sense of legitimacy strengthens as its number of "consumers" increases. As more firms select a jurisdiction, the impression of juridical competence and lack of corruption is further shored up, in turn encouraging more firms to opt for that jurisdiction. With more use, the legal system indeed gains greater legal competence. In this way, the reputation feeds on itself.

Moreover, with widespread use, consumers of law gain a greater familiarity with the rules and procedures of that particular jurisdiction, providing an additional benefit. This will feed upon itself in the same way; the more frequently a jurisdiction is selected, the more familiar it becomes to potential users, eliciting more users to opt for that jurisdiction. A network effect posited upon indirect network externalities—which is a network benefit that does not necessarily provide a greater circle of users, but rather provides an improved indirect support system—is analogous to smoother roads for one's Ferrari.

This holds true for most of the other points. Considerations such as the speed of litigation and the general quality of legal services are also subject to a network effect in this manner. As a greater number of firms and international actors litigate in a particular jurisdiction, the quality and costs of legal services in that jurisdiction will invariably be affected, providing more opportunities to improve upon their services and gain a higher level of expertise. In the case of arbitration, arbitrators and institutions for administering arbitration gain experience with increased usage. A larger legal industry will affect costs, driving down the price of quality legal services and their related industries. This in turn will draw more foreign users.

Indeed, juridical expertise as whole is subject to a network effect. As in the case of legal services in general, with an influx of more foreign users courts will gain a greater degree of commercial expertise regarding sophisticated commercial issues. Courts will become uniquely qualified to resolve disputes associated with specific areas of law. London, for example, is "known for its particular expertise in certain branches of the law such as insurance and shipping."<sup>113</sup> This proficiency will work to attract more users, which then contributes to a further increase in court expertise. In the case of London, for instance, commercial actors in the insurance and shipping industry will naturally gravitate to the jurisdiction, further honing this command over issues involving insurance and shipping. In this sense, juridical expertise is an indirect network externality; it provides a network benefit by improving upon the

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113. BELL, *supra* note 27, at 13.

indirect support system, similar to the quality of a telephone connection in a telephone network resulting from an increase in users.

As for the remaining reasons for forum choices that were cited at the outset of the Article, which include the preclusion of other jurisdictions, the impetus of multiple litigation, and the assurance of predictability, these factors are not network externalities because their value does not grow commensurate with an increase in use. These considerations, however, have a relatively neutral effect upon choice of forum decisions. Because all venues can more or less equally provide these benefits, they only compel parties to undertake a choice of venue decision, rather than influencing the nature of that decision. Thus, they are in this sense not relevant to the present discussion beyond the fact that they prompt some choice of forum decision to be made over not making one at all.

Thus, on closer examination, all of the other factors that emerge in law-selection decisions reveal themselves as indirect network externalities; they involve, as Liebowitz and Margolis phrase it, a “mediation through the market” (rather than some direct interaction between consumers).<sup>114</sup> Considerations such as competence, familiarity, quality and cost of legal services, and court expertise all potentially contribute to a network effect. These considerations attract users, and with the subsequent increase in users these elements are thus strengthened, which in turn draws in more users. In this sense, law-selection decisions are clearly influenced by indirect network externalities. Although these network inducing externalities contribute to the overall strength of a network effect, it is the main suggestion of this Article that commercial law as a whole, owing to the nature of trade, is capable of generating a powerful network effect because it not only possesses these indirect network externalities, but also direct network externalities. To reiterate the point made earlier, systems that involve both direct and indirect externalities are likely to produce the most powerful network effects. Commerce is such a system. In what sense does commerce also possess direct network externalities? Let us consider this next.

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114. Liebowitz & Margolis, *supra* note 60, at 287.

III. NETWORK EXTERNALITIES ARISING FROM COMMERCIAL  
RELATIONSHIPS: THE ROLE OF INTERACTION AND CHOICE

A. *Why Commercial Law Is More Like a Telephone than a Ferrari*

Returning now to our telephone and Ferrari examples, we can see that commercial law is more analogous to a telephone than a Ferrari. Like a telephone, commercial law is a tool to assist specific interactions between different parties. And like a telephone or fax machine, its value is in its ability to facilitate these direct interactions. In this respect, commercial law also possesses certain implicit direct network externalities; for example, commercial interaction is predicated on direct interaction between "users." When we consider the degree to which commercial law arises in response to the demands of the market, similar to how any product does, that is, as a tool that serves a useful function in that it facilitates direct interactions, the notion that it displays network externalities is not altogether surprising. As we noted previously, the number of consumers who recognize the same legal norms is analogous to the number of consumers who use a product. Thus, the adoption of legal norms can be compared to the adoption of VHS format over Beta, or a consumer bringing home a PC instead of a Macintosh.

If we think of commercial law as a product, it is one whose value is wholly predicated on its ability to facilitate *interaction* between parties within the larger network in which they operate. It thus benefits greatly from synchronization. Commercial law, because it regulates an array of interactions between changing partners within a larger commercial network, is more like a telephone than a Ferrari. It has an intrinsically higher synchronization value and is particularly inclined to generate a network effect.

Commercial law, as exemplified in the case of choice of law situations, possesses not only indirect network externalities, but also direct network externalities because its central function is to facilitate interaction between parties. In fact, commercial law is employed precisely for that purpose. Because of the presence of both indirect and direct network externalities, commercial law is primed to generate a network effect. The existence of both direct as well as indirect network externalities essentially helps offset other factors that may also influence a choice of law decision. Users will inevitably feel the pull of the network primarily through the law's inherent synchronization value, reinforced also by considerations that stem from indirect network externalities, such as a jurisdiction's level of expertise, general competence, quality and costs of legal profession, and so forth.

Combined, these network externalities are apt to trigger a powerful network effect that grows more entrenched over time. At times, for certain parties, one or more indirect network externalities may even eclipse direct ones in importance. However, in all situations, there will remain the direct network benefit derived from subscribing to a body of rules that boasts the largest pool of participants—the benefit to the “purchaser” being “access to other purchasers.”<sup>115</sup> As with language, the value of commercial law increases commensurate with the number of people who embrace it. And as with language, commercial law benefits enormously from standardization.

### *B. Standardization and Natural Monopolies*

Like fax machines, telephones, and language, the value of a system of law as a standard increases as the number of people who use it grows. Like a telephone with no one to call, or a language that no one speaks, there is not much good in subscribing to a system of commercial law if it is only you who does so. A strong argument could be made that this synchronization value contributed to the spread of the medieval Law Merchant in Europe during the tenth, eleventh, and twelfth centuries. Having to navigate a diverse assortment of local customs and law, medieval merchants were eager to utilize a uniform system of regulation to oversee their transactions so as to avoid the commercial inefficiency and confusion of dealing with different laws.<sup>116</sup> The Law Merchant was a tool of unified commercial discourse that transcended the hotchpotch of differing local systems of law that traders would encounter, such as

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115. Lemley & McGowan, *supra* note 12, at 488.

116. See TRAKMAN, *supra* note 22, at 11 (footnotes omitted) (“[T]he Law Merchant itself offered the medieval merchant an ideal solution to many of these difficulties [arising from having to deal with a diversity of legal norms]. Legal rules were a means towards achieving uniformity of practice in trade. They entrenched mercantile practice within uniform codes, thereby reducing the diversity of local customs in favor of a universal law of trade. The most viable mercantile practices were enforced in the Law Merchant so that local practices were undermined where they diverged from the Law Merchant. The method of entrenching merchant practice in law followed a distinct pattern. The Law Merchant was to evolve according to ‘. . . the most ancient customs, concurring with the Law of Nations of all Countrys [sic].’ Established custom lay at the foundation of the Law Merchant. The universal system of law thus sought out those customs which were ‘constant,’ those practices which were ‘established’ and, in particular, those habits which were capable of sustaining a high level of commerce to the satisfaction of merchants, consumers and rulers alike. The law embodying such custom was required to be universal, i.e., common to all nations. In this way, merchants were to be regulated by laws of mercantile origins which were both well-established in practice and consistently applied by merchants to their own business undertakings.”).

ecclesiastical, manorial, or civil.<sup>117</sup> The Law Merchant, as a uniform code that achieved a measure of standardization of practice in trade, served a critical function. Without recourse to such a uniform code of law, merchants would have been faced with a dizzying diversity of local customs. In this way, standardization offered a clear benefit because it facilitated their exchanges.

The fundamental purpose of standardization is to facilitate interaction among individuals by synchronizing their interactions.<sup>118</sup> With telephones, it is having mutually compatible telephones; with VHS videocassettes, it is video stores renting VHS tapes that can be played on one's VHS player. Standardization produces synchronization. Synchronization is "the benefit received by users of a standard when they interact with other individuals using the same standard."<sup>119</sup> Liebowitz and Margolis point out that "synchronization effects will increase with the number of people using the same standard."<sup>120</sup>

Many have concluded that legal standardization must be created through the auspices of the state. Examining standardization in the law, Landes and Posner argue that it must be imposed by a central authority. They note,

[T]here would appear to be tremendous economies of standardization in [law] akin to those that have given us standard dimensions for electrical sockets and railroad gauges. While many industries have achieved standardization without monopoly, it is unclear how the requisite standardization or commonality could be achieved in the [law] without a single source for [law] without, that is to say, a monopoly.<sup>121</sup>

Other scholars, however, have concluded that no monopoly is necessary, and that standardization may evolve through a decentralized process.<sup>122</sup> The idea of a network effect is thus useful here. Applied to products in the marketplace, network externalities have been used to account for the emergence of "natural monopolies" that generate a precise standard. These "natural monopolies" can arise from the value of synchronization

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117. Barry Macleod-Cullinane, *Lon L. Fuller and the Enterprise of Law*, 22 LEGAL NOTES 1, 5 (1995).

118. Liebowitz, & Margolis, *supra* note 60, at 292.

119. *Id.*

120. *Id.*

121. William M. Landes & Richard A. Posner, *Adjudication as a Private Good*, 8 J. LEGAL STUD. 235, 239 (1979).

122. See, e.g., Benson, *supra* note 22, at 648; see F.A. HAYEK, 1 LAW, LEGISLATION, AND LIBERTY: A NEW STATEMENT OF THE LIBERAL PRINCIPLES OF JUSTICE AND POLITICAL ECONOMY 38-39 (1973). For a useful summary of spontaneous law, see Norman Barry, *The Tradition of Spontaneous Order*, 5 LITERATURE OF LIBERTY: A REVIEW OF CONTEMPORARY LIBERAL THOUGHT 7-8 (1982).

over production costs (although production costs should also be affected as well).<sup>123</sup> Applied to law, a network effect offers itself as a more comprehensive explanation of how this process may occur in commercial law, particularly in a venue such as transnational commercial interaction where there is a distinct absence of a central state authority to institute standards through regulation. The reply to Landes and Posner's conclusion, that in order for standardization to occur there must be a monopoly, is that network externalities can create "natural monopolies." As with any other product in the market, a natural monopoly may evolve, inducing an uncoordinated standardization.

Thus, where government is absent, network externalities may step in to create spontaneous standardization. This, however, requires that the product (or activity) have synchronization value; that is to say, that it directly benefits from an increase in the number of people who use it. Commercial law, because it facilitates interaction between individuals, has a high synchronization value and thus is particularly open to the effects of network externalities.

### C. *Switching Costs and Lock-in*

It is a simple point that the more people who employ a certain system of commercial law, the greater its value. This is so because, just as a language facilitates interaction, commercial law's central function is to facilitate commercial interaction. As merchants engage in commercial ventures with different parties, a common language is not only useful, but the lack of it may lead to significant financial loss. Thus, the more this language is "spoken," the more useful it becomes. This is due in large part to switching costs.

Switching costs lie at the heart of network externalities.<sup>124</sup> After early adoption, users may have opportunities to employ alternative products; however, due to the transaction costs involved in switching, it is more efficient for them to carry on using the product. In the example of the QWERTY keyboard, this would primarily be the inconveniences of having to learn to type on a new keyboard and of finding such keyboards. In the example of VHS, this would mean running around one's city in a desperate (and futile) attempt to find a Beta videocassette for one's Beta player. Potential switching costs, in this way, constrain the actions of individuals, corraling them into certain patterns of usage.

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123. Liebowitz, & Margolis, *supra* note 60, at 301.

124. S.J. Liebowitz & Stephen E. Margolis, *Policy and Path Dependence: From QWERTY to Windows 95*, 3 REG. CATO REV. BUS. & GOV'T 33, 34 (1995).

Commercial law is no exception to this phenomenon. Through the use of a certain system of law, merchants become increasingly familiar with these laws. In addition, the nature of certain regulations may, at times, even dictate and inform the business strategies the merchants adopt. When constructing the terms of their contracts, merchants will be cognizant of the fact that law selection decisions “will be relevant in determining issues such as the validity of the original agreement and any amendments, the interpretation of clauses if there is uncertainty, whether there has been a material breach[,] and the calculation of any damages.”<sup>125</sup> Choice of law can have specific commercial repercussions in the case of, for instance, warranties and other obligations imposed on sellers of goods, as well as in some areas of banking and finance law.<sup>126</sup> Choice of forum could very well impact the issue of enforcement, which is a consideration of tremendous importance to commercial actors.<sup>127</sup> In this sense then, when crafting the contract, heed must be given to law-selection considerations, as these choices will largely determine the nature of many aspects of the contract should litigation result. In this way, law-selection is an extension of the contract itself; it is an integral constituent of the contractual understanding that must ultimately be mutually agreed upon by both parties. In this environment, certain law-selection choices can quickly emerge as default standards for participants. This is what we see with the prominence of, for instance, English commercial law in transnational commerce.

Merchants learn to use a law selection as one would learn to use a language, and just like learning a language, it entails a certain investment.<sup>128</sup> If one had to learn a new language with each person with whom one interacted, it would be time-consuming to say the least, not to mention somewhat confusing and inefficient. It is more practical to simply use one language, ideally the one that most people speak. Similarly, it is, broadly speaking, far more “efficient” to simply utilize whatever law is used by the majority of individuals with whom one may

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125. DUNCAN BLACK, MONDAQ BUSINESS BRIEFING: GOVERNING LAW AND JURISDICTION—WHO CARES? (2008), [http://www.accessmylibrary.com/coms2/summary\\_0286-34690172\\_ITM](http://www.accessmylibrary.com/coms2/summary_0286-34690172_ITM).

126. Gabriel, *supra* note 18, at 2.

127. *Id.*

128. The concept of lock-in also may produce significant negative consequences by potentially generating suboptimal equilibria and inefficiency. To varying degrees, this has been discussed in the literature (although not in regard to choice of law situations specifically). See *generally* Klausner, *supra* note 12, at 785. While lock-in as it relates to choice of forum and choice of law is certainly an interesting line of inquiry, it is intentionally not brought into the present discussion. See also Carbonara & Parisi, *supra* note 24, at 2.

potentially engage in commercial interactions.<sup>129</sup> It is comparatively easier, safer, and most likely cheaper to simply continue employing the form of law that one has used in the past. In doing so, one may avoid unnecessary switching costs. This process may take the form of a utilization of business usages, rules of arbitration, or, as in the present focus of our discussion, even choice of jurisdiction. As these trade practices “crystallize into commercial usages, business patterns emerge.”<sup>130</sup> These norms proliferate due to network externalities and there arises a general reluctance to employ new and not widely used jurisdictions.

Thus, we see a distinct disinclination on the part of many business people to conduct commercial transactions under a law with which they are not familiar. As Wolf points out:

[T]he prudent tradesman does not enter into a commercial venture if there is a possibility of the transaction being subject to the strange laws and precepts of a country not in the mainstream of international commerce. When faced with the fact of an unfamiliar system of law being applied to any transaction, there arises a law-shy reaction.<sup>131</sup>

This “law-shyness” is due in large part to prospective switching costs.

Moreover, if one learns to utilize a new body of law that few people actually use, this would only underscore the wasted expenditure in terms of switching costs one has paid. The “return” on the investment of familiarizing oneself with the law, possibly even modifying ways of conducting business, would be comparatively smaller if one did not have many future occasions to maximize this investment. Thus, there are distinct switching costs that work to reinforce network externalities on any given body of commercial law, essentially serving as powerful disincentives to switch to alternatives. In this manner, switching costs standardization produces a network effect. As the number of “consumers” goes up, the value of that set of legal norms increases.

#### *D. How Interaction and Choice Precipitate a Network Effect*

Returning for a moment to Fuller’s description of customary law as a language of interaction: the metaphor is a good one because law, like language, is a tool to regulate human interaction. The intrinsic value of a

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129. Klausner, *supra* note 12, at 785. Assuming of course that the law itself is not terribly inefficient or that it represents other significant drawbacks, as discussed above, this would have to be weighed against network benefits.

130. TRAKMAN, *supra* note 22, at 99.

131. RONALD CHARLES WOLF, *TRADE, AID, AND ARBITRATE: THE GLOBALIZATION OF WESTERN LAW* 10 (Ashgate Publ’g 2004) (1988).

law is contingent upon its relationship to a larger network.<sup>132</sup> That is, that there is a community of more than one that subscribes to the law. Like language, what good is a system of law if you are the only person who adheres to it? The value of language is derived from its ability to coordinate a network of individuals, and as such, like language, it may exhibit network externalities.

Broadly speaking, this is true of all forms of law. However, it is important to understand that this is especially true for commercial law. Why is this? The answer can be traced back to the elements of fluid interaction and frequent choice that commercial law possesses. If we can strain the metaphor of language even further: commercial law is a language that is more widely spoken than its noncommercial counterpart. The characteristics of fluid interaction and frequent choice render commercial law particularly susceptible to the effects of network externalities. They are, in no uncertain terms, the key ingredients in precipitating a robust network effect, and sit at the heart of why law constructed around commercial interaction is more inclined to produce a network effect than any other context for law. In situations where there is fluid interaction between actors, a network effect may take root because there will arise a distinct advantage in standardization. This fluidity of interaction must also be supplemented by frequent choice. Where the actors can choose the standard, parties will tend to opt for the most commonly selected one, barring an important reason not to do so. Thus, choice is also an important component. These two elements—expansive interaction and frequent choice—lay the crucial foundations on which a network effect may be constructed. Commercial interaction is uniquely imbued with these characteristics. Let us now examine these two elements a little closer, looking at the characteristic of interaction first.

1. The Element of Interaction: Commerce Enlarges One's Circle of Potential Partners

Before proceeding, however, we should first clarify what was just said. The value of a law for an individual actor is derived from it being recognized by a larger group of individuals. This, however, largely depends on whether or not the individual actor has points of interaction with the other members in the group. The greater the scope of interaction (or expectancy of interaction), the more susceptible a user will be to the influence of network externalities.

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132. Liebowitz and Margolis rightly point out that the fundamental purpose of a standard is that it facilitates interaction among individuals. Liebowitz & Margolis, *supra* note 60, at 292.

Let us illustrate this point with an example. For instance, I am quite content that the Criminal Code of New York State extends to only roughly twenty million people. Whether this number is twenty or 200 million would only be of direct consequence to me if there were a chance I might interact with one or more of the extra 180 million—of course the more the better. To make the same point using the example of the telephone, the fact that one can now call more people will mean little if one simply does not have more people to call. If one has no cause to call this new influx of telephone users, the resulting increase in synchronization value will be irrelevant. This salient point represents a giant “if” in the center of any network effect argument: the value of the item increases commensurate with the number of people who use it only *if* one has occasion to interact with these new users.<sup>133</sup> Synchronization value alone is not enough; there must also exist a relatively wide net of parties with whom one might at least potentially interact, and the wider the better.

Commercial interaction clearly provides this element. Commercial activity entails a relatively fluid shifting and broadening of highly focused expressions of interaction. With trade, there is always an incentive to “call” new people. As a consequence, the value of commercial law as an instrument to facilitate these interactions increases as the number of parties who recognize and employ the law grows—a network effect. This is because those engaged in commerce have a uniquely broad pool of potential partners with whom they may embark on commercial ventures. The nature of trade is oriented towards enlarging this consortium of partners. Thus, it is advantageous that more and more individuals employ the form of law to which they are accustomed. Equally, for an individual selecting a legal jurisdiction in a choice of law clause, from the outset there is an immediate benefit in learning to conduct one’s interactions under the system of law that is most widely used, thus increasing one’s pool of potential collaborators that employ similar law.

Compare this with, for example, criminal law where relationships are relatively static. An individual gains no comparative advantage if more parties subscribe to the law if the individual simply has no occasions to interact with these additional people. It does not really have any impact one way or the other. After all, what good are other people speaking the language that I speak if I never have any occasion to speak

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133. Of course, benefits triggered by indirect network externalities may nevertheless still trickle down to a user. But for reasons we have already discussed, the resulting network effect will typically not be as powerful as one arising from both direct and indirect network externalities.

with them?<sup>134</sup> In the case of family law, for example, how important is it to one individual whether people beyond her immediate relations adhere to that particular set of regulations? But the nature of trade is different. Commercial activity offers the potential for engaged interactions with parties well outside one's immediate field of interaction, which is the opportunity to "speak" with them. Commercial interaction often involves "speaking" with people in very distant places, frequently taking a transnational expression.

a. It Is the Nature of Commerce To Forge New Ties

The basic nature of commerce encourages merchants to tirelessly expand their circle of associations. This could be said to be a primary objective of trade. Successful players frequently seek out new partners with whom to forge new business relationships in an effort to duplicate their prior successes and expand their pool of wealth. In other forms of law, we simply do not find a comparable fluid mixing of specific, targeted partners. This has to do with the fact that commercial law is unique in that it requires the seeking out of explicit partners with whom to establish definite relationships. Other forms of law are not as concerned with the building of partnerships as they are with preventing injurious interactions between individuals in a large group. Commercial law is the active formation of new relationships of cooperation between select parties, while noncommercial law involves regulating the behavior of individuals through injunctions, that is, what not to do. The former will force a mixing of players by linking together individuals. This places a greater premium on synchronization.

b. Commercial Relationships Are More Involved

While forms of association regulated by noncommercial law are generally static, commercial interactions, in contrast, are marked by a tendency to build fresh relationships with new partners. Moreover, these commercial relationships tend to be more involved and highly specialized, necessitating a more sophisticated utilization of law as an instrument to oversee the interaction. Standardization and synchronization are, perhaps because of this, even more of an issue in

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134. There may be some benefits to be garnered from a larger pool of people who speak one's language, even if one does not have occasion to meet with them. However, at best these benefits would spring entirely from indirect network externalities. For instance, with the example of language, a greater availability of literature written in that language would represent one such benefit. While one frequently finds an English version of most appliance directions, Greenlandic Norse speakers, or those conversant in only Aramaic, are not as fortunate.

this setting. Although I share a fleeting legal relationship with the man I pass on the street in that we both obey the law, mutually refraining from inflicting harm on one another (hopefully), we do not construct a specialized form of association, and more importantly, I do not actively seek out new people to pass on the street. In this sense, these relationships can be understood as relatively limited and generally static.

Commerce, in contrast, is fluid, and anticipates an expansive mingling of actors; it is a bridge between particular parties within a greater community. Perhaps it could be conceptualized in this manner: while noncommercial law regulates interactions between individuals in “a large and at times somewhat unclearly defined community,”<sup>135</sup> commercial interaction is, in effect, the construction of a miniature community within that larger community, sometimes involving only two parties (if this can rightly be called a community). It constructs a clear, dynamic relationship between them. This relationship is typically marked by forms of complex association, with the law that regulates it playing a uniquely important role. This “bridge” created between one set of people can then be extended to another, and so forth. In each instance, a smaller “community” is carved out from the greater whole, the result being a greater need for standardization between an ever-widening pool of people.

c. International Pool of Partners

This applies equally to entire regions. Commercial ties often transcend geographical boundaries. In the case of transnational commercial relationships, this mixing frequently reaches across the threshold of national and cultural borders, as the long arm of commerce extends to wherever it can seize hold of a business opportunity and flourish. The nature of modern transnational commercial interaction, in some cases, extends the circumference of potential partners virtually across the entire globe, in marked contrast with interaction regulated by other forms of law, which are implicitly regional and thus ultimately limited in terms of the network in which one moves. Commerce intrinsically aspires to enlarge itself. Commercial interaction is truly unique in this respect.

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135. FULLER, *supra* note 73, at 227.

d. Potential Enough

Furthermore, this interaction does not necessarily have to even be realized in order to give rise to a network externality; merely the potential for future interaction with this larger group is enough to increase the value of the body of law of a particular jurisdiction. Potential interaction is enough, and most forms of commercial activity carry with them at least the potential for a future increase in the circle of actors with whom the merchant engages. In the case of the example of the New York State Penal Code cited above, notice that even the remote potential of interacting with other people is enough to make it desirable that they too subscribe to the same body of criminal law.

The truly important role of interaction in generating a network effect can be observed in the path-dependent process of railway gauge standardization in the nineteenth century. During this period, railway companies who shared a common track gauge could “more easily exchange traffic, resulting in lower costs, improved service, and greater profits. As a result, positive ‘network’ externalities . . . produce[d] positive feedbacks among choices of gauge by different agents.”<sup>136</sup> Thus, from an initial hotchpotch of nineteenth-century gauge-width diversity, standardization gradually emerged.

The United States and Canada had six gauges in widespread use until the 1880s. Now only a few relic tourist lines use variant gauges. Britain’s extensive Great Western Railway system used a variant gauge for over 50 years before completing its conversion to the gauge of neighboring systems in 1892. Similarly, the original gauges of The Netherlands, the earlier German state of Baden, and much of Norway gave way to the common standard that emerged in most of western and central Europe.<sup>137</sup>

At the heart of this evolution was the element of interaction between agents, in this case transport between regions. Spatial isolation often impeded the development of standardization, as the absence of interaction, or potential interaction, did not provide the necessary impetus to adopt widely used standards. As insulated networks came in contact with larger networks, however, this quickly changed. For instance, beginning in the 1830’s, a few short lines in Britain employed gauge widths of 5’0” (1524 mm) and 5’6” for what was initially expected to be isolated local networks.<sup>138</sup> When the expanding and more widely

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136. Douglas J. Puffert, *Path Dependence in Spatial Networks: The Standardization of Railway Track Gauge*, 39 EXPLORATIONS IN ECON. HIST. 282, 283 (2002) (footnotes omitted).

137. *Id.*

138. *Id.* at 287.

used Stephenson-gauge network reached these lines, they converted immediately.<sup>139</sup> The variant gauges of Russia and Spain remain precisely the same because these historically peripheral economies had relatively little exchange of traffic with the rest of Europe.<sup>140</sup> In North America, interaction likewise played a determinant role. Between 1866 and 1886, railway-gauge standardization emerged largely as a result of the “strong growth in demand for interregional transport,” such as the shipment of Midwestern grain to seaports along the coast.<sup>141</sup> The fact that regions in Latin America, Africa, and Asia saw less standardization can be traced directly “to lower demand for interregional and international transport.”<sup>142</sup>

Generally, when we speak of network effects, the degree of interaction is decisive; the more extensive this interaction is, the greater the likelihood that a network effect may emerge, driven by the tangible benefits associated with synchronization. This is true for all kinds of network effects. As Puffert notes, this dynamic applies to “other spatial networks—such as for transportation, communication, and electrical power distribution—as well as to networks with nonspatial graphical structures (patterns of connectedness) . . . . This arguably includes most empirical networks, including the ‘virtual’ networks often considered in discussions of network externalities.”<sup>143</sup> And more to our point, this applies in equal measure to commercial trading networks where there exists extensive interaction (or potential interaction) between a great many actors.<sup>144</sup>

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139. *Id.*

140. Puffert goes on to point out that by the time these regions saw higher rail interaction with the core of Europe, their common-gauge networks, and potential conversion costs, had already grown relatively large, thus offsetting the pull of network externalities. This process of offsetting is particularly relevant to our above discussion of the significance of networks involving both direct and indirect network externalities, as other considerations such as conversion costs may blunt the effect of network externalities. *Id.* at 288; *see also supra* Part II.D (“Distinguishing Externalities: Direct and Indirect Network Externalities”).

141. Puffert, *supra* note 136, at 289.

142. *Id.* at 291.

143. *Id.* at 312 (footnotes omitted).

144. Perhaps the existence of left-hand-drive road systems in some countries can be largely attributed to a lack of direct interaction with other networks. Apart from inter-state trucking, there is only limited vehicular interaction among differing systems. That is, drivers tend to remain within their closed network. The majority of present-day left-hand-drive networks tend to be islands (the United Kingdom, Australia, New Zealand, Japan, Indonesia, Cyprus, Ireland, Malta, and Sri Lanka), their shorelines providing a natural, nonporous boundary to the network that constrains interaction with other networks. Countries such as India, Nepal, Pakistan, Malaysia, and much of South East Africa are exceptions to this, but this may also be due to other influences, such as British Colonialism. Moreover, another factor may be that, unlike railway-track gauges, left-hand drive does not necessary preclude the use of right-hand-drive vehicles on their roads. Over the course of the twentieth century, there occurred a gradual worldwide shift from left-hand drive to right-hand drive. A commonly cited reason for this switch is conformity

By creating an enterprise that, in effect, draws from a vast pool of possible partners, commerce creates a situation where the more people who speak the same legal language the better. The key point is that commerce creates a state of affairs in which actors essentially participate in a much wider community of potential partners—in fact, usually the bigger the better. This wide network of interaction is fluid and shifting, providing a high degree of mixing between actors. Commercial partnership is a bridge between disparate parties that, in effect, widens the scope of one's prospective interactions well beyond one's immediate circle of would-be partners. As it does so, it cries out for the use of a common language of legal norms. To strain our language metaphor perhaps to the point of utter collapse: while noncommercial law, being more static in its sphere of potential coactors, can be compared to the language you speak with your immediate family, commercial law might be a language you might speak with your entire street, your city, country, perhaps even an industrial village in central China, and as such, you had better pick a language that is widely spoken. Commerce's element of fluid interaction provides the first key element in generating a network effect. The second decisive component is the ability of actors to select the law that oversees their interactions. Let us now turn and examine this second component.

## 2. The Element of Choice: Parties Selecting Law with Each New Interaction Are Consumers Purchasing a Product

The ability for commercial actors to, in effect, choose the applicable law contributes to commercial relationships being especially receptive to network externalities. In many respects, a contract allows parties to select the law they wish to use. For the most part, this is simply not the case with other forms of law. Transnational commercial exchange in and of itself often represents an opportunity for the participants to select and, to some extent, even construct specific rules to govern their exchange.<sup>145</sup> This characteristic anticipates a network effect by allowing the “consumers” of legal norms to essentially select elements of the law, or entire jurisdictions of law, in a manner comparable to a consumer

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with neighboring transportation networks, because it increases the safety of cross-border traffic. For example, former African British colonies such as Gambia, Sierra Leone, Nigeria, and Ghana have all converted to right-hand drive because they all share borders with former French colonies utilizing right-hand systems. The former Portuguese colony of Mozambique retained a left-hand system despite the fact that its colonial ruler converted to right-hand drive in the early part of the twentieth century. Interestingly, all Mozambique's bordering countries are also left-hand drive.

145. See Benson, *supra* note 22, at 659.

purchasing a product. Without this ability to choose, a network effect could not take root because users' tendencies would not find expression. The ability to choose the relevant law to govern their interaction gives parties the freedom to follow the lead of previous parties, and, so to speak, jump on the legal bandwagon, precipitating a network effect. The predominance of English contract law as a standard for transnational commercial ventures attests to the reality of this effect.

This is, perhaps, nowhere more evident than in the consent to jurisdiction and forum selection clauses of transnational commercial agreements, in which entire systems of law may be selected over others. This choice opens the door to a network effect for reasons already mentioned. Like consumers choosing one product over another, consumers of law face a similar choice. This is equally true for choice-of-dispute arbitration procedures and the various other elements of their contracts. To be sure, a "mini-legislature" convenes each time a new commercial partnership is formed, invariably promoting the use of certain legal norms over others, and in the case of law-selection decisions, certain jurisdictions over others.

An important point that should be emphasized here is frequency of choice. The more frequently parties have the opportunity to opt for one jurisdiction over another, the more responsive these selections will be to general trends in "consumer" tastes. Each new point of contractual interaction allows for new user input, providing an opening through which network-related considerations may enter. Upon the initiation of new partnerships, merchants engaging one another in trade can elect a specific system of law to oversee their subsequent interactions. These instances are recurrent points at which the user may reevaluate the benefits derived from utilizing a particular body of law, and potentially switch. Without such instances, it would be exceedingly difficult for a network effect to take root.

For instance, users of cellular telephone networks that offer free calling between users would be more susceptible to the influence of a network effect that would follow from large competing telephone networks if these users were purchasing a new telephone every month. Users would have more opportunities to subscribe to a network with more users. Trends in the number of network users would, in this manner, translate into a network effect far more swiftly. In this sense, frequent choice helps pave the way for a network effect. The repeated formation of new commercial partnerships, as evident in the case of merchants, provides exactly this, where at the outset parties essentially choose the relevant law by crafting contractual terms, adopting

preexisting ones, and more to the point at issue here, by inserting choice of forum and choice of law clauses into their contractual agreements.<sup>146</sup>

The ability for parties to decide on law with each new interaction allows for a network effect to take place because there are countless windows through which participants can express their preferences for specific rules over others. A general shift toward a particular body of law may incrementally emerge, experiencing an increasing return as more merchants, influenced by the effects of network externalities, gravitate toward it. In this manner, partly as a result of frequent choice, a sort of natural legal monopoly may emerge, its predominance as a legal standard becoming ever more deeply entrenched over time.

This is not the case with other forms of law precisely because those structures preclude the possibility of incremental feedback. In the case of criminal law, for instance, two strangers meeting one another certainly do not negotiate and decide on which elements of the penal code will apply to their present interaction, or even more absurdly, which nation's criminal law will govern their relationship.<sup>147</sup> Commercial law, specifically transnational commercial law, is unique in respect to the degree to which the actors select the law. Indeed, this is analogous to consumers frequently purchasing products.

While commercial law is, in this sense, more fluid and dynamic, other forms of law cannot shift as seamlessly or in such direct response to the inclinations of "consumers." Thus this limits the emergence of a network effect on such systems. While the common law, in its reliance on judge-made law, does allow for greater responsiveness when contrasted with statute-based systems of law, this is nowhere near as

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146. At the same time, the extent to which parties are free to make any law-selection choice should not be exaggerated. In the case of choice of forum there are definite restrictions on the freedom to choose one jurisdiction over another. In the case of choice of law provisions, the ability to select proper law is limited by the nature of the jurisdiction one finds oneself in. For instance,

Some systems adopt a fairly open policy, allowing parties to choose foreign law, subject to the substantive screening discussed above. Others further restrict adoption of foreign legal regimes when the chosen legal system has a substantial relationship with the case. This [type of] regime operates through a 'substantial relationship test,' requiring the chosen legal system to have a relevant connection to the contracting parties or to their legal relationship. Such 'substantial relationship' requirements generally grant much discretion to the courts in validating the contractual choice of law. This regime is applied in the United States.

Carbonara & Parisi, *supra* note 98, at 6.

147. This is not to discount, of course, situations in which criminals may select a national forum for their crimes, taking into consideration the potential legal consequences should their crime be exposed in that jurisdiction.

finely tuned and sensitive as the law that emerges as the direct product of contracting parties. The net effect of this sensitivity is that network externalities can influence the growth of commercial law in a manifest fashion, while its noncommercial brother is more resistant to the self-propagating influences of a network effect. In this sense, frequent choice works together with commerce's characteristic of fluid interaction to yield a direct network externality within commercial law, one predicated on direct interaction between participants.

#### IV. CONCLUSION

Now, let us reevaluate our initial supposition: commercial parties selecting law can be likened to consumers selecting a product, and are thus equally susceptible to the effects of network externalities. They are "consuming" a legal jurisdiction. The number of "consumers" who subscribe to the same legal norms is analogous to the number of consumers who use a product. As the number of "consumers" increases, so too does the inherent value of selecting that jurisdiction, inducing even more people to "purchase" that body of law. This is a network effect. Transnational commercial law is ideally calibrated so as to produce a network effect. This stems from the inherent nature of commerce. The purpose of this discussion was to explain how this is so. I posited a distinction between two kinds of externalities, direct and indirect network externalities, concluding that network systems with both kinds of network externalities were the best candidates to produce a robust network effect. I showed that many of the factors to which selection of forum and choice of law are commonly attributed, such as a jurisdiction's competence, the quality of legal services, and court expertise, are in fact indirect network externalities. More crucially, however, commercial law also demonstrates an implicit direct network externality in that its fundamental purpose is to facilitate direct interaction between network participants. Thus, because commercial interaction exhibits direct as well as indirect network externalities, it is primed to trigger a network effect, as these two tiers will tend to offset other factors that may be involved in law-selection decisions. If the pull of a direct network externality is not enough, indirect network externalities may be adequate to tip the scales and trigger a network effect. To be sure, indirect network externalities such as a jurisdiction's competence, the quality of legal services, and court expertise, will often factor more prominently into law-selection choices; however, direct network externalities will invariably help shape these decisions.

We then discussed how the twin ingredients of fluid interaction and the frequent choice present in commerce precipitate a network effect. Expansive interaction between network actors (or even potential interaction) opens the door to a network effect by placing a higher premium on the need for synchronization. The deeply involved nature of commerce is to forge new ties between disparate parties, in effect widening the pool of potential partners for commercial actors, often across the threshold of national borders. Trade, in a sense, essentially fashions a larger community within which participants may then interact. We then looked at how frequent opportunities to select law, as illustrated in law-selection provisions embedded in the contracts of fresh commercial relationships, allow for an incremental drift towards a specific jurisdiction because each successive contract represents a juncture where commercial actors may opt for an emerging standard and, in doing so, further contribute to its emergence. This frequency of choice opens the door to a network effect. Without these occasions for “consumer” feedback it would be difficult, if not virtually impossible, for a network effect to take root.

The characteristics of expansive interaction and choice, in conjunction with both direct and indirect network externalities, represent the crucial building blocks of a network effect. Commercial interaction has this characteristic in spades. What is more, the influence of network externalities is only magnified by the undercurrent of brute competition and the verity of the bottom line that propels commercial enterprise, forcing players to make choices that promise to be most economically advantageous. Unlike consumers buying Beta over VHS, commercial entities typically do not have the luxury of preference over expedience. To be sure, when contracting parties face new law-selection decisions when drawing up their contracts, a jurisdiction that has already emerged in their relevant industry as a standard will commonly be invoked precisely because it is the standard, thus inducing a network effect. In the case of sophisticated transnational parties to a contract, when proper attention is paid to their law-selection choices, network externalities inevitably present themselves in some form or another. Any system, then, that possesses both direct and indirect network externalities and exhibits a high degree of choice and interaction between participants is ideally calibrated to generate a network effect. Because commerce so clearly possesses these characteristics, one should not be surprised to discover the conspicuous pull of a network effect on choice of forum and choice of law decisions or on the adoption of commercial norms in general. These ideas may be readily applied to the spread of legal norms,

business usages, standard terms of contract, and much else of the modern law merchant. With the current move towards arbitration in international commerce, where arbitrators in burgeoning global arbitration centers employ an overlay of transnational law, these same principles will operate, ever-deepening the entrenchment of certain bodies of law or sets of legal norms as recognized standards.