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Modularity in Cross-Border Insolvency

Andrew B. Dawson
University of Miami School of Law, adawson@law.miami.edu

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ANDREW B. DAWSON†

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INTRODUCTION

This Article proposes a novel framework for thinking about the structure of the Model Law on Cross-Border Insolvency. The Model Law's framework is best understood as a modular design structure, that is, a framework that manages complexity by breaking the system down into semi-autonomous units.[1] Principles of modularity have proven useful in thinking about various transactional structures, from contract boilerplate to complex merger-and-acquisition agreements.[2] It can likewise provide insights into the Model Law, explaining its structure and providing guidance as to its implementation.

Modularity is a means of breaking down complex systems, and the realm of cross-border insolvency is indeed a complex system involving multiple interdependent legal systems. Without a single universal court capable of administering the worldwide estate of a multinational debtor, it is often necessary for the multinational debtor to be subject to multiple bankruptcy procedures around the globe. Rulings in any one proceeding are likely to have exogenous consequences. For example, a decision to liquidate the debtor's assets in jurisdiction *A* may impede the enterprise-wide reorganization plans proceeding in jurisdiction *B*. In order to preserve the going-concern value of the estate and to facilitate a restructuring, there must be some means of coordinating the multiple proceedings. Coordination involves creating a procedural structure that will govern courts and bind the debtor, creditors, and other interested parties.

The United Nations' Model Law on Cross-Border Insolvency—adopted by the United States in chapter 15 of the Bankruptcy Code—creates a procedure for coordinating the administration of these multiple territorial cases and, in doing so, to centralize that administration. Nations that adopt the Model Law commit themselves to coordinate with foreign bankruptcy proceedings whenever a foreign bankruptcy trustee (or similarly appointed official) opens a proceeding under the Model Law. Such a model law effort has network effects, with greater value the more widely it is adopted. At this

1. Richard N. Langlois, *Modularity in Technology and Organization*, 49 J. ECON. BEHAV. & ORG. 19, 19 (2002).

2. *See* Henry E. Smith, *Modularity in Contracts: Boilerplate and Information Flow*, 104 MICH. L. REV. 1175, 1196 (2006); Cathy Hwang, *Unbundled Bargains: Multi-Agreement Dealmaking in Complex Mergers and Acquisitions*, 164 U. PA. L. REV. 1403, 1417 (2016) (discussed further *infra* Part II.A).

point, the Model Law's network is quite large, as more than forty nations have adopted it.[3]

The implementation of the Model Law has produced some challenges, though, as courts have at times reached inconsistent and unpredictable results. In thinking about these challenges, Professor Jay Westbrook has suggested courts should interpret the Model Law as "a system text" that creates an international legal system for addressing the centralization challenge.[4] As opposed to a "standards text" that aims to establish international standards, a system text creates "an institutional and procedural structure" to carry out its ends.[5]

In thinking about the Model Law as creating a cross-border insolvency system, we can see an entire research agenda in analyzing its institutional and procedural structure. We can think about the role of judges, as Adrian Walters does in this issue, as well as the other institutional actors within that system (lawyers, trustees, creditors); and we can think about legal systems more generally, as the international system interacts with both common and civil law systems.[6]

This Article considers the design structure of the Model Law's cross-border system, arguing that the Model Law can be understood as reflecting a modular design. While the Model Law may not be intentionally modular, principles of modularity help to explain its structure, to frame its implementation challenges, and to suggest solutions to those challenges.

The characteristic feature of modular systems is that they divide systems into semi-autonomous units.[7] Units are autonomous to the extent that they have standardized and simple interactions with the other system units, that is, to the extent that information flow among the units is restricted.[8] Consider, for ease of illustration, the two basic structures of television shows. Shows may be thought of as systems that are broken down into "units" of episodes. There are two basic ways episodes "interact" with one another: there are procedural shows, such as *Law & Order*, and serial

3. *Status: UNCITRAL Model Law on Cross-Border Insolvency (1997)*, U.N. COMM'N ON INT'L TRADE LAW, http://www.uncitral.org/uncitral/en/uncitral_texts/insolvency/1997Model_status.html [https://perma.cc/QXA6-87NL].

4. Jay Lawrence Westbrook, *Interpretation Internationale*, 87 TEMP. L. REV. 739, 754 (2015).

5. *Id.* at 753.

6. *See generally* Adrian Walters, *Modified Universalisms & the Role of Local Legal Culture in the Making of Cross-Border Insolvency Law*, 92 AM. BANKR. L.J. (forthcoming 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3084117 [https://perma.cc/9232-DY29]); Andrew B. Dawson, *The Problem of Local Methods in Cross-Border Insolvencies*, 12 BERKELEY BUS. L.J. 45, 53 (2015).

7. Langlois, *supra* note 1.

8. *Id.*

shows, such as *Game of Thrones*. *Law & Order* episodes are relatively independent, stand-alone components of the overall series. There is little information from episode 1 that would be necessary to episode 2. In fact, the series can be watched out of sequence with very few challenges to plot or character development. In contrast, information flow among episodes of *Game of Thrones* is intense: significant plot and character development may be lost if a viewer were to skip a single episode. If we consider each episode as a unit of the larger system of the show, *Law & Order* highly restricts inter-episode information flow. *Game of Thrones* does not. *Law & Order* is, therefore, a more modular "system."

While modularity's information-hiding function has been a useful tool for analyzing private ordering, this is the first article (to my knowledge) to employ modularity explicitly to analyze a statutory schema. Scholars have used modularity to help explain and theorize the role of boilerplate in contracts;[9] the multi-step procedure in modern deal making;[10] and the role of collaboration and innovation in contract design.[11] In addition, principles of modularity underlie theories as to the role of asset partitioning, as well as the role of cross-guarantees and cross-default provisions in asset-partitioned arrangements.[12] Modularity may be useful not only to explain these private ordering structures but also to provide insights into the cross-border insolvency system.

This Article proceeds as follows. Part I provides a brief overview of the Model Law, including its history, development, and emerging issues. Readers already versed in this area may safely skip to Part II, which argues that modularity helps to explain the structure of the Model Law's cross-border insolvency system. This section provides insights and examples of modularity in complex systems, including engineering and manufacturing, and then applies those principles to the architecture of the Model Law. The Model Law's modular features are reflected in two main sets of rules governing inter-court cooperation—one for cooperation that is triggered *automatically* once certain criteria are met (Automatic Assistance) and one for cooperation that *may* be granted if certain standards are met

9. Smith, *supra* note 2, at 119.

10. Hwang, *supra* note 2, at 1417–18.

11. Matthew C. Jennejohn, *Collaboration, Innovation, and Contract Design*, 14 STAN. J.L. BUS. & FIN. 83, 140 (2008).

12. Henry Hansmann & Reinier Kraakman, *The Essential Role of Organizational Law*, 110 YALE L.J. 387, 399 (2000); *see, e.g.*, Anthony J. Casey, *The New Corporate Web: Tailored Entity Partitions and Creditors' Selective Enforcement*, 124 YALE L.J. 2680 (2015).

(Discretionary Assistance).[13] Each of these protocols reflects different degrees of modularity. The more information is restricted, the more modular the set of rules. When we look at these rules from this perspective of modularity, we can better understand how U.S. courts have applied these rules when interpreting cases under chapter 15 of the Bankruptcy Code and how courts should interpret the Model Law as the case law develops in this field.

Having framed the Model Law as reflecting a modular design structure, Part III then characterizes the Model Law's implementation problems as problems of imperfect modularity. In other words, the Model Law's challenges in many ways reflect a breakdown of its attempts to restrict information flow: While the Model Law intends to limit the number and intensity of interactions among courts, the implementation of the Model Law at times creates new connections and at other times invites highly intense interactions.

Part IV then considers the implications of these insights to the question of Discretionary Assistance and choice of law. The Model Law does not tell courts *how* to determine choice-of-law questions; however, the way this protocol hides information from the ancillary proceeding is a strong indicator about *where* these questions should be answered. By restricting the information flow to ancillary proceedings, the Model Law effectively leaves the choice-of-law decision to be made in the foreign main proceeding. By focusing on the information-hiding functions of the Model Law, we can see that the Model Law does not definitively settle the thorny choice-of-law questions as to Discretionary Assistance, but it does suggest where these questions should be addressed.

13. The Model Law also provides for "Additional Relief." *See* U.N. COMM'N ON INT'L TRADE LAW, UNCITRAL MODEL LAW ON CROSS-BORDER INSOLVENCY WITH GUIDE TO ENACTMENT AND INTERPRETATION, at 5, U.N. Sales No. E.14.V.2 (2014), http://www.uncitral.org/pdf/english/texts/insolven/1997-Model-Law-Insol-2013-Guide-Enactment-e.pdf [https://perma.cc/9BTS-E3FW] [hereinafter MODEL LAW]. This provision is best understood as clarifying that enactment of the Model Law does not limit the adopting country's existing (or future) avenues for relief in cross-border insolvency proceedings. *See* Ad Hoc Grp. of Vitro Noteholders v. Vitro S.A.B. de C.V. (*In re* Vitro S.A.B. de C.V.), 701 F.3d 1031, 1054 (5th Cir. 2012) ("We conclude that a court confronted by this situation should first consider the specific relief enumerated under § 1521(a) and (b). If the relief is not explicitly provided for there, a court should then consider whether the requested relief falls more generally under § 1521's grant of any appropriate relief."). *But see* David L. Eaton & Aaron J. David, *Reconciling "Additional Assistance" with "Appropriate Relief" in Ch. 15*, AM. BANKR. INST. J., Feb. 2017, at 20. This may have important implications in some cases, but this is outside the scope of the two main protocols for inter-court assistance.

I. THE CROSS-BORDER INSOLVENCY SYSTEM

Before considering the design structure of the Model Law, it may be helpful to consider first the problem the Model Law is designed to solve, namely, the lack of a single forum capable of centralizing the administration of the debtor's cross-border estate. Because administrative centralization is often essential to preserving the value of the estate and to permit financial reorganization, some degree of cross-border coordination is therefore necessary. This cooperation is an inherently complex system, as it requires multiple actors (debtors, creditors, tribunals, and trustees, for example) working across different substantive debtor-creditor laws. Section A below discusses the two main types of systems to address the lack of administrative centralization. Section B will then discuss the Model Law's approach more specifically.

A. Administrative Centralization in Cross-Border Insolvency

If a debtor has assets and creditors in more than one nation, there will be no single jurisdiction that can administer the entire bankruptcy estate or bind all creditors.[14] Each nation has control over only those assets within its jurisdiction, thus requiring some sort of international cooperation to sell all of a debtor's assets or to reorganize the entire enterprise. State sovereignty, thus, poses a serious obstacle to any effort to preserve the going-concern value of a multinational enterprise. As Jay Westbrook describes it, preserving going-concern value requires market symmetry: the governing bankruptcy law must be symmetric in reach as the debtor's legal relations with its creditors.[15]

The challenge is a familiar one to those who have thought about the relationship of the U.S. federal and state governments in the realm of U.S. bankruptcy law. During the nineteenth century, there was no permanent bankruptcy law, with only short-lived bankruptcy laws enacted in the

14. *See* John A.E. Pottow, *Procedural Incrementalism: A Model for International Bankruptcy*, 45 VA. J. INT'L L. 935, 944 (2006) ("In a critical respect, the 'problem' of transnational insolvencies, at least at one level, might be nothing more than an admittedly challenging choice-of-law issue: whose (policy-rich) laws of distribution, priority, and avoidance should govern the insolvency of the multi-jurisdiction debtor?").

15. Jay Lawrence Westbrook, *A Global Solution to Multinational Default*, 98 MICH. L. REV. 2276, 2283 (2000) (describing this ability of bankruptcy law to bind all stakeholders as "'market symmetry': the requirement that some systems in a legal regime must be symmetrical with the market, covering all or nearly all transactions and stakeholders in that market with respect to the legal rights and duties embraced by those systems").

immediate wake of financial crises.[16] Without a federal bankruptcy law in place, there would be no single state court proceeding that could govern the assets and creditors of an interstate business.[17] Such a debtor would be forced to open proceedings in multiple states, asking courts to honor the orders from its "home" jurisdiction. Opening multiple proceedings is expensive. Worse, it creates coordination problems. If the debtor is liquidating, intra-court cooperation may be necessary in order to conduct a going-concern sale of the debtor's assets. If the debtor is reorganizing, this would require coordinating proceedings to ensure that the debtor's reorganization plan would be enforceable against all creditors. Federal bankruptcy law solves these coordination problems by centralizing the administration of the estate into a single proceeding, thus providing market symmetry between the legal regime and the debtor's multi-jurisdiction estate.

Whereas federal bankruptcy law can solve this challenge within the U.S. federal system, there is no such international bankruptcy law to provide market symmetry for a multinational debtor. Instead, each country has jurisdiction over the multinational debtor's property within its territory—a state of the world reflecting the theory of territorialism.[18] True centralization would only be possible in a universalist system in which there would be a single bankruptcy law and bankruptcy forum: i.e., universal market symmetry for multinational debtors.[19] Because universalism remains purely theoretical, both territorialists and universalists recognize that market symmetry can be approximated by inter-court cooperation. That is, centralization is possible to the extent that the nations with competing jurisdiction over the multinational debtor's property can coordinate their proceedings.

Some have argued that this coordination should be driven by creditors' ex post assessment of whether such cooperation is desirable—a theory described as "cooperative territorialism."[20] That is, inter-court cooperation can occur once the debtor is in bankruptcy and the interested parties determine that some degree of cross-border cooperation would maximize the value of the estate. This has been accomplished in some significant cases,

16. *See* David A. Skeel, Jr., *Rethinking the Line Between Corporate Law and Corporate Bankruptcy*, 72 TEX. L. REV. 471, 477–78 (1994).

17. *See generally* Andrew B. Dawson, *Better than Bankruptcy?*, 69 RUTGERS U. L. REV. 137 (2016) (describing the use of state "bankruptcy" laws and their limitations).

18. Lynn M. LoPucki, *The Case for Cooperative Territoriality in International Bankruptcy*, 98 MICH. L. REV. 2216, 2240–41 (2000).

19. Westbrook, *supra* note 15, at 2287.

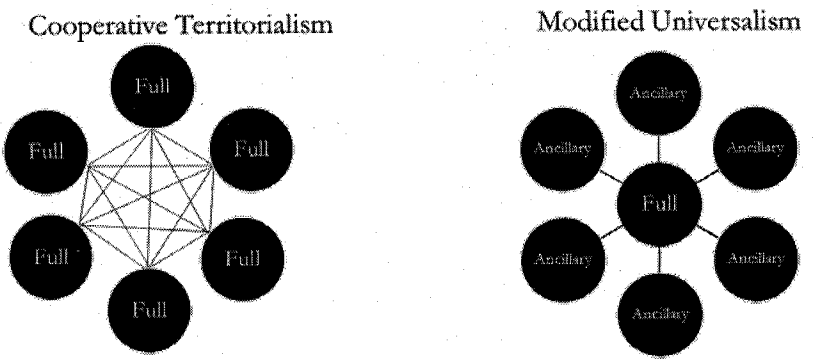
20. LoPucki, *supra* note 18.

with parties agreeing to a set of cooperation protocols, for example, coordinating procedures for filing claims or selling assets.[21]

Others have argued that the decision to cooperate should be made ex ante, with nations committing to inter-court cooperation. This approach, known as "modified universalism," promises greater certainty and predictability.[22] One single proceeding in the debtor's "home" jurisdiction is to play the lead role. Representatives of that estate in the home proceeding may then open secondary (or "ancillary") proceedings in other jurisdictions as needed to administer the entire estate. These ancillary proceedings would not be full bankruptcy cases. Instead, they would serve primarily to permit the home jurisdiction's orders to apply worldwide.

If we visualize the architecture of these different approaches, we can see the cooperative territorialism envisions a highly-interconnected approach to resolving the issue of cross-border cooperation. Cooperation would be multi-party and multi-jurisdiction, with "full" bankruptcies in each jurisdiction. Modified universalism, on the other hand, creates a hub-and-spoke model of cross-border insolvency, with a "full" bankruptcy proceeding in one jurisdiction and ancillary proceedings around the perimeter. See Figure 1.

Figure 1



Modified universalism promises a more predictable and certain procedure for cross-border insolvency, as it both limits the number of

21. *See* BRUCE LEONARD, INT'L INSOLVENCY INST., CO-ORDINATING CROSS-BORDER INSOLVENCY CASES (2001), https://www.iiiglobal.org/sites/default/files/media/Coordinating_Cross_Border_Insolvency_Leonard.pdf [https://perma.cc/PF9M-J6U8].

22. Jay Lawrence Westbrook, *Universalism and Choice of Law*, 23 PENN ST. INT'L L. REV. 625, 626 (2005); Westbrook, *supra* note 15, at 2302.

interactions among courts and creates a regularized procedure for handling those interactions. As described in the next part, the Model Law reflects this modified universalism theory, with the aims of promoting cooperation and greater predictability.[23]

B. The Model Law's Cross-Border Insolvency System

The Model Law on Cross-Border Insolvency, promulgated by the United Nations Commission on International Trade Law (UNCITRAL), reflects this modified universalist theory.[24] If a multinational debtor files bankruptcy in jurisdiction *A*, that jurisdiction can then authorize a "foreign representative" to open ancillary proceedings in other jurisdictions as needed. There is thus one single "full" bankruptcy proceeding whose jurisdictional reach can be extended via ancillary proceedings in other countries.

The Model Law has two primary means for how an ancillary court can extend the reach of the foreign full bankruptcy. First, there is a set of relief that is to be granted automatically to a foreign representative once certain statutory rules are triggered (Automatic Assistance). Second, there is a set of discretionary relief that an ancillary court may extend to the foreign bankruptcy representative (Discretionary Assistance).

While the following parts are not comprehensive, they illustrate the basic parameters of these two categories of relief. The key point here is not the exact details of the categories; rather, the key point for this Article—which, after all, is focused on the structural design of the Model Law—is in outlining the two mechanisms that regulate inter-court assistance.

1. Automatic Assistance

The Model Law instructs that an ancillary court shall grant certain assistance automatically so long as certain procedural and substantive requirements are met. These provisions, found in articles 15 and 17, are

23. The Model Law's Preamble lists its objectives:

> *(a)* Cooperation between the courts and other competent authorities of this State and foreign States involved in cases of cross-border insolvency;
> *(b)* Greater legal certainty for trade an investment;
> *(c)* Fair and efficient administration of cross-border insolvencies that protects the interests of all creditors and other interested persons, including the debtor;
> *(d)* Protection and maximization of the value of the debtor's assets; and
> *(e)* Facilitation of the rescue of financially troubled businesses, thereby protecting investment and preserving employment.

MODEL LAW, *supra* note 13, at 3.

24. *See id.*

principally that (a) the "foreign proceeding" authorized the "foreign representative" to seek relief and (b) that the foreign proceeding is a "foreign main proceeding," i.e., that the foreign full bankruptcy case is located where the debtor has its "center of main interests."

In other words, the ancillary court grants certain assistance automatically upon validating the authenticity of the representative (was she appointed by a foreign proceeding) and the appropriateness of the forum jurisdiction (was it filed where the debtor has its center of main interests). The linchpin of this analysis is the jurisdictional part—how should a court determine the "center of main interests" of a multinational debtor? Although there is some dispute as to the application of this standard, it is generally agreed that the standard aims to comport with creditors' expectations: creditors of a Brazilian-based company would lend money expecting that Brazilian debtor-creditor law would apply.[25]

Once the ancillary court makes this finding, certain automatic "centralizing" features are triggered as set forth in article 20: the ancillary court issues a stay against all actions against the debtor, actions against the debtor's assets, and against all dispositions of the debtor's assets.[26]

2. Discretionary Assistance

The Model Law provides that an ancillary court *may* grant additional relief to the foreign representative. This discretionary relief includes the expanding the bankruptcy stay, assisting with discovery efforts within the ancillary jurisdiction, and entrusting local assets to be administered or distributed in the foreign full proceeding.[27] To be eligible for discretionary relief, there are two principal restrictions (and a third which applies only as to foreign nonmain proceedings). First, the foreign proceeding must either be a "foreign main proceeding" (as noted above, filed where the debtor has its center of main interests) or a "foreign nonmain proceeding" (i.e., filed where the debtor conducts "non-transitory economic activity"). In the parlance of the Model Law, the foreign representative can only obtain discretionary relief if the foreign full bankruptcy was filed where the debtor has at least an "establishment."

Second, there are substantive restrictions designed to protect creditors. Those protections depend on the type of relief sought and on the type of foreign proceeding. The baseline substantive protection for creditors is found

25. *See In re* OAS S.A., 533 B.R. 83, 101 (Bankr. S.D.N.Y. 2015).
26. MODEL LAW, *supra* note 13, at 10–11.
27. *Id.* at 11–12.

in article 22(a): "the court must be satisfied that the interests of the creditors and other interested persons, including the debtor, are adequately protected."[28] To that end, the court is permitted to place conditions on any discretionary relief.[29] On top of this baseline rule, the Model Law provides additional restrictions when the foreign representative asks the ancillary court to turn over local assets to be distributed in the foreign proceeding. In that case, the Model Law directs the court specifically to examine the interests of local creditors.[30] Finally, before granting relief to a foreign *nonmain* proceeding—i.e., a foreign proceeding where the debtor has an establishment but not its center of main interests—there is one more requirement. The court must make a mini choice-of-law determination: it may issue orders as to local assets only when, under the local choice of law rules, those assets should properly be administered in that foreign court; and the ancillary court may issue discovery orders only if satisfied that it relates to information required in that foreign nonmain proceeding.[31]

Finally, even if the conditions for discretionary relief are satisfied, the Model Law contains a public policy override.[32] To address concerns about politically unpalatable losses—e.g., if jurisdiction *A* permitted rejection of collective bargaining agreements while jurisdiction *B* did not[33]—then the Model Law gives a nod towards territorialist concerns. It permits ancillary courts to refuse to cooperate with a foreign proceeding if doing so would be "manifestly contrary to the public policy" of the ancillary jurisdiction.[34] Thus, the ancillary court in jurisdiction *B* may refuse to defer to jurisdiction *A*'s treatment of collective bargaining agreements.

While this public policy override may apply, in theory, to both automatic and discretionary assistance, U.S. bankruptcy courts have favored reserving this override to matters in the discretionary realm—an approach not specifically dictated by the Model Law, but one consistent with the categories of relief.[35] It is hard to imagine a situation in which imposing a

28. *Id.* at 12.

29. *Id.*

30. *Id.* at 11.

31. *Id.* at 12.

32. *Id.* at 5.

33. Treatment of employees is one of the most politically divisive issues in international bankruptcy. *See* U.N. COMM'N ON INT'L TRADE LAW, LEGISLATIVE GUIDE ON INSOLVENCY LAW, at 131, U.N. Sales No. E.05.V.10 (2005) ("[T]he relationship between employee and employer raises some of the most difficult questions in insolvency law.").

34. MODEL LAW, *supra* note 13, at 5 ("Nothing in this Law prevents the court from refusing to take an action governed by this Law if the action would be manifestly contrary to the public policy of this State.").

35. *See, e.g.*, *In re* Creative Finance Ltd., 543 B.R. 498, 501 (Bankr. S.D.N.Y. 2016).

stay on collection activities would violate public policy; it is more likely that public policy concerns would arise as to the broader discretionary relief. For example, public policy exceptions have been found when the U.S. ancillary court was asked to turn over private email passwords, in contravention of the Electronics Communication Privacy Act.[36]

II. THE MODULAR MODEL LAW

Professor Westbrook has argued that institutional and procedural structure of the Model Law creates a cross-border system, and not merely a set of international standards.[37] To the extent courts have made mistakes implementing the Model Law, part of that stems from the failure to interpret it as a "system text."[38] This section examines the design structure of the Model Law system; arguing that the Model Law is best understood as modularizing the complex system of cross-border insolvency. First, this section describes the principles of modular design structures. Second, it then re-casts the Model Law's design structure as reflecting modularity principles. This re-casting will involve a more in-depth examination of the Model Law's text—in particular, the rules for determining when the ancillary court should grant automatic relief and the standards for determining when it should grant discretionary relief.

A. Modular Design

Modularity is a means for managing complex systems.[39] It is characterized by breaking down a system into semi-autonomous units that then interact through a set of defined protocols that limit the flow of information (or other interactions) among those units.[40] These units are semi-autonomous to the extent that there are few inter-connections among the units and to the extent those inter-connections restrict the flow of information among the units. This "information hiding" feature is critical: merely limiting the number of interactions among modules is not enough; rather, the interface protocols that govern the interaction of the modules must restrict the flow of information.[41]

36. *In re* Toft, 453 B.R. 186, 191 (Bankr. S.D.N.Y. 2011).
37. Westbrook, *supra* note 4.
38. *See id.*
39. Langlois, *supra* note 1.
40. Smith, *supra* note 2, at 1180.
41. *Id.* at 1177.

Modularity, in this way, can be understood as a "method of reducing dependence on context."[42] If a system is modularized, changes in one unit will have limited consequences on the system overall. In an integrated system, in contrast, a change in one unit can cause the whole system to stop. Modularity has been fundamental to designing everything from computer systems to merger-and-acquisition transactions. But at this point, an oversimplified example may be helpful for laying out this basic idea. Consider the two general formats for television series. Some shows, like *Game of Thrones*, are serial programs, meaning that events in one episode will be connected to events in later episodes.[43] You have to watch the whole series to really follow the story. On the other hand, procedural shows, like *Law & Order*, are composed of relatively self-contained episodes. A viewer can watch these episodes in random order and suffer no plot confusion.[44] Because of this limited flow of information across episodes, procedural television series can be considered modular in character. What happens in episode 1 is self-contained, with little-to-no information flowing into episode 2. Thus, *Law & Order* is more modular that *Game of Thrones*. And because modularity is a matter of degree, there are examples of shows that fall in the middle, that is, that have some information flow across episodes but not enough to require serial viewing. *Hill Street Blues* may be an example of that—a show which pushed the serialized style into a procedural format, with unprecedented success.[45]

Continuing with this example, we can see the pros and cons of modularity. Modularity is helpful for the casual viewer, who can drop in on episodes at random and not have to keep track of past plotlines and character developments. It is also helpful for the show's producers. Not only does the standalone nature of such episodes make them more marketable in syndication, but it also allows for greater experimentation. For example, fans

42. *Id.* at 1207.

43. Brad Adgate, *Serialized TV Is All the Rage this Fall*, FORBES (May 16, 2014, 9:03 AM), https://www.forbes.com/sites/bradadgate/2014/05/16/serialized-tv-is-all-the-rage-this-fall [https://perma.cc/L83X-PHX6].

44. To be sure, even in procedural television series, there may be character development, inside jokes, or other connections to be drawn between episodes. Modularity, as discussed below, is not absolute, but may be a matter of degree. The more interconnections between episodes, the less modular the series.

45. Hat tip to Jay Westbrook for offering the example of *Hill Street Blues* as a semi-modular structure, a show that has been called "the most influential TV show ever." Todd Leopold, *'Hill Street Blues': The Most Influential TV Show Ever*, CNN (May 1, 2014, 4:56 PM), http://www.cnn.com/2014/04/29/showbiz/tv/hill-street-blues-oral-history/index.html [https://perma.cc/87JV-VK5G]. *The Good Wife* has been described as having serialized and procedural elements: a viewer can "drop in" on any episode and follow along but will likely miss the nuances that a dedicated viewer would catch. Heather Mason, *Breaking Down the Differences Between Procedural and Serialized Shows*, GEEK & SUNDRY (June 10, 2015), http://geekandsundry.com/procedural-versus-serialized-television/ [https://perma.cc/GG46-BDS8].

of the proceduralized comedy *Seinfeld* will recall "The Chinese Restaurant" episode that centered solely on the characters waiting to get a table.[46] This episode was considered quite avant-garde at the time—almost too much so, as NBC resisted even airing it.[47] The proceduralized nature of the show, though, lowered the risks for a major network to experiment in this way—it could then (and did) return back to its more standard format for the next episode. The producers could also experiment with secondary characters (often celebrity guests) who could appear in one episode, never to appear or be discussed again.

On the other hand, procedural television shows are less able to develop long plot lines and characters. The most popular television shows in recent years have eschewed the proceduralized format in favor of serialized formats precisely for this reason. The modern "golden age of television" has delved into long story arcs, tackling major social issues such as criminal justice (think *The Wire*) and plot twists.[48] The arc of these stories simply could not fit into self-contained episodes.

The pros and cons of modularity, as explained through television show formats, hold true in a variety of contexts: modularity reduces the costs of innovation and assembly, but it may come at a cost of overall quality. We have observed this tradeoff in understanding behavioral psychology, in manufacturing and engineering, and even in private legal ordering. For example, Herbert Simon has described how our tendency to make life decisions in isolation, rather than seeing how these decisions may be interconnected, is an important and essential tool for allowing us to simplify decisions in a way commensurate with our cognitive limitations.[49] That is, by (wrongly) breaking down big decisions into self-contained, isolated

46. *Seinfeld: The Chinese Restaurant* (Shapiro/West Productions May 23, 1991).

47. *See* Lindsay Kimble, *NBC Hated 'The Chinese Restaurant' and Other Facts and Easter Eggs About the* 'Seinfeld' *Classic*, UPROXX (Sept. 17, 2015), http://uproxx.com/hidden/seinfeld-the-chinese-restaurant-fun-facts [https://perma.cc/TGY7-CKQJ] (quoting Michael Richards, who played Kramer and did not appear in this episode, as saying, "'The Chinese Restaurant' episode was so unique that I just wanted to be a part of that uniqueness because it was cutting edge. I knew that was a very important episode."); Larry Fitzmaurice, *All 169* Seinfeld *Episodes Ranked from Worst to Best: Saying a Lot About the Show About Nothing*, VULTURE (June 24, 2015, 12:14 PM), http://www.vulture.com/2015/06/every-seinfeld-episode-ranked.html [https://perma.cc/W24H-CSU6] (describing the episode "as groundbreaking as Seinfeld gets").

48. *See* Thomas Doherty, *Storied TV: Cable Is the New Novel*, CHRON. HIGHER EDUC. (Sept. 17, 2012), http://www.chronicle.com/article/Cable-Is-the-New-Novel/134420 [https://perma.cc/M9WY-RR6M].

49. HERBERT A. SIMON, REASON IN HUMAN AFFAIRS 17–23 (1983) (discussing bounded rationality as a feature for handling complexity). Even though many of our life decisions are interconnected, we don't see them that way. Rather, we tend to see them in isolation. He acknowledges that bounded rationality often means our decisions are suboptimal and perhaps inconsistent but extols this all the same.

decisions, we may sacrifice subjective expected utility; however, it is the only way that we can "get along in a world that is much too complicated to be understood from the Olympian viewpoint of [Subjective Expected Utility] theory."[50]

We have examined this tradeoff in manufacturing as well. The development of computer systems provides a good illustration. A computer, of course, is a complex system with many components that all work together to permit the system to operate: memory units, processors, input ports, output ports, and other components.[51] When computers were first marketed to consumers, these components were all highly dependent on one another. A technological advance in processors, for example, would require modifying the other components as well.[52] Consumers could not upgrade any one part without upgrading the whole.[53] Now, of course, consumers can buy new memory separately for their computer, for example, without having to buy new a new processor. The components still work together as a whole, but the components are designed to be relatively independent from the others. The interaction between one component and another is highly standardized, such that parts can easily be swapped out without requiring a system overhaul. This modularization was a major step forward in computer industry.[54] At the same time, modularity means more parts and more interaction between those parts. The more moving parts, the more opportunity for things to go wrong. An integrated system might have fewer glitches and be able to work more efficiently.[55]

These dynamics have also been explored in the way parties may structure their legal relationships. For example, Henry Smith has used modularity to explain the role of contract boilerplate.[56] Contracts are generally viewed as information-intensive, privately-negotiated agreements between the parties.[57] If a single provision in a contract were removed, that

50. *Id.* at 23.

51. Carliss Y. Baldwin & Kim B. Clark, *Managing in an Age of Modularity*, HARV. BUS. REV., Sept.–Oct. 1997, at 84.

52. *Id.*

53. *Id.*

54. *Id.*

55. D.P. Siewiorek & M.R. Barbacci, *Some Observations on Modular Design Technology and the Use of Microprogramming*, *in* MICROPROGRAMMING AND SYSTEMS ARCHITECTURE 509 (Infotech Info., State of the Art Report No. 23, 1975) ("A design using module sets tends to be slower and costlier in terms of hardware than a comparable system designed with [integrated] components.").

56. Smith, *supra* note 2.

57. K & D Holdings, LLC v. Equitrans, L.P., 812 F.3d 333, 339 (4th Cir. 2015) ("A severable contract is one that is 'susceptible of division and apportionment,' while a contract that is not severable has material provisions and consideration that 'are common each to the other and interdependent.' (quoting Dixie Appliance Co. v. Bourne, 77 S.E.2d 879, 881 (W. Va. 1953)); 15 RICHARD A. LORD,

would affect the whole contract. Hence, the common law presumption that contracts are not severable—if a single part of the contract is found unenforceable, the contract as a whole is presumed unenforceable.[58] Boilerplate provisions, in contrast, are transferable from one contract to the next. They can be modified within a contract without systemic consequences, e.g., changing a choice of forum clause would not likely require restructuring other parts of the contract. It is precisely this interchangeability and adaptability that make boilerplate cheaper than customer-tailored contract provisions.[59]

Similarly, modularity also helps explain the role of asset partitioning in debtor-creditor relations.[60] A borrower can disaggregate firmwide risk by separating related assets into separate groups in order to lower the cost of capital. A firm with two different lines of business, theorized Henry Hansmann and Reinier Kraakman, might separate those two lines of business into two distinct legal entities.[61] They give the example of a firm with both an oil business and a hotel business. By separating the two businesses, creditors of the oil business do not need to worry about the hotel business (with which they are presumably less familiar), and vice versa. This will lower creditors' monitoring costs and, consequently, reduce the cost of capital.[62] While they do not use the language of modularity in their analysis, the concept is implicit. Asset partitioning allows for limiting information flow, making it unnecessary for oil creditor to worry about happenings in the hotel business.[63]

The key characteristic of modularity in each of these areas is that it reduces context dependency, but at the potential cost of creating more interfaces between subunits. Modularity is a matter of degree, and there may exist an ideal degree of modularity that limits context dependency without

WILLISTON ON CONTRACTS § 45:4 (4th ed. 1990 & Supp. 2016), Westlaw (database updated May 2017) ("There is a presumption against finding a contract divisible unless divisibility is expressly stated in the contract itself, or the intent of the parties to treat the contract as divisible is otherwise clearly manifested." (footnotes omitted)).

58. Smith, *supra* note 2, at 1191; *K & D Holdings, LLC*, 812 F.3d at 339; 15 LORD, *supra* note 57.

59. Smith, *supra* note 2, at 1191.

60. *Id.* at 1187 ("Even asset-partitioning can be viewed as an example of information-hiding and modularization: organizational law allows the information about the owner's dealings with his creditors to be irrelevant to the enterprise's contractual partners and sometimes makes information about the business's dealings irrelevant to the owner's creditors.").

61. Hansmann & Kraakman, *supra* note 12.

62. *Id.*

63. Anthony Casey argues that the oil creditor might *want* to know about some happenings in the hotel business and theorizes on the role of cross-entity liabilities and guarantees that would give the oil creditor the option of enforcing its interest in the oil assets based on a default in the hotel business. Casey, *supra* note 12, at 2693–94.

creating too many interactions or over-simplifying complex problems. Returning again to the television series analogy, it may be that a television series can be modular enough to attract casual viewers without being so modular as to limit long plot or character arcs.

B. Modularity in Cross-Border Insolvency

Modularity can provide a useful lens through which to examine cross-border insolvency regimes. At root, cross-border insolvency is a very complex choice of law problem: which country's bankruptcy law(s) should apply to the multinational debtor's worldwide estate? And because the resolution of this problem involves tribunals in multiple jurisdictions, this complex choice of law question involves multiple decision-makers. To assess the modularity of this multi-part framework requires focusing on the amount of information flow among these parts—the more information flow, the less modular, and vice versa.

First, as to the multipart structure, the structure of the Model Law at least looks like the sort of modularity structure we described in Figure 1. The components of the cross-border insolvency system are the court proceedings. While a television series is by its nature composed of multiple episodes, cross-border insolvency systems are composed of multiple components out of political necessity. There is no single international bankruptcy tribunal with worldwide jurisdiction over the multinational debtor's estate, thus making it necessary to open multiple bankruptcy proceedings in various jurisdictions to administer assets and bind creditors worldwide. Whether the Model Law's "episodes" are modular depends on the amount of information flow among those several proceedings. If internal developments within bankruptcy proceeding in jurisdiction *A* has consequences for the proceedings in *B* and *C*, then the Model Law is much more like a serial TV show than a procedural one. The key is to examine how information flows from one unit to the next.

As to the information flow, it is necessary to examine the set of interface protocols, governing not only the *quantity* of inter-court interactions but also the information-hiding *quality* of those interactions. To this end, we will turn back to the Model Law's two main interface protocols—Automatic Assistance and Discretionary Assistance.

This section argues that these two sets of protocols—the protocol for Automatic Assistance and that for Discretionary Assistance—can be understood as serving an information-hiding function, that is, to reflect a degree of modularity. The information-hiding is not constant across these protocols. When dealing with Automatic Assistance, the protocols hide a

great deal of information; less so with Discretionary Assistance. Modularity, as described above, is a matter of degree—and that degree provides both explanatory and prescriptive guidance for the application of the Model Law.

1. Automatic Assistance

This section argues that the Model Law's rules governing Automatic Assistance are highly modular, i.e., they greatly reduce the outcome's dependency upon context by hiding information from the ancillary courts. Although not articulated in this way, the language of the Model Law, its Guide to Enactment, and U.S. court cases interpreting chapter 15 all reflect this "information-hiding" function of the Automatic Assistance protocols.

As discussed above, an ancillary court is to grant automatic relief to the foreign representative if the court finds that the foreign proceeding is a foreign main proceeding, among other requirements. Most important in this suite of relief is the automatic stay, which provides perhaps the strongest tool to facilitate centralized administration of the debtor's estate.[64]

While the basic requirements for Automatic Assistance may appear to invite a factually intensive inquiry, the Model Law has several provisions that restrict the flow of information here through two strategies: broad definitions and statutory presumptions. Definition-wise, the Model Law defines "foreign proceeding" and "foreign representative" broadly. These broad definitions make it much harder for parties to raise arguments that a foreign bankruptcy proceeding is ineligible for relief because its insolvency proceedings are extra-judicial or ex parte, problems that has arisen under the pre-Model Law case law.[65] As explained in the UNCITRAL Guide to Enactment and Interpretation, this definition was drafted "to refer broadly to proceedings involving debtors that are in severe financial distress or insolvent."[66] The drafters' concern was that different legal systems use different terminology, and they wanted to make sure that these differences did not cause courts to determine that a proceeding was a "foreign proceeding" because it, for example, failed to use the word "bankruptcy" or "insolvency."[67]

64. MODEL LAW, *supra* note 13, at 10–11; *see id.* at 83.

65. *See* Charles D. Booth, *Recognition of Foreign Bankruptcies: An Analysis and Critique of the Inconsistent Approaches of United States Courts*, 66 AM. BANKR. L.J. 135, 203 (1992) (discussing Interpool, Ltd. v. Certain Freight of the M/VS Venture Star, 878 F.2d 111, 112 (3d Cir. 1989), in which the court determined that Australian proceeding did not merit comity under section 304 because its insolvency proceedings were "essentially *ex parte*"). Challenges were likewise raised (unsuccessfully) on this ground under chapter 15 in *In re* ABC Learning Ctrs. Ltd., 445 B.R. 318, 328 (Bankr. D. Del. 2010), *aff'd*, 728 F.3d 301 (3d Cir. 2013).

66. MODEL LAW, *supra* note 13, at 38–39.

67. *Id.* at 38.

Similarly, the drafters defined "foreign representative" broadly so as to include debtors-in-possession, a party authorized by the court, or a party appointed by a special agency.[68] Again, the broad definition makes it harder to raise information-intensive litigation over whether a foreign representative qualifies for relief. In other words, the broad definitions provide little need for the ancillary court to peer inside the foreign proceeding.[69]

In addition to broad definitions, the Model Law uses statutory presumptions to limit the flow of information at the Additional Assistance interface. Article 16 of the Model Law creates presumptions that the foreign proceeding and foreign representative requirements are met; that documents submitted by the foreign representative are authentic; and, most importantly, that the debtor's center of main interests (COMI) is where it has its registered office.[70]

This last presumption concerning the debtor's COMI is of fundamental importance to the Automatic Assistance protocols, since the court must find not only that the foreign representative was duly authorized by a foreign proceeding but also that the foreign proceeding is occurring where the debtor has its center of main interests—a term that is otherwise undefined in the Model Law. The vagueness of this COMI determination has been the primary source of criticism about the Model Law (and one of the principal topics addressed in this literature).[71] In the face of this vagueness, the Model Law's rebuttable presumption that a debtor's COMI is where it has its registered office greatly limits the information flow in the Automatic Assistance protocol.

While there is certainly potential for the COMI standard to be interpreted in an information-intensive way, this has not been the trend in the U.S. case law. Consider the case of *In re Creative Finance Ltd.* as an example

68. *Id.* at 46.

69. There have been challenges raised as to whether parties qualify as foreign representatives, but these have been unsuccessful. *See* Ad Hoc Grp. of Vitro Noteholders v. Vitro S.A.B. de C.V. (*In re* Vitro S.A.B. de C.V.), 701 F.3d 1031, 1046 (5th Cir. 2012); *In re* OAS S.A., 533 B.R. 83, 93 (Bankr. S.D.N.Y. 2015) (holding that "authorization" does not require judicial or statutory but could be satisfied by showing that the corporation (or debtor in possession) had authorized the foreign representative).

70. MODEL LAW, *supra* note 13, at 8.

71. *See e.g.*, Jay Lawrence Westbrook, *Locating the Eye of the Financial Storm*, 32 BROOK. J. INT'L L. 1019 (2007); Lynn M. LoPucki, *Universalism Unravels*, 79 AM. BANKR. L.J. 143 (2005); John A.E. Pottow, *The Myth (and Realities) of Forum Shopping in Transnational Insolvency*, 32 BROOK. J. INT'L L. 785 (2007); Andrew B. Dawson, *Offshore Bankruptcies*, 88 NEB. L. REV. 317 (2009); Kyu Paek, *COMI of Offshore Funds, Revisited*, AM. BANKR. INST. J., Feb. 2017, at 30; Alexandra CC Ragan, Comment, *COMI Strikes a Discordant Note: Why U.S. Courts Are Not in Complete Harmony Despite Chapter 15 Directives*, 27 EMORY BANKR. DEV. J. 117, 117 (2010); Oscar N. Pinkas & James A. Copeland, *In Re* Creative Finance*: Not So Creative on COMIs*, AM. BANKR. INST. J., July 2016, at 30, 30.

of courts' commitment to the information-hiding function of the Automatic Assistance protocol. The case involved two British Virgin Islands (BVI)-incorporated funds that engaged in what the chapter 15 court described as "the most blatant effort to hinder, delay and defraud a creditor this Court has ever seen."[72] Prior to their liquation proceedings, the funds conducted most of their business in the United Kingdom and conducted most of their operations from Spain and Dubai. When the debtors were sued in the United Kingdom and a $5 million judgment was about to be entered, the principal moved all of the debtors' liquid assets to the BVI then placed the funds into insolvency proceedings there. When the BVI liquidator filed a chapter 15 petition in the United States, the bankruptcy court denied the petition *not* because of the multiple badges of fraud (which would require a fact-intensive analysis) but because no activity had taken place in the BVI. Without any activity in the BVI, there is no way it had its COMI there.[73] In so ruling, the court emphasized its objective analysis by noting that "[a]s offended as the Court is by the Debtors' conduct here," it was inappropriate to engage in more subjective factors, such as whether the case was filed in bad faith or whether it violated public policy.[74] Those issues, the court ruled, would be handled, if at all, in the protocols for discretionary relief.

In summary, the Automatic Assistance recognition protocol might appear to be information-intensive, but its broad definitions and statutory presumptions work to hide information from the ancillary proceeding. Applying this protocol, we have seen U.S. courts refuse to engage in more information-intensive analysis, leaving the factual analysis to the more open-textured Discretionary Assistance protocol.

2. Discretionary Assistance

The Discretionary Assistance interface protocol is more information-intensive than that for Automatic Assistance—and exactly how information-intensive has been a matter of considerable disagreement. Modularity, after all, is a relative concept. As shown in this part, the degree of modularity in the Discretionary Assistance interface depends in large part on the type of assistance sought and the nature of a foreign proceeding as main or nonmain.

Article 21 provides the type of discretionary relief available to a foreign representative upon recognition "where necessary to protect the assets of the debtor or the interests of the creditors."[75] Applying this provision under

72. *In re* Creative Finance Ltd., 543 B.R. 498, 502 (Bankr. S.D.N.Y. 2016).
73. *Id.*
74. *Id.* at 515.
75. MODEL LAW, *supra* note 13, at 11.

chapter 15, a U.S. bankruptcy court may, for example, extend the automatic stay to protect insiders or affiliates; freeze U.S.-based assets; provide for discovery powers; entrust U.S. assets for administration by the foreign court; or "grant[ ] additional relief that may be available to [a trustee]."[76]

Article 22 provides some limitations on that assistance, broadly, and article 21 provides some specific limitations. Article 22 requires that, before granting any Discretionary Assistance, "the court must be satisfied that the interests of the creditors and other interested persons, including the debtor, are adequately protected."[77] The United States changed this standard to "sufficiently protected" in order to prevent any confusion with the term "adequate protection" as defined elsewhere in the U.S. Bankruptcy Code. I will likewise use the term "sufficiently protected." Further, it allows the court to place conditions on any such relief and to modify or terminate such relief.[78]

The "sufficiently protected" standard is much more open-textured than the COMI standard: there is no definition of this standard nor any presumptions at all. Instead, the standard invites the ancillary court to explore the facts of the case, determining not only that the relief would protect local creditors but also whether it would protect the debtor. That is, it requires the ancillary court to look at the big picture of the multinational debtor's cross-border insolvency.

On top of the sufficiently protected standard, article 21 imposes additional requirements. First, before entrusting local assets to be distributed in the foreign proceeding, the court must be "satisfied that the interests of creditors in this State are adequately protected."[79] In other words, when deciding whether to send local assets to a foreign proceeding, the ancillary court must consider specifically the interests of the local creditors. The local ancillary court, thus, is specifically authorized (and required) to consider local creditors, even if the requested relief would benefit the world-wide administration of the debtor's estate.

Second, before granting any Discretionary Assistance to a foreign representative from a foreign *nonmain* proceeding, the court must engage in a deeper factual inquiry: (1) before entrusting assets to be administered abroad, the court must determine that, under local choice-of-law rules, the

76. *Id.*

77. *Id.* at 12. Note, the United States changed the standard to "sufficiently protected," as "adequate protection" is a term of art under the Bankruptcy Code. The intent, though, was to simply avoid confusion, not to depart from the Model Law. H.R. REP. NO. 109-31, pt. 1, at 115.

78. MODEL LAW, *supra* note 13, at 12.

79. *Id.* at 11.

local assets should be administered in that foreign nonmain proceeding; and (2) before granting discovery orders, the local court must be determined that the order would relate to information actually required in that foreign nonmain proceeding.[80]

As to the foreign nonmain proceedings, the Discretionary Assistance interface has a choice-of-law element to it. The Guide explains that this requirement seeks to ensure that foreign nonmain proceedings do not interfere with main ones.[81] Again, applying this requirement to a hypothetical application under chapter 15 of the Bankruptcy Code, it seems to assume a scenario in which a debtor has filed a foreign main proceeding in jurisdiction *A* and a nonmain proceeding in jurisdiction *B*. If the *B* representative seeks assistance from a U.S. bankruptcy court under chapter 15, that court should take care that any requested relief does not interfere with the foreign main proceeding in *A*.[82] The emphasis that the U.S. court should make this determination "under the law of [the United States]," the Guide explains, is meant to reflect the principle that "recognition of a foreign proceeding entails attaching to the foreign proceeding consequences envisaged by the law [of the United States]."[83] That is, when choosing whether it is appropriate to grant discretionary relief to a foreign nonmain proceeding, the chapter 15 court is to make that determination under U.S. choice-of-law rules.

The Discretionary Assistance interface, then, requires more factual determination than that for Automatic Assistance—and the amount of that factual determination varies mostly based on whether the ancillary court is being asked to assist with a foreign main or nonmain proceeding and based on the nature of the requested assistance. Foreign nonmain proceedings require a choice-of-law analysis, foreign main proceedings do not. General discretionary assistance requires courts to consider broadly the interests of all parties. When that discretionary assistance involves sending local assets to be administered abroad, the court is directed to consider specifically the interests of local creditors.

80. *Id.* at 12.

81. *Id.* at 88–89.

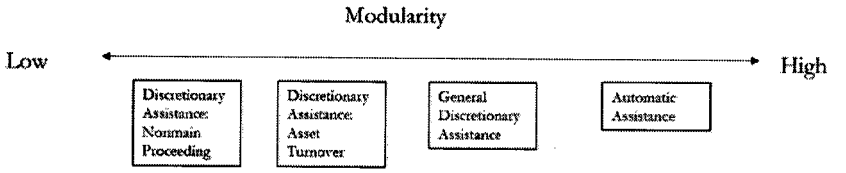
82. *Id.* ("The objective is to advise the court that relief in favour of a foreign non-main proceeding should not give unnecessarily broad powers to the foreign representative and that such relief should not interfere with the administration of another insolvency proceeding, in particular the main proceeding.").

83. *Id.* at 89.

C. Summary

Along a modularity spectrum, then, Automatic Assistance is the most modular, Discretionary Assistance as to foreign nonmain proceedings is the least modular, and Discretionary Assistance as to foreign main proceedings is in the middle. See Figure 2. If Automatic Assistance protocols are like *Law & Order*, and Discretionary Assistance for foreign nonmain proceedings are like *Game of Thrones*, then the Discretionary Assistance for foreign main proceedings is like *Hill Street Blues*—there is sufficient information flow across "episodes" to permit plot and character depth, but not so much as to require complete commitment to watching every episode.

Figure 2



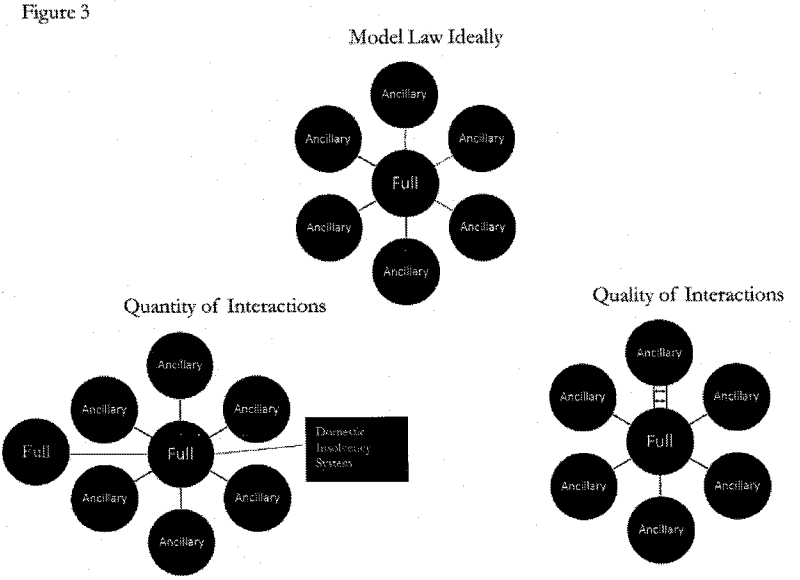
In other words, we see varying degrees of information hiding. That information hiding has pros and cons, just as modularization generally does. It permits experimentation and innovation with limited system-wide effects. For example, consider what happens when one country amends its own insolvency laws. Such an internal change does not undermine the predictability of the Automatic Assistance protocol: information about that change is hidden from the ancillary proceeding. The only cost to that is that it does not permit much nuance at this level; however, this is a low cost when it comes to Automatic Assistance, as that assistance is limited primarily to *staying* collection activities (and not distributing assets). Discretionary Assistance's less-modular protocol allows for the ancillary court to consider that import of the country's new insolvency laws. It might drive the ancillary court to be more willing to entrust assets abroad, for instance. But that level of information intensity also increases the costs of administering the system.

III. WEAKNESSES IN MODULAR STRUCTURE

Principles of modularity can help explain the way the Model Law is structured, and they can also help us think systematically about the challenges that have arisen when implementing the Model Law. The Model Law was designed to limit both the number of interactions among courts and the information-intensity of those interactions. Many of the Model Law's

problems can be understood as its inability to limit the number and quality of those interactions, i.e., the implementation problems can be understood as the Model Law's imperfect modularization. This part will consider these two types of problems: quantity of interactions and quality of interactions, which can be represented in the following diagram depicting the modular ideal of the Model Law above the two types of modularity imperfections.

Figure 3



A. Quantity of Interactions

Whereas the Model Law envisions limiting interactions only to those between the ancillary and the full foreign bankruptcy proceeding, this is not always possible when the Model Law is plugged into local insolvency systems or when the foreign debtor is a corporate group. In these situations, there may be interactions between systems—that is, between the Model Law's cross-border insolvency system and the local court's broader insolvency system—as well as between potentially overlapping insolvencies within the corporate group. Each of these problems will be discussed in turn.

1. Inter-System Interactions

Although the Model Law deals with interactions between the ancillary and foreign proceedings, the Model Law itself may interact with other legal systems. For example, the cross-border insolvency system may intersect with the international arbitration system if the debtor were subject to arbitration

agreements.[84] The Model Law system may also interact in unexpected ways with the local bankruptcy system. When this happens, there are more interactions that the Model Law envisions, and the result is that the system is less modularized.

Adrian Walters's contribution to this issue, in some ways, examines this imperfect modularization, as the Model Law requires local judges to also put on a global hat. This issue also draws on the broader issues of legal transplantation: statutory uniformity among the nations that have adopted the Model Law does not translate into uniformity in practice.[85] That is, differences in methods of statutory interpretation and in styles of case management may lead courts to implement the same text in very different ways. This may happen alongside concerns for local interests or entirely independently.

For this section, I offer an example that is perhaps more mundane (and is likely less consequential) but that highlights well the interaction between the Model Law and the local bankruptcy law. *Drawbridge Special Opportunities Fund LP v. Barnet* (*In re Barnet*) illustrates the difficulty of integrating the Model Law with the local bankruptcy law, in this case, the United States Bankruptcy Code.[86] The case seemed like an easy one, at least as applied to the Automatic Assistance protocol: the debtor was an Australian firm that was liquidating in Australia and filed a chapter 15 petition in the United States. There was no dispute as to the debtor's COMI. Yet, the Court of Appeals for the Second Circuit held that the petition for relief must be rejected because the debtor did not satisfy the Bankruptcy Code eligibility rules.

Those eligibility rules govern who may be a debtor under the U.S. Bankruptcy Code. Section 109(a) limits eligibility to "a person that resides or has a domicile, a place of business, or property in the United States, or a municipality."[87] Here, the Australian-based debtor had no known assets in the United States. It had filed the chapter 15 petition in order to gain discovery assistance in an effort to track down company assets. Because it

84. Jay Lawrence Westbrook, *International Arbitration and Multinational Insolvency*, 29 PENN ST. INT'L L. REV. 635, 638 (2011).

85. For a broader discussion highlighting the importance of legal culture in comparative law, see Caroline Bradley, *Transatlantic Misunderstandings: Corporate Law and Societies*, 53 U. MIAMI L. REV. 269, 273 (1999) ("These are problems of translation, problems of understanding the institutional context in which the rules of corporate law operate, and problems of understanding the cultural context within which rules of corporate law apply."). For a narrower discussion on the importance of legal methods, see Dawson, *supra* note 6, and Walters, *supra* note 6.

86. Drawbridge Special Opportunities Fund LP v. Barnet (*In re* Barnet), 737 F.3d 238 (2d Cir. 2013).

87. 11 U.S.C. § 109(a) (2012).

had no assets, the court concluded that, under a plain meaning interpretation of section 109(a), the petition had to be denied.[88] The court found this to be so even though section 109(a) deals with who may be a "debtor," and the foreign representatives in a chapter 15 case are not "debtors." That is, the court did not recognize that chapter 15 is different—it is not an in rem proceeding, unlike proceedings under other chapters of the Bankruptcy Code.[89]

The result is decidedly contrary to the Model Law's aims and principles, yet the court found it to be the direct result of a plain reading of the Bankruptcy Code. This case has been heavily criticized.[90] The decision is also of little importance as debtors have very easily side-stepped this requirement.[91] But for our purposes, it provides a relatively simple illustration of the Model Law's imperfect modularization: despite the efforts to limit interactions between the ancillary and foreign bankruptcy proceeding, ancillary courts must still interact with their own local insolvency systems.

2. Intra-Debtor Connections

The Model Law not only fails to account for the inter-system interactions that occur, as the ancillary court must apply the Model Law within its domestic insolvency law framework, but it also fails to address the interactions when the debtor consists of a group of related corporate entities. The Model Law's "center of main interests" test assumes that there is just one main proceeding, leaving open the question of how to handle the insolvency of a multinational debtor group.[92] The multinational debtor group may consist of entities incorporated in multiple jurisdictions, such that each entity may arguable have its own center of main interests. Should the corporate group itself be deemed to have a single center of main interests (if for procedural consolidation only, not substantive consolidation of the entities)?

Consider the insolvency of the Brazilian telecommunications giant Oi SA, which filed bankruptcy in Brazil in 2016. Oi SA is the parent company

88. *Barnet*, 737 F.3d at 247.

89. *See In re* Bemarmara Consulting a.s., No. 13-13037-KG (Bankr. D. Del. Dec. 17, 2013).

90. *See* Dawson, *supra* note 6.

91. For example, the Australian liquidators subsequently filed a second chapter 15 petition, this time in the form of an undrawn retainer with local counsel and in the form of a U.S. legal claims. *In re* Octaviar Admin. Pty Ltd., No. 14-10438 (SCC) (Bankr. S.D.N.Y. June 19, 2014).

92. *See* Irit Mevorach, *Cross-Border Insolvency of Enterprise Groups: The Choice of Law Challenge*, 9 BROOK. J. CORP. FIN. & COM. L. 107 (2014); Leif M. Clark, *Managing Distribution to Claimants in Cross-Border Enterprise Group Insolvency*, 9 BROOK. J. CORP. FIN. & COM. L. 20 (2014).

of a large conglomerate which included a Netherlands-incorporate financing entity Oi Brasil Holdings Coöperatief U.A. ("Coop").[93] After Oi SA, Coop, and several related entities commenced insolvency proceedings in Brazil, the foreign representative sought chapter 15 assistance in the United States on behalf of Coop and three other Oi entities. The court recognized the Brazilian proceeding as a foreign main proceeding.

Around that same time, creditors of Coop (led by the distressed debt hedge fund Aurelius Capital) commenced an involuntary insolvency proceeding against Coop in the Netherlands. Following the U.S. recognition order, Aurelius led an effort to have the Dutch case converted from a reorganization-type proceeding to a liquidation, resulting in the appointment of a trustee. The trustee then filed a chapter 15 petition in the United States requesting that the *Dutch proceeding* now be recognized as the foreign main proceeding. Thus, Coop was subject to arguably two foreign main proceedings: that of the parent in Brazil and the Dutch proceeding.

Ultimately, the U.S. chapter 15 court refused to recognize the Dutch proceedings both because Coop was simply a financing arm of the parent company (and thus creditor expectations of COMI determination would point to Brazil) and because Aurelius's COMI-manipulation strategy was improper.[94] Putting aside the (presumably) sui generis aspect of Aurelius's behavior, the case is a helpful one for highlighting the challenges of corporate group insolvencies. As Irit Mevorach has noted, the Model Law's choice-of-forum rules may be well-suited for handling cases such as Oi, in which there was a clear center of main interests for the corporate group; however, if we change the facts just a little bit, the analysis becomes much more complicated.[95] As Mevorach argues, centralizing a corporate group insolvency is easier to justify in the case of integrated groups that are controlled and managed centrally.[96] In contrast, full insolvency centralization is harder to justify for groups that are decentralized, i.e., "the group entities—all or some of them—are managed independently, with significant autonomy in their respective jurisdictions, and are more loosely controlled from a group headquarter."[97] If Coop, for example, had actually conducted business in the Netherlands and been something more than just a

93. The facts in this section are drawn from the Post-Trial Memorandum of Decision in the chapter 15 case of *In re* Oi Brasil Holdings Coöperatief U.A., 578 B.R. 169 (Bankr. S.D.N.Y. 2017).

94. *Id.* at 221–22.

95. Mevorach, *supra* note 92, at 116–17.

96. *Id.* at 117–19.

97. *Id.* at 119.

special purpose financing vehicle for the Oi corporate group, the COMI analysis would be much more difficult.

B. Intensity of Interactions

The Model Law not only seeks to limit the number of inter-court interactions, it also seeks to limit the intensity of those interactions. And, as discussed above, the degree of information-hiding varies according to the interface protocols (Automatic Assistance versus Discretionary Assistance) and according to the type of relief sought within the Discretionary Assistance protocol. Empirically, from the U.S. experience with chapter 15, we have seen that ancillary courts have been acted consistently with the Automatic Assistance protocol's information-hiding directive; however, there has been considerable disagreement about the appropriate amount of information-hiding within the Discretionary Assistance protocol.[98] As reported in Jeremy Leong's empirical study of chapter 15 cases, courts have been reluctant to entrust U.S. assets to foreign bankruptcy proceedings—and when they do so, they almost always do so with qualifications to protect U.S. creditors.[99]

In other words, while the Model Law appears successful at limiting the intensity of interactions among courts when dealing with requests for Automatic Assistance, it has been less successful at limiting information flow with requests for Discretionary Assistance. As described by former bankruptcy judge Allan Gropper, the "sufficiently protected" standard in the Discretionary Assistance protocol seems to invite a choice-of-law analysis; however, most courts rarely acknowledge that they are either explicitly or implicitly making a choice-of-law decision.[100] Thus, we have some courts engaging in a fact-intensive choice-of-law analysis and other courts simply assuming a choice-of-law decision. The result is a discrepancy in the amount of information the ancillary court should consider, i.e., in the degree of information-hiding directed by the Discretionary Assistance protocol.

Consider here a recent example from the Second Circuit, in which the court applied the Model Law to reach a result that is inconsistent with the information-hiding features of the Discretionary Assistance protocol. The result is that the court engaged in a more information-intensive analysis as to a foreign main proceeding than it would have if it had dealt instead with a

98. Jeremy Leong, *Is Chapter 15 Universalist or Territorialist? Empirical Evidence from United States Bankruptcy Court Cases*, 29 WIS. INT'L L.J. 110, 115 (2011); *see also* Dawson, *supra* note 71.

99. Leong, *supra* note 98, at 116.

100. *See generally* Allan L. Gropper, *The Curious Disappearance of Choice of Law as an Issue in Chapter 15 Cases*, 9 BROOK. J. CORP. FIN. & COM. L. 57 (2014).

foreign *nonmain* proceeding—a result that runs counter to the spectrum of modularity posited in Part II.

In re Fairfield Sentry involved a sale of the assets of a British Virgin Islands investment fund.[101] When the foreign representative of the BVI liquidation sought to approve the sale in the United States, the question arose whether the chapter 15 court had to conduct a de novo review of the BVI sale or simply to rubber-stamp the sale. The controversy in the case was based on the asset being sold: the investment fund had claims against Bernard L. Madoff Investment Securities LLC. The foreign liquidator sold the claims in the BVI for about a third of their face value.[102] A mere three days after the sale, the claim purchaser received a huge windfall: the Madoff Fund Trustee recovered a massive settlement agreement for $7.2 billion, resulting in an immediate gain of $40 million for the claim purchaser.[103]

The foreign representative of the BVI liquidator wanted the chapter 15 court to conduct a de novo review of the BVI sale, hoping that the court would conclude that the sale price was inadequate and throw out the sale. The purchaser, on the other hand, argued that the chapter 15 court's role was simply to review the BVI sale for procedural fairness.

Ultimately, the Second Circuit ruled that a de novo hearing was required under chapter 15.[104] In doing so, the court relied on section 1520(a)(2):

> Upon recognition of a foreign proceeding that is a foreign main proceeding—
>
> . . . .
>
> (2) sections 363, 549, and 552 apply to a transfer of an interest of the debtor in property that is within the territorial jurisdiction of the United States to the same extent that the section would apply to property of an estate.[105]

The question was whether this provision statutorily requires a de novo sale hearing in the chapter 15 case under section 363 of the Bankruptcy Code. On rehearing, the Second Circuit found that the plain meaning of the statute requires a section 363 hearing.[106] It rejected the purchaser's argument that

101. *In re* Fairfield Sentry Ltd., 768 F.3d 239, 241 (2d Cir. 2014).

102. *Id.* at 242.

103. *Id.*

104. *Id.* at 243.

105. 11 U.S.C. § 1520(a)(2) (2012).

106. Farnum Place, LLC v. Krys (*In re* Fairfield Sentry Ltd.), 690 F. App'x 761, 767 (2d Cir. 2017), *cert. denied*, 138 S. Ct. 285 (2017) ("The plain language of the statute thus seems to require that, pursuant to § 363 and our precedent, any sale of debtor property outside of the ordinary course of business can be approved by the bankruptcy court only after notice, hearing, and a finding of good business reasons to permit the sale.").

section 1520(a)(2) no longer applied once the chapter 15 had entrusted the Madoff claims to be administered in the BVI. That is, the BVI foreign representative had already asked the court to entrust the Madoff claims to be sold in the BVI, which the court approved under section 1521(a)(5), which authorizes the chapter 15 court to entrust U.S.-based assets to a foreign administrator only if "the court is satisfied that the interests of creditors in the United States are sufficiently protected."[107] Because the assets had been entrusted, the court had already disposed of the U.S. assets and thus section 1520(a)(2) was no longer applicable.

In doing so, the court ended up with a rather strange result, when viewed in the broader context: the court would have deferred more to the BVI proceeding if it had been a foreign *nonmain* proceeding instead of a foreign *main* proceeding. Only foreign main proceedings received the automatic protection of section 1520. Thus, if the BVI had been a foreign nonmain proceeding, the entrustment order would have been the final word. The standard for entrustment may have been higher—section 1521(c) imposes an additional layer of scrutiny on entrustment orders to foreign nonmain proceedings—but it would have been final. This is exactly the opposite of how the Model Law generally treats foreign main versus nonmain proceedings: deference is more appropriate (and relief more generally available) to foreign *main* proceedings because the COMI jurisdiction has a stronger interest in the case. Yet, because the court interacted unpredictably with the Model Law's connection to the U.S. Bankruptcy Code provision regarding asset sales, we ended up with a result at odds with the Model Law's information-hiding protocols.

C. Summary

These are all examples of implementation problems from the U.S. experience with the Model Law, but there are certainly examples one could find from the experience of other courts (again, Adrian Walters's piece on the controversial U.K. case *Rubin v. Eurofinance SA*[108] is extremely important). The examples cited here have been described as reflecting the problems of local interests and of local methods; however, as discussed here, they can be helpfully framed as problems of imperfect modularity.

107. 11 U.S.C. § 1521(a)(5) & (b).
108. [2012] UKSC 46, [2013] 1 AC 236 (appeal taken from Eng.).

IV. IMPLICATIONS

In this final part of the paper, I end with a brief example of how modularization can provide guidance on how to apply the Model Law. In particular, insights from the modular structure of the Model Law help to situate choice-of-law decisions. That is, we can see that even though the Model Law largely (and deliberately[109]) elides controversial choice-of-law questions, it indicates *who* should be making those difficult decisions.

Choice of law is an information-intensive exercise, one that is not only fact-intensive, but also policy-rich. The choice of insolvency law may reflect deep social and economic policy issues, with ramifications for corporate governance and labor relations, for example.[110] The Model Law, accordingly, avoids dealing with this "prickly" issue, as noted by commentators and reflected in its Guide to Enactment.[111] Some have argued that choice-of-law rules are inherently baked into the Model Law, though. For instance, once a foreign bankruptcy proceeding is recognized as a "foreign main proceeding," that court will presumably apply its own substantive bankruptcy law, including those of creditor priority and distribution. As Ted Janger notes, though, this is not necessarily the case, as choice-of-forum rules and choice-of-law are more independent than these critics have asserted.[112] While local courts may be predisposed to applying their own substantive bankruptcy law, this is not foreordained.

More problematically, I believe, is the sort of hidden choice-of-law decisions that courts must make when applying the Discretionary Assistance protocols. As identified and discussed by retired bankruptcy judge Allan Gropper, courts deciding whether the interests of local creditors are

109. Pottow, *supra* note 14, at 954.

110. John J. Chung, *The Retrogressive Flaw of Chapter 15 of the Bankruptcy Code: A Lesson from Maritime Law*, 17 DUKE J. COMP. & INT'L L. 253, 269–70 (2007) ("Bankruptcy law embodies and reflects each society's particular choices concerning its attitudes toward money, debt, the relationship between those with property and those without, employers and labor, and so on. In other words, bankruptcy law reflects and embodies deep social issues that define the structure and aspirations of a society." (footnote omitted)); Nathalie Martin, *The Role of History and Culture in Developing Bankruptcy and Insolvency Systems: The Perils of Legal Transplantation*, 28 B.C. INT'L & COMP. L. REV. 1, 5 (2005) ("New insolvency systems must instead reflect how individual nations have experienced the growth of market economies, and how, philosophically, countries have viewed debt. Bankruptcy systems are social tools.").

111. Pottow, *supra* note 14, at 941 (describing bankruptcy's rules of priority and distribution as "'prickly' because they are highly normative and driven by domestic policy"); Edward J. Janger, *Universal Proceduralism*, 32 BROOK. J. INT'L L. 819, 832 (2007) (noting that the Model Law addresses only the choice of forum, leaving aside rules regarding choice of law and substantive entitlements); MODEL LAW, *supra* note 13, at 25 (describing the scope of the Model Law as "limited to some procedural aspects of cross-border insolvency cases").

112. Janger, *supra* note 111, at 832–33.

"sufficiently protected" must make a choice-of-law determination, even if they often do so only implicitly.

Consider here the example of a well-known chapter 15 case that can highlight this issue. *In re Qimonda AG* involved a German manufacturer of semiconductor memory devices that filed for bankruptcy in Germany in 2009 and then opened ancillary proceedings in the United States.[113] As part of its chapter 15 filing, it sought relief under the Discretionary Relief protocol, asking the court to entrust the company's U.S. patents to be administered in the German main proceeding. The controversy in the case focused on the impact this might have on the patent licensees: Under U.S. bankruptcy law, it is not possible to terminate the rights of licensees; under German law, this was an unsettled matter. Accordingly, U.S. patent licensees objected to the entrustment order.

The Discretionary Relief protocol authorized the U.S. ancillary court to entrust the assets to the German liquidation proceeding "only if the interests of the creditors and other interested entities, including the debtor, are sufficiently protected."[114] The bankruptcy court initially granted the order, finding that the interests of the estate would be best served by having the worldwide patent portfolio centrally administered; furthermore, to the extent the licensees feared they would be treated less favorably under German insolvency law than under the U.S. Bankruptcy Code, the court said that this was a matter to be litigated in the German insolvency proceeding.[115]

The District Court reversed and remanded, finding that the bankruptcy court had failed to adequately consider the interests of the U.S. patent licensees and to determine whether the requested relief would violate fundamental U.S. public policy.[116] Ultimately, the bankruptcy court reversed course, finding that the interests of the licensees outweighed the harm to the estate and that terminating licensee rights would violate public policy—which the Fourth Circuit affirmed on the balancing interests prong (without reaching the public policy prong).[117]

For purposes of this section, *Qimonda* is a good illustration of the problems of information flow. There is considerable disagreement about whether the court got this right—the outcome was decidedly territorialist in

113. Jaffe v. Samsung Elecs. Co., Ltd., 737 F.3d 14, 17 (4th Cir. 2013).

114. 11 U.S.C. § 1522(a) (2012).

115. *In re* Qimonda AG, No. 09-14766-RGM, 2009 WL 4060083, at *2 (Bankr. E.D. Va. Nov. 19, 2009) ("The legal theory arises under German law and is best resolved by German courts. It should not be complicated by superimposing [U.S. Bankruptcy Code] § 365 on the analysis."), *aff'd in part, remanded in part sub nom. In re* Qimonda AG Bankr. Litig., 433 B.R. 547 (E.D. Va. 2010).

116. *In re* Qimonda AG Bankr. Litig., 433 B.R. at 571.

117. *Jaffe*, 737 F.3d at 17.

nature, but then again the Model Law specifically requires a certain degree of territorialism.[118] While this disagreement has focused on this territorialism-universalism issue, it can helpfully be re-framed as a disagreement about the appropriate amount of information intensity, which in turn has important implications for which court should make the choice-of-law decision. The first bankruptcy court ruling limited the information flow considerably, thus shifting the choice-of-law decision to the German court: we have a German debtor seeking to apply German insolvency law in a way that has obvious benefits to the cross-border estate and uncertain costs to local creditors, and creditors should handle that in Germany. On remand, we see the court seizing the choice-of-law decision for itself, assuming (a) that U.S. bankruptcy law would apply to the U.S. patent licenses and (b) that German law would result in the termination of licensing agreements. We do not know if these assumptions are true or false. Verification of the first would require an information-intensive choice-of-law analysis. Verification of the second would require litigation in Germany.

Thus, while *Qimonda* can be understood as a triumph of local interests over universalism interests, it can usefully be understood as highlighting the choice-of-law problem in the Discretionary Assistance protocol. When we consider the case in light of the Model Law's information hiding features, we see that the Model Law "starves" the ancillary court from the information it needs to conduct choice-of-law analyses, thus implicitly shifting the decision to the foreign main proceeding (here, the German proceeding). That is, even though the Model Law does not dictate a choice-of-law rule, its information-restricting features make it impracticable to conduct a choice-of-law analysis in the ancillary proceeding. By limiting the information flow to ancillary proceedings, the Model Law can be seen as implicitly preventing those choice-of-law decisions from being made in the ancillary proceedings. In other words, the Model Law centralizes those decisions in the foreign main proceeding. Accordingly, although the Model Law does not create a choice-of-law rule of its own, it does tell us which court should be making that analysis.

While the Model Law's structure, then, does not resolve the prickly choice-of-law questions, its modular design structure provides helpful guidance as to which courts should be making those information-intensive decisions.

118. *See, e.g.*, John J. Chung, *In Re* Qimonda Ag: *The Conflict Between Comity and the Public Policy Exception in Chapter 15 of the Bankruptcy Code*, 32 B.U. INT'L L.J. 89 (2014); Dawson, *supra* note 6.

CONCLUSION

This Article has sought to use the insights of modularity to help explain how courts have interpreted and should interpret the Model Law's rules for inter-court cooperation in cross-border insolvency cases. Focusing on the level of information flow between foreign bankruptcy proceedings and ancillary proceedings, we can see that the Model Law creates a structure that promotes certain basic cooperation that is automatically available to foreign main proceedings. Whereas prior bankruptcy law required, or at least permitted a factually intensive analysis, the Model Law restricts the flow of information when making the initial determination of whether to grant automatic relief to the foreign proceeding. When determining whether to grant discretionary relief beyond that available automatically, the Model Law restricts the information courts are to consider—not as much as it does for automatic relief, but more than it did under the prior, pre-Model Law statute.

It is the aim of this Article to frame this decision making within this modularity framework. Such an approach does not solve the choice of law questions that arise in cross-border insolvencies; however, it helps to situate these questions within the modular framework of the Model Law.