Recently, increasing attention has been devoted to the question of whether there are economic justifications for having the design of legal institutions vary across countries. Some of that interest has been spurred by a desire to explore the legal implications of political and economic integration. However, this article is inspired primarily by the literature that has emerged as an outgrowth of a revived interest in the design of legal institutions in developing countries, defined broadly here to include the formerly Communist countries. This literature addresses a topic that is of tremendous practical importance, as there is now considerable—though not uncontested—evidence suggesting that the quality of a country's legal institutions is an important determinant of its prospects for development.

It is almost an article of faith among many analysts that achieving the 'rule of law' in developing countries will entail adopting laws that take the form of simple, bright-line rules, particularly when it comes to laws that govern the conduct of business activities. This belief seems to be
based in part upon the idea that simple, bright-line rules are optimal in virtually any context. It is widely believed that laws that take this form are desirable because they tend to minimize uncertainty about the content of the law and so are particularly well suited to guiding behaviour. The antecedents of this view can be traced back to the work of Max Weber, but the same view features prominently in the writings of a wide range of noted contemporary scholars and policy makers.4

The consensus in favour of simple, bright-line rules in developing countries is also based in part upon an argument that these sorts of legal norms are particularly suitable in societies where legal institutions are weak. This second argument is premised on the notion that the principal determinant of the design of legal institutions ought to be institutional competence. As Edward Glaeser and Andrei Shleifer put it, ‘a key goal in the design of a legal system is to control law enforcers.’5 Starting from this premise, it is arguably reasonable to conclude that simple, bright-line rules are typically optimal for developing countries because laws of this type facilitate the monitoring and control of incompetent and corruptible judges, who are more likely to be found in developing countries than in their more developed counterparts.6

Here we will adopt a different approach. First, we will reject the assumption that the optimal form of laws can be determined independently of the context in which those laws are being adopted and applied. Second, instead of presuming that the key goal in the design of laws is the control of law enforcers, this article assumes, at least for the sake of argument, that lawmakers’ key goal ought to be to control the activities


of members of society. Consequently, instead of emphasizing how countries vary in terms of the quality of their legal institutions, this article focuses on the fact that countries vary in terms of the nature of the activities that will be regulated by any given law. Specifically, we will, at least at the outset, assume that lawmakers are reasonably competent and well intentioned and focus upon the legal implications of the fact that there are variations across countries in terms of the volume of activity governed by any given law.

The central argument here is that jurisdictions that experience relatively low volumes of any given activity ('small jurisdictions') should find it relatively attractive to adopt laws in relation to that activity that take the form of standards rather than rules and should not be particularly attracted to standards that are simple rather than complex. I will also show that, to the extent that they should adopt rules, small countries ought to be relatively willing to copy them from large countries. In economic terms, the intuition underlying all of these claims is that, for a variety of reasons, there are likely to be increasing returns to scale in the formulation of rules and so large jurisdictions should, compared to small jurisdictions, find it relatively attractive to invest in creating rules. At least in the area of business law, many — though clearly not all — developing countries are likely to be small countries, and so these conclusions contradict the views of commentators who argue that developing countries should strive to adopt business laws that take the form of simple, bright-line rules and should be reluctant to transplant laws from developed countries.

The argument proceeds as follows: Part II defines the concept of a small jurisdiction. Part III outlines the analytical framework that will be used to determine the appropriate approach to law-making in any given jurisdiction. The framework is based upon one commonly used in the law and economics literature concerning rules and standards. To date, however, that literature has focused on analysing how approaches to law-making should vary across activities rather than across jurisdictions.7 Part

7 Ehrlich and Posner do consider the implications of differences across jurisdictions, specifically, Britain and the United States, but focus on differences in the method and cost of producing legislation. They also discuss the implications of changes within a single jurisdiction over time. Ehrlich & Posner, 'Economic Analysis,' supra note 6. Kaplow explicitly limits his analysis to cases involving a single jurisdiction but notes the possibility of jurisdictions free-riding upon other jurisdictions' investments in law-making. See Louis Kaplow, 'Rules versus Standards: An Economic Analysis' (1992) 42 Duke L.J. 557 at 569, note 19 [Kaplow, 'Rules versus Standards']. In an article focusing on law-making in developing countries, Posner generally endorses a rules-first strategy but notes that 'the rules-first strategy is more advantageous in more populous countries because the average costs are lower.' Posner, 'Creating a Legal Framework,' supra note 3 at 4.
IV uses that framework to analyse how certain characteristics of laws – specifically, the extent to which they rely upon rules as opposed to standards (their ‘rule-likeness’), their simplicity, and their similarity to foreign law – should vary with the size of a jurisdiction. Part V illustrates these points with an example involving insolvency law. As already mentioned, the results of this analysis suggest that, to the extent that developing countries are also small countries, the conventional wisdom regarding law-making in developing countries omits an important consideration. Part VI addresses the argument that the conventional view can be supported by reference to the proposition that developing countries tend to be endowed with weak legal institutions. Part VII discusses whether there is any evidence that lawmakers behave in the fashion recommended in this article and the potential significance of such evidence. Part VIII concludes and suggests directions for further research.

II What is a small jurisdiction?

Patterns of economic activity vary across jurisdictions along an almost infinite number of dimensions. Differences along several of those dimensions have important implications for the design of legal institutions, but here we will focus exclusively on the fact that jurisdictions vary in terms of their size, meaning the volume of activity engaged in by residents who enjoy the benefit of its legal system. For our purposes, a small jurisdiction will be one whose laws govern a low volume of activity and a large jurisdiction will be one whose laws govern a high volume of activity.8

A jurisdiction’s size must be assessed by reference to a particular activity, since size can vary across activities. In other words, a jurisdiction may be small for the purposes of one activity (e.g., business activity) and large for the purposes of another (e.g., divorce). When it comes to business activities, the primary determinants of a jurisdiction’s size are likely to be the size of its population and that population’s wealth: generally speaking, a jurisdiction with a small and poor population is unlikely to have a large volume of business activity.9 It is also worth noting

8 In at least one context discussed below, the volume of formally resolved disputes will be a more useful measure of a jurisdiction’s size than the volume of primary activity. See notes 29–31 infra and accompanying text. In fact, an earlier version of this article used the volume of formally resolved disputes as the principal measure of jurisdiction size.

9 The relationship between a jurisdiction’s wealth and the volumes of various types of business activity will be enhanced if increased wealth tends to lead to greater standardization of business activity. Along these lines, according to Frank Upham, Zhu Suli argues that adjudicators in rural China ought to approach disputes on the understanding that transactions in the countryside are less standardized than those that take place in urban areas. See Frank K. Upham, ‘Who Will Find the Defendant If He Stays with His Sheep? Justice in Rural China,’ Book Review of Song fa xiaxiang: Zhongguo
that such a jurisdiction is unlikely to witness a large number of business disputes, although this general proposition will not hold if its inhabitants tend to engage in unusually complex transactions or in an unusually large number of transactions whose terms are poorly specified (for example, because they are not fully reduced to writing) or if they are unusually disputatious. In addition, as a general rule, over time a jurisdiction that witnesses a small number of business disputes is also likely to see a relatively small number of formally resolved business disputes – unless, of course, its inhabitants are unusually litigious, its legal institutions are exceptionally accessible, or its conflicts of laws rules are particularly expansive.

For the purposes of business law, because of their relatively small economies, many developing countries are likely to qualify as small jurisdictions. Of course, in the long run, virtually all developing countries aspire to increase their wealth and income. Hopefully this means that some developing countries that are small today will be large tomorrow. Therefore, depending on how long the growth process is expected to take, it may be appropriate for lawmakers in those countries to draft laws that fit the size of jurisdiction that they hope to become rather than laws that suit their present condition. However, there is a wide range of non-legal factors that constrain rates of economic growth even under ideal legal conditions. Thus there are many developing countries in the world that will remain small, especially given that this is a relative concept, for the foreseeable future and should design their legal institutions accordingly.

It is also worth noting that, in relative terms, some developed countries are small in comparison to other countries. For example, in many respects Canada will be a small jurisdiction in comparison to the United States, and New Zealand, Luxembourg, and Iceland will be even smaller. Consequently, the following analysis should also be of interest to those concerned with comparative aspects of law-making in developed countries.

III Analytical framework

The balance of this article analyses how the size of a jurisdiction affects whether it is appropriate for its laws to be relatively rule-like or standard-like, simple or complex, and indigenous or transplanted. The analytical approach is unabashedly economic, in the sense that ‘appropriateness’ is defined by reference to a social-welfare function that incorporates the
costs and benefits associated with particular approaches to law-making. It is important to emphasize, however, that this mode of analysis is chosen primarily for the sake of clarity and does not reflect any particular presumptions about the form of the social-welfare function. Specifically, there is no presumption that social welfare is to be equated with wealth maximization.

The remainder of Part III is devoted to outlining the costs associated with and effects of various approaches to law-making. Before we begin, however, one terminological note is in order. The discussion that follows frequently refers to ‘law-making’ and ‘lawmakers.’ For the purposes of this analysis, the term ‘lawmaker’ is defined broadly to include two classes of actors who give content to legal rules: ‘adjudicators,’ who assign legal consequences to activities in the course of resolving a formal dispute, and ‘legislators,’ who assign legal consequences to activities outside of the context of formally resolved disputes. The set of adjudicators includes law-enforcement officials, who effectively give content to the law through the exercise of their discretion. The term ‘law-making’ has a corresponding definition.

A THE COSTS OF LAW-MAKING

1 Analytical costs

The most obvious costs associated with law-making are the costs incurred in the course of determining what content ought to be given to the law that will govern a given dispute. That determination may involve theoretical analysis of the justifications for giving one type of content to the law rather than another, empirical analysis of matters such as the nature and effects of the activity to be subject to legal regulation, or some combination of the two modes of analysis. In what follows, all these costs will simply be labelled ‘analytical costs.’

For present purposes it is crucial to draw a distinction between ex ante analysis and ex post analysis. As the term suggests, ex ante analysis is designed to give content to law before any dispute has arisen. By contrast, ex post analysis is conducted after a dispute has arisen, with a view to resolving it. A distinction can also be drawn between analytical costs incurred in the public sector — in other words, by the legislature, the executive, or the judiciary — and those incurred in the private sector — meaning, by actors such as interest groups, academics, or the parties to disputes. Generally speaking, the manner in which analytical expenditures are allocated across the members of a society will not be crucial to
the discussion that follows. However, it is important to note that the extent to which analytical expenditures are borne, either directly or indirectly, by the parties to disputes may influence the volume of formally resolved disputes: the higher the cost of formal dispute resolution, the more likely disputants are to substitute informal for formal modes of dispute resolution.\(^\text{11}\)

2 Communication costs
Another major set of costs associated with law-making consists of the costs of disseminating information about the content of the law ('legal information') among lawmakers and members of society. These costs will be labelled 'communication costs.'\(^\text{12}\)

As with analytical costs, it is crucial to the following analysis to distinguish communication costs that are incurred \textit{ex ante} from those that are incurred \textit{ex post}. \textit{Ex ante} communication costs will sometimes be referred to as 'promulgation' costs. In the case of legislation, these will include the costs of drafting, enacting, and publishing the law. In the case of binding precedents, the promulgation costs are the costs of drafting and publishing judicial opinions.

The sense in which communication costs can be incurred \textit{ex post} may be slightly less obvious. The intention here is to refer to the costs incurred by adjudicators and other actors in order to ascertain the content of laws that have been promulgated at an earlier date – in other words, the costs of conducting traditional legal research. For the sake of convenience, communication costs incurred \textit{ex post} will occasionally be referred to simply as 'research' costs. The level of research costs required to determine what content has been given to the law governing a particular activity ('potential research costs') will tend to depend on the number of potential sources of law, the amount that has been invested in promulgating the law, and the ease with which the content of the law can be derived by replicating the type of research favoured by lawmakers. It is important, however, to draw a distinction between actual and potential research costs, because rational actors will not necessarily choose to make a sufficient investment in research to completely resolve legal uncertainty.\(^\text{13}\)

As was true for analytical costs, for the purposes of what follows it is generally not very relevant how communication costs are allocated

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\(^\text{12}\) The existing law and economics literature tends not to distinguish communication costs from analytical costs.

\(^\text{13}\) The level of research costs that actors choose to incur will depend on the perceived value of resolving uncertainty about the content of law, which will vary depending on the type of activity being regulated as well as on potential research costs.
between the public and the private sectors. The magnitude of the potential research costs allocated to disputants may be relevant, however, because higher potential research costs may imply increased legal uncertainty.

3 Administration costs
The final set of expenditures associated with the operation of legal institutions comprises the costs incurred in the course of applying a law with known content to a particular dispute. These costs will be called 'administration costs.' For present purposes, the most important category of administration costs is the costs involved in obtaining information about the circumstances surrounding a dispute, a crucial step in determining what law ought to be applied.

As with analytical costs and communication costs, there are many different ways of allocating administration costs across the public and private sectors of a society. However, as is the case with analytical costs, for present purposes it is only relevant to consider the quantum of administration costs allocated to disputants, since the higher that figure is, the stronger will be disputants' incentives to substitute informal for formal modes of dispute resolution.

B THE EFFECTS OF LAW-MAKING
Investments in law-making will tend to affect the content of laws applied to any given activity, how much information members of society have about that content, and whether laws are applied in the manner intended by lawmakers. These effects are all likely to have significant welfare implications.

1 Error costs
The content of the law will depend upon what sort of analysis has been conducted to determine the appropriate content. Society can be characterized as suffering a loss whenever it adopts laws that are not well suited to achieving their purpose, whatever that purpose may be. The losses associated with adopting inappropriate laws will be referred to generically as 'error costs.' It will be assumed that the larger the volume of activity affected by inappropriate laws, the greater the aggregate error costs. The broad concept of error costs is intended to embrace a wide range of understandings of the purposes that law is designed to serve, including purposes such as deterrence or corrective justice. Depending upon which purpose is emphasized, the error costs associated with inappropriate law will be incurred either at the point when content is given to the law, at the point when the content of the law is communicated to members of society, at the point when the law affects the behaviour of members of society, or at the point when the law is applied to a particular case.
The magnitude of error costs will be assumed to depend upon the magnitude of investments in analysis: specifically, the greater the investment, the lower the error costs. (Of course, this assumption may simply reflect the conceit of a legal academic).

The relationship between error costs and investments in communication is less straightforward. It will be assumed here that investment in communication tends to reduce actors’ uncertainty about the content of the law ('legal uncertainty'). For those who measure error costs at least in part by reference to actors’ behaviour, this is potentially significant, because the level of legal uncertainty may be an important determinant of behaviour. Unfortunately, it is difficult to determine in the abstract whether the change in behaviour associated with varying legal uncertainty will be for better or worse. For instance, if a law is well designed, meaning that it encourages socially desirable behaviour and/or discourages undesirable behaviour among actors who are aware of the law, increasing legal uncertainty by limiting dissemination of relevant information or making its content ambiguous is only likely to induce an increase in undesirable behaviour (i.e., error costs). If, however, the law is poorly designed – for example, because it contains loopholes that permit undesirable behaviour to go unpunished – then increased legal uncertainty may actually reduce error costs. In this scenario, if the law is certain, it will be clear to actors that they can misbehave with impunity, whereas under a less certain regime, some of those actors may be deterred by the risk of punishment.\(^\text{14}\) It is worth noting that although the relationship between legal uncertainty and error costs is theoretically ambiguous, there is cross-country evidence suggesting that, on balance, legal uncertainty is negatively correlated with levels of investment and economic growth.\(^\text{15}\)

The relationship between error costs and investments in administration is similar to the relationship between error costs and investments in communication. The working assumption here will be that investments in administration increase the likelihood of laws’ being applied to the facts as intended by lawmakers. If laws are well designed, then poor administration will tend to increase error costs. If, however, laws are poorly designed, then poor administration may not be such a bad thing. For example, in the 1980s Hernando de Soto famously documented the

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\(^{14}\) As Kennedy puts it, laws whose content is clear ‘allow the proverbial “bad man” to “walk the line.”’ Kennedy, ‘Form and Substance,’ supra note 10 at 1696. See also Kaplow, ‘Rules versus Standards,’ supra note 7 at 575, note 42, and 604; Gillian K. Hadfield, ‘Judicial Competence and the Interpretation of Incomplete Contracts’ (1994) 23 J.Legal Stud. 159.

prevalence of ‘bad laws’ in Peru that required business people to comply with restrictive and time-consuming bureaucratic procedures. He also brought to light the vibrancy of the informal enterprises that evaded compliance with those laws and survived without the benefits of a good legal system. Although de Soto clearly advocates replacing bad laws with good laws, it seems reasonable to conclude that he would view imperfect administration of bad laws as a second-best solution.

2 Other costs of legal uncertainty
The quality of actors’ information about the law may also have a direct effect on their welfare, the nature of which depends on whether actors prefer or are averse to uncertainty. It is difficult to generalize about whether actors are likely to welcome being exposed to legal uncertainty, because empirical research suggests that attitudes toward uncertainty vary across both individuals and contexts. Experimental research suggests that individuals are risk averse with respect to possible gains and risk preferring with respect to possible losses. There is also evidence that individuals are averse to ambiguity when confronted with the prospect of a high-probability gain but prefer ambiguity when probabilities are lower.

Another factor to consider is the relationship between legal uncertainty and administration costs. Legal uncertainty that leads to divergent beliefs about the outcome of trial may impede informal settlement of disputes; therefore, increasing this sort of legal uncertainty may increase the proportion of disputes in a jurisdiction that are resolved formally as opposed to informally and thereby increase aggregate administration costs. On the other hand, to the extent that legal uncertainty increases the riskiness of going to trial and parties are risk averse, increased uncertainty will tend to increase the likelihood of settlement and thereby reduce administrative costs.

IV Activity levels, law-making, and welfare

A OVERVIEW
It should be clear from the above discussion that, even when represented in stylized form, law-making is an extremely complex activity. Lawmakers

make decisions not only about the content of the law but also about how much effort should be put into determining that content, when that effort should be exerted, whether and to what extent the content of the law should vary according to context, and what amount of effort should be put into publicizing the content of law. Part IV explores the possibility that it might be appropriate for lawmakers in large and small jurisdictions to resolve these issues in systematically different ways.

B. RULES VERSUS STANDARDS

As noted, several prominent commentators have argued that lawmakers in developing countries should favour 'bright-line' rules over 'vague' rules21 or, to use the more orthodox legal vocabulary, rules over standards.22 The essence of the distinction between rules and standards (as opposed to simple and complex laws) is most clearly set out by Louis Kaplow, who states that in the case of rules, content is given to law before the activities to which it applies occurs, either by an adjudicator who creates a binding precedent in the course of resolving an earlier dispute or by a legislator.23 Conversely, when law is formulated as a standard, an adjudicator gives content to the law after the activity subject to that law has occurred. The canonical illustration of this distinction contrasts a rule that prohibits driving over 100 km/h with a standard that prohibits driving at an unreasonable speed.24

Unfortunately, although extremely useful for analytical purposes, the simple dichotomy between rules and standards obscures the fact that many laws embody, to a greater or lesser extent, the characteristics of both rules and standards. These laws often consist of rules whose range of application is uncertain, with classic examples being rules that apply 'other than in exceptional circumstances' or rules that merely specify the process by which a determination of the law's content is to be made. In this article, laws will be referred to as 'guidelines' to the extent that they fall into this intermediate category.

Adopting a rule to resolve a given class of future disputes essentially means that those disputes will be resolved in accordance with legal principles derived from ex ante analysis, the products of which must somehow be communicated to the relevant adjudicators. By contrast,  

21 Hay et al., 'Toward a Theory,' supra note 3.  
23 Kaplow, 'Rules versus Standards,' supra note 7.  
24 Recall that here, as elsewhere in this article, the process of characterizing the law in question must take into account the actions of all lawmakers — meaning, both legislators and adjudicators — remembering that the class of adjudicators is broadly defined. So, for example, for the purposes of this analysis, a statute that prohibits driving in excess of the posted speed limit is not properly characterized as a rule if, in practice, law-enforcement officials will treat the statute as a prohibition on driving at an unreasonable speed.
adopting a standard means that the disputes will be resolved in accordance with legal principles derived from *ex post* research. Therefore, from an economic perspective, if the total resources devoted to law-making are held constant, adopting a rule rather than a standard can be interpreted as involving greater investment both in *ex ante* analysis and in communication of legal information, and less investment in *ex post* analysis. Consequently, the welfare implications of moving from a rule to a standard will depend upon the relative effectiveness of *ex post* as opposed to *ex ante* analysis and upon the net benefits of investing in the communication of legal information.

As far as the first factor is concerned, one benefit of *ex post* analysis is that it allows lawmakers to defer expenditures on analysis until the point when the law has to be administered. The magnitude of this benefit will depend upon the time value of money and the length of time that is expected to elapse before a dispute arises.

The choice between *ex post* and *ex ante* analysis also has implications for the relationship between the level of investment in analysis and its quality, as measured in terms of error costs. In some contexts, *ex post* analysis will be substantially more effective, in this sense, than *ex ante* analysis, because a great deal of useful information is generated more or less automatically in the course of events that give rise to a dispute. For example, it may be easier to determine whether a light rainfall is likely to cause a car travelling at 100 km/h on a particular stretch of road to hydroplane after a police officer has witnessed the event than it would have been beforehand. In this example, the event giving rise to the dispute is informative because it serves as a kind of natural experiment. In other cases, the occurrence of an event is informative because it demonstrates the feasibility of a particular form of misconduct. This explains why several scholars have argued that laws that aim to prohibit sophisticated forms of misbehaviour such as tax evasion or avoidance and

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25 It may not always be possible to avoid communication costs completely by adopting a standard rather than a rule. One reason for this is that, in some contexts, lawmakers may be obligated to invest just as much in promulgating a standard as in promulgating a rule because, even if content is going to be given to the law *ex post*, norms concerning retroactive law-making may necessitate the enactment of legislation indicating that a particular type of activity is at least potentially subject to legal regulation. The cost of drafting and publicizing such legislation may not vary significantly depending on its content. For example, it may not be any more expensive to enact a statute that prohibits driving over 100 km/h than it is to enact one that prohibits driving at an unreasonable speed. A second reason that adopting a standard may entail expenditures on communication is that lawmakers may choose to invest in disseminating information about the content that has been given to a standard by, for example, publishing adjudicators’ reasons for decision. This is most likely to occur when lawmakers expect the adjudicator’s decision to serve as a rule for the purposes of future disputes.
corporate self-dealing are easier to formulate as standards than as rules. On the other hand, in some contexts, it may be equally easy to conduct analysis before or after the occurrence of a dispute. In addition, there may be economies of scale in analysis that make it relatively inexpensive to reduce the likelihood of error by analysing laws that will govern a large set of different types of activity before the laws are to be administered. For example, it may be easier to determine the appropriate speed limit for a number of slightly different roads all at once rather than on a number of different occasions. Finally, ex post decision making may be impaired by a hindsight bias.

Leaving aside the relative effectiveness of ex post and ex ante analysis, the choice between rules and standards also depends upon the costs and benefits of investing in the communication of legal information. Generally speaking, the main benefit of investing in communication of legal information – or any other type of information, for that matter – is that it allows the recipients of the communication to obtain the information without replicating previously conducted analysis. In the present context, this suggests that encouraging the communication of legal information by setting rules as opposed to standards will be socially beneficial to the extent that it allows adjudicators to avoid redundant analysis and permits members of society to dispel legal uncertainty without having to mimic the analysis that will be conducted by an adjudicator in the event of a dispute. These benefits will be small, however, if the analysis in question is easy to conduct (compared to the cost of determining the content of a rule specified ex ante) or if the information in question is not particularly valuable to begin with. This suggests that standards should be preferred when the content of the law will be regarded as ‘intuitive,’ a situation that may be quite common. For example, John Braithwaite and Valérie Braithwaite once found that Australian nursing-home regulations containing standards such as a requirement that homes provide a ‘home-like environment’ were enforced more consistently – and thus, presumably, more predictably – than comparable American regulations containing more detailed rules. This line of reasoning also suggests that standards

27 See, generally, John Braithwaite, ‘Rules and Principles: A Theory of Legal Certainty’ (2002) 27 Aust.J.Leg.Phil. 47. Similarly, Ehrlich and Posner claim that ‘many standards, such as efficiency (reasonableness), have a large intuitive element which makes them comprehensible without special training, while most legal rules are not understood unless studied.’ Ehrlich & Posner, ‘Economic Analysis,’ supra note 6 at 270–1. See also Posner, ‘Creating a Legal Framework,’ supra note 3 at 5.
should be preferred when the costs of exposing actors to legal uncertainty are low.

There is a number of reasons to believe that a move from rules to standards, or vice versa, will have qualitatively different welfare effects in large and small jurisdictions. One is that the size of a jurisdiction may influence the relative merits of *ex ante* and *ex post* analysis. Typically, the smaller the jurisdiction, the longer the time that can be expected to elapse before content will have to be given to a standard. Thus, in small jurisdictions the fact that adopting a standard will permit lawmakers to defer spending on analysis implies that adopting a standard will create a relatively significant benefit.

A jurisdiction’s size is also likely to have some bearing on the effectiveness of *ex ante* as opposed to *ex post* analysis. This effect stems from the fact that the amount of analysis required to formulate a law within a specified margin of error is likely to be a decreasing function of historical activity levels,\(^{29}\) which will in many cases be positively correlated with a jurisdiction’s current size. The reasoning behind this conclusion is as follows: information that can be gleaned from historical activity is likely to assist in determining the appropriate content of contemporary law.\(^{30}\) The more closely historical activity resembles expectations of future activity, the more valuable historical analysis is likely to be. To a point, the greater the volume of historical activity, the greater the likelihood of finding relevant information in the historical record and the greater the likelihood of benefiting from historical analysis.\(^{31}\) However, the marginal

\(^{29}\) It is unclear whether error costs are likely to be negatively correlated with historical levels of primary activity or with historical levels of formally resolved disputes. The answer to this question will depend, in part, upon whether lawmakers have access to mechanisms for inspecting primary activities (e.g., studies by social scientists) and whether it is easy to draw inferences about the appropriate content of law simply by observing primary activity. This last question is hotly disputed. Compare Eric A. Posner, ‘Law, Economics and Inefficient Norms’ (1996) 144 U.Penn.L.Rev. 1697, and Robert Cooter, ‘Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant’ (1996) 144 U.Penn.L.Rev. 1643.


\(^{31}\) This argument becomes more complicated if the benefits of experience are derived principally from previous formally resolved disputes. This is because the volume of formally resolved disputes may be influenced by the choice between rules and standards. As noted above, it is conventional to assume that increased legal uncertainty tends to reduce the likelihood of settlement, which, in turn, implies that making law more standard-like will tend to increase the volume of formally resolved disputes. The higher the volume of formally resolved disputes, the more rapidly lawmakers will accumulate sufficient experience to make it attractive for them replace a standard with a rule. Even taking this effect into account, it remains true that, all other things being equal, a large jurisdiction will probably have more formally resolved disputes than a
informational value of historical activity — or, if you will, the marginal value of experience — is likely, at least after a certain point, to be a diminishing function. This implies that beyond a certain point, the higher the historical level of activity, the less benefit a lawmaker derives from waiting to give content to the law. This, in turn, implies that once the level of historical activity becomes quite large, a lawmaker charged with giving content to law before the relevant activity takes place is likely to possess almost as good information as one charged with giving content to the law after the activity has taken place. Therefore, at activity levels that exceed the critical value, moving from a standard to a rule is likely to generate a relatively small reduction in the likelihood of error.

The ultimate implication of this argument is that in very large jurisdictions, making the law more rule-like is likely to cause a relatively small increase in error costs. An alternative, and perhaps more intuitive, way of phrasing this argument is to say that lawmakers in large jurisdictions have a relatively large stock of experience upon which to draw. Correlatively, lawmakers in small jurisdictions will have relatively small stocks of experience upon which to draw. In each case, adopting a standard instead of a rule will delay the process of giving content to the law and allow more experience to accumulate. However, our assumption that experience is of diminishing marginal value suggests that the additional experience acquired in a small jurisdiction will be more valuable than the additional experience acquired in the large jurisdiction, thus making standards relatively attractive in small jurisdictions.

A jurisdiction’s size is also likely to affect the relationship between investments in communication of legal information and reductions in the numbers of people (including both adjudicators and ordinary members of society) who are driven to conduct redundant analysis or who are small jurisdiction, and will therefore accumulate more experience, if both jurisdictions operate under a standard. Consequently, a large jurisdiction should be willing to replace a standard with a rule earlier than a comparable small jurisdiction. The complication is that, from that point onward, the small jurisdiction may accumulate experience more rapidly than the large jurisdiction.

To further complicate matters, it is worth noting that, as mentioned above, moving from a rule to a standard does not necessarily imply an increase in legal uncertainty, because sometimes standards are more intuitive than rules. In addition, conventional economic analyses of settlement and litigation conclude that the likelihood of a dispute proceeding to a formal mode of resolution is not only an increasing function of the level of legal uncertainty but also a decreasing function of privately borne litigation costs. Even if making law more standard-like does increase legal uncertainty, if administering a standard involves more ex post analysis than administering a rule, then such a move may also increase the private costs of formally resolving a dispute. Therefore, the overall effect of making law more standard-like on the volume of formally resolved disputes is ambiguous. See Posner, ‘Legal Procedure,’ supra note 11 at 450, note 72, and Kaplow, ‘Rules versus Standards,’ supra note 7 at 573, note 35.
exposed to legal uncertainty. The reason for this is that, assuming that the creation of systems for communicating legal information involves significant fixed costs, the average cost of communicating legal information will be relatively high in a small jurisdiction, thus making investments in communication relatively unattractive in small jurisdictions. \(^{32}\)

Under these conditions, the larger the number of users, the less likely it is that the fixed costs of an improved communications system will exceed the aggregate benefits of improved communications, and so the more worthwhile it becomes to invest in communication. Conversely, the smaller the number of users, the more likely it is that the fixed costs of communication will be prohibitive. In other words, investments in communi-

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\(^{32}\) Obviously this assumption will not be valid for all types of communication systems. Consider, for example, a system that uses the simplest possible form of communications technology; imagine a precedent-based legal system in which it is necessary to read every case previously decided before it is possible to determine the law applicable to any given case. To make the illustration even more extreme, assume that each researcher must receive a copy of each precedent directly from its author, with no possibility of sharing. In this system, every lawmaker and member of society interested in resolving uncertainty about the law essentially has to communicate directly with every previous lawmaker, and so communication costs will tend to rise exponentially with the number of precedents and researchers involved. It is easy to see, however, that the effects of increasing the number of precedents and researchers will differ dramatically if it is possible to employ a communications technology that permits each adjudicator to communicate with many researchers, and each researcher to communicate with many adjudicators, through the medium of a central repository of information such as a law library, an electronic legal database, a series of law reports, a legal treatise (or American-style Restatement), or a statute that codifies the common law. Creating such a repository tends to involve certain fixed costs, meaning costs that do not vary depending upon how many people use the repository. However, once the repository has been created, and assuming that it is well organized, the marginal costs of both adding additional information and allowing additional lawmakers and members of society to access information may be quite low (until it nears the limits of its capacity). Admitting another person or adding another volume of a reporter to a law library (much less an electronic database) or adding another case to the footnotes of a treatise and allowing another person to share the book do not entail significant costs.

The assumption that the repository in question is well organized is fairly important, however. Take, for example, the case of a legal treatise. If the treatise is so well organized that every new precedent can be accommodated by simply adding its citation to the appropriate footnote without altering the text, then the increment in social cost associated with an increase in the number of users will consist merely of the sum of (a) the cost to the author of reading each additional precedent and citing it in the appropriate footnote and (b) the cost to each additional user of the treatise of reading the relevant portion of the treatise (ignoring the footnote). If, however, the length of the text were to change with an increase in the number of precedents – for example, because the author can incorporate an additional precedent only by adding paragraphs that summarize its holding – then the increment in social costs will be more dramatic, because one will have to consider the fact that additional material must be read by all users of the treatise.
cating legal information will generally tend to exhibit increasing returns to scale. This all suggests that small jurisdictions are unlikely to find investments in systems for communicating legal information attractive.

The upshot of this analysis is that in large jurisdictions, it will be relatively profitable for lawmakers to invest in ex ante analysis combined with means of communicating the results of that analysis to subsequent lawmakers and interested members of society. This implies that in small jurisdictions, either (a) across the entire jurisdiction, rules should be used less frequently than in large jurisdictions; (b) little investment should be made in reducing the cost to researchers of accessing the rule that governs any given activity; or (c) both. Taken together, these assertions imply that it is appropriate for legal systems in small jurisdictions to contain a larger number of standards and/or obscure rules than the legal systems found in large jurisdictions. The basic intuition is that making law through rules rather than standards involves more fixed costs—in the form of both analytical costs and communication costs—and so displays increasing returns to scale. This result parallels the familiar claim that relatively infrequent activities should be governed by standards rather than rules. The significance of explicitly extending this insight to the analysis of jurisdictions in which the frequency of a single activity varies (as opposed to a single jurisdiction in which there are different activities of varying frequency) is that, to the extent that developing countries are small countries, the results contradict the standard view that developing countries should generally strive to adopt clear rules.

It is worth emphasizing, however, that this argument does not necessarily imply that the legal systems of small jurisdictions should rely primarily upon standards. The point is a relative one: all other things being equal, small jurisdictions should place more reliance upon standards than large jurisdictions. This argument is fully consistent with the idea that in some contexts, because of the nature of the issues at stake, it will be optimal to frame the applicable laws as rules rather than standards, regardless of the jurisdiction’s size. Similarly, in other contexts,
standards will be most appropriate for both small and large jurisdic-
tions.\textsuperscript{35}

C SIMPLICITY
Some scholars appear to believe that it is particularly important for
developing countries to adopt simple laws and to eschew complexity.\textsuperscript{36} As it turns out, this argument is only partially consistent with an analysis that focuses on the high probability that many developing countries are, at least for the purposes of business law, small jurisdictions.

Following Kaplow,\textsuperscript{37} we will define complexity as a measure of the number of distinctions drawn by the law. In other words, if a law is complex, it will attach a relatively large number of different legal outcomes to any given set of distinguishable disputes. So, for example, a relatively complex law on speeding might have the speed limit depend upon weather conditions and road curvature. By contrast, a relatively simple law would prescribe a single limit for each road, regardless of the conditions.

From an economic perspective, varying legal complexity can be interpreted as varying the distinctions whose impact upon the appropriate legal outcome is analysed. Our hypothetical complex traffic law requires analysis of the impact of speed, weather conditions, and road curvature, whereas the simple law requires analysis of the impact of just speed. Varying complexity also implies increased investment in communicating the content of the law to any particular person, since a greater volume of information has to be communicated in order to identify the law that applies to each dispute. It will typically be more costly for lawmakers to prepare – and for drivers to read – traffic signs that define different speed limits for different segments of the same road under different weather conditions than to read signs that set a single speed limit for the entire road. Finally, varying complexity also implies varying the information that must be collected \textit{ex post} before any given dispute can be resolved within any given margin of error. For example, a complex law on speeding might demand the production of evidence concerning speed, weather, and road conditions that would be irrelevant under a simpler law. Alternatively, if total resources allocated to administration are held constant, broadening the range of information collected

\textsuperscript{35} See the discussion of tax evasion and corporate self-dealing accompanying note 26 supra.

\textsuperscript{36} Hay et al., ‘Toward a Theory,’ supra note 3. This claim must be distinguished from the more general claim that all jurisdictions should strive to simplify their laws. For an example of this argument, see Richard A. Epstein, \textit{Simple Rules for a Complex World} (Cambridge, MA: Harvard University Press, 1995).

by adjudicators might entail reducing the quality of information collected in each category of information.38

Ultimately, the welfare effects of varying legal complexity will depend on whether these sorts of shifts in the allocation of resources among analysis, communication, and administration tend to reduce error costs by tailoring legal outcomes to fit the particular characteristics of each dispute or generate harmful uncertainty. The magnitude of the reduction in error costs will depend on (a) the social benefits of distinguishing different types of disputes (such as speeding on rainy days and clear days) and (b) how frequently lawmakers are able to capture those benefits.

Within this analytical framework, it appears to be fairly clear that increased complexity is likely to be more attractive in a large jurisdiction than in a small jurisdiction insofar as complex rules are concerned. Increasing the complexity of a rule has many of the same economic implications as merely making the law more rule-like in the sense described in the preceding section; it involves (among other things) increased investment in certain types of ex ante analysis and communication, with the potential benefit of a reduction in error costs. The costs of ex ante analysis and communicating additional information – for example, the costs of analysing how speed limits ought to vary according to weather conditions and of replacing road signs – are not likely to vary in proportion to the size of the jurisdiction, whereas the benefits – in this case, reduced accidents – are likely to do so. Consequently, increasing the complexity of a legal rule is more likely to be appropriate in a large jurisdiction than in a small one.

The situation is quite different, however, when it comes to analysing the economic implications of increasing the complexity of a standard. The principal potential benefit of increasing the complexity of a standard is the same as that associated with increasing the complexity of a rule: reduced error costs. Imagine, for example, that drivers expect adjudicators to take into account weather conditions when determining what amounts to a reasonable speed. This may induce drivers to modify their driving according to the weather in much the same way as if the legislature had adopted a rule-like speed limit that varied according to weather conditions. Both approaches may generate similar social benefits in terms of reduced error costs, and in each case the magnitude of those benefits will presumably increase constantly with the volume of traffic. However, the benefits of increasing the complexity of standards are obtained principally through increased investments in ex post analysis,

38 The relationship between complexity and total administration costs is somewhat ambiguous, because, as noted above, if the added administration costs of complexity are borne by disputants, some may be encouraged to resolve disputes informally rather than formally. Ehrlich & Posner, 'Economic Analysis,' supra note 6 at 265.
and the magnitude of those investments tends to vary in proportion to
the volume of disputes. Thus, there is no reason to believe that the
volume of traffic will have any significant influence upon whether there
are net benefits to increasing the complexity of a standard. In other
words, in the case of standards, there is no reason to believe that com-
plexity is either more or less likely to be attractive in a small jurisdiction.
A similar conclusion should hold for ex post efforts to increase the
complexity of a guideline.

This analysis suggests that it is only partially accurate to claim that
simple laws are most appropriate for small jurisdictions. Based on the
foregoing analysis, it seems reasonable to claim that it is appropriate for
any rules found in a small jurisdiction to be less complex than the rules
found in a large jurisdiction. However, there is no reason to believe that
the standards adopted in a small jurisdiction ought to be either more or
less complex than standards adopted in a large jurisdiction. Once this
observation is combined with our earlier conclusion that standards ought
to be relatively prevalent in small jurisdictions, even if we take into
account the fact that, in many cases, the administration of a standard
involves a certain amount of rule making, it becomes difficult to sustain a
blanket conclusion that laws in a small jurisdiction should generally be
simpler than laws in a large jurisdiction.

D LEGAL TRANSPLANTS
One of the most frequently examined issues in comparative law in the
modern era is the question of whether and to what extent laws should be
transplanted – and thereby harmonized – from one jurisdiction to
another. As comparativists often point out, transplantation can be
effected either by adopting laws that formally resemble foreign laws or by
adopting laws that are functionally equivalent to foreign laws. Jurisdic-
tions that engage in transplantation can also choose either to adopt the
law of a foreign jurisdiction as it stands at a fixed point (which might be
in the past) or to provide that, at any given point, the content of local law
will be determined by reference to contemporary foreign law.

Scholars who have written about the economic implications of legal
transplants have demonstrated varying degrees of enthusiasm for the

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39 The framework used below can also be used, albeit with a few modifications, to analyse
the merits of other strategies that might also lead to harmonization of laws. Those
strategies include adopting laws formulated at the supranational level or adopting laws
that are drafted simultaneously in two or more jurisdictions with a view to facilitating
harmonization. The dangers associated with the first of these strategies are discussed
in Katharina Pistor, ‘The Standardization of Law and Its Effect on Developing
Economies’ (G-24 Discussion Paper Series, No. 4, 2000), and Paul B. Stephan, ‘The
Futility of Unification and Harmonization in International Commercial Law’ (1999) 39
practice. For example, Daniel Berkowitz, Katharina Pistor, and Jean-François Richard claim to show that countries that have transplanted laws without adaptation and applied them to a population not already familiar with these laws tend to have relatively ineffective legal institutions.\textsuperscript{40} Closer to the other end of the intellectual spectrum on this issue is Richard Posner, who, while emphasizing the importance of adapting transplanted laws to local culture, endorses transplantation as a means of creating a legal code in circumstances where local laws and customs are unsuitable or where legislative drafting skills are scarce.\textsuperscript{41} The analytical framework set out above can be used to illuminate the potential benefits and dangers of legal transplantation and to explain why, if there are any contexts in which transplants are desirable, they are most likely to involve small jurisdictions transplanting laws from large ones.

From an economic perspective, legal transplantation involves increasing the extent to which lawmakers in a given jurisdiction rely upon analysis conducted in a foreign jurisdiction as opposed to analysis conducted locally. Consequently, the welfare effects depend on (a) the effectiveness of relying upon the foreign analysis and (b) the costs of communicating the products of that analysis to local lawmakers and actors, compared, in each case, to the effectiveness and communications costs associated with relying upon local analysis.

As far as the first factor is concerned, the effectiveness of foreign analysis will depend on how much effort was invested by the foreign analysts and how closely the activities regulated by foreign lawmakers resemble, along a large number of dimensions, those of concern to local lawmakers: the more similar the problems, the greater the potential benefits of transplantation.\textsuperscript{42} With respect to the second factor, the principal determinants of communication costs will be the number of sources of foreign law, the complexity of foreign law, and, of course, the type of communications technology employed. In comparing the communication costs associated with foreign and local analysis, it is important to take into account the possibility that legal information relating to foreign law can be communicated, at least in part, using technology developed for the purpose of communication within the foreign jurisdiction. For example, the inhabitants of a jurisdiction that adopts English law can rely in part on English treatises and Web sites to access legal

\begin{itemize}
  \item \textsuperscript{41} Posner, 'Creating a Legal Framework,' supra note 3.
  \item \textsuperscript{42} This suggests that it will often be worthwhile for countries considering transplantation to invest in research directed at identifying the most appropriate source jurisdiction. The cost of that research must, of course, be taken into account in assessing the relative merits of transplantation and of law-making based on local research.
\end{itemize}
information, even if the recipient jurisdiction would be too small to justify creating such materials to disseminate purely local norms. It is also worth noting that the costs entailed in communicating foreign law to actors in a recipient jurisdiction may vary considerably across the population. Some actors, perhaps most notably certain foreign investors, may have ready access to the law of the source jurisdiction. For other actors, though, the reverse may be true: transplanted laws may draw upon unfamiliar concepts and diverge from local informal norms. For the latter group, locally developed laws may be relatively perspicuous. On the other hand, these effects may be reversed if the foreign law has been functionally rather than formally transplanted.

According to this analysis, all other things being equal, legal transplantation is most likely to be appropriate when it takes the form of laws being transplanted from a large jurisdiction to a small one as opposed to from small to large, or between large jurisdictions, or between small jurisdictions. There are several reasons why this is likely to be the case. First, as far as rule making is concerned, the optimal level of investment in analysis tends to increase with the volume of transactions to be governed by the rule in question. This implies that lawmakers in a large jurisdiction will naturally tend to invest greater resources in analysis of the rules concerning a given activity than lawmakers in a small jurisdiction would do. Second, in comparison to lawmakers in a large jurisdiction, lawmakers in a small jurisdiction will have a small stock of information gleaned from prior local disputes to draw upon when analysing the appropriate content of new law. In fact, the greater the disparity in size between two jurisdictions, the greater the probability that any given type of dispute will arise first in the larger jurisdiction. Third, the greater the disparity in size between two jurisdictions, the more likely it is that the large jurisdiction will employ better technology to communicate legal information than does the small jurisdiction.

For all of the above reasons, legal transplantation (from large jurisdictions) is likely to be more attractive to small jurisdictions than it is to large jurisdictions. In many cases this will simply involve using foreign rules as rules in the domestic context. In some cases, however, the optimal strategy will be to use foreign rules as guidelines that will apply unless and until local lawmakers obtain additional information. It is important to stress, however, how heavily this conclusion rests on the assumption that all other things remain equal. In particular, the analysis depends on the assumption that the legally relevant characteristics of primary activities do not vary systematically across large and small jurisdictions. However, if, for instance, activities in small jurisdictions generally resemble those in other small jurisdictions more than they resemble those in large jurisdictions, then transplantation between small jurisdictions will tend to be more appropriate. For example, if the corporate
governance issues that arise in a small jurisdiction are more likely to resemble the corporate governance issues that arise in other small jurisdictions than they are to resemble the ones that arise in large jurisdictions, then it may be most appropriate either to transplant corporate law from a small jurisdiction or not to rely on a legal transplant at all.

Illustration: Insolvency law

The foregoing analysis has clear implications for how lawmakers in large and small jurisdictions should act if they are concerned with maximizing social welfare, broadly defined.

So far, isolated implications have been illustrated by reference to examples drawn from traffic regulation, but at this point it is probably helpful to refer to an example involving a branch of business law, specifically, insolvency law.

In recent years, in both developed and developing countries, a great deal of attention has been focused on reform of insolvency legislation. The World Bank has even established a Web site that provides access to the insolvency legislation of a number of countries, presumably for use as models by lawmakers in other jurisdictions. Interestingly, some of the countries selected have adopted very different approaches to the design of their insolvency laws. For present purposes, the contrast between the legislation from Canada and the United States — or, to be more specific, the portions of those legislative schemes that concern reorganizations (as opposed to liquidations) of large corporations — is particularly noteworthy.43

In Canada, most reorganization proceedings involving large firms are governed by a statute known as the Companies' Creditors Arrangement Act (the CCAA) rather than by the ordinary insolvency legislation.44 In the United States, equivalent proceedings are generally governed by Chapter 11 of the US Bankruptcy Code („Chapter 11“).45 Until the CCAA was amended in 2005, the differences between Chapter 11 and the CCAA, together with the jurisprudence surrounding each statute, were striking.46 The CCAA was an extremely short, self-contained statute that

43 This example was selected principally because of its convenience in light of the author’s personal knowledge. Generally, however, comparing Canada and the United States is a useful way of illustrating the potential effects of differences in economic size, since the two countries are very similar in other respects (e.g., language, culture, level of development).
46 See An Act to establish the Wage Earner Protection Program Act, to amend the Bankruptcy and Insolvency Act and the Companies’ Creditors Arrangement Act and to make consequential amendments to other Acts, S.C. 2005, c. 47.
did little more than permit an insolvent corporation to obtain a stay of proceedings and to impose a binding plan of reorganization upon a class of creditors pursuant to a vote by a majority of the members of the class. It did not provide any guidance on crucial issues such as: Can a debtor company borrow additional funds, and, if so, upon what terms? Can the debtor sell all or substantially all of its assets? Can the debtor disclaim executory contracts, and if it does, what are the consequences for the other party? Canadian judges interpreted the CCAA’s silence on these matters as an invitation to exercise their ‘inherent jurisdiction’ to formulate the applicable legal principles. They also repeatedly emphasized that each CCAA proceeding must be assessed in light of its particular facts, so there was very little respect for precedent in the jurisprudence on the CCAA.

By comparison, Chapter 11 has long contained very explicit rules on each of the topics listed above, and judicial precedents seem to provide significant guidance to courts of first instance in areas where the statute is ambiguous. In short, the pre-amendment Canadian CCAA contained significantly more standards than did the American Chapter 11.47 On the other hand, my personal impression is that Canadian courts applying the CCAA considered the same range of factors as those referred to in the US Bankruptcy Code before making decisions in equivalent areas. Thus, it is not clear that, at the end of the day, Canadian law in this area was any less complex than the equivalent US law.

The central normative implication of my argument to this point is that small jurisdictions formulating reorganization laws should, if they are starting from scratch, reject the rule-based complex American approach in favour of the standard-based, but not necessarily less complex, Canadian approach.48 Perhaps more importantly, however, my analysis

47 It is worth noting that in Canada, reorganizations of small and medium-sized companies are typically carried out under the Bankruptcy and Insolvency Act, R.S.C. 1985, c. B-3 [BIA], which is far more complex and rule-oriented than the CCAA. This difference between the two regimes is consistent with the theory that Canadian lawmakers are responsive to the volume of activity being regulated. Roughly 2 600 reorganizations are dealt with under the BIA each year. No official statistics are collected with respect to CCAA proceedings, but Canadian insolvency practitioners believe that there are fewer than 100 such proceedings each year. See, generally, Office of the Superintendent of Bankruptcy Canada, Annual Statistical Report for the 2001 Calendar Year; Kevin E. Davis, An Economic Analysis of Differences between Canadian and American Commercial Insolvency Laws (unpublished report submitted to Industry Canada, 2002).

48 It could be argued that the formal differences between the Canadian and US insolvency regimes, as well as the fact that—unlike their American counterparts—Canadian judges and legislators frequently consider the merits of harmonizing Canadian and American insolvency law, are not coincidental but, rather, can be explained by the fact that Canada is, compared to the United States, a small jurisdiction for these purposes. In the year 2000, the US economy was approximately fourteen times larger than Canada’s. See
suggests that lawmakers in a small jurisdiction should be relatively reluctant to make their laws from scratch. Instead, they should – as Canadian lawmakers frequently do – seriously consider using the law of a larger foreign jurisdiction as a model, recognizing that it may require some adaptation to fit local conditions.

So, for example, suppose that a small nation such as Jamaica is contemplating reform of its insolvency laws. The first implication of the analysis is that they should invest fewer total resources in formulating new rules than would a larger jurisdiction such as the United States or Canada – the relatively small number of insolvencies expected to arise in the foreseeable future might ensure that the expected costs of creating a rule to govern any given scenario will frequently outweigh the expected benefits. A second consideration is that, compared to their American and Canadian counterparts, Jamaican lawmakers may have relatively little experience with business insolvencies to draw upon when formulating rules. Third, it also seems reasonable to assume that in a small jurisdiction like Jamaica, given the fixed costs associated with their creation, specialized reporters, treatises, and periodicals devoted to Jamaican insolvency law are less likely to be financially viable than their counterparts in the United States or Canada. Consequently, going forward, it may actually be cheaper for Jamaican lawyers to obtain access to rules found in US or Canadian insolvency law than to gain access to indigenously formulated rules. For all of these reasons, it is likely to make sense for a country like Jamaica to use rules derived from foreign insolvency laws as a starting point in the design of their own laws.

There is a variety of other reasons, however, why Jamaican lawmakers are unlikely to want to use foreign laws as more than just a starting point.

World Bank, World Development Indicators Database, online: World Bank, <http://www.worldbank.org/data/dataquery.html>. As noted above, no official data on the volume of proceedings under the CCAA are available, but one study compiled with the collaboration of a number of leading Canadian practitioners reports that between 1982 and 1994 there were only twenty-seven major reorganizations in Canada. See Jacob S. Ziegel, L.W. Houlden, & David E. Baird, eds., Case Studies in Recent Canadian Insolvency Reorganizations (Toronto: Carswell, 1998). By way of comparison, a search of Lynn LoPucki’s Bankruptcy Research Database, online: UCLA <http://lopucki.law.ucla.edu>, reveals that in the years 1982–1994 inclusive there were 216 large public company bankruptcy reorganization cases filed in the US Bankruptcy Courts.

It is important to recognize, however, that this claim embodies a contestable assumption that both countries’ insolvency laws have been designed to optimize welfare. The dangers of using observations of lawmakers’ behaviour to support the claims being made here are discussed in Part VII below. For now, suffice it to say that the central purpose of this analysis is normative rather than positive. In other words, the objective is to justify a certain approach to law-making rather than to explain its prevalence, and the purpose of contrasting Canadian and US reorganization laws is merely to illustrate that approach.
For instance, the structure of the Jamaican economy may be significantly different from that of the Canadian or American economy. There may be a relatively large number of Jamaican firms that are at least arguably ‘too big to fail’ and whose insolvencies require a distinctive and more politically sensitive approach. In addition, the structure of the Jamaican judiciary is different from that of the United States and, perhaps to a lesser extent, from that of Canada. The absence of specialized bankruptcy or commercial courts in Jamaica may have an important bearing on the optimal degree of complexity of insolvency laws. For these and other reasons, indigenously created norms may be more appropriate in the Jamaican context than rules transplanted from either the United States or Canada.

At this point, however, Jamaican lawmakers will have to decide whether it makes sense to adopt indigenous rules or indigenous standards. Because of their relative lack of experience, Jamaican lawmakers should be less confident than their North American counterparts about the merits of any rules that they come up with. Moreover, because of the relatively low volume of economic activity that is likely to benefit from their efforts, the benefits of investment in analysing alternative rules will be relatively small. In addition, any distinctive rules that Jamaican lawmakers create are likely to be less well communicated to judges, lawyers, and businesspeople than the equivalent rules in North America, because the relatively small Jamaican market for legal information of this sort is less likely to support the publication of specialized reporters, treatises, and periodicals. For all these reasons, Jamaican lawmakers should find investment in creating a rules-based insolvency regime less attractive than their North American counterparts would. The best solution may be either to copy foreign laws, such as the pre-2005 CCAA, that already contain a large number of standards or, alternatively, to copy a more rule-based regime like Chapter 11 but to treat its provisions as guidelines rather than as binding rules. The danger of both these approaches is that they involve consciously adopting a regime that is not perfectly tailored to fit local circumstances and may generate legal uncertainty. However – and this is, perhaps, the central intuition underlying this entire argument – the costs of achieving a better fit between legal norms and the society to which they apply, and of resolving legal uncertainty, are more likely to be prohibitive in small jurisdictions than in large ones.

VI Countervailing considerations

A INSTITUTIONAL COMPETENCE
One of the purposes of the present analysis is to provide a counterpoint to analyses that rely primarily on institutional competence in determining the optimal approach to the jurisprudential issues canvassed above.
In other words, the intention is not to deny the importance of institutional competence but, rather, to suggest that a jurisdiction’s size is also an important consideration.

In fact, there are points at which an analysis based principally on jurisdiction size can overlap with and reinforce one that focuses on institutional competence. This possibility arises because and to the extent that it is reasonable to surmise that institutional competence is correlated with size. Such a correlation is particularly likely if competence is equated with ability to formulate complex laws, because legislators’ ability to appreciate the types of distinctions that can and should be drawn between future disputes may depend in part upon their prior experience, which may, in turn, be a function of historical activity levels. Thus, for example, legislators with limited experience in setting complex speed limits may not appreciate the need to set different speed limits for clear and foggy situations, as opposed to simply distinguishing situations with varying amounts of precipitation. This explains why focusing on either institutional competence or jurisdiction size leads to the conclusion that if lawmakers in small jurisdictions adopt rules, they should be simple ones.

That having been said, three comments are in order about whether institutional competence should be a central consideration in designing legal institutions. First, taking institutional competence into consideration does not necessarily yield unequivocal and uniform prescriptions for developing countries confronting the issues canvassed above. Consider, for example, the question of how lawmakers should respond to variations across jurisdictions in absolute levels of institutional competence. In other words, what is the appropriate response to situations in which the lawmakers in Jurisdiction A are systematically more competent than the lawmakers in Jurisdiction B? This seems like a plausible characterization of the differences between lawmakers in a typical developed country and those in a typical developing country. In this scenario, it seems reasonable to conclude that simple laws and legal transplants should be relatively attractive to the lawmakers in the developing country. However, it is less clear whether rules should be more attractive to those lawmakers. This is because in some contexts, it may be desirable for a lawmaker who is prone to error to adopt a standard, as opposed to a rule, if the standard generates greater legal uncertainty and consequently has a relatively small effect on behaviour. As noted above, there are situations in which an erroneously set bright-line rule is likely to induce a great deal of undesirable behaviour as actors flock to exploit a harmful loophole, whereas a standard would have much less extreme effects.

There can also be variations across jurisdictions in terms of relative institutional competence. In some jurisdictions, different institutions are responsible for giving content to rules and standards, and one of those
institutions may be more or less competent than the other. Moreover, the relative competence of these institutions can vary across jurisdictions. However, such variations do not yield clear and consistent implications for the design of legal institutions in developing countries, because it is difficult to find a priori reasons for believing that either rule-making or standard-setting institutions will systematically display greater competence in those countries. For example, suppose we assume that rules are formulated by the legislature and standards are administered by the judiciary. If legislators are less susceptible to bribery than judges – for instance, because of the greater difficulty of bribing the relatively large number of legislators – then it may be optimal to rely on the legislature instead of the judiciary to give content to the law, implying reliance on rules instead of standards. But the opposite conclusion holds in any situation where the legislature is less competent than the judiciary. This may arise, for example, because the former is more susceptible to pressure from interest groups or is dominated by the executive.49

Ultimately, therefore, even if institutional competence is the primary consideration in designing legal rules, there is no a priori reason for believing that developing countries should always favour simple rules. The only unambiguous implication – which flows from differences in absolute rather than relative levels of institutional competence – is that developing countries should favour legal transplants, but that conclusion is not inconsistent with the results of the present analysis. Thus, in some contexts at least, the approach to law-making recommended in this article will not conflict with the more conventional approach.

A second observation about the relevance of institutional competence is that, as scholars such as Posner have acknowledged, it may not be appropriate for lawmakers to take all limitations upon institutional competence as given and merely attempt to work around them by altering their approach to law-making.50 Some institutional deficiencies have undesirable welfare effects that cannot be avoided by reallocating responsibility for law-making. For example, judicial corruption and incompetence may undermine the courts’ ability not only to give appropriate content to business laws but also to administer laws that perform important political functions, such as restraining abuse of power by the executive.51 Structuring legal systems so as to limit judges’ authority may only reinforce this problem, with dire consequences for social welfare.

49 This possibility seems to motivate Glaeser and Shleifer’s conclusion that bright-line rules are inappropriate in a jurisdiction with a ‘bad government.’ Glaeser & Shleifer, ‘Legal Origins,’ supra note 5.
Consequently, it may be worthwhile to invest in enhancing judicial integrity and competence rather than simply attempting to work around it. This observation suggests that in some cases, legal reformers can reasonably treat considerations related to institutional competence as transitional concerns that are of less inherent significance than considerations related to a jurisdiction’s size.

This leads to a third and final observation about the relationship between the present analysis and analyses based on concerns about institutional competence. Even where the two modes of analysis generate conflicting policy recommendations, there is no a priori reason for favouring one mode of analysis over the other. Ultimately, the relative significance of institutional competence and jurisdiction size in any given context will be an empirical matter.

B LEGAL HERITAGE

Several prominent scholars have recently argued that developing countries that trace their legal heritage back to the civil law – and, in particular, the French civil law – display lower levels of economic growth, heavier regulation, weaker law enforcement, less secure property rights, less efficient governments, weaker levels of investor protection, and lower levels of financial development and political freedom.\(^{52}\) Glaeser and Shleifer suggest that bright-line rules are more prevalent in jurisdictions with a French legal heritage than in common law jurisdictions because the French legal tradition places a great deal of reliance on codes and grants judges little flexibility to depart from statutory provisions.\(^{53}\) Thus, at first glance, this literature suggests, at least indirectly, that bright-line rules are inappropriate in developing countries. This inference is, of course, consistent with the conclusion reached in section IV.B of this article.

There are, however, at least three reasons to avoid placing too much weight on findings drawn from the literature on legal traditions. First, there is evidence that the correlation between French legal heritage and poor legal institutions is a spurious one that obscures the more fundamental role played by colonialism and inappropriate legal transplants in determining the quality of legal institutions in developing countries.\(^{54}\) Second, there is room for debate over whether rules are significantly more prevalent in civilian than in common law jurisdictions, especially when one takes into account the fact that, for purposes of the present

\(^{52}\) Ibid.; Glaeser and Shleifer, ‘Legal Origins,’ supra note 5.

\(^{53}\) Ibid.

analysis, we must consider rules made by both judges and legislatures. Not only are many provisions of civil codes typically so broadly worded as to resemble standards more than rules, in both common law and civilian jurisdictions a large proportion of business law consists of statutory provisions, as opposed to either the common law or provisions of a code. It is also significant that, historically at least, civilian judges have tended to be less bound by precedent (judge-made rules) than their common law counterparts. Third, even if civilian jurisdictions are more rule-bound than common law jurisdictions and, at least in the developing world, tend to have systematically weaker legal institutions, this does not necessarily prove that rules are causally connected to weak institutions in developing countries. There may be other factors, such as varying degrees of judicial independence or levels of procedural formalism, that explain the correlation between civilian legal heritage and poor legal institutions.

C OTHER CONSIDERATIONS
The preceding analysis abstracts considerably from reality by focusing on comparisons of jurisdictions that differ only with respect to size and suggesting that size is the most significant dimension along which developing countries differ from developed countries. It is quite possible that other types of inter-jurisdictional differences in the activities subject to legal regulation ought to receive equal or greater amounts of attention from lawmakers. For example, developing and developed countries can probably be distinguished systematically by reference to the extent of their reliance on foreign trade and investment. It may turn out to be the case that susceptibility to these sorts of external economic influences, and the corresponding implications for legal harmonization, ought in fact to be the most important considerations for lawmakers. Similarly, there may be significant variations across developing and developed countries in terms of social, political, and economic stability. Those variations will, in turn, lead to variations in the amount of certainty with which lawmakers can predict the effects of their decisions and may justify differences in the timing of investments in analysis. Finally, differences in absolute levels of institutional competence may turn out to be of greatest significance. These and other topics are left to future research.

It is becoming increasingly common these days to argue that the merits of different approaches to the design of legal institutions can and should be evaluated by subjecting them to rigorous empirical tests. In principle, the approach recommended here for small jurisdictions should be no exception. In practice, however, empirical testing of these recommendations is likely to prove difficult. Here it is useful to keep in mind that, like any normative analysis, although it suggests how lawmakers should act, the analysis presented so far does not provide any basis for presuming that actual lawmakers do act in this fashion. Moreover, the validity of the analysis does not depend directly on whether behaviour consistent with its recommendations is actually observed.

The closest thing to an empirical study shedding light on these issues appears to be an intriguing article by Casey Mulligan and Andrei Shleifer. Mulligan and Shleifer find that US states with large populations tend to have more 'regulation,' as measured by the number kilobytes of information contained in their state statutes, than those with smaller populations. They also find that more populous US states licensed certain occupations, regulated telegraphs, and regulated the working hours of women earlier than less populous states. In addition, they conduct a cross-country regression analysis showing, among other things, that more populous countries tend to regulate business entry more intensively and are more likely to rely upon military conscription, which they characterize as a form of regulation involving significant fixed costs. Mulligan and Shleifer argue that these findings all support the proposition that regulation is most likely to be adopted in states with large populations affected by the regulation, because there are fixed costs associated with creating regulation.

Mulligan and Shleifer define 'regulation' as an approach to resolving social problems that involves delineating the rights and obligations of various parties in advance. For their purposes, the distinctive feature of this approach to social ordering is that although it involves certain fixed costs, it tends to reduce the marginal costs of resolving social problems. This definition of regulation as opposed to other approaches to social ordering closely tracks the definition of a rule, as opposed to a standard,
used in the legal literature. In fact, at certain points Mulligan and Shleifer use the terms 'rule' and 'regulation' interchangeably. Consequently, at first glance, their analysis seems to provide empirical confirmation of the claim that small jurisdictions find rules less attractive than large jurisdictions.\(^{61}\)

However, there are at least two reasons to doubt whether Mulligan and Shleifer have actually observed what they claim to observe. The first source of doubt surrounds their data. It is far from clear that Mulligan and Shleifer have actually created valid measures of the number of rules in the jurisdictions they study. For instance, their use of the number of kilobytes contained in state statutes seems to ignore rules that might be contained in the common law or subordinate legislation. Consequently, it may not even be true that large US states have more rules (or regulation) than small ones. In addition, none of their measures takes into account how much analysis preceded the creation of the regulation, and so they fail to measure potential variation in a potentially important component of the fixed costs associated with law-making. In principle, it could be that small jurisdictions have less regulation than large jurisdictions because lawmakers in small jurisdictions make greater investments in ensuring that regulation is truly necessary and, if it is deemed necessary, that it is relatively concise. This would sit uneasily with the hypothesis that lawmakers in small jurisdictions are relatively unwilling to incur fixed costs.

A second difficulty with Mulligan and Shleifer's analysis stems from the fact that they are essentially claiming that correlation indicates causation. Even if it is true that large jurisdictions adopt more rules/regulation than small jurisdictions, it is difficult to defend the causal claim that they do so because lawmakers are generally concerned about the fixed costs of law-making. The problem is that it is virtually impossible to eliminate alternative explanations – that is, explanations besides concern about fixed costs – for this kind of observed behaviour. For instance, perhaps lawmakers in large jurisdictions are, maybe by virtue of being drawn from a larger pool of candidates, simply more competent than lawmakers in small jurisdictions. Alternatively, and more cynically, perhaps lawmakers generally have less than benign motivations for adopting rules/regulation, such as self-aggrandizement (as opposed to cost minimization), and so more intensive use of rules and regulation in large jurisdictions can be explained by the fact that lawmakers in large jurisdictions are less accountable than lawmakers in small jurisdictions.

\(^{61}\) Mulligan and Shleifer's analysis appears to have been developed independently of and subsequent to the one contained in this article.
Difficulties in quantifying legal phenomena and in establishing causation rather than mere correlation are endemic in statistical studies of legal institutions. Among other things, this suggests that statistical analyses should often be combined with surveys or interviews designed to reveal lawmakers' internal perspectives before drawing any definitive conclusions about lawmakers' practices. More important for present purposes, however, is the following point: merely observing that lawmakers in small jurisdictions favour standards over rules, and so on, neither confirms nor denies the normative claim that it is a good thing for them to do so. Defending this sort of normative claim requires both a means of observing lawmakers' behaviour and some way of testing the impact of different types of behaviour upon the quality of the resulting laws. Mulligan and Shleifer do not attempt this last step, suggesting that, unfortunately, the state of the art in empirical analysis still has some way to go before it can shed light upon the merits of the claims advanced above.

VIII Conclusions

Using an analytical framework well accepted in the law and economics literature, this article has shown that, speaking very generally, it is appropriate for small jurisdictions to adopt laws that are, compared to those found in large jurisdictions, relatively standard-like and opaque. On the other hand, to the extent that they take the form of standards, there is no particular reason to believe that laws in small jurisdictions should be any simpler than those in large jurisdictions. Finally, small countries should find it relatively advantageous to pursue opportunities to transplant laws from other jurisdictions, particularly large ones. The basic intuition underlying these arguments is that setting bright-line rules that are customized to fit the circumstances of a particular jurisdiction involves significant fixed costs — in the form of both analytical costs and communication costs — and so manifests increasing returns to scale: the larger the jurisdiction, the larger the return on investing in bright-line, customized rules.

This analysis presents an important counterpoint to conventional analyses that either assume that all legal systems ought to converge upon a single ideal form consisting of simple, bright-line rules or, if they acknowledge the desirability of variation, suggest that the primary determinant of the form taken by legal norms ought to be institutional competence. These approaches to the question of how the formal characteristics of laws should vary across jurisdictions have the potential to generate contradictory conclusions, and there do not seem to be any a priori grounds for favouring one approach over the other, suggesting that further research, both theoretical and empirical, is warranted. These
conclusions have particularly significant implications for small (in the technical sense used in this article) developing countries that face pressure to adapt their legal systems to conform to conventional ideals.62

62 The analysis also, indirectly, sheds light upon the merits of efforts designed to increase the size of a jurisdiction, either physically or legally.