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Understanding the role of law and the legal system in economic development requires more than a purely economic model[1]

Frank H Stephen[2]

University of Manchester
Correspondence emails: frank.stephen@manchester.ac.uk

ABSTRACT

This article illustrates that an approach to law and economics which uses economic models and quantitative analysis without considering socio-cultural factors and lacks detailed legal understanding of the specific 'laws' being analysed can lead to problematic policy prescriptions. It shows that the 'law and finance' approach to law and economic development is flawed. More generally, the article demonstrates that law and economics cannot solely rely on the application of the techniques of economics but must also recognise the importance of culture in determining economic behaviour. The studies discussed utilise a New Institutional Economics model of the role of law and the legal system, draw on dimensional models of culture from cross-cultural psychology and utilise a Leximetric dataset containing more finely grained measures of creditor and investor protection indices than those used in earlier studies of the role of law in economic development. The evidence adduced suggests a strong and persistent transplant effect.

Keywords: law and economics; comparative law; legal culture; development; New Institutional Economics; finance; creditor protection; investor protection; empirical; legal transplants; Legal Origin Theory.

1 This article is based on an invited presentation at the 'law and economics' conference held at the University of Leicester's School of Law in July 2019. The author is grateful to the conference organisers Richard Craven and Olivia Hamlyn for comments on the article. Comments from participants in the conference, this journal's editor and its referees have helped to improve the article but, as always, any remaining flaws are those of the author.

2 Emeritus Professor of Regulation, School of Law, University of Manchester; and Research Associate, Centre for Business Research, University of Cambridge.

INTRODUCTION

'Law and Economics' in its modern form was crystallised in the early 1970s with the publication of the *Economic Analysis of Law* by Richard Posner,[3] a Professor of Law at the University of Chicago. The research programme from which it developed began with the analysis of tort law using the so-called Coase Theorem.[4] In the early years of its development this research programme essentially focused on analysing the common law. This led to a view that the common law was efficient.

The 'Chicago' approach to law and economics was criticised from a number of directions within economics not least from those promoting a more detailed analysis of institutions.[5] Since these early days, the application of economic reasoning to law has expanded greatly to include, *inter alia*, the use of New Institutional Economics (NIE). However, early on in these developments Ronald Coase, Nobel Laureate in Economics, writing about the expansion of economists into other social sciences wrote?[6]

> ... if the main advantage which an economist brings to the other social sciences is simply a way of looking at the world, it is hard to believe, once the value of such economic wisdom is recognised, that it will not be acquired by some practitioners in these other fields. This is already happening in law and political science. Once some of these practitioners have acquired the simple but valuable, truths which economics has to offer, and this is the natural competitive response, economists who try to work in the other social sciences will have lost their main advantage and will face competitors who know more about the subject matter than they do.

Lately, there has been increased use of the techniques of economics by scholars from other disciplines such as political science, history and law. However, there continue to be instances of the narrow approach to law and economics being carried out with significant impact on policymaking. The present article draws on two studies in the field of law and finance to illustrate that, when economists ignore the insights of other social sciences, they may prescribe policies for multilateral lending agencies such as the World Bank which have negative consequences for the client countries of such multilateral agencies.

In recent years, multilateral development agencies have promoted an approach to economic development which is market led. They have

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3 Richard Posner, *Economic Analysis of Law* (Little, Brown & Co 1972).

4 Roald Coase, 'The problem of social cost' (1960) 3(1) Journal of Law and Economics 1–44.

5 See for example, Frank H Stephen, *The Economics of the Law* (Harvester Wheatsheaf 1988) 184–193.

6 Ronald Coase, 'Economics and contiguous disciplines' (1978) 7(2) Journal of Legal Studies 201–211 at 210.

promoted the idea that efficient markets will enhance development and, in particular, that an efficient financial system will stimulate growth by selecting the most viable investments. This approach has been supported by projects such as *Doing Business* which has published data on an increasing range of regulatory and legal matters in an increasing number of countries since 2003.[7] This project in recent years has ranked countries' performance in ease of doing various business measures. The value of such measures has been criticised by a number of authors.[8] Kelley et al[9] have argued that the publication of *Doing Business* rankings has motivated reforms in a number of jurisdictions. These authors provide evidence that publication of *Doing Business* rankings encourages competitiveness in adopting these reforms among the elites of countries covered.

The *Doing Business* project appears to be motivated by the research programme of Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny (LLSV), which has come to be known as Legal Origin Theory.[10] Essentially, this approach argues that the investor and creditor laws of the common law jurisdictions are superior to those in civil law jurisdictions in promoting financial development and hence growth. A consequent policy prescription is that the rules observed in common law jurisdictions should be adopted by those jurisdictions which do not already have them.

Legal Origin Theory is an example of research still being undertaken in law and economics almost 20 years after Coase's admonition, which ignores relevant and valid insights from other social sciences which nullify its own conclusions. We draw on two papers from an alternative programme of research which illustrate that when insights

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7 See World Bank, Business Enabling Environment.

8 Benito Arruñada, 'Pitfalls to avoid when measuring institutions: is doing business damaging business?'(2007) 35(4) Journal of Comparative Economics 729; Claude Menard and Bertrand du Marais, 'Can we rank economies according to their economic efficiency?' (2008) 26 Washington University Journal of Law and Policy 55.

9 Judith G Kelley, Beth A Simmons and Rush Doshi, *The Power of Ranking: The Ease of Doing Business Indicator as a form of Social Pressure* (Annual Meeting of the American Political Science Association Mini-Conference on Assessment Power in World Politics Philadelphia PA, 2 September 2016).

10 Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Legal determinants of external finance' (1997) 52 Journal of Finance 1131; Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Law and finance' (December 1998) 106(6) Journal of Political Economy 1113; Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Investor protection and corporate governance'(2000) 58 Journal of Financial Economics 3; Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 'The economic consequences of legal origins' (2008) 46(2) Journal of Economic Literature 285.

from other social sciences and the more detailed subject knowledge of legal academics are incorporated into tests of the influence of law on financial development the results of Legal Origin Theory are nullified.

This alternative research programme differs from Legal Origin Theory in four respects:

1 It is based on a model of economic behaviour which recognises the importance of institutional constraints, namely NIE.
2 It uses a more finely tuned set of indices of investor and creditor protection laws covering several years. A number of criticisms have been made of the legal indices used in empirical tests of Legal Origin Theory.[11] Alternative measures of investor and creditor protection rules have been developed through the Centre for Business Research (CBR) at the University of Cambridge which it is argued overcome the deficiencies of those devised by LLSV. These, so-called, Leximetric indices[12] are used in the second of the papers discussed below.
3 It accounts for cross-cultural differences in behaviour. Legal Origin Theory also ignores the insights gained from researchers in the field of cross-cultural psychology[13] who have demonstrated the existence of distinct cultural regions which exhibit significant and consistent differences in social behaviour. The research programme reported in the present article takes account of culture and finds that studies which ignore cultural differences wrongly impute differences in financial development to differences in legal systems rather than to cultural differences.
4 It takes into account the historical process through which jurisdictions acquired their current legal systems. Cultural differences are also shown to interact with the process by which

11 These include errors in the scores given to particular jurisdiction in the indices of creditor and investor protection indices; there is a home country bias in that the authors only look for provisions similar to those which appear in US law; there are inconsistencies in coding; the role of case law in civil law jurisdictions is misunderstood; most investor protection laws in common law jurisdictions are a consequence of legislation and not judicial law making; the use of 0/1 indicators is too crude; provisions of individual laws cannot be separated from their legal and social context; they fail to consider the interaction between the provisions of the law and their enforcement. These are outlined in more detail by Frank H Stephen, *Law and Development: An Institutional Critique* (Edward Elgar Publishing 2008).

12 J Armour, S Deakin and M Siems (2016) 'CBR Leximetric datasets'.

13 See, for example, Shalom H Schwartz, *Cultural Value Orientations: Nature and Implications of National Difference* (2008 State University-Higher School of Economics Press) and Geert H Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations* (Sage Publications 2001).

> elements of the legal system have been transplanted from one social and legal context to another. Indeed, the research which has led to the identification of such a 'transplant effect' illustrates the benefits of collaboration between economic and legal scholars.[14]

The present article draws on the two studies[15] from a research programme which applies an NIE model to analyse the role of the law and the legal system in the process of market-led economic development as promoted by multilateral development agencies such as the World Bank. This model suggests that policies that promote the adoption of legal rules deemed to be effective in promoting financial development in developed countries (and common law countries in particular) as a route to promoting development will not have the intended effect when they clash with the legal culture of the recipient jurisdiction. The two empirical studies from this programme covering different time periods and sample countries provide evidence to support this contention.

The next section of this article outlines the key components of the NIE model derived by the present author. This develops Oliver Williamson's Levels of Social Analysis framework under which market organisation is constrained by governance structures which in turn are constrained by the institutional (including legal) environment. The institutional environment is in turn constrained by what Williamson calls embeddedness which may be interpreted as culture. Our NIE model uses the cultural regions identified by Shalom Schwarz through his dimensional model of culture to track 'variations' in culture across jurisdictions which is discussed in the third section below. This is followed by a discussion of the Transplant Effect which arises when laws or rules from one jurisdiction are transplanted to another whose legal culture is unreceptive to the transplant. It is argued that in such circumstances the effectiveness of the legal system will deteriorate. The subsequent section reports on two studies which provide empirical applications of the NIE model of the role of the law and the legal system in economic development. The reported results show: that the characteristics of the legal environment influence financial development but make clear that the effectiveness of the legal system interacts with law on the books in such a way that the impact of particular laws on financial sector development is likely to be lower the lower is legal effectiveness; the indices of shareholder and creditor protection are found to converge over time but the index of legal

14 See Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, 'Economic development, legality, and the transplant effect' (2003) 47 European Economic Review 165–195.

15 Stephen (n 11 above); Frank H Stephen, Simon Deakin and Boya Wang, *The Role of the Legal System in Financial Sector Development* (December 2020 Centre for Business Research, University of Cambridge).

effectiveness for jurisdictions is relatively stable across cultures; and evidence supporting the transplant effect and rejecting Legal Origin theory is found in the data.

THE ROLE OF LAW AND LEGAL SYSTEM IN ECONOMIC DEVELOPMENT

Stephen[16] argues that to understand the role of law and the legal system in the process of economic development requires a theoretical basis. We contend that NIE has the potential to provide such a theory. In this section we outline a framework for such a theory.

Nobel laureate in Economics, Douglass North provides an explanation of the role of institutions in the process of economic change. North defines 'institutions as the humanly devised informal and formal constraints on behaviour and their enforcement characteristics. He further defines organisations as groups of individuals who come together for a common purpose. Economic change arises when 'organisational entrepreneurs' see that they will be better off by the change. For North, norms of behaviour, conventions and self-imposed codes of conduct are informal institutions and rules; laws and constitutions are formal institutions. North also categorises the enforcement characteristics of informal and formal institutions as themselves being institutions. Organisations can be political, social, economic or educational.[17] The enforcement characteristics of institutions give rise to transaction costs. North characterises institutions as the rules of the game and organisations as the players of the game.

Another Nobel laureate in economics, Oliver Williamson, developed transaction cost economics. He explains that human and environmental characteristics give rise to different levels of transaction cost for mediating a transaction by different means. The different means of mediating the transaction are what Williamson calls governance structures. These governance structures can be the market, firms of different types and hybrids. Menard and Shirley[18] suggest: 'Some of the differences between North and Williamson may be less problematic than is often perceived, since they are similar to the differences between a macro and micro perspective.' They also point to other definitional

16 Stephen (n 11).

17 Geoffrey M Hodgson, 'What Are Institutions?' (2006) XL(1) Journal of Economic Issues 1, has argued that North's organisations are in fact also institutions and quotes correspondence from Douglass North which concedes this but argues that for analytical purposes it is useful to distinguish between them.

18 Claude Ménard and Mary M Shirley, 'The future of new institutional economics: from early intuitions to a new paradigm?' (2014) 10 Journal of Institutional Economics 541.

differences. They suggest that a major challenge for NIE is 'how do the (Northean) rules that determine the security and functioning of property rights or the laws that affect contractual credibility and enforcement shape the choice of (Williamsonian) modes of governance and of the ways to organize transactions?'.[19]

A step in this direction is provided by Williamson[20] who summarises the concerns of NIE through a framework of four 'levels of social analysis'. These are shown in Figure 1, which is adapted from Figure 1 of Williamson.[21] It allows us to see the influence which institutions have on economic behaviour. At the foot of the diagram is 'resource allocation'. This is the concern of neoclassical economics: economic agents react to the signals provided by product and factor markets in allocating scarce resources to different activities. Williamson refers to this as 'third order economising', with the purpose of getting the marginal conditions right. The solid arrow from the level of governance to resource allocation in Figure 1 is used to indicate that resource allocation is constrained by existing 'governance structures'. While resource allocation takes place on a continuous basis, governance structures take longer to adjust. Williamson suggests from one to ten years. Thus, at any point, resource allocation is constrained by existing governance structures. However, over time governance structures can be adjusted in response to inefficiencies through a feedback loop as indicated by the broken vertical arrow in Figure 1.

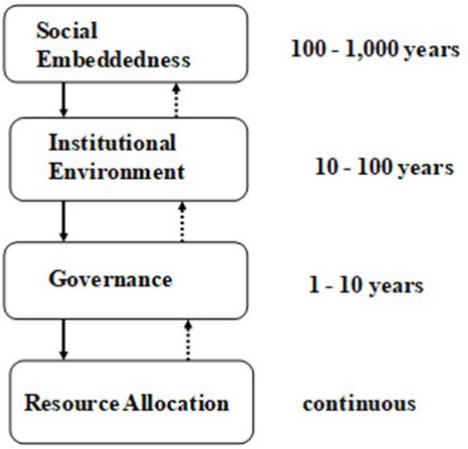

Figure 1: Williamson's framework.[22]

19 Ibid 559.

20 Oliver E Williamson, 'The New Institutional Economics: taking stock, looking ahead' (2000) 38 Journal of Economic Literature 595.

21 Ibid.

22 Adapted from Willliamson (n 20 above).

Williamson identifies the governance structure level with transaction cost economics. At this level, for example, contracts are used to align governance structures with transactions, but it also includes the development of organisational forms to cope with complex incomplete contracts – eg firms with different organisational and ownership structures, bureaucracies, regulatory bodies, mutuals etc. Transaction cost economics analyses these differing governance structures as arising to minimise transaction costs. Williamson styles activity at this level as second order economising. The characteristic economising decision at this level is that of 'make or buy'. Should a firm purchase a particular input across a market interface and thus govern the transaction by contract or should it produce it in-house and govern it by hierarchy? According to Williamson, the choice depends on transaction costs. Changes in governance structures cannot be instantaneous. However, this economising behaviour is itself constrained by the institutional environment within which it takes place, as indicated by the solid arrow from institutional environment level to the governance level in Figure 1 (above). In Williamson's model the *institutional environment* consists of formal rules: constitutions; laws; property rights. Economising behaviour at this level, which Williamson labels first order economising, encompasses the legislative, executive and judicial functions of government. He particularly stresses the defining and enforcement of property rights and contract laws. Adjustments at this level, it is argued, can take from a decade to a century. As Figure 1 indicates, changes at this level are constrained by what Williamson refers to as embeddedness, which includes informal institutions, norms and religion. However, there may be feedback from the governance level to the embeddedness level. Williamson refers to the institutional environment as setting the 'formal rules of the game' and governance as the 'play of the game'. The embeddedness level might be seen as providing the *informal* rules of the game. It is non-calculative and spontaneous. It provides the socio-cultural context. Williamson refers to behaviour at this level as being 'adopted' and subject to inertia.

We can relate Williamson's framework to Douglass North's analysis of economic change.[23] Table 1 summarises the constituent parts of each framework. As can be readily seen, there is considerable overlap. North's institutions correspond to a combination of Williamson's embeddedness and institutional environment levels. We also map North's framework onto Williamson's in Figure 2. Williamson's resource allocation level corresponds to North's transformational sector in which inputs are

23 John Joseph Wallis and Douglass C North, 'Measuring the transaction sector in the American economy, 1870–1970' in Stanley L Engerman and Robert E Gallman (eds), *Long-term Factors in American Economic Growth* (Chicago University Press 1986).

transformed to outputs. However, the two frameworks differ at the intermediate level. Williamson's governance structures bear some similarities to North's organisations: firms, bureaucracies, mutuals etc are organisations. Williamson, however, includes markets as governance structures, but they are not usually thought of as organisations. There is also the subtle difference that Williamson refers to governance structures as 'the play of the game', whilst North refers to organisations as the players. This suggests Williamson sees governance as a process, while North sees organisations as actors. Williamson is essentially concerned about how contractual relationships are mediated and the way in which transaction costs shape the choice of governance structure from those which are available given the institutional environment. North stresses the role of organisational entrepreneurs as the agents of change in the economic and political context, whereas Williamson is concerned with governance structures as constraining resource allocation. In one sense Williamson is really focused on the downward constraints, illustrated in Figures 1 and 2 by the solid downward arrows, while North is particularly concerned with the upward broken arrows, particularly between the organisational level and the institutional level. Consequently, Williamson's analysis is static in nature whilst North is trying to understand the dynamics of change over time. Although Williamson recognises the existence of feedback loops, that is not really his concern. He does not discuss who initiates that feedback or what process brings about change. Indeed, in an article in 2000, he explicitly notes that he ignores the feedback loops.[24]

Although in the same article, he distinguishes between embeddedness and the institutional environment, he explicitly locates informal institutions at the former level. Thus, we can see that North's institutions (or institutional matrix as he sometimes refers to it) encompass both Williamson's embeddedness and Williamson's institutional environment, but Williamson may be seen as distinguishing between the two levels because he essentially regards formal institutions as potential policy variables and hence subject to conscious manipulation by policymakers, whereas informal institutions are not 'designed' by policymakers but are adopted and subject to inertia. Yet, he does recognise that embeddedness constrains the choice of institutions. The timescales shown in the right-hand side of Figure 1 emphasise the inter-temporal differences between Williamson's levels.

It should be noted that both Williamson and North stress the importance of enforcement of property rights and laws in their discussions of institutions. The question of enforcement has featured

24 See Williamson (n 20 above).

Williamson's Framework	North's Framework
Embeddedness Informal institutions, norms and religion.	*Institutions* Informal constraints (eg norms of behaviour, conventions, self-imposed codes of conduct), formal constraints (eg rules, laws, constitutions) and their enforcement characteristics.
Institutional Environment Constitutions, laws, property rights (defining and enforcing).	
Governance Contracts, firms with different organisational and ownership structures, bureaucracies, regulatory bodies, mutuals etc, hybrids.	*Organisations* Individuals in groups for a common purpose. They can be political, economic, social and educational.
Resource Allocation Getting the marginal conditions right.	*Transformation Sector* Transformation of resources into outputs.

Table 1: Comparing Williamson's and North's frameworks. Source: Stephen.[25]

in both Legal Origin Theory and (as legality) in the literature on the transplant effect (see further below).

Williamson's framework for social analysis, summarised in Figures 1 and 2, is a relatively simple and linear model, but nevertheless it provides a very powerful insight into the limitations of neoclassical economics as a framework for understanding the process of economic development and particularly as the basis for development policy. Advocates of a market-based approach to development relying solely on neoclassical analysis are likely to support the withdrawal of the government from many areas of economic activity, the privatisation of assets and reliance on market forces to generate an efficient allocation of resources and hence enhance economic development. What Figure 1 amply demonstrates is that the reallocation which would take place is heavily constrained by governance structures, the institutional environment and embeddedness. In particular, what would be an efficiency-enhancing reallocation in one social context would not be one in another social context with a different legal or political system and

25 Source: Stephen (n 11 above).

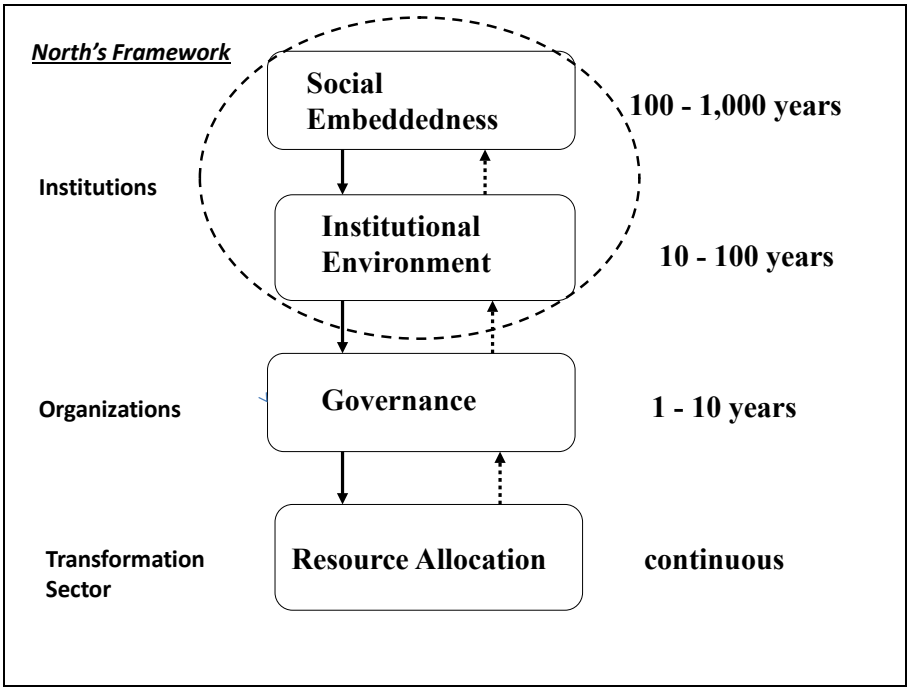

Figure 2: Williamson's and North's frameworks.[26]

different social customs or religious norms. Put differently, a market-induced reallocation of resources in one social context might not be possible in another because property rights might differ between the two contexts and thus relative prices of resources might differ leading to different marginal decisions by economic agents. For example, a resource such as a particular category of land might be alienable (and thus its ownership transferable) in one social context but not in another due to social custom. Thus, in the second context, even if property rights are changed by legislation, owners of this particular category of land might not be willing to sell it due to the social custom which inhibits its sale.

Williamson's framework can be used to motivate a model of the determinants of growth in order to examine the role which the law and the legal system play in the process of development. Williamson's constraints help in distinguishing between exogenous and endogenous variables in that model. However, to construct a model of development which recognises the institutional and cultural constraints placed on policymakers we need a means to account for the constraints imposed at the embeddedness level. We turn to this in the next section.

26 Ibid.

CULTURE, LAW AND DEVELOPMENT

Much NIE analysis focuses on the institutional environment. It takes embeddedness or the socio-cultural context as given and examines the implications for governance structures. In this section we focus on embeddedness in order that we articulate the relationship between embeddedness and the legal environment. We begin with an analysis of the relationship between legal institutions and culture. It draws on empirical studies which test whether such a relationship, indeed, exists. We examine the dimensions of culture and how they might be measured and relate them to measures of the legal institutions in different countries. A relationship between the socio-cultural variables and legal variables is found to exist.

In the previous section we introduced Williamson's 'levels of social analysis' as a framework by which to assess the role which law plays in the process of economic development. In that framework the institutional environment is constrained by what Williamson calls 'embeddedness', which we might also call the socio-cultural context. We will draw on a series of empirical papers in the field of corporate governance which examine the relationship between dimensions of culture and corporate governance rules.

Williamson's levels of social analysis framework treats embeddedness/socio-cultural context as a constraint on the legal environment – ie a restraint on the adoption of (increasing the transactions costs of) certain legal rules. However, particular cultures may enhance or encourage the adoption of particular rules, for example a society in which individuals are encouraged to be assertive and promote their own interests may be more likely to favour a system of corporate governance under which individual shareholders are able to challenge decisions by boards of directors in the courts. Intuitively, it seems likely that such culture factors will have an influence on the development of a jurisdiction's legal system. However, it is also likely that through time the legal system may affect people's behaviour and consequently influence the cultural context in future. Indeed, Williamson's framework does allow for a feedback loop from institutional environment to embeddedness. The relationship between cultural context and the legal environment is undoubtedly a complex one. However, the potential for the cultural context to raise the transaction costs associated with legal reform should caution policymakers, particularly in multilateral development institutions, against promoting legal transplants without considering the potential cultural resistance.

One difficulty in analysing the role of socio-cultural factors are the wide-ranging definitions of culture which are available and their often casual or informal use. There is a need to make the idea of culture operational so that the relationship between culture and law can be

tested. Amir Licht has argued that 'Cross-cultural psychology has made considerable progress toward developing an analytical framework for comparing cultures.'[27] He and a number of co-authors have used so-called 'dimensional models of culture' to examine the relationship between corporate governance laws and cultural dimensions. In particular, they have used the dimensional models of Geert Hofstede[28] and Shalom Schwartz[29] in this context. These cultural dimensions have also been used by Breuer and Saltzman in a thorough empirical study of culture and corporate governance.[30] Stephen has used Schwartz's cultural regions to examine differences across these regions in corporate governance.[31]

Geert Hofstede developed his set of cultural value dimensions in the 1960s and 1970s from studies of IBM employees in a number of countries. The value dimensions developed from Hofstede's work are:

- 'individualism/collectivism', sorting between societies where the individual is seen only as loosely linked to the rest of society and cares only for self and immediate relatives and those where the individual is seen as part of a closely knit group such as family or clan which provides security in exchange for loyalty;
- 'power distance', differentiating between societies which regard unequal distributions of power in institutions as legitimate or not;
- 'uncertainty avoidance', being comfortable or uncomfortable with uncertainty or ambiguity;
- 'masculinity/femininity', prizing achievement, heroism and material success as opposed to relationships, modesty and interpersonal harmony; and

27 Amir Licht, 'Culture and law in corporate governance' Working Paper 247/2014 (March 2014 European Corporate Governance Institute Law).

28 Hofstede (n 13 above); Geert H Hofstede, Gert Jan Hofstede and Michael Minkov, *Cultures and Organizations: Software of the Mind* 3rd edn (McGraw-Hill 2010).

29 Shalom H Schwartz, 'Cultural value differences: some implications for work' (1999) 48 Applied Psychology: An International Review 23; Shalom H Schwartz, 'A theory of cultural value orientations: explication and applications' (2006) 5 Comparative Sociology 137; Shalom H Schwartz, 'Culture matters: national value cultures, sources and consequences' in Robert S Wyer, Chi-yue Chiu and Ying-yi Hong (eds), *Understanding Culture: Theory, Research and Application* (Psychology Press 2009).

30 Wolfgang Breuer and Astrid Juliane Salzmann, 'National Culture and Corporate Governance' in Sabri Boubaker, Bang D Nguyen and Duc K Nguyen (eds), *Corporate Governance: Recent Developments and New Trends* (Springer Verlag 2012).

31 Frank H Stephen, 'New Institutional Economics, culture and corporate governance' in Franklin N Ngwu, Onyeka K Osuji and Frank H Stephen (eds), *Corporate Governance in Developing Markets* (Routledge 2017) 45-60.

- 'long-term orientation', having a long-term orientation favouring thrift and persistence.

Hofstede's work has been used widely in the management literature. Shalom Schwartz developed his set of bipolar culture dimensions in the 1990s and validated them with fieldwork in over 60 countries. The dimensions identified by Schwartz are:

- 'embeddedness/autonomy', at the embeddedness end of this dimension the individual is seen as subsumed within the group implying maintenance of the status quo, propriety and order whilst at the other pole the individual is autonomous and self-fulfilling;
- 'hierarchy/egalitarianism', where at the hierarchy pole there is a willingness to play an assigned role within a recognised unequal distribution of powers and roles while at the other pole a willingness to promote the interests of others is favoured; and
- 'mastery/harmony', where mastery connotes a society where there is an emphasis on promoting self interest in the natural and social environment whereas harmony implies subsuming one's interest in the environment.

Schwartz*	**Hofstede****
English Speaking	Anglo
West European	Germanic Nordic More Developed Latin
East Central Europe and Baltic States	-
Eastern Europe and Balkans	-
Latin American	Less Developed Latin
South and South East Asia Confucian	More Developed Asian (consisting only of Japan), Less Developed Asian
Muslim Middle East and Sub-Saharan Africa	Near Eastern

Table 2: cultural regions. *As reported in Schwartz.[32] ** As reported in Breuer and Saltzman.[33]

32 Schwartz (n 13 above).
33 Breuer and Saltzman (n 30 above).

Schwartz's cultural dimensions have been used widely in the social sciences and particularly in the fields of law and corporate governance through collaboration with Amir Licht and others.

Both the Hofstede and Schwartz value dimensions for individual countries have been used to generate cultural regions where the similarities within regions outweigh the differences between regions. The cultural regions differ across the two systems, *inter alia*, because of differences in country coverage. The cultural regions identified by Schwartz have developed over time as more countries have been included. Those summarised in Table 2 are drawn from Schwartz's 2008 paper.[34] Hofstede does not include any Eastern European or African countries in his coverage. The countries in Hofstede's Near Eastern region are Greece, Turkey and Iran, which under Schwartz regions are in Western Europe, Eastern Europe and not included respectively. Brazil and Argentina are in Hofstede's More Developed Latin (along with many European countries).[35]

Schwartz[36] argues that the cultural regions which his surveys have identified 'are related to geographical proximity ... they also reflect shared histories, religion, level of development, culture contact'. Schwartz[37] characterises the Western Europe Cultural Region as being high on autonomy, harmony and egalitarianism while the 'Sub-Saharan Africa and Middle Eastern' and 'South and South-East Asian' regions are high on embeddedness and hierarchy, and the 'Confucian' region is high on hierarchy and mastery. The 'English-speaking' region is high on autonomy and mastery.

Williamson's levels of social analysis model, outlined earlier, suggests that cultural context constrains the institutional environment including the legal environment. Following on from differences across cultural regions as identified by Schwartz we would thus expect different cultural regions to develop different legal environments. A number of authors have investigated empirically the link between cultural value dimensions and the legal system. For example, Stephen[38] has shown that values of a 'rule of law index' and an enforcement index constructed by Pistor et al[39] for transition countries in Europe are statistically

34 Ibid.

35 As reported in Amir Licht, Chanan Goldschmidt and Shalom H Schwartz, 'Culture, law, and corporate governance' (2005) 25 International Review of Law and Economics 229.

36 Shalom H Schwartz, 'Mapping and interpreting cultural differences around the world' in H Vishen, J Soeters and P Ester (eds), *Comparing Cultures, Dimensions of Culture in a Comparative Perspective* (Brill 2004).

37 Schwartz (n 13 above).

38 Stephen (n 31 above).

39 Katherina Pistor, Martin Raiser and Stanislaw Gelfer, 'Law and finance in transition economies' (2000) 8 Economics of Transition 325.

related to the cultural region to which Schwartz has allocated that country. Thus, not only may 'laws' differ across jurisdictions from different cultures (laws on the books), but specific laws or rules may operate differently across jurisdictions from different cultures (law in action) Therefore, in analysing the role of law on the process of development we must take account not only of the law on the books but law in action.

THE TRANSPLANT EFFECT

The policy of market-led development promoted by multilateral development agencies has at its foundation Legal Origin Theory, which not only posits that laws governing investor and creditor protection as developed in common law jurisdictions promote financial sector development but also that their adoption in other jurisdictions will improve the prospects of economic development in those jurisdictions. This contention has been challenged by a group of researchers who have sought to measure the effectiveness of transplants between jurisdictions. Berkowitz et al[40] and Pistor et al[41] point out that all jurisdictions have been the subject of legal transplants. Modern legal orders have developed from earlier legal orders by adopting elements of others' legal systems whether by conquest, emulation or imposition.

In much of Europe conquest by the Romans brought the transplanting of Roman law which was mixed with some remnants of customary law. The Norman Conquest of England in 1066 led to further developments which were then consolidated from the sixteenth to nineteenth centuries as what we now know as the common law, which was subsequently exported through colonisation to many parts of the world. In the settler colonies of North America, Australia and New Zealand the common law operated without being influenced by local customary law. In other British colonies local customary law remained important in areas such as family law, but the common law dominated commercial law.

In most other European jurisdictions Roman law remained dominant until the nineteenth century introduction of the Napoleonic code in France and subsequently through much of Western Europe. Many Latin American colonies on independence retained the French civil code as transmitted through Spanish colonisation. In many cases while the colonial power's legal order evolved subsequently its colonial manifestation remained largely unchanged. The German civil code,

40 Berkowitz et al (n 14 above).

41 Katherina Pistor, Yoram Keinan, Jan Kleinheisterkamp and Mark D West, 'Evolution of corporate law and the transplant effect: lessons from six countries' (2003) 18 World Bank Research Observer 89.

developed in the second part of the nineteenth century, was adopted by Japan and subsequently by China and Korea.

In more recent times legal transplants have taken place through a form of conditionality. In Europe, central and eastern European countries wishing to accede to the European Union revised their legal order to comply with the norms of existing members. More widely, many developing countries have been encouraged by the World Bank and others to adopt investor and creditor protection rules more typical of common law jurisdictions.

The writers in the transplant effect literature argue that the process of transplanting is crucial in determining the success of the transplant. It is this which determines what these writers call 'legality'. By 'legality' they mean the 'importance of enforcement and effective legal institutions'.[42] Put another way, the process of transplantation determines how well the transplanted law is enforced. Whether the transplant is introduced through conquest, emulation or imposition will affect its receptivity, defined as the country's ability to give meaning to the imported law. Thus, transplants which arise from emulation of a foreign jurisdiction's law are likely to be well received and adapted to the recipient jurisdiction's legal culture. On the other hand, laws transplanted as a result of conquest or other forms of imposition are less likely to be adapted to the recipient's legal culture. Where laws are adapted to local conditions, they are likely to have been more sensitively appraised and consequently used by local legal actors. Berkowitz et al[43] argue, for example, that some countries which received the Napoleonic code through conquest adapted it to local conditions[44] whilst others[45] did not. In their empirical work Berkowitz et al[46] distinguish between receptive and unreceptive transplants using adaptation as an indicator of receptivity. Another factor which is likely to increase receptivity is familiarity. If a transplant has its origin in a similar legal order to that of the recipient, it is more likely to be a receptive transplant. A transplant from one civil law jurisdiction to another civil law jurisdiction is likely to be more easily assimilated into the recipient jurisdiction than would be one from a common law jurisdiction.

Where transplants arise from conquest or imposition they may be seen as supply driven. On the other hand, when they arise from emulation they may be seen as being demand driven. Receptivity is likely to be increased when a transplant is demand driven. This does not mean that a supply-driven transplant cannot be successful, but

42 Berkowitz et al (n 14 above).
43 Ibid.
44 In their sample: Belgium, Italy, Netherlands.
45 In their sample: Portugal, Spain.
46 Berkowitz et al (n 14 above).

where it is not sympathetic to the recipient's legal culture the cost of achieving success will be higher because transaction costs will be greater. Although some countries received their transplant through conquest, there may have been powerful groups within the recipient who benefited from the transplant and, as a consequence, resistance to it was reduced – the transaction costs (both political and economic) were lower. In the terminology of NIE, unreceptive transplants raise transaction costs because the transplanted laws do not fit well with the recipient jurisdiction's legal environment and/or clash with its culture. Receptive transplants generate lower transaction costs because the laws being transplanted are compatible with the recipient's legal environment and culture. This approach further strengthens the need for any analysis of the role of the law and legal system in the process of development to take account of culture.

Berkowitz et al[47] estimate the determinants of legality and gross national product (GNP) *per capita* from a dataset of 49 countries and show empirically that the transplant effect on GNP *per capita* is achieved indirectly through the influence of legality on GNP *per capita*. Adoption of an unreceptive transplant reduces legality, that is to say it reduces the effectiveness with which the transplanted rules are applied in the courts or economic actors use resources in trying to circumvent the transplanted rules. They illustrate their results with the example of Colombia whose GNP *per capita* in 1994 was $1400. If that country had been the recipient of a receptive transplant their estimates suggest that its GNP *per capita* would be raised to $3785 because 'legality' would be enhanced. However, an unreceptive transplant of the German code would only raise GNP *per capita* to $2690, and an unreceptive transplant of the common law would have left GNP *per capita* unchanged.

Pistor et al[48] examined the experience of legal transplants in those countries making the transition from socialism to a market economy. They analysed data from 24 countries covering the Confederation of Independent States (CIS), Central and Eastern Europe (CES), the Baltic States (Baltic) and South Eastern Europe (SEE). The authors found that in the period of transition investor and creditor rights improved significantly across these countries. By 1998 the average level of LLSV's investor protection index for the transition countries was greater than the average for all legal origins other than that for common law jurisdictions, whilst the average for the creditor protection index was higher than for any of the civil law groupings or the common law countries. There were differences, however, within the transition

47 Ibid.

48 Pistor et al (n 41 above).

countries. Pistor et al[49] group the transition countries as follows: CEE/Baltic; SEE; CIS. They note that these groupings broadly correspond to legal orders before communism. The CEE/Baltic grouping had German civil law, while SEE states were typically part of the Ottoman Empire which was subject to French civil law influences, and the CIS countries 'failed to develop a modern formal legal system prior to the revolution'.[50] In the case of shareholders' rights, by 1998 the CEE/Baltic grouping and the CIS grouping scored higher on the LLSV index than all but the common law countries while the SEE grouping scored higher than both the French and German civil law groupings. With respect to creditor rights, the contrasts were even more dramatic. The CEE/Baltic grouping scored higher than any of the civil law groupings or the common law grouping while only the common law grouping had a higher score on the creditor protection index than either the CIS or SEE groupings. This suggests that, overall, the law on the books protecting investors and creditors in these transition countries had improved during the transition process. They were at least comparable to French and German civil law jurisdictions and in some cases reaching the level of Common Law jurisdictions.

When it comes to law in action (ie how well the legal system works as opposed to law on the books) the transition economies in Pistor et al's[51] study fared less well. Correlations between measures of rule of law, effectiveness and enforcement on the one hand and shareholder and creditor protection laws on the other were very low or negative. Stock market development (as measured by the average for 1997 and 1998 of ratio of market capitalisation to GDP) was found not to be influenced by investor protection laws but was influenced by the rule of law index. A similar result was found for creditor protection laws. However, in a dynamic specification for the determinants of the change between 1994 and 1998 in private sector lending, which included the distance from an income-related benchmark for lending as well as the initial level of creditor protection and the change from 1994 to 1998, both of these variables were found to be significant, but the rule of law was not. When the legal effectiveness variable of the European Bank for Reconstruction and Development[52] was substituted for the rule of law variable, it was found to be a statistically significant and positive determinant of the change in private sector lending, while the coefficients of the other variables were only marginally affected. The specifications used here suggest non-linearities in the effect of creditor

49 Ibid.

50 Ibid 337.

51 Ibid.

52 This is based on survey data reporting views on the effectiveness of reforms in bankruptcy and corporate law.

protection laws, but the variable measuring legal effectiveness is only entered as a level. Nor is the possibility of interaction between the effectiveness measure and the creditor protection measure tested.

The empirical evidence from the transplant literature clearly shows that the policy prescriptions implied in Legal Origin Theory may not be valid. Successfully transplanting legal rules from one legal order to another depends on the receptiveness of the recipient's legal culture. Whilst the evidence from the transition countries cited above is less strong than that from the more general study, this literature provides some support for Douglass North's conjecture that path dependence may reduce the benefits of transplanting institutions from developed to developing countries.

A NEW INSTITUTIONAL ECONOMICS MODEL OF FINANCIAL SECTOR DEVELOPMENT

Integrating the insights of NIE, the transplant effect and Schwartz's dimensional model of culture, Stephen has developed a model which identifies the role played by the law and the legal system in financial sector development and growth. Figure 3 summarises this model.

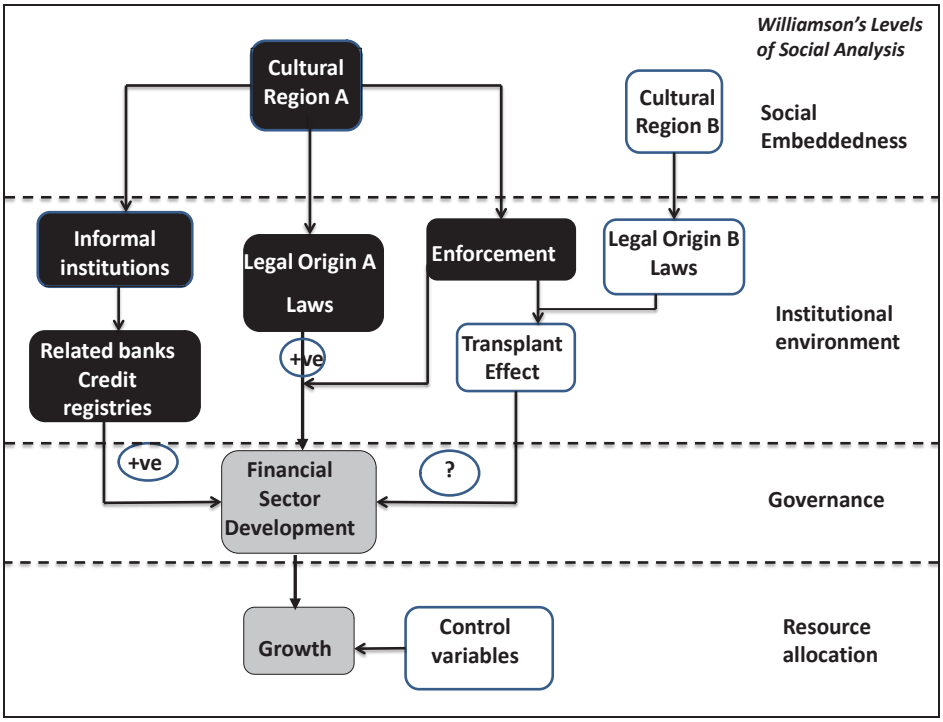

Figure 3: Schematic of the NIE framework applied to determinants of growth

The horizontal divisions in the figure correspond to the four levels of social analysis outlined by Williamson. At the top of the figure we see the culture of Region A is taken to be exogenously determined. At the next level laws, informal institutions and the enforcement characteristics of Cultural Region A constitute the institutional environment. Each of these constituent parts is constrained by the culture of Cultural Region A. The laws on the books are mediated into law in action by the enforcement characteristics to influence financial sector development. However, financial sector development is also influenced by informal institutions such as credit registries and close relations between banks and firms. Financial sector development mediates how exogenous characteristics of the jurisdiction are transformed into growth characteristics.

The figure accounts for legal transplants on the right of the figure in the form of laws derived from the culture of Cultural Region B being transplanted to Cultural Region A and interacting with the enforcement characteristics of Cultural Region A. For receptive transplants, the effect of this interaction on financial sector development will be positive, but in the case of unreceptive transplants it will be negative or at least lower than if it had been a receptive transplant. Laws on the books which are at odds with a jurisdiction's culture will be less effective than in other jurisdictions where they are in tune with the jurisdiction's culture.

The model sketched in Figure 3 has been applied to two separate datasets. Stephen[53] uses the financial dataset constructed by Levine and Zervos[54] together with the investor and creditor protection indices used in La Porta et al[55] and an enforcement variable[56] used by Levine and Zervos. The data consists of a cross-section of 39 countries for a single period. It includes legal origin countries and countries subject to receptive and unreceptive transplants. Whilst it does not include transition countries, it does include countries from a range of Schwartz's cultural regions as well as developed and developing countries. Whilst this first dataset uses unamended the creditor and investor protection indices employed in LLSV, the dataset used in Stephen et al[57] does not. It substitutes for these metrics those developed in the CBR Leximetric

53 Stephen (n 11 above) ch 6.

54 Ross Levine and Sara Zervos, 'Stock markets, banks and economic growth' (1998) 88(3) American Economic Review 537.

55 La Porta et al, 'Law and finance' (see n 10 above).

56 This is the average of the rule of law variable and the contract repudiation variable used by Stephen Knack and Philip Keefer, 'Institutions and economic performance: cross-country tests using alternative institutional measures' (1995) 7(3) Economics and Politics, 207.

57 Stephen et al (n 15 above).

data for investor and creditor protection, and it uses as its enforcement measure the rule of law index published by Daniel Kaufman and Aart Kraay.[58] The data analysed covers 30 jurisdictions for the period from 1996 to 2013. It is thus analysed using panel data methods. It includes legal origin countries, receptive and unreceptive transplants, transition countries and countries from all of Schwartz's cultural regions. Because of the time span covered, Stephen et al also take account of external shocks to the financial and regulatory systems, eg the end of the dotcom boom, the passing of the Sarbanes-Oxley Act in the US, the publication of *Doing Business* rankings and the financial crisis of 2008.

In both studies financial sector development is measured by the ratio of bank lending to the private sector to GDP (Bpy) and the ratio of capitalisation of the stock market to GDP (Mcap). Taken together they measure the size of the financial sector relative to the economy as a whole. Azfar and Matheson[59] have called their sum market mobilised capital. Both studies use a general to specific method under which the indices of investor and creditor protection are initially entered to allow for the possibility of non-linear relationships. This is similarly done for the enforcement measure and for interactions between each legal variable and the enforcement measure.

Size of financial sector

The estimates obtained in both studies cannot reject the hypothesis that the size of the financial sector is influenced by investor and creditor protection rules and the enforcement characteristics in a jurisdiction. The effect of high levels of creditor protection is greater for countries the higher their enforcement characteristics. For example, Stephen[60] reports that, while Egypt and South Korea have the same level of creditor protection index, an increase by one unit in the creditor protection index in Egypt is predicted to increase private credit by only 12.8 per cent but 21 per cent in South Korea. This is because the measure of enforcement in South Korea is 37 per cent higher than that in Egypt. However, the results of both studies suggest that the impact of an increase in investor protection on market capitalisation diminishes the higher the level of enforcement.

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58 See Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, 'The Worldwide Governance Indicators: methodology and analytical issues' Policy Research Working Paper No 5430 (World Bank 2010).

59 Omar Azfar and Thornton Matheson, 'Market-mobilized capital' (2003) 117 Public Choice 357.

60 Stephen (n 11 above) 138.

Characteristics of legal environment

Stephen et al utilise the CBR Leximetric dataset to represent the legal environment.[61] The levels of the investor and creditor protection indices in the CBR Leximetric dataset converge across jurisdictions and cultural regions over time. The level of the investor protection index was higher in the English Speaking, South and South East Asian, Confucian (China) and Eastern European and Balkans (Russia) cultural regions than in the other cultural regions. In the period after the bursting of the dotcom bubble, this index rose in the Central European and Baltic States, South and South East Asian, Confucian and South American cultural regions. In the period corresponding to the passage of the Sarbanes-Oxley Act there was an increase in the Western European and Muslim Middle East and Sub-Saharan Africa cultural regions. Following the publication of the Dong Business rankings, the investor protection index rose in the Central Europe and Baltic States, China and the jurisdictions in the South American cultural region which had been unreceptive transplants.[62] The convergence of the shareholder protection index since the 1990s is illustrated in Figure 4.

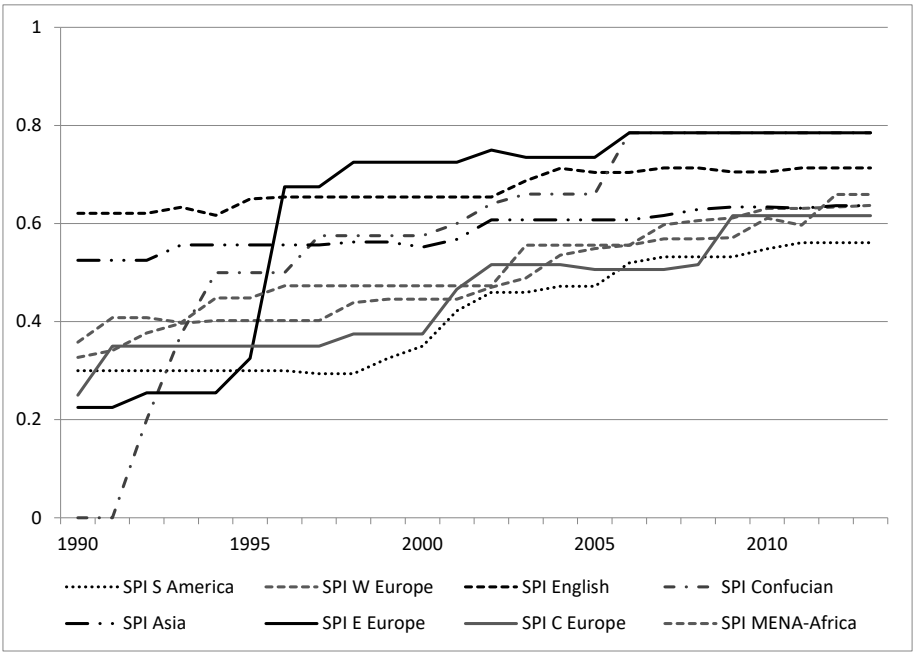

Figure 4: Shareholder protection index by cultural region. Source: CBR Leximetic data and Stephen et al.[63]

61 Stephen et al (n 15 above).
62 Brazil and Mexico.
63 Stephen et al (n 15 above).

Although there has been, in general, an increase in the creditor protection index, this has not led to the same degree of convergence as with the shareholder protection index. The estimation of the NIE model suggests that there were few statistically significant differences in the creditor protection index across cultural regions. In the first period, only Cyprus (the only common law jurisdiction in Western Europe), Russia and the two unreceptive jurisdictions in the South American Cultural Region differed from the overall average level of the creditor protection index. After the bursting of the dotcom bubble, this index rose for the Central European and Baltic States, Russia and the unreceptive jurisdictions of the South American Cultural Region while it fell for the non-common law jurisdiction in the South and South Eastern Asia Cultural Region (Japan). After the passage of the Sarbanes-Oxley Act, the index rose in the unreceptive transplant jurisdictions of western Europe (Cyprus and Spain) and the unreceptive transplant countries of south America (Brazil and Mexico). Following the publication of the *Doing Business* rankings, the index rose for the jurisdictions of the Western European Cultural Region, Central Europe and Baltic States and fell for the non-common law jurisdiction of the South and South East Asian Cultural Region (Japan). After the financial crisis, the only significant change for this index was an increase for China (the only jurisdiction in the dataset from the Confucian Cultural Region). The creditor protection index is illustrated for the cultural regions in Figure 5.

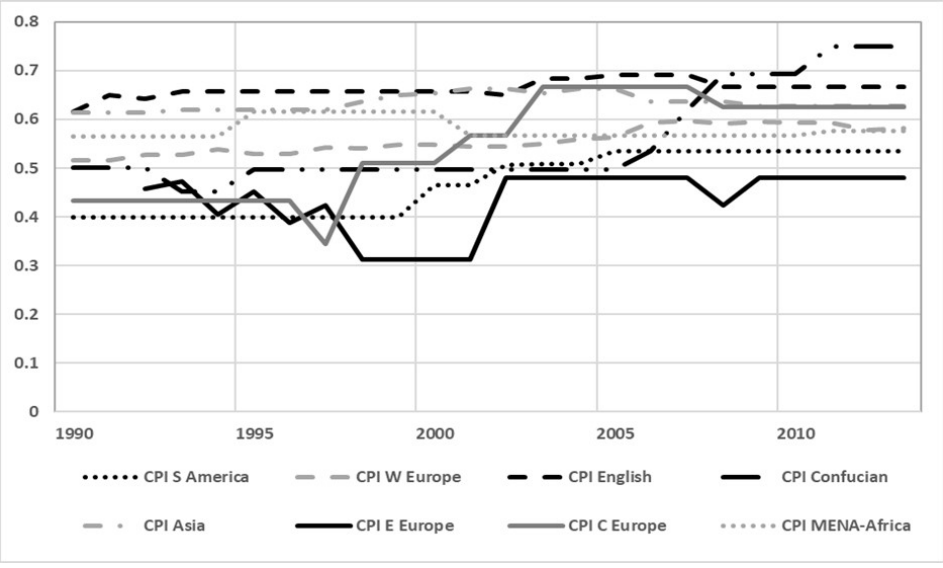

Figure 5: Creditor protection index by cultural region. Source: CBR Leximetric data and Stephen et al.[64]

64 Ibid.

The third element of the legal environment in the NEI model is what Stephen[65] calls enforcement: the confidence among economic agents in a jurisdiction as to the reliability of courts and the legal system. Stephen and Stephen et al[66] examine the extent to which levels of the index which they use for enforcement vary systematically across cultural regions. Stephen[67] finds that the only statistically different levels of enforcement are for the English Speaking, Western European and Confucian Cultural Regions. In these cultural regions the levels of enforcement are significantly higher than elsewhere. Stephen et al find a level of stability over the period covered in enforcement levels across cultural regions and groups of jurisdictions. They find that significant differences in level of enforcement exist between jurisdictions which were the unreceptive recipients of legal transplants in South America and elsewhere, the new transition jurisdictions of Russia and China and, finally, Argentina. These groups of jurisdictions have statistically lower levels of enforcement than on average. The unreceptive transplants of Western Europe, South East and South Asia and the Muslim Middle East and Sub-Saharan Africa have levels of enforcement which although significantly different from the average are not as low as those of the unreceptive transplants in the South American Cultural Region. With the exception of the result for Argentina, these results are strongly in line with the transplant effect. The relative stability of levels of enforcement is shown by the fact that the only statistical differences in the enforcement variable identified are: after the bursting of the dotcom bubble for the English Speaking, Western European, common law jurisdictions of South and South East Asia and for Argentina; and after the publication of the *Doing Business* rankings for Cyprus and the jurisdictions of the Central European and Baltic States Cultural Region which increased. The results obtained by Stephen et al suggest that the differences across jurisdiction in the measure of enforcement which they use are stable and deep-seated and only marginally affected by external shocks or policy changes. Given the differences in estimated values between jurisdictions which were subject to unresponsive transplants and those which are either origin or subject to receptive transplants, the evidence strongly supports the existence of a transplant effect.[68]

65 Stephen (n 11above).
66 Ibid and Stephen et al (n 15 above).
67 Stephen (n 11above) 143.
68 Stephen et al (n 15 above).

Legal Origin Theory

The data sets analysed by Stephen and Stephen et al[69] provide an opportunity to test the validity of Legal Origin Theory, namely that common law jurisdictions have more efficient legal systems than those of civil law jurisdictions. Whist all countries in the English Speaking Cultural Region are also common law jurisdictions and all countries in the Western European Cultural Region and the South American Cultural Region are civil law jurisdictions, in Stephen's dataset there are a number of common law jurisdictions which are not part of the English Speaking Cultural Region. These are Hong Kong (Confucian Cultural Region), Nigeria, Zimbabwe (Muslim Middle East and Sub-Saharan Africa), India, Pakistan, Malaysia, Singapore, Thailand (South and South East Asia) and Israel,[70] and in Stephen et al's dataset Cyprus (Western Europe), India, Malaysia, Pakistan (South and South East Asia) and South Africa (Muslim Middle East and Sub-Saharan Africa).[71] This variation in cultural region across the common law jurisdictions enables us to test whether being a common law jurisdiction has an effect beyond that of culture by distinguishing between common law jurisdictions and non-common law jurisdictions in the cultural regions where there are both.

Whilst Stephen finds that the level of the investor protection index for the common law jurisdictions of the English Speaking Cultural Region and that of the Common Law jurisdiction in the Confucian Cultural Region (Hong Kong) are statistically significantly higher than those in the Western European Cultural Region, that for the common law jurisdictions of South and South East Asia (India, Malaysia, Pakistan, Singapore and Thailand) is lower and not significantly different from the civil law jurisdictions from that cultural region (Indonesia, Japan and Philippines) included in the data. Similarly, the level of this index for the common law jurisdictions of the Muslim Middle East and Sub-Saharan Africa Cultural Region (South Africa and Zimbabwe) are not statistically different from the level for the civil law jurisdictions of that cultural region (Egypt and Turkey). In the case of the creditor protection index, the estimated level for the English Speaking Cultural Region (common law) is statistically significantly lower than that for the jurisdictions of South and South East Asia Cultural Region or the Confucian Cultural Region or the Muslim Middle East and Sub-

69 Stephen (n 11 above) and Stephen et al (n 15 above).

70 Stephen (n 11 above). In Schwartz's system, Israeli Jews are in the English-Speaking Cultural Region and Israeli Arabs in Muslim Middle East and Sub-Saharan Africa. In our econometric analysis, it is left unallocated to a cultural region.

71 Stephen et al (n 15 above).

Saharan Africa Cultural Region (in each of which there is no difference between common and civil law jurisdictions). In the case of the measure of enforcement, Stephen finds no statistical difference between the common law jurisdictions of the English Speaking Cultural Region (common law) and those of the Western Europe Cultural Region (civil law) which are both lower than for the Confucian Cultural Region which contains both common law and civil law jurisdictions. These are all higher than that for the South and South East Asian Cultural Region which contains both common law and civil law jurisdictions. The estimated value of the index for the common law jurisdictions in the Muslim Middle East and Sub-Saharan Africa jurisdiction is statistically below that for the civil law jurisdictions in that cultural region and those of all other cultural regions. Thus Stephen's results reject the strong version of Legal Origin Theory.[72]

The results obtained in Stephen et al go even further in refuting Legal Origin Theory. In the case of the shareholder protection index they find that while the estimated value for the jurisdictions of the English Speaking Cultural Region (common law) is statistically higher than that for the Western European Cultural Region (civil law with exception of Cyprus), it is significantly lower than the jurisdictions of South and South East Asian Cultural Region (common and civil law), China and Russia (both civil law). In the case of the creditor protection index, there is no difference between the estimated value for the English Speaking jurisdictions (common law) and the civil law jurisdictions of Western Europe or the jurisdictions of the South and South East Asian Cultural Region (including civil and common law jurisdictions) or the civil law jurisdiction of China. In the case of their measure of enforcement the dominant result (as reported above) is that enforcement levels in unreceptive transplants (regardless of whether civil or common law) are lower than those in origin and receptive transplant jurisdictions. Thus, the results on the legal environment found by Stephen et al reject the Legal Origin Theory.[73]

SUMMARY AND CONCLUSIONS

In this article we have considered a situation where an economic model has been applied to a legal policymaking context without any consideration of the insights gained from studying the historical process through which legal rules have been transplanted from one culture to another: Legal Origin Theory. We contrast the conclusions of Legal Origin Theory with those found using the NIE model developed

72 Stephen (n 11 above).
73 Stephen et al (n 15 above).

by Stephen[74] which not only builds on Williamson's[75] levels of social analysis but takes account of the transplant effect and Schwartz's cultural regions and uses the CBR Leximetric indices. The conclusions of Legal Origin Theory are rejected by the evidence adduced.

The empirical results discussed demonstrate that failure to take account of insights from other social sciences in the application of economic modelling can result in misguided policy advice. Not only do laws on the books matter but so too does their interaction with measures of legal effectiveness that influence financial development, as does the process by which laws are transplanted across jurisdictions and the accuracy by which researchers transform them into quantitative indices. These results should caution multilateral development agencies against policies which imply the transplant of legal rules from common law jurisdictions without taking account of the legal culture in the recipient jurisdiction.

74 Stephen (n 11 above).
75 Williamson (n 20 above).