The Legal Theory of Finance: Implications for Methodology and Empirical Research

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Abstract

This commentary on the LTF project highlights the importance of the idea that law 'constructs' finance and considers some of its methodological implications. The idea that law shapes finance implies that the legal system can be clearly differentiated in theoretical terms from the economy, and that the independent causal influence of the law on financial outcomes can be measured empirically. It will be argued that this can best be achieved by placing empirical research on law and finance in an evolutionary-theoretical perspective, which draws on related developments in game theory and systems theory, in the statistical study of law ('leximetrics'), and in time-series econometrics.

Introduction

This commentary aims to draw out some of the methodological implications of the LTF project, summarised in Katharina Pistor's paper (Pistor, 2013), in particular its claim that finance is 'constructed' by the legal system. The commentary will explore what might be implied by moving beyond the dichotomy between the 'rational actor' and 'social embeddedness' models of law and finance. Specifically, it will make some suggestions on how we might think about the ways in which law 'frames' the economy, and explore ways in which this idea might be operationalised in empirical research. Then, in the light of this consideration of theory and methods, it will discuss some of the main findings of the project, namely that that financial systems are 'hierarchical', with power unevenly distributed between core and periphery; legal enforcement of financial claims is uneven and incomplete, with flexible enforcement at the core made possible by the strict enforcement on the periphery; and, the overall structure is inherently or 'endogenously' unstable. It will be argued that a single, unifying theme emerging from the LTF project is that the financial crisis was the surface manifestation of a deeper, more fundamental disjunction between the legal and financial systems.

Some starting points

Discussants for the LTF project were asked to clarify the assumptions guiding their own work. I approach the LTF project from the point of view of a legal researcher who is interested in the way law shapes, and is shaped by, the economy. In common with other 'law and economics' researchers, I am interested not solely in the doctrinal structure of legal rules (although that is certainly of interest), but also in their economic functioning, and hence in issues of economic theory and methodology, in so far as they touch on law. I share with the framers of the LTF project what may be called a certain disappointment (even disillusionment) with the rigidity of 'mainstream' law and economics approaches, above all their unrelenting emphasis on equilibrium in markets and on the spontaneous alignment of legal rules and economic behaviour. There has been undue neglect, in law and economics, not just of non-neoclassical approaches to institutionalism within economics, but also of contemporary developments elsewhere in the social sciences, including systems theory or what might be called 'evolutionary sociology'. At the end of the day, there is, or should be, just one social science, and it makes little sense to treat sociology and economics (or law) as if they were entirely unrelated fields. The single social science we should be aiming for is one informed by and synthesised from evolutionary models in various sub-disciplines, in particular evolutionary game theory and systems theory (Deakin, 2011). As part of this process, there needs to be some discussion about the methodological shortcomings of the currently predominant models in empirical economics and legal studies, with their excessive emphasis on rationality and equilibrium. Empirical research should be informed by models of the economy and of the legal system which take seriously their dynamic properties, in particular their tendencies towards non-stationarity and disequilibrium. This perspective is, of course, directly relevant to the financial crisis and its analysis. Models of financial systems which assumed stationarity and equilibrium are partly responsible for the crisis and for its continuation now, as policy makers struggle to formulate a coherent response to it.

The LTF project

The LTF project breaks new ground not just in promoting the idea that the financial system is legally constituted (a claim that many law and economics scholars would not deny), but in providing some highly specific claims on how law does this. It is essential to show specifically how the financial system could not operate, and in practice does not operate, without certain legal rules. Although, in principle, finance could perhaps operate without legal underpinning, in practice it does not do so outside a few isolated and mostly irrelevant cases, so the critical issue is to understand how the financial system we actually have has been shaped, historically, by the law, and how the law continues to influence it today. Here, the LTF model helpfully suggests that 'law is central to finance in at least three respects: law lends authority to the means of payment; it spurs regulatory pluralism by delegating rulemaking to different stakeholders; it vindicates financial instruments and other financial contracts' (Pistor, 2013: __). Also core to the LTF project is a specific hypothesis concerning enforcement, namely that at the core of the financial system there are more benign survival constraints than at the periphery. The legal system enforces financial claims differentially, so finance, far from being 'flat', is structured hierarchically.

These claims are supported, in various ways, by the empirical case studies of the LTF project, from which, inductively, the theoretical premises of the project have been derived. There may nevertheless be a need to fill out and extend the methodological bases of the project. We might agree that progress in the social sciences, involving shifts from one paradigm to another, generally takes a methodological form. If there is a gap in the LTF project present it is, perhaps, the absence of a more systematic account of the methodological implications of viewing law as having a 'constitutive role' in framing finance, and a clearer picture of the kind of empirical research programme that would be informed by an LTF approach.

An evolutionary-systemic view of law and finance

An 'over-sociologised' notion of embeddedness is just as much a problem as its opposite, the idea of the wholly autonomous rational actor. Embeddedness implies that economic exchange is rooted in micro-level social relations, and therefore shaped by cultural norms which are specific to particular national, regional or sectoral contexts. While this is no doubt a grain of truth in this, the embeddedness approach risks dissolving the economic into the social, at the same time as marginalising the analysis of formal, public institutions, including those of the legal system (Harvey, 2002). The rational actor model, conversely, dissolves social relations and legal institutions alike into an undifferentiated economic realm.

At the core of the idea of law 'constructing', 'constituting' or 'instituting' finance are two linked claims: law can be differentiated from the economy; and, law exercises an independent causal influence on economic behaviour and outcomes.

It seems intuitively obvious, from the most basic knowledge or study of the law, that legal and economic relations are substantively different from one another and operate at different levels of social interaction, but in fact the opposite has been strenuously maintained by the dominant modes of thought in the social sciences for most of the last century, namely marxism and neoclassical economics. Essentially, they both see law as an 'epiphenomenal' expression of material relations: class relations, in the case of the former, and rational strategic behaviour, in the case of the latter.

The methodological-individualist position of neoclassical economics does not necessarily deny that there are macro-level structures, such as those of the legal system, which can affect incentives and behaviour in certain contexts, but it does claim that these macro structures can be entirely understood as outcomes of the micro-level interactions of agents. Institutional rules crystallise patterns of behaviour which emerge as rational agents' best responses to the fixed parameters of a given environment. Legal rules, notwithstanding their public character, largely give effect to norms which originate outside the legal sphere. As such they exercise no independent causal influence over the economy, except perhaps to impede its operation when, from time to time, they get out of line with agents' expectations. Even then, mechanisms of selection within the law-making process are supposed to ensure that 'inefficient' rules are mostly selected out (as in the idea that the judge-made common law 'works itself pure').

Can the LTF approach distinguish itself from this view? If law 'constructs' finance, then it must be, to some degree, functional, in the sense of facilitating financial transactions, and also endogenous, in the sense of responding to the needs of financial actors. Contrary to the standard neoclassical approach, in the LTF model the law must be clearly differentiated from the economy.

It is necessary to specify exactly what it is about the legal system which separates it from the economy. Here, an 'ontological' approach, which seeks to identify the nature of legal rules as an aspect of social structure (Lawson, 2004), may help.

We might begin by acknowledging that in an environment characterised by uncertainty, rules of some kind are needed to coordinate agents' expectations and behaviour. These rules are, to begin with, perhaps nothing more than behavioural regularities. Social learning, based on agents' mutual observation and imitation, provides a basis for the emergence of stable equilibria, which may over time acquire a normative or prescriptive dimension. Compliance with norms and punishment of defection become rational best responses for agents. Scaled up, this kind of evolutionary model can quite well explain the emergence of norms of contractual cooperation; contracts become self-enforcing through the effects of reputation, with punishment taking the form of a refusal to trade.

If this model were correct, there would no need for a legal system to enforce contracts, and such legal rules as did exist would merely be expressions of customary norms. The point surely is that the model explains a vanishingly small set of cases. The cognitive conditions which have to be met for agents to arrive at efficiency-enhancing Nash equilibria are not trivial, and in practice, are rarely met through spontaneous ordering alone (Gintis, 2009; Aoki, 2010). It is not hard to see how there is a need for specialised agencies to take on the tasks of information gathering and knowledge retention, and for them to acquire responsibility for the consistent administration of sanctions. These agencies need not be the state; they could be trade associations or stock exchanges. Very often, however, these bodies have their rules endorsed by the state and enforced by the legal system.

If we then want to identify what the legal system adds to the operations of self-regulatory bodies, the answer may lie in its capacity to store information at a higher level. Legal rules 'encode' information from the social realm. The processes through which the law acquires autonomy from any given area of social interaction, such as the economy, are the basis for its capacity to store and retain information over time; they perform the role of 'inheritance' in an evolutionary sense. Thus legal 'dogmatics' (or doctrinal analysis), although often criticised for distancing the law from its context and rendering the application of legal rules indeterminate or ineffective, is essential to understanding the law's deeper functionality. The impersonal and general application of legal rules, a part of the 'rule of law' which many economists now argue is required for the successful operation of a market economy, is another aspect of this autonomy of the legal system from its environment.

Thus law can perform economic functions, while also being separate from the economy. The law and the economy are inter-dependent, coevolving sub-systems within the wider, functionally-differentiated orders characteristic of market-based, industrialised societies (Luhmann, 2004).

The idea of coevolution has a number of implications. Firstly, to say that law and the economy coevolve suggests that they are broadly but not exactly aligned. They are not mirror images of each other. Thus a legal notion like 'contract' is not one-to-one match for the behavioural practices to which it (approximately) corresponds. Secondly, legal forms are multi-functional. A given legal rule can perform different functions in different contexts and at different points in time. Thus there is a degree of causal indeterminacy when considering the economic impacts of legal rules. Thirdly, causal influences can flow both ways. A change in the economy can trigger a legal response, and vice versa. There is no necessary priority to economic change, and a change in the law may exercise an independent causal influence on economic outcomes. Fourthly, any alignment of systems is a long-run process. Over time, the legal system may well be adjusted to a particular set of social practices (such as certain transaction-types), if they are sufficiently stable. In that sense, the legal system may be said to be longitudinally endogenous to agents' preferences and actions. In the short run, on the other hand, the legal system will not be a perfect fit with behaviour, and will generally appear to agents as an exogenous constraint or influence on agents' action-choices. For these various reasons, it would be accurate to refer to the legal system as *quasi-functional* and *quasi-endogenous* with respect to the financial system. This leads on to fifth and final implication, which is that the lack of a precise fit between law and the economy can trigger periods of instability and crisis, but it can also create a space for active deliberation over the content of law and hence for directed legal reform, in particular during such crises (as now).

Empirical operationalisation

A possible objection to the view just outlined is that it does not disclose a feasible empirical research programme. This objection is, however, without merit.

Firstly, it remains entirely possible, within the theoretical framework set out above, to use formal techniques to generate research hypotheses. Game theoretical models remain relevant to the analysis of agents' interactions, although evolutionary and epistemic game theory will be of greater use than classical game theory. Game theory can accommodate agents' bounded rationality and use of heuristics to overcome uncertainty in the environment. It can also be used to model equilibrium outcomes of agents' interactions given different institutional parameters. Thus it is relevant to analysing the role of legal and other rules as short-run, exogenous constraints on behaviour. It may be of less value when it comes to modelling the emergence and evolution of evolution of macro-level structures, but other formal methods, such as agent-based simulations, may be relevant here (Poteete et al., 2010).

Secondly, new data sources are making it possible to analyse the potential impact of legal and other institutions on the economy. So-called 'leximetric' data coding techniques are, in principle, improving all the time, providing an empirically more grounded account of cross-country differences in legal and regulatory regimes, as well as becoming more transparent, in terms of the description of sources and methods, than they were in the past (Siems and Deakin, 2010). The construction of longitudinal datasets makes it possible to trace legal change over time and to begin to test a number of hypotheses concerning legal and economic coevolution. There is also now a wide array of indices attempting to capture less formal aspects of legal institutions, including general respect for legality and effectiveness of legal rules in practice (Voigt, 2012).

Thirdly, multidirectional causality and endogeneity in the law-economy relation do not at all rule out quantitative empirical testing. Cointegrated vector autoregression (CVAR) models, for example, are highly appropriate for studying potential short- and long-run effects of legal change on the economy, and vice versa (Deakin, Sarkar and Singh, 2012). These are models which are designed to deal with non-stationary data, that is, data which move away from benchmark values on a persistent basis in response to an external event, as opposed to reverting to the previous trend. Both financial and legal ('leximetric') variables tend to be non-stationary in this sense. CVAR models are also capable of dealing with endogeneity and reverse causation issues of the kind which arise in the context of complex, non-linear relationships. They can therefore be used to distinguish between short-term effects of a legal change, which may be limited if the legal rule was endogenously generated, and a longer-run impact which shifts the economy on to a different equilibrium path. An additional point in favour of CVAR approaches is that they do not involve 'statistical fixes' of the kind associated with (often ad hoc) instrumental variables, but allow for the adjustment of the regression model in the light of data (as in the case of models which permit the use of diagnostic statistical tests to identify appropriate lags) (Hoover et al., 2008; Juselius, 2011).

Fourthly, and notwithstanding the availability of econometric techniques for testing the role of law in shaping economic outcomes (and vice versa), there should be wider acknowledgement of the value of mixed methods approaches, including case studies, interview-based field work and historical analyses, in the empirical study of law and finance, as more generally in relation to institutional phenomena. Field research is unavoidable where large-number data are simply not available, as will be the case for informal institutions. Qualitative research can be used to test for the direction of causality and to specify the sequencing of events in circumstances where econometric analysis can only point to correlation (at best), not causation. Qualitative research is also appropriate for the detailed study of institutional contexts which may play a framing role with regard to beliefs and preferences, thereby testing (and possibly correcting) hypotheses drawn from rational-actor models (Poteete et al., 2010).

Explaining financial market failures and crashes: outline of a research agenda

The empirically rich case studies which were carried out for the LTF project speak to the many different factors at play in the financial crisis. They can be read as implying that there was no single overriding cause of the crisis. However, there is a case for identifying a unifying theme, which is that the financial crisis was the surface manifestation of a deeper, more fundamental disjunction between the legal and financial systems.

The idea that financial markets were essentially self-stabilising enjoyed wide intellectual appeal during the 2000s. It also received a kind of legal validation, in the form of deregulatory legislation, encouragement of regulatory arbitrage, and acceptance of 'creative avoidance' and 'gaming' of the law. The assumption in each case was that legal regulation was more likely than not to be an impediment to efficiency, and that, on balance, benefits would accrue from allowing powerfully-placed parties to waive the rules or to choose when and how to comply with them (hence the 'soft core, hard periphery' effect when it came to enforcement). There seems to have been a more than contingent link between regulatory gaming and risk taking of the kind which led to financial fragility; for example, in the use by Lehman Bros. of artificial repo transactions to boost its credit ratings in the months before its collapse, echoing Enron's use of SPVs a decade earlier (Howarth, 2013).

If Lehmann was just the trigger, the wider trend up to the autumn of 2008 was the progressive weakening of the legal and other non-market mechanisms which had previously served to stabilise the financial system. Financial market regulation did not fail for the reasons identified in theories of public choice and regulatory capture, nor because of limits to the effectiveness of the law of the kind identified by the theory of responsive law. It failed, in the long run, precisely because it had been so successful in the short run; the post-crisis reforms of the 1930s and 1940s, in restoring stability to the financial system, eventually created the conditions in which it became feasible, intellectually and politically, to deregulate it again. This was the effect of the policy cycle which Minsky (1986) predicted; Kalecki (1943) and Polanyi (1944) had made the same prediction even as the new regulatory framework was being put in place.

Identifying the effect of the policy cycle, within an evolutionary framework for understanding the law-finance relation, may mark a step forward in thinking our way out of the crisis, but it also argues against any quick regulatory fixes. Law remains semi-endogenous to the economy and so embedded in the policy cycle and constrained by the wider configuration of economic and political forces which brought about the crisis in the first place. Legal rules are not self-enforcing, and so are dependent on still-powerful actors for their effective implementation. Yet, a crisis of the kind we have been experiencing represents the best possible moment to exploit law's potential as an instrument of root-and-branch reform.

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