Observations on the Legal Theory of Finance

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Katharina Pistor's powerful essay proposes a new framework for understanding the interaction between finance and law.[1] This extended comment attempts to situate her approach in the landscape of modern social science and to underline its importance and its elements of novelty.

Although vital for an appreciation the nature of modern capitalism, fixing and linking the two topics of law and finance is trickier than it may appear at first sight. Money and law are among the most strange and complex institutions in modern society. Their very nature has been contested by theorists for over a hundred years, and no resolution to these disputes is yet in sight.

The long controversies over the nature of money and law, while branching in different directions, share some common and central questions. Foremost among these is the role of the state. Within legal studies there is a conflict between theorists that see the state as essential to constitute law (Commons 1925, Diamond 1935, Seagle 1941) and others who regard it as equivalent to established custom (Carter 1907, Hayek 1973). In the latter view, law is ubiquitous throughout history; it is "is older than legislation" and "in the sense of enforced rules of conduct is undoubtedly coeval with society" Hayek (1973, p. 72). In the former view, law is not custom, but supplants conflicting customary claims in complex societies by means of an institutionalized judiciary and state authority.

There is a close parallel in the history of monetary thought between the "chartalist" or "state theory of money" where the role of the state is seen as essential to its nature (Knapp 1924, Keynes 1930, Smithin 2000, Bell 2001, Ingham 2004), and the contrasting view that money is a spontaneous outcome of exchanges between individuals (Menger 1871). In the latter view, money develops as a matter of convenience between traders. But although the idea is promoted by mainstream economists, history provides no clear example of such a

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development. The historical facts support the contrasting view that money emerged in ancient civilizations as a mechanism to sustain and manage state debt (Graeber 2011).

A theoretical question that is common to both these separate debates is whether the institution can emerge spontaneously as the undesigned outcome of interacting individuals, or whether some powerful over-arching authority is necessary, such as the state, for the emergence or persistence of the institution. These debates are of vital importance, despite the fact that they are ignored on most university curricula in law or finance.

Pistor acknowledges the historical specificity of money and law. Law is treated as something more than custom: it is partially constituted by the state. Similarly, money combines elements of private ordering and financial innovation, but is also tied up with a sovereign state. Rather than treating these institutions as essentially spontaneous, she emphasizes their "essential hybridity." This concept counters the arguments of Austrian school theorists such as Carl Menger (1871) and Friedrich Hayek (1973) that the state is doing little more than endorsing or coopting an essentially spontaneous arrangement. Contrary to Hayek, even common law is much more than custom: it involves and institutionalized judiciary (Hasnas 2005).

Another feature of her argument is her emphasis on uncertainty, which she uses in the radical sense of John Maynard Keynes (1921, 1937) and Frank Knight (1921) to refer to future events for which there is no basis to calculate their probability. The role of uncertainty has been recognized in the lead-up to the Great Financial Crash of 2008, but because of its unquantifiability it has been written out of the script of mainstream economics. Pistor does not devote valuable space to criticizing mainstream views. Instead she develops her own position. But I wish here to emphasize some of the differences, and compare her stance with others.

Pistor's stance differs in key respects from contemporary mainstream economics. From the 1940s to the 1980s, mainstream economic theorists were in pursuit of its grand theory of everything, mostly through the project of general equilibrium theory. A major casualty was the loss of notions held by the original institutional economists and others concerning the historical specificity of major capitalist institutions, including money, markets and law. In the 1980s the mainstream realized that there were internal problems in general equilibrium theory and game theory became the new fashion (Kirman 1989, Rizvi 1994). But the damage had been done: discourse on the historical specificity of institutions had been forgotten. For different reasons, postwar sociology under the tutelage of Talcott Parsons also moved in a generalist and ahistorical direction (Holmwood 1996, Hodgson 2001).

Another consequence of the pursuit of general equilibrium theory from the 1940s to the 1980s was a drive towards a form and use of mathematics that was simply pursued to solve logical and internal problems, including the existence, uniqueness and stability of general equilibria. This particular mathematical discourse had little (if any) empirical grounding and became a self-contained logical puzzle. This drive for empirically ungrounded formalism transformed economics into virtually a branch of applied mathematics (Blaug 1997, 1999, Friedman 1999). A consequence of this was to drive the concept of uncertainty (in the Knight-Keynes sense) out of the mainstream of the discipline (Hodgson 2011).

The remainder of this comment is structured as follows. The next section addresses the historical specificity of some capitalist institutions, followed by another that considers in more detail the eclipse of the uncertainty concept. The third section addresses the idea of essential hybridity. The fourth section concludes the essay, in part by considering possible forerunners of this new legal theory of finance in the history of social science.

The historical specificity of markets, finance, and law

Let us start with the market, the definition and nature of which is notoriously neglected, even by economists (North 1977, Coase 1988, Hodgson 2008a, 2008b). The problem here is to differentiate between early historical cases such as occasional peripheral trade between tribes, at one extreme, and at the other extreme, modern, high-volume, highly-organized markets with complex internal rules. One option – in the pursuit of generality and with the loss of historical specificity – is to call any kind of trade a market. The difficulty then is that the conceptual framework associated with "the market" becomes bland and undetailed, and is of relatively little help in dealing with specific explanations or policy problems, particularly the complex financial institutions of modern capitalism.

Occasional trade between tribes has existed for tens of thousands of years. But typically this did not involve regular trade with multiple buyers or sellers. The very notions of market supply and market demand require multiple traders engaged in regular exchange with fairly similar products or services. Otherwise they are close to meaningless, or simply individual supply and individual demand writ large. Markets further play an important economic role by gathering, processing and signaling information to participants (Baker 1984, Hodgson 1988).

Markets proper, involving organized and regularized exchange, are of ancient but more recent origin. The first clear evidence of an organized market appears in semi-mythological texts from Ancient China. In roughly 3000 BC, it is said that Emperor Shennong gave permission for rows of houses in the center of his capital (in modern Shanxi Province) to be used for trading, and imposed rules for this market (Wang 1936, pp. 3-4).

The Greeks had trading ports on Mediterranean shores by the eighth century BC (Tandy 1997, ch. 3). There is evidence of an organized market in Athens in the sixth century BC, where there was a marketplace (*agora*) where goods were regularly traded according to defined rules (Polanyi 1971). In Babylon at about the same time there was an auction market for marriage rights (Cassady 1967). At least from this perspective, the notion that the "market economy … has existed since the caves" (McCloskey 2010, p. 16) is unsustainable. I agree with Pistor and others that "markets are made" (Abolafia 1996). Their making and their maintenance necessarily involves detailed rules and the exercise of political and legal powers.

Credit money is possibly older than markets, first appearing in Mesopotamia, around 3200 BC with an elaborate system of money of account, complex credit systems, and rates of interest. The state played central role in both constituting and regulating those institutions (Davies 1994, Graeber 2011). Even later, money emerges as medium of exchange, with circulating tokens or coins. The first manufactured coins appeared separately in India, China, and around the Aegean between 700 and 500 BC. Bills of exchange developed in Europe in Medieval times followed by the more recent invention of banknotes. Backed by the state, money itself became a widely-used store of value in the modern era.

Capitalism, as the word properly suggests, only becomes possible with the emergence of monetary investment *capital*, involving private lenders and collateralizable property to underpin debt. In England these features developed over centuries but became more widespread and effective after the "financial revolution" of around 1700 (Dickson 1967, Roseveare 1991). The state proved crucial in the process, both in the development of the banking system and the establishment of particular systems of property rights that enabled the use of owned wealth as collateral.

Dating the emerging of law is more tricky, because the very definition of law is under severe dispute. As Paul Bohannan (1965, p. 33) remarked: "It is likely that more scholarship has gone into defining and explaining the concept of "law" than any other concept still in central use in the social sciences." For some theorists, law by definition involves the state. As the American jurist Joseph P. Bradley (1902, p. 230) put it:

> It matters not how it came to be the law, whether it was prescribed by an autocrat or a legislative body, or arose from mere custom and usage, or the decrees of the courts – if the physical power of society, that is the State, is put forth for its vindication, it is law; if not, it is not law.

Emphasizing the state does not mean that custom is unimportant. John R. Commons (1924) correctly argued that to be enforceable (at least in non-totalitarian societies) laws must be widely perceived as reasonable, appropriate and fair. Consequently, law must largely conform to established custom, even if it amounts to more than custom alone. Commons also emphasized that the collective power of the state also lay behind all property rights and transactions within capitalism. Custom is important to sustain law, but law is much more than an epiphenomenal expression of custom.

Nevertheless, there is a qualitative difference between custom and law, and a line must be drawn between societies dominated principally by customary rules and those where law proper has also emerged (Hodgson 2009). If law were no more than custom, then all sorts of relatively minor rules, including grammatical rules of language and codes of politeness, would be laws. By contrast, work by anthropologists and legal historians also shows that the evolution of law involves conflict resolution, powerful institutions, and the transcendence of mere customary arrangements. While custom remains important, law is irreducible to custom.

While law depends on the spontaneous evolution of custom, it also typically requires the powers and institutions of the state. Law in the modern sense did not exist in simpler and smaller societies. It generally requires a specialist judiciary within a stratified system of power. While also depending on custom, law typically requires major institutional interventions and arrangements promoted by the state.

While custom can be sustained by habit and routine, laws in large-scale, complex societies are far too numerous and complicated to be sustained in this law. Instead, modern law depends of the acknowledgement of legitimate authority (Hodgson 2009). As Pistor points out, it is essentially a matter of political power.

Given this view of law, then legal institutions must also be regarded as a historically specific phenomenon, which emerged in Babylonia roughly four thousand years ago, received its classic development and codification in Ancient Rome, and developed further in England and elsewhere from the twelfth century AD and thereafter (Berman 1983).

In both economics and sociology, the neglect of historical specificity is tied up with a shallow and exclusively customary notion of law. Consider the firm. Economists have yet to agree on its definition and it is typically conceived without reference to law in the narrower and preferred sense. But once the firm is treated as a legal entity with singular legal personhood (Hodgson 2002, Hansman et al. 2006, Gindis 2009) then notions such as "internal markets" (Doeringer and Piore 1971) or "firm-market hybrids" (Cheung 1983, Williamson 1985) become unsustainable. A firm is an organization of multiple legal entities – individuals, shareholders, subsidiaries – but as a firm it is but one legal person. Employed individuals or internal divisions enter into contracts with outside entities in the name of the firm, not of its parts. Transfers of resources within firms – even if they are by agreement and are given prices – are not legally enforceable unless they are part of contracted agreements with the firm itself. As such, a singular legal entity cannot also be a market, in whole or in part. Even if the firm is an organizer of markets for other legal entities, such as the London Stock Exchange, it is not itself a market. Purchases of raw materials and the hiring of labor-power are transaction on the boundary of the firm, prior to the management and use of these resources within.

Law has also been devalued in relation to the concept of property. The leading economist Armen Alchian (1977, p. 238) defined the "property rights" of a person in the universal terms of "the probability that his decision about demarcated uses of the resource will determine the use." The upshot of this definition is that if a thief manages to keep stolen goods then he acquires a substantial property right in them, even if, on the contrary, legal or moral conclusions would suggest that they remain the rightful property of their original owner. Alchian's definition of property neglects the essential legal concept of rightful ownership. It denotes possession rather than property (Pipes 1999, Steiger 2008).

In the quest of overly abstract and ahistorical theories of exchange, firms, and property led many economists inevitably to abandon a historically specific concept of law. This did not mean the absence of an interface between economics and law as a discipline. Instead it there meant the surrender of law to the prerogatives of economists. The sub-discipline of "law and economics" became concerned principally with costs and benefits to individual utility-maximizers of various assumed legal rules. With few exceptions, researchers in this area lost sight of the nature of law itself. Instead, law was typically treated as a set of rules derived solely through private interactions.

By contrast, the problem of dealing with historically specific phenomena was central to economics from the 1840s to the 1940s. It was not only the German historical school and the original American institutionalists that grappled with this problem; it also concerned other leading economists including Karl Marx, John Stuart Mill, Gustav Schmoller, Carl Menger, Alfred Marshal, Werner Sombart, John R. Commons, and Frank Knight (Hodgson 2001). Yet it disappeared from the agenda of mainstream economics after the 1940s.

Max Weber was as much an economist as a sociologist, and should be regarded as part of the intellectual tradition of the German historical school. Weber's theory of "ideal types" is an attempt in part to deal with the problem of historical specificity. But today Weber is seen as a sociologist; and sociology as a discipline has searched for eternal verities and downplayed historical specificities.

Talcott Parsons (1937) was largely responsible for both the re-labeling of Weber and the ascent of ahistorical sociology (Camic 1991, Holmwood 1996, Hodgson 2001). In his 1949 presidential address to the American Sociological Society, Parsons (1950, p. 5) argued for: "General theory, which I interpret primarily as the theory of the social system, in its sociologically relevant aspects." For Parsons, there were no longer different social systems, but simply *the* social system. Parsonian sociology then dominated the discipline, until it met a fragmentary revolt in the 1970s.

The pre-1940 status given to questions of historical specificity has yet to be re-established in economics or sociology. Both subjects need to be re-infused with a sense of history. The legal theory of finance requires takes the historical specificity of legal and financial institutions as foundational. That is one of its sources of analytical focus and power.

The eclipse of the uncertainty concept in economics

A bibliometric analysis performed by this author showed that the Keynes-Knight concept of uncertainty had made a decreasingly frequent appearance in ten leading journals of economics from the 1940s, reaching a low of about 2 per cent in the first decade of the new millennium (Hodgson 2011). The timing of its postwar decline corresponds closely with the rise of mathematical formalism in economics (Blaug 1999).

It is difficult to fit (by definition non-quantitative) uncertainty into a mathematical model. Uncertainty is thus banished from mainstream economic theory. As Nobel Laureate Robert E. Lucas (1977, p. 15) wrote: "In cases of uncertainty, economic reasoning will be of no value." This is redolent of Nobel Laureate Kenneth J. Arrow's (1951, p. 417) earlier discussion of Knight's uncertainty concept and his conclusion that without measurable probabilities "no theory can be formulated for this case." Both authors then upheld that "economic reasoning" and "theory" were quantitative. In this context, economists pushed aside Keynesian or Knightian objections that uncertainty was incalculable. They either ignored the unquantifiable concept or gave uncertainty a subjective and quantifiable interpretation.

Although uncertainty is by definition unquantifiable, models can still be used to capture other aspects of economic systems. But as long as uncertainty is part of the analysis as a whole, one has to give up the supreme goal of prediction, as Keynes (1937) well understood. Instead, the aim is to understand the causal process and to provide an informed and effective basis for careful policy interventions.

In contrast, for much of the twentieth century, economics has been captivated by a vision of science where predictability has been the paramount aim. Milton Friedman (1953) elevated prediction as the supreme goal for economists – even at the expenses of any realisticness of assumptions – in his classic and highly influential article. Contemporary economics retains a devotion to model-based prediction. When prediction is thwarted within a particular mathematical approach, then often that type of approach falls out of favor.

This is confirmed by considering developments in mathematics that show that predictability is sometimes unobtainable. When chaos theory emerged in the 1980s and demonstrated that outcomes in non-linear systems are often unpredictable, some economists met this new mathematics with a flurry of interest. But mainstream discussion of chaos theory has since waned, and it has never been given the attention warranted by the ubiquity of non-linearities in the real world (Hodgson 2011). Mainstream economics is not simply focused on mathematical models; it elevates those models that purport to yield predictions and downplays those that show that our powers of prediction are limited.

Neither has the "complexity revolution" yet shifted mainstream economics from its predictive goals. Rather than look real-world complexity in the face, economists have remained in an artificial world of much simpler models, partly to maintain the rhetoric of prediction. As yet, established techniques for dealing with complexity, such as agent-based modeling, are generally rare in leading mainstream journals.

To recapitulate, the decline of the uncertainty concept coincides with the inverse process of a rising mathematical formalism in mainstream economics that was directed toward the task of prediction. Partly because of its intrinsic non-quantifiability, the Knight-Keynes uncertainty concept declined in significance. Uncertainty is not only unquantifiable but it restricts precise prediction. It is thus prevented by a double-lock from entry into the mainstream.

The elevation of attempts at predictability in economics is arguably a result of the "physics-envy" that has besotted the discipline since the 1870s (Mirowski 1989). Note the powerful critique of mainstream and behavioral modeling by Roman Frydman and Michael D. Goldberg (2011) is aptly titled: *Beyond Mechanical Markets*. Economics has not only to rehabilitate the concept of uncertainty, it must also abandon mechanistic thinking and downgrade prediction as the supreme theoretical goal.

Social Rules and Essential hybridity

Abandoning a mechanistic outlook and the primary goal of prediction leads to a very different perspective, where explanation becomes the supreme objective. The additional concern with institutions and rules as the stuff of socio-economic life implies a change in basic ontology (Hodgson 1997). Appropriate mathematical representations must capture structured rules and relations, with less emphasis on continuous functions (Potts 2000). Legal rules are a part of the constellation of rules in socio-economic life. Rules in this view are not regarded simply constraints, but also as enablers of social activity, including communication, coordination and organization.

One immediate consequence of this vision is the literal impossibility of complete de-regulation, or of an unregulated economy or market. Rules are everywhere, and are essential to social and economic life. All that can be achieved is to change some rules, or to remove some to allow others to do more work. This vision is broadly "institutionalist:" it recognizes the pervasiveness of institutions, which are in turn regarded as systems of legal and other rules (albeit with contrasting nuances in different accounts) (Commons 1924, North 1990, Searle 1995, 2005, Ostrom 2005, Hodgson 2006).

Lawyers, political scientists and historians have long acknowledged the functional inter-dependence of institutions. It is typical for an institution to depend upon others. The most pervasive conformation of this point is that almost all institutions depend on communication via the institution of language (Searle 1995). Furthermore, as a reflection of their varied evolutionary history, institutions have internal variety. This "requisite variety" of internal rules and structures is a means of coping with complexity and change in the external environment (Ashby 1956). Institutions with insufficient internal variety and flexibility fail to adapt and may then expire. Institutions typically have an internal variety of rules and structures and also often depend on other different institutions for their own emergence or survival.

Given that all systems involve combinations of different institutions, how does this relate to the problem of identifying the "essence" of a system? For some the internal variety might signal that such a task is impossible or misguided. "Anti-essentialism" has been a voguish term in social science for about three decades. But much of this has been based on distortions of what "essentialism" means (Nussbaum 1992). In fact, the identification of essences is a vital part of all science. Crucial to this perspective – which derives from Aristotle – is the distinction between *essential* and *accidental* properties of a type of entity. As John O'Neill (1998, p. 8) puts it:

> The essential properties of an entity of a particular kind are those properties of the object that it must have if it is to be an object of that kind. Accidental properties of an entity of a particular kind are those properties it has, but could lack and still be an entity of that kind.[2]

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[2] O'Neill (1998) goes on to develop a forceful critique of some "anti-essentialist" arguments in social science. Essentialism has become a global term of abuse and a catch-all word for many highly varied sins, including biological reductionism, the imposition of Western values on other cultures, and over-generalizations concerning

Apply this reasoning to the internal variety and interdependence of institutions. First consider law. The argument noted above is that the legal system is part of the state, and the state is part of its make-up. Consequently, the state is not an accidental property of law. Similarly, contra Menger (1871), the state is not an accidental property of money. But at the same time, custom is also a vital basis for law, and money is also partly sustained by private or spontaneous arrangements. Such non-state elements are also non-accidental. Money and law embody both private (spontaneous) and state (designed) elements, among their non-accidental properties. These dissimilar elements are both part of the respective "essences" of money and law – hence the term "essential hybridity." Pistor (2013) herself sees "essential hybridity" as permeating finance "from top to bottom." She continues:

> Financial systems are not state or market, private or public, but always and necessarily both. This follows from the fact that financial instruments must be enforceable, that finance is hierarchical and that in the last instance a sovereign has to stand in to protect the financial system from self-destruction.

Consequently, internal variety is part of the essence of financial systems. More specifically, their essence entails both state and private elements.

This claim of essential hybridity is a specific example of a more general idea that I call the "impurity principle" (Hodgson 1988). This is the proposition that every socio-economic system must rely on at least one partially integrated and structurally dissimilar subsystem to function. There must always be a plurality of production subsystems, so that the social formation as a whole has requisite variety to promote and cope with change. And if one type of structure is to dominate, other structures are necessary to enable the system as a whole to operate.

Essential hybridity means bringing new dimensions of complexity into the analysis. But because of their essential nature, none of the key properties in the hybridization can be assumed away, even at early analytical stages involving high degrees of simplification. Removing any vital property from the picture would mean that the basic phenomena were being turned into something quite different. The analysis would be derailed from the start. This poses severe analytical challenges, but in a complex world of immense variety the essential hybridity of money and law have to be acknowledged.

Concluding remarks

Pistor's analysis opens up an exciting and novel research agenda. One might reflect on its precedents in the history of social science. Several individual elements have a traceable origin. As noted above, the uncertainty concept has its origins in Knight (1921) and Keynes (1921). Concerning the role of the state in sustaining money and the financial system, there are a variety of opinions on the spectrum to wholly spontaneous and wholly state theories of money. Emphasizing essential hybridity, Pistor's position on money and finance is nuanced and at neither extreme. Perhaps it is closest to Keynes (1930), Minsky (1936), Bell (2001), and Ingham (2004). Her emphasis on power is redolent of a number of authors, including Marx and Weber.

One of the most distinctive features of her position is her emphasis on the constitutive role of law. As noted above, the bridge between law and economic matters has been built before,

gender differences (Fuss 1989, Nussbaum 1992, Sayer 1997). Social theory has yet to recover fully from this reckless and misguided verbal cleansing.

but largely to deploy neoclassical economic concepts in an assumed legal context. Mainstream law and economics considers how utility-maximizing individuals will react to various legal rules. With Pistor's bridge there is much more conceptual traffic in the other direction, from the legal to the economic and financial side. She considers some limits to law, rather than taking the existence and enforcement of the legal rule as given. Her emphasis on law contrasts profoundly not only with Marx, who saw law as merely an epiphenomenon of the economic "structure" (somehow defined independently of legal rules or relations), but also with many modern mainstream economists, who treat law largely as a spontaneous emergent outcome of individual interactions (Hodgson 2003).

One might search for economists or other social scientists who took law as seriously. Perhaps the most important in this regard, were the German historical school, including leading figures such as Gustav Schmoller and Werner Sombart. In turn, they influenced the original American institutionalists. Within this latter group the most important statement of the role of law in the capitalist economy is by John R. Commons (1924). But these two large and important traditions of thought never created a systematic approach to theory. Searches for useful insights among their works can eventually be rewarding, but the labor resembles a large-scale archaeological dig, finding much waste among the few small items of treasure.

While redolent of these precedents, Pistor's work signals a new variety of institutionalism, which draws from both the original and newer traditions in economics and sociology. But with the exception of Commons (1924), it differs from work in all these traditions by taking law much more seriously. A new "legal institutionalism" has been born.

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