

## **The Law-Finance Paradox**

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The global financial crisis led to the rediscovery of ‘fundamental uncertainty’. Incorporating uncertainty into the analysis of financial markets alters our understanding of how these markets operate and expose the two-faced role of law in finance. Instead of helping markets to approximate their idealized efficient state as assumed in standard accounts of law and finance, under conditions of fundamental uncertainty law can be destructive and hasten its demise. This is the essence of the Law-Finance Paradox:

*Legal commitments lend credibility to financial contracts and help transform relational finance into large-scale markets; yet, enforcing all contracts ex post as written ex ante irrespective of intervening change can lead to the system’s self-destruction; further, suspending or relaxing the full force of law to rescue the system undermines the credibility of legal commitments needed to support market development.*

Fundamental uncertainty means that we cannot rely on probability calculus or other scientific means to predict the future (Knight, Keynes, et al). If liquidity were a free good, fundamental uncertainty would not be such an unsettling feature of financial markets; we could always refinance when the present turns out different from assumptions made in the past. If instead liquidity is volatile – available yesterday but unattainable today -- uncertainty can wreak havoc in

financial markets. If one adds to uncertainty and liquidity volatility the fact that contemporary markets rely extensively on non-negotiable enforceable legal commitments one has the perfect ingredients for an endogenous financial crash even as, or rather precisely when, everybody plays by ‘the rules of the game’.

The Law-Finance Paradox is an inherent feature of a credit based financial system; the more developed credit markets the more vulnerable they are to its destructive impact. Unlike equity holders who receive return only if and when they have been realized, creditors have the contractual right to demand fixed payments of principal and interest – armed with the threat of court enforcement and bankruptcy in the event of default. Still, under conditions of fundamental uncertainty the value of even this well fortified legal right is more precarious: By the time claims become due the debtor’s assets may have lost value -- if only because in times of economic downturn too many creditors seek enforcement against too many debtors at the same time. Knowing that, creditors may wish to monitor the debtor to detect signs of distress in order to intervene early before anybody else; to defer enforcement; and they may even be willing to refinance the debt. In short, creditors can and often do help debtors to cope with uncertainty by offering temporal liquidity relief.

When creditors and debtors know each other and realize their mutual dependence on one another, i.e. in relational finance, creditors are more willing to share some of the liquidity risk because they are ultimately dependent on their borrowers, and they know it. In contrast, market-based credit systems rely

extensively on credible, non-negotiable legal commitments. Investors buy financial assets from intermediaries without knowing the borrower, frequently not even the originating lender; they buy only fractions of debt from different borrowers because they wish to diversify, not share risk. Guarantees from parent companies, margin and collateral calls, and similar contractual devices designed to shift the costs of uncertainty to the other party help accomplish this task. From the investor's perspective this makes perfect sense. Yet, while these contractual features may shift the burden of uncertainty to others they cannot purge them from the system. To the contrary, by hardwiring the obligation to perform irrespective of fundamental change they may hasten its demise.

Relief can come from adding liquidity to the system or relaxing (suspending) the full force of the law. Quantitative easing exemplifies the former; debt moratoria the latter. The distributional effects of these measures varies; additional liquidity protects creditors from the fallout lending that assumed that refinancing would always be an option without relieving debtors of their burden to repay. Debt moratoria instead protect debtors from being harassed by their creditors without addressing the effect this may have on the creditors. Still, their repercussions for law as a credible commitment device are functionally equivalent: they effectively suspend the binding nature of ex ante commitments.

The Law-Finance-Paradox cannot be resolved. The key governance question is therefore not whether to relax the law in times of crisis – there is no other option if a full blown self-destruction of the system shall be avoided -- but whether a

system that can survive only if its basic tenets are breached time and again is sustainable economically as well as politically. This question is all the more pertinent, because under current arrangements the propensity of suspending the full force of the law is not evenly distributed throughout the system. It tends to be higher at the apex at the system than at its periphery. This follows from the premise that not all means of pay – not all financial instruments or IOUs – are equally credible. While many IOUs can be easily exchanged for one another or for cash in times of liquidity abundance, once signs appear that not all bets on the future made in the past will be validated, a run on all but the most credible means of pay will occur. That turns out to be cash, or state-issued money, or close cash-substitutes, such as treasuries of many, though by no means all, countries. Market participants understand perfectly that in times of crisis effective help can be obtained only from above – those with greater liquidity and ultimately from whoever has access to unlimited resource of high-powered money. Since private agents by definition have a hard budget or survival constraint, these can only be public entities or states that can coordinate burden sharing by others legally and politically. States in turn will offer help where it is most needed to avoid a full breakdown of the financial system. That will focus their attention on intermediaries and assets that are critical for the system's survival: the too big and the too interconnected to fail; but also entities that offer critical backstopping functions to others and whose failure would trigger a downward spiral as well as assets that are deeply intertwined with treasuries, the closest substitute to cash.

The attempt by market actors to seek cash in times of crisis and by states to provide it where it is most needed to rescue the system is perfectly rational. When, however, access to liquidity aid in times of distress becomes part of expectations of a selective few, moral hazard looms large. Worse, it undermines the legitimacy of law in the eyes of those on the system's periphery who are held to their ex ante commitments while having to share the burden of the collective rescue effort as tax payers. There are two possible solutions for this dilemma. One is to restructure the financial system to make it less prone to crises, i.e. less reliant on instant refinancing. Another is to find institutional solutions that randomize the probability of rescue throughout the system without sacrificing the stabilization effort. There is extensive literature on the former but little on the latter strategy, the focus of this essay.

The point of departure is the well-known concepts of incomplete contracts and incomplete law. Neither private parties nor lawmakers (or regulators) are able to anticipate all future contingencies. Private parties can obtain *relative* protection for known and fairly common contingencies and regulators can protect the system against known forms of violation or abuse. Writing highly complete laws or highly complete contracts is futile and attempts to do so without an option to renegotiate or reregulate in light of new information or events are misguided, even harmful. This is the essence of the law-finance paradox.

The challenge therefore is to develop regularized processes that address the problem of uncertainty so that the probability of benefiting from rescue

operations is more evenly distributed. One possible solution proposed here is to incorporate what one might call an “uncertainty-out” in all financial contracts. Uncertainty-outs can be triggered in the build-up of a financial crisis and not only when it is in full swing. Moreover, it is equally available to all parties in the system, not only to those who have situated themselves at its apex.

Incomplete contract and incomplete law theories recognize that not all future contingencies can be fully accounted for in contracts or laws. They seek governance solutions that solve this problem by allocating the power to complete a law (legal standard) or contract to a designated agent – an owner, a court, or a regulator. Thus, incomplete contract theory holds that ownership is a derivative of the incompleteness problem. Because parties cannot foresee all future contingencies, the right to make decisions when unforeseen contingencies arise must be allocated to the “residual” owner. That, however, can be a solution only if there is a single owner who can impose her will, and if there is more than one claim to ownership that there is recourse to a court to resolve the conflict. Courts have a long tradition in solving unforeseen events by applying established legal principles to new fact patterns or developing new legal principles that fit them. However, according to incomplete contract theory, courts are not always the best arbiters; they are reactive law enforcers and must be called upon by an aggrieved party to solve a dispute. In principle, harm must have been done or must be imminent (for a preliminary injunction) before courts can be called upon. Thus, reactive law enforcement will come too late to prevent harm in many cases. Enforcement should therefore shift to agents that can act proactively, namely

regulators, who are designed to act on their own initiative. To ensure their accountability to lawmakers and ultimately the electorate regulators are, however, constrained in the type of actions they can take. They must act within the constraints established by law. This limits regulatory action when proactive intervention is most needed, namely when the build up of a crisis threatens the stability of the system. We know from experience, of course, that in the context of full blown crises, regulators or central banks tend to rely on their emergency powers or on highly incomplete law to undertake “whatever it takes” kind of rescue operations. That, however, is not proactive intervention, but reactive self-defense.

True proactive intervention has to start earlier, when signs of stress appear in the system. “Uncertainty-outs” should therefore not be limited to a crisis; nor should they be limited to the apex or core of the financial system where law tends to be relaxed and rules renegotiated. Uncertainty-outs should not be a privilege of a few, because their rational, fundamental uncertainty, affects everybody and everybody should therefore have recourse to similar regularized processes to cope with uncertainty. Private contracting practices offer some evidence for how uncertainty can be incorporated in contractual relations. Joint venture parties in R&D projects, for example, intentionally write highly incomplete contracts; they commit each other to cooperate but avoid overtly specific contingencies, because they know that the process of research and development is beset with uncertainties. This approach works for undertakings with only few parties. It is unlikely to work in contemporary large-scale financial markets that are built on

non-negotiable, freely transferable and enforceable legal commitments. Yet, these are precisely the kind of contracts that require an uncertainty-out to prevent the law-finance paradox from running its course.

Take ordinary consumer lending relations. Most defaults occur not because the borrower is a cheater, or fabricates a strategic default (although this informs most regulatory approaches), but because she incurs a fundamental life change, such as disease, divorce, or unemployment. Since these events fall squarely within the sphere of the borrower, not the lender, one might argue that the borrower should bear their full costs. Yet, while it is in general impossible for an individual to foresee that she will be laid off or suffer a serious illness within the next 5 years, the probability that a certain number of borrowers will default in a given year due to such factors can be better estimated – not determined -- at an aggregate level. This is easier for the lender than the borrower. For these cases – not for every default – mechanisms are needed that reallocate the burden of uncertainty and to give the right to trigger this mechanism to the party that has better information about the fact that such an event has occurred or is about to occur, i.e. to the borrower. Conversely, the lender would have to be required to build cushions in advance to be able to allow for refinancing or renegotiation in response to such claims. Similarly, mortgage lenders tend to have better information about the development of real estate markets, interest rates, and other factors that might impact the ability of borrowers to pay in the future – although, as we have seen, they too might err. Nonetheless, under current configurations they typically have greater flexibility to adjust their contracts to changing circumstances – i.e. by

changing interests rates in flexible mortgages -- than borrowers do. This encourages lenders to ignore signs of growing distress, because the sum of all enforceable contracts they hold disguises the potentially systemic effect default may have on themselves or on investors who are now holding the products they created. Homeowners, however, feel the pain when their ex ante commitments become unsustainable. They should therefore be given the right to trigger an uncertainty-out. Forcing lenders to share the burden of uncertainty earlier may force them to adjust their lending strategy and can lead to a self-correction of the system. Similar principles should apply in more complex credit relations, i.e. margin calls or collateral calls and the like.

Market participants are unlikely to incorporate uncertainty-outs voluntarily. After all, they seek to use their information and bargaining power for their own benefit and in a competitive market this is what they should do. In an inherently instable financial system that ultimately relies on the willingness and ability of states and their taxpayers to backstop the system, the pursuit of self-interest should, however, not be limitless. The costs market participants impose on the system must be born by some and there is no reason why those who benefit most from imposing these costs should not share some of the burden. The problem we currently face is that if the system is allowed to run its usual course, at the time interventions take place regulators and central banks have to decide between the Scylla of default and the Charybdis of bailout. Mechanisms that trigger cost-sharing for cases of uncertainty can reduce the stress in the system at least if appropriate precautions are taken by those best able to shoulder them. It should

be the task of regulators and supervisors to design such a scheme and adapt it to changing circumstances. Uncertainty-outs should be mandatory, but private parties could be given some leeway in designing the mechanisms -- subject to regulatory oversight. Moreover, lawmakers should create default rules and give the party seeking an uncertainty-out effective procedural remedies to invoke a review of such provisions *ex ante* and trigger the mechanism when events occur that were not foreseeable for either party.

In law this is nothing new. Contracts routinely contain *force majeure* clauses that allow parties to breach contracts without triggering remedies in cases of natural disasters, the outbreak of warfare, terrorist attacks or the like. Limiting *force majeure* to such cases is not necessary, but since this is now widely accepted doctrine will be difficult to change. Uncertainty-outs should capture events that neither party could foresee in the specific instance with any precision, and where the enforcement of the original contract would impose undue harm on either. Such mechanisms differ from *force majeure* also in that they do not allow parties to simply walk away from the deal. Instead, they are meant to create temporal relief or refinancing, not cancellation. This is akin to a German legal doctrine – the *clausula rebus sic stantibus* – which allows the distressed party to seek adaptation of the contract by a court. It was first invoked in cases during the period of hyperinflation following World War I, but is now codified in Section 313 of the Civil Code (BGB). This provision is rarely used, as it should be.

As discussed supra, relying on courts may work in the early days of financial distress, but is unlikely to work in times of financial crisis. For these cases centralized mechanisms are needed that determine when a triggering event has occurred and give guidance as to scope and scale of contractual adaptation. An example is the intervention by the Hungarian government in mortgage markets that were dominated by foreign currency denominated loans. When the appreciation of foreign currency was threatening mass default, it imposed on all banks the obligation to adapt the contracts and denominate them in domestic currency.

In sum, recognizing at long last that uncertainty is an essential condition has major implications for the governance of financial markets. It challenges the common notion that contracting parties should be free to contract as they wish and that states should interfere only in the rare cases of market failure. Under conditions of uncertainty and liquidity volatility these privately agreed contracts are capable of placing the system on autopilot to self-destruction. This is now well recognized if only implicitly by central banks and regulators that have used all available tools to rescue the system even if this meant that they had to stretch or breach the legal powers given to them. Market actors at the core have applauded this and continue to call for more – but are unwilling to offer similar relief to their own counterparties. The point of this essay is that if uncertainty affects everyone then everyone should have access to regularized procedures for addressing uncertainty if and when it manifests itself. It proposes an “uncertainty-out”, a contractual provision that will be read into all financial

contracts whether or not explicitly included and can be triggered by private parties, but also by regulators or central banks to reallocate the burden of uncertainty and thus prevent a build-up of stress in the system. This is not a call for a return to legal centralism, but for the recognition that financial systems are essentially hybrid between states and markets, public and private. They would not exist without the state or the law; enforcing private financial instruments should therefore be conditional on including provisions that make private autonomy in finance compatible with the social interest in the stability of the system. The mechanism proposed is compatible with decentralized markets and extensive, though not limitless, private autonomy. By promoting burden sharing across the financial system it may have some adverse effects on some actors' willingness to lend – and will doubtlessly give rise to contractual innovation that seeks to circumvent it. Thus, it is not fool proof, but a step towards a new understanding of contractual and regulatory governance of instable financial systems.

#### References:

- Ayotte, Keneth, and Patrick Bolton. 2011. "Covenant Lite Lending, Liquidity and Standardization of Financial Contracts." In *Research Handbook on the Economics of Property Law*, edited by Keneth Ayotte and Henry E. Smith. Cheltenham, UK: Edward Elgar.
- Bolton, Patrick, and Howard Rosenthal. 2002. "Political Intervention in Debt Contracts." *Journal of Political Economy* no. 110 (5):1103-1134.
- Frydman, Roman, and Michael D. Goldberg. 2011. *Beyond Mechanical Markets: Asset Price Swings, Risk, and the Role of the State*. Princeton: Princeton University Press.
- Hart, Oliver, and John Moore. 1999. "Foundations of Incomplete Contracts." *Review of Economic Studies* no. 66 (1).
- Hodgson, Geoffrey M. 2013. "Some Comments on "The Legal Constitution of Finance" by Katharina Pistor." *This Issue*.

- Keynes, John Maynard. 1964 (1936). *The General Theory of Employment, Interest and Money*. Orlando, Florida: Harcourt, Inc.
- Knight, Frank H. 1921. *Risk, Uncertainty and Profit*. Boston: Houghton Mifflin.
- Mehrling, Perry. 2011. *The New Lombard Street: How the Fed Became the Dealer of Last Resort*. Princeton: Princeton University Press.
- . 2013. "Essential Hybridity: A Money View of Law and Finance for Foreign Exchange." *Journal of Comparative Economics* no. 41 (2).
- Minsky, Hyman P. 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.
- Pistor, Katharina. 2013. "A Legal Theory of Finance " *Journal of Comparative Economics* no. 41 (2).
- Pistor, Katharina, and Chenggang Xu. 2003. "Incomplete Law." *Journal of International Law and Politics* no. 35 (4):931-1013.
- Rona-Tas, Akos, and Alya Guseva. 2013. "Information and Consumer Credit in Central and Eastern Europe." *Journal of Comparative Economics* no. 41 (2).
- Williamson, Oliver E. 2005. "Economics of Governance." *American Economic Association Papers and Proceedings* no. 2005 (May):1.