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Law and Finance in the Context of Crisis: The Imperative of Structural Vision

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Law and Finance in the Context of Crisis:

The Imperative of Structural Vision

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Abstract

This piece explores the worldwide response to the recent financial and economic crisis through a comparative analysis of financial crisis, regulation and reform in the US and in several emerging market countries.

Two main ideas inform my argument.

The first idea is the inadequacy of ways of dealing with the crisis that fail to enlist finance more effectively in the service of the real economy, rather than allowing it to serve itself, and that misunderstand globalization as an unyielding constraint on institutional experimentation at home. A wide range of historical and contemporary examples helps make the point.

The second idea is the imperative of structural vision: the understanding of the consequences of different paths of institutional change as well as the imagination of new institutional alternatives. A deficiency in such vision is one of the chief flaws in the major currents of contemporary economics.

A reformed practice of legal analysis can help redress this defect. The reform of finance and of its relation to production, viewed through the lens of structural vision, can serve as a point of departure for innovations useful to growth, inclusion and democracy.

KEYWORDS: financial crisis, financial regulatory reform, instability, inequality, political reform, law and finance, democracy and finance, globalization, global governance, international monetary and financial reform, comparative law, institutional analysis

JEL Classifications: G1, G2, G24, G20, G24, K22, K23, L14, M16, N20, 016, P16

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Introduction

Finance and the regulation of finance are often viewed as the terrain in which the inherent constraints on the organization of a market economy are most clearly seen. In the analysis and governance of finance, all aspirations to structural change are supposedly exposed as wishful thinking.

The view that I here propose breaks decisively with this understanding, and rejects it as ill informed and unimaginative. Two main ideas inform my argument. The first idea is that the widely professed commitment to the organization of socially inclusive economic growth and to the enlistment of finance in the service of such growth require that we re-imagine and remake the institutional arrangements, defined in law, that govern the relation of finance to the real economy. Under present institutions and practices, finance largely serves itself rather than serving the productive agenda of society. We can make it do what it is supposed to do if we are willing to think and to act more boldly.

It is not enough to regulate finance; it is necessary to reorganize it, piece-by-piece and step-by-step. The problems that contemporary societies face in dealing with problems presented by finance are not adequately defined and solved when we view these problems as originating simply in localized market failures or in localized failures in the regulatory response to these localized market failures. The problems arise from structural limitations. They demand, as solutions, structural alternatives, if by structure we mean the institutions and assumptions that shape how economies and societies work.

The creation of a network of local banks in the nineteenth-century United States, of universal banks in nineteenth-century Europe and of central banks, armed with power to control the money supply, in the twentieth century are all examples of structural change. So are the emergence and diffusion of Keynesianism, understood as a complex of ideas and practices that enabled governments to manage economies counter cyclically, thus diminishing the dependence of the level of economic activity on the level of confidence. Another example of structural change in the institutions and practices of finance is the usurpation of many of the functions of finance, in the decades preceding the financial crisis of 2007-2009, by financial organizations that were not banks, a phenomenon often described as the substitution of bank-based finance by market-based finance. Structural change can be good or bad. Whether it is good or bad, it deals with what matters most in the ordering of social and economic life.

Structural change is not just something that, for mysterious reasons and under the provocation of crisis, happened at certain moments in the past. It is something that we can make happen, in thought and in practice, now. And wherever and whenever it happens, it appears in the form of new institutional arrangements, defined in legal detail. There is no structural change without legal innovation.

The second idea animating the argument of this article is that the trajectory of rethinking and reform of finance for which I argue illustrates the thesis that market economies can be organized in strikingly different ways. Such alternative approaches to the organization of a market economy matter: they shape production and exchange as well as distribution. They are fateful for the course of economic growth and social change.

This paper began as a contribution to the Columbia University Global Finance and Law Initiative, under the aegis of a research grant provided by the Institute for New Economic Thinking (INET). It shares with this larger project a number of fundamental starting points.

Among the most important common starting points, three deserve special mention: first, a rejection of the adequacy of the dominant traditions in economic analysis and in legal thought, as guides to understanding the recent crisis and its effects; second, a belief in the importance of empirical understanding to the reformulation of our ideas about law, economics and finance; and third, a belief in the contribution that comparative legal and institutional analysis can make to an improvement in our thinking about finance and financial reform, and the possibilities for their transformation.

From here, however, I develop an argument and approach that differs from the other contributions to this initiative. The easiest way to describe the distinctive character of my approach is by contrast to a number of influential tendencies in present-day thinking about the problems of law and finance. The contrast helps define the character and content of my claims.

1. Naïve legal constructivism. Market economies are constituted by legal arrangements, as legal thought has demonstrated with increasing clarity over the past one hundred years. There is a pre-set list of basic types of social organization, each with a natural or pre-set legal content. The task of law is to fill in the outline – to translate the logic of the type(s) into legal and institutional detail.

Naïve legal constructivism trivializes the significance of law and legal thought to the understanding, imagination and creation of structure and structural change. Law is the medium in which novelty is established, most commonly through analogical extension or recombination of past and present institutional variations. These variations matter. Alternative ways of organizing “capitalist” or market economies influence every aspect of economic life, including the basic arrangements of production and exchange. They shape how an economy grows and works. The organization of finance and of its relation to the real economy is one aspect, among many, of this larger reality.

2. Structures and systems. There is a striking affinity between the way that institutional structure and structural alternatives are approached in mainstream conservative political-economy thinking and in the tradition of Marxist social theory.

All these tendencies locate the relevant framework or structure in an abstraction such as capitalism or the market economy. According to this way of thinking, the abstract type or structure recurs in history in many different circumstances. It has an in-built legal and institutional content, which may become apparent little by little. Although it may vary, it is indivisible; all its parts stand and fall together. It evolves in stages and obeys certain laws of change and operation.

My working assumption is that the relevant legal-institutional structure needs to be depicted at a much greater level of detail or concreteness. At this level, it ceases to appear as a recurrent and indivisible type, which conforms to certain laws of change and has a preset institutional content.

A structure, in the sense illustrated in my argument, can exert a decisive influence and be recalcitrant to change and nevertheless represent a hodgepodge, capable of being explained only in the light of its particular history, full of accident and suppressed transformative opportunity.

3. *Vulgar Weberism.* A common response to the deficiencies of established ways of thinking in comparative law and political economy is to expand the scope of analysis by insisting on the importance of history, culture, and politics, without, however, relying on any particular conception of structure or of its reformation. Call this tendency vulgar Weberism; one of its sources of inspiration is the economic and legal sociology of Max Weber. By failing to articulate a different vision of structure and structural change, it fails to mount a real challenge to the ideas with which it is often contrasted. Expanding the conversation is not enough; we need to change it.

4. *Alternative capitalisms.* A long tradition of writing in comparative political economy explores differences in the way that the contemporary market economies and their financial systems are organized. This literature goes in the direction for which I argue. However, it stops short because it almost invariably supposes that there is a basic paradigm, of capitalism or of the market economy, of which contemporary economies ring changes.

On the view developed here, past and present variations in the organization of finance and of its relation to the real economy represent a subset of a broader universe of institutional possibilities. There is no predetermined limit to how far these differences can go. We can envisage points of departures, directions, and next steps. However, we cannot legitimately mark out a circumscribed horizon of institutional possibilities.

From here, I proceed in three steps: first, by placing my argument in a context of debate in political economy and legal theory; second, by examining three comparative-historical situations that illustrate my core ideas; and, third, by drawing out the larger implications of the argument for thought as well as reform.

The context of theoretical debate in economics and in law

I develop these ideas against the backdrop of two theoretical controversies: one in economics, and one in law and legal thought.

Theoretical background in economics: Beyond neoclassical and Keynesian approaches to economic policy and financial regulation

The approach to the problems discussed in this essay has traditionally been informed by two major theoretical traditions: neoclassical and Keynesian economics. According to neoclassical economics, increased financial market activity is generally perceived as beneficial. New financial markets, intermediaries and arrangements are understood as a rational response to emergent forms and forces of production. Financial innovation – the process of developing new financial markets, intermediaries and arrangements – represents the spontaneous mobilization and deployment of resources to optimal social effect. Absent localized market imperfections, the free play of market forces should be allowed to proceed unimpeded, in the service of increasingly complete and efficient markets.

Similarly, according to the standard, neoclassical approach to regulatory policy in general and regulation of finance in particular, the aim of regulation is simply to redress the effects of localized market imperfections, the better to make private returns converge to social returns to economic activity.

According to Keynesian and post-Keynesian traditions, emphasis shifts to conditions of permanent disequilibrium or, alternatively, periodic and unavoidable instability in economic and financial activity, giving rise to the need for regulatory constraint, not merely to correct for local market imperfections, but to stabilize and defuse a recurrent susceptibility to economic crisis and to the idling of labor. On this view, the role of the state is to build buffers and safeguards against the inherent instability of modern, market-oriented financial systems and the economies they are meant to serve.

Excluded from these ways of thinking about finance and its regulation is the idea that there can be alternative ways of organizing the relation between finance and the real economy, as an initial step toward reorganizing the market economy as a whole.

By contrast, the view defended here begins and ends with a very different understanding of the central problem of finance. According to the alternative view, a financial crisis can never be fully explained in terms made popular by modern finance: i.e. as the result of a localized market imperfection or a localized failure in the regulatory response to a localized market failure. These are the terms provided by modern economics and finance theory. They are omnipresent and still in charge. Yet they are incapable of explaining the central facts of financial crises in the modern era

The severity and course of financial crises are always shaped by their institutional settings. We should not think of this setting as “given” or fully determined by an abstract institutional conception, for example, the regulated market economy or financial system. The arrangements governing the relation between finance and the real economy can take radically different directions. In some of these directions, the arrangements loosen the link between finance and the real economy. In other directions, the arrangements tighten this relation.

Theoretical background in law: from technical implementation to detailed institutional understanding and imagination

The second theoretical controversy that serves as a backdrop to this piece concerns the domain of law and legal thought.

It is commonplace to emphasize that market economies and reform agendas presuppose the rule of law. The rule of law is a shorthand description for all the policies, practices and arrangements that lend stability and transparency to decentralized market transactions.

But in the dominant traditions of legal and policy analysis, the abstract idea of a market is assumed to have a built-in or pre-determined legal structure. From this understanding arises the idea that the task of legal thought vis-à-vis any detailed program of reform is of a purely tactical or secondary nature, involving a process of technical implementation.

By contrast, the institutional perspective developed in this piece recognizes that (a) market economies can assume very different legal-institutional forms and (b) that these forms may either tighten or loosen the link between finance and the real economy. From these two starting points, I argue that the task of legal thought is to explore, at the level of significant legal and institutional detail, the nature and significance of existing models of organization in the domain of finance (as well as in other domains of social organization) and the possibility of alternative models. Only such a perspective is capable of integrating the different approaches available to us today into a more comprehensive view.

Case studies

Introduction: aims, shared ideas and connections

This section explores the organization of finance and its relation to the real economy in three different historical settings. I develop the central argument through a comparative analysis of two different experiences of American financial crisis, regulation and reform: the financial crisis and reforms of the 1930s and the financial crisis and reforms of today. I then broaden the comparative perspective by

considering two additional historical examples: the experience of Chile in the 1980s and 1990s, and the experience of Brazil and the BRIC countries today.

There is a logical order to the three case studies. The first case study explores the fundamental ambiguity of the project of financial regulation. In any given situation, the regulation of finance may be conceived as either a step into the institutional reorganization of finance (e.g., for the sake of better enlisting finance in the service of the real economy) or as an evasion of the task of regulation.

The contrasting approaches in the first case study illustrate each of these two main alternatives. The New Deal reforms of the 1930s illustrate partially and imperfectly the idea of regulation as a first step toward the institutional reconstruction of financial markets. The financial reforms of today, both domestic and international use regulation as a shield deflecting reorganization.

The second case study – that of Chile in the 1980s and 1990s – extends the analysis in two directions: first, it explores the content and character of the regulatory project in the context of a developing country. Second – and more importantly – it expands the discussion to include the relation between internal and external dimensions; i.e., the relation between policies promoting a deepening in the link between finance and the real economy in the national economy, and the capacity of a country to participate actively rather than passively in the global economy. The Chilean case study suggests that the better enlistment of finance in the service of the real economy (financial deepening as opposed to hypertrophy) may be a necessary but not sufficient condition for integration into the world economy without surrender of the ability to create new comparative advantage and to innovate in the institutional setting of production and exchange. Globalization can and should be redirected. But even with the present form of globalization, there is large room for maneuver; the organization of finance and of its relation to the real economy is one of the determinants of the size of the room for maneuver.

The third case study concludes the discussion by considering a very different institutional approach to the organization of finance and financial regulation. I consider the situation of Brazil and the BRICs today, under the aegis of a contemporary model of state capitalism. The comparative analysis of Brazil and the BRICs today highlights two separate themes. The first theme is relative success of these countries in weathering the global crisis of the past few years. I argue that the distinguishing features of this new “state capitalism” have been instrumental to their relative success. But the success does not come without cost. The second theme implicit in the Brazilian and BRIC example is that the combination of state capitalism with export-led growth is a costly and dangerous proxy for an alternative to the larger project of enlisting finance in the service of the real economy. The chief cost of this variation is its denigration of democratization in the two main forms considered in this essay: the democratization of the market economy (as in the institutional organization of socially inclusive growth) and the deepening of democracy in society as a whole. As such, the project should be rejected. There are

better ways to enlist the services of the state in the organization of socially useful finance. The experience of Brazil and the BRICs serves as a cautionary tale, illustrating a series of policies and arrangements that do and do not serve the project of growth with social inclusion.

Preview of main analytical distinctions

These studies deploy a number of analytical distinctions.

One of these distinctions is the contrast between financial deepening and financial hypertrophy. By financial deepening I mean an increase in the service that finance renders to the real economy: to production of goods and services. By financial hypertrophy I mean an increase in the size of the financial sector and of its share of GDP unaccompanied by an enhancement of the contribution of finance to real economic activity. The premise of this distinction is a controversial theoretical claim: that the relation of finance to the real economy is variable and that it varies according to institutional arrangements defined in law. This claim contradicts assumptions shared by the leading currents of opinion in economics, including the tendencies in economics that profess to be inspired by Keynes' intellectual legacy.

Another key distinction in the argument of these comparative studies is the contrast between passive and active integration of a national or regional economy in the global economy. By passive integration, I mean a form of integration that accepts (or "naturalizes") both the present distribution of comparative advantage in the international division of labor and the institutional formula for the organization of the market in general, and of finance in particular, recommended by the political, economic, and intellectual authorities of the richest and most powerful countries. In recent decades, this formula has gone under the name of neoliberalism or Washington Consensus.

By active integration of a national or regional economy in the world economy, I mean a form of economic opening that is predicated on both a disposition actively to reshape comparative advantage in terms more favorable to the national economy and an insistence on experimenting with alternative institutional arrangements, including arrangements for the organization of finance and of its relating to the real economy.

A premise of this distinction is that an intimate connection exists between the capabilities and insights that enable the active reshaping of comparative advantage and the capabilities and insights that require institutional experimentation. A second premise is that although the present regime of globalization imposes restraints on the freedom of maneuver of countries and their governments in creating new institutions and new comparative advantages there remains, within these restraints, a large space for variation and innovation. A third premise is that the ability of a country and of its government to make use of this room for maneuver

depends on certain achievements, among them financial deepening. A fourth premise – largely unexplored in this paper – is that the world economic order, including the regime for world trade and world capital flows, can and should be reformed to make more economic openness possible with less restraint in domestic institutional experimentation.

Financial regulation as a step toward institutional innovation versus financial regulation as a surrogate for institutional innovation: US in the 1930s versus US today

In the run-up to the crisis of 2007-2009, the United States pursued a path that resulted in financial hypertrophy (the increase of the share of finance in national outputs and profits) without financial deepening (the effective service of finance to the productive agenda of society). The experience of the US in the 1930s shows fragmentary elements of a different path.

When the financial crisis broke in out in 2007, the institutional setting in which finance operated had degenerated into a ramshackle construction. (A similar evolution or involution took place in many of the other rich industrial democracies.) The New Deal arrangements for the governance of finance had been partly but not completely bent and gutted. They had been hollowed out, unevenly and discontinuously, in response to an alliance of powerful interests and ideas.

The framework that was hollowed out should not be understood as simply an approach to the regulation of finance, as if the organization of finance pre-existed it. Rather, it should be understood as a particular way of organizing finance and of shaping its relation to the real economy.

This case study explores the distinctive structural and institutional dimensions of the New Deal approach to the organization of financial markets. In the categories of my argument here, we can understand the New Deal framework as an attempt to prevent financial hypertrophy, that nevertheless fails to achieve, except in the housing market, what I here call financial deepening. The subsequent hollowing out of the New Deal arrangements gave free reign to financial hypertrophy, and created a situation favorable to the global crisis of 2007-2009.

It is a commonplace to observe that a systemic crisis reveals systemic deficiencies. But such a crisis also creates the opportunity for correction of these deficiencies, through politics, experimentation, and institutional innovation embodied in law.

The argument of this section moves forward in three steps. I begin by discussing the general spirit and organization of the New Deal framework for financial governance and its subsequent itinerary of reform. The second part of the case study considers the American regulatory response to the financial crisis today, as embodied in the Dodd Frank reforms, as an example of regulation as an alternative to reorganization

(i.e. considering the relation between the contemporary “best practice” approach to financial regulation and the organization of finance that pre-existed it). I conclude the case study by considering once again the contrast between the US regulatory agenda of today and the regulatory agenda of the 1930s.

The New Deal emphasis on structural reform

For much of the post-war period, U.S. banks and securities markets operated within the legal and institutional framework established during the decade of the 1930s, in response to the Great Depression. Two key principles animated these reforms. The first principle was the commitment to a comprehensive framework of financial supervision and regulation, designed to stabilize and strengthen the banking system, in part by insulating the banks from the risks associated with underwriting and position-taking in speculative financial markets.

The second principle was a belief in the importance of structural reform, not just to dampen financial speculation, but to deepen financial markets and to provide through this deepening the institutional and material support for the New Deal program of socially-inclusive economic reform. For the architects of the New Deal reforms, no effort was more important than the effort to redress by government action the perceived deficiencies in existing financial markets and arrangements. Without a supportive financial setting, the New Deal agenda would be compromised from the very outset, starved of resources and arrangements required to move forward.

This idea of activist government policy was, of course, a hallmark of the New Deal reforms. But nowhere was this approach more fully or successfully deployed than in the area of mortgage finance. For the architects of the New Deal, re-organization of the mortgage market was fundamental for two different reasons. First, the pre-reform model of housing finance was widely perceived to be at the heart of two great evils of the time: economic insecurity and financial instability. Second, the broadening of the mortgage market was considered an essential pillar of broad-based recovery and reform. For the Americans – as well as for Keynes – the area of housing and mortgage finance provided an especially promising channel for the reactivation of economic activity and the stimulation of aggregate demand.

Three key features would characterize the New Deal reforms in the area of housing and housing finance. A first feature involved the use of state-owned banks and investment funds to purchase and restructure a large portion of outstanding mortgage obligations.

A second feature was the creation of a series of federally sponsored mortgage agencies and auxiliary institutions. For the New Deal reformers, it seemed obvious that the traditional banks and securities markets were incapable on their own of creating a stable and expanding system of nationwide mortgage finance. To do this,

new resources and arrangements were required. Thus, a series of new entities were created – the FHA, FHLBS, Fannie Mae under the RFC - not to supplant the traditional banks – but to complement and extend them, by creating access to long-term funding, and by providing a series of risk management tools that would enable the thrifts and the banks to originate and hold in portfolio the new long-term mortgages that the system was designed, in part to support.

A third important feature of the New Deal housing and financial reforms was the strengthening and expansion of the public law framework for monetary policy and financial regulation. In our own day, it is commonplace to separate the discussion of monetary policy from financial policy and the institutional organization of the financial system. But the central bank and auxiliary institutions play a crucial role in the structure and development of financial markets and their relation to production. Here – as in other areas – organization matters.

In the context of the 1930s, two innovations of the new monetary regime would play an especially important role in the post-war development of the financial system. A first innovation consisted in the centralization of monetary and banking authority in the newly created Board of Governors of the Federal Reserve. Prior to this transfer of power, monetary and credit policy were effectively under the control of the private bankers, acting on their own initiative through a series of regional organizations, often at cross-purposes.

A second major institutional innovation was the creation of the federal system of depository insurance (the “FDIC”). As many have noted, this system was remarkable in two respects. First, the new system of government-sponsored depository insurance eliminated the most basic source of systemic risk in 19th and early 20th century American finance: runs on the bank by retail investors fearful for their life savings. Second, and of even greater interest today, the FDIC would pioneer a variety of new techniques for the restructuring of failed institutions. The so-called “special resolution regime” established as part of its charter, would serve as a laboratory for the development of different forms of reorganization, including, in later years, different forms of public and private partnership designed to preserve assets and institutional resources capable of contributing to economic development in community and regional centers.

Until recently, most commentators have focused on the regulatory aspects of the New Deal financial reforms. But the New Deal program of structural reform would prove equally – or more – important in at least two respects. First, the new federally sponsored system of housing and mortgage finance would contribute to the broadening of home ownership and expansion of the construction industry throughout the post-war period. Second, the New Deal system of housing and mortgage finance would contribute to the deepening of every part of the financial system. The banks and thrifts would thrive within a framework of federally sponsored and insured deposits and a host of public institutions providing liquidity for the mortgage market. Securities firms would benefit as well, first by the steady

issuance of government and agency securities, and later, by emulating the practices of the federally-sponsored mortgage agencies, especially in the area of securitization.

For a time, the system worked very well. The development of a the New Deal system of money, banking and credit would help to create the deepest and most sophisticated financial market in the world, contributing to an unrivaled period of shared prosperity, innovation and growth during the first few decades of the post-war period. Nor would the characteristic pathology of the pre-war markets return with the new prosperity. The combination of financial deepening, socially inclusive growth, and government sponsorship and coordination would contribute to a period of unrivaled macroeconomic and financial stability in the US and elsewhere.

Yet from the very outset it was also clear that the system was subject to two great limitations. One limitation was financial localism: the organization of a national banking system made up thousands of unit banks, each confined to a relatively small geographical area and prohibited by law from interstate branching or functional affiliation. Although this system could succeed in channeling savings to firms and households in the community, it would do so without benefit of economies of scale or diversification. As a result, the community banks and thrifts of the post-war period were inherently fragile. Their ability to perform even the most basic financial services depended on a series of special conditions, which would soon disappear.

A second limitation was the selective nature of the financial deepening that was achieved. For all the ingenuity and institutional creativity applied in the area of mortgage finance, the model of public and private partnership underlying the new mortgage market would remain the exception rather than rule. Within the mortgage market, public and private collaboration would create the basis for a vast expansion of both housing and housing finance. But beyond the mortgage market, in areas denied the same apparatus of government-sponsorship and support, local banks would remain what they had always been (at least in the United States until then): primitive and underdeveloped, cut off from the world's leading financial centers, whether in the US or anywhere else. Capital markets would remain equally remote: accessible to government and blue chip firms (and the occasional start-up favored by Wall Street and venture capital); but having little or nothing to do with vast majority of small and medium size firms which would form an increasingly important part of the US and other countries in the post-war period.

Neither of these problems was insuperable. Indeed, the very framework put in place by the New Deal model of financial reform would suggest many different points of departure for further institutional innovations that would tap the productive potential of savings in ways appropriate to a national market economy in the historical era of globalization. For example, the development of more sophisticated forms of fiscal and financial federalism could have provided a platform for an on-going process of collective learning and experimentation by the country's regional and community banks. The generalization of the "tertiary sector," i.e. the sector of government-sponsored funds, insurers and financial intermediaries could have

served as a continuing source of both stimulus and support for the deepening of local markets and their integration with global markets.

Had this subsequent progression occurred, financial localism – the most significant American experiment in the organization of finance up to the early decades of the twentieth century – could have been the first in a series of steps serving to strengthen and enhance the country’s uniquely decentralized system of banking and credit. It could have served – and could still be made to serve – as an emblem of what is necessary today to create a nationwide system of entrepreneurial finance, rooted in local communities, firms, and regions, but equipped financially, technologically and organizationally to move up the economic ladder and compete actively rather than passively in the global financial system.

But this progression did not happen. Instead, from the 1970s on, four mutually reinforcing tendencies would derail the kind of forward motion necessary to support an ongoing process of financial deepening, in the service of growth with social inclusion.

Weakening of regulatory oversight and the emergence of shadow-banking

The legal framework for the regulation of finance was progressively eviscerated from the 1970s on. This hollowing out took place in two waves.

The first wave involved the emergence of financial institutions in the 1970s free from the New Deal restrictions. Examples include: money market mutual funds; lightly regulated finance companies; a burgeoning commercial paper market.

The second wave involved a restatement and rationalization of the system that arose from the continuing growth of the shadow market into a generalized framework of regulatory dualism. Regulatory dualism is the combination of a thinly regulated sector and a thickly regulated sector. The term is used here to refer to the increasing growth, formalization and integration of a two-tiered system of financial regulation, both in the US and in other countries.

Of course, the very idea of shadow banking has been part of the US financial system for years. The rise of money managers and non-bank banks in the immediate post-war period was a central tendency of the time, endlessly studied and debated by academics and policymakers. But beginning in the decade of the 1990s, the shadow sector would take on new and added importance as the primary venue for private label securitization. Thus, the new non-bank financial intermediaries would include: conduits and special purpose vehicles, in addition to hedge funds and private equity firms. Collateralized debt obligations (“CDOs”) and credit default swaps (“CDS”) would provide the instruments of choice for securitizing sub-prime mortgages and related exposures. The development of new money and funding markets outside the

traditional banking sector would provide funding to the special purpose vehicles at the heart of the shadow market.

For students and observers of the financial crisis, the arrangements described above are, by now, easily recognizable. But, according to the conventional account, the trends represent the spontaneous response to increased complexity and sophistication.

But this is not, in fact, what happened. The more closely we observe the historical trajectory of reform, the more clearly we are able to see that what appears, at first, as “spontaneous financial innovation” is, in fact, a product at least in part, of changing rules and regulations, conceived against the background of ideas available at the time and themselves subject to an ongoing process of criticism and transformation.

Reorganization of the US system of federally sponsored housing and mortgage finance

This point becomes even more obvious when we consider the development of shadow banking in relation to the reorganization of the US system of mortgage finance. This second wave was reciprocally connected with a radical reorganization of the unique US system of mortgage finance.

Like the development of shadow banking, the transformation of the mortgage market would occur in two stages. The first stage consisted in the restructuring of the federally sponsored mortgage agencies and the introduction of securitization for GSE-sponsored mortgage pools. Beginning in the 1970s, the newly chartered GSEs would begin to securitize GSE-sponsored pools of residential mortgages. The new secondary mortgage market, based on securitization, would evolve from the simple pass-through structures of the 1970s to the more complicated CDOs, including multiple tranches and credit enhancements.

The second stage involved the development of “private-label securitization” – a parallel system for the origination, pooling and securitization of residential mortgages that failed to meet the standards established in the GSE segment of the market (thus, the label “subprime” mortgage market).

Critics of securitization today emphasize the “inherent” deficiencies of this form of financial practice. What the critics fail to understand is that the market imperfections and regulatory mistakes revealed by the recent crisis are themselves products – not of securitization in general – but of the hollowing out of securitization that occurred during the decade of the 1990s as it evolved in the shadow market.

There was no intrinsic reason for the new markets in credit risk transfer to develop in this manner. As the earlier experience in the US had shown, securitization and derivatives, if managed properly, could, contribute in many ways to the socially useful deepening and development of financial markets, in the service of economic growth and innovation. Yet the emerging legal and regulatory regime established by US and international authorities created both the opportunity and the incentives to expand these markets in the shadow sector. Only in time would the country come to realize the consequences of this shift and the effect it would have on the development of the financial system and its relation to real economy.

Breakdown of traditional bank-based financial intermediation

Two main consequences flowed from these developments. First, the slow but steady breakdown of traditional bank-based financial intermediation. For much of the postwar period, banks remained what they had always been both here and in other countries: the primary agents of financial intermediation, channeling savings to households and business, typically out of funding from their depository base. But from the 1980s on, this, too, would begin to change. Big banks, already buffeted by the tendencies described above (e.g. mortgage securitization, loss of deposits to money market mutual funds, loss of primary corporate customer base to the commercial paper market) would increasingly adopt the business model of their competitors: increasing emphasis on proprietary trading and position-taking in derivatives and publicly-traded securities; origination and securitization of mortgages and other standardized assets; and the provision of liquidity and risk management tools to players in the shadow market (especially those parts of the shadow market highlighted above).

Increasing role of capital markets in the intermediation of finance

The counterpart to the breakdown in traditional, bank-based financial intermediation was the increasing role of capital markets in the intermediation of finance, and financial activity more generally in the United States. As the new markets and arrangements took hold, the capital markets would become the leading sector of finance, outpacing and displacing the banks that once served as the heart of the mortgage market.

For comparative finance theorists, this move from “banking” to capital markets has often been seen as part of a natural evolutionary tendency, in which “institutions” are, increasingly replaced by ever more perfect “markets”. As a descriptive matter it was certainly true that many of the traditional loans and financial instruments formerly originated and held at the banks would – in the United States – be transferred to the money and capital markets. But the idea that markets were replacing banks – and through this replacement, contributing to a process of socially optimal risk diffusion, was wrong in at least three respects.

First, there were many reasons to believe that the “market” that began to emerge in the US from the middle of the 1990s might be less rather than more efficient than the bank-based model of financial intermediation from which the new model emerged.

Second, as the crisis would soon make clear, the fact that credit in the US financial system increasingly took securitized form did not mean that the banks were any less involved in the structuring or distribution of credit risk.

Indeed, in many ways the banks would become more not less involved in the process of credit intermediation. For one thing, many of the new securitized instruments would remain on the balance sheets of the banks; for another, many of the conduits and specialized investment vehicles involved in securitization either belonged to commercial banks, or were guaranteed or supported by them.

Third, the new shadow banking system – especially that part of the shadow system populated by conduits, special purpose vehicles and other non-bank financial intermediaries that had come to dominate US credit markets - instead of providing a haven for financial innovation in the service of enterprise, growth and risk-diffusion, would become little more than a venue for the trading of speculative positions by and among (mostly private) financial institutions, thoroughly disengaged from the real economy which the financial markets were supposed to serve. This last point requires further comment.

Ever since Keynes we have understood the ambiguity in the nature of financial speculation. Speculation can represent a concrete prediction of what will happen in the real economy and in doing so, fulfill two important functions: the organization of risk-taking and the generation and dissemination of information. But speculation can also turn inward and involve nothing more than the trading of speculative positions, with little or no contribution to the management of risk or the production of socially useful information.

This distinction between different forms of speculation would have little or no practical effect if the difference, in the end, were nothing more than a psychological fact; such is the tendency is much of the theorizing today, a tendency that itself goes back to Keynes.

But it is not a psychological fact. In fact, there are different ways to organize financial markets, especially financial markets designed to facilitate the organization and management of financial risk through the exchange of securities and derivative contracts. Some ways promote socially useful financial trading; other ways allow and even encourage what financial regulators, practitioners and observers increasingly consider socially useless forms of gambling, with little or no social benefit.

In the period leading up to the financial crisis, there were many reasons to believe that the new emphasis on proprietary trading and portfolio investment among US financial intermediaries had become an exemplary illustration of the second, socially dangerous form of financial speculation. A large empirical literature would testify to the build-up of finance-driven asset bubbles, generating gains on paper as the markets went up, only to lose them when the markets went down.

Note the irony in this last situation. The development of securitization and derivatives markets during the decade of the 1990s was hailed by many of the leading policymakers and central bankers as financial breakthroughs of the highest order. Together, the two frontiers of high finance would stabilize and support an increase in growth as well as stability in global markets, by facilitating the diffusion of risks through new markets, intermediaries and instruments, increasingly available in every region of the world economy. But this is not, in fact, what occurred. Instead, the new financial markets of the 1990s would expand in scale, scope and turnover largely within the financial sector (and having little or nothing to do with the needs of the real economy). Thus the stage would be set for recurrent cycles of booms and bust, fueled by global liquidity, external debt, and the increasing proliferation of credit-driven asset bubbles.

The net result was to build into the very framework of the new global financial market seeds of its own destruction, creating the conditions for a market crisis unrivaled since the Great Depression. The vast creativity and ingenuity of late twentieth century financial engineers would succeed in creating mechanisms for financial hypertrophy rather than deepening, and an endless cycle of boom and bust, built into the very framework of the new market-oriented” model of US and global finance.

The flaws of the hollowed-out system become manifest: the subprime crisis of 2007/8

Nowhere would this dynamic of financial hypertrophy and decoupling appear as clearly and as painfully as in the subprime crisis of 2007, and the global crisis of 2008. This story is, by now, well known. The purpose of the following account is merely to highlight the part of the story that remains obscure and will continue to remain obscure until placed in its broader legal and institutional setting.

The rise and fall of the subprime mortgage market

Consider first, the rise and fall of the subprime mortgage market as an exemplary illustration of the new era of financial decoupling and the increasing emphasis placed on the practice of speculative finance.

For much of the post-war period, the federally sponsored mortgage market had served the country well, providing stable and steady growth in both homeownership and home finance. The market did so, at least in part, on the

strength of the institutional and regulatory safeguards provided by the New Deal reforms. But from the mid 1990s on, the structure and composition of the US mortgage market would change. The market in subprime mortgages would account for an increasing portion of the mortgage market overall, especially the securitized part of the market. The proportion of simple pass-through structures involving agency standards and guarantees would decline, and the more complex, highly structured CDO and CDS instruments, originated and traded as part of the private label market would increase in prominence and effect.

At first these developments were well received. American central bankers and policymakers would celebrate innovation in the mortgage market as a sign of the alliance between ingenuity and democratization. For proponents of unfettered markets, the development of this new frontier seemed to confirm the central argument made all along: that financial markets and practitioners could be trusted to create value and monitor risk for the benefit of society as a whole. The best form of regulation was self-regulation, guided by the discipline of the market.

Yet, from the outset there were reasons to doubt this view of the facts. For one thing, the kinds of loans being made were questionable on their face. The self-regulating character of financial markets required transparency, full disclosure and sound management of risk.

Yet little in the subprime market reflected either transparency or prudent risk management. Indeed, the very structure of the subprime contracts made clear what critics had noted all along: that the new mortgage contracts made sense only in a world in which housing prices only went up. The famous NINJA loans with teaser rates and little or no down payment could only possibly perform if housing markets never fell and loans never suffered from market disruption.

For another, the changing structure of the mortgage market would itself reveal a widening gap between theory and practice. If the original model of securitization worked, it did so because of a series of safety and soundness provisions imposed on the system of housing and mortgage finance. These safety and soundness provisions were more than mere trimming; they were absolutely essential to promote stability, integrity and transparency in public securities markets. The hollowing out of the institutional protections left the market prey to the kinds of pathologies characteristic of American finance in the period leading up to the Great Depression. As in the 1920s, the private label securitization market would become a game of insiders, structured for the benefit of the sponsoring banks, rather than the hapless investors dependent on rating agencies for protection.

Collapse of the shadow-banking sector

For a time, the market seemed to work well. The self-reinforcing character of the credit bubble and housing boom would be in full bloom in the middle of years of the

decade of 2000s. But as the US housing market began its inevitable descent beginning in the fall of 2006, a series of striking developments would reveal how far the financial system had drifted from its earlier moorings in the New Deal legal and regulatory regime.

An early indication of this transformation could be found in the sudden breakdown of money and funding markets beginning in the summer of 2007. A second indication could be found in the serial bankruptcies, bailouts and rescues that would begin in the months following this market debacle.

For economists and policymakers, these events were stunning: markets are supposed to be self-correcting. But they should not have been stunned. The new forms of financial intermediation had made the world more risky and unstable. Growth in the shadow market was invisible and chaotic.

Leveraged losses, Wall Street banks and the financial panic of 2008

But by far the most stunning indication of the transformation of US finance would appear with the systemic breakdown in September 2008. The collapse of the leading US investment banks in a period of less than a month was both unprecedented and unimaginable.

According to modern finance theory, none of this should have happened. Derivatives and securitization, viewed primarily as mechanisms of risk diffusion, were supposed to stabilize financial markets, not render them more unstable.

But in the conditions of the time, neither derivatives nor securitization would serve as true mechanisms of credit risk transfer. One problem had to do with the hidden ties of continuity and obligation linking different players in the financial market. For example, originators of residential mortgages could use derivatives or pooled asset-sales (securitization) to reduce balance sheet exposure, or to obtain favorable regulatory treatment for assets and liabilities to which the firms might nonetheless remain exposed.

Another problem had to do with the enormous build-up of leverage and concentration of risk within the financial sector. On the eve of the sub-prime crisis, the leverage ratio for the country as a whole (i.e. total outstanding US debt as a percentage of GDP) had grown to an astonishing 350%, more than twice the level of 1980. The majority of new debt was both (a) concentrated in the financial sector; and (b) linked to the real estate market, especially the residential real estate market. Indeed, the channeling of so much credit into the real estate market would produce what insiders would easily recognize as a reverse pyramid of obligations (or a giant Ponzi scheme). In other words, the primary mortgage market was narrow; the secondary mortgage market, more general; and the successive layers of derivatives piled on top of each other (or to the side, through the trading of synthetic

exposures) would create a chain of liabilities beyond the control and comprehension of financiers.

In this setting, the very concept of intermediation would take on new meaning. Intermediation was supposed to involve the channeling of savings from households and firms to productive investment (or long-term consumption) within the real economy. Yet the growth in credit and asset markets in recent years would remain heavily oriented to the banks themselves. Relatively little of credit allocated during the height of the recent bubble would even leave the financial system.

Domestic weakness, illiquidity and instability in global markets

Consider, finally, the spread of the crisis to global markets. Just as US finance would become increasingly a game of asset trading among highly leveraged financial institutions, created to benefit the “market” itself, so the spread of the crisis to the world as a whole would reveal how the new logic of speculative trading had come to dominate global markets.

Recall the many developments that had taken place in the world economy from the time of the Asian crisis. The world as a whole had become “awash with liquidity” prior to the global crisis. Growing imbalances in the world economy would increasingly correspond to the recycling of surpluses from developing to developed countries, especially the United States. At the same time, many of the most successful developing countries would be recipients of large capital inflows from abroad. Indeed, the increasing amount of cross-border investment was interpreted as a sign that the global economy was thriving, under the aegis of open markets and a regime of free trade.

According to the standard view, financial deepening in global markets should have been, on the whole, for the good. Financial liberalization, it was generally believed, should lead, automatically, to the efficient allocation of capital around the world.

Yet the very great turbulence in global markets triggered by the financial crisis in the US would provide a new perspective on the development of global finance. The accentuation of instability in the global capital market would now appear strikingly similar to the dynamic in the US market. The same tendencies apparent in the US market would reappear in the global market. These would include: a stunning increase in leveraged cross-border capital flows; the creation of a vast and parallel “shadow market” in global markets; increasing volatility within this market, and the enormous scale of capital reversals triggered by bursting of credit bubbles and declining asset values.

The financial crisis of 2007-2009 and its legal and institutional setting

Before going on, let us pause and consider the essential difference between this analysis of the dynamic of the crisis and the standard view that has informed public discussion and public policy. The key difference is in the crucial role I attribute to the distinctive institutional framework generated by what I have called the hollowing out of the New Deal regime. Although the outcome was organized under the aegis of a generalized regulatory dualism, it was not – apart from the contrast between a highly regulated and a thinly regulated sector – a system at all. It had no logic: no rhyme or reason. It was the contingent result of a series of surprising compromises among powerful forces. Everything happened as if the resurgent financial pseudo-orthodoxy of the late 20th century had been powerful enough to gut the New Deal settlement about finance but not powerful enough to replace it with a coherent alternative, suited to its own interests and vision.

The US government's response to the financial crisis: regulatory reform as an alternative to reorganization

Consider next both the debate and the reform agenda that would characterize financial regulatory reform in the United States. Both the project of regulatory reform, and the policy discourse within which the reform proposal(s) took place, appeared, at first, to be very ambitious. But on further reflection, they were not ambitious. Understanding the nature and limitations of the proposals and the discourse takes us to the heart of the dilemma posed today in the debate over financial regulation.

The current project of financial regulatory reform is best understood as the combination of four different features. Each feature may be given different form. But the main outlines of the proposed agenda are – by now – established, shaped by discussions among elite policymakers in the US and in global forums.

Four different features would define the financial regulatory agenda in the US and in other countries:

1. The classic New Deal regulatory reform agenda, including the determination to separate proprietary trading from government-insured deposit-taking (as embodied in the Volker rule) and a commitment to expanding the perimeter of regulation.
2. A new macro-prudential agenda, complementing the classic Basel reforms (see below) and focusing on the twin powers of enhanced supervision and resolution authority, in response to the problem of “too big to fail.”
3. The classic Basel agenda, emphasizing capital adequacy, additional restraints on leverage and a renewed concern with liquidity issues.
4. A new consumer protection agenda, as exemplified by the proposal to create a new Consumer Protection Agency in the domain of the capital markets.

Taken as a whole, the proposed reforms certainly seem ambitious. However, from the standpoint of the earlier discussion, it is clear that they fall far short of the structural reform(s) required in the US and other countries. The first and most basic problem is that the new proposal for financial regulatory reform does little or nothing to address the main structural flaws and deficiencies revealed by the financial crisis.

The point can be summarized in a single sentence. Instead of viewing the financial markets and arrangements we have against the mirror of what we need, the new regulatory reforms would simply extend the perimeter of regulation to areas that should never have been allowed to develop in the first place.

Viewed in this light, even the most ambitious of the recent proposals for financial regulatory reform fall short. To the cries of the people, small business and community banks, the proposed legislation is silent, preserving rather than correcting the practices and arrangements at the heart of the earlier breakdown in finance.

What's missing - what the government could have done, but chose not to do

To see how far away from real progress this is, consider the kinds of reforms we need to address the problems of finance today. Recall the earlier discussion. The initiatives with which the government addressed the crisis left unresolved and even unconsidered three problems that I have claimed in my earlier argument to be central.

The first is the problem of regulatory dualism: the strategy of regulation based upon a stark contrast between a thinly regulated and a thickly regulated sector of finance. The second is the problem of financial localism: the existence in the United States of a nationwide network of local banks, originating in the nineteenth century, with remarkable potential to support broad-based economic growth, but now abandoned and unequipped because starved of access to adequate resources and capabilities. No one has asked the obvious question: how could this unparalleled structure be reconciled with the imperative of economies of scale and brought up to the front line of advanced financial practices and skills?

The third problem is the most general: the tenuous link between finance and the real economy. As the earlier discussion has shown, the post-New Deal reforms rendered even more precarious the ability of the financial system to fulfill its most basic social function. Thus, what has always been important is today imperative. It is now vital to develop arrangements capable of more effectively mobilizing savings for productive investment, creating new instruments for the management of risk, and broadening access to the economic and cultural resources required to participate effectively in the global economy.

For the financial reforms to have lasting effect, they would need, at the very least, to address these structural problems. Yet neither the original emergency measures nor the program for regulatory reform debated in the US today even mentions, much less establishes the conditions for new forms of production and new strategies of socially inclusive growth.

Indeed, if anything, the proposed regulatory reforms would make these matters worse: As I have already noted, the emergency measures, partly through design and partly through neglect have compounded the very problems they were meant to address, by identifying the national interest in financial reform with preservation of existing markets, intermediaries and arrangements at the heart of the financial collapse.

Defenders of the emerging consensus are quick to point out that the US government acts today under severe, even debilitating conditions. But it is mistaken to claim that the federal government enjoys no margin to develop alternatives, on the ground that its whole course of action has been shaped by intractable and determinant constraints. In fact, the policy that, together with the central bank, it has pursued, is, in many respects a bold and surprising response to the crisis. My argument here is that it is nevertheless a response that fails to take advantage of the transformative opportunity presented by the crisis.

Rather than seeing the course of policy as the ineluctable consequence of the established constraints, we should interpret it as a choice – in many respects a mistaken choice – informed by ideas – in many ways inadequate ideas.

The bold (although misguided) and chosen chapter of the government's response to the crisis is manifest in three domains. First, it is expressed in the design and development of the bailout of the banking system. For example, the government opted to commit vast resources to the turnaround of some of the largest of the nation's financial firms without either acquiring a decisive (albeit temporary) stake within these institutions or forcing a fundamental change in the way they do business. At the same time, it did almost nothing to enhance the capabilities of the nationwide network of small local banks, which represents the country's most important and most distinctive asset in the organization of finance.

A second realm of policy in which the constructed, non-automatic character of the government's response has been made evident lies in the jurisdiction of the Federal Reserve. It is the design and development of a program of "quantitative easing" or monetary liquidity that is as imaginative and creative as any attempted over the last thirty years. Such technical virtuosity and administrative audacity could have been put to many other uses.

A third area in which the government can be shown to have opted for a direction rather than to have one forced upon it by circumstance is housing and foreclosure. Here, too, the government has made choices that could not have been inferred

mechanically from the structure of the situation in which it has acted. It has, for example, put the New Deal mortgage finance GSEs (Fannie Mae, Freddie Mac) under the banner of state receivership without reversing the post New Deal developments that rendered them – and the secondary mortgage market – subservient to a speculative finance relatively disconnected from the productive agenda of society. It has also launched an array of detailed anti-foreclosure initiatives without embracing a single decisive course of action that would do for small homeowners (or small businesses for that matter) anything comparable, in the generosity of rescue, to what it has proposed to do for big banks.

Each of these cases reminds us of a point that should have been obvious all along. In choosing to salvage or restructure our existing financial markets, there is no neutral baseline. There is no hypothetical point at which the market “as it is” ceases to exist and becomes the product of “political intervention.” The choices that we make are no better or worse than the assumptions we bring to the table. In each particular act of reconstruction or renewal, we broaden or narrow the field of constraint by acts of will and imagination.

The point can be generalized. There are always alternative ways to respond to a practical conflict, opportunity or constraint. Some ways contribute to the stabilization of existing markets, and some ways contribute to the creation of new market orders, for example, by deepening the resources and arrangements made available to finance long-term, productive investment, or by innovating in the mechanisms of collective response to financial crisis and stagnation. The challenge is to identify and to work within the area of overlap between two different social objectives: increasing the capacity for innovation in the organization of savings, production, and investment; and increasing the mechanisms of response to external shock, for the sake of socially-inclusive growth at home and stability in global markets.

Comparison and contrast with the New Deal approach

To see how such a course might be possible, even or especially in times of great crisis, consider once again the New Deal reforms in the area of financial markets. As many have noted, the crisis of the 1930s would serve, in many ways, as a precursor to the crisis today. Yet, two key differences would distinguish the government’s response to the Great Depression from the government’s response to the crisis today: (a) the willingness to use the federal government as an agent of structural, not merely regulatory reform; and (b) the willingness to innovate in the policies and arrangements used to organize the domestic (and global) financial system.

We see this difference manifest in the very first acts of the New Deal banking reforms. The famous banking holiday declared in the opening days of FDR’s first administration set the tone for the program of reform that would follow. This program was marked from the very outset by a commitment to combining governmental activism and structural reform in the service of an ideal of making

finance subservient to production and turning the task of economic reconstruction into an occasion for providing personal security and opportunity for the broad mass of individuals and households.

Consider next the many new legal and institutional innovations undertaken in the service of this objective. The architects of the New Deal reforms experimented over and over again in the effort to identify and establish policies and arrangements that would safeguard the individual against insecurity – in particular against the effects on the individual of major instability in the level of economic activity – and at the same time curb the speculative excesses of finance, particularly with regard to other people's money.

Consider, finally, the combination of these two themes in the programs developed in the area of housing and mortgage finance. The essential points are, by now, well known. The policies and arrangements devised at the time would do more than add a patina of support to the private restructuring of mortgage contracts. Instead, the federal government would develop policies, tools and resources to restructure outstanding obligations (for example, by establishing the HOLC to purchase distressed debt on the secondary market) and then use its new tools to restructure the system of mortgage finance. Together with the many anti-foreclosure initiatives initiated by state governments, the efforts of the federal government would provide immediate redress to millions of homeowners and at the same time contribute to broad-based reform, both within and beyond the housing and mortgage market. These reforms could not be reduced to a choice between state and market. They would involve, instead, the institutionalized broadening of the financial market in an effort to reshape the relation between finance and the real economy, in the service of the larger project of socially inclusive economic growth.

Three further points are suggested by the discussion of the New Deal reforms.

The first point is that the New Deal reforms set out to deepen rather than diminish the scope of private enterprise and decentralized initiative. The second point is that this effort required an on-going practice of legal and institutional innovation in the organization of the market economy, especially in the area of finance. The third point is that our characteristic contemporary concerns were entirely absent from the earlier debate. The reformers did not hesitate to challenge existing practices and arrangements, out of deference to the interests of the financial sector; nor did they confuse the established arrangements of finance with the inherent requirements of market order. Instead, they experimented without a plan, in the service of what appeared at the time to be the most promising line of transformation.

Lessons from the New Deal approach to economic recovery and financial reform

We are now in the position to understand and evaluate the US program of financial rescue and reform. The main problem with the US response to date is that it fails to understand the main problem and seize the main opportunity. The main problem, I have claimed, is a weakening in the link between savings and productive investment, and between finance and the real economy. The main opportunity, until now largely squandered, is using the crisis of the past five years to develop a series of small-scale legal and institutional innovations to re-regulate finance in an effort to reorganize the relation between finance and the real economy so that the former becomes more useful – and less dangerous – to the latter. To do so – I have argued here – requires rejecting the settlement of the past three decades as the horizon of our collective ambitions.

To reject the current settlement does not require that we return to the earlier New Deal project of financial reform. It does, however, command that we make better use of the institutional and conceptual materials at hand, to fashion a new way forward in the service of two key goals: linking finance to the real economy, and broadening access and opportunity. In this task, nothing is more important than the alliance of will and imagination, in breaking free from preconceptions of how market-oriented financial systems are or can be organized; in trying out new and more promising approaches to the organization and regulation of socially-useful forms of finance.

Financial deepening as a step toward active integration in global markets: Chile's partial and limited experiment with financial heresy and micro-institutional innovation during the 1980s and 1990s

The best way to deepen the argument about the institutional shaping of finance and financial reform is through comparative legal and institutional analysis. These institutional variations matter on two counts. First, they reveal the detailed content of the very restrictive repertory of institutional alternatives on offer in the world today. Second, they provide the indispensable materials for imagining and promoting the construction of new alternatives.

In this and the following section, I consider two further examples of my theme: a Chilean example of partial and limited experiment with financial heresy and micro-institutional innovation during the 1980s and 1990s; and the Brazilian and BRIC example of an alternative institutional approach to the organization of finance and financial regulation. The Chilean example shows how a set of modest and localized innovations that contributed to financial deepening also insured the basis for greater national economic sovereignty. The Brazilian and BRIC example illustrates a very different point: how success in restraining the excesses of speculative finance, i.e., avoiding financial hypertrophy, in the face of worldwide financial and economic crisis, can be achieved without signaling success in the advance toward financial deepening and the democratization of finance.

Chile's experience with relatively successful and contained financial heresy and contained micro-institutional innovation

In the second half of the twentieth century, Chile showed how a small open economy can use finance to prosper if only it is willing to innovate in the arrangements governing the channeling of private savings into productive investment and the relation of the state to private firms. It also showed how a more effective enlistment of finance in the service of production can strengthen, and be strengthened by, active engagement in the world economy.

To this end, Chile devised a series of modest legal-institutional heresies, detailed in the following pages. The heresies were successful in creating a niche of relative prosperity. They failed, however, to go far enough to reconcile growth with greater equality and inclusion. Like many other contemporary economies, Chile became less equal as it became more prosperous. They also failed to point the way to a more diversified productive base, less dependent on the production and export of commodities.

Consider, first, the very different experiences of sovereign debt restructuring in Latin America in the 1980s and 1990s. Chile, Argentina and Mexico exemplify three very different approaches. Mexico, the most compliant, accepted an international bailout that paved the way for the denationalization of its banking system and increasing concentration of financial services within the domestic market.

Argentina, too, participated in a series of “market-friendly” restructurings that did little to improve the mobilization of savings or investment within the domestic economy. As a result, the voluntary restructurings of the 1990s gave way to unilateral default in 2001, followed by a series of incoherent attempts to reschedule domestic and international obligations. The opportunity to reform the basic framework of finance was squandered.

By contrast, Chile struggled to preserve a national banking sector. It took measures to raise its aggregate levels of both public and private saving to levels that if they remain below those that characterize the most successful Asian economies are nevertheless well above the Latin American averages. It used pension reform as a device for a forced heightening of the level of national saving. It sought to favor the expansion of credit for producers as well as consumers as a proportion of national output. It pursued active regulatory policies designed to increase the penetration of finance as well as to curb its abuses. In these and other ways, it set an example of how a small country, far from the economic centers of the world, could attenuate its dependence on the whims and interests of international financial markets without weakening its resolve to participate in the world economy.

These heresies do not turn Chile into a model to be copied, if only because successive Chilean governments have failed to take the next steps in a trajectory of institutional innovations that would have helped Chile create new comparative

advantages in the world economy and ensure more inclusive growth at home. However, they do serve as points of departure for a pathway of cumulative institutional and legal transformation at odds with the formulaic ideas that we have been accustomed to treat as touchstones of orthodoxy. They show how modest innovations, including innovations in the organization of finance, can promote the twin goals of active integration into the world economy (national economic sovereignty) with financial deepening and democratization (the two key objectives of progressive financial reform).

The BRIC alternative: An effective but costly shortcut to national power and economic growth without a deepening of democracy or the development of inclusive growth

Consider, finally, a third example of institutional experimentation and reform. I refer here to the BRIC alternative, as it has developed in recent years.

The following discussion of the BRICs, with special focus on Brazil, has a simple point. The BRIC countries were relatively successful in using state capitalism and export-led growth to mitigate the effects of the worldwide financial and economic crisis of recent years. China and Brazil, in particular, used governmentally controlled banks to maintain credit flows and to keep production on a forced march. Brazil exported natural resources and commodities, increasingly to China as well as other markets. And China transformed such resources and commodities into manufactured goods exported to the rest of the world.

The combination of state capitalism and export-led growth failed, however, to result in a model worthy of imitation in the rest of the world. It averted economic ruin without achieving necessary economic transformation. It failed to deepen the internal market and to democratize access to productive resources and opportunities. It amounted to a short cut, or even to an evasion, rather than to a solution. State finance was used to benefit governmental controlled enterprises in China and a handful of big private businesses in Brazil.

Democratization of the market economy, capable of giving practical content to the ideal of socially inclusive economic growth, would have required much more by way of reshaping the relation of finance to the real economy as well as the relation of governments to the mass of small and medium-size business that remained the most important -- and the most neglected -- part of these economies.

The false alternative presented by the example of Brazil and other leading emerging economies

The large emerging economies, especially three of those that have come to be known under the label BRIC -- Brazil, India, and China -- have been relatively

successful in dealing with the consequences of the recent crisis. This relative success has sometimes supported the belief that these countries have already discovered the secret of an alternative. To some, it has seemed that we need only to bring into the light of theory, and then to implement as policy, the path that they have already opened up. Before embracing this suggestion, we should pause to consider to what extent their experience offers a road map, indeed a short cut, to a recovery plan. For this purpose, I take Brazil as the chief focus: free of some of the complications that attend the experience of its much larger BRIC equivalents, its experience enables us directly to grasp something unexpected.

A first factor explaining the relative success of these emerging economies is the use of governmentally controlled banks to ensure the continuation of credit flows. It is a great advantage to count such banks among the instruments of public policy. However, it is not as great an advance as genuine financial deepening would be: a tightening of the link between finance and production, enhanced by a broadening of access to credit, especially credit for producers, by enterprises in all sectors and of every scale. Better to decentralize and democratize the whole of finance than to use banks controlled by the state to make up for the deficiencies of an unreconstructed banking system.

There is no reason in principle why the governmentally controlled banks could not be used to help fund small and medium-size businesses, start-ups included, and to mimic the work of private venture capital. In this way, they would work -- and in fact they have sometimes worked -- as a front line in the deepening and the democratization of finance. However, in a very divided and unequal society, as the large developing countries generally are, the distribution of subsidized credit has more often favored a relatively small number of big enterprises, with sweetheart relations to the state. Thus in Brazil the major part of these resources has been used to benefit a small group of big private business, under the pretext of helping to turn them into "world champions." In China it has served largely to maintain the funding for governmentally owned enterprises.

The conditions of dualism in the credit market characteristic of these economies, creates the instruments for the affirmation of such a bias. It is a result that will occur whether the dualism takes the form (as it does now in Brazil or China) of a contrast between an administered market in subsidized credit and a relatively freer market in non-subsidized credit or whether it takes the form (as it has in economies marked by financial repression) of credit rationing. The expansion of credit through such institutional vehicles, although motivated by the effort to prevent a slump, magnifies the impact of the preexisting inequalities.

A second factor is relative autarky. Despite the vast changes of recent decades that have brought the large emerging economies into the global economy, they remain relatively autarchic. It is obviously true of Brazil; its exports are still less than 15% of GDP. However, it is more surprisingly true even of China, a driving force in the world economy today; its exports are still under 30% of GDP, by comparison to

roughly 50% for Germany.

A paced and limited integration into the world economy, subordinated to the requirements of a national development strategy, is better than an unconditional integration. By an unconditional integration we mean one that accepts the present allocation of comparative advantage among national economies as the basis for place in the world economy, and then goes on to subordinate national strategy to the constraints imposed by this global niche.

However, the best is a movement that enhances integration but seeks to shape it in the service of a project designed to create new comparative advantages. The most effective way to create them is not dogmatically to choose sectors that are supposedly bearers of the future (as if the future did not have to make its own choices). It is to empower experimentalism: by establishing arrangements that broaden economic and educational opportunity, by giving small and medium-size business access to forms of credit, technology, marketing, and knowledge normally reserved to big businesses, by propagating successful local practice, and, above all, by creating the means and the conditions for pluralism and experimentation in the institutional forms of the market economy – that is to say, in the ways of organizing production and exchange.

In no area is the contrast between the lesser evil and the greater good more striking than with regard to finance itself. A simple reason why many of the large emerging economies -- and the BRIC economies in particular -- did relatively better in the crisis than the advanced economies is that they had refused fully to open their capital accounts. In this way, they limited their vulnerability to the national effects of international financial turmoil.

Consider, again, the case of Brazil. Brazil had generally followed the major Latin American economies in accepting what was in effect a functional equivalent to the nineteenth-century and early twentieth-century gold standard. In the closing decades of the twentieth century, most of the Latin American republics accepted a constellation of policies and ideas yielding a similar effect: acquiescence in a low level of domestic saving, consequent dependence on foreign capital, and openness to foreign capital, whether loan capital or portfolio capital, including greater freedom for capital to enter and leave. The practical result was to make the national government relatively more dependent on international financial confidence.

There was, however, an exception to this surrender to the functional equivalent of the gold standard, in the form of continuing limits to the openness of the capital account. These limits proved important in explaining the relative success of these emerging economies in resisting the effects of the crisis of the early twentieth century.

Nevertheless, in accord with the spirit of my argument, closure to world finance is not as desirable as openness on the basis of financial deepening, a mobilization of

national resources, and an institutional broadening of economic and educational opportunity. Such a basis provides elements of a strong national project. The dangers of financial openness do not grow simply, as the conventional discourse assumes, in proportion to the absence of regulatory precautions. They grow also and above all in proportion to the avoidance of conditions that bring the national economy to its knees by making it dependent on foreign finance and financial confidence.

We cannot find in the recent and relative success of the large emerging economies the lineaments of a program of recovery and reconstruction of enduring and general interest. What we can find is a record of fragmentary insight and luck in the avoidance of disaster: a series of distant second bests rather than the demarcation of a reliable path.

General themes of the case studies

The argument of this paper has two major sets of implications: one is substantive; the other is methodological.

The substantive theme

The substantive theme is easy to state. What matters for both explanatory and programmatic thinking is structure, understood as the formative institutional arrangements.

The major currents of political-economic thinking, whether neoclassical, “new classical” or Keynesianism fail to do justice to the paramount importance of the structural issues and possibilities.

An important corollary is that the prevailing institutional order is not an indivisible and recurrent system, with a built-in logic, as Marxist idea about capitalism or conservative ideas about the market economy might lead one to suppose. It is more likely to be a ramshackle and contingent historical hodgepodge. For example, the hollowed-out, post-New Deal American system; the effective minor heresies of Chile; the state capitalism of the contemporary BRIC economies.

The implementation of the widely professed commitment to socially inclusive growth requires institutional reshaping of the market economy. It cannot be achieved by compensatory redistribution.

The reorganization of finance and of its relation to the real economy - so that it serves the real economy rather than serving itself, is an important part of this project.

There is a reciprocal relation, in the advancement of such a project, between the mobilization of national resources (as through the more effective channeling of long-term savings into long-term productive investment), and active rather than passive integration into the world economy. Integration should not, and need not, represent a freezing into place of present comparative advantage or a surrender to an institutional formula like the one championed by the Washington Consensus.

The methodological theme

Legal analysis, especially comparative legal analysis, can serve as a major source of the content of a structural vision. It can do so because it deals with detailed institutional variations that cannot be inferred from abstractions, such as capitalism or the market economy.

To this end, legal analysis must break with its instrumental and subservient relation to the political-economic orthodoxies. It cannot be simply a technique for implementing the intellectual and political program of those orthodoxies.

Conclusion

Although finance is ordinarily represented as a mere constraint on institutional possibility, it turns out on closer inspection to be a source of institutional opportunity, both requiring and enabling alternative institutional arrangements. The study of finance and of its relation to the real economy thus becomes an incitement to the development of structural vision – in political economy, legal analysis and programmatic argument. Thus the scenario of constraint becomes the theatre of imagination.

Law and Finance in the Context of Crisis: Contemporary Experience in Comparative Perspective

	Financial deepening vs. financial hypertrophy	Active versus passive integration in the world economy
US today v. US in 1930s	<p>Extraordinary growth of financial sector together with decoupling of finance from real economy and funding of long term investment</p> <p>Regulation in the service of economic security together with limited but significant move toward deepening of the housing market</p>	<p>Massive inflows of short term capital intermediated via shadow banking</p> <p>High domestic savings channeled to government and non-financial enterprise; restrictions imposed on trading of gold and convertibility of domestic currency</p>
Chile in the 1980s and 1990s	<p>Progress toward deepening and against hypertrophy through a series of small scale innovations in the mobilization of savings and in the channeling of savings to productive investment</p>	<p>Use of tax, legal and regulatory incentives to attract strategic investment and to safeguard the country against turbulence in global markets</p>
The Brazil and BRIC direction	<p>State-owned banks and development agencies maintain production-oriented and consumer credit; regulatory restrictions limit speculative financial transactions</p>	<p>Relative autarky: high level of domestic savings fuel domestic spending and investment; capital and exchange controls limits exposure to global shocks</p>
A better alternative	<p>Rejection of credit dualism; decentralization of domestic banking system to broaden access and opportunity; institutional diversification and experimentation</p>	<p>Active participation in global markets; restrictive treatment of short term portfolio capital; accommodating treatment of FDI</p>

References

- Adrian, T. and Shin, H. S. (2009), "The Shadow Banking System: Implications for Financial Regulation", Federal Reserve Bank of New York Staff Report no 382.
- Adrian, T. and Shin, H.S. (2008), "Financial Intermediation, Financial Instability and Monetary Policy", Federal Reserve Bank of New York Staff Report no 346.
- Alpert, D., Hockett, R. and Roubini, N. (2011), "*The Way Forward: Moving From the Post-Bubble Economy to Renewed Growth and Competitiveness*", New America Foundation.
- Arrow, K. and Debreu, G. (1954), "Existence of an Equilibrium for a Competitive Economy" *Econometrica*, Volume 22.
- Atkinson, A. B. and Stiglitz, J.E. (1980), *Lectures on Public Economics*. New York: McGraw-Hill.
- Bernanke, B. (2010), "Causes of the Recent Financial and Economic Crisis", Testimony before the Financial Crisis Inquiry Commission, September 2, 2010.
- Beim, D. O. and Calomiris, C. W. (2001), *Emerging Financial Markets*, New York: McGraw-Hill.
- Brunnermeier, M. K. (2009), "Deciphering the 2007-2008 Liquidity and Credit Crunch", *23 Journal of Economic Perspectives*, volume 23 (1).
- Brunnermeier, et al. (2009), "The fundamental principles of financial regulation", *Geneva Reports on the World Economy*, no 11.
- Burki, J. and Perry, G E. (1999), *Beyond the Washington Consensus: Institutions Matter*, Washington D.C.: World Bank.
- Calomiris, C. W. (2000), *U.S. Bank Deregulation in Historical Perspective*, New York: Cambridge University Press.
- Coase, R. H. (1960), "The Problem of Social Cost", *Journal of Law and Economics* 3:1-44.
- D'Arista, J. W. (1994), *The Evolution of U.S. Finance, Volume II*, New York: M.E. Sharpe.
- _____ and Schlesinger, T. (1993), "The Parallel Banking System", in Gary A. Dynski, Gerald Epstein, Robert Pollin, eds., *Transforming the U.S. Financial System: Equity and Efficiency for the 21st Century*, New York: M.E. Sharpe.

_____ (2009), "Systemic Regulation, Prudential Matters, Resolution Authority and Securitization", Statement before the Committee on Financial Services, October 29, 2009.

_____ (2009), "Rebuilding the Framework for Financial Regulation", EPI Briefing Paper 231.

Diamond, D. (1984), "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies* 51.

Diamond, D. and Rajan, R. (2009), "The Credit Crisis: Conjectures about Causes and Remedies", NBER Working Paper no 14739.

Dodd, R. (2007), "Subprime: Tentacles of a Crisis", *Finance & Development*, December.

Duncan, R. (2009), *The Corruption of Capitalism*, Hong Kong: CLSA Books.

Edwards, F. R. and Mishkin, F. S. (1995), "The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy", in *Federal Reserve Bank of New York Policy Review*.

Eichengreen, B. (2008), *Globalizing Capital: A History of the International Monetary System*, Princeton, New Jersey: Princeton University Press.

Epstein, G.A. (ed.) (2005), *Financialization and the World Economy*, Northampton, MA: Edward Elgar.

FSA (2009), *The Turner Review: A Regulatory Response to the Global Banking Crisis*, March.

Fisher, I. (1933), "The Debt-Deflation Theory of the Great Depression", *Econometrica*, 1(4), 337-357.

Geithner, T. F. (2008), "Reducing Systemic Risk in a Dynamic Financial System", Remarks at The Economic Club of New York, June 9, 2008.

_____ (2010), "Causes of the Financial Crisis and the Case for Reform", Testimony Before the Financial Crisis Inquiry Commission, May 6, 2010.

Gerschenkron, A. (1962), *Economic Backwardness in Historical Perspective*, Cambridge: Harvard University Press.

Glaeser, E. L. and Shleifer, A. (2002), "Legal Origins", *Quarterly Journal of Economics*.

Gorton, G. (2009), "Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007", Federal Reserve Bank of Atlanta's 2009 Financial Markets Conference: Financial Innovation and Crisis.

_____ and Metrick, A. (2010), "Regulating the Shadow Banking System".

Greenwald, B. and Stiglitz J. (1993), "Financial Market Imperfections and Business Cycles", *Quarterly Journal of Economics*, 108 (1) 77-114.

Group of Thirty (Financial Reform Working Group) (2009), *Financial Reform: A Framework for Financial Stability*, Washington, D.C.

_____ (2010), *Enhancing financial stability and resilience: Macroprudential policy, tools, and systems for the future*.

Hall, P. A. and Soskice. D. (eds.) (2001), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, New York: Oxford University Press.

Hart, O. and Moore, J. (1999). Foundations of Incomplete Contracts, *Review of Economic Studies* 66 (1).

Hayek, F. A. (1973), *Law, Legislation and Liberty*, Chicago: University of Chicago Press.

Heilleiner, E. (1994), *States and the Reemergence of Global Finance*, Ithaca: Cornell University Press.

Kennedy, D. M. (1999), *Freedom From Fear: The American People in Depression and War, 1929-1945*, New York: Oxford University Press.

Keynes, J. M. (2009), *Essays in Persuasion*, New York: Classic House Books.

_____ (1964), *The General Theory of Employment, Interest and Money*, New York: Harvest/Harcourt, Inc.

_____ (1965), *A Treatise on Money*, Vol. I, London: Macmillan & Co. Ltd.

Knight, F. H. (2009), *Risk, Uncertainty and Profit*, Orlando: Signalman Publishing.

Kindleberger, C. P. and Aliber, R. (2005), *Manias, Panics and Crashes: A History of Financial Crises*, Hoboken, New Jersey: John Wiley & Sons, Inc.

Krippner, G. R. (2011), *Capitalizing on Crisis: The Political Origins of the Rise of Finance*, Cambridge: Harvard University Press.

Koo, R. C. (2009), *The Holy Grail of Macroeconomics*, Singapore: John Wiley & Sons (Asia) Pte. Ltd.

La Porta, R. et al (1998), "Law and Finance", *Journal of Political Economy*, 106 (6): 1113-1155.

Lothian, T. (2010 a), "The Past and Future of American Finance: American Experimentalism without American Exceptionalism", *Journal of Globalization and Development: Vol. 1 (2)*.

Lothian, T. (2010 b), "After the Crisis: Institutional Innovation and the Alternative Futures of American Finance", Columbia Law and Economics Working Paper No. 386.

Lothian, T. and Unger, R. M. (2011), "Crisis, Slump, Superstition and Recovery: Thinking and Acting Beyond Vulgar Keynesianism", Columbia Law and Economics Working Paper No. 394.

McKinsey Global Institute (2010), *Debt and deleveraging: The global credit bubble and its economic consequences*, January.

_____ (2009), *Global capital markets: Entering a new era*, September, 2009.

Mehrling, P. (2011), *The New Lombard Street: How the Fed Became the Dealer of Last Resort*, Princeton: Princeton University Press.

Minsky, H. P. (2008), *Stabilizing an Unstable Economy*, New York: McGraw Hill.

_____ (2008), *John Maynard Keynes*, New York: McGraw-Hill.

North, D. C. (1990), *Institutions, Institutional Change and Economic Performance*, New York: Cambridge University Press.

Posner, R. (1974), "Theories of Economic Regulation", *Bell Journal of Economic Management* 5.

Rajan, R. G. (2010), *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, Princeton: Princeton University Press.

_____ (2005), "Has Financial Development Made the World Riskier?" NBER Working Paper No. W111728.

Rauchway, E. (2008), *The Great Depression and the New Deal*, New York: Oxford University Press.

Reinhart, C. M. and Rogoff, K. S. (2009), *This Time is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press.

Rodrik, D. (ed.) (2003), *In Search of Prosperity: Analytic Narratives on Economic Growth*, Princeton: Princeton University Press.

_____ (2007), *One Economics: Globalization, Institutions and Economic Growth*, Princeton: Princeton University Press.

Roubini, N. and Mihm, S. (2010), *Crisis Economics: A Crash Course in the Future of Finance*, New York: Penguin Press.

Russell, E. D. (2008), *New Deal Banking Reforms and Keynesian Welfare State Capitalism*, New York: Rutledge.

Schularick, M and Taylor A. M. (2009), "Credit Booms Gone Bust: Monetary Policy, Leveraged Cycles and Financial Crises 1870 to 2008", NBER working paper number 15512, November.

Stigler, G. J. (1971), "The Theory of Economic Regulation", *Bell Journal of Economics and Management*.

Stiglitz, J. E. and Weiss, A. (1981), "Credit rationing in markets with imperfect information", *American Economic Review* 71: 393-410.

Tarullo, D. K. (2008), *Banking on Basel: The Future of International Financial Regulation*, Washington, D.C.: Peterson Institute for International Economics.

_____ (2009), "Financial Regulation: Past and Present", Speech at the Money Marketeers of New York University, NY, November 9, 2009.

_____ (2010), "Towards an Effective Resolution Regime for Large Financial Institutions", Remarks at Symposium on Building the Financial System of the 21st Century: An Agenda for Europe and the United States (March 18, 2010).

Turner, A. (2011), "Reforming Finance: are we being radical enough", 2011 Clare Distinguished Lecture in Economics and Public Policy.

_____ and others (2010), "What Do Banks Do? What Should They Do?" in *The Future of Finance: The LSE Report*, London School of Economics and Political Science.

_____ (2009), "The financial crisis and the future of financial regulation", Speech delivered at The Economist's Inaugural City Lecture, 21 January 2009.

UNCTAD (2011), "Trade and Development Report, 2011: Post-crisis Policy Challenges in the World Economy", New York and Geneva.

Wilmarth, A E. Jr. (2011), "The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem", *Oregon Law Review*, 951.

_____ (2002), "The Transformation of the U.S. Financial Services Industry, 1975-2000: Competition, Consolidation, and Increased Risks", *University of Illinois Law Review*, 215.

World Bank (2009), "Regulatory Reform: Integrating Paradigms", Policy Research Working Paper number 4842.