Testimony submitted to the House Committee on Financial Services, Hearing on "Systemic Risk: Are Some Institutions Too Big To Fail And If So, What Should We Do About It?" Tuesday, July 21, 2009, 2pm.

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Main Points

1) The U.S. economic system has evolved relatively effective ways of handling the insolvency of nonfinancial firms (through bankruptcy) and small or medium-sized financial institutions with retail deposits (through a FDIC-run intervention process). These kinds of corporate failures inflict limited costs on the real economy, and even a string of problems in such firms does not generally jeopardize the entire financial system.

2) We do not yet have a similarly effective way to deal with the insolvency of large financial institutions (e.g., any bank with assets over $500bn, which is roughly 3 percent of GDP). When one of these firms gets into trouble, the authorities face an unpalatable choice of "bailout or collapse." If the problems spread to more than one firm, the balance of responsible official thinking shifts towards: "bailout, at any cost".

3) The collapse of a single large bank, insurance company, or other financial intermediary can have serious negative consequences for the U.S. economy. Even worse, it can trigger further bank failures both within the United States and in other countries – and failures elsewhere in the world can quickly create further problems that impact our financial system and those of our major trading partners.

4) As a result, we currently face a high degree of systemic risk, both within the United States and across the global financial system. This risk is high in historical terms for the US, higher than experienced in most countries previously, and probably unprecedented in its global dimensions.

5) Short-term measures taken by the US government since fall 2008 (and particularly under the Obama administration) have helped stabilized financial markets – primarily by providing unprecedented levels of direct and indirect support to large banks. But these same measures have not removed the longer-run causes of systemic instability. In fact, as a result of supporting leading institutions on terms that are generous to top bank executives (few have been fired or faced other adverse consequences), systemic risk has likely been exacerbated.

6) Some of our largest financial firms have actually become bigger relative to the system and stronger politically as a result of the crisis. Executives of the surviving large firms have every reason to believe they are "too big to fail." They have no incentive to help bring system risk down to acceptable levels.

[1] This testimony draws on previous and ongoing work with James Kwak, particularly The Quiet Coup (*The Atlantic*, May 2009), and Peter Boone. Underlined text indicates links to supplementary material; to see this, please access an electronic version of this document, e.g., at http://BaselineScenario.com, where we also provide daily updates and detailed policy assessments.

7) Specifically, the surviving large U.S. financial firms and their foreign competitors have a strong incentive to resume "pay-for-performance" incentive systems – they compete by attracting "talent," and if any one firm brings its compensation under control, it will lose skilled employees. But these firms – and their regulators – have also demonstrated they cannot prevent such incentives from becoming "pay-for-disguised-risk-taking" on a massive scale.

8) The potential for unacceptable systemic risk remains deeply engrained in the culture and organizational structure of Big Finance. Over the past 30 years, this sector has benefited from a process of "cultural capture," through which regulators, politicians, and independent analysts became convinced this sector had great and stabilizing technical expertise. This belief system is increasingly disputed, but still remains substantially in place – big banks are, amazingly, still presumed by officials to have the expertise necessary to manage their own risks, to prevent system failure, and to guide public policy.

9) There are four potential ways to reduce system risk going forward

    a. Change our regulations so as to reduce ex ante risk-taking, e.g., by more effectively controlling the extent of leverage in the financial system or by more tightly regulating derivatives transactions.

    b. Change the allocation of regulatory authority within the financial system, so that the relative powers of the Federal Reserve, Treasury, FDIC and various other regulators are adjusted.

    c. Make it easier for the authorities to close down failing large financial companies using a revised "resolution authority."

    d. Change the size structure of the financial system, so that there are no financial institutions that are "too big to fail".

10) All of these approaches have some appeal and it makes sense to proceed on a broad front – because it is hard to know what will gain more traction in practice.

11) The growing complexity of global financial markets means that even sophisticated financial sector executives do not necessarily understand the full nature of the risks they are taking on.

12) There is no ideal – or even proven – regulatory structure that will work inside the U.S. political system. Relative to the alternatives, strengthening the FDIC makes sense. For certain levels of potential bailout (e.g., as with CIT Group recently), the FDIC has an effective veto power over providing some forms of government support. This has proved a helpful check on the discretion of the Federal Reserve and the Treasury recently, but it would be a mistake to assume this will be the case indefinitely.

13) While an extended "resolution authority" could be helpful, it is not a panacea. As markets evolve, new forms of interconnections evolve – and we have learned that not even managers of the best run banks understand how that affects the transmission of shocks. Furthermore, as banks become more global, an effective resolution authority would need to span all major countries in comprehensive detail. We are many years away from such an arrangement.

14) The stakes are very high – the country's fiscal position has been significantly worsened by the current crisis, and our debt/GDP ratio is on track to roughly double.

15) As a result, it makes sense also to consider measures that will reduce the size of the largest financial institutions. The recent experience of CIT Group suggests that a total asset size under $100bn may provide a rough threshold, at least on an interim basis, below which the government can allow bankruptcy and/or renegotiation with private creditors to proceed.

16) Market-based pressure for size reduction can come through a variety of measures, including higher payments to the FDIC (or equivalent government insurance agency) from institutions that pose greater system risk, higher capital requirements for bigger firms, and differential caps on compensation based on the cost of implied government assistance in the event of a failure – think of this as pre-payment for failure.

17) Breaking up our largest banks is entirely plausible in economic terms. This action would affect less than a dozen entities, could be spread out over a number of years, and would likely increase (rather than reduce) the availability of low-cost financial intermediation services.

18) The political battle to set in place such anti-size measures would be epic. But as in previous financial reform episodes in the United States (e.g., under Teddy Roosevelt at the start of the 20th century or under FDR during the 1930s), over a 3-5 year period even the most powerful financial interests can be brought under control.

19) If we are able to make our largest financial firms smaller, there will still be potential concerns about connected failures or domino effects. Much tougher implementation of "safety and soundness" regulation is the only way to deal with this. In that context, stronger consumer protection – through a new agency focused on the safety of financial products – would definitely help (as well as being a good thing for its own sake).

The remainder of this testimony provides further background regarding how systemic risk developed to its current high levels in the U.S., and suggests why we need new limits on financial institutions whose management regards them as "too big to fail".

Background

The depth and suddenness of the U.S. economic and financial crisis today are strikingly and shockingly reminiscent of experiences we have seen recently only in emerging markets: Korea in 1997, Malaysia in 1998 and even Russia and Argentina, repeatedly.

The common factor in those emerging market crises was a moment when global investors suddenly became afraid that the country in question wouldn't be able to pay off its debts, and stopped lending money overnight. In each case, the fear became self-fulfilling, as banks unable to roll over their debt did, in fact, become unable to pay off all their creditors.

This is precisely what drove Lehman Brothers into bankruptcy on September 15, 2008, and the result was that, overnight, all sources of funding to the U.S. financial sector dried up. From that point, the functioning of the banking sector has depended on the Federal Reserve to provide or guarantee the necessary funding. And, just like in emerging markets crises, the weakness in the banking system has quickly rippled out into the real economy, causing a severe economic contraction and hardship for millions of people.

This part of my testimony examines how the United States became more like an emerging market, the politics of a financial sector with banks that are now "too big to fail," and what this implies for policies that attempt to reduce systemic risk.

How could this happen?

The US has always been subject to booms and busts. The dotcom craze of the late 1990s is a perfect example of our usual cycle; many investors got overexcited and fortunes were lost. But at the end of the day we have the Internet which, like it or not, profoundly changes the way we organize society and make money. The same thing happened in the 19th century with waves of investment in canals, railroad, oil, and any number of manufacturing industries.

This time around, something was different. Behind the usual ups and downs during the past 25 or so years, there was a long boom in financial services – something you can trace back to the deregulation of the Reagan years, but which got a big jolt from increasing global capital flows during the 1990s, the Clinton Administration's refusal to regulate derivatives market effectively, and the complete failure of "safety and soundness" bank regulation under Alan Greenspan and the George W. Bush Administration. Finance became big relative to the economy, largely because of these political decisions, and the great wealth that this sector created and concentrated in turn gave bankers enormous political weight.

This political weight had not been seen in the US since the original J. P. Morgan in the late 1800s/first decade of the 20th century. In that period, the banking panic of 1907 could only be stopped by coordination among private sector bankers, because there was no government entity able to offer an effective counterweight. The first age of banking oligarchs – with great political influence based on economic might – came to an end with the passage of significant banking regulation during and in response to the Great Depression. But the emergence of a financial oligarchy during a long boom is typical of emerging markets.

There were, of course, some facilitating factors behind the crisis. Top investment bankers and government officials like to lay the blame on low U.S. interest rates after the dotcom bust, or even better – for them – the flow of savings out of China. Some on the right of the spectrum like to complain about Fannie Mae or Freddie Mac, or even about longer-standing efforts to promote broader home ownership. And, of course, it is axiomatic to everyone that the regulators responsible for "safety and soundness" were fast asleep at the wheel.

But these various policies - lightweight regulation, cheap money, the unwritten Chinese-American economic alliance, the promotion of homeownership - had something in common, even though some are traditionally associated with Democrats and some with Republicans: they all benefited the financial sector. The underlying problem was that policy changes that might have limited the ability of the financial sector to make money - such as Brooksley Born's attempts at the Commodity Futures Trading Commission to regulate over-the-counter derivatives such as credit default swaps - were ignored or swept aside.

Big banks enjoyed a level of prestige that allowed them to do what they liked, for example with regard to "risk management" systems that allowed them to book large profits (and pay large bonuses) while taking risks that would be borne in the future – and by the rest of society. Regulators, legislators, and academics almost all assumed the managers of these banks knew what they were doing. In retrospect, of course, they didn't.

Stanley O'Neal, CEO of Merrill Lynch, pushed his firm heavily into the mortgage-backed securities market at its peak in 2005 and 2006; in October 2007, he was forced to say, "The bottom line is we…I…got it wrong by being overexposed to subprime, and we suffered as a result of impaired liquidity…in that market. No one is more disappointed than I am in that result." (O'Neal earned a $14 million bonus in 2006; forced out in October 2007, he walked away with a severance package worth over $160 million, although it is presumably worth much less today.)

At the same time, AIG Financial Products earned over $2 billion in pretax profits in 2005, largely by selling underpriced insurance on complex, poorly-understood securities. Often described as "picking up nickels in front of a steamroller," this strategy is highly profitable in ordinary years, and disastrous in bad years. As of last fall, AIG had outstanding insurance on over $500 billion of securities. To date, the U.S. government has committed close to $200 billion in investments and loans in an effort to rescue AIG from losses largely caused by this one division - and which its sophisticated risk models said would not occur.

"Securitization" of subprime mortgages and other high risk loans created the illusion of diversification. While we should never underestimate the human capacity for self-delusion, what happened to all our oversight mechanisms? From top to bottom, executive, legislative and judicial, were effectively captured, not in the sense of being coerced or corrupted, but in the equally insidious sense of being utterly convinced by whatever the banks told them. Alan Greenspan's pronouncements in favor of unregulated financial markets have been echoed numerous times. But this is what the man who succeeded him said in 2006: "The management of market risk and credit risk has become increasingly sophisticated . . . banking organizations of all sizes have made substantial strides over the past two decades in their ability to measure and manage risks."

And they were captured (or completely persuaded) by exactly the sort of elite that dominates an emerging market. When a country like Indonesia or Korea or Russia grows, some people become rich and more powerful. They engage in some activities that are sensible for the broader economy, but they also load up on risk. They are masters of their mini-universe and they reckon that there is a good chance their political connections will allow them to "put" back to the government any substantial problems that arise. In Thailand, Malaysia, and Indonesia prior to 1997, the business elite was closely interwoven with the government; and for many of the oligarchs, the calculation proved correct – in their time of need, public assistance was forthcoming.

This is a standard way to think about middle income or low income countries. And there are plenty of Americans who are also comfortable with this as a way of describing how some West European countries operate. Unfortunately, this is also essentially how the U.S. operates today.

The U.S. System

Of course, the U.S. is unique. And just as we have the most advanced economy, military, and technology in the world, we also have the most advanced oligarchy.

In a primitive political system, power is transmitted through violence, or the threat of violence: military coups, private militias, etc. In a less primitive system more typical of emerging markets, power is transmitted via money: bribes, kickbacks, and offshore bank accounts. Although lobbying and campaign contributions certainly play a major role in the American political system, old-fashioned corruption - envelopes stuffed with $100 bills – is probably a sideshow today, Jack Abramoff notwithstanding.

Instead, the American financial industry gained political power by amassing a kind of cultural capital – a belief system. Once, perhaps, what was good for General Motors was good for the United States. In the last decade, the attitude took hold in the U.S. that what was good for Big Finance on Wall Street was good for the United States. The banking and securities industry has become one of the top contributors to political campaigns, but at the peak of its influence it did not have to buy favors the way, for example, the tobacco companies or military contractors might have to. Instead, it benefited from the fact that Washington insiders already believed that large financial institutions and free-flowing capital markets were critical to America's position in the world.

One channel of influence was, of course, the flow of individuals between Wall Street and Washington. Robert Rubin, co-chairman of Goldman Sachs, served in Washington as Treasury Secretary under President Clinton, and later became chairman of the executive committee of Citigroup. Henry Paulson, CEO of Goldman Sachs during the long boom, became Treasury Secretary under President George W. Bush. John Snow, an earlier Bush Treasury Secretary, left to become chairman of Cerberus Capital Management, a large private equity firm that also counts Vice President Dan Quayle among its executives. President George H. W. Bush has been an advisor to the Carlyle Group, another major private equity firm. Alan Greenspan, after the Federal Reserve, became a consultant to PIMCO, perhaps the biggest player on international bond markets.

These personal connections - which were multiplied many times over on lower levels of the last three presidential administrations - obviously contributed to the alignment of interests between Wall Street and Washington.

Wall Street itself is a very seductive place, imbued with an aura not only of wealth but of power. The people who man its towers truly believe that they control the levers that make the world go 'round, and a civil servant from Washington invited into their conference rooms, even if just for a meeting, could be forgiven for falling under its sway.

The seduction extended even (or especially) to finance and economics professors, historically confined to the cramped hallways of universities and the pursuit of Nobel Prizes. As mathematical finance became more and more critical to practical finance, professors increasingly took positions as consultants or partners at financial institutions. The most famous example is probably Myron Scholes and Robert Merton, Nobel Laureates both, taking positions at Long-Term Capital Management, but there are many others. One effect of this migration was to lend the stamp of academic legitimacy (and intellectual intimidation) to the burgeoning world of high finance.

Why did this happen and why now? America is a country that has always been fascinated with rather than repelled by wealth, where people aspire to become rich, or at least associate themselves with the rich, rather than redistribute their wealth downward. And roughly from the 1980s, more and more of the rich have made their money in finance.

There are various reasons for this evolution. Beginning in the 1970s, several factors upset the relatively sleepy world of banking - taking deposits, making commercial and residential loans, executing stock trades, and underwriting debt and equity offerings. The deregulation of stock brokerage commissions in 1975 increased competition and stimulated participation in stock markets.

In *Liar's Poker*, Michael Lewis singles out Paul Volcker's monetary policy and increased volatility in interest rates: this, Lewis argues, made bond trading much more popular and lucrative and, it is true, the markets for bonds and bond-like securities have been where most of the action has been in recent decades. Good old-fashioned innovation certainly played its part: the invention of securitization in the 1970s (and the ability of Salomon Brothers to make outsized amounts of money in mortgage-backed securities in the 1980s), as well as the invention of interest-rate swaps and credit default swaps, vastly increased the volume of transactions that bankers could make money on. Demographics helped: an aging and increasingly wealthy population invested more and more money in securities, helped by the invention of the IRA and the 401(k) plan, again boosting the supply of the raw material from which bankers make money. These developments together vastly increased the opportunities to make money in finance.

Not surprisingly, financial institutions started making a lot more money, beginning in the mid-1980s. 1986 was the first year in the postwar period that the financial sector earned 19% of total domestic corporate profits. In the 1990s, that figure oscillated between 21% and 30%; this decade, it reached as high as 41%. The impact on compensation in the financial sector was even more dramatic. From 1948 to 1982, average compensation in the financial sector varied between 99% and 108% of the average for all domestic private industries. From 1983, it shot upward in nearly a straight line, reaching 181% in 2007.

The results were straightforward. Jobs in finance became more prestigious, people in finance became more prestigious, and the cult of finance seeped into the culture at large, through works like *Liar's Poker*, *Barbarians at the Gate*, *Wall Street*, and *Bonfire of the Vanities*. Even convicted criminals, like Michael Milken and Ivan Boesky, became larger than life. In a country that celebrates the idea of making money, it was easy to infer that the interests of the financial sector were the same as the interests of the country as a whole - and that the winners in the financial sector knew better what was good for American than career civil servants in Washington.

As a consequence, there was no shadowy conspiracy that needed to be pursued in secrecy. Instead, it became a matter of conventional wisdom - trumpeted on the editorial pages of The Wall Street Journal and in the popular press as well as on the floor of Congress - that financial free markets were good for the country as a whole. As the buzz of the dot-com bubble wore off, finance and real estate became the new American obsession. Private equity firms became the destination of choice for business students and hedge funds became the surefire way to make not millions but tens of millions of dollars. In America, where wealth is less resented than celebrated, the masters of the financial universe became objects of admiration or even adulation.

The deregulatory policies of the past decade flowed naturally from this confluence of campaign finance, personal connections, and ideology: insistence on free flows of capital across borders; repeal of the Depression-era regulations separating commercial and investment banking; a Congressional ban on the regulation of credit default swaps; major increases in the amount of leverage allowed to investment banks; a general abdication by the Securities and Exchange Commission of its enforcement responsibilities; an international agreement to allow banks to measure their own riskiness; a short-lived proposal to partially privatize social security; and, most banally but most importantly, a general failure to keep pace with the tremendous pace of innovation in financial markets.

American Oligarchs and the Financial Crisis

The oligarchy and the government policies that aided it did not alone cause the financial crisis that exploded last year. There were many factors that contributed, including excessive borrowing by households and lax lending standards out on the fringes of the financial world. But major commercial and investment banks - and their fellow travelers in and around the financial sector - were the big beneficiaries of the twin housing and asset bubbles of this decade, their profits fed by an ever-increasing volume of transactions founded on a small base of actual physical assets. Each time a loan was sold, packaged, securitized, and resold, banks took their transaction fees, and the hedge funds buying those securities reaped ever-larger management fees as their assets under management grew.

Because everyone was getting richer, and the health of the national economy depended so heavily on growth in real estate and finance, no one in Washington had the incentive to question what was going on. Instead, Fed Chairman Greenspan and President Bush insisted repeatedly that the economy was fundamentally sound and that the tremendous growth in complex securities and credit default swaps were symptoms of a healthy economy where risk was distributed safely.

In summer 2007, the signs of strain started appearing – the boom had produced so much debt that even a small global economic stumble could cause major problems. And from then until the present, the financial sector and the federal government have been behaving exactly the way one would expect after having witnessed emerging market financial crises in the past.

In a financial panic, the critical ingredients of the government response must be speed and overwhelming force. The root problem is uncertainty - in our case, uncertainty about whether the major banks have sufficient assets to cover their liabilities. Half measures combined with wishful thinking and a wait-and-see attitude is insufficient to overcome this uncertainty. And the longer the response takes, the longer that uncertainty can sap away at the flow of credit, consumer confidence, and the real economy in general - ultimately making the problem much harder to solve.

Instead, however, the principal characteristics of the government's initial response to the financial crisis were denial, lack of transparency, and unwillingness to upset the financial sector.

First, there was the prominent place of policy by deal: when a major financial institution, got into trouble, the Treasury Department and the Federal Reserve would engineer a bailout over the weekend and announce that everything was fine on Monday. In March 2008, there was the sale of Bear Stearns to JPMorgan Chase, which looked to many like a gift to JPMorgan. The deal was brokered by the Federal Reserve Bank of New York - which includes Jamie Dimon, CEO of JPMorgan, on its board of directors. In September, there were the takeover of Fannie Mae and Freddie Mac, the sale of Merrill Lynch to Bank of America, the decision to let Lehman fail, the destructive bailout of AIG, the takeover and immediate sale of Washington Mutual to JPMorgan, and the bidding war between Citigroup and Wells Fargo over the failing Wachovia - all of which were brokered by the government. In October, there was the recapitalization of nine large banks on the same day behind closed doors in Washington. This was followed by additional bailouts for Citigroup, AIG, Bank of America, and Citigroup (again).

In each case, the Treasury Department and the Fed did not act according to any legislated or even announced principles, but simply worked out a deal and claimed that it was the best that could be done under the circumstances. This was late-night, back-room dealing, pure and simple.

What is more telling, though, is the extreme care the government has taken not to upset the interests of the financial institutions themselves, or even to question the basic outlines of the system that got us here.

In September 2008, Henry Paulson asked for $700 billion to buy toxic assets from banks, as well as unconditional authority and freedom from judicial review. Many economists and commentators suspected that the purpose was to overpay for those assets and thereby take the problem off the banks' hands - indeed, that is the only way that buying toxic assets would have helped anything. Perhaps because there was no way to make such a blatant subsidy politically acceptable, that plan was shelved.

Instead, the money was used to recapitalize (buy shares in) banks - on terms that were grossly favorable to the banks. For example, Warren Buffett put new capital into Goldman Sachs just weeks before the Treasury Department invested in nine major banks. Buffett got a higher interest rate on his investment and a much better deal on his options to buy Goldman shares in the future.

As the crisis deepened and financial institutions needed more assistance, the government got more and more creative in figuring out ways to provide subsidies that were too complex for the general public to understand. The first AIG bailout, which was on relatively good terms for the taxpayer, was renegotiated to make it even friendlier to AIG. The second Citigroup and Bank of America bailouts included complex asset guarantees that essentially provided nontransparent insurance to those banks at well below-market rates. The third Citigroup bailout, in late February 2009, converted preferred stock to common stock at a conversion price that was significantly *higher* than the market price - a subsidy that probably even most *Wall Street Journal* readers would miss on first reading. And the convertible preferred shares that will be provided under the new Financial Stability Plan give the conversion option to the bank in question, not the government - basically giving the bank a valuable option for free.

One problem with this velvet-glove strategy is that it was simply inadequate to change the behavior of a financial sector used to doing business on its own terms. As an unnamed senior bank official said to *The New York Times*, "It doesn't matter how much Hank Paulson gives us, no one is going to lend a nickel until the economy turns."

At the same time, the princes of the financial world assumed that their position as the economy's favored children was safe, despite the wreckage they had caused. John Thain, in the midst of the crisis, asked his board of directors for a $10 million bonus; he withdrew the request amidst a firestorm of protest after it was leaked to the *Wall Street Journal*. Merrill Lynch as a whole was no better, moving its bonus payments forward to December, reportedly (although this is now a matter of some controversy) to avoid the possibility they would be reduced by Bank of America, which would own Merrill beginning on January 1.

This continued solicitousness for the financial sector might be surprising coming from the Obama Administration, which has otherwise not been hesitant to take action. The $800 billion fiscal stimulus plan was watered down by the need to bring three Republican senators on board and ended up smaller than many hoped for, yet still counts as a major achievement under our political system. And in other ways, the new administration has pursued a progressive agenda, for example in signing the Lilly Ledbetter law making it easier for women to sue for discrimination in pay and moving to significantly increase the transparency of government in general (but not vis-à-vis its dealings with the financial sector).

What it shows, however, is that the power of the financial sector goes far beyond a single set of people, a single administration, or a single political party. It is based not on a few personal connections, but on an ideology according to which the interests of Big Finance and the interests of the American people are naturally aligned - an ideology that assumes the private sector is always best, simply because it is the private sector, and hence the government should never tell the private sector what to do, but should only ask nicely, and maybe provide some financial handouts to keep the private sector alive.

To those who live outside the Treasury-Wall Street corridor, this ideology is increasingly not only at odds with reality, but actually dangerous to the economy.

The Way Out

Looking just at the financial crisis (and leaving aside some problems of the larger economy), we face at least two major, interrelated problems. The first is a desperately ill banking sector that threatens to choke off any incipient recovery that the fiscal stimulus might be able to generate.

The second is a network of connections and ideology that give the financial sector a veto over public policy, even as it loses popular support.

That network, it seems, has only gotten stronger since the crisis began. And this is not surprising. With the financial system still fragile, the potential damage that a major bank could cause - Lehman was small relative to Citigroup or Bank of America - is much greater than it would be during ordinary times. The banks have been exploiting this fear to wring favorable deals out of Washington. Bank of America obtained its second bailout package (in January 2009) by first threatening not to go through with the acquisition of Merrill Lynch - a prospect that Treasury did not want to consider (although the details of exactly who forced whom to do what remain rather murky).

In some ways, of course, the government is deeply involved with parts of the banking system – having sunk hundreds of billions of dollars into banks directly and through debt guarantees. And the Federal Reserve has taken on a major role in providing credit to the real economy. We have state supported finance without much control over banks or anything else.

One solution is to scale-up the standard FDIC process. A Federal Deposit Insurance Corporation (FDIC) "intervention" is essentially a government-managed bankruptcy procedure for banks. Organizing systematic tough assessments of capital adequacy, followed by such interventions, would simplify enormously the job of cleaning up the balance sheets of the banking system.

One problem over the past nine months was that Treasury negotiated each bailout with the bank being saved, yet Treasury is still paradoxically - but logically, given their anachronistic belief system - behaving as if the bank holds all the cards, contorting the terms of the deal to minimize government ownership while forswearing any real influence over the bank.

Surely, the most important lesson from this financial crisis is that we never again want to be in the same position: none of the available choices. There is nothing we have "learned" that would make next time any less painful or any less costly, either in terms of the budgetary impact or the decline in the real economy.

But the second challenge - the power of the oligarchy - is just as important as the first. And the advice from those with experience in severe banking crises would be just as simple: break the oligarchy.

In the U.S. today, this means creating a market-based incentive to break up the oversized institutions that have a disproportionate influence on public policy. And it means splitting a single interest group into competing sub-groups with different interests. How do we do this?

Larger banks should become more costly to operate, either due to higher capital requirements, a larger insurance premium paid to the FDIC (or equivalent), or caps on compensation – or all of the above. Over time, as the economy recovers, these constraints can be tightened – pushing the large banks to divest themselves of standalone units.

This may seem like a crude set of incentives, but it is the most direct way to limit the power of individual institutions, especially in a sector that, the last year has taught us, is even more critical to the economy as a whole than anyone had imagined.

Of course, some will complain about "efficiency costs" from breaking up banks, and they may have a point. But you need to weigh any such costs against the benefits of no longer having banks that are too big to fail. Anything that is "too big to fail" is now "too big to exist."

Further regulation of behavior is definitely needed; there will be costs, but think of the benefits to the system as a whole. In the long run, the only good solution may be better competition - finally breaking the non-competitive pricing structures of hedge funds, and bringing down the fees of the asset management and banking industry in general. To those who say this would drive financial activities to other countries, we can now safely say: fine; although we also need to work urgently within the G20 to ensure de-escalation of global financial system risk.

Of course, all of this is at best a temporary solution. The economy will recover some day, and Wall Street will be there to welcome the most financially ambitious graduates of the world's top universities. The best we can do is put in place structural constraints on the financial sector – including antitrust rules and stronger regulations - and hope that they are not repealed amidst the euphoria of a boom too soon in the future. In the meantime, we can invest in education, research, and development with the goal of developing new leading sectors of our economy, based on technological rather than financial innovation.

In a democratic capitalist society, political power flows towards those with economic power. And as society becomes more sophisticated, the forms of that power also become more sophisticated. Until we come up with a form of political organization that is less susceptible to economic influences, oligarchs - like booms and busts - are something that we must account for and be prepared for. The crucial first step is recognizing that we have them.