

# Testimony

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Finance

Committee on Banking, Housing and Urban Affairs  
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## **The National Institute of Finance**

### **Providing Financial Regulators with the Data and Tools Needed to Safeguard Our Financial System**

Statement of the

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Mr. Chairman and Member of the Subcommittee:

We thank you for the opportunity to appear before you on behalf of the Committee to Establish the National Institute of Finance (CE-NIF). The primary objective of the CE-NIF is to seek the passage of legislation to create a National Institute of Finance (NIF). In our testimony today we would like to provide the reasons why we see this as an urgent national need and the role we see for the proposed National Institute of Finance in strengthening the government's ability to effectively regulate financial institutions and markets and to respond to the challenges of systemic risk.

The CE-NIF is unique. We are a volunteer group of concerned citizens brought together by a common view that the federal government and its financial regulators lack the necessary data and analytical capability to effectively monitor and respond to systemic risk and to effectively regulate financial firms and markets. The members of the CE-NIF consist of individuals from academia, the regulatory agencies, and the financial community. We have raised no money to support our effort, we represent no vested interests, and we have paid what few expenses we have incurred out of our own pockets. We share what we believe to be a legislative objective that is critical to the long-term well-being and prosperity of our nation.

### **Lessons of the Credit Crisis: Critical Weaknesses in Financial Regulation Were Revealed**

#### **Government Officials Lacked the Data to Understand The Consequences of Alternative Options**

The events of the most recent financial crisis have laid bare the dire consequences that can flow from poorly understood and ineffectively regulated financial institutions and markets. In response to the crisis, a lot of attention has been paid to how to strengthen the legal authorities and organizational structure of the financial regulatory community. Unfortunately, far less attention has been paid to what data and analytical capability is needed to enable regulators to use those new powers effectively. Data and analytics are not the stuff of headlines and stump speeches; however, when they are deficient, they are the Achilles' heel of financial regulation. Unfortunately, we have ample evidence that the recent crisis was due in part to a lack of appropriate data and analytic tools. A review of key events from the recent crisis makes this point very clear.

When Lehman Brothers tottered on the brink of bankruptcy in September, 2008 government officials were faced with a choice between two stark alternatives: save Lehman Brothers and signal to the markets and other large and highly inter-connected financial institutions that they could count on an implicit government safety net, irrespective of how risky their financial excesses might be; or let this large and important investment bank go under – reaffirming to the market that there are consequences to risky business practices – but run the risk of setting off a cascade of bankruptcies and market disruptions.

Forced to make a quick decision, officials let Lehman go under, a decision that sparked a horrifying downward spiral of the financial markets and the economy. That decision was based, in part, on the belief at Treasury that participants in the financial markets had been aware of the problems at Lehman for a number of months and had ample time to prepare by limiting their exposure<sup>1</sup>. Officials did not have access to the types of information that would have given them a better picture of how interconnected firms and the broader markets were to Lehman's fate. The day after the failure, the Reserve Fund – a \$64.8 billion money market fund – 'broke the buck' because of its exposure to Lehman. That is, its assets were no longer sufficient to support a \$1.00 value for the price of its shares. This sparked a massive run on the \$3.5 trillion money market industry and, because of the important role that the money market funds play in providing liquidity in the commercial paper market (a market for providing short-term corporate loans) the \$2.2 trillion commercial paper market froze. When the broader economy was no longer able to access funding and credit, the crisis had become systemic.

Whether the government could have done a better job of responding to that challenge or foreseen the catastrophic fallout of the Lehman decision is an open question. The point that is clear, however, is that at this critical moment in time they did not have the data needed to fully understand the counterparty relationships linking Lehman to the system, nor did they have in place the capacity to analyze such data to form a clear picture of the consequences of the alternatives they faced. Simply put, at this critical juncture, government officials were flying blind.

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<sup>1</sup>“The view at Treasury ... was that Lehman's management had been given abundant time to resolve their situation by raising additional capital or selling off the firm, and market participants were aware of this and had time to prepare.” Phillip L. Swagel – Assistant Secretary for Economic Policy at the U.S. Treasury during crisis – Brookings Papers March, 2009.

Unfortunately, this lack of data was representative of the problems the government faced in understanding what was going on across the breadth of the market. At the very same time that Secretary of the Treasury was grappling with the problems at Lehman, he learned for the first time the extent of the problems at AIG caused by the excessively large concentration of Credit Default Swaps (CDSs) on the books of AIG's Financial Products unit. AIG had written \$441 billion in CDSs – linked to Private Label Mortgage Backed Securities (PLMBSs). Those PLMBSs were rapidly becoming the 'Toxic Assets' of this crisis and falling in value, sharply increasing the value of AIG's obligation to make good on those CDSs. Officials were apprised of the scale of the problem, but they faced two key problems that were evaporating trust in the market: the growing uncertainty over how to value these CDS and the fact that they had no way of understanding the Domino risks, i.e. the risk that the failure of one firm (AIG) would cause a cascade of failures throughout the system. Facing these uncertainties, government officials felt they had no choice but to provide massive government assistance to prevent AIG from failing.

In addition to being an essential component of measuring and monitoring systemic risk, having or not having comprehensive counterparty data has important forensic consequences, as well. Bernie Madoff ran the largest and most damaging Ponzi scheme in history. He reported consistently high earnings based on a purported complex trading strategy that made ample use of derivative transactions. He was able to perpetrate this very long running fraud, in part, because officials did not have good data on the network of counterparties to derivative transactions. Madoff's consistently high reported earnings raised questions among a few in the financial community, and although the SEC investigated several times they found nothing amiss. If they would have had access to data on the counterparty network for derivative transactions the outcome of those investigations could have been very different because Madoff's reported derivatives trades were, of course, fictitious. A simple check of the counterparty data would have revealed that no one reported being on the other side of Madoff's trades, and that they had to be fictitious. That evidence would have confirmed the fraud.

## **Critical Components of Effective Regulation Were “Outsourced”**

The extent to which the government lacked the necessary data and analytical capability to effectively regulate financial institutions and markets was hidden from view in some cases because of the extent to which the government has in effect outsourced critical regulatory capabilities.

Some of that outsourcing enabled the creation of the toxic assets that became a central part of the crisis. When these private label subprime mortgage backed securities were initially issued, large tranches were rated triple-A or double-A by private rating agencies. Rating these securities and advising issuers on how to qualify for the desired rates was a large and profitable business for the rating agencies. These ratings received the blessing of the financial regulators and that made it easy for investment and commercial banks to sell many ultimately troubled assets to highly regulated financial firms (such as insured depositories, insurance companies, pension funds, Federal Home Loan Banks, Fannie Mae and Freddie Mac).

Comptroller of the Currency John Dugan in a speech in 2008 alluded to this outsourcing of responsibilities to the rating agencies. “In a world of risk-based supervision,” he said, “supervisors pay proportionally more attention to the instruments that appear to present the greatest risk, which typically does not include triple-A-rated securities.” In other words, the regulators were relying on the rating agencies to determine what “appear(s) to present the greatest risk”.

The transformation of these assets from triple-A rated to Toxic Assets started when rising delinquencies and defaults in the underlying subprime mortgages forced the rating agencies to downgrade many of those securities. Those downgrades raised questions in the market about the credit quality of a whole range of structured investment products. However, in many, if not most, cases market participants lacked the ability to see through these complicated structured financial products to the underlying collateral and only a handful of market participants had the sophistication to allow them to independently assess their value and inherent riskiness.

When the financial markets crashed and the major surviving financial firms teetered on the brink the federal government had to determine whether these firms were adequately capitalized. However, neither the Treasury nor the regulatory agencies were able to make such determinations completely

on their own because they lacked the necessary data and analytical capacity to do so. The government turned to the banks themselves to do the assessments. Although the bank's systems were not designed to anticipate domino risks and deal with the lack of market liquidity, they were the best that was available. The Treasury posited a few economic stress scenarios and instructed the regulated banks to assess how they would fare under those scenarios. The banks were then to report the results of their analyses back to the Treasury and their regulators.

It is an ironic twist that the regulators had to rely on the same models that were employed to manage banks' exposure to risk during the run-up to the crisis in order to perform this analysis. Of course, banks should have the capability to perform such analysis; it is part and parcel of competent corporate management and governance. However, this crisis demonstrates the importance of having a regulatory community that is capable of generating independent assessments of the credit quality of a security or the safety and soundness of a bank, market or the financial system that they regulate.

### **Systemic Risk: the Whole is Greater Than the Sum of the Parts**

The capital markets exist to move capital from less efficient uses to more efficient uses. The capacity of the markets to intermediate risk and provide for these flows of capital was seriously threatened in the recent crisis, and there are several alternative ways of trying to prevent another crisis that are being looked at. One prevailing line of thinking is that systemic risk can be managed by identifying a relatively small number of systemically important institutions and regulating them especially well. There are critical conceptual errors in this thinking. When it comes to systemic risk, the whole is greater than the sum of the parts. Even if there were no large, systemically important institutions, there would still be the risk of systemic failure. A couple of representative examples follow, along with the identification of the type of data needed to monitor and respond to systemic risk related to these examples.

Systemic risk may arise as a consequence of the way financial firms are tightly linked to one another by multiple complex contractual relationships. For example, when LTCM teetered on the brink of failure in 1998 the government organized a group of large financial institutions to step in and provide sufficient capital to prevent that failure. One investment bank, whose exposure to LTCM

was about \$100 million, was asked to contribute more than \$150 million to support LTCM. As a narrowly defined business proposition it does not make much sense to put \$150 million at risk to try to protect an exposure of \$100 million. This was especially true when that institution could have withstood the loss of the \$100 million without impacting its ability to continue operating. Why did they do it? Although a \$100 million loss would not have caused that firm's failure, they did not know how exposed their other major trading partners were to LTCM. If one or more of their major counterparties failed as a result of their exposure to LTCM, they could have been dragged down as well. Financial regulators need detailed counterparty data to monitor the domino risks that comes from connectedness.

Systemic risk may arise from excessively large concentrations of risk on the books of a financial institution or a group of firms. Concentrations in and of themselves are not necessarily a systemic risk. However, the interplay between concentrations and connectedness can create systemic risk. In this crisis the best example was the dangerously large concentration of CDSs on the books of AIG's Financial Products unit. Investors in Private Label Mortgage Backed Securities (PLMBS) turned to the CDS market to lower the credit risk of their investments. Issuers of PLMBS entered into CDS transactions to raise the credit ratings of the securities they were issuing. AIG aggregated that market-wide risk on their balance sheet by writing \$441 billion of CDS contracts against the risk of loss associated in those PLMBS, without hedging that risk or having sufficient assets in reserve to cover the losses that developed. To stave off the consequences of a failure to those already fragile firms doing business with AIG, the federal government committed to put almost \$200 billion in capital into AIG. Financial regulators need market-wide position data to monitor the buildup of systemic risk that may flow from such concentrations.

### **What We Do Know About the Next Systemic Financial Crises**

No matter how much we improve the government's ability to understand and remediate systemic risk, that risk cannot be reduced to zero. Therefore, we must prepare for the next financial crises. And, in that regard, there are several things that we do know:

- The first is that while there may be some similarities with previous crises and lessons to be learned from them, the cause of tomorrow's crisis will likely be different than yesterday's crisis.

- The second is that you cannot prepare for tomorrow's crisis by simply collecting the data and building the models you needed to understand yesterday's crisis. You must cast a broader net.
- The third is that when a new crisis begins to unfold it will be too late to try to collect the additional data, build the analytics, and undertake the research needed to make better regulatory and policy decisions. Policy makers and regulators will be stuck using the data and the analytics that they have at hand to try to develop the best policy response.

### **The National Institute of Finance: An Essential Response**

Most of the debate related to regulatory reform has focused on altering the regulatory organizational structure and providing regulators with new legal authorities. Very little attention has focused on providing the capacities (data, analytic tools and sustained research) needed to be able to measure and monitor systemic risk and correct the current deficiencies in regulatory capabilities. In order to address these weaknesses we propose the creation of a National Institute of Finance (NIF). The NIF would have the mandate to collect the data and develop the analytic tools needed to measure and understand systemic risk, and to strengthen the government's ability to effectively regulate financial institutions and markets. In addition, the NIF would provide a common resource for the entire regulatory community and the Congress.

### **Key Components and Authorities**

The NIF would be an independent resource supporting the financial regulatory agencies. It would not be a regulatory agency itself. The only regulatory authority it would have would be to provide reference data, set data reporting standards, and compel the provision of data. The NIF would have two key organizational components: the Federal Financial Data Center (Data Center) and the Federal Financial Research and Analysis Center (Research Center). The Research Center would have the responsibility to build analytics, and sponsor and perform research. Lastly, the NIF would be funded by a direct assessment on the firms required to report to it.



**The Data Center** will collect and manage transaction and position data for (1) U.S. based entities (including for example, banks, broker-dealers, hedge funds, insurance companies, investment advisors, private equity funds and other highly leveraged financial entities) and their affiliates; and (2) U.S.-based financial transactions conducted by non-U.S. based entities. In order to carry out this responsibility, the Data Center will develop and maintain standards for reporting transaction and position data, including the development and maintenance of reference databases of legal entity identifiers and financial products. It will also establish the format and structure for reporting individual transactions and positions. It will collect, clean, and maintain transaction and position data in secure databases. It will provide regulators access to the data, and it will provide public access to aggregated and/or delayed data to improve market transparency - providing no business confidential information is compromised. Keeping this data secure will be an important responsibility of the Data Center. In this regard, the federal government has a long-standing and excellent track record in maintaining the security of all kinds of very sensitive data, including financial, military, intelligence, tax and census data and the NIF would adhere to the same data security standards used for existing secure data centers.

**The Research Center** will develop metrics to measure and monitor systemic risk and continually monitor, investigate and report on changes in system-wide risk levels. In addition, the Research Center will develop the capacity to assess the financial condition of large financial institutions and assess their capital adequacy in stress scenarios. The Research Center will be responsible for conducting, coordinating and sponsoring the long-term research needed to support systemic risk regulation. The Research Center will provide advice on the financial system and policies related to systemic risk. In addition, it will undertake assessments of financial disruptions in order to determine their causes, and make recommendations for appropriate regulatory and legislative action in response to those findings.

**An Independent Voice:** It is critical that the NIF have the ability and responsibility to report its findings in a fully independent manner. Because the NIF does not have any financial regulatory authority, *per se*, its objectivity will not be diminished by a conflict of interest that could arise if it had to report on its own regulatory actions. In addition, it is structured in a way that helps insulate it from political pressures. This structure plays a key role in assuring that the NIF will offer its very

best unbiased assessments of the risks facing the financial system and the broader economy, as well as its best unbiased recommendations for responding to those risks.

**Funding from Assessments:** The NIF will be funded by assessments on reporting institutions. This method of funding is used by financial regulatory agencies and is appropriate for several reasons. First, the financial sector will benefit from an annual reduction in operating cost of tens of billions of dollars as a result of the standardization of data and reporting. Having the beneficiaries of these cost savings use some of those savings to fund the NIF is the fair thing to do. In addition, like the financial regulatory agencies, the use of industry assessments will make it possible for the NIF to pay salaries that are above the standard civil service pay scale and better enable the NIF to attract the highly skilled staff it will need to fulfill its responsibilities.

### **Benefits of Establishing a National Institute of Finance**

Establishing a National Institute of Finance will bring substantial benefits to our financial system and the broader economy. The fundamental benefits of the NIF are many.

**It will improve the efficiency and effectiveness of financial regulation.** The Institute will provide regulators with the ability to independently assess the safety and soundness of a bank, market or the financial system, stopping the outsourcing of critical capacity to banks and rating agencies. It will investigate market disruptions and conduct the fundamental research needed to improve regulation of financial institutions and markets. It will also ensure that these findings and advances are integrated into the systemic risk monitoring systems. In addition it will provide an invaluable resource for the analysis of proposed regulatory policy and monitoring of existing policy to help refine and strengthen the overall approach to regulation.

**It will reduce the likelihood of systemic crises and costly institutional failures.** As the NIF develops models and metrics for systemic risk and collects the appropriate data, it will be able to provide a better understanding of system-wide aggregation, of the level of liquidity in the system, and gain a better understanding of potential for liquidity failures and fire sales, which are part of the early warning stages of a systemic failure. When it is fully mature, the NIF will have the ability to see through the entire counterparty network, allowing it to quantify Domino risks - the risk of a

cascading failure that might result from the failure of other financial entities - and identify critical nodes in the counterparty network. Along with market participants, it will also have the ability to see through complex structured products down to the underlying collateral (e.g. loans or mortgages providing the cash flows) - helping improve transparency and avoiding the rise of new types of toxic assets that could trigger a future crisis.

**It would create a safer and more competitive market.** By helping improve individual firm risk management and providing better tools to the regulators to monitor and oversee systemic risk, the U.S. financial markets will be made safer, and will attract more business than competitors that are more prone to major shocks or collapses during times of economic stress.

In addition, the NIF would actually benefit the U.S. financial services industry, as well.

**It would reduce operating costs.** Standardizing data reporting will dramatically reduce back office costs (costs associated with verifying details of trades with counter parties) and costs associated with maintaining reference databases (legal entity and financial instrument databases). Morgan Stanley estimates that implementation of the NIF will result in 20% to 30% savings in operational costs.

**It would facilitate risk management.** By requiring daily reporting of all positions to the NIF, firms will be able to present a complete picture of their positions to their own internal risk management groups. This will in turn ensure that senior management has a consistent and clear understanding of the firm's exposures – particularly their exposure to different counterparties during times of economic stress.

## **Conclusion**

The federal government has responded to a number of threats to our national well-being by organizing major research and monitoring efforts. The threat of natural disasters led to the creation of the National Oceanic and Atmospheric Administration, containing the National Weather Service and National Hurricane Center, whose skill in forecasting the weather and warning of impending natural disasters has saved many lives. The Centers for Disease Control and the National Institutes of Health have advanced the state of medical research, developed new treatments for deadly diseases, and mobilized to protect the population from the threats of pandemics. The nation's

national security has been greatly advanced by the outgrowth of the sustained research programs supported by DARPA.

When we look at the financial losses suffered by the American public and the burden placed on U.S. taxpayers by the government's response to this most recent financial crisis, it is fair to ask why we have not created a similar sustained research and monitoring effort to protect the American people from the high costs of systemic risk and financial implosions. The regulatory reform legislation that recently passed in the House charges a new Financial Services Oversight Council (FSOC) with the task of monitoring systemic risk and provides some new legal authorities to intervene in a time of crisis. However, it fails to provide the tools necessary to carry out the systemic risk monitoring responsibility. That responsibility can only be carried out well if the proposed FSOC has a deep understanding of how our financial system works. Such an understanding can only be based on access to much better system-wide data and the analytic tools needed to turn that data into relevant information on systemic risk. This is something that is currently beyond the government's capability. Unfortunately, as set forth in the House bill, the FSOC would have no permanent staff and no specific authority to collect the many kinds of system-wide data needed. As it stands the FSOC represents little more than a hollow promise when it comes to its ability to monitor systemic risk and ward off future crises.

Our nation's financial markets are a public good. The safety of our country and the well being of our population depend on well functioning financial markets. We have incurred very high costs in this recent crisis as a result of the failings of our current approach to regulating financial markets and institutions. This approach has relied on a fragmented, data poor, regulatory structure that despite its best efforts did not have the tools with which to understand and respond to the threat presented by systemic risk.

The Senate has an opportunity to materially strengthen any proposed financial regulatory reform legislation by creating a National Institute of Finance that will equip regulators and a systemic risk regulator with the data and analytical tools needed to correct the deficiencies that were made so apparent in this recent crisis. The full capabilities of the NIF will take several years to realize, however, benefits will ensue from each stage of its development. Although it will take time and

substantial effort to stand up the National Institute of Finance, the benefits should far outweigh the cost.

Lastly, we were pleased to learn that on February 4, 2010 Sen. Jack Reed introduced S.3005, “The National Institute of Finance Act of 2010.” This act lays out a strong case for the creation of the National Institute of Finance. Furthermore, it proposes the creation of the NIF in a way that insures its ability to fulfill the role envisioned by the CE-NIF. It would have the authority to collect the data necessary to monitor systemic risk. It would have the responsibility to establish a Research Center that will develop the metrics for monitoring systemic risk and to report on its monitoring of that risk. It would have the capacity to be a significant resource for the regulatory community. It would have the ability to fund itself in a way that insures that it will have adequate resources for its important mission, and it is structured so that it will be a truly independent and technically expert voice on matters relating to the regulation of financial institutions and markets and the threats of systemic risk.

Mr. Chairman and Members of the Subcommittee, this concludes our prepared statement. Thank you for the opportunity to present the recommendations of the Committee to Establish the National Institute of Finance. We will be happy to answer any questions the committee may have.