
The National Institute of Finance

Providing financial
regulators with the
data and tools
needed to safeguard
our financial system

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The National Institute of Finance

The National Institute of Finance (NIF) would be a national data repository and research and development lab serving the financial regulatory community. The mission of the NIF would be to provide financial regulators with the data, software, computing power and analytic capacity they need to oversee and safeguard the health of the modern financial system.

Premise

- The regulatory structure is fractured and lacks critical capacity.
 - Beginning in the mid-1980s, the financial system became much more quantitative and computation-intensive. New approaches to data management and quantitative analysis generated entirely new classes of financial instruments and new approaches to trading and risk management.
 - Regulatory agencies have not been able to keep up with the innovations in the financial industry in terms of tracking new products, model development and risk management. They do not match Wall Street's analytic and computational capacity with their own. Without this quantitative capacity, they cannot understand, monitor, and when necessary intelligently intervene in the operations of the financial system. Currently, agencies do not have the expertise to rapidly develop and implement production grade risk management tools.
 - Inter-agency fragmentation inhibits the emergence of such a capacity. There is not a strong culture of collaboration or data sharing between regulatory agencies. Nor do the incentives of the regulatory world encourage such collaboration.
- The regulatory community needs to be a leader in risk management; hence they need access to better data and better tools:
 - System wide, real-time transaction data that includes counterparty relationships
 - Rigorously tested, well understood production level risk management software
- Access to data is an established regulatory tool. Further, requiring firms to disclose their positions and counter party relationships is essential in order to manage systemic risk.
- The regulators must be clearly independent from the industries that they regulate.
 - Regulators (and risk managers) rely heavily (and in many cases exclusively) on ratings provided by the rating agencies
 - Rating agencies have a clear conflict as they receive fees from banks to provide ratings. In addition, rating agencies were seen by the investment banking community as second tier institutions with regards to talent and risk management tools.
 - Banks are asked to provide important parts of the regulatory service, for example, providing internal models for assessing capital and more recently for performing stress tests.

Recent Examples that Highlight the Need for Better Data and Tools

- Allowing Lehman Brothers to go bankrupt and the subsequent credit market gridlock, which was the result of not understanding system-wide counter-party risks (the risk that a trading partner will go bankrupt).
- Failure to identify the concentration of Credit Default Swap positions held by AIG.
- Failure to identify that Maddof's firms did not hold any positions in the market.
- Failure to identify the liquidity ('fire-sale') risk associated with the concentration of assets collectively held by Structured Investment Vehicles (SIVs).

The National Institute of Finance

The National Institute of Finance would provide the infrastructure and framework for collaboration, data sharing, collection of transaction data and the development of production grade tools for use by financial regulators and risk managers.

NIF Mission

- The National Institute of Finance will manage data collection, at a transaction level, coordinate the needed research and execute the development and testing of risk management tools. Working in conjunction with the NIF, existing regulators will be able to provide vital new services:
 - A clear understanding of the counter-party network and its impact on system-wide and firm specific risk:
 - Allowing agencies to identify which firms are too big to fail.
 - Allowing agencies and policy makers to better understand how to intervene in frozen markets.
 - A system-wide, 'Risk Dashboard' (a real-time system-wide risk assessment tool) providing a picture of system-wide capital levels and allowing for identification of aggregation risks.
 - A product safety lab for risk models and new securities
 - Providing a set of rigorously tested, well understood risk management tools and independently validating firms risk models.
 - Providing a systematic way to monitor new financial innovations and develop models to assess their potential system-wide impact when they reach certain size thresholds.
 - Capacity for system-wide fraud detection.
 - Ability for regulators to independently assess the capital requirements of a firm and to independently perform stress tests.
 - Ability for the National Security Team to assess potential risks to our financial system.

NIF Infrastructure

The NIF will maintain a Federal Financial Data Center (FFDC) and a National Risk Lab (NRL). To maintain security the FFDC and NRL will be co-located. For expediency, a 'shovel ready' proposal blueprint could be put together through a partnership between existing government research labs, universities and the IT industry.

- The NIF will maintain a Federal Financial Data Center (FFDC)
 - The data center will collect transaction level data, by being copied on transactions as they are logged in back-office clearing houses; including copies of legal documents for new financial products.
 - The data center will contain highly sensitive information and the number one criteria for the data center will be ensuring the security of this data.
 - The data center will maintain a current classification, and understanding, of financial products being used system-wide.
 - Regulators will have unfettered access to the data, following the model provided by the Census Bureau's Remote Data Centers.
 - The data will be made available, at appropriate time lags and aggregation levels to the private sector.

- The NIF will maintain a research and development focused National Risk Lab (NRL):
 - The lab will integrate, develop and test production level risk systems, which will then be made available to regulators and industry.
 - The lab will act as an interface between industry, regulators and a broader research community.
 - They will identify important problems in managing risk, translating these problems into appropriate technical research problems.
 - Support the sustained research efforts needed to solve these questions.
 - Integrate the solutions, along with other best of class technologies into production level risk management tools (i.e. software).
 - The lab will also provide an infrastructure for validating risk models used by firms and assessing the potential systemic risk posed by new financial innovations.

- The NIF will be an independent government entity.
 - Like the other regulatory agencies, the Director will be nominated by the President and confirmed by the Senate.
 - The budgetary funds for the NIF will come from un-appropriated sources, as with the other regulatory agencies. Fees might be based on institutional assessments, transaction-based fees, or other formulas.