

RESEARCH BUZZ



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The Obama Plan for Financial Regulatory Reform

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On March 26, 2009, Treasury Secretary Timothy Geithner announced the administration's plan for financial regulatory reform.¹ The plan is limited in its details, but embraces ideas that circulated in the Treasury (2008) Blueprint and in other proposals, such as the Group of 30 plan released in January 2009, or abroad, in the United Kingdom's Turner Report.² The plan focuses on four broad components.

The first component is to address systematic risk.³ The plan describes this risk as the interconnectedness of firms and markets, such as AIG or Lehman Brothers, which has made clear that a consistent and more conservative regulatory regime is required. Secretary Geithner has contrasted concern for the solvency of single financial institutions, but also the stability of the system itself. The initial description of the plan focuses on some features of this component.

The second component is protecting consumers and investors. This includes protecting con-

sumers from manipulation and abuse, not simply fraud, which is already illegal, but also practices that require greater transparency and enforcement of new rules. The Treasury notes the deception and abuse that have been visited on homeowners in securing mortgage loans as an example.

The third component is "eliminating gaps in our regulatory structure." The plan calls for "clear authority and resources, and accountability for each of its key functions."

The fourth component is "[F]ostering international coordination" to ensure that rules for global markets are consistent with high U.S. standards, in order to ensure U.S. competitiveness. Specific additional steps will include a three-prong initiative to address prudential supervision, tax havens and money laundering activities in weakly-regulated jurisdictions.

The initial statement on the plan focuses on the first component, systematic risk, because stability is central to economic recovery and growth, but also because of the importance of stability to a G-20 meeting that was upcoming at the time (April 2, 2009). According to the description of the Obama plan, systemic risk is addressed by five proposals:

- A single independent regulator with responsibility over systemically important firms and critical payment and settlement systems.
- Higher standards on capital and risk management for systemically important firms.
- Registration of all hedge fund advisers with assets under management above a moderate threshold.
- A comprehensive framework of oversight, protections and disclosure for the over-the-counter (OTC) derivatives market.

- New requirements for money market funds to reduce the risk of rapid withdrawals.

These proposals have been endorsed or included in virtually all proposals for regulatory reform. They are not all equally important. For example the first one establishes a new regulatory purpose along with the bureaucratic infrastructure necessary to pursue it and it applies to the largest financial institutions, while the others affect aspects of regulation of selected components of the financial system and how they operate.

There are many details to be worked out for these proposals. For example, which institution should be the new financial stability regulator? Many policy leaders have suggested that the Federal Reserve should be that regulator, while others argue that such a regulator would unnecessarily complicate the regulatory structure and that in any event, based on its track record as a regulator, the Fed should not have the assignment. In their view, if there is to be such a regulator it should be some other new or existing institution.

The problem of systemic risk and its oversight and control is a relatively new objective of policy for a developed country. In emerging markets this goal has been recognized somewhat longer and it is facilitated by a strong independent central bank, a system of property rights that is efficiently enforced and the rule of law. Fiscal institutions such as low, predictable, broad based taxes and transparent and limited government spending and regulatory burdens also are critical to financial stability. The new view of financial stability that has received a significant boost from the current global financial crisis is that firms that have liquidity problems that could threaten the value of the firm and other firms with closely correlated asset and liability prices pose systemic risks. A recent paper by Archarya (2009) explicitly defines systemic risk as the correlation of asset prices, in his case, for assets held by banks. Such asset price correlation cannot yet cause bank insolvency directly because loans and securities held to maturity are valued at book value and not at market

prices, though for regulatory and management purposes such correlation risk should be taken into account. In a perfect world where all assets are tradable, all assets (and liabilities) would be marked to market and correlations of assets within the firm or across firms would have what Archarya might refer to as systemic or at least systematic risk. However, the idea of correlated prices as a measure of systemic risk widens the regulatory concern to a stance favorable to price controls as the only policy to achieve financial stability. This is a naïve notion of stability because comprehensive price controls would lead to huge losses in consumer well being. The more narrow notion of systemic risk that has for hundreds of years troubled political and financial leaders has been the risks of runs that could collapse the banking and payments systems. Idiosyncratic shocks to some firms that do not have these system-wide effects have not been considered systemic risk until the latest financial crisis. The switch can also be seen in the switch in terminology from banks that are too big to fail because they might spark runs of large uninsured depositors and others to reference to large or systemically important financial firms. Here too, the references are used interchangeably. So far, large and important non-financial firms are excluded from the discussion, but bailouts for the auto industry fit here, and this is reinforced by use of TARP funds (the Treasury Asset Recovery Plan for buying problematic bank assets) for the auto bailout.

Regulatory capital standards arise in banking because of the existence of deposit insurance, a scheme developed in 1935 to eliminate systemic risk in banks and that has been extremely effective. The case for relatively higher regulatory capital standards for “systemically important firms” arises because the “too big to fail” principle has been extended recently to large non-bank financial institutions. If such institutions are implicitly insured from failure by the government, then taxpayer protection requires measures that make such a valuable guarantee less valuable to limit government and taxpayer exposure. The alternative way to lower the value of government guaran-

tee or reduce the taxpayer cost of it is to limit or end “too big to fail.” This was the approach that was adopted in the 1991 Federal Deposit Insurance Corporation Improvement Act (FDICIA). Unfortunately, the mechanisms for bailing out an institution deemed to be “too big to fail” have been largely untested because the large institutions at risk today have so far been non-banks. Ironically, the Fed has announced that the 19 largest banks are “too big to fail” without reference to required sign-offs by the FDIC and the Secretary of Treasury. In today’s environment, getting the required agreement should be no problem, however. What a difference a few years and a new crisis make in restoring public and political and public tolerance for regulatory forbearance and bailouts. In any event, U.S. banks already face relatively high capital requirements because of the “prompt corrective action” provisions of FDICIA. Foreign banks have not been subject to these provisions and only follow Basel II risk-based capital requirements, which are generally lower. And of course non-bank financial institutions have not faced comparable capital requirements as banks. In the U.S. bank holding companies were able to avoid capital requirements on their shadow banking activities due to essentially a loophole in supervision by the Federal Reserve.

Proscribed risk management standards sound desirable, but in the end are virtually guaranteed to be ineffective and potentially obstacles to sound management practice. The experts on risk management are in the firms whose purpose is to protect shareholders. Risk management is a dynamic field where standards are ever changing and faced with new challenges on a daily basis requiring immediate and effective responses that cannot be designed or implemented in a timely manner by regulators. Regulators are very good at proscribing minimal standards, but day-to-day management of risk and efficient state-of-the art standard setting for managers is the function of private firms, not regulators.

The third proposal is largely of foreign origin. German policymakers and politicians have been

opposed to the introduction of hedge funds for several years and they have been effective in pushing European officials to regulate hedge funds and to push for global regulation of hedge funds. Their latest success was in the April 2, 2009 G-20 meeting where leaders vowed to regulate hedge funds. Unlike other regulatory reform proposals, which are largely outgrowths of perceived difficulties during the latest financial crisis, this one has no basis in experience. Only wealthy investors have access to hedge funds in the U.S. and market participants are well-informed that hedge funds, even large ones, regularly fail or go out of business with no more than barely noticeable ripples in various markets. Increased regulation of these firms, at least as currently proposed, would have little or no benefit and could raise the risk of future regulatory resistance to innovation and threaten U.S. leadership in the global capital markets.

The fourth proposal for increased oversight of the OTC derivatives market is already well along, perhaps aided by pressures from regulators here and abroad. Exchanges are now offering central clearing arrangements such as those that exist in futures markets where there has never been a contract failure due to counterparty risk, such as that which is possible and greatly feared in the OTC derivatives market.

The last proposal, for improved regulation of money market funds, is an outgrowth of the failure of Lehman Brothers and the loss of value of their commercial paper which was held, in part, by some money market mutual funds. One such firm, Reserve’s Primary money market mutual fund, failed and others closed or were merged with other funds. These funds are among the safest short-term assets in the market, just behind Treasury bills and bank deposits, but the Federal Reserve felt it necessary to avoid any disruption and so created two new facilities for funds and their investors. The fund for investors has been completely unused as investors have not found it necessary to transfer their funds to the Fed to avoid losses. Lending to funds against commercial paper

or other assets has been very limited, less than \$1 billion during the week ending April 23, 2009, for example, but both programs may serve as a backstop in the event of a shock to the money market mutual fund or commercial paper sectors. Whether such a liquid and safe market requires public insurance or subsidization by the Fed or other public institution is a serious question that goes to the heart of the nation's money and capital market viability and competitiveness.

The Obama plan for regulatory reform is an important first step in the redesign of the nation's regulatory system. So far, its most serious omission is that it does not address the reorganization of existing regulatory bodies or proposals for new federal regulatory organizations, such a new federal regulator for large national insurers or insurers who choose to have federal charters. The issues posed by reorganizing the current "silo" approach that regulates by firm type into a risk based model that regulates according to types of risk, or some other model, will be the most politically charged issues as the regulatory reform debate moves forward. Progress toward regulatory reform is expected to gain speed in coming months, but is expected to require a year or more to achieve any success. No doubt as these steps are debated and new proposals are fleshed out, there will be increasing controversy over the direction of reform.

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Endnotes

1. See U.S. Treasury (2009).
2. See the U.S. Treasury (2008), Group of 30 (G-30) (2009) and Financial Services Administration (2009). The Turner Report focused on the importance of macro-prudential supervision (a financial stability regulator), increased capital requirements and regulation of liquidity.
3. The Treasury explicitly refers to "systematic," but uses the term "systemic" elsewhere in their description of the plan. This is an interesting slip of the tongue that shows that the criteria for a firm that is "too big to fail" is one for which a large shock to its asset price has large effects on the value of other firms, potentially posing liquidity and insolvency problems for them.

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Tunisian Dealer Behavior in FX

Market: Pricing Decision*

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The important growth of microstructure theory on Foreign Exchange largely has been motivated by the failure of macroeconomic models. Conventional macro exchange rate models offer modest attention to how trading in the Foreign Exchange (hereafter referred to as "FX") market actually takes place. The implicit notion is that the details of the trading (i.e., who quotes currency prices and how trade takes place) are inconsequential for the behavior of exchange rates over months, quarters or longer. However, in recent years, the market structure for foreign exchange trading and the interactions between the participant groups have altered considerably, with the daily market turnover having increased astoundingly.¹

FX market microstructure models examine the determination and behavior of spot exchange rates in an environment that replicates the key features of trading in the FX market. Interest in the market microstructure is apparently driven by the rapid structural, technological, and regulatory changes that are taking place affecting the securities industry worldwide. Micro-based models examine how information relevant to the pricing of foreign currency gets integrated in the spot exchange rate via the trading process. Therefore, trading is not an ancillary market activity that can be ignored when considering exchange rate behavior, but rather an integral part of the process through which spot rates evolve and are established. In addition, recent micro-based FX models differ from other areas of microstructure research in their focus on the links between trading, asset price dynamics, and the macro-economy. An essential belief of the theory of market microstructure is that asset prices need not have the same full-information expectations of the value because

of a variety of frictions.

We use a dataset with complete trade records for a Tunisian dealer for the Dollar/Tunisian Dinar (USD/TND) and the Euro/Tunisian Dinar (EUR/TND) daily exchange rates and investigate whether the dealer sets prices to protect private information, control inventory to adjust risk exposure, and fix the pricing order. Given the information for each trading day for the dealer, we also investigate the dealer's market-making behavior to test if the dealer takes advantage of the low transparency of customers, or interbanks order flow and manages inventory shocks. In addition, using the data on trade counterparty identity, we examine the impact of information coming from different types of trades (customer or interdealer trades) on the dealer's pricing decision. Most of the microstructure research in FX focuses on the bid-ask spread, volatility and heterogeneity issues. Very few studies focus on testing the market-making behavior, as various datasets do not provide direct measures of the volume traded, or information on the dealer inventory as this is considered the property of the bank and confidential information. This vital information allows the analysis of the dealer's behavior and, in particular, explains their pricing decisions.

Findings and Conclusions

The performance of a Tunisian interbank foreign exchange dealer with transaction prices, trading quantities, dealer inventories, and a type of trading system used for the transactions are investigated in this study. In a widely cited paper, Bjørnnes and Rime (2005)² find no support for such information or on the inventory effects, while Lyons (1995)³ finds support for both the information and inventory effects in the pricing in the market. Using an extension of Lyons and Bjørnnes and Rime's model, our finding supports information and inventory effect only for USD/TND exchange rate, but not for the EUR/TND exchange rate. We think this may be due to the characteristics of exchange rates, as we noticed the USD/TND exchange rate during the study period was not stable unlike the EUR/TND. In microstructure theory, order flow is

considered private information, in particular the customer order. We have three types of order - customer, domestic interbank and foreign interbank orders - and among all different types of orders, dealer's domestic interbank and customer are informative for USD/TND. The first one is the most important and informative order flow, but for EUR/TND, the foreign interbank seems to be a more informative order than the customer order. In addition, we find an inventory effect only for the USD/TND exchange rate. Shading quotes signal a dealer's position and our results indicate that, with the inclusion of Central Bank of Tunisia (TCB), intervention seems to be significant only on the dealer's pricing decision for USD/TND. Therefore, the intervention TCB is informative for the exchange rate that is not stable.

Though our findings cannot be generalized to the Tunisian FX market because we have data only for one dealer, the FX market in Tunisia is, nevertheless, not that large. In fact, there are only twenty banks that intervene daily in the interbank market with an average of 200 orders for USD and 200 orders for EUR. These twenty banks represent 100 percent of the market, where each bank's average share of 5% is equivalent to the percentage of share represented by the dealer in this study. We think the other dealer in the Tunisian FX market may well have the same behavior like the dealer in our study and for all the markets.

New theories that address risk management and information updating in a trading environment with both domestic and foreign trading are currently in great demand. For future research in this area, we think it is important to explore the market-making activities of the interbank market that includes other characteristics of the interbank trading since there is a need for the better understanding in the use of outgoing trades. It is important to understand the dealer's choice between different trading channels.

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- * This article is a summary of forthcoming research by Professor Mahfuzul Haque and Professor Imen Kouki. The summary was written by Professor Haque with the approval of Professor Kouki. Their article, with the same title, will appear in the *Journal of Emerging Markets Finance* (Fall 2009).

Endnotes

1. BIS, Bank for International Settlements (2004), Central Bank of Tunisia's (TCB) Survey of Foreign Exchange and Derivatives Market Activity 2003 - Preliminary Results.
 2. Customers order to be the most important source of private information and therefore the spreads to customers are wider than spreads to other dealers.
 3. First to empirically test the market making conduct of a FX trader using the dealer's intraday inventory and trade data on FX markets and supports both asymmetric information and inventory control models.
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Indiana's Banking Industry

Performance

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Commercial banks in Indiana continue to show mixed results when compared to national results. The data in this article cover the period from 2000 to 2008 and are from the Federal Deposit Insurance Corporation (FDIC).

Return on equity (ROE), which measures bank profitability for every dollar of a shareholder's equity, has sharply declined since 2004. While ROE was 20.05 percent in Indiana and 13.71 percent nationally in 2004, it dropped to -0.1 percent and 1.6 percent, respectively, in 2008 as shown in the table (there was a slight national increase in 2006, but it fell thereafter). Likewise, the rate of decline for Indiana's net income (not shown) has been higher than the national rate since 2001. This rapid decline in net income has directly affected the performance on ROE, of which it is a component. The decline in ROE, absolutely and relative to the nation since 2003, reflects in part a declining share of loans relative to deposits. This decline, coupled with Indiana's high net interest margin, has taken a toll on Indiana banks' ROE.

Interest income has typically been commercial banks' main source of income. The net interest margin, which is the difference between interest income and interest expense as a percent of earning assets, has consistently been higher in Indiana than the nation. Despite this, net income continues to decline more rapidly. To survive and compete effectively, Indiana commercial banks must develop newer income-generating products and services. Except for 2004 and 2005, Indiana's non-interest income to earning assets ratio has been lower than the national ratio. As a result of bank failures, mergers and acquisitions, the number of Indiana commercial banks has declined from 153 in 2000 to 114 in 2007 (2008 bank failures have not yet been provided). The latest transaction report from the U.S. Department of Treasury shows that to stave off failure, over 10 banks in Indiana have sought assistance through the Troubled Asset Relief Program (TARP) to help them deal with their legacy assets, whose value is difficult to ascertain.

Loans in Indiana, as a percent of deposits, remain consistently higher than the national level, but have declined sharply since 2002. Indiana's net loans and leases in 2008 were 96 percent of total deposits, compared to 83 percent nationally. Indiana's commercial banks have capital well above minimum requirements and their core capital

Table: Key Banking Performance Ratios

	Rate of Return on Equity (ROE, %)		Net Loans and Leases (% of Deposits)		Net Interest Margin (%)		% of Unprofitable Institutions		Noninterest Income to Earnings (%)	
	Ind	U.S.	Ind	U.S.	Ind	U.S.	Ind	U.S.	Ind	U.S.
12/2008	-0.10	1.62	95.88	82.70	3.71	3.23	12.61	22.06	1.15	1.96
12/2007	7.40	9.12	95.56	89.43	3.68	3.35	6.14	11.19	1.13	2.33
12/2006	8.98	13.03	90.41	87.83	3.72	3.39	5.74	7.54	1.15	2.59
12/2005	12.52	12.88	109.03	87.47	3.59	3.55	3.05	6.31	3.06	2.69
12/2004	20.06	13.71	103.13	86.41	4.12	3.60	5.00	5.88	3.44	2.67
12/2003	21.62	15.33	127.42	86.43	4.27	3.83	3.38	6.02	2.81	2.98
12/2002	14.82	14.42	141.48	86.98	4.27	4.08	1.32	6.64	1.89	2.97
12/2001	12.22	13.15	113.72	87.08	4.07	3.90	3.90	8.13	2.55	2.89
12/2000	9.82	13.99	104.70	89.76	4.02	3.94	3.92	7.34	2.33	2.99

(leverage), Tier 1 and total capital ratios have also consistently been above the national average. Both Indiana and the U.S. have, in recent years, had an increase in the percentage of unprofitable institutions. Since the recession began in December 2007, commercial banks have been hit hard. Between December 2007 and December 2008, unprofitable commercial banks doubled nationally from 11 to 22 percent, and, in Indiana, from 6 to 12 percent.

Both trends and performances in 2008 are not favorable to the viability of many Indiana banks. Innovative products need to be introduced quickly and relatively more profitable is necessary. Economies of scale, strategic advantages in services offered and market share may continue to drive the number of Indiana banks down, especially while the effects of a recession and housing crisis continue to be felt.

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