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Risks of Measuring Risk: Dodd-Frank Stress Testing May Give False Security

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WHILE THE RECENT DODD-FRANK STRESS TEST RESULTS OF THE NATION'S 30 BIGGEST BANKS MIGHT SEEM REASSURING, PRUDENT POLICY MAKERS AND PRACTITIONERS SHOULD BE WARY. Like airport security, many are asking, "Are we safer?" After all, the only thing worse than no security is bad security that creates a false sense of security. But concerns should not simply be focused on the possibility of accounting errors, even the $4 billion mistake reported by BofA in late April.

Five years after the failure of IndyMac Bank—followed by the failure of Lehman Brothers, the collapse of hundreds of depository banks and the ensuing financial and credit crises—financial institutions are grappling with the Dodd-Frank Wall Street Reform and Consumer Protection Act and its implementing regulations. One of the tools intended to identify weaknesses early on is rigorous stress testing with "severe scenarios."

From the board room to the court room, decisions made on the basis of stress tests will have real consequences—for the industry, for banks and for individuals. Reliance on stress test results, however, even Federal Reserve-sponsored stress test scenarios, may do little more than create a false sense of security—especially for practitioners whose conduct may be harshly judged in the next downturn.

Appropriate risk management must acknowledge:

1) the likelihood that stress tests overlook or underestimate key risks;

2) that systemic-focused stress testing cannot substitute for prudent transaction-based analysis; and

3) that false assurance of flawed stress testing will lead to greater risk-taking. These risks—and not the risk of mis-reporting—pose the greatest threat and cause for caution regarding Dodd-Frank's stress test regime.

OVER-LOOKED AND UNDER-APPRECIATED RISKS

Although the Fed keeps the details of its stress test models a secret to prevent gaming the test, several current risks fall outside adequate modeling. These risks include the extreme concentration of assets held by bigger banks, the magnification and impact in a crisis of interdependence and the related risks of an apparent credit bubble.

CONCENTRATION OF RISK

Whether a single bank's high concentration of home construction loans or the consolidation of bigger banks, concentration of risk carries the potential for devastating loss. Federal guidelines expressly address concentration risk for a bank's balance sheet, but offer no guidelines as to systemic concentration and consolidation

INTERDEPENDENCE

Stress testing assumes a set of crisis-like conditions to evaluate an entity's response. But a major limitation of any stress testing is the uncertainty of which variables are independent of those tested and which are not. For example, a stress test may assume a drop of property or other asset values of 20 percent but conclude that the bank's capital and liquid-

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ity is sufficient to withstand that occurrence. The test will assume as relatively constant the sources of liquidity, whether credit facilities, deposits or investments. Overlooked and unmeasured, of course, is the fact that in a crisis all of these other sources of presumed capital and liquidity will also be severely impacted, especially in the short run.

ASSET BUBBLES AND FEAR

Behavioral economists like Nobel laureate professor Robert Shiller have for years described the risks and uncertainties of asset bubbles—having observed in June 2005 for example that the California housing bubble would have no "soft landing." Many credible observers suggest that the Fed's prolonged low rate policy has created something of a new credit bubble, unsustainable even in the near term. (See, e.g., "Six Years of Low Interest Rates in Search of Some Growth," The Economist, 4-6-13). Indeed, recent history teaches that prolonged low interest rates have contributed to major asset bubbles, followed by dramatic price collapse and downturn.

Just as "irrational exuberance" will drive a market higher than its historical valuation metrics, fear may drive an inflated market far lower than modeling anticipates. Current stress testing does not appear to differentiate whether any particular bank's assets are more susceptible to the overvaluation of bubble conditions.

Another overlooked risk is simply the unpredictability of the timing and severity of a crisis event, whether a financial crisis or tsunami—what economist Nassim Taleb described as a 'black swan' event—events which themselves often depend on a consensus of safety.

SYSTEMIC-FOCUSED STRESS TESTING AND ENTERPRISE RISK MANAGEMENT

Stress testing is not designed to evaluate the strength of particular assets or the efficacy of key risk functions, such as loan origination, at a particular institution. Rather, stress testing is similar to what many banks described pre-crisis as "enterprise risk management" or ERM.

At IndyMac Bank, for example, its "enterprise risk" philosophy caused it to use billions of dollars of insured depository funds to originate home loans that no prudent bank would retain on its own balance sheet. Instead of saying no to these high-risk, document-light loans, IndyMac assumed that it could originate and sell the loans indefinitely into the secondary market. When that market stopped buying, IndyMac was left with billions of dollars of losses on loans that it could not sell, swamping its risk-based capital.

Managing risks on an "enterprise" level generally presumes a level of predictable performance over an identified period of time for similar asset classes. For example, a correlation between default rate and loan loss is determined, depending on the risk-rating assigned to particular assets. A pool of loans with an average FICO score of 660 may carry a predicted default rate of 4 percent to 5 percent. But such "risk management" ignores the phenomenon that higher-risk assets are higher-risk in large part because performance under stress is far more unpredictable. Losses may occur more quickly, and more severely, than the straight linear progression the risk managers assumed.

In other words, for high-risk assets, the "worst case" is never the worst case. Quantifying the unpredictable nature of future behaviors is dicey, both for particular transactions and across an entire institution or industry. Stress tests, of course, necessarily make assumptions as to the impact of adverse changes to selected variables, such as asset values. Not only may particular assumptions understate risk, the economic modeling of stress testing may actually compound and obscure rather than reveal the imbedded risks and uncertainties of the institution's practices.

FALSE ASSURANCE WILL LEAD TO GREATER RISK-TAKING

Stress testing cannot substitute for standards that require sound underwriting of each risk on an individual basis. The risk-dilution benefits of hedging activities such as securitizations, for example, have now been shown to be largely illusory viewed systemically. As the Office of the Comptroller of the Currency has noted in its Dodd-Frank guidance, stress testing is just one tool available for risk assessment. Rather than relying on hedging, dilution and presumed diversification, prudent risk management of depository institutions should follow "safe and sound" standards and simply pass on particular transactions that fail to meet these standards.

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The unintended consequence of the current stress testing, however, may be to increase rather than decrease inappropriate risk-taking by depository and other regulated institutions. Just as a flawed annual physical may cause a chain-smoking patient not to cut back, flawed stress-testing may lead to greater risk-taking. Excessive reliance on stress test outcomes will almost certainly underestimate risk and create an inappropriate level of confidence, either as to the depth, duration or likelihood of the negative economic scenario. Dodd-Frank's focus on capital adequacy and formulaic stress testing falls far short of addressing the fundamental confluence of economic factors and industry practices that gave rise to IndyMac and other failures.

The stress test results announced in March were followed in April with BofA's discovery of a $4 billion "accounting" error. While some have cried foul, adequate controls present a challenge for every complex business. Error alone, even material changes requiring a restatement of prior financials, is not cause to criticize rigorous stress testing. Better controls will catch many such potential errors. But beyond the proliferation of written policies and reporting that follows new regulations like Sarbanes-Oxley or Dodd-Frank, the question ought to be whether we're safer, not simply whether our accounting is more accurate.

Indeed, all of the major institutions, from IndyMac to Lehman Bros., purported to rely on some form of "stress testing." If the conclusion learned from these failures is the belief that "better" stress testing will avoid similar catastrophes in the future, we are almost certainly creating a false sense of security.

Banking practitioners and market participants may find their conduct today viewed tomorrow through the eyes of the Securities Exchange Commission, shareholders or jurors. When the high risk of individual loans, investments and other transactions is explored with such hindsight, the errors of judgment may seem obvious. Reliance on stress test results, even those mandated by Dodd-Frank, will not provide a silver bullet defense. As Warren Buffet has reminded us, when the tide goes out we see who was swimming naked. But blaming the economy for the fall-out of bad decisions would be like blaming the tide for swimming without a bathing suit.

Despite many laudable aspects of Dodd-Frank, including stronger balance sheet requirements, stress testing is a limited tool. The better lesson learned from the recent financial crises should be a healthy skepticism of stress tests and other economic models, and of "enterprise risk management," in favor of sound practices and processes to evaluate the risk of each asset and the wisdom of each potential transaction. After all, the tide eventually will go out. ■

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