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EDITORIAL COMMENTARY

No Margin of Safety

New bank-capital requirements are based on ruinous risk models

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JUST WHAT WE NEED: A New Basel Capital Accord. Inspired in part by the failure of Long Term Capital Management, the world's financial regulators are imposing a new capital-adequacy regime for the banks under their control. Unfortunately, the very models and assumptions that drove Long Term Capital Management to the financial heights and depths are built into the new regulatory scheme. It's a story that nicely illustrates how Wall Street has taught the world how to measure -- or rather how to fail to measure -- financial risk.

The first Basel agreement came in 1988, following such events as the Third World debt crisis and the savings-and-loan meltdown. Basel I was intended to save the banks from the same fate. It focused on market risk, and set minimum levels of capital for banks. Institutions would weight the amount of capital needed to back various types of assets according to the risk of holding them: Little or none for Treasury debt, and up to 100 cents on the dollar for unsecured loans.

With the focus on capital adequacy fostered by Basel I-and some well-timed bridge loans from the Fed to prop up the largest banks -- the U.S. financial system navigated past the financial shoals of 1989-1991.

The Workaround

Capital is expensive and safety doesn't contribute to profit. Banks almost immediately began to work around the rules of Basel I, using derivatives and off-balance-sheet strategies to minimize the risk-based capital required to support their businesses.

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Through the 1990s, sifting through derivative fiascoes like Gibson Greetings, Proctor & Gamble and Barings, regulators saw that the big derivative-playing banks were taking risks-and selling risks to clients-whose value changed faster than the ability to manage or even describe them.

With Basel II, the world's financial regulators are still trying to save the banks from themselves. This new set of capital-adequacy rules attempts to address the exponential growth in bank risk-taking by aligning credit creation and risk-control techniques under a portfolio-based discipline. Unfortunately, the Basel Committee on Bank Supervision, led by the Federal Reserve Board, is building Basel II atop a foundation of credit tools and risk practices that missed some of the worst financial mishaps of the past decade.

Long Term Capital Management failed because the economists' models inspiring its trading strategies showed what options would be worth in the market. But when liquidity dried up, there was no market.

The LTCM rescue was noted mostly for how the Fed of New York "encouraged" dealer banks to cover the \$90 billion financial crater made by the fund's crash. More significant, however, was the fact that some of the smartest minds in risk management, Nobel laureates Myron S. Scholes, and Robert C. Merton, had managed to build a \$90 billion bomb using radioactive credit extended by the largest New York banks.

LTCM's stumble should have called its quantitative techniques into question, but instead of pondering the details, Wall Street and the regulators embraced the techniques developed by Merton, Scholes and the late Fisher Black. Today most tools used by financial professionals employ "Merton models" to value options, to price derivatives and to assess risk in general.

Merton models substitute market prices for a credit analysis, relying on the Efficient Market Hypothesis -- the well-known supposition that investors can't beat the market because stock prices already reflect all known information about a given issuer. Greater-than-normal success requires accepting greater risk, or just being lucky.

Garbage In, Garbage Out

Merton's work is an elegant generalization that assumes financial transparency and rational behavior by investors. Yet Wall Street took his framework and applied it to specific credit tasks -- for example, to predict the probability that a borrower will default. As long as a company's stock price is strong, a Merton model generates a positive credit opinion -- which explains why so many professional analysts and investors missed the outliers in the financial statements of fallen stars like Enron, HealthSouth and WorldCom.

Dependence on price-based risk models contaminates every aspect of modern finance. The reasons are simple, and selfish. It is quicker and easier to run a Merton Model on a PC than to employ an experienced credit analyst, who might have to do research and develop an opinion. Moreover, nobody on Wall Street wants to ask whether these models actually work because the derivative transactions they enable support the largest part of bank profits.

A marketplace that assesses risk using market prices as a credit gauge makes the term "mark to market" take on a terrifying new dimension, particularly for investors who hold bank stocks or buy structured assets. Most bankers know that Merton models don't provide any early warning of risks like fraud or restatement, and only some visibility regarding default. Yet they use them anyway.

The fact that the template underlying most of Wall Street's risk-rating methodology is largely a function of market sentiment should concern regulators and bankers as well as investors. The key provision of the Basel II capital framework is the requirement that banks generate internal ratings that describe credit, market and operational risks, add these ratings up, and then project the bank's required "economic capital."

And as Basel II goes forward, the largest banks will actually model their capital needs using "contemporary risk analysis systems" that are predominantly based on Merton models.

There is evidence that Basel II is already distorting the behavior of banks as they try to game the latest regulatory scheme. Data from the Federal Deposit Insurance Corporation suggests that the largest banks are "managing down" key Basel II metrics, such as probability of default and loss given default, to show a less risky

profile to regulators. The means to this end seems to be packaging corporate credits and even retail subprime loans into "complex structured financial transactions."

You can blame the Fed for keeping rates artificially low, but funds always chase yield and always ignore risk, and the banksters are happy to oblige. Is it a coincidence that the largest money-center banks are reporting sharply improved credit risk and recovery performance to federal bank regulators, while there are reports of growing losses to end-investors on structured assets? In fact, markets for structured assets have become so ugly in the past year that the disputes are becoming very public.

Last month, Barclays Capital settled a dispute with a German bank claiming unanticipated losses on tranches of collateralized debt obligations, a rare public example of how the very "contemporary risk-analysis systems" relied upon by Basel II to protect banks are instead being used to support predatory tactics against investors. Last week, Bank of America announced that it is facing legal action from an Italian bank claiming losses on complex credit derivatives. For every public spat, hundreds of such disputes are settled quietly.

U-Turn

The vast growth in bank-derivatives activity was once thought to be a threat to the banks, but it seems now that the real menace posed by derivatives is to bank clients -- all through the good offices of Basel II. Even though a bank may artificially improve its risk profile with asset sales and derivatives machinations, the embedded credit and operational risks can come back to haunt the dealer bank and its shareholders.

If regulators eagerly pushing Basel II really want to help their constituents manage risk, they probably need to revisit the use of tools that substitute a momentum-driven popularity contest for old fashioned fundamental analysis.

Meanwhile, whether you're a bank lending officer originating a loan or a portfolio manager buying a structured asset from the same banker, if you don't look at the numbers and form your own credit opinion, then don't complain when the investment goes south, and you and your organization face professional sanctions, civil claims or even criminal penalties for failing to perform due diligence as part of the risk-management process.

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