

# D **THE JOURNAL OF DERIVATIVES**

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**W**ho would have believed it? On December 10, 2013, after only 3½ years of public discussion and debate, an extended review by five government entities, and 18,000 comment letters, the Volcker Rule banning proprietary trading by banks, was approved by regulators. Of course, formally adopting the rule is still only an early stage in the process. We can envision continued public discussion and debate, further clarifications, and modifications to respond to issues and problems that will inevitably crop up as the rule is implemented, not to mention the equally inevitable challenges in court. To provide more time for the banks to adapt to the new regime, final implementation has been pushed back to July 2015, with the possibility of extending the grace period for several more years, until 2017. The issues involved are complex, and the final rule extends to more than 1,000 pages. Yet, it is unsettlingly vague on some critical definitions and issues, causing considerable discomfort in the industry. It has been especially challenging to define the boundaries between activities that are permitted in order to support a bank's legitimate market-making business, positions that are legitimate hedges of financial risks that the bank is bearing, and trades that are prohibited as proprietary speculation. The lines in the rule as adopted are fuzzy. For example, a market maker is allowed to build up a securities position if it is to satisfy "reasonably expected near-term" client demand. But how much client demand is it reasonable to expect? How long is near term?

Ambiguity is annoying to those who must figure out how to implement the Volcker Rule in their own trading rooms. Similar complaints have long been voiced about the entire Dodd-Frank Act. The Act is more than 2,000 pages long and called for about 400 new regulations, but left most of the details to be fleshed out by the SEC, the CFTC, the Fed, and other agencies. Yet what was the alternative? It is hard to believe that we would be better off if the current U.S. Congress had itself tried to redesign the system of regulations covering the entire U.S. financial system in full detail. Similarly, we should not be entirely surprised, or bothered, that the first rollout of the Volcker Rule leaves some key details less than completely specified. The full impact, including unintended consequences, of any major change in the regulatory regime cannot

be known until we have had some experience working under it. Adjustments, modifications, and tweaks will surely be needed. We should probably think of the first round of implementation of the Volcker Rule, and other new regulations under Dodd–Frank, as being like the “beta version” of a major new software application: fully functional, but expected to need some improvements once we have gained some experience using it.

Until then, arguments about the impact of the Volcker Rule will be based on conjecture and anecdotes: hypothetical examples and unique cases that are claimed to demonstrate desirable or undesirable features of the rule. A key example of how this kind of reasoning affects policy making is the case of the London Whale, the JPMorgan Chase trader who lost more than \$6 billion on a huge bet on credit default swaps. That incident cast a sharp focus on the Volcker Rule: Rulemakers could uniformly agree that whatever the final Volcker Rule allowed or didn’t allow, at the very least, it should rule out the possibility of another Whale.

Ambiguity in rule making is bothersome, but writing very precise rules that assume that we can predict their full impact on the financial system would be simply foolish. I therefore offer *N cheers for vagueness* for the Volcker Rule, where *N* is a number lying in a reasonable range between 2 and 3, not exceeding the latter.

Turning to this issue of *The Journal of Derivatives*, our lead article deals with a major issue faced by anyone trying to construct an aggregate information measure from the collection of options written on a given underlying. In practice, some measures, such as the put–call ratio, simply add up total contracts traded without regard to maturity or moneyness. Other measures, like implied volatility, may not be aggregated at all, but simply carried as individual values that are plotted in the volatility smile curve. Holowczak, Hu, and Wu propose weighting the relevant value from each option series by the corresponding Greek letter exposure to that factor. For example, their measure of exposure to the return on the underlying weights the number of contracts traded in each option series by the option’s delta. They show that such composite information measures are quite effective in combining information from a collection of options.

In the second article, Ghamami and Goldberg address another important real-world issue. Credit Value Adjustment (CVA) changes the value of a derivatives position on a firm’s books to reflect the credit quality of the counterparty. “Wrong way risk,” where the counterparty’s credit quality becomes weaker at the same time their liability under the derivatives contract becomes large, seems like it should clearly increase the total risk borne under the derivatives contract.

But the authors demonstrate that this need not occur. In the next article, Jensen explores the optimal rebalancing strategy for a firm that has sold a constant proportion portfolio insurance (CPPI) plan to a customer. CPPI guarantees a minimum floor on the value of the insured portfolio and tries to maintain leveraged exposure to the market above that level. Simon and Campasano then look at futures on the VIX index to see if the futures basis indicates which way the VIX will move next. The futures price moves toward the spot index and not the reverse.

The article by Mishra and Daigler digs into the intraday behavior of two closely related options markets: SPX options on the spot S&P 500 index and SPY options written on the SPDR ETF, which tracks the S&P 500. Although both are actively traded, the two contracts seem to be favored by different classes of buyers, with SPX options traded in size by institutions and SPY options appealing more to the retail trade. Only the latter exhibit the common U-shaped pattern of volume, volatility, and bid-ask spreads over the course of the day. Finally, Hull and White describe a rather new approach to options-based executive compensation. To preserve the manager's performance incentives, which are a feature of options grants but are lost when the options fall out of the money, the grant is a kind of derivative that pays off in shares, with the number varying as a function of the stock price at maturity. The article shows how to value the contract.

Yet another source of uncertainty facing the financial markets right now is the changing of the guard in the regulatory agencies and at the Fed. Many major figures are moving on. Ben Bernanke has just ended his exemplary chairmanship at the Fed, handing the reins to Janet Yellen, and Stan Fischer will come in as Fed vice chair, after his fine service running the Bank of Israel. (Disclaimer: I am proud to say that Bernanke is an old friend from graduate school and Fischer was on my dissertation committee.) Gary Gensler leaves the CFTC, along with two of the other five commissioners. Replacements have been nominated but not yet approved. Mary Jo White replaced Mary Schapiro at the SEC less than a year ago. The new team of regulators has plenty of important work on their plates. We wish them all (and therefore ourselves) much luck and success.

**Stephen Figlewski**  
**Editor**