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Last year's financial meltdown really does seem to be giving way to the "green shoots" of economic recovery, although so far they appear to be mostly shooting green into banks' bonus pools. The ranks of the unemployed continue to grow, even though at this time there seem to be almost as many discouraged workers leaving the labor force, and therefore the unemployment statistics, as there are workers becoming newly unemployed. But now a major new source of uncertainty that is not captured by our normal measures of volatility is striking the financial markets. It is political risk. Today Washington is deep in the throes of legislating the overhaul of the U.S. health care system, but waiting in the wings is a thorough revamping of the financial regulatory structure. What form will that take? Proposals of all kinds have been floated, with a restructure of the regulatory environment for derivatives figuring heavily in most of them. Readers of *The Journal of Derivatives* understand how complex these instruments can be, so it is hard not to be filled with dread when a Congressman decides it is good politics to cry, "These markets are nothing more than uncontrolled gambling and they all ought to be shut down!" or "These markets can serve a useful role but not when they are dominated by speculators. Only trading by hedgers should be permitted!" The possibilities for disaster are endless, and we are all holding our breath to see what Congress will come up with.

This issue of *The Journal of Derivatives* features several articles that look at how a futures market interacts with its underlying cash market. In times of market turmoil, this issue is fraught with controversy, with derivatives skeptics asserting that speculation in futures drives prices away from true values and produces excess volatility. Financial economists, by contrast, emphasize that "speculation" is the same thing as trading based on information, and the more rapidly and accurately the available information is embodied in prices, the better the financial markets will perform. When information flow is volatile, prices will be volatile too, because the market's understanding of the true values is changing rapidly. If the cash market is fragmented, as is common when trading is over the counter, while the futures market is centralized, it is quite possible for the futures price to reflect aggregate information better than the cash market does. In that case, new information will cause price movements first in futures, and changes in cash prices will follow. That is, the futures market leads the cash market to its new equilibrium. By contrast, if the futures market is small and undeveloped while the cash market is large and integrated, cash should lead futures.

The lead article, by Rosenberg and Traub, explores this issue for foreign currency (FX) futures traded at the Chicago Mercantile Exchange (CME). Historically, the FX market has been dominated by large international banks that make active and deep markets for a broad range of spot, forward, and option transactions. The FX futures contracts at the CME were the first financial futures to be introduced, but trading volume was always small relative to what was being done in the OTC market. Rosenberg and Traub show that even so, in 1996, currency futures prices strongly led prices in the cash market. However, this somewhat unexpected direction of causality was reversed by

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2006, quite possibly because the OTC market has become more integrated and transparent in recent years.

In our second article, Schlusche considers the lead-lag relationship between DAX futures and the DaxEx, an exchange-traded fund designed to replicate the DAX index. Earlier research has indicated that DAX futures lead the DAX cash index. But the DaxEx is a kind of derivative, so do DAX futures lead the DAX ETF? Schlusche finds that they do, but less so in times of high volatility.

The next article explores an important issue for stock index derivatives. The returns processes that are assumed in developing option pricing models normally prevent the price of the underlying from becoming negative, but it is allowed to go to zero. This is clearly appropriate for a single stock in a world with bankruptcy risk. But as Câmara, Krehbiel, and Li point out, this is not appropriate for a stock *index*, because a component stock whose price falls too low will be replaced in the index by a different stock. The rules governing how the index is constructed effectively constrain it to remain above some positive lower bound. The authors develop and successfully test an option pricing model based on a *displaced* jump-diffusion process, which permits both diffusive movements and jumps but constrains the index to not fall below a level that is strictly positive.

In the following article, Wallmeier and Diethelm describe an equity derivative instrument that seems very exotic. A "multiple barrier reverse convertible" is a kind of convertible bond that pays a regular coupon, but its terminal payoff at expiration might be the nominal face value in cash or, alternatively, some amount of the worst-performing among several stocks, contingent on one of them having breached a specified barrier level at some time over the life of the contract. Our experience at the *JOD* has been that it is a lot easier for a clever researcher to invent a contract with an exotic payoff structure and to develop a pricing model for it within the standard option pricing paradigm than it is for that contract to attract any trading activity among actual investors. We routinely turn down articles on such contracts until the market shows some interest in trading them. What is remarkable in this case is that Swiss investors apparently love these structures: they are the most successful structured equity products in that market. The authors present a pricing model for them and show that, on average, they are somewhat overpriced. Clearly, Swiss buyers of multiple barrier reverse convertibles need to read this article.

Our final article, by Uhrig-Homburg and Wagner, returns to the issue of cash-futures interaction in the new market for pollution permits in Europe. The EU introduced a "cap and trade" system for carbon dioxide emissions in 2005, and a market was also set up for trading futures contracts on the permits. Do futures on EU allowances obey the cost-of-carry model of futures pricing? Yes and no. Yes, once the emission allowances for the relevant futures expiration have been issued, but not before that. Which market leads the other when prices are changing? The evidence suggests that both markets contribute to price discovery, but the influence of the futures is stronger.

Turning back briefly to the impending redesign of the financial system, presumably by the time I am writing the Editor's Letter for the next issue of the *JOD*, much of the political uncertainty will have been resolved. Let's hope so anyway, so we can go back to worrying about the more familiar kind of volatility.

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