

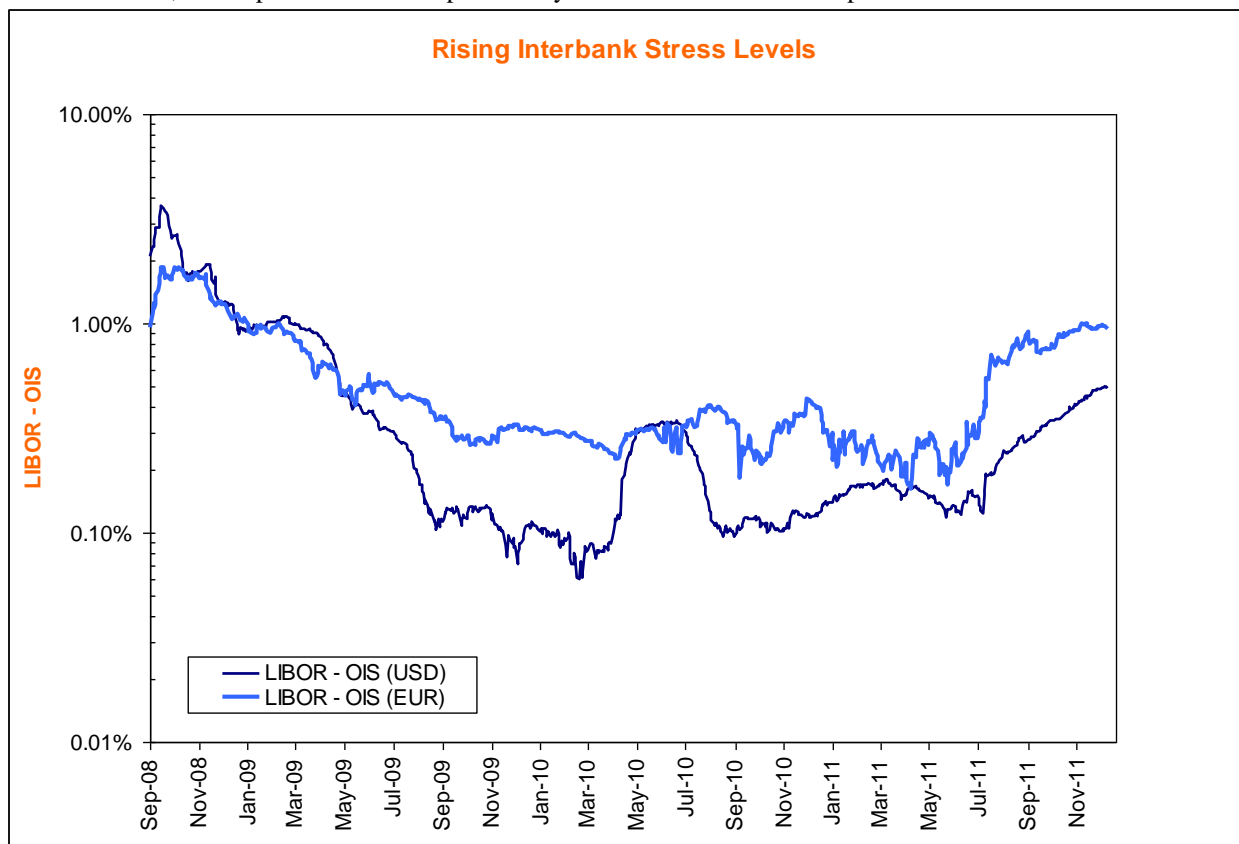
The Compelling Case for Centrally Cleared Interest Rate Swaps

“Trust, but verify.” – President Ronald Reagan

Events often drive financial markets to converge on a solution. Such is the case today with cleared bilateral over-the-counter (OTC) swaps on interest rates and other financial instruments.

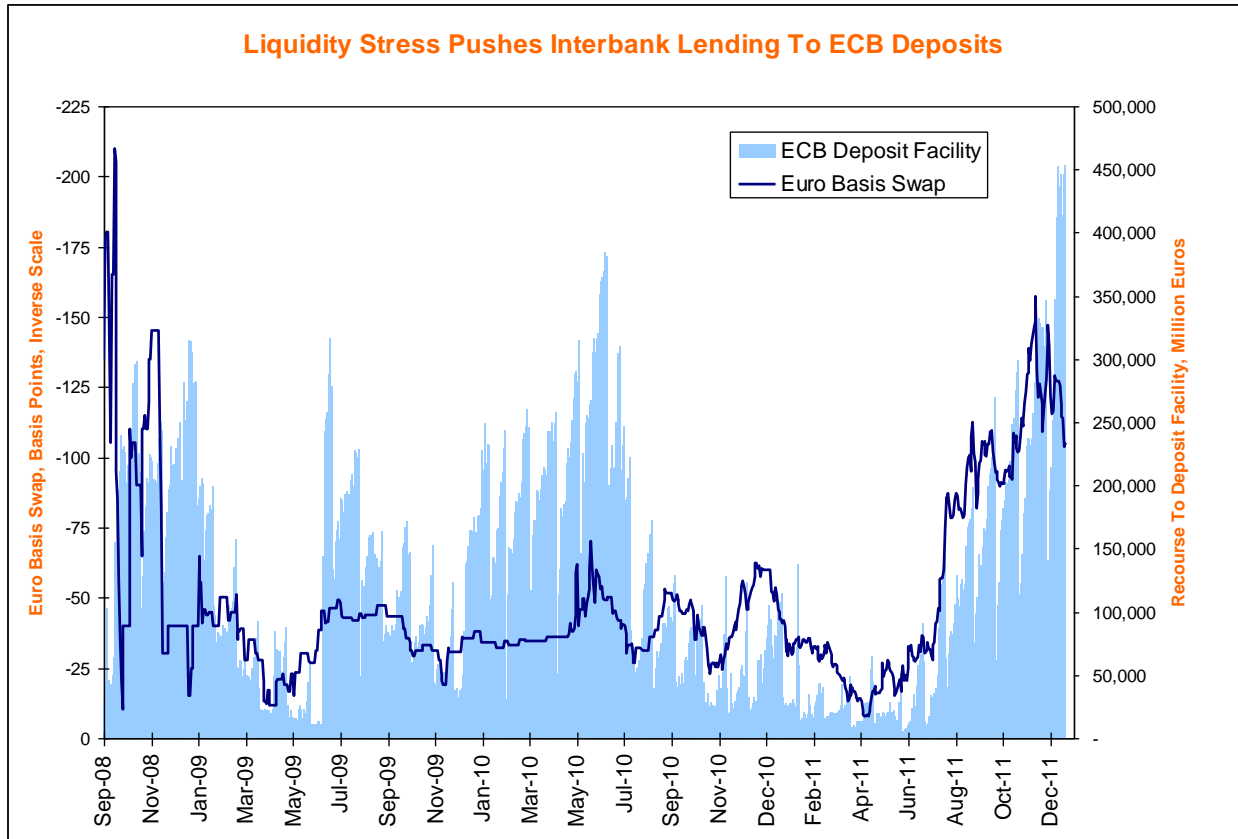
The Basel III accords adopted in June 2011 require counterparties to account for credit valuation adjustments (CVA) on their derivative positions. As CVAs are the difference between a risk-free portfolio and a portfolio where the probabilities of counterparty default are accounted for, the charges to capital can accumulate quite rapidly over large portfolios even during normal times. During a time of rising financial stress, they can become prohibitive.

As events in 2008 and again in the European sovereign debt crises of 2010-2011 underscored, the systemic financial stress accumulates far more rapidly than does the stress for a single counterparty. These stresses are reflected in the spreads between LIBOR and the corresponding overnight index swap (OIS) rate. Whether measured in U.S. dollar or in euro terms, these spreads can rise exponentially in time of stress as banks pull back from one another.



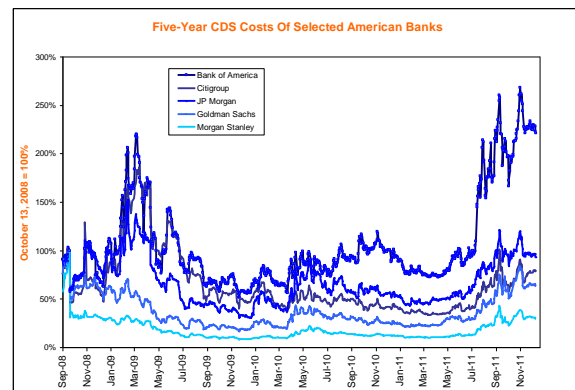
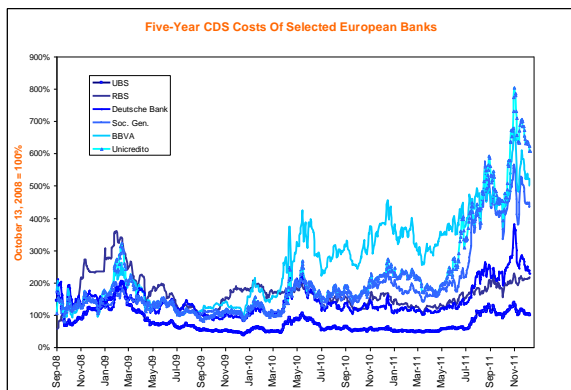
A second and perhaps more potent way of viewing the European interbank stress issue is an analysis of how European banks abandon the interbank market and deposit funds directly with the European Central Bank during times of financial stress. ~~As dollar liquidity becomes scarce, the euro basis swap declines and can become increasingly negative; borrowers are simply willing to accept a lower interest rate on euros relative to the rate paid on dollars. The collapse of these basis swap rates in November 2011 led to a coordinated move by global central banks to provide dollar swap lines on November 30, 2011 and was associated with a flight into recourse deposits at the ECB-European banks lend large sums of dollars, but as their deposit base is euros, they fund these loans by issuing dollar-denominated debt to American money-market mutual funds and bond funds and by borrowing dollars in the interbank market. Once European bank stress rises, these dollar funding sources begin evaporating. European banks then have to fund their dollar loans by bidding for excess euros, often provided by the European Central Bank, and then swapping these euros for dollars. This operation raises USD interest rates relative to EUR interest rates on the so-called basis swap.~~

The most expensive swap of any kind in any is one where you want to trade and cannot find a ready counterparty. Until the ECB's €490 billion Long-Term Refinancing Operation (LTRO) in December 2011, a sustained increase in direct recourse deposits at the ECB is and was prima facie evidence of a breakdown in bilateral OTC market liquidity. Funds on deposit at the ECB increased during the 2008 crisis, during the first move to rescue Greece in May 2010 and again in during the late 2011 sovereign credit crisis. The LTRO provided European banks with a ready source of low-cost funding they left on deposit with the ECB. Those funds can be used by the banks for other purposes, such as commercial lending or even paying off their own bond market debt, at a later time.



Contingent Credit Default Swaps

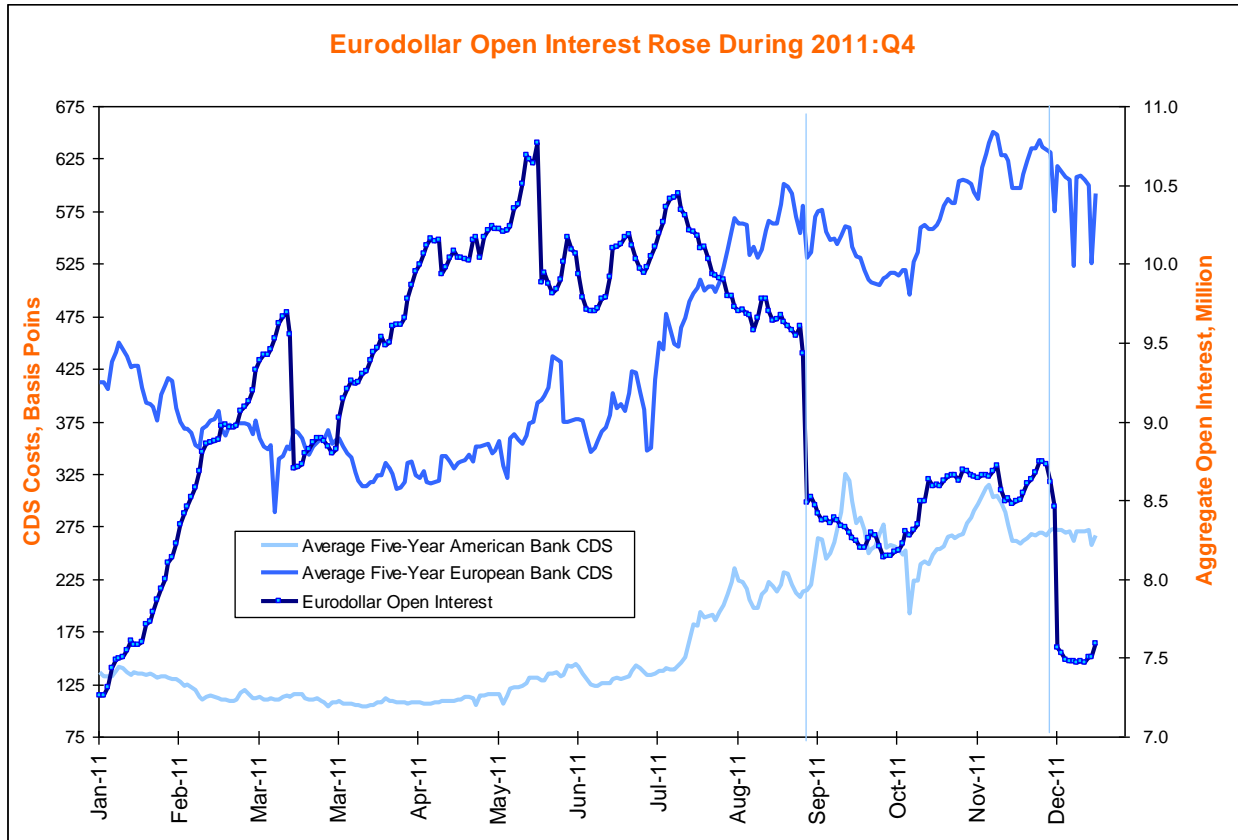
CVA charges can be reduced by collateralizing exposures, but this involves prohibitively high levels of liquid assets and can be operationally unwieldy as well. A second tactic to reduce CVA charges involves the purchase of contingent credit default swaps (CCDS); these are triggered when a trade defaults as opposed to a bond and theoretically reduce the CVA. CCDS and all other CDS costs almost by definition rise in times of stress as illustrated by the five-year senior CDS for selected European and American banks reindexed to the height on the financial crisis in October 2008.



CCDS trades involve a circularity of risk as the counterparty selling protection may be unable to honor its obligations; this certainly was seen in 2008. Moreover, the treatment of sovereign default issues in Europe in 2011 has injected an element of confusion as to what constitutes a default. A corporate hedger faced with purchasing CCDS protection at a rising costs from a financial intermediary has to consider whether the CCDS can or will be executed as intended.

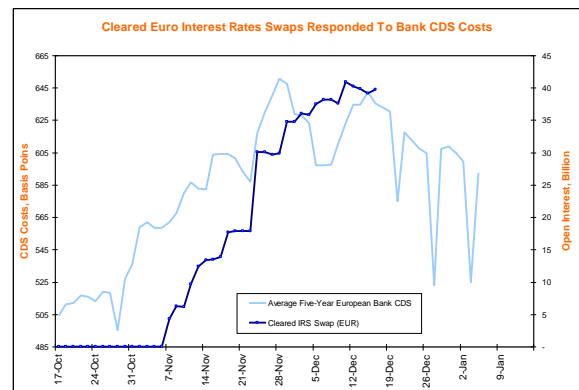
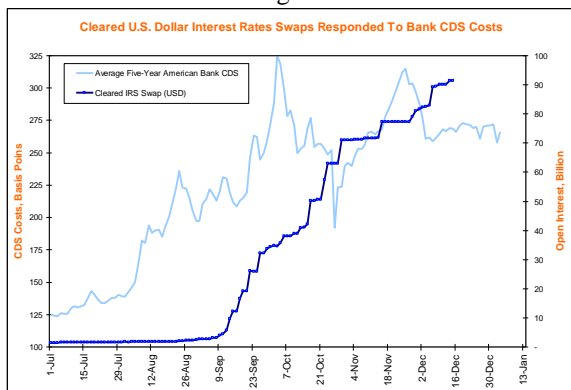
Eurodollar Futures and Synthetic Swaps

The interest rate swap market has used strips of Eurodollar futures to price, hedge, fix and float its positions for more than a quarter-century and it understands one of the bedrock realities of risk management: When cash market liquidity shrinks, futures markets remain open and functioning. As average five-year CDS costs for American and especially European banks rose during 2011, aggregate open interest for Eurodollar futures both rose and fell in response to normal interest rate market developments and its own quarterly expiration cycle. Once these bank CDS costs started to rise sharply in October 2011, Eurodollar open interest rose as well. This suggests markets moved to the safety of the Chicago Mercantile Exchange Clearinghouse once interbank liquidity became both scarce and expensive.



Cleared OTC Interest Rate Swaps

If the response of Eurodollar futures was impressive yet expected, the response of cleared OTC interest rate swaps was simply impressive as the market is new. In both the U.S. dollar and euro cases, which begin in July and October 2011, respectively, the increase in average five-year CDS costs for American and European banks led exponential growth in the notional open interest of cleared swaps. The data sample is small but the results are encouraging and appear to confirm the principle markets will gravitate to the lower-cost and potentially lower-risk solution of central clearing.



Other Counterparty Issues

An additional consequence of 2008 that expanded during 2011 was an increased willingness to view OTC derivative books with multiple offsetting positions across an array of counterparties more on a gross than on a net basis. While a trader's net exposure may be small, the default of a significant counterparty or group of counterparties could result in an unbalanced and unhedged position during the default and recovery process.

Markets have come to understand the unintended consequences of Basel capital standards. Several well-intentioned capital standards for risk-adjusted capital led to what, in retrospect, was a dangerous concentration of risk positions across the system. Prior to the 2008 meltdown, banks felt justified in holding AAA-rated mortgage-backed securities and derivatives. Prior to the 2010-2011 sovereign debt crises in Europe, banks felt justified in holding the higher-yielding sovereign debt of various countries. Both cases led to a belated recognition what was regarded as Tier I capital less expensive to the balance sheet of a given bank could lead to concentration of unwanted risk across the banking system.

As all reforms tend to address recently recognized problems, the probability regulators will address this concentration of risk problem going forward is rising. This will intersect with Basel III's move to account for counterparty creditworthiness via CVA charges and lead to one of two outcomes. The first will be a reduction in risk management activities from both corporate treasurers and financial intermediaries as the old way of doing business becomes too complex and expensive.

The Futures Market Solution

The second course of action, already underway and endorsed by Dodd-Frank, is for bilateral OTC counterparty credit risk to be converted into exchanged-cleared synthetic swaps. Here the netting out of gross counterparty positions can be achieved through a consolidated futures and options book at the net cost of margin financing. Multiple counterparty credit risks can be consolidated into a single clearinghouse position with the built-in cushion of daily variation margining to protect the system as much as possible from a customer default. In addition, the futures markets allow for risk-based cross-margining of positions to effect further net savings in financing costs.