Not All Carry Trades Are Alike

All professions develop a short-hand sooner or later. Not only does it facilitate communication amongst those with a shared knowledge (or ignorance) base, it excludes outsiders. For years, bond traders have referred to "the yield curve" as the spread between ten- and two-year Treasury notes. The choice of a two-year note may seem a little odd to the outsiders, which suits the pros just fine. The two-year represents a one-year forward rate agreement stacked on the end of a one-year money market strip; it thus is linked to the cost of rolling a one-year money market strip forward for another year.

The global drive toward zero percent interest rates in 2008-2010 compressed the yield on the two-year note down to a limit where lenders found resistance. Moreover, as low as two-year note yield got, below 55 basis points in July 2010, they could not compete with short-term strips of federal funds in what is known as the overnight index swap (OIS) market. A three-month OIS hovered below 20 basis points in July 2010.

As the Federal Reserve kept promising to keep short-term rates low for "an extended period," carry traders found it increasingly attractive to switch their funding source from the more traditional two-year note to the three-month OIS. We can compare the two yield curves by their forward rate ratios over time; this is the rate at which we can lock in borrowing for either 9.75 years (OIS) or eight years (two-year note) starting either three months or two years from now, divided by the ten-year note yield. The more these FRRs exceed 1.00, the steeper the yield curve.

The OIS-based FRR is both flatter and smoother than the $FRR_{2,10}$. The periodic outbursts of fear regarding short-term rates tend to make the highly expectational two-year note yield jump around violently, while the OIS rate stayed anchored by the Federal Reserve.



Two Different Yield Curves

Stock Market Impact

The federal government made the financial sector its special project during and after the financial crisis of 2008. The low borrowing costs it created allowed banks and other financial institutions to rebuild their balance sheets by borrowing low at the short end and lending high at the long end. Indeed, this engineered carry trade allowed the Federal Reserve to monetize Treasury debt by letting member banks buy Treasuries at auction rather than having the Federal Reserve do more than its \$300 billion of Treasury and \$1.25 trillion of mortgage security purchases financed out of thin air.

Not that this free money led to stock market outperformance: If we go back to the day in November 2008 when Timothy Geithner, present at the creation during his stay as president of the Federal Reserve Bank of New York, was appointed to be Secretary of the Treasury and Citigroup got backstopped once again by the Paulson Treasury, and compare the total returns for the twelve industry groups of the S&P 1500 financial sector, the favored groups of the banking sector have underperformed, with the mortgage-finance group underperforming the most.



Financial Industry Group Total Returns Nov. 20, 2008 - Jul. 30, 2010

Which carry, the OIS-based or the two-year note-based, was the better explanatory variable for some of these key banking groups? We can answer this by modeling the total return of each financial group relative to the S&P 1500 Supercomposite on a log-linear basis; $\ln(\text{Rel.Perf}) = f(FRR)$. Let's take the big banks first. Here the behavior of the industry was so dominated by external factors such as the question of nationalization and the repayment of TARP funds the actual answer to which carry trade was more important must be, for most of 2010, the OIS carry. This does suggest the major banks have fattened up somewhat on their ability to borrow at a term federal funds rate.



Relative Performance And Two Carry Trades Since November 20, 2008: Other Diversified Financial Services

The answer is different for the regional banks, however. These banks have had greater exposure to real estate portfolios and depend more on their loan portfolios as opposed to trading and fee income than the major banks do. Their relative performance is not at all a strong function of either carry trade.

Relative Performance And Two Carry Trades Since November 20, 2008: Regional Banks



What about the investment bank & brokerage group? Here the answer lies in-between; the OIS carry clearly produces the better statistical fit, but the investment banks' reliance on free money started to wear off after the financial crisis began to dissipate. In retrospect, the best thing that happened to the investment banks was their post-2008 status as commercial banks and members of the Federal Reserve system gave them direct access to federal funds. As an aside, the pattern for asset managers and custodial banks is similar to that seen for the investment banks.



Relative Performance And Two Carry Trades Since November 20, 2008: Investment Banks & Brokerages

The final group we will discuss directly is consumer finance. This group is almost a mirror-image of the investment banks; its relative performance turned into a close function of the forward rate ratio in the Treasury market while its link to the OIS carry disappeared in early 2010. They are yield curve-dependent, to be sure, but as they are not a direct player in the federal funds market, they have to rely on a different carry trade.

Relative Performance And Two Carry Trades Since November 20, 2008: Consumer Finance



We have to emphasize the variable being modeled here is the relative stock market performance of financial groups, not the profitability of financial groups. A stock can rise in the face of poor earnings if there is a reasonable belief business will improve or the firm will be rescued. Conversely, a stock with strong earnings can do poorly if the earnings derive from special circumstances such as free money and government protection. The simple fact of the matter is modeling anything in the financial sector based on earnings was impossible over this period; you had to account for massive operating losses, capital raised, assets written off, government capital infusions, all manner of extraordinary items, the elimination of FAS 157 mark-to-market accounting, etc. A stock price, in contrast, is observable and more or less beyond dispute.

We can infer from the observations above of relative stock performance the carry based on the much shorter and much more dangerous OIS – the funding must be rolled over every three months instead of every two years – became more important than the traditional yield curve spread between the two- and ten-year note. Recent evidence suggests the one-month OIS rate has become more important now than the three-month OIS rate. Such dependence on ever-shorter funding is reminiscent of the overnight funding employed by the late, great Bear Stearns and Lehman Brothers. What did we fail to learn, besides everything?

We can also infer much of the free money went to fatten the balance sheets of investment banks, regional banks and asset managers as opposed to flowing into the economy as job-creating credit. In the battle between Main Street and Wall Street, Wall Street won. Where is the adage, "Don't fight the Fed" better known?