Sovereign Credit Risk And Inflation

Einstein earned his chops in a number of ways, not the least of which was creating what he called *"gedankenexperimenten,"* or thought experiments, to think about what should happen in a given situation. You and I might have had these moments of wild fancy and chalked them up either to day-dreaming or to various chemistry experiments run wild; this is why Einstein's name is synonymous with genius and ours are not.

But let's not prevent ourselves for taking a crack at one real-world problem, and that is thinking about the default of a debtor who has the world's reserve currency and a printing press to create more of that currency, either literally or electronically, at near-zero cost. Under Ben Bernanke, we have the tools, we have the technology and we have the ink. This of course describes the United States: The dollar is accepted worldwide as a medium of exchange and as a unit of accounting. Once upon a time, we could attribute this to the overwhelming economic dominance of the U.S.; now we have to attribute it to a lack of reasonable alternatives as much as anything else. Anyone who ever thought the euro might be a serious contender in the reserve currency department probably cringes at the recollection. A third attribute of a reserve currency, its role as a store of value, is related directly to the willingness and ability of the reserve currency's issuer to maintain that currency's purchasing power by minimizing inflation and maximizing its strength relative to other currencies.

A market for credit default swaps (CDS) on sovereign debt has grown significantly since 2008, and has produced some strange paradoxes such as the "flight to the printing press" noted here in June 2009 (see "Pushing the Limits on Government Finances"). It had roots in the actions first taken in late 2007; this is when central banks began taking an active role in intervening in financial markets as disparate as commercial paper, asset-backed securities, money markets, the interbank market for short-term debt, their own national debt markets and pretty much everything else with a name suitable for later use in an acronym. The entirety of these interventions, accompanied by finance ministry and legislative-level actions, can be summarized as transferring bad private debt onto the public's balance sheet and then hoping for the best.

Those who trade by hope become former traders quickly.

Dial 'D' For Default

The CDS market for U.S. Treasury debt has another little quirk: Its payoff is a complete and utter fantasy. As dollars are nothing more than monetized Treasury debt, pieces of paper as it were, a failure of the Treasury to perform means the dollar has become worthless and should no longer be legal tender for all debts, public and private. To remedy this inconsistency CDS on U.S. Treasuries pay off in euros on the charming notion that if the U.S., a political entity with only one civil war to its credit, fails the common currency of the European Monetary Union will retain value. This is a howler of the first order; once the Greek and Spanish fiscal woes came to light in late 2009, to be followed by outright rescues of both Greece and Ireland in 2010, speculation over the euro's ultimate fate increased. Yes, the American Civil War might have been a doozy, but European history is littered with armies marching hither and yon.

In addition, the dollar's role as the reserve currency places all of the U.S.' creditors in the unenviable position of knowing the U.S. never can default so long as it can create more dollars. The risk, therefore, becomes the debt is honored nominally with worthless pieces of paper. This is hardly without historic precedent: The Weimar Republic did exactly this to pay the reparations arising from World War I. The resulting hyperinflation destroyed Germany's postwar economy and created both a bitterness that led to subsequent, um, political problems in Germany and to a later resolve to keep inflation low and the Deutsche mark strong. This lingering resolve helped create the tensions between Germany and weaker members of the EMU that erupted several times in 2010.

The Inflation Risk

We are faced with the likelihood, therefore, CDS on the sovereign debt of the reserve currency issuer is a meaningless concept for default risk. The number should represent some sort of insurance against that currency's debasement, but with a twist: While investors pretend they abhor inflation wherever and whenever it arises, the simple fact of the matter is financial markets do best during periods of low inflation. Deflation, which punishes debtors, is a decided negative and high inflation, which invites the central bank to restrict credit, is another negative.

Let's take a look in Chart 1 at the history of CDS on ten-year U.S. Treasury notes, measured in euro basis points, relative to ten-year Treasury Inflation-Protected Securities (TIPS) breakeven rates of inflation plotted inversely. Statistically, TIPS breakeven rates lead CDS by 39 trading days, or about two months, on average. We should add

in passing TIPS are a highly imperfect measure of what actual inflation is; they remain the default measure, however (see "The Illusion of TIPS Protection," May 2007).



We can see how CDS costs rose and expected inflation fell during the financial crisis of late 2008 and early 2009; the market interpreted the extraordinary actions then underway as deleterious to U.S. government finances while the implosion in bank lending was leading to a contraction in inflation expectations.

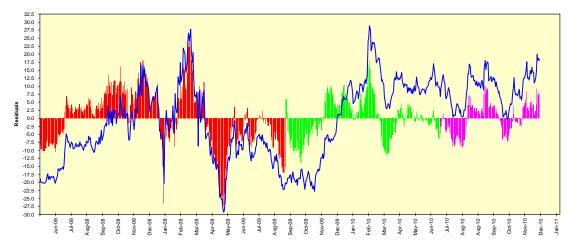
The negative correlation between the two measures continued after TIPS breakevens bottomed in December 2008 and CDS costs peaked in February 2009 with an extraordinary joint statement by the Federal Reserve and the Treasury we can summarize as, "Do not worry about default; we will print the money to repay you." While inflationary expectations rose, as they should have given the promise to print money, sovereign CDS costs fell.

Now let's move to September 2009, marked in Chart 1 with a green vertical line. The negative correlation switched to a positive correlation as U.S. short-term interest rates dove below their Japanese counterparts, gold moved to record highs on a near-daily basis and the dollar threatened its all-time low against the euro. This switch-point in correlation is when the sovereign CDS market stopped accepting a "little bit of inflation" as good and started worrying about default via catastrophic inflation. Please note how CDS costs have remained elevated since September 2009 even though the financial crisis ended earlier that year; the continued expansion of the federal deficit and the continued printing of money by the Federal Reserve have done little to enhance Uncle Sam's creditworthiness.

Before And After

We can illustrate how this change took hold in Chart 2 by regressing the CDS costs against TIPS breakevens lagged 39 days and capturing the residuals, or unexplained portion, over three periods. The first period, from June 2008 to September 2009, is marked with red columns. The second, from the September 2009 switch-point until the resumption of yuan revaluation by China in June 2010, is marked with green columns. The third period, from June 2010 forward, is marked with magenta columns. The entire data sample is depicted with a blue line.





The periods are statistically different from one another at near-100% confidence. This is equivalent to saying that once creditors to the U.S. realized the game being played, they did not want to play it anymore. However, what choice did they have once alternatives to the dollar, the euro in particular, started to flag? Both China and Japan, the two principal lenders to the U.S., were forced to keep financing the American current account deficit if they wanted to maintain their current account surpluses and avoid the necessary adjustments to their domestic economies.

The end of this game will be inflation eventually. That is the "what." The "when" will depend on the revival of credit extension in the domestic banking system. The Federal Reserve may pretend its policies are not inflationary, but the only reason inflation has not emerged with a vengeance so far is a crippled banking system has yet to do its primary job of turning monetary reserves into credit. In addition, the manifestation of inflation in global asset markets does not figure into the Federal Reserve's calculation of inflation even though it is very real to non-Americans. Food inflation in China will be a major issue.

Who, then, is benefiting from the money created? That would be the federal government itself: The money created can be borrowed at near-0% for the short-term and lent back to the government at 350 basis points or so in the long-term. This yield curve carry trade has allowed Uncle Sam to write a check to himself and pretend everything is just fine with the world. What, besides absolutely everything, could go wrong here?