

## Pushing The Limits On Government Finances

Every culture has a parable equivalent to “the straw that broke the camel’s back,” as if anyone had ever seen the local dromedary lying in a shattered heap. It is good, simple wisdom: Keep stressing a system, any system, and it will break eventually. This has been one of the tenets of chaos theory as well; a normally functioning system can undergo a phase change and go haywire.

The global credit crunch that began in 2007 and swept through financial markets all through 2008 entered a new and dangerous phase in the U.S. in July 2008 with the federal backstopping of Fannie Mae and Freddie Mac. An implicit guarantee became an explicit guarantee overnight, and the federal government spent the next four months extending its balance sheet with an alphabet soup of multi-trillion dollar lending and credit facilities.

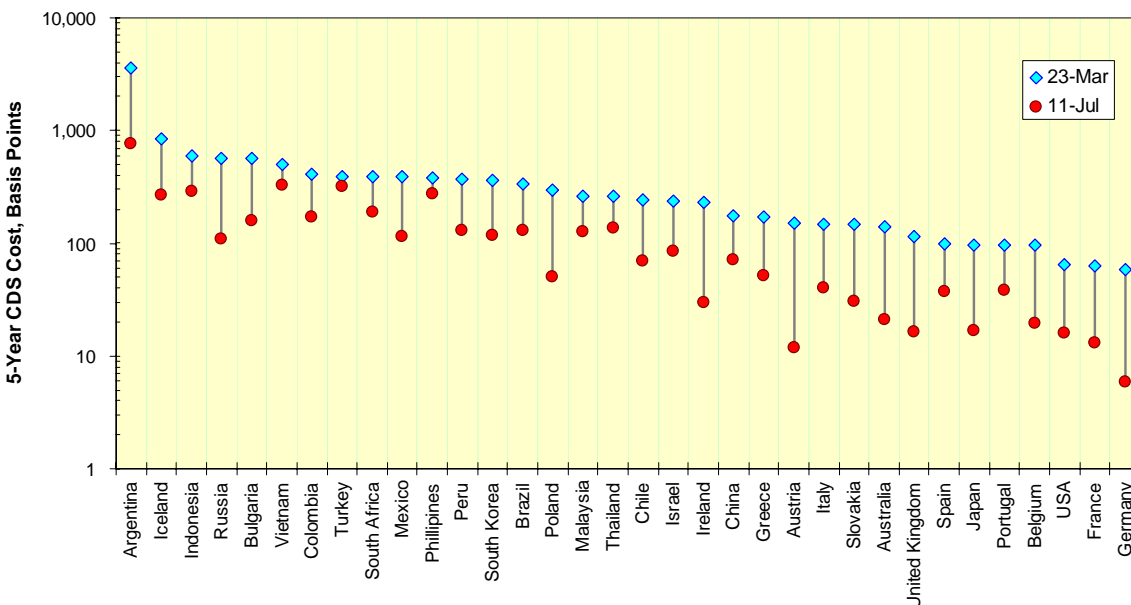
The U.S. and other governments acted as if these guarantees, all of which were massive borrowings against future tax revenues, had no limit. This is as wrong as wrong could be, as we shall see below. The very same credit default swap (CDS) markets that played such a major role in the dissolution of insurance giant and political heartthrob AIG and stressed bank balance sheets around the world began signaling sovereign credit risk, the risk governments would default on their bonds, was rising and rising quickly.

Paradoxically, government bond yields fell during this period of rising credit risk, the exact opposite of what we might expect and certainly the exact opposite of what was seen in the corporate bond markets. The reason was the vaunted “flight-to-quality,” that bidding up of government bonds during times of financial stress, was really a flight to the printing press. If the world was in a credit crunch and threatened with the worst economic calamity since the Great Depression, the only place to which risk-averse investors could flee was government securities and their promise to pay back the nominal amount of the loan even if they had to print the money to do so. This mechanism helped starve the private sector for much-needed capital between the third quarter of 2008 and the first quarter of 2009 and exacerbated the credit crunch. Governments were claiming available funds and at a lower cost to turn around and “rescue” private firms in trouble; we will return to this issue below.

### Sovereign Credit Risk

The extent to which sovereign credit risk expanded across a range of countries between the July 2008 backstopping of Fannie Mae and Freddie Mac and the March 2009 \$1 trillion plan to buy toxic bank assets is mind-boggling. Chart 1 displays these CDS costs in descending order of March 2009 values, marked in blue, in comparison to the values from Friday, July 11, 2008, marked in red. The CDS costs for the U.S. are expressed in euros, not in dollars, on the charming theory that if the U.S. government defaults those euros you receive in recompense will be worth something. All other CDS costs are priced in U.S. dollars.

**Chart 1: Change In National 5-Year CDS Costs**  
July 11, 2008 - March 23, 2009

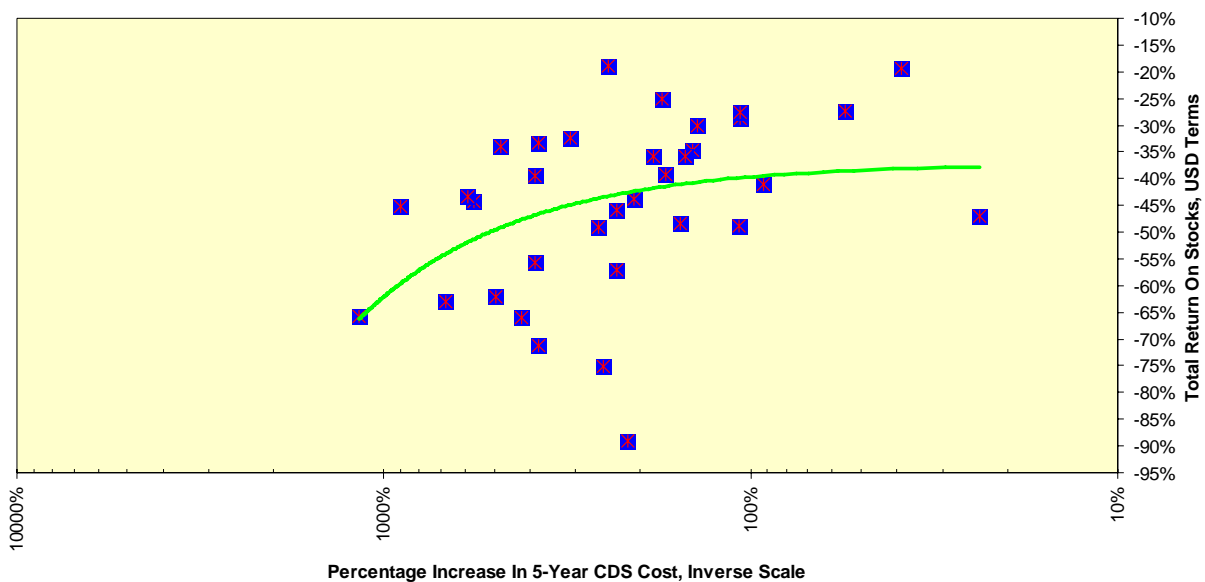


Please study the Y-axis. It is logarithmic, which means the vertical range represents percentage change. First, all sovereign CDS costs rose over the eight-month period. Not a single government's credit risk fell. Second, some of the largest percentage increases, visible in the height of the gray vertical lines, were seen in low-risk countries such as Germany and Austria. Third, some of the weaker credits going into the period witnessed some of the largest percentage increases in CDS costs; this list includes Russia, Iceland and Argentina. Finally, a few weak credits, such as Vietnam, Turkey and the Philippines, had small percentage increases.

### Equity And Currency Responses

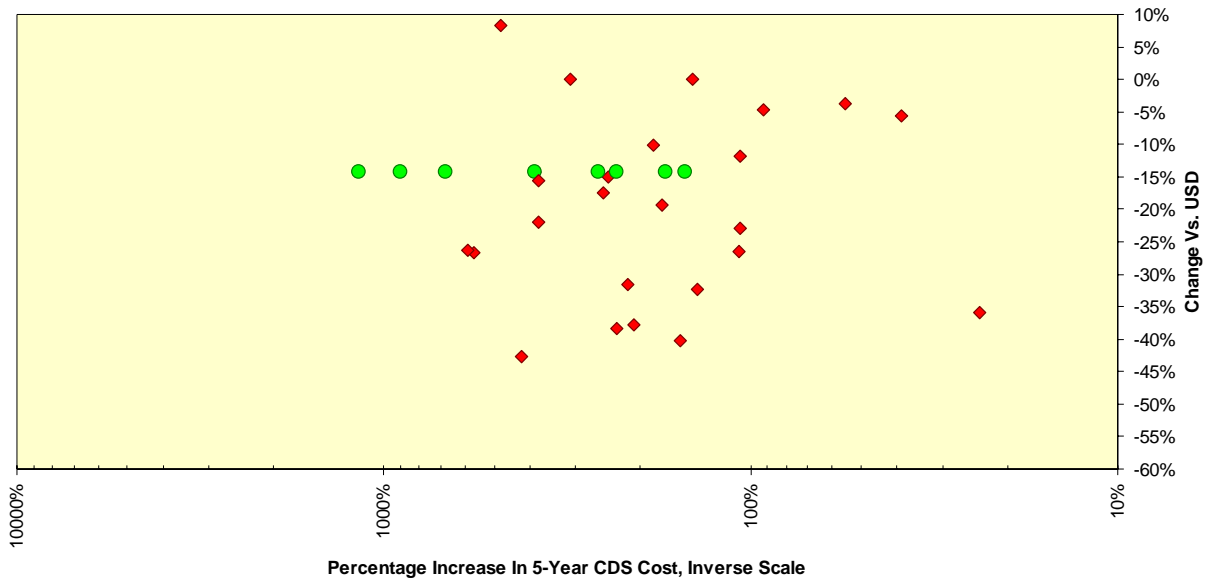
Prior to the investing debacles of 2008, many might wonder if the CDS market could have existed on another planet for all it affected individual portfolios. We all learned the hard way the impact was huge. We can see in Chart 2 how deteriorating credit quality affects the total return expressed in U.S. dollars for each country's stock market. If we plot the total returns against the percentage increases in CDS costs extracted from Chart 1 and plot them inversely on a logarithmic scale, we see a definite trend toward rising credit risk leading to poorer stock market performance.

**Chart 2: National Equity Market Responses To Credit Default Costs**  
July 11, 2008 - March 23, 2009



Can the same be done for changes in each country's currency? Here the answer is, "No," and for a subtle reason. The random relationship seen in Chart 3 (the eight nations using the euro in the sample are marked with green circles) reflects the consequences of deteriorating sovereign credit quality on a nation's interest rates. Those higher short-term interest rates tend to support a country's currency, all else held equal.

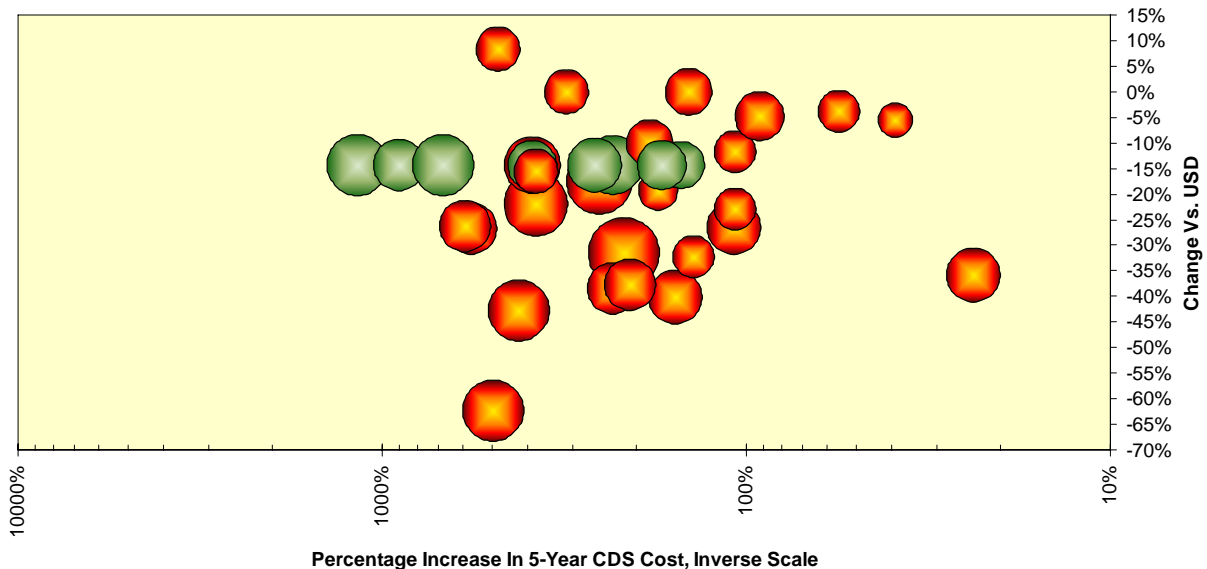
**Chart 3: National Currency Responses To Credit Default Costs**  
July 11, 2008 - March 23, 2009



**The Combined Effect**

However, those very same higher short-term interest rates should drag equity returns lower, all else held equal. This means we should see a definite pattern in equity returns mapped against the combination of currency changes and percentage changes in CDS costs: The greater the CDS percentage increase and the worse the change in the currency are, the poorer the performance of the equity market should be. If we use bubbles to represent the magnitude of the equity market decline, with larger bubbles corresponding to worse performance, we should see larger bubbles in the southwest corner of the chart below, and we do.

**Chart 4: Equity Returns As Function Of 5-Year CDS Costs And Currency Changes**  
July 11, 2008 - March 23, 2009

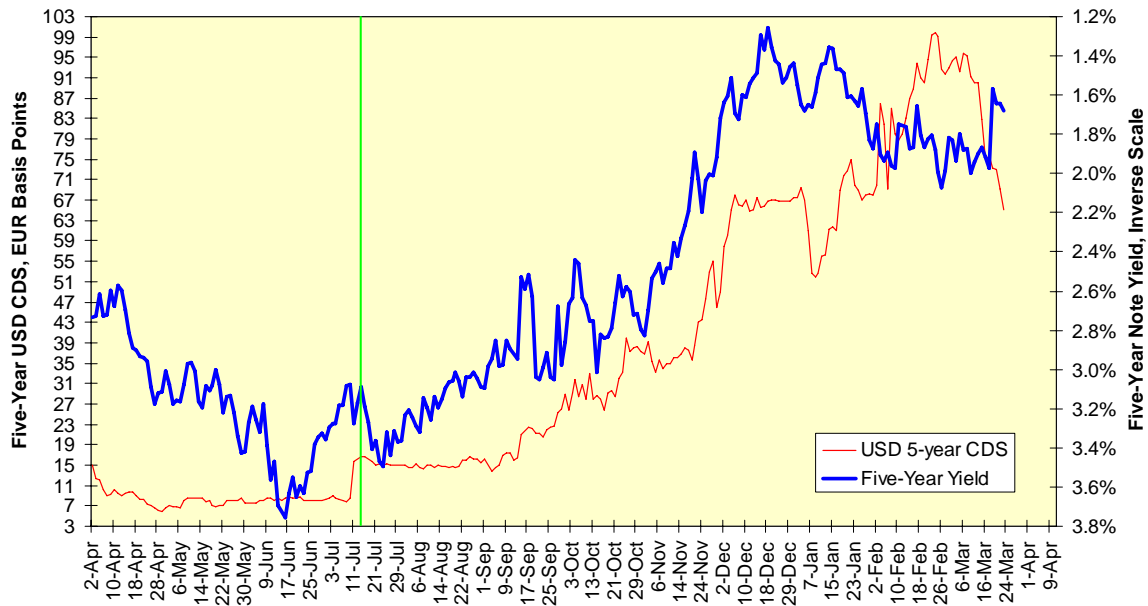


We can reach a simple and hopefully unsurprising conclusion: If governments believe they can solve long-term economic problems by over-extending their faith and credit up to and past the breaking point, they will do so at the cost of higher interest rates. Restated, governments will have to bribe investors with higher interest rates to support borrowing and to support currencies. Long-term economic growth and profitability – those positive stock market returns we all remember and would like to see again one day – will suffer as future investment is diverted into current consumption.

## Crowding Out

One of the worries expressed in the early 1970s when interest rates first started to rise was the Treasury was going to crowd out private borrowers by virtue of their higher credit quality. While this never really came to pass then, it happened in fact after the Treasury began to backstop Fannie Mae and Freddie Mac in July 2008. We can see in Chart 5 how as five-year CDS costs on U.S. Treasury notes rose, yields fell.

Chart 5: Five-Year CDS Costs And Yields



In the private sector, lower credit quality means you are a “junk” credit and have to pay more. In the public sector, apparently, greater systemic credit risk means the government’s debt is more attractive as investors flee to the printing press. If that sound like it is good enough for government work, well, it is government work.