YIELD CURVES AND SPREADS- MAKING A DIFFERENCE

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"Well, it seems to me that you have seen too much in too few years.
And though you've tried you just can't hide
Your eyes are edged with tears."
"19th Nervous Breakdown", The Rolling Stones

CONCLUSION

The 10 year versus two year spread on the United States government yield curve offers some insight into major economic and financial marketplace trends. US Treasury 10 year note spread relationships versus other instruments of similar maturity further confirm or signal major marketplace trends. The US of course is not the only nation with a yield curve, and America's debt playground is not the only relevant one. America is not the only country with painful fiscal troubles. However, both the UST 10/2 yield curve differential and important 10 year UST note intermarket spreads underline recent trends in stock benchmarks such as the S+P 500 (and in commodities "in general"). They also warn of US (and worldwide) economic weakness ahead.

THINKING POSITIVE: US TREASURY 10 YEAR LESS 2 YEAR

"If you ain't first, you're last. You know, you know what I'm talking about?" NASCAR driver Ricky Bobby, in the film "Talladega Nights: The Ballad of Ricky Bobby"

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Since the advent of the worldwide economic crisis in 2007, the US government yield curve from the short end to the long end has been positively sloped (10 year yields higher than those of the two year). Many voyeurs analyze not only the trend and level of yield curves, but also their relative steepness and flatness. Let's examine the Treasury 10 year less 2 year differential.

The initial high in the US Treasury 10 year note was 6/28/06 at 5.25 percent. Its final high was 5.32pc on 6/13/07. The bottom in the 10/2 year Treasury spread occurred between these dates. On 11/27/06 (when faith in Goldilocks economy rhetoric remained widespread and deep), 10 year Treasury yields were 20 basis points under (a negatively sloped, inverted curve) those of the 2 year government note (settlement prices, Federal Reserve and Bloomberg data).

The international financial debacle began in mid-2007. As the disaster spread around the globe and moved by fits and starts into gear into 2008, as the crisis moved well beyond real estate, the US yield curve's shape erratically became increasingly positive. It reached about 210 basis points on 3/6/08. Although the S+P 500 made its major high at 1576 on 10/11/07, substantial faith in economic growth remained. The S+P 500 made its final high on 5/19/08 at 1440 before resuming its decline. The Treasury spread dipped to about 120bp in June 2008. However, by autumn 2008, as the worldwide economic crisis worsened further, the 10 year versus two year rose to about 260 basis points over (11/13/08).

Yet next, in a climactic "flight to quality" panic, the UST yield curve spread then slumped to its final trough at about 125 points (12/26/08; about the June 2008 low). Compare the timing of some lows in commodities: Brent 3620 on 12/24/08, the London Metal Exchange Index/ base metals likewise on 12/24/08. The yield curve spread made another low, though higher than the

December 2008 one, at around 170bp on 3/18/09. Recall the related timing of the S+P 500's major bottom at 667 on 3/6/09.

What's happened since? With the Fed keeping policy rates near zero, as the American and global economies were somewhat repaired, this spread widened, peaking around 291 basis points on 2/22/10. This was a couple of months before the initial high in the S+P 500 on 4/26/10 at 1220 (recall the 4/5/10 UST 10 year top at about 4.00pc). The differential shrank- until the Federal Reserve unveiled its latest round of money printing in late August/November 2010 (while refusing to raise the Federal Funds level). It reached a low of about 196bp on 8/26/10 (the US 10 year low of 2.33pc was a bit later, on 10/8/10). Note the key low in the S+P 500 at 1040 on 8/27/10 alongside this spread bottom. Remember also the related commodity rally, as well as the continued depreciation of the broad real trade-weighted dollar.

The Treasury curve then became more positively sloped, achieving key highs just under the 2010 top. Around 2/4/11, it was almost 290bp. The initial 2011 high in the S+P 500 was not long after this, on 2/18/11 at 1344 (recall the US 10 year high 2/19/11 at 3.77pc). As the government spread edged lower, the S+P 500 peaked at 1371 on 5/2/11 (10 year UST high 4/8/11 at 3.61pc). On 7/1/11, the Treasury spread made another top at 270 basis points (UST minor top that day at 3.22pc; gold takeoff point also that day, from 1477). This was just prior to the S+P 500's 7/7 (1357) and 7/21/11 (1347) tops. As stocks since then tumbled, the Treasury spread has shrunk to around 190bp.

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Yield curves change shapes and reach levels for all sorts of reasons. Examination of multiple marketplace moves at various times around the world surely would reveal much. But let's first nevertheless leap to a few conclusions in the current context regarding the movement of the 10 year less two year Treasury spread.

The narrowing in the Treasury spread since early 2011 confirms and intertwines with the decline in stocks (and commodities in general) and growing fears of economic weakness in the US (and elsewhere, especially Europe).

The recent "flight to quality" scramble moved the spread to just under the key August 2010 195bp bottom. The Fed probably recalls the fall in the spread to about 125bp at end 2008. Thus a decisive breach of the August 2010 level alongside a decline in the S+P 500 toward 1000/1050 probably will spark another furious Fed easing effort, whether by money printing (QE3) or otherwise.

Note the broad real trade-weighted dollar has made new all-time lows over this period. The Fed's dogged determination to keep short rates pinned near the floor as it happily printed money in its quantitative easing rounds hardly encouraged confidence in the US dollar.

The Fed's stubborn refusal to raise the Federal Funds level during the recovery from 2009 to the spring of 2011 not only helped to keep the 10/2 year Treasury spread wide, in contrast to the spread trend after August 2003. What does this difference in behavior suggest for the current economic crisis (2007-present) relative to the post-2003 period? In this context, recall that the lowest level for the Fed Funds rate during the prior major weakness in the economy was one percent (obviously somewhat higher than now). That depressed level lasted about a year (July 2003 to July 2004). Compare the duration of near zero Federal Funds in more recent times. Not only has this persisted for over two and a half years, from December 2008 to the present. The Fed on 8/9/11 indicated its view that very low levels would persist into mid-2013. This displays the

significantly greater fears of the Fed and its allies about weakness in the economy (the recovery; despite the rally in the stock marketplace and strong corporate earnings), the banking system, and the consumer balance sheet.

With Federal Funds and therefore other short term rates being held at rock bottom levels (though negative interest rates are not impossible), the spread faces notable barriers. Anyway, prior highs in the UST spread display resistance in the spread at a positive slope of 260 to 300 basis points.

Indeed, the Fed's managing and maneuvering of policy rates is impressive. Some may wonder why America often complains about OPEC's efforts to manage crude oil prices or China's quest to maneuver its exchange rate. Let's avoid the dreadful "manipulation" label in regard to altruistic policy actions by all such dedicated public servants.

Support for the 10/2 government yield curve spread is at 125 basis points. If the worldwide economy spun into deflation (recall Japanese 10 year yields beneath one percent), America's 10/2 spread could narrow further as long rates cratered.

However, consider other scenarios which could cause noteworthy US government yield curve shifts. What if the Federal Reserve's sustained effort to generate sufficient sustained inflation finally paid off, with perhaps more than it bargained for? Perhaps a belated effort to raise short rates to subdue inflationary dragons would narrow this spread. Yet how long will bond owners cheer loudly regarding two percent Treasury yields? Besides, if fiscal deficit spending problems also looked unsolved, long rates could keep advancing and the 10 versus 2 year UST spread might widen. Or, suppose there was another (additional) round of dollar weakness. At what point would America (US Treasury and the Federal Reserve) raise rates to protect the dollar?

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Compare the 2000 to 2003 track record and its aftermath with the current crisis era up through late 2008/early 2009. US equities peaked in first quarter 2000 (S+P 500 at 1553 on 3/24/00), with two year yields about 50 basis points over (negatively sloped curve) on 4/7/00. As the economy weakened, the government curve steadily became more positive, moving to around 225bp as equities made their lows in October 2002/March 2003. The final high in the 10/2 Treasury spread was about 275bp on 8/13/03. As the economy recovered and the Fed raised short term interest rates, the 10 versus 2 year spread narrowed notably.

In both periods, the 10 versus two year yield spread action involved shifts from a negatively sloped curve to a positive one. High (wide) positive spread levels are comparable in basis point terms. One can associate the shifts in slope from negative to positive in broad brush terms with economic weakness (use the S+P 500 as a proxy for the economy), with the 2000 move confirming it and the 2007/08 one warning and then confirming it. The great yield spread narrowing in 2008, however, involved a substantial flight to quality panic.

Thus the yield curve patterns nevertheless do not duplicate each other, including in relation to equity moves. So one should be wary about making strong generalizations about the 10/2 UST spread relationship apart from specific contexts. Review of other interest rate relationships, such as spreads between various 10 year instruments and the 10 year US Treasury note nevertheless offers help in interpreting the 10/2 UST yield curve spread and related economic and marketplace trends.

QUALITY TIME: TEN YEAR SPREADS

"Well, I tried to live the way I should
I've shed some tears and sweated blood
Don't you know babe?
And I think it's time I took a break
'cause I have took all I can take." "Working on the Road", by Ten Years After

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Across various parts of the yield curve, traders and other observers compare instruments of similar maturity. A popular time benchmark is 10 years. Given the variety of nations and marketplace sectors, potential quality comparisons are numerous. A survey of a handful underlines the ability of such spreads to shed light on economic conditions and various marketplace trends.

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The 10 year corporate industrial BB (generic series; Bloomberg data) yield exceeded the US Treasury 10 year at a lofty peak of about 910 basis points (corporates over) on 3/9/09. This was almost the exact day of the S+P 500's major bottom on 3/6/09 at 667. The yield differential represents a long ascent from its valleys during the blissful Goldilocks era; recall, for example, 11/29/06's 185bp.

In the prior economic downturn, this quality spread made its low at 490 basis points on 10/11/02, near the time of the initial trough in stocks (S+P 500 10/10/02 at 769; final low 3/12/03 at 789).

The much wider spread level between the 10 year corporate industrials and the 10 year UST in 2009 hints that, even allowing for 2008/early 2009 flight to quality rush to Treasuries (12/18/08 ten year UST low about 204), the overall economy in 2009 was in much rougher shape then than in the prior time.

In the global arena, America's economy, marketplaces, and policies of course do not race alone. Nevertheless, sustained low US government interest rates, massive federal deficit spending, the Fed's festive money printing, and a weak dollar policy ignited and helped to propel the United States and worldwide economic recovery since 2009.

As the recovery gathered speed after 2009's equity lows, this corporate versus UST spread tightened substantially. On 4/5/10, it reached about 290 basis points (compare the differential in mid-2008 around 300bp before the economic crisis accelerated). In any event, this April 2010 level was not long before the S+P 500's interim high on 4/26/10 at 1220 (10 year top 4/5/10 at 4.00pc). The credit spread then expanded to around 400bp, but the Fed mechanics greased the economic wheels with further wonderful quantitative easing. With nominal US government yields still relatively low, and a supposedly good economy, perhaps some yield hunters found corporate debt alluring. The spread made lows on 2/22/11 and 4/7/11 around 240bp.

However, the US and other economies have hit a few of those supposedly inevitable bumps in the road and equities have suffered some severe scrapes (S+P 500 low 1101 on 8/9/11 is about a 20 percent fall from it May 2011 peak). Thus the corporate versus Treasury spread has widened out to about 350bp recently. Sustaining a move under the 400bp level or so would be a danger sign for the economy.

But is this 10 year industrial sector corporate note approximately representative of the American corporate field in general? Judging from another spread relationship versus the UST 10 year, it probably is. The Fed reports Moody's Baa index, which contains corporate bonds from various sectors, not just the industrial one. Although these have an average maturity of 30 years (and a minimum of 20 years), the spread trend relative to the UST 10 year is similar to that of the generic BB corporate industrial.

Using monthly averages, the spread between the Baa index and the 10 year Treasury rose from about 155 basis points in February 2007 to 600bp in December 2008. Although it shifted down to 240bp in April 2010, it widened to almost 320bp in October 2010. The differentials (based on monthly averages) narrowed for several months, reaching 255bp in April 2011. However (and using daily data), in mid-August 2011 it stretched out to about 315bp. So watch the current level relative to the October 2010 monthly average (and the daily close high of about 330bp on 11/10/10).

Monitor credit default swaps for US (and European) corporate (and sovereign) entities to assess economic strength and corporate versus government spread trends. There are assorted CDS indices, so take the following examples as guidelines. Corporate CDS levels have risen in recent weeks. This roughly parallels the fears of economic weakness (stock marketplace declines) and the widening 10 year corporate versus Treasury spread.

The Markit CDX North American Investment Grade Index of 125 investment grade entities rose from around 50 basis points in mid-2011 to about 120 recently. Nearly four years ago, on 10/9/07, as the S+P 500 climbed to its 1576 pinnacle on 10/11/07, it was merely 45 points. As the S+P 500 made its March 2009 low, so did this index. It peaked on 3/9/09 at 300. Look also at the Markit CDX North American High Yield Index of 100 non-investment grade entities. Its 3/9/09 high was around 1925. Although this index dropped substantially to just under 400 in early 2011, it recently spiked to around 700.

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Compare US stock dividend yields with those of short and long term UST. If US stocks cannot sustain rallies with short term UST bill and note rates at or not much above zero, what does that say about economic health?

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How about the municipal bond marketplace relative to Treasuries? The US federal fiscal situation of course is not great, but that of many municipalities (and states) likewise is rather messy. The 10 year general obligation municipal BB versus UST 10 year spread (municipals over Treasuries; Bloomberg dats) reached almost 420 basis points on 3/18/09, around the time when the S+P 500 made its final low and the economy hit bottom. Though this quality spread narrowed to 76bp (municipal yields over) on 3/25/10, it has been widening gradually since then. Though it was still around 115bp at the end of June 2011, this spread has since deteriorated to over 180 basis points. A move over the 200/225bp range would underline growing fears regarding economic recovery. In the good old days before the crisis, 10 year UST yields reached 80bp over these municipal ones (6/12/07).

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Suppose capital-raising (borrowing) gets more and more difficult for corporate entities or sovereigns. Language of credit crunch probably will surface. American consumer net worth remains significantly beneath the heights reached before the worldwide economic crisis. Many fear the revival of a crushing recession.

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In the recent European sovereign debt and banking crisis, gurus have analyzed and extensively commented upon 10 year (and other maturity) government spreads between various European sovereigns. Think of the Greece (or Ireland or Portugal) versus Germany 10 year sovereign spread, or the Spain (or Italy) versus Germany differential. The pattern has captured headlines. German rates reside below those of these countries. The greater the sovereign debt fears, the wider the yield spread.

Observers compare America's 10 year Treasury note against other national debt yields around the globe. Let's focus on the 10 year UST note against a 10 year German government one.

As the worldwide economic crisis sped up in late 2008, this spread eventually moved significantly. The US rate was above the German one before the onset of the crisis in 2007. In mid-2007, it was about 50 basis points over. But in the flight to quality panic, US rates fell almost 90 basis points under Germany's. (12/30/08). Compare the roughly similar 75bp under level for the UST on 10/9/02, around the time of the S+P 500 low then.

During the recovery that commenced in 2009, the UST regained its yield premium, making a high of 90bp (the mirror image of the end 2008 level) over the Bund on 4/5/10. The spread has sagged lower since then, with the US premium making lower highs (52bp in early January 2011, then about 35bp in late July 2011). It is around flat with the Bund now. Yet on a few days in recent weeks, it has been slightly negative. The UST less German government bond spread shift from a premium to negative is consistent with signs of US (and arguably even European) economic weakness. A sustained shift of UST yields under German ones in the current environment, and especially a march toward December 2008 ones, would hint at a fairly noteworthy economic downturn.

However, history is not destiny in spreads, including this German/US sovereign spread. Admittedly Treasuries offer some an apparent safe haven against the crumbling of parts of the international banking (financial) system. Yet with the US ten year yielding about two percent and current US inflation levels around that, and with the Fed determined to create inflation of around two percent, how eager will Chinese, Japanese, and other holders of US government debt be to keep being net buyers of it? We all know that shorter term UST yields are even less. What if foreigners become net sellers of Treasuries? Or, suppose the US dollar weakens sharply from current levels. What if this is not only on a broad real trade-weighted basis, but also against the Euro FX as well? What if America engages in another substantial round of money printing (or some other clever easing), and that the European Central Bank does not follow suit?