THROWING CURVES: THE FRIENDLY FED'S YIELD CURVE GAME

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"When you're down and troubled and you need a helping hand,
and nothing, whoa, nothing is going right.
Close your eyes and think of me and soon I will be there
to brighten up even your darkest nights.
You just call out my name, and you know wherever I am
I'll come running to see you again.
Winter, spring, summer, or fall, all you got to do is call, and I'll be there, yeah, yeah, yeah.
You've got a friend." "You've Got a Friend", a James Taylor song

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TAKE ME OUT TO THE BALL GAME

In professional sports such as baseball and Wall Street's competitive marketplaces, history is not destiny. However, "the past" and variables apparently relevant to it need not be discarded as being of little or no importance, relevance, or guidance for current and future playgrounds. During the worldwide economic crisis that dawned in mid-2007 and the ensuing recovery, noteworthy moves in the 10 year less two year United States government yield spread often have roughly coincided with significant Federal Reserve Board policy decisions (and several months ago with major European Central Bank ones). These US Treasury yield curve ventures (trend changes) generally have occurred around the same time as significant moves in the US Treasury 10 year note and the US stock marketplace (S+P 500). Many lows in the 10/2 UST yield curve spread have tied up with (occurred within a few months of) important S+P 500 bottoms; pinnacles in the spread likewise link up somewhat closely in time with plateaus in the US stock playground.

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The UST 10 year less two year spread probably established a major bottom on 7/24/12 at 117 basis points (10 year yield higher than two year return, so a positive yield curve; short rates over long rates creates a negative yield curve).

What would a further notable widening of the spread (steepening of the curve, more positive slope) from current heights around 165 basis points suggest to avid financial marketplace fans? Perhaps a sustained move in this 10/2 UST spread over around 200 to 210 basis points will indicate a renewed (further) strengthening of the US (and worldwide) economic recovery.

However, that upward path over 200/210 basis points instead may warn of impending economic weakness. This viewpoint is not necessarily as off base as some may claim. One needs to focus on whether America is a key source of and significant spark for likely global (not just US) feebleness.

In that regard, recall the shift from 6/12/08's 117 basis point low (same as 7/24/12's) up to 11/13/08's 262bp as the financial crisis raced forward (Lehman Brothers bankruptcy 9/15/08). The US housing and financial leverage (banking system) problems were critical issues (though of course not confined to the US), even though the US (and the world in general) did not in mid-2008 yet face major fiscal troubles.

Why might the 10/2 UST spread widen (as in mid-June to mid-November 2008) nowadays or in the near or medium term? In some circumstances, there can be a dismal widening of the UST spread (and higher long term rates) accompanied by little or no economic growth (or even a recession). Suppose the current US (and international) economic horizon darkened significantly. Assume a big fiscal difficulty in the US is a major factor in this bleak outlook. Then maybe this time around, when economic downturn risks in general still loom large, there will not be as nearly as substantial a flight to quality into UST as there was at end 2008 (after mid-November) and as there has been at subsequent economic (downturn) crisis periods since then up to the present time. Thus this setup probably would produce an outcome for the 10/2 yield spread very unlike its pattern during the previous substantial financial deteriorations of the mid-November 2008 to the present time span. Many players (especially international ones) may not view the UST as wonderful quality (especially when nominal yields are so mediocre) if the US may or does become the star of a fearsome fiscal problem and related systemic economic crisis.

If potential UST buyers do not readily come to bat and help America, the US may have to "pay up" (raise rates, especially long ones) to attract capital. Recall that in the deep gloom of Europe's recent (and ongoing) debt crisis, interest rates for many sovereigns (such as Greece, Portugal, Ireland, Spain, and Italy) flew higher.

In this context, if the US balks at raising UST rates sufficiently, or does not do so quickly enough, that risks another round of US dollar depreciation. After all, America's ongoing yield repression and money printing policies for some time have encouraged and sustained dollar weakness. The broad real trade-weighted US dollar ("TWD") was about 83.8 in February 2013 (monthly average). Not only is this well below March 2009's peak at 96.9 (compare the timing of the 2009 S+P 500 bottom). It also is beneath June 2012's minor top at 86.3. Optimists may point out that the current level does edge over July 2011's record low of 80.5. However, the TWD's February 2013 depth remains under the prior major support level around 84.0 (lows in October 1978, July 1995, and April 2008).

If the foreign buyers and the US public did not come to the plate and buy UST in sufficient quantities, maybe the trusty Fed would have to print even more money so that it could make up the difference! Might this risk inflation (and higher rates, especially at the long end of the curve)?

Of course the US probably would not be alone on the field in this fiscal crisis (and the entangled overall economic one). European and Japanese are not sitting on the bench in this world series of debt; their fiscal problems remain (and their economies are fairly weak too).

In this predicament, rising US interest rates (use the 10 year UST as the benchmark) alongside a widening 10/2 UST spread (since the Fed probably would react relatively slowly in raising the Federal Funds rate) would no longer warn of economic strength (as has been the rough relationship during the recovery from around March 2009). Instead, it would be a sign (confirmation) of a current or upcoming downturn (or very mediocre recovery).

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Yet the history of the past several years also warns that a slump in the 10/2 UST spread back close to around the July 2012 bottom probably signals US (and global) economic weakness as well.

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Suppose the current major league US fiscal problem does not deteriorate in the relatively near term into a disaster. Assume also that Federal Reserve all-stars and other considerations manage

to get American and worldwide economic growth to climb more sharply upward. Then the 10/2 UST spread may need to swing up close to the prior high range of 260 to 290 basis points for that relationship to attain a top and thereby portend significant economic weakness.

WARM-UPS

As the interpreter and thus the umpire in practice of its own mandate, the Federal Reserve Board decides and acts upon its personal vision as to what's best (appropriate, desirable) in the American monetary policy game.

The friendly Fed's long-running and highly accommodative policies such as manipulating interest rates lower and massive money printing have won applause from much of Wall Street, the majority of Main Street, most United States political players, and the financial media. After all, these maneuvers have helped to spur economic growth, mend consumer balance sheets (net worth), and spark and maintain a huge rally in the S+P 500. The Fed's victorious yield repression quest, keeping the Federal Funds rate near zero for over four years, has assisted debtors (and borrowers), though it has been far less popular with creditors (and savers). In an environment with US inflation running in the ballpark of about 1.5 to two percent, much of the US Treasury yield curve in recent times has offered negative or only mediocre real returns.

The Fed Funds rate has rested almost on the ground since December 2008 at less than .25 percent (monthly average). The major low in the UST two year on 9/20/11 was a paltry .14 percent; it has rotated close to .25pc since then. Compare 6/13/08's 3.11pc summit. What about the UST 10 year? It stood at 5.32pc on 6/13/07, but slumped to a major low on 7/25/12 low at 1.38pc. The bottom in the 30 year UST was 7/26/12 at 2.44pc; recall its relatively lofty 6/13/07 high at 5.44pc.

And via their very strong grip over the Federal Funds rate, manager Chairman Bernanke and his FOMC lineup have major league power over the shape and steepness of the US government yield curve. Their allegedly benevolent influence is especially strong over the short end of the yield curve; picture instruments with around two years or less to maturity. Their yield repression on the short end of the yield curve also encourages yield repression on the long end, as does their massive buying of longer dated UST notes and bonds.

The Fed of course does not play alone. The Fed's rate repression program, its money printing spectaculars, and the US government yield curve's levels and shape intertwine with interest rate levels and yield curve patterns elsewhere. The Fed and its policies are of course not the only variable affecting US government yields, the interest rate playing field in general (think of other sovereign debt as well as corporate and municipal bonds), American inflation and unemployment rates, or stock, currency, commodity, real estate, and other commercial arenas. The Fed's key central banking teammates around the globe such as the European Central Bank, the Bank of Japan, the Bank of England, and the Bank of China have engaged in easing programs similar to the Fed's. And after all, obviously Congress and the President rather than the Fed play the key role in creating and solving US fiscal problems.

THE BOX SCORE

From the final innings of the glorious Goldilocks Era to the present, review the scorecard for the key highs and lows in the US Treasury 10 year less two year yield spread, the UST 10 year note,

and the S+P 500 in the context of Federal Reserve policy activity. Several European events are included as well.

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US Treasury Spread (basis points): 10 Year less 2 Year	Federal Reserve Policy, UST 10 Year Yield (percent), S+P 500, other factors
Negative 19 basis points 11/27/06	Goldilocks Era continues.
3/6/08 initial top 208bp	Goldilocks Era ends: mid-2007 to spring 2008. UST peak 6/13/07 at 5.32pc (then 10/15/07 4.72pc). Final S+P 500 top 5/19/08 1440 (10/11/07 peak 1576).
Slide to 117bp 6/12/08, then spike to 262bp 11/03/08	Stocks tumble. UST moves sideways, lows 3.28pc on 3/17/08 and 3.24pc 9/16/08, highs 4.27pc 6/13/08 and 4.10p 10/5/08. Acceleration worldwide economic crisis; Lehman bankruptcy.
Dive to 125bp 12/26/08	"Flight to quality" in UST, 2.04pc bottom 12/18/08. Fed finishes whacking down Fed Funds rate, touching around .25pc or less since December 2008.
Explosion to 276bp 5/27/09	QE1 money printing announced November 2008 and March 2009, start economic rally. S+P 500 major low 3/6/09 at 667. UST high 6/11/09 at 4.00pc.
Final high 291bp 2/22/10	QE1 ends March 2010. UST plateau 4/5/10 at 4.01pc. S+P 500 high 4/26/10 at 1220.
Fall to 196bp 8/26/10	Fed coaches pitch QE2 end August/November 2010. Final low S+P 500 8/27/10 at 1040. UST low 10/8/10 at 2.33pc.
Curve steepens to 289bp 2/4/11, then drops off from 271bp 7/1/11	QE2 closes June 2011. S+P 500 top 5/2/11 at 1371, then 7/7/11 at 1357. UST peak 2/9/11 3.77pc, then 3.61pc 4/8/11 and 3.22pc 7/1/11.
Lows 152bp 9/23/11, 158bp 12/19/11	Operation Twist 9/21/11 announced. This policy of selling the short end of the UST curve while buying the long end tends to boost short term yields and reduce long rates. Yet since Operation Twist aims to produce economic growth while the Fed also (alongside Twist) still violently represses short rates, arguably Twist in practice has a countervailing tendency, in which long term UST rates rise relative to short term ones. Anyway, 10 year UST yields go sideways to up after Twist (lows 1.67pc on 9/23/11 and 1.79pc on 1/31/12; tops 2.42 on 10/28/11 and 3/20/12 at 2.40pc). S+P 500 low 10/4/11 at 1075 just after Operation Twist unveiled.

	European Central Bank long-term refinancing operation (LTRO) of low interest loans announced 12/8/11 (two rounds, 12/21/11 and 2/29/12). Akin to money printing, this ECB policy assisted confidence in European (and thereby US) recovery and thereby helped UST 10 year yields to rise). Note the timing of Operation Twist and the LTRO alongside the 9/23/11 and 12/19/11 UST spread lows.
Highs 209bp 10/27/11; 200bp 3/19/12	UST highs 10/28/11 at 2.42pc and 3/20/12 at 2.40pc. S+P 500 interim high 4/2/12 at 1422.
Key bottom 117bp 7/24/12	ECB President's 7/26/12 "whatever it takes" speech to preserve the Euro. Peak in Spain less Germany sovereign 10 year spread 638 basis points 7/24/12. Major low 10 year UST 1.38pc 7/25/12. ECB's Outright Monetary Transactions (OMT) announced 8/2/12 (framework 9/6/12). Also recall some earlier price action and relationships close in time to the 117bp bottom in the 10/2 UST spread. The 10/2 spread made an initial low on 6/1/12 at 121bp. See the UST's initial low on 6/1/12 at 1.44pc alongside German Bund's bottom that day at 1.13pc. S+P 500 low 1267 on 6/4/12.

What's happened since midsummer 2012? On 9/13/12, the generous Federal Reserve, to the relief of most financial audiences, hurled in another round of money printing, announcing QE3 on 9/13/12. Yet the 10 year less two year spread, rather than widening due to this helpful Fed effort, dropped from 162bp on 9/13/12 to 134bp on 11/16/12. The UST likewise moved lower from its 1.89pc minor top on 9/14/12, touching 1.55pc on 11/16/12. This pattern beginning in mid-September ominously broke the previous ones, surely displeasing the kindly and eternally vigilant Fed, and arguably warning of the fragility of the recovery and the fading efficacy of Fed money printing efforts. The S+P 500 similarly stumbled on its basepath. From its 9/14/12 top around 1475, rather than joyously rallying, it fell to 1343 on 11/16/12, thus heading toward its 6/4/12 low at 1267.

Many asked if the Fed would be there again real soon to help! The fearful yet resolute Fed decided to play hardball via its easy money policy yet another time. On 12/12/12, this guardian angel offered even more money printing (QE4) plus a bonus of additional forward policy guidance details (inflation and unemployment number specifics). It felt brave enough to allow Operation Twist to expire gracefully at the close of calendar 2012.

Since the big hitters at the Fed scrambled into action in mid-December 2012, the UST 10 year less two year spread has widened according to plan, reaching a high since then on 2/19/13 at 176bp. The 10 year UST yield paraded over its 9/14/13 peak, reaching 2.06pc on 2/14/13. The S+P 500 likewise advanced upward, making a high to date near 1539 on 3/5/13 (as of around 10am). As a footnote for monitoring potential trend changes for the S+P 500 in the near term, recall some important anniversaries of trend changes during calendar March. These include the

3/6/09 major low at 667, the 3/12/03 final low (at 789; major low 10/10/02 at 769) and the 3/24/00 major high at 1553.

NUMBERS AND GAMES: A VIEW FROM THE BLEACHERS

In the film "Wall Street" (Oliver Stone, director), Gordon Gekko claims: "It's all about bucks, the rest is conversation."

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Does the Federal Reserve have a policy regarding (closely related to) the 10/2 UST spread?

The Fed's repressive yield game aims to keep interest rates low all along the UST curve, so it probably has no specific target for the 10/2 spread (whereas it does for Federal Funds). However, US inflation measures around 1.5 to 2.0 percent and the enlightened Fed wants to achieve at least two percent inflation while it keeps the Funds rate pinned at very low levels. So the 10 year probably will not easily dive beneath its July 2012 floor. Consequently, the Fed has an implicit near term policy for the 10/2 UST spread on the low side. It will be difficult for the spread to fall much below the 117bp lows anytime soon.

On the high side for the UST 10/2 spread, divining an implicit Fed policy is more difficult. However, assume the Fed's current inflation goals and continued economic growth, and picture the two year UST yield staying at a base of around .25pc to .50pc. The Fed probably would be content with a 200 to 210 basis point differential. The 200/210bp range stands about midway between the crisis trough and its peak. The peak differential since the two year UST made its low in September 2011 is around 200bp (209bp on 10/27/11 and 200bp on 3/19/12). The Fed might be somewhat wary of a sustained move over 210bp in the current environment (with the two year yield around .25pc). Would this spread travel over 210bp or so always be a sign of a strong recovery? Or could it in some circumstances suggest emerging inflation fears, or in other settings be a warning of increasing dangers on the federal fiscal field?

Suppose the two year note walks to as much as one percent (even though the Fed may not easily permit that yield to occur in the near future). With inflation around two percent, that 200 to 210 point spread will not worry Fed sentinels much so long as the recovery seems robust, since the 10 year UST yield around three percent would only modestly exceed the inflation rate.

However, a stretch in the 10/2 UST spread up to the 260 to 300 basis point range surely would capture the heroic Fed's attention. For the recent economic crisis, recall 262bp on 3/6/08, 276bp on 5/27/09, 291bp on 2/22/10, and finally the 289bp on 2/4/11. Not only were these significant summits for the differential during the recent economic crisis. Similar highs occurred in the more distant past. Note the 268bp high on 7/14/92 and the 274bp on 8/13/03. The average of these six peaks is about 277 basis points.

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The history of the 10 year UST note entwines with Federal Reserve policy and the behavior of Federal Funds and the 10/2 UST spread. What are some near term key support and resistance levels for the UST 10 year?

**Recall the lows of 1.38pc (9/23/11) and 1.44pc (6/1/12). Note also 9/23/11's 1.67pc. A ten percent move under the 1.38pc low gives about 1.25pc. In watching the 10 year UST to ascertain

its key support and resistance, don't overlook the 30 year UST. The bottom in the 30 year UST was 7/26/12 at 2.44pc (compare the 30 year's 2.51pc on 12/18/08).
**Half of several peaks around four percent from autumn 2008 through spring 2010 equals two percent. 2.04pc was the 12/18/08 bottom. See the price gap in the 10 year at 2.14/2.07 (4/5 to 4/9/12), as well as the recent high on 2/14/13 at 2.06pc. The 30 year UST is not far out in left field; its recent high was 2/4/13 at 3.25pc.
**Note the 2.35pc to 2.50pc range. 2.33pc was the 10/8/10 bottom, and 2.47pc on 3/18/09 was the point from which 10 year UST yields soared not long after the major low on 3/6/09 in the S+P 500. 2.42pc was the 10/28/11 top, 2.40pc the 3/20/12 one.
**Key resistance levels for the 10 year above this are: 3.05pc to 3.30pc, 3.75pc; 4.00/4.25pc.

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While sitting attentively in the current financial stadium, a marketplace spectator may decide to pick out a particular yield for the two year note such as .25pc. It then can add what it deems an appropriate differential to it, thus generating a target for the 10 year UST. It may employ historical differentials (key turning point levels) for the spread as a guideline, perhaps coloring its view with an assessment of Federal Reserve policies. Thus .25pc plus 117 basis points gives 1.32pc for the 10 year UST. Adding 200 to 210bp to the two year's .25pc makes the ten year UST yield 2.35/2.45pc.

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The sequence of choices made by the loyal, brilliant, wise, and diligent Fed in the implementation of its beloved exit strategy and the marketplace responses to those decisions will influence both outright UST yield levels and various UST yield curve relationships.

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Watch credit spreads of corporate debt (particularly junk bonds), municipals, and mortgage securities against the comparable UST marketplace. Suppose credit spreads between UST and corporate bonds widen significantly. Suppose further that this outcome involves a notable bounce up in non-government debt yields without any flight to quality in the UST marketplace. Since the Fed has long been engaged in yield repression, this credit spread move may be a sign of pressure on the Fed to (finally) shift the Federal Funds rate and the overall UST curve upward.

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Yield curves are not inevitably positive. The UST yield curve at times was negative prior to November 2006. Remember the 10 year less two year negative yield of 51 basis points on 4/7/00 (not long after the S+P 500's 1553 pinnacle on 3/24/00). Recall also the negative slope at 44bp on 3/29/89. Roughly three decades ago, it became very negative for quite some time, falling under 200bp in 1980 as the Federal Reserve battled inflation.

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