

The New Bond Market Vigilantes

The bond market once again leads the Fed—
but this time by lowering yields

Highlights

- “Bond vigilantes” rose to prominence in the late `80s and early `90s for their ability to raise rates in response to accelerating growth and rising inflation pressures. These vigilantes are at it once again, driving yields in advance of any actual policy change by the Fed. But this time around, they’re pushing rates *lower* rather than *higher*.
- The bond market typically moves in anticipation of *any* shift in Fed policy. In virtually every instance bond yields have risen prior to Fed tightenings, declined prior to easings—on average 52 basis points ahead of tightenings and 151 basis points ahead of easings. And they have tended to occur well in advance of the actual policy shift by the Fed. On average, yields have risen 2 months ahead of the first rate hike, declined about 4 months before the Fed first begins to ease.
- Although the Fed raised the nominal funds rate by just 25 basis points during 1997, the continued deceleration of inflation pressures coupled with a further strengthening of the dollar has resulted in a de-facto tightening of policy. The *real* funds rate has risen to the highest level since 1990, and suggests that monetary policy may now be approaching overly restrictive territory.
- The Treasury coupon curve flattened fairly steadily throughout most of 1997. Historically, flat/inverted yield curves have been fairly reliable indicators of a coming decline in bond yields. This most recent curve flattening appears to support the view that *the next major policy shift by the Fed is more likely to be a series of rate cuts rather than rate hikes*.

In the late 1980s and early 1990s the so called “bond vigilantes” rose to prominence (repute?) for their perceived ability to engineer what the Fed appeared reluctant to do—raise interest rates in response to accelerating growth and rising inflation pressures. Consistently over the past decade and a half, bond yields have risen well in advance of any actual tightening of monetary policy. The presumed influence of these market movers became such that Fed policy was (erroneously) deemed by some to have become nearly irrelevant. Not to worry, the accepted wisdom went, the bond vigilantes would administer the appropriate

dose of monetary medicine as needed. The Fed, however, finally appeared to have seized the initiative last Spring when the funds rate was raised 25 basis points in response to still strong growth and continued tightening of labor market conditions. The move to tighten against a backdrop of *decelerating* finished goods inflation and an absence of pipeline price pressures was hailed as a truly preemptive strike, and seen as evidence that the Fed had finally gotten “ahead of the curve.”

It now appears, however, as if the Fed may have fallen behind the curve once again. The bond vigilantes are

driving yields in advance of any actual policy change by the Fed. But this time around, they're pushing rates *lower*. That is, the vigilantes have already begun the process of *easing* prior to any rate cuts by the Fed. Although the Fed raised the nominal funds rate by just 25 basis points during 1997, the continued deceleration of inflation pressures coupled with a further strengthening of the dollar has resulted in a de-facto tightening of policy. The *real* funds rate has risen to the highest level since 1990, and suggests that monetary policy may now be approaching overly restrictive territory. What's more, the flattening of the coupon curve is indicative of still lower bond yields in coming months. While it's still a bit early to be talking about a *near-term* rate cut—in fact, the Fed remains officially biased toward tighter policy—it is likely that *the next major sustained policy move will be an easing*. High real rates coupled with growing concerns over the prospects for a global deflation mean that the Fed will be prompted to cut rates aggressively once the pace of domestic demand growth begins to slow. Therefore, look for bond yields to fall still lower in the months ahead as expectations shift away from the potential for a near-term rate hike, and increasingly toward the prospects for rate cuts. This is along the way toward 5% bond yields by the turn of this decade (see “*Five at the Turn*,” March 21, 1993), and into the mid-4% range by early in the next decade (see “*Fours Before Long*,” February 2, 1996).

The new Vigilantes

Although the term “bond vigilante” only became part of the popular vernacular in the late 1980s, bond market vigilantism is as old as the bond market itself. The fact is that the bond market has typically moved in anticipation of any coming shift in Fed policy. Table 1 and Table 2 reflect the movement in bond yields prior to major policy changes by the Fed over the past decade and a half. As Table 1 illustrates, in every instance in the post-Volcker era, bond yields have declined prior to Fed easings. Likewise, Table 2 illustrates that yields have also tended to rise ahead of any major tightening moves. Not only have these yield movements been substantial (averaging 151 basis points ahead of easings and 52 basis points ahead of tightenings), but they have also tended to occur well in advance of the actual policy shift by the Fed. On average, yields have declined about 4 months before the Fed first begins to lower the funds rate, and have risen more than 2 months ahead of the first rate hike. So while the term “bond market vigilante” is appropriate, it's usage has been misleadingly one-sided. Because just as the vigilantes have registered their protest with Fed foot dragging by pushing rates higher ahead of actual tightening moves, they have

been even more aggressive in driving yields lower when a more accommodative policy stance is warranted. The recent flattening of the coupon curve may be signaling just such an outcome.

Table 1

Bond Yield Changes Prior to Easing

Start of easing cycle	No. of rate cuts	Total rate decrease	Date of yield peak before rate cut	Days from yield peak to easing	Yield decrease peak to easing
May-82	4	600 bp	2/9/82	98	151 bp
Nov-84	9	413	5/30/84	161	241
Nov-87	3	81	10/19/87	16	122
Jun-89	23	681	3/20/89	78	87
Jul-95	3	75	11/7/94	241	156
Average	8	327 bp		119	151 bp

Source: Federal Reserve Bank of New York, DRI.

Table 2

Bond Yield Changes Prior to Tightening

Start of tightening cycle	No. of rate hikes	Total rate increase	Date of yield trough before rate hike	Days from yield trough to tightening	Yield increase trough to tightening
Mar-84	2	200 bp	11/16/83	132	86 bp
Jan-87	4	140	12/10/86	23	17
Mar-88	10	330	3/3/88	27	45
Feb-94	7	300	10/15/93	112	53
Mar-97	1	25	12/3/96	112	59
Average	5	199 bp		81	52 bp

Source: Federal Reserve Bank of New York, DRI.

Flat Chance

The yield curve flattened fairly steadily throughout most of 1997. However, the most acute narrowing of spreads across the coupon curve occurred from mid-August through mid-December. From +73 basis points back on August 15, the spread between 30-year bonds and 2-year notes had narrowed to just +21 basis points on December 22. But even this measure actually understates the degree to which yields across the curve had converged, since virtually all of the curve's spread could be found between the 30-year and 10-year sector. In fact, from mid-December through the beginning of January, there were several instances of partial inversions across the front of the coupon curve—the 5-year trading through the 3-year. Why so much focus upon the flattening of the coupon curve? Because while there are no shortage of oft conflicting theories to explain what this flattening of the yield curve is “telling us” about the economy, the message for bond market participants is less ambiguous. Historically, flat/inverted yield curves have been fairly reliable indicators of a coming decline in bond yields. As Table 3 illustrates, in 4 of the past 5 instances in which the coupon curve flattened or inverted, bond yields declined materially over the ensuing 12 months. The only

exception was in 1990 when tension in the Persian Gulf caused bond yields to rise. These curve flattenings are generally consistent with overly restrictive Fed policy, and therefore indicative of a shift toward more accommodative policy in the near future. This most recent curve flattening appears to support the view that *the next major policy shift by the Fed is more likely to be a series of rate cuts rather than rate hikes*.

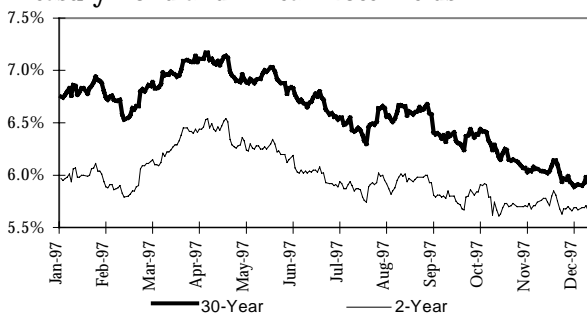
Table 3
Change in 30-year Bond yield 12 months after Flattening

Flattening*	Change in 30-year bond Yield
December-81	-312 bp
August-84	-188
December-88	-130
August-89	74
December-94	-172
Average	-145 bp

*Spread between 2-year note and 30-year bond less than 10bp
Source: DRI.

Keep in mind, however, that this flattening has occurred in a decidedly non-traditional manner. Rather than narrowing as short-term rates have risen, the contraction of spreads across the curve has largely been a function of the steady decline in long-term rates. As Chart 1 illustrates, long bond yields have fallen about 140 basis points since April 1997, while yields on the front end declined only 100 basis points over the same period. This narrowing of spreads along the curve has thus taken place despite a rate decline on the front end. There are those who suggest that such an atypical flattening of the curve renders comparisons to past periods largely irrelevant. The argument goes that since this flattening has not been accompanied by material increases in the nominal funds rate, it cannot be indicative of overly restrictive Fed policy. As you can see from Table 1, the funds rate has been raised just 25 basis points during the current tightening cycle, compared to an average of about 200 basis points during prior cycles. This lack of aggressive tightening by the Fed during the current expansion would appear to call into question the likelihood for the sharp declines in bond yields typically associated with flat yield curves.

Chart 1
Treasury Bond and 2-Year Note Yields

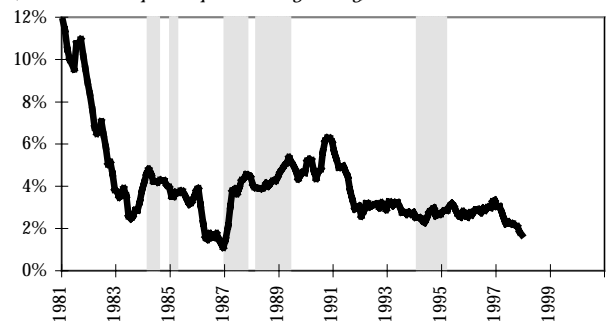


Source: DRI.

An atypical expansion...

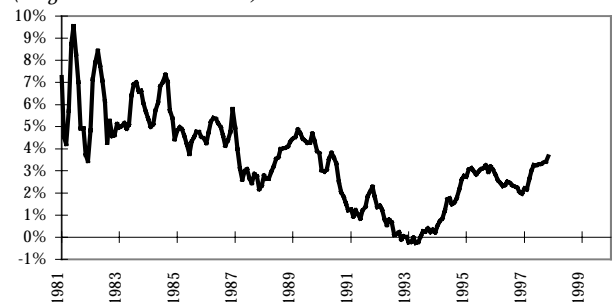
But this view of the curve is overly simplistic—and more than just a bit misleading. Because while the recent flattening of the curve has been atypical, so too has been the current economic expansion. As Chart 2 illustrates, prior periods of Fed tightening have typically occurred against a backdrop of accelerating price pressures. The increase in inflation meant that the degree to which monetary policy had been tightened—the rise in the *real* funds rate—was less than the increase in the nominal rate alone might suggest. However, the current expansion has been marked instead by a steady deceleration of inflation pressures. CPI has fallen from a 3.3% pace a year ago, to just a 1.7% pace currently—despite still strong growth and further tightening of labor markets. So while the nominal funds rate has risen by just 25 basis points since March 25, 1997, the real funds rate has risen much more sharply. This suggests that the degree to which monetary policy has already been tightened is much greater than the change in the nominal funds rate alone would indicate. In fact, at about 3.80%, the real funds rate is at its highest level since May 1990 (Chart 3). The degree to which the real funds rate has already risen is comparable to past periods of flat yield curves, and suggests that the expectations for further declines in bond yields over the next 12 months are not so unreasonable after all.

Chart 2
Consumer Price Index
(Shaded areas represent periods of tightening)



Source: Bureau of Labor Statistics.

Chart 3
Real Target Fed Funds Rate
(Target fed funds rate less CPI)



Source: Bureau of Labor Statistics, Federal Reserve Bank of New York.

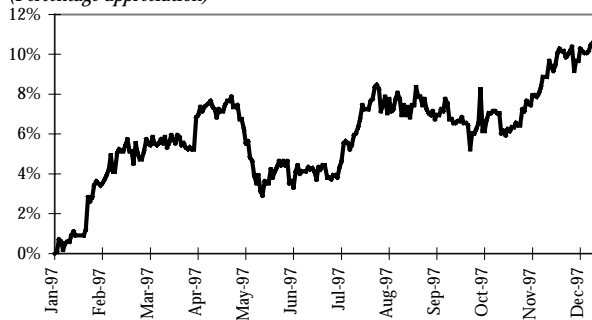
...and a rising greenback

This "de-facto" tightening of monetary policy has been abetted to a substantial degree by the impressive appreciation in the dollar during 1997. As Chart 4 reveals, the greenback was up 10.3% against a trade-weighted basket of currencies this past year. Our chief economist, Dr. Maury Harris, estimates that each 5% sustained rise in the dollar has roughly the impact of a 100 basis point rate hike by the Fed upon the economy. That being the case, then the 183 basis point rise in the real funds rate since the beginning of 1997 has been supplemented by the equivalent of nearly an additional 200 basis points worth of tightening through the currency markets. So while a single 25 basis point increase in the nominal funds rate might appear a fairly docile tightening by historical standards, the rise in the real funds rate coupled with the strong dollar indicates a much more restrictive policy stance. Therefore, the "non-traditional" flattening of the coupon curve may indeed be indicative of a monetary policy which has become too restrictive, thus retaining its usefulness as a harbinger of still lower bond yields in the months ahead.

Chart 4

Trade Weighted Dollar

(Percentage appreciation)



Source: DRI.

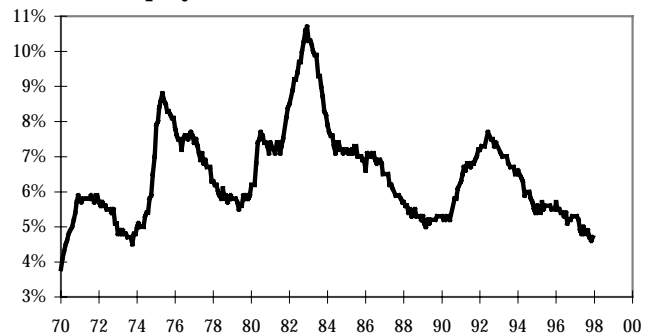
No near-term rate cut...

Of course, it's still a bit early to be pondering the prospects for a near-term rate cut. After all, the sharp drop in bond yields has already done much of the "heavy lifting" for the Fed. As the minutes from the November 12 gathering of the FOMC reveal, the Fed remained biased toward tighter monetary policy by a vote of 11-1. It's likely that this asymmetrical bias toward tightening was maintained following the December 16 FOMC meeting as well. In fact, were it not for the lingering banking/equity market/currency market crisis in Asia, the odds are that the Fed would have raised rates again in the latter part of 1997. Although inflation pressures remain extraordinarily well contained for this point in the expansion, labor markets

have tightened even further and domestic demand remains robust. The unemployment rate dropped to just 4.6% in November (the lowest since October 1973), before rising modestly to 4.7% in December (Chart 5). Payrolls expanded at a 267,000 average monthly clip during 1997—the highest since 1994. While these exceptionally tight labor market conditions have yet to generate the type of wage pressures that might normally be expected, average hourly earnings have still accelerated from a 3.9% pace in 1996, to 4.1% in 1997. Even this modest pick-up in wage pressures is unlikely to have escaped the attention of senior Fed officials.

Chart 5

U.S. Unemployment Rate



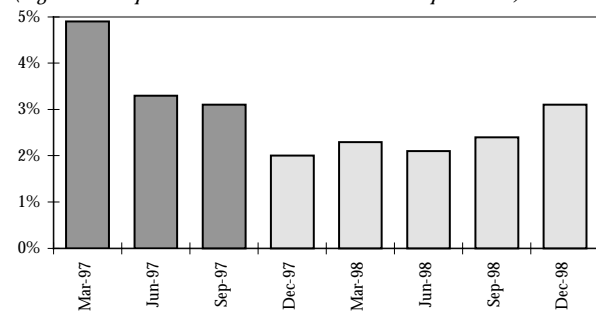
Source: Bureau of Labor Statistics.

Meanwhile, the expansion has shown few outward signs of slowing. The economy expanded at a robust 3.1% annual pace during the third quarter, and Dr. Harris estimates growth continued at a strong 3.0% pace during the fourth quarter as well. However, our chief economist is looking for growth to have moderated to just a 2.2% clip during the first half of this year (Chart 6). With labor markets still tight, the Fed may be reluctant to back away from its tightening bias immediately. However, against this backdrop of more moderate domestic GDP growth and lingering fallout from the Asian contagion, the odds for an actual rate hike during the first half of the year appear to have diminished. In a recent speech before the American Economic Association, Fed Chairman Alan Greenspan

Chart 6

U.S. GDP Growth

(Lighter bars represent PaineWebber Economic Group's forecast)



Source: Bureau of Economic Analysis, PaineWebber Economics Group.

repeatedly raised the issue of global deflation. While various news services probably read more into the Chairman's comments than was intended, the speech did highlight the seriousness with which the Fed now takes the deflationary risks from the Asian contagion. Dr. Harris now puts the odds of a Fed rate hike at no better than 25% during the coming year.

Of course, the Fed could still move to raise rates during the first half of 1998. An unexpected pick-up in price pressures coupled with still strong demand might convince the Fed that an additional tightening move is necessary. A stabilization of the Asian situation would also provide further latitude to raise rates. But even if the Fed were to tighten in early 1998, the move would probably be limited to a single 25 bp increase. What's more, any associated back-up in bond yields following such a tightening would likely be short-lived. The yield curve would flatten again—or perhaps even invert—as bondholders were drawn to the realization that Fed policy had “crossed the line” and become overly restrictive. After having risen on the initial tightening move, yields would soon fall as participants began to shift their focus away from the *last Fed rate hike*, and increasingly toward the prospects for the *first rate cut*.

...but the next sustained move will likely be an easing

So, while a rate hike in 1998 can't be ruled out entirely, the next major sustained policy shift by the Fed is apt to be an easing. The Fed's current bias toward tightening is exclusively a function of above-trend domestic demand and exceptionally tight labor markets. However, once growth in the U.S. begins to moderate, the need for more accommodative monetary policy will become increasingly apparent. The currently high real funds rate is tolerable as long as demand remains robust, but will soon become intolerable as growth slows. In fact, high real rates and destimulative fiscal policy in the U.S. coupled with a strong dollar all point to a lower funds rate—at some point. What's more, the lingering effects of the Asian contagion and contractionary policies called for by European Union suggest that global disinflation remains largely intact. So once U.S. domestic demand growth begins to slow, the Fed will be forced to pursue more accommodative monetary policy. How soon? *Experience tells us that the interval between the final Fed rate hike and first rate cut can be fairly short. The period between such a shift in policy has averaged about 2 ½ months, but at times has been less than a month.*

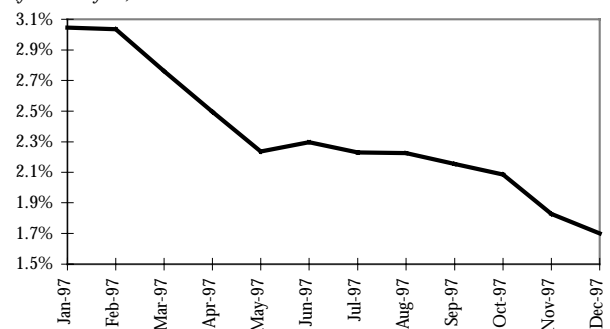
High real rates and destimulative fiscal policy—As already noted, what has distinguished the current

expansion from past economic cycles has been the absence of a rise in inflation. In fact, as the expansion has progressed, price pressures have actually moderated—especially over the past 12 months (Chart 7). As a result, real rates remain fairly high by historical standards, even though nominal rates have fallen sharply since April. Keep in mind that real rates remain stubbornly high despite some pretty impressive progress on the fiscal front (Chart 8). From a high of \$290 billion (4.5% of GDP) back in 1992, the deficit dropped to just \$22.6 billion in 1997 (0.3% of GDP). This represents the smallest deficit in nominal terms since 1974, and the lowest as a percent of GDP since 1969, when the government last ran a surplus. As was the case so often during the 1997 fiscal year, the Congressional Budget Office (CBO) has revised its deficit estimates sharply lower. From an initial projected fiscal shortfall of \$57 billion, the CBO now estimates the deficit for the 1998 fiscal year will fall to just \$5 billion. But even this revised projection may be overly pessimistic. There is a growing consensus among private economists that the federal government will generate a modest budget surplus during the current fiscal year—despite the \$24 billion worth of tax cuts and spending initiatives that were pushed into 1998 as part of the budget deal. Still high real rates coupled with destimulative fiscal policy will help pave the way for eventual Fed easing.

Chart 7

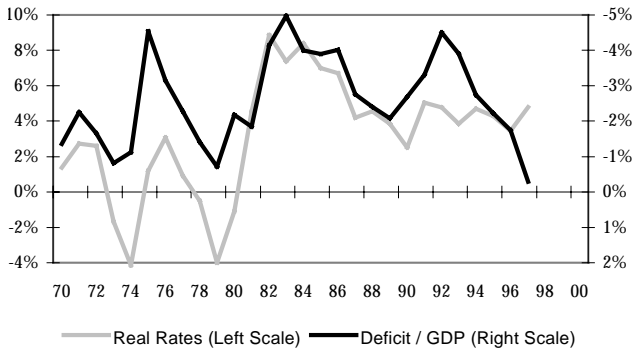
Consumer Price Index

(year over year)



Source: Bureau of Labor Statistics.

Chart 8

Deficit/GDP vs Real Bond Rates

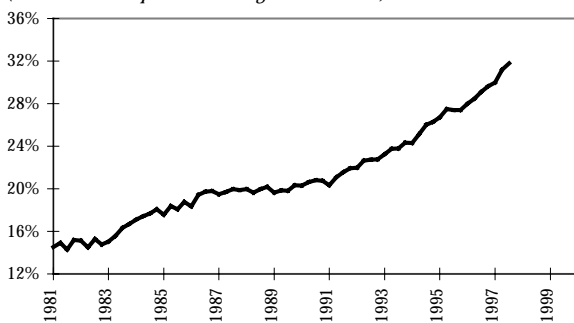
Source: Bureau of Economic Analysis, U.S. Treasury Department, DRI.

Continued strong dollar—The continued strength of the dollar has helped restrain growth and limit price pressures, and may signal that monetary policy has become overly restrictive as well. The 10.3% appreciation of the dollar is estimated to have shaved as much as 0.2% off real GDP growth in 1997, and could shave an additional 0.3% in 1998. The dollar has also been an important catalyst behind the continued moderation of price pressures during 1997. It is estimated that import prices fell 3.8% during the first three quarters of 1997, while the import penetration ratio reached a record high of 31.8%. In other words,

Chart 9

Import Penetration Ratio

(Merchandise imports/domestic goods consumed)

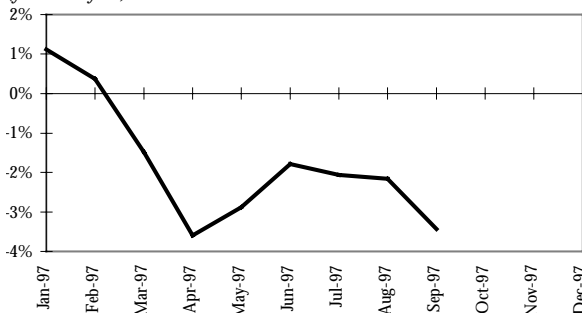


Source: PaineWebber Economic's Group.

Chart 10

Import Price Index

(year over year)



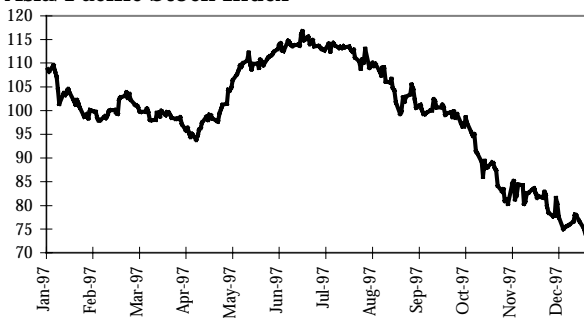
Source: IMF.

we are satisfying a greater share of domestic demand through imports (Chart 9)—and those imports are being purchased at ever lower prices (Chart 10). Keep in mind that a rising currency is typically associated with high real rates and improving inflation prospects. Thus far the strong dollar has been beneficial in terms of restraining growth, limiting inflation pressures and partly alleviating tightness in domestic resource markets through an increase in lower cost imports. This rise in the dollar only contributes to the destimulative effects of tight monetary policy, and eventually helps pave the way for more accommodative policy.

The Asian Contagion—Initially dismissed as little more than a regional currency skirmish, the Asian contagion has mushroomed into a full blown global capital market event. As Chart 11 and Chart 12 illustrate, both equity and currency markets within southeast Asia have been hit hard over the past 6 months. The Asian Pacific stock index is down 37.7% since July, 1997, while a GDP weighted regional currency index is off 21.3% against the dollar over the same time period. The hardest hit equity markets such as Indonesia and Korea have suffered losses of 45.2.0% and 39.2% respectively since early July, while the rupiah and won are down 67% and 47% over the same period. But the weakness in equity and currency markets are merely symptoms of what really ails the region—heavy dollar denominated debt burdens, excess capacity, weak domestic demand, burdensome regulatory environment and overly ambitious public infrastructure projects. Because of the currency and banking crisis in the region, the IMF has already been forced to cobble together aid packages totaling more than \$60 billion for Indonesia, Thailand and the Philippines. Additionally, it's estimated that the aid package for Korea will add at least another \$60 billion to the total.

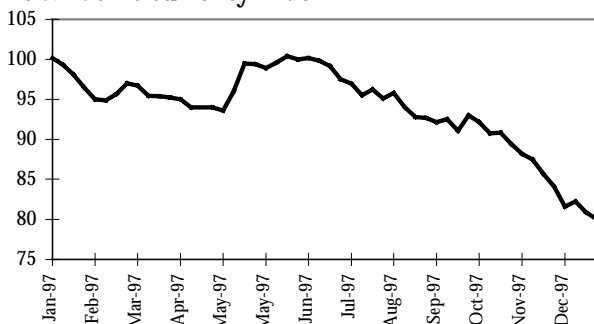
Foreign equity and currency markets should stabilize before long, as the assorted international aid packages begin to have the desired affect. However, the disinflationary/deflationary impact upon the real economy from the structural flaws in Asian economies will linger long after stock market gyrations have faded from the headlines. In fact, the austerity measures imposed by the IMF as a pre-condition for assistance will likely add to the deflationary effects of the Asian contagion—at least in the near term. The IMF requires countries facing currency pressures and an outflow of funds to raise interest rates, increase taxes, cut government spending and cut budget deficits. Hardly a prescription for accelerating growth against the backdrop of weak domestic demand. Not surprisingly, both growth and inflation estimates for the region have already been cut sharply in the aftermath of the equity/currency market crisis. Chart 13 shows the OECDs revised growth forecasts for southeast Asia for 1998. As Chart 13 illustrates, growth estimates have been reduced for every economy in the region. Growth estimates for Japan have been slashed by over 40%, while projections for Korea have been cut nearly 20%. Estimates for the Dynamic Asian economies as a group have been reduced by just under 40%.

Chart 11
Asia/Pacific Stock Index



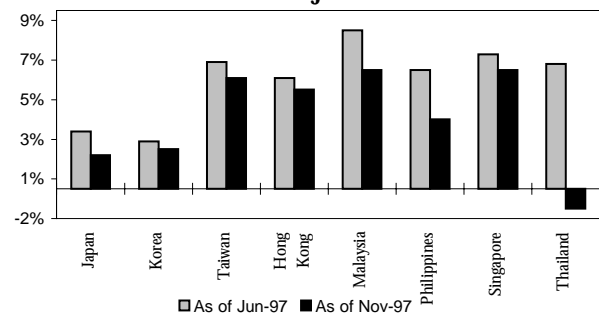
Source: DRI.

Chart 12
Asia/Pacific currency Index



Source: PaineWebber Fixed Income Strategy Group, DRI.

Chart 13
OECD GDP Growth Projections for 1998



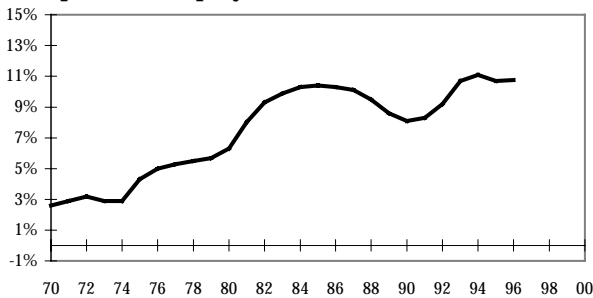
Source: OECD.

Any further deepening of the banking crisis could force additional downward revision to official growth projections. Confronted with the need to service high dollar denominated debt burdens in an environment of still weak domestic demand, southeast Asian countries will increasingly turn to exports as the primary means of jump starting their economies. This suggests that excess capacity within the Asia-Pacific region will continue to act as a “pressure release” for tight resource markets in the U.S. and as long as growth in the U.S. remains robust, this arrangement is mutually beneficial. However, once domestic demand begins to slow, the problem of global over capacity could become acute. Keep in mind that the U.S. has been on a bit of a

capital spending spree itself over the past few years. Capital expenditures have risen at rapid 10.2% annual rate over the past 3 years. If demand begins to slow at about the same time new capacity is coming on line, utilization rates could drop fairly quickly, thereby forcing the Fed to shift toward an easing bias.

The European Union—It is generally acknowledged that the integration of Europe into a truly common market and single currency block will lead to stronger growth, lower costs and enhanced productivity—over time. However, the near-term effect of satisfying the conditions imposed upon member nations for admission into the union has been to restrain growth through contractionary fiscal policy and largely procyclical monetary policy. Unemployment in Europe hovers near the highest levels in the post-war era (Chart 14), and growth remains restrained as well (Chart 15). Yet, government spending has already been further reduced and, until quite recently, monetary policy throughout much of Europe has been biased toward restraint. With the May 1998 convergence date fast approaching, prospective members have moved to meet deficit, debt and inflation criteria. However, as Charts 16, 17 and 18 reveal, few aspirants actually meet the guidelines as strictly defined. Which means, of course, some further fiscal belt tightening is probably in store. Along with decelerating demand growth in Asia, the still destimulative impact from EMU convergence will still act as a partial governor on growth during 1998.

Chart 14
European Unemployment Rate



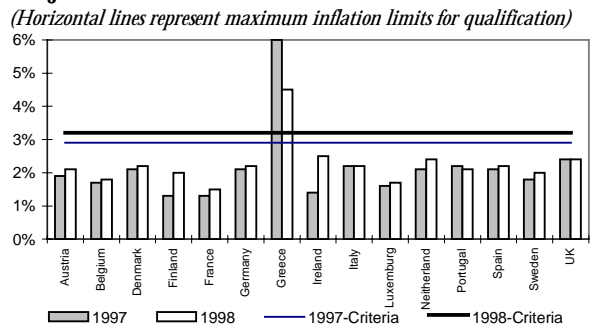
Source: OECD.

Chart 15
European GDP Growth Rate



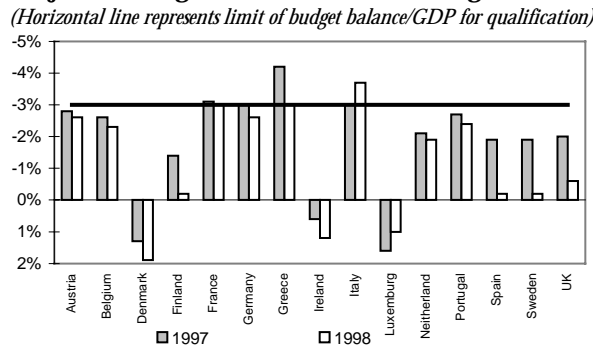
Source: OECD.

Chart 16
Projected Inflation



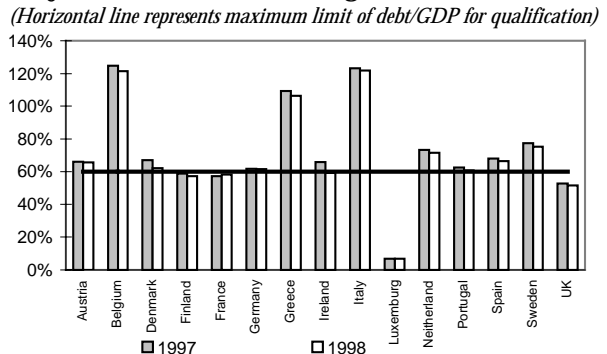
Source: Bloomberg (EU forecasts as published in October 1997).

Chart 17
Projected Budget Balance as a Percentage of GDP



Source: Bloomberg (EU forecasts as published in October 1997).

Chart 18
Projected Debt as a Percentage of GDP



Source: Bloomberg (EU forecasts as published in October 1997).

Just a Question of Time

Of course, trying to time a Fed easing is always difficult. Domestic growth remains robust, and tight labor markets are keeping the Fed on watch for any acceleration in wage inflation. Against this backdrop, the prospects for a near-term rate cut are remote. In fact, the Fed remains biased toward tightening, and another 25 basis point “snugging” early in 1998 isn’t entirely out of the question—although it’s become increasingly less likely. But while a near-term rate cut is still a long shot, the prospects for a Fed easing sometime in 1998 or early 1999 has gained validity. As we’ve already noted, bonds don’t have to wait until the Fed has actually begun to cut rates before yields decline. Once market perception simply shifts from the view that the *Fed may not yet have done enough*, to the view that the *Fed may already have done too much*, bond yields will fall further. But how much further? Historically, declines in note and bond yields begin prior to the last Fed rate hike, and continue right through the easing cycle. A reflattening of the coupon curve would indicate that bond yields have further to fall in the months ahead.

A calming of the “Asian Contagion” fears that have supported a “flight to quality” rally in bonds can see a temporary retracing of some of the bond markets recent gains. But, as the U.S. economy begins to slow and inflation pressures recede still further, the need to reduce high real rates through more accommodative monetary policy will become even more evident, and ultimately bonds are likely to rally still further.

It was back in 1988 that we wrote about the coming decade of falling bond yields (“*The Beauty of Bonds*,” September 1, 1988). In 1991 we talked of the massive flows of individual funds into the market (“*The Big Shift*,” September 1, 1991) We put a number on the first leg of the bond rally with “*Six in ‘96*” (April 21, 1991)—and bond yields on the first day of 1996 stood at 5.95. The long term bond rally was not over, as we looked for and continue to look for “*Five at the Turn*” (March 21, 1993). In that report we talked about ongoing disinflation and the potential big positive of an eventual balancing of the budget. We are well along the road to our long held target of 5% at the turn of the century, and the pace may now be speeding up.

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