

QUARTERLY MARKET MONITOR FOURTH QUARTER 2006 ECONOMIC REVIEW

BRETT HAMMOND
CHIEF INVESTMENT
STRATEGIST

LEO KAMP
CHIEF ECONOMIST

DOUGLAS FORE
DIRECTOR OF PORTFOLIO
ANALYTICS

Q4 2006 DEVELOPMENTS:

- U.S. economic growth probably increased a bit late last year, with Q4 growing (at annual rates) a percentage point higher than the previous quarter.
- Despite this improvement in the final quarter of 2006, the annual growth of the second half of the year was still substantially below the pace of the first half.
- Inflation moderated quite significantly both on an overall and “core” basis in the second half of the year, but most dramatically in Q4.
- The euro area continued to show the same solid growth in Q4 as it had posted during much of the year.
- Growth seemed to improve somewhat in Japan during the last quarter, with both business investment and exports increasing some, despite still mixed results from household spending.
- China’s growth continued to accelerate through Q4 of 2006, with much of the gains still driven from booming investment activity.

2007 EXPECTATIONS

- The slower growth trajectory that emerged in the U.S. during 2006 will likely continue well into this year.
- The Fed will likely remain on hold until the middle of the year, possibly followed by a slight easing during the second half, but only to a limited extent.
- The U.S. will most likely not slump into a recession this year.
- Recent evidence suggests a continuation of solid, although somewhat softer, growth in the Euro area this year.
- Similar to the Euro area, the U.K. will most likely also soften some in 2007, as central banks in the U.K. and Euro area are likely to continue raising interest rates this year due to their concern about inflation rising further.
- Economic growth in Japan this year will likely be fairly stable, on average, possibly edging down some as the rest of the world slows.
- China’s economy should remain strong, albeit less vibrant, in 2007, as export growth will likely be a bit less robust due to slower economic growth of much of the developed world.
- The trade-weighted dollar will probably continue to weaken in 2007, as interest rate differentials narrow between the U.S. and the rest of the world and as China’s currency gradually appreciates versus the dollar.



UPDATE ON RECENT GLOBAL ECONOMIC DEVELOPMENTS

UNITED STATES

U.S. economic growth (measured in inflation-adjusted GDP terms) probably picked up a bit late last year, with the fourth quarter growing (at annual rates) higher than the 2% posted for Q3.

The increase was due to better consumer spending, an improvement in the trade deficit, and an ongoing solid pace in business capital spending. However, it is important to keep in mind that seasonably adjusted consumer spending data may have received a statistical boost from the unseasonably warm weather seen during much of the fourth quarter. Likewise, the improvement in hiring and housing demand reported during Q4 may have received a similar boost. In any event, Q4's growth improvement, even as reported, still seems unremarkable, especially in light of the sluggish 2% result of the prior quarter. So, despite improvement in the final quarter of the year, the 2.5% annual growth of the second half was still substantially below the 4.1% pace of the first half of 2006.

Meanwhile, despite a sharp rise in energy prices and an escalation of so-called "core" prices (those outside food and energy) earlier in the year, inflation actually moderated quite significantly both on an overall and "core" basis in the third and fourth quarters, but most dramatically in the final quarter of the year. Overall Consumer Price Index (CPI) inflation registered just a 0.2% annualized gain in Q4, with "core" CPI inflation posting just a 1.4% advance, both showing significant improvement over Q3 and what occurred in the first half. Obviously, this lower inflation trajectory was good news to the Federal Reserve Board (the Fed), which had been raising interest rates consistently over about a two-year period, from mid-2004 through June of last year. The better inflation through Q4 probably helped to keep the Fed from raising rates further and helped to maintain its Fed Funds target at its June level of 5.25%.

EUROPE AND ASIA

Economic conditions also seemed to improve elsewhere around the globe during Q4.

During the quarter, the euro area continued to show the same solid growth it had posted during much of the year. Unfortunately, however, these growth results were uneven across the "Big Three" euro area countries of Germany, France, and Italy. Generally, Germany showed better results during Q4 than the others in the "Big Three." In addition, while Euroland inflation was down from recent peaks, and now a bit below the European Central Bank's (ECB's) 2% target, money growth is still rising at a rate (9%, double the ECB target) that makes the monetarist ECB quite uncomfortable. So, with economic growth solid, inflation just a tad below target, and the money supply still rising rapidly, the ECB hiked interest rates in Q4.

Counter to expectations earlier last year, interest rates continued to rise in the U.K., the result of continued solid economic growth, reaccelerating home prices, ongoing double-digit household debt growth, and inflation (at 3% year-over-year) now above the Bank of England's 2% target. All of this was a reversal of softer trends that seemed to have emerged late in 2005 and early last year. As a result of this trend reversal, the Bank of England raised rates during Q4 in an attempt to dampen growth and rein in inflation.

Meanwhile, economic growth seemed to improve somewhat in Japan during Q4, following a fairly anemic performance in the prior quarter. Both business investment and exports appeared to have picked up some, despite still mixed results from spending by households. However, inflation remained quite subdued at year-end, with CPI inflation still barely above zero. With the economy showing only modest improvement and overall inflation still quite low, almost non-existent, the Bank of Japan was in no hurry to raise interest rates beyond the 0.25% it put in place in July when it emerged from its long-standing, anti-deflationary "zero interest rate policy."

Meanwhile, China continues to zoom along. Economic growth in 2006 probably outstripped the stunning almost 10% rate we saw in 2005, with much of the gains still driven from booming investment activity, which seemed to accelerate even further towards the end of 2006. Apparently, the measures that Chinese government and central bank have taken to dampen vibrant investment demand there have had little impact thus far. But, even with a booming economy, China's inflation remains quite low, around 2%.

2007: A SLOWER GLOBAL ECONOMY

EXPECT U.S. GROWTH TO SLOW FURTHER

The slower growth trajectory that emerged in the U.S. during 2006 will likely continue well into this year.

- Economic growth will likely slow further in the first half, as housing activity declines continue to be direct and indirect drags on growth. Declines in housing activity will directly put downward pressure on overall economy-wide growth. And, consumer spending will likely take a growth hit as declining home prices erode gains in homeowner wealth.
- Oil prices and other commodity prices will likely see only modest declines during 2007.
- The unemployment rate will pickup, rising to 5% by year-end, up from the 4.5% rate seen December 2006.
- Inflation will continue to drift lower as commodity prices cease rising and labor markets become less tight.
- With the economy slower and inflation well under control, the Fed will likely ease a bit during the second half, but only to a limited extent, perhaps 50–75 basis points. Only if recession were to take hold would they ease more aggressively.
- The Treasury yield curve will remain inverted during 2007, but less so in the second half as the Fed eases.
- The trade-weighted dollar will probably continue to weaken in 2007, as interest rate differentials narrow between the U.S. and rest of the world and as China's currency gradually appreciates versus the dollar.

EURO AREA GROWTH LOOKS TO SOFTEN LATER THIS YEAR

Recent evidence suggests a continuation of solid, but somewhat softer, growth in the Euro area this year. Some of the major themes surrounding this view are:

- Euroland growth will remain solid, again supported by exports and investment, especially in Germany. Consumer spending will likely remain relatively subdued.

- Growth should soften some in the second half of the year, due to a slower growth abroad, higher interest rates, and euro appreciation cutting into export growth and investment activity.
- Employment growth should slow with a softer Euroland economy later in the year, limiting further improvement in the unemployment rate.
- A softer economy probably means inflation will eventually become less worrisome to the ECB later this year, causing them to stop raising rates, but only after raising rates a couple of times in the first half.
- Government budgets will continue to be pressured by greater retirement and medical spending, as the populations of major Euroland countries age and decline in numbers.
- The euro will again see a significant appreciation, as the dollar continues to weaken this year.

U.K. ECONOMIC GROWTH WILL ALSO BE SLOWER THIS YEAR

Similar to the euro area, growth in the U.K. will probably also soften some in 2007. Some of the reasons for this view are:

- The Bank of England now appears to be more aggressive in reining in the elevated inflation of late. This means that interest rates will continue to move higher in coming months.
- Rising interest rates will eventually cause a much softer housing market, along with lower home price inflation.
- Less home price inflation means that home equity will grow less rapidly, which in turn should cut into the growth of consumer spending.
- And with a slower U.S. and from the lagged effect of the British pound appreciating during much of 2006, we should also see net exports detracting from growth this year.
- And finally, as with the euro, the British pound will likely appreciate versus the U.S. dollar, as interest rates continue to rise in the U.K.

STABLE GROWTH PROSPECTS FOR JAPAN

Economic growth in Japan this year will likely be fairly stable and, on average, only a bit less than we saw in 2006. The major reasons for this view are:

- The composition of growth in Japan will likely remain fairly stable this year, with investment and exports continuing as the principal growth drivers.
- However, Japan's growth this year, dependent as it is on exports, will edge down some as the rest of the world slows.
- Moreover, last year's experience suggests that consumer spending will continue to disappoint as a growth driver, despite improving hiring conditions and greater bonuses.
- As a result, inflation will likely remain very subdued, especially now that money growth is quite low in the wake of the Bank of Japan (BoJ) ending its "quantitative easing program" last year.
- With inflation very low and the economy a bit softer, the BoJ will take its time in "normalizing" short-term interest rates.
- With little movement in interest rates and the economy a bit slower this year, it is unlikely that we will see a massive appreciation of the yen versus the dollar, although some appreciation will still likely occur.

CHINA'S ECONOMY WILL REMAIN STRONG, ALTHOUGH LESS VIBRANT, IN 2007

The major themes surrounding this view are:

- China's export growth will likely be a bit less robust as much of the developed world sees slower economic growth.
- In addition, we will likely see more moves from a government that now appears to be more determined in reining in China's rampant investment. Those moves, together with those already in place, would likely result in some diminution of real GDP growth this year.
- China's program to resurrect a social safety net will take time to implement. Furthermore, it will take time for people to regain confidence in the government's programs. Meanwhile, consumers will probably not decrease their rate of precautionary savings much, thereby undermining the government's goal of shifting towards a more consumer-driven economy.
- And finally, continue to look for only modest, token appreciation of China's currency.

TIAA-CREF is a national financial services organization and the leading provider of retirement services in the academic, research, medical and cultural fields with more than \$380 billion in combined assets under management (9/30/06). Further information can be found at www.tiaa-cref.org.

Market Monitor is prepared by TIAA-CREF Asset Management and represents the views of TIAA-CREF's Investment Strategy and Client Solutions Group. These views may change in response to changing economic and market conditions. Past performance is not indicative of future results. The material is for informational purposes only and should not be regarded as a recommendation or an offer to buy or sell any product or service to which this information may relate.

TIAA-CREF Asset Management is a division of Teachers Advisors, Inc., a registered investment advisor and wholly owned subsidiary of Teachers Insurance and Annuity Association (TIAA). TIAA-CREF® personnel in its investment management area provide investment advice and portfolio management services through the following entities: Teachers Advisors, Inc., TIAA-CREF Investment Management, LLC, and Teachers Insurance and Annuity Association® (TIAA®). TIAA-CREF Individual & Institutional Services, LLC, distributes securities, member NASD/SIPC. TIAA, TIAA-CREF, Teachers Insurance and Annuity Association, TIAA-CREF Asset Management and FINANCIAL SERVICES FOR THE GREATER GOOD are registered trademarks of Teachers Insurance and Annuity Association.

Brett Hammond, Leo Kamp and Douglas Fore are available to comment on economic data. If you wish to speak with them, please contact Chad Peterson, Media Relations, 212-916-4808 or email cpeterson@tiaa-cref.org.

C37695