



Current Analysis

Current Analysis reports address current economic issues of importance to RBC Financial Group and its clients.

Is the U.S. yield curve signalling an economic slowdown?

Executive summary

Historical analysis shows us that short-term rates have moved above longer-term interest rates ahead of the past six U.S. recessions. We have examined some of the factors that have contributed to 10-year rates falling below or equal to short-term rates (3-month T-bill yield) in recent weeks and assess that the current shape of the yield curve does not portend a significant slowing in economic growth ahead.

Our analysis shows that 10-year rates have held relatively steady during the recent tightening cycle because of an unusually high demand for longer-term securities and because inflation expectations have stabilized, reducing the amount of risk premia demanded by investors to hold these securities. Short-term yields have followed their historical pattern, rising as the Federal Reserve increased the Federal funds target rate. We are forecasting that 10-year yields will rise by about 40 basis points this year in line with a pick-up in the core inflation rate as the recent commodity price increases slowly feed through to higher consumer price inflation.

In turn, higher inflation will boost expectations of future inflation, leading markets to price in a higher risk premium into 10-year rates. Short-term rates are likely to rise by less given that the Fed is approaching the end of its tightening cycle and growth is expected to moderate somewhat in 2007.

RBC's bond model, based on real returns over time and expected inflation indicates that 10-year yields below 5% are too low adding to our sense of certainty that any curve inversion will prove temporary and unlikely to imply a recession is coming.

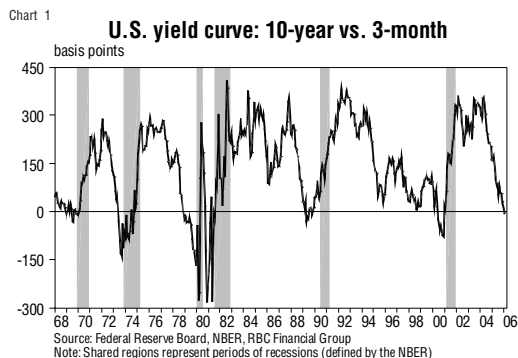
Is the yield curve signalling a slowdown?

The U.S. yield curve inverted early this year igniting debate about the odds that the economy will fall into recession in the quarters ahead. Historical analysis shows us

that short-term rates have moved above longer-term interest rates ahead of the past six U.S. recessions. We have examined some of the factors that have contributed to 10-year rates falling below short-term yields and assess that **the U.S. yield curve is unlikely to become more significantly inverted over the medium term** and that there is limited risk of a U.S. recession ahead. Our analysis shows that 10-year rates have held relatively steady over the recent tightening cycle because of an unusually high demand for longer-term securities and because low inflation volatility and stable expectations about future inflation reduced the amount of risk premia demanded by investors to hold these securities. Short-term yields have followed their historical pattern, rising as the Federal Reserve increased the Federal Funds target rate.

Fed funds to rise to 5%

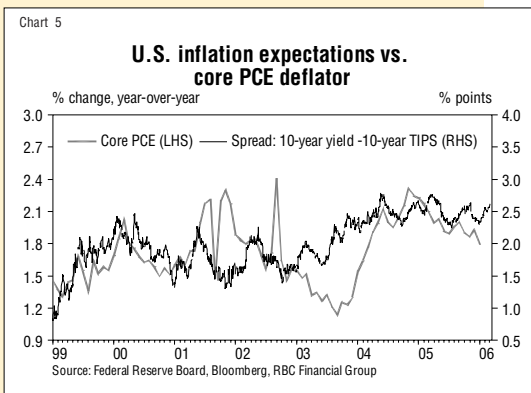
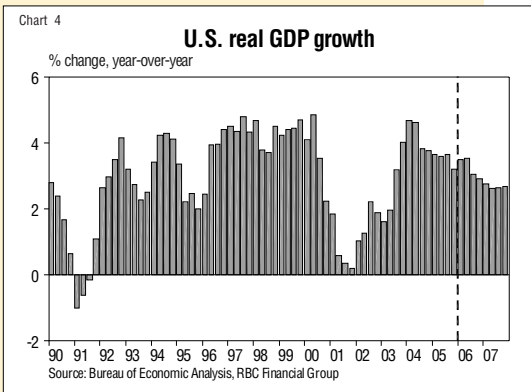
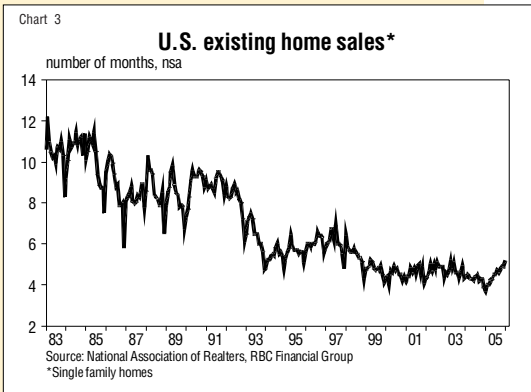
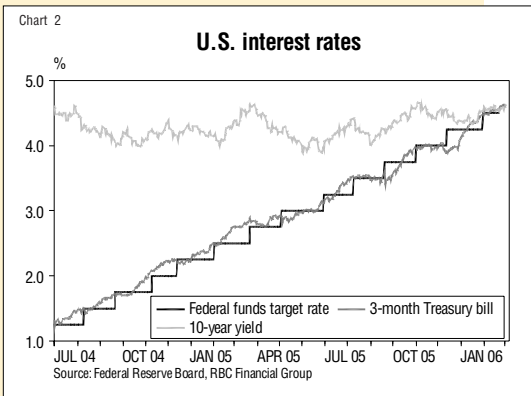
The U.S. economy will continue to be resilient in 2006, growing by 3.2%, a modest slowing from 2005's 3.5% pace. With the economy growing near its trend pace, the Federal Reserve will continue on its path to bring the fed funds rate to neutral which we estimate is roughly



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5%. Since rising prices in the chain of production and wages, as shown by unit labour costs, feed through to CPI with a time lag, we expect an increase in core inflation around mid-year. The Fed is likely to pause once the funds rate is at its neutral setting as it gauges the impact of higher rates on the economy which will limit the upside in short-term yields. Ten-year yields, which are more closely related to movements in inflation, will continue to drift higher.



In the near-term, one of the concerns for the outlook for the U.S. economy is that a decline in the housing market brought on by higher interest rates will lead to weaker consumer spending and in turn a slowing in economic growth. As yet, there is little evidence to suggest that the housing market on the verge of a substantial decline, with housing starts in January at the highest level in 33 years and home sales showing some moderation lately but still at high levels. To be sure, the stock of new homes relative to those sold has risen to the highest level since November 1996 suggesting some cooling in the housing is under way. But, with the bulk of interest rate increases already behind us, and the majority of mortgages having a fixed rate rather than floating rate, we believe that the correction ahead will be mild by historical standards.

Our forecast is for consumer spending to increase by about 3% this year as rising incomes offset some of the impact as higher borrowing and energy costs along with negative wealth effects that can take up to two years to materialize. The modest pull-back in housing is likely to be accompanied by lower motor vehicles sales as higher rates take effect. Increasingly growth will be driven by an improvement in the U.S. trade gap and a restocking of inventories which have fallen to unsustainably low levels. Rising exports, as the U.S. economy finally benefits from the significant depreciation in the currency from 2002 to 2004, will curtail the drag of the trade sector on economic growth. After growing at a trend rate in 2006 we expect the economy to slow modestly in 2007 which will likely see the Fed be content to keep policy rates at neutral for the remainder of 2006 and most of 2007.

We are forecasting that 10-year yields will rise by about 40 basis points this year in line with a pick up in the core inflation rate based on recent unit labour cost and producer price inflation increases. In turn, higher inflation will boost expectations of future inflation leading markets to price in a higher risk premium into 10-year rates. Short-term rates are likely to rise by less given that the Fed is approaching the end of its tightening cycle with another 50 basis points of rate increase generally expected.

Temporary factors holding long yields down

The recovery in the U.S. economy prompted the central bank to move off its ultra-easy monetary policy in June 2004 when the fed funds rate was 1%. While short term rates climbed as the Fed signalled that additional increases would be forthcoming, 10-years remained relatively steady, trading within plus or minus 40 basis points of the average rate in the 20-month period.

There are differing theories about why longer-term rates have remained relatively stable. One theory is that investors expect a significant slowing in economic growth that will force the central bank to reverse some of its monetary tightening. In anticipation

of slower growth/lower rates, investors were buyers of the relatively higher yielding longer-dated securities to secure returns in anticipation of lower yields during the economic slowdown. If our forecast is correct these investors will be able to achieve higher returns by purchasing 10-year notes at yields of greater than 5% by mid-year.

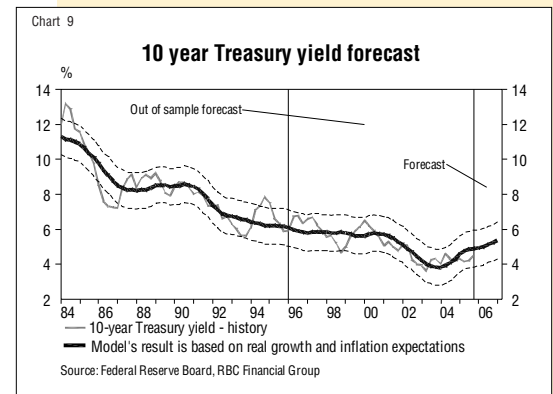
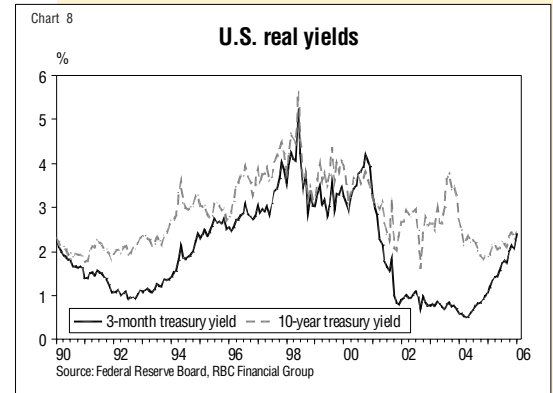
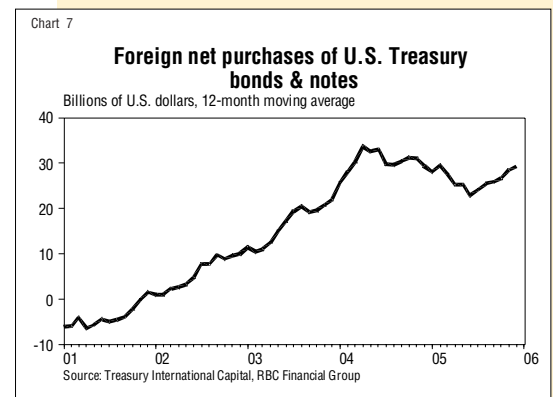
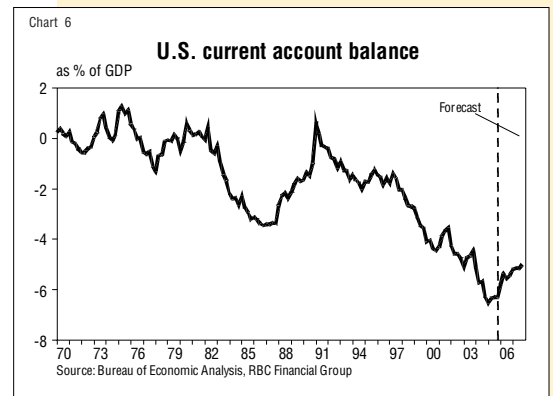
We believe anchored inflation expectations are partially responsible for the stability in long-term yields as the risk premia demanded by investors associated with anticipated higher inflation has diminished. Using the difference between the nominal yield on the 10-year bond and the inflation protected bond yield as a proxy for inflation expectations, we see that expected inflation has remained stable at 2.5% over the past two years. This followed a doubling in the expected inflation rate from 1.4% in 2003 to about 2.8% in early 2004, around the period that the core PCE deflator went from 1.1% to 2.2%. Inflation this decade has been less volatile than in previous decades in part due to increased credibility about the commitment of central banks to keep prices stable. This in turn has tempered swings in longer-term yields compared to previous periods.

Yields have also been depressed by rising demand for longer-dated U.S. Treasuries from pension fund managers who increased the duration of portfolios to better match assets to future liabilities. The decline in equity markets and in interest rates in the early 2000s resulted in defined benefit plans being underfunded. Legislative changes that made pension funds reallocate their assets away from equities to fixed income to narrow gap between the liabilities and assets and limit volatility in portfolios, increased demand for US Treasuries.

An OECD study shows that if global pension funds aggressively shifted toward asset-liability matching policies, it would lead to a significant increase in demand compared to the current level of global supply of longer-dated securities.

Additional demand came from foreign investors who continued to accumulate Treasury securities either as a way to invest their U.S. dollar reserves or based on their view that the market would provide superior returns. China's U.S. dollar foreign exchange reserves more than doubled to \$819 billion in the two years ending 2005. At the same time, holdings of U.S. Treasury securities rose by \$98 billion to \$256.7 billion. Since 2003, Japanese investment in U.S. Treasuries jumped by \$134 billion, to total \$685 billion in at the end of last year.

We expect that demand for U.S. financial assets will dissipate as opportunities outside the United States become more attractive and, as rising U.S. interest rates encourage domestic savings, making the U.S. less reliant on foreign investment.



Interest rate outlook*

		Actual			Forecast			
		05Q2	05Q3	05Q4	06Q1	06Q2	06Q3	06Q4
United States	Fed funds	3.25	3.75	4.50	4.75	5.00	5.00	5.00
	3 month	3.05	3.48	4.48	4.85	5.00	5.00	5.00
	2 year	3.65	4.15	4.75	4.85	5.10	5.10	5.10
	5 year	3.75	4.16	4.76	4.80	5.15	5.10	5.10
	10 year	3.98	4.30	4.74	4.80	5.15	5.15	5.10
	30 year	4.28	4.54	4.73	4.75	5.00	5.10	5.15
Spreads:	(basis points)							
	10yr - 3mth	93.5	81.8	26.6	-5	15	15	10
	10yr - 2yr	33	15	-0.9	-5	5	5	0

* %, End of period