



TD Economics

Special Report

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A PRIMER ON THE U.S. SUB-PRIME MARKET

Investors need nerves of steel to withstand the bad news streaming out of the U.S. sub-prime mortgage market. Aside from the fact that the financial woes of the lenders are well publicized, borrower delinquency rates have risen with alarming speed. And the worst is yet to come, as sub-prime delinquency rates will likely deteriorate further over the next 18-24 months. Some of these will result in outright foreclosures, thereby adding to the supply of homes in an already-laden market. While this news may seem grim, we don't believe the market has sufficient scale to derail the U.S. expansion or prompt a nationwide credit crunch. By extension, the risk of contagion to the prime market also seems low alongside a healthy job market.

Sub-prime risks centered on 2005-2006 vintages

The sub-prime market represents roughly 10% of all outstanding mortgages. By this metric alone, rising defaults should be little cause for concern. However, this broad figure gravely understates the amount of activity

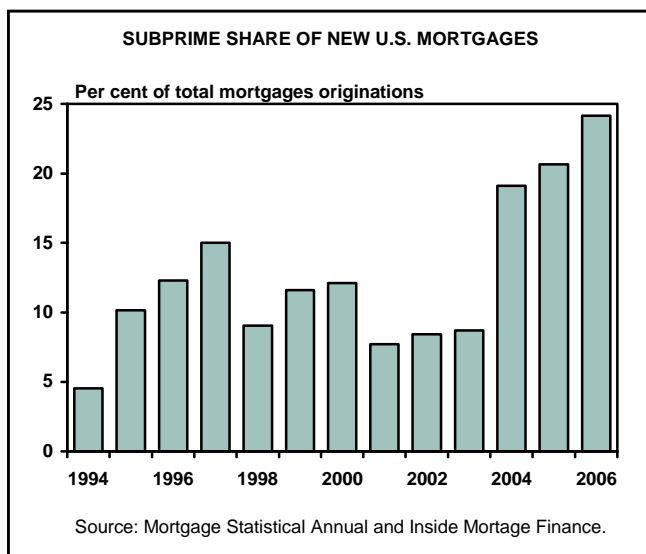
HIGHLIGHTS

- **The worst is yet to come in the U.S. sub-prime mortgage market**
- **Defaults for 2006 sub-prime mortgage loans are not likely to peak for another 20-24 months**
- **But, sub-prime mortgages do not have the scale to send the U.S. expansion off the tracks**

that has been going on in the past two years. The sub-prime mortgage market ballooned in 2005 and 2006 to 20-25% of all new mortgages, capturing more than twice the market share seen over the prior 10 years. It is these mortgages that now present the greatest risk to the health of the American financial system.

As the housing boom became long in the tooth, sub-prime lenders became more aggressive in attracting clients, particularly in 2006. For instance, roughly 50% of all sub-prime borrowers in the past two years needed to provide only limited documentation of their incomes. According to the data provider Loan Performance, low or no documentation loans (referred to as 'liar loans') increased from just 18% of total purchase originations in 2001 to 49% in 2006. An April 2006 report by the Mortgage Asset Research Institute analyzed 100 loans in which the borrowers merely stated their incomes, and then looked at documents those borrowers had filed with the I.R.S.. The resulting differences were significant. In 90% of the loans, borrowers overstated their incomes 5% or more. But, in almost 60% of these cases, borrowers inflated their incomes by more than half.

In this context, it's not surprising that poor loan performance is largely concentrated in the 2006 sub-prime



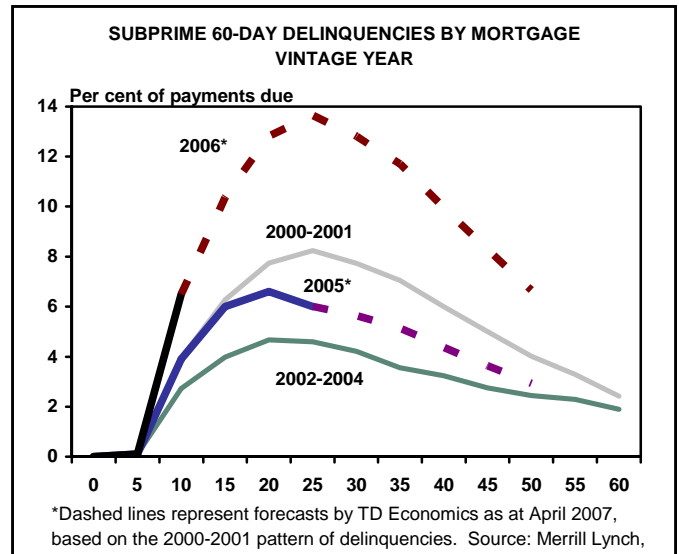
vintages, in which 60+ day delinquencies are 25% higher than 2005 vintages and approximately 66% higher than 2003 and 2004 vintages.¹ The weaker performance for 2006 subprime loans is attributed to greater leverage and the migration of lenders down the credit spectrum to capture clients. In the past, a borrower who ran into financial stress could be bailed out through a favourable interest rate environment and the equity they built up in the home via price appreciation. Sub-prime borrowers in 2006 have neither of these elements on their side. They have more difficulty finding refinancing options to lower their monthly payments and have little-to-no equity in their homes. Loan-to-value ratios on an average loan price of nearly \$200,000 are about 94%.

Sub-prime loans will not go softly into the night

Over the next two years, a large number of sub-prime mortgages will require their payments to be reset to new levels of interest rates and principal amounts. Macroeconomic Advisors estimates that the cumulative volume of sub-prime debt facing reset over that period will exceed \$500 billion, with the increase in payments cresting at a little over \$14 billion. Others place the additional payment expense as high as \$35 billion. While this will divert funds away from consumer spending, the impact should be limited. Consumers spend about \$9 trillion annually, so reset costs amount to less than one half of one percent.

Nonetheless, 2006 subprime mortgages will blemish the financial landscape for many months to come, with delinquency rates likely hitting a peak of 12-14% in roughly 24 months time – compared to a delinquency rate of about 6.5% at the present. Some of these delinquencies will turn into foreclosures that will pressure home supply by adding to the available stock. However, it is estimated that when foreclosure proceedings are started, only about one-quarter actually end in a foreclosure.

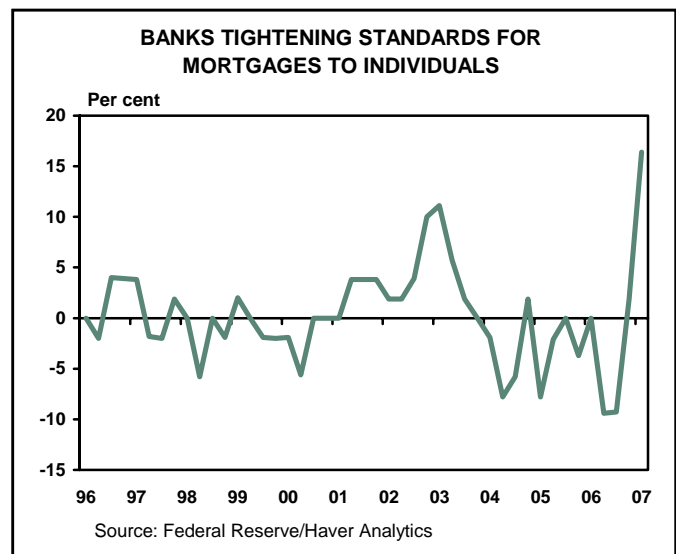
The explosion of sub-prime lending likely encouraged an excess of 130,000-160,000 housing starts from mid-2005 through mid-2006. However, our March economic forecasts incorporated more than sufficient 'pay-back', so recent developments in the sub-prime market have not altered our view of the downside risks to our projections of residential investment. (For further forecast details please see the *Quarterly Economic Forecast* report at <http://www.td.com/economics/qef/qefmar07.pdf>)



Contagion not occurring

The greater risk to our U.S. forecast is if the difficulties of the sub-prime market leak into other segments of the financial market. One way this behaviour would manifest itself is through the prime mortgage market. However, delinquency rates in the prime mortgage market have nudged up by only 0.02% from the final quarter of 2005 to year-end 2006. This is hardly dramatic compared to sub-prime delinquencies, which rose more sharply by 0.6% over this same time period.

Another way subprime contagion might occur is if financial institutions tighten lending standards to the point of choking off the supply of funds to would-be borrowers. In fact, the Federal Reserve conducted a study in January that indicated 15% of domestic banks had tightened credit



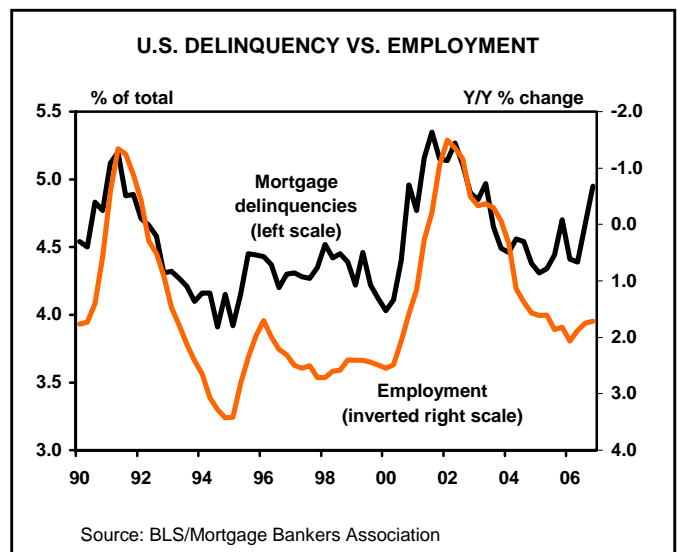
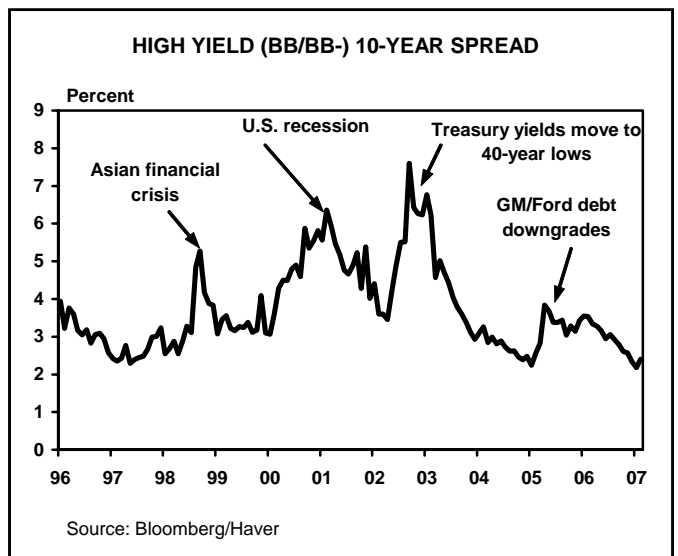
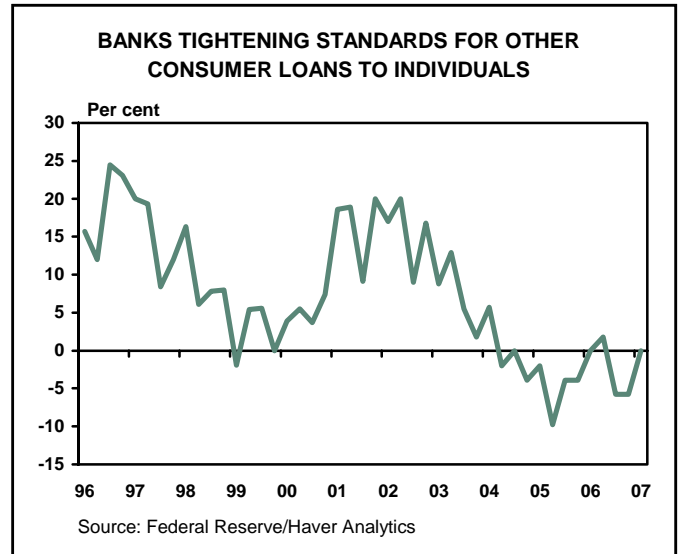
standards on residential mortgage loans, marking the highest net fraction since the early 1990s. However, this behaviour did not spill over to riskier loan products like credit card and non-credit-card consumer loans. So, there is no evidence of contagion on this front either.

What about other risky debt products, like the high yield bond market? The spread between BB/BB- 10-year (junk) bonds and Treasuries was 241 basis points in March. This is well below levels typically seen during a financial crisis. For instance, the financial crisis of 1998 led to a tightening in business lending standards that caused high-yield spreads to rise from 255 basis points in May 1998 to 527 basis points by October 1998. Even downgrades to GM and Ford debt ratings in 2005 caused aggregate high yield spreads to swell temporarily from 225 basis points in February to 384 basis points by May. The current low level of spreads provides some reassurance that the sub-prime mortgage crisis has not mushroomed beyond those parties with direct exposure.

Conclusion

As the months roll forward, we have little doubt that news of a struggling sub-prime mortgage market will repeatedly play on the insecurities of financial market participants because the worst is yet to come. Investors will continue to hear about sub-prime casualties, both as consumer defaults mount and as more lenders exit the market. According to DBRS, as of the end of March, nine of the top 25 sub-prime lenders in the U.S. already exited the business or are no longer operating independently, while several smaller lenders have filed for bankruptcy protection.

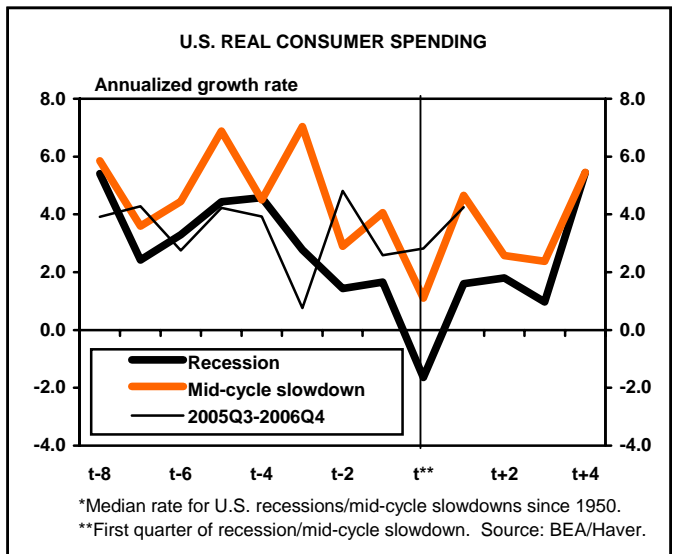
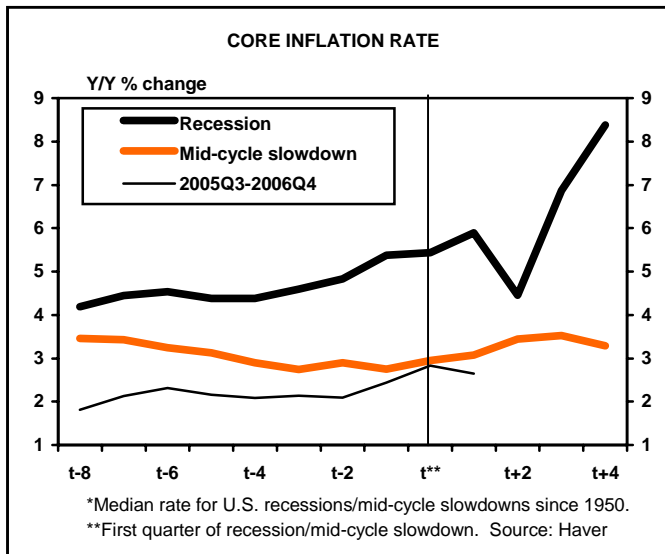
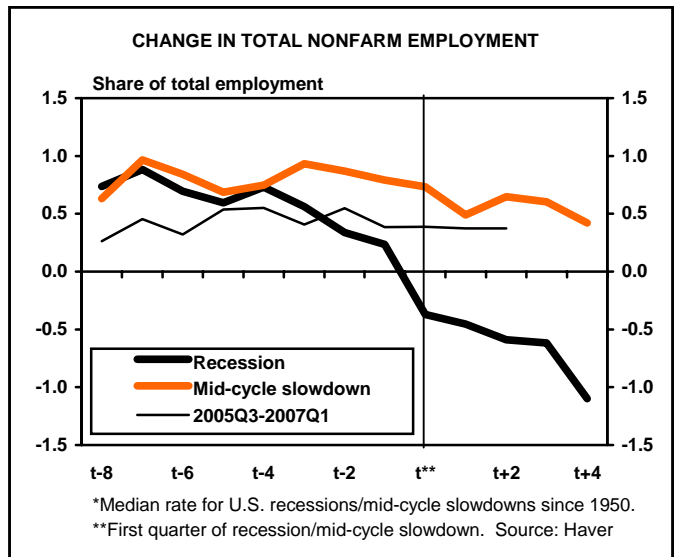
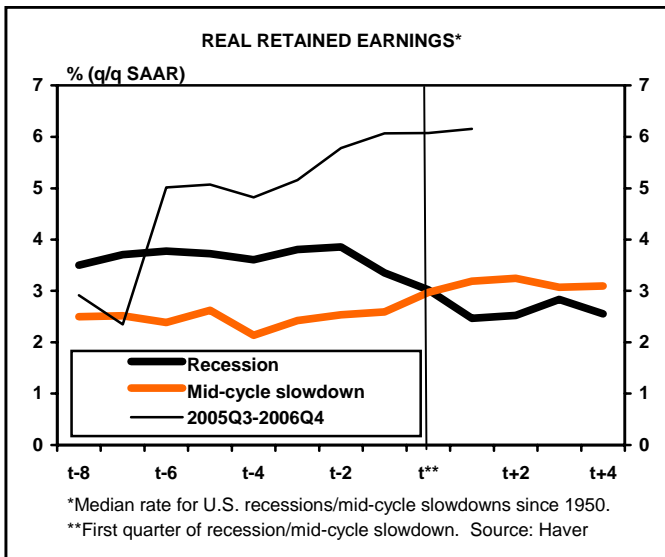
However, it is all too easy to become engrossed in the wrangling of the mortgage market and overlook some of the broader fundamentals currently at play in the U.S. economy. For one, some economic stability is derived from the fact that about one-third of homeowners have no mortgage and own their homes outright. Second, the series of panel graphs on the final page show that when it comes to employment, corporate savings, inflation and consumer spending, the current U.S. economic cycle continues to mirror a mid-cycle slowdown, not an outright retrenchment. In fact, the healthy employment market may help put a ceiling on the rate of mortgage delinquencies. In the past, these two series moved in lockstep with each other, but the adjacent graph indicates greater divergence this time around. Perhaps this is further affirmation that



the difficulties in the mortgage market are related more to a normalizing credit cycle after extremely loose standards, rather than broader macroeconomic difficulties. The ab-

sence of financial contagion, ample supply of liquidity and a healthy job market give every reason to believe the American economy will ride out the housing downturn.

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Endnotes

¹ DBRS, February 21, 2007, Industry Outlook for Residential Mortgage Lenders

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