



Consumer Watch U.S.

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Jeffrey Rubin
(416) 594-7357

Avery Shenfeld
(416) 594-7356

Benjamin Tal
(416) 956-3698

Peter Buchanan
(416) 594-7354

Warren Lovely
(416) 594-7359

David Bezic
(416) 956-3219

How Painful Will Mortgage Rate Resets Be?

Benjamin Tal

We are in the midst of the largest mortgage interest rate reset in American history. In the coming 24 months, interest rates on no less than US\$2 trillion of mortgage debt will be adjusted upward. Ultimately, that will not turn out to be as big a macro story as currently feared by many. But it will be a credit quality story. Rising interest payments, amidst a slowing housing market, are a sure-fire recipe for increased default rates. And with those risky loans being the fastest growing segment of the MBS market, that's where it will hurt the most.

Reset Time

The fed funds rate has risen by 425 basis points since mid-2004, but the effective mortgage rate paid by

American households has risen by only 30 basis points (Chart 1). An uncooperative bond market played an important role here. But equally important was the stickiness of actual mortgage payments on adjustable rate mortgages (ARMs). Theoretically, interest payments on those mortgages are suppose to dance to the tune of the fed funds rate. But the majority of those loans were given with a teaser—a low introductory rate for a period of two or even three years that would adjust upward at the end of the initial period.

The ARMs market climaxed in 2004 and 2005, with ARMs originating in those years accounting for fully one-fifth of all mortgages outstanding at the end of that period (Chart 2). For most of these loans, the

Chart 1
Rate Increase Since 2004

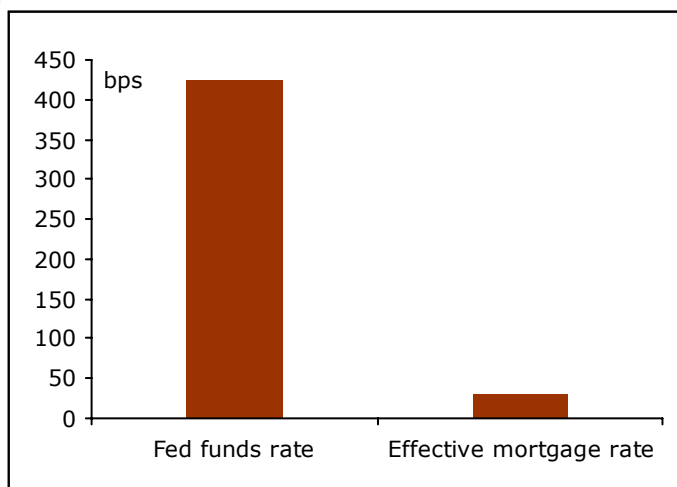
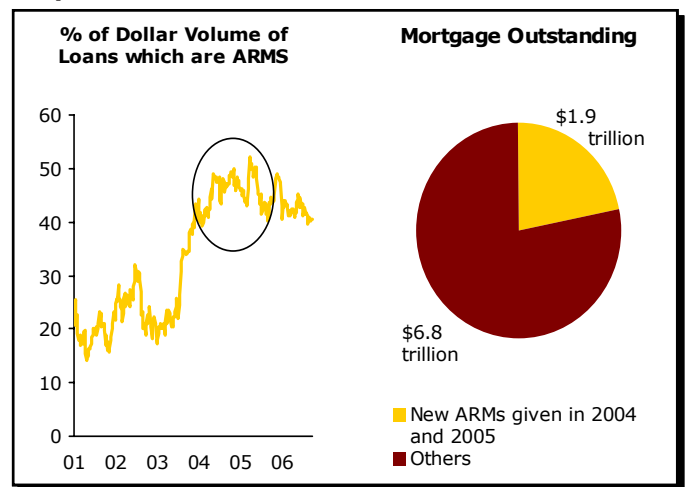


Chart 2
Unprecedented Growth in ARMs in 2004/05



teaser period is now ending, and it's payback time. Interest rates on roughly US\$2 trillion of mortgage debt will be upwardly adjusted in the coming 24 months.

Two trillion dollars is a big number, and it's tempting to conclude that the increase in mortgage interest payments will have a momentous impact on consumers. But a careful calculation of these extra payments, based on the distribution of the initial mortgage rates, suggests that in the coming two years, households will see their mortgage interest payments rise by an additional annual average of roughly US\$35-40 billion. That's not a large enough number to cripple the consumer, especially considering the fact that over the past year, higher interest rates have lifted households' interest income from deposits by more than double that amount.

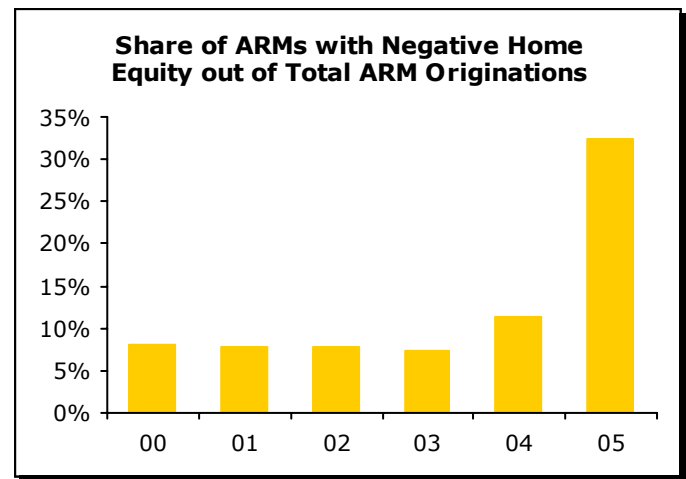
Deteriorating Credit Quality

So this is not a macro story. But it is a credit quality story. The recent surge in ARMs activity was concentrated among high-risk borrowers, who pursued every avenue to lower their initial payments. The sub-prime (high-risk)¹ segment of the market has been growing by more than 20% a year since 2003, and those sub-primers, especially in cities where real estate prices rose the fastest, have been heavy users of exotic mortgages such as Interest Only and Negative Amortization Option ARMs (Chart 3).

The direct consequence of this real estate gymnastics is that many of those high-risk borrowers have little or no home equity to rely on in the case of even a modest price correction. An astonishing one-third of ARMs taken in 2005 currently have negative home equity, and close to half possess less than 5% equity (Chart 4)². And many of those questionable borrowers are now facing substantial interest rate resets (Chart 5).

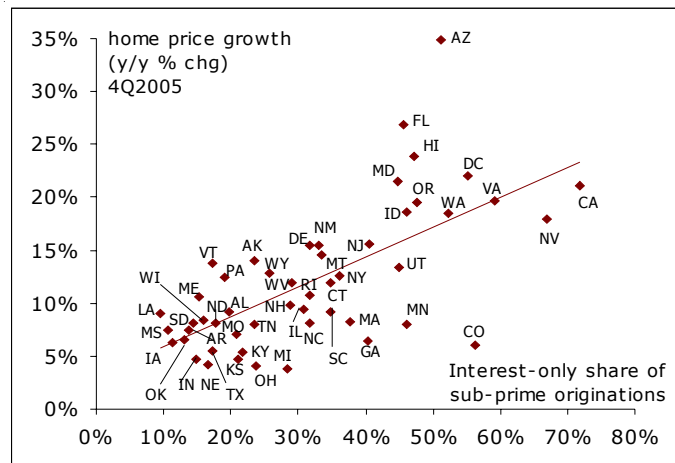
Early signs of trouble are already evident. The mortgage delinquency rate is on the rise (Chart 6, left) and more sub-prime borrowers are now defaulting in the early months of their home loans. The number of

**Chart 4
Negative Home Equity**



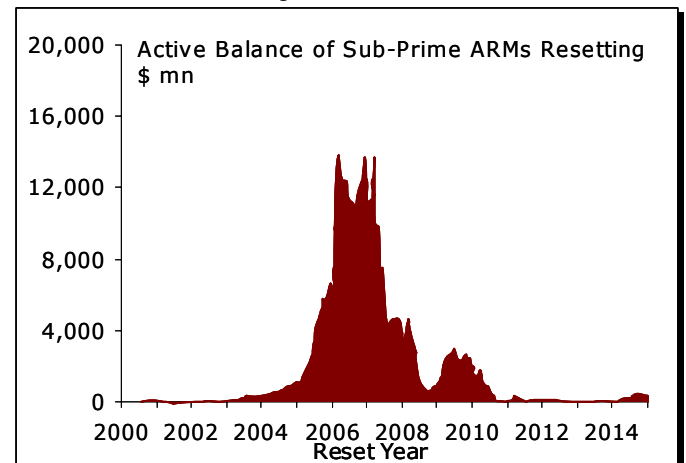
Source: First American Real Estate Solutions, CIBCWM

**Chart 3
Exotic Mortgages Most Popular Where Prices Rose Fast**



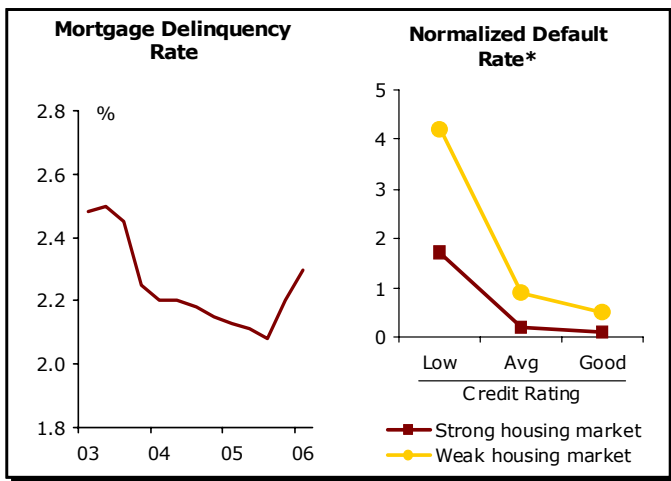
Source: Loan Performance Corporation, CIBCWM

**Chart 5
Sub-Prime ARMs Will See a Surge in Interest Rate Reset Activity in the Next 18 Months**



Source: Loan Performance Corporation, CIBCWM

Chart 6
Mortgage Default Rates Will Rise



*Ratio of default rate for a given risk group to the default rate for the entire sample. Source: CIBCWM, BIS

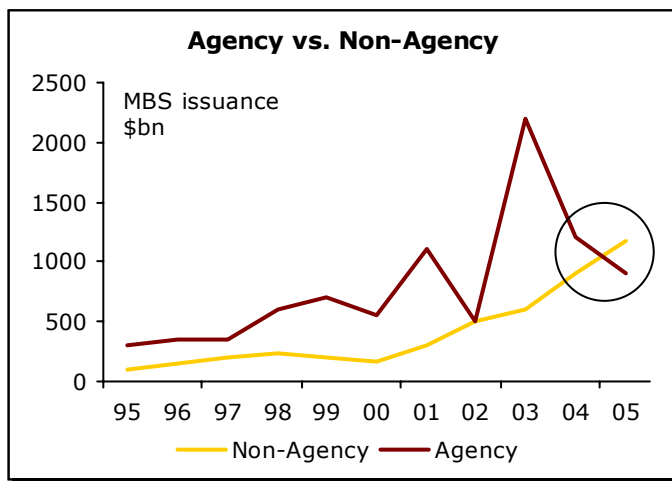
sub-prime mortgages with at least one missed payment in the first three months after origination has risen by 14% since the beginning the year. What's more, the shift from a strong to weak housing market environment will lead to a rise in *unexpected* losses since the long real estate bull market has artificially improved the credit rating of many borrowers, and the relationship between default rates and credit scores becomes increasingly more convex as we move from a more to less robust housing market (Chart 6, right).

Non-Agency MBS Market Will Feel the Pain

This is not good news for American banks. Never before has the US financial sector been so exposed to the real estate market, with mortgages and home equity loans accounting for almost 40% of total loans and leases. In all likelihood, loan loss provisions will rise notably in the coming 12-24 months.

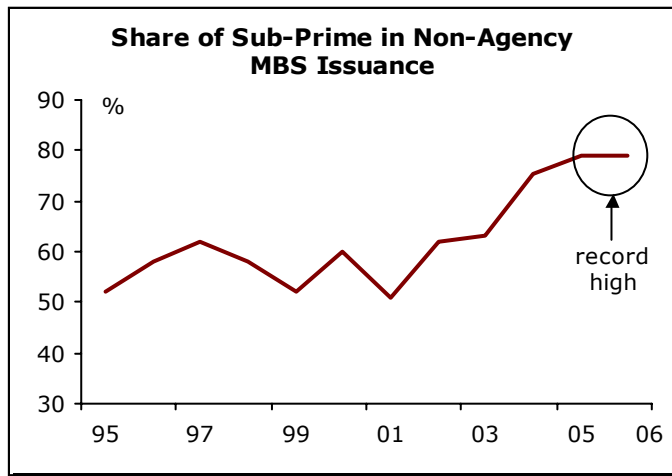
But the most significant impacts will be felt in the MBS market, where non-agency (private) issuance has been rising much faster than MBS issued by agencies (like Fannie Mae). Annual non-agency MBS issuance has not only doubled to more than US\$1 trillion in the past few years, but its share in the MBS market has risen from 25% in 2000 to more than a half today (Chart 7). And this strong increase in private issuance coincided with the sub-prime boom, with sub-prime mortgage pools now accounting for

Chart 7
Strong Non-Agency MBS Issuance



a record-high 80% of all non-agency MBS issuance (Chart 8). Current non-agency/agency MBS spreads have yet to reflect a significant deterioration in non-agency credit quality. That will change soon.

Chart 8
Sub-Prime Boom



Notes:
 (1) Non-conforming/sub-prime market is defined as lending at relatively costly interest rates and fees to credit-impaired or otherwise higher risk borrowers. Whereas prime loans are typically offered to borrowers who have a strong credit history and can demonstrate a capacity to repay their loans, non-conforming loans are typically made to borrowers who are perceived as deficient on either of these grounds. The lender also accepts riskier mortgage characteristics, such as a higher loan to value ratio, or attributes of the property that cause the loan to carry elevated credit.
 (2) For breakdown by state, refer to Table 1 on pg. 4.

Table 1
Home Equity: 5% or Less By State

State	5% Equity or Less	State	5% Equity or Less
NY	5.5%	AZ	16.6%
HI	6.1%	NV	15.9%
MA	7.0%	GA	10.8%
CT	8.2%	KY	14.3%
NJ	8.6%	WA	15.0%
MT	6.5%	IL	15.6%
VA	9.7%	NM	15.0%
FL	10.6%	MN	16.7%
DE	9.7%	IN	17.4%
PA	10.4%	NC	13.3%
MD	10.3%	MO	20.1%
CA	10.8%	OK	19.9%
DC	13.4%	WI	24.3%
TX	8.8%	OH	23.9%
SC	10.7%	AR	21.3%
UT	11.0%	AL	22.1%
OR	13.2%	MI	24.6%
AK	12.4%	CO	28.5%
		TN	28.0%

Source: First American Real Estate Solutions, CIBCVMM

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