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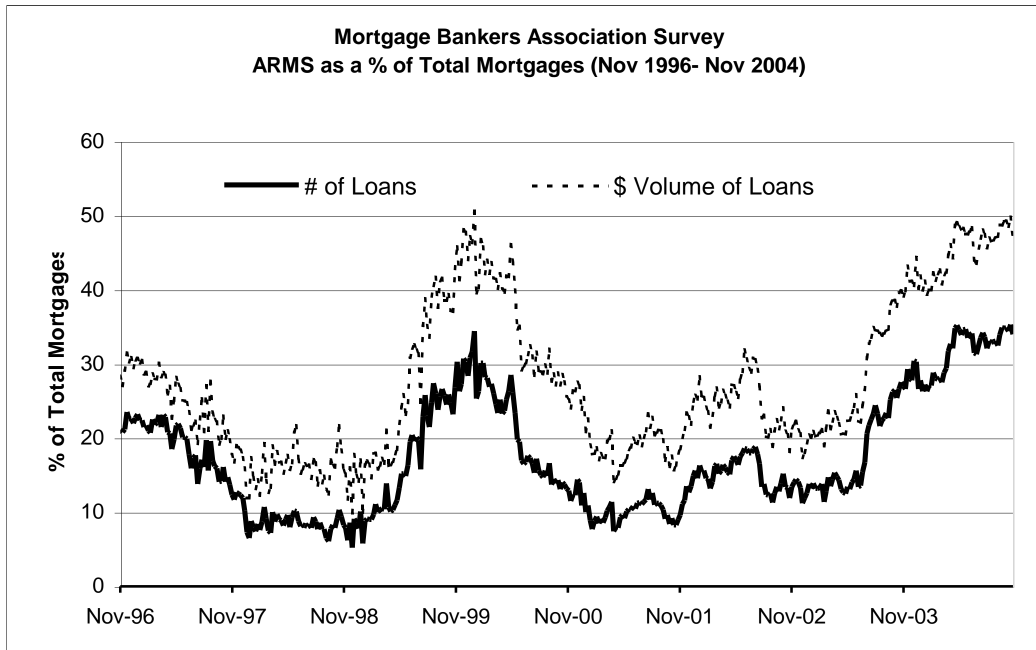
The Growth of Hybrid ARMs in the Residential Mortgage Market

Over the last few years mortgage production trends have shifted from fixed rate to adjustable rate mortgages. Many home borrowers are familiar with the standard 30-year fixed rate mortgage, where they pay the same fixed percentage rate every month for 30 years until their mortgage is paid off. Alternatively, some may be familiar with the standard adjustable rate mortgage where the rate, which is pegged to 1-year LIBOR or 1-year CMT, resets annually. If 1-year rates rise, the homeowner pays a higher rate during that year and if rates fall the homeowner pays a lower rate. This type of mortgage leaves the homeowner with a tremendous amount of uncertainty and risk should rates rise from year to year.

An alternative to the traditional types of mortgages is the Hybrid ARM. As their name reveals, Hybrid ARMs are part fixed and part adjustable. These mortgages are typically fixed for the first 3, 5, 7, or 10 years and are adjustable for the remaining term. The fixed rate portion is lower than that of their 30-year fixed rate mortgage counterpart. However, it is not permanent because it adjusts with the market (i.e. 1-year LIBOR, or 1-year CMT) after the fixed rate term expires. For example, a 5/1 ARM is a mortgage rate that is fixed for five years at a rate that is lower than the 30-year fixed rate mortgage. After the first five years, the rate can change annually with a floating rate index such as 1-year LIBOR or 1-year CMT. In order to protect the borrower, the rate cannot change by more than a certain fixed amount from year to year and it has a lifetime cap. For example, the 5/1 ARM can have a 2/2/6 structure. This means that after the first 5-year fixed rate period is over, the rate cannot increase more than 2% at the first reset, 2% at any subsequent reset, and it cannot increase by more than 6% from the initial fixed rate over the life of the mortgage. Despite the risk of a potentially increasing mortgage rate, borrowers may choose to enter into a Hybrid ARM transaction when either home prices or fixed mortgage rates are very high.

The recent trend of rapidly rising home prices has brought about a strong demand for Hybrid ARMs. Exhibit 1 shows that ARM loans as a percentage of total mortgage production have increased dramatically over the last few years. Since borrowers with higher loan balances get the most savings out of lower mortgage rates, this increase appears even stronger when measured by loan size.

Exhibit 1



As home prices rise, so do mortgage loan balances. In order to afford larger mortgages, borrowers must look to product types other than the traditional fixed rate mortgage. A borrower purchasing a home for $400,000 with a mortgage of $300,000 paying a 30-year fixed rate of 5.625% would have a monthly payment of $1,726.97. The same borrower could take out a 5/1 ARM and pay a fixed rate of 4.5% with monthly payments of $1,520.06 for the next five years, resulting in savings of 12,414.60 over the 5-year period. Any time during or after the 5-year period, he can refinance into a 30-year fixed rate mortgage if his financial situation improves or he can choose to make adjustable rate payments for the remaining 25 years of the mortgage. The Hybrid ARM rate for a 3/1 ARM would be even more attractive than that of a 5/1 because the fixed rate portion of the loan is shorter. Conversely, the rates for a 7/1 and a 10/1 ARM would be higher because the fixed rate period is longer. (Please see Exhibit 2 below).

Exhibit 2

	Rate	***Monthly Payment on $300,000 loan***	***Monthly Savings vs. 30 Year Fixed***
30 Year Fixed	5.625%	$1,726.97	N/A
3/1 Hybrid ARM	4.000%	$1,432.25	$294.91
5/1 Hybrid ARM	4.500%	$1,520.06	$206.91
7/1 Hybrid ARM	4.875%	$1,587.62	$139.35
10/1 Hybrid ARM	5.250%	$1,656.61	$70.36

Demand for Hybrid ARMs also increases when interest rates are high. When 30 year fixed mortgage rates become too high for some borrowers to afford, they may look for alternatives that give them a short-term break with the anticipation that rates will

eventually fall and they can refinance into a fixed rate mortgage. This was the case in 2000. When the absolute level of rates was high and mortgage production was low, ARMs were a large percentage of new mortgages. (Please refer to Exhibit 1 on previous page).

The savings associated with Hybrid ARM rates relative to 30 year fixed rates is greatest when the treasury yield curve is steep. The reason for this is that Hybrid ARMs are primarily priced off of the shorter part of the yield curve, while 30-year fixed rate mortgages are priced mostly off of the 10-year part of the curve. Traders, who hedge their portfolios of bonds, look at the partial durations of securities. In exhibit 3 below, we compare the exposures of fixed rate and Hybrid ARM mortgages to different parts of the yield curve.

Exhibit 3

	2- year	***5-year***	***10-year***
30 Year Fixed	24%	25%	51%
7/1 Hybrid ARM	32%	48%	20%
5/1 Hybrid ARM	39%	55%	6%

While the Hybrid ARMs are priced more heavily off of the 2- and 5-year part of the treasury curve, the 30-year fixed rate mortgage is primarily weighted to the 10-year part of the curve. As a result, if short-term rates are significantly lower than longer-term rates, the advantage to Hybrid ARMs over 30-year fixed rate mortgages becomes more apparent.

The recent strong demand for Hybrid ARMs can be attributed to the steepness of the treasury curve, but more importantly to the dramatic rise in home prices relative to income growth across the country. In addition, potentially rising interest rates may also filter down into a greater demand for Hybrid ARMs. If the trend in home prices continues borrowers will likely take on the risk associated with uncertain future mortgage payments in order to reap the immediate savings of low initial mortgage payments. Ultimately, many homebuyers know that they may not stay in their homes for more than a certain number of years. They can sell their house before or shortly after their Hybrid ARM becomes adjustable, thereby walking away with a significant savings during the time that they had their mortgage.

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Emad is the Managing Partner and Chief Executive Officer of Vanderbilt Avenue Asset Management LLC. Vanderbilt's client base includes Multi-national Corporations, Public Funds, Foundations/Endowments, and Taft Hartley accounts.

Previously, Emad was Chairman of Institutional Business at Pioneer Investments. Pioneer investments has more than $300 Billion in assets under management. The parent of Pioneer, UniCredit S.p.A., is the largest bank in Italy and the second largest bank in Europe. Pioneer had purchased Vanderbilt Capital Advisors, of which Emad was the founder and Chief Executive Officer.

Emad has had numerous articles published in professional and academic journals such as *The Journal of Forecasting*, *The American Economist* and *The Journal of Fixed Income*. He is a Board member of The National Investment Company. Emad was a member of the Board of Advisors of the Pacific Institute, The Advisory Committee of Fulcrum Global Partners, The Chief Executive Officers Club and formerly a board member of The Foreign Policy Association. He also served on the Board of Directors of the University of Albany Foundation, NextGen Healthcare Inc., The Park Avenue Bank, AA Bank and The New Providence Fund and Associates LP.

Emad is an FINRA Arbitrator. He is also a member of the National Association for Business Economists and The Economic Club of New York. Emad served as an adjunct professor at the University of Kansas and St. John's University.

Emad holds a Bachelor of Science from the University of Albany, and a M.A. and Ph.D. in Economics from the University of Kansas.