MORTGAGE DOLLAR ROLLS DEFINED

Portfolio managers should be aware of the opportunities to enhance a portfolio's return through the use of mortgage dollar rolls. A mortgage dollar roll is a transaction in which the investor sells a mortgage backed security for delivery in one month at a specified price and then simultaneously buy the same security for delivery in a future month at a lower price. The difference between the two price's called the drop (usually quoted in 32's) and is the result of the 30-day commercial paper rate, the expected principal and interest payment on the mortgage, as well as the demand/supply of the mortgage in the market place. This transaction allows the portfolio manager to have the same price and duration exposure in the mortgage security while either delaying the cash payment for the security by a month or receiving the cash for the bonds for a one-month. The net effect is that the investor is able to maintain mortgage exposure while having the cash to reinvest.

In a typical transaction the buyer of a mortgage security for the current month (the buyer of the roll) is a broker/dealer seeking to cover an existing short position in the specified coupon mortgage. Dealer shorts can result from a change in supply as the production coupon for mortgages changes because of an interest rate change or as a result of increased demand from money managers. A common situation would be when rates increase, money managers purchase mortgage securities for their better return in an increasing rate environment because of their lower callability and high coupon income. At the same time because rates are rising individuals put off locking in the rate for a mortgage on a new house and people who currently have a mortgage will consequently not refinance. This will cause a decrease in the supply of mortgages coming to the market place. The broker/dealer who had sold mortgages to investors now finds himself with a short position and no supply. The seller in a transaction (the seller of the role) is typically an institutional investor who wants to maintain his net long position in a mortgage security while capturing the price drop and being able to reinvest the cash in a short-term security. When this is a positive arbitrage for the investor he will roll his bonds, which then helps to alleviate the supply/demand imbalance.

The advantages and risks of rolling mortgages can have a substantial impact on the decision to roll or not. One of the factors that influence the roll is prepayment risk. When an investor rolls bonds, he foregoes prepayment risk. On a premium security that is expected to have a substantial number of prepayments, an investor would be better off rolling the bonds and avoiding the prepayment risk. In contrast, however on a discount dollar price mortgage, a pick up in prepayments is advantageous, as the price one receives when a security prepays is par resulting in a gain. One situation where an investor could capitalize on this is when he or she believes prepayments will be higher

than the market is forecasting. The investor could roll their premium bonds and eliminate their risk to prepayments. Another advantage of rolling mortgages is you are not susceptible to delivery variances, that is the dealer delivering mortgages has the option to over or under, deliver to the investor a small percentage of the original trade amount. The dealer will always deliver the less desirable amount to the investor. If for example, the market is down from the time the bonds were purchased the dealer will deliver as many bonds as permitted. This allows the dealer to sell the investor additional bonds at a predetermined price, which of course would be higher than the current price available in the market. This creates an instant arbitrage for the dealer. This option is not available to the dealer when an investor rolls the bonds.

The dollar roll may be illustrated by the simple example highlighted below.

I. Assumptions

Security:	**GNMA 7% 30-Year TBA July**
Prepayment Rate:	**181 PSA**
Settlement Date:	**July 21, 1998**
Current Delivery Price:	**101 18/32**
Forward Price:	**101 15/32**
Price Drop:	**3/32**
Reinvestment Rate (1 mo.LIBOR):	**5.65625%**
Initial Balance:	

II. Return from Holding of GNMA 7% (*Bought on 6/22/98*)

A) $100MM GNMA 7% July TBA @ 101-18/32 for settlement 07/21/98

Principal:	**$101,562,500.00**
Accrued Interest Paid:	**$ 388,888.89**
Total Cost:	**$101,951,388.89**

One month principal & interest received by investor on 08/17/98.

Principal:	**$ 322,342.00**
Accrued Interest Paid:	**$ 583,902.53**
Total Cost:	**$ 906,244.53**

B) Value of the asset on 8/19/98

Own $99,677,658.00 principal	
GNMA 7% @ 101-15/32:	**$101,141,673.59**
+Principal & Interest Rec.	**$ 906,244.53**
+Acc. Int. (08/01 – 08/19)	**$ 348,871.80**
Total Value on 8/19/98:	**$102,396,789.93**

III. Return from Dollar Roll of GNMA 7%

A) Invest $101,951,388.89 @ 5.65.25% for 30 days = $464,533.72

B) Value of Asset on 8/19/98

Money to invest:	**$101,951,388.89**
+30 days int. @ 5.6525%:	**$ 464,533.72**
Subtotal:	**$102,415,922.60**
Drop (3.32) on $100MM	**$ 93,750.00**
Total Value on 8/19/98:	**$102,509,672.60**

IV. Evaluation

Dollar Roll Value:	$102,509,672.60
Holding Security Value:	$102,396,789.93
Value advantage of Dollar Roll:	**$ 112,882.77**

The above example indicates that the GNMA 7% roll provides a superior return relative to holding the GNMA security. Over time, an investor can add significant incremental return by entering into a dollar roll rather than buying and holding the security.

In conclusion all investors in the mortgage market should be aware of the opportunities available in the mortgage roll market. Only after analyzing the different components of the roll and quantifying them can you determine the best value for a portfolio.