



# Mortgage Backed Report

## Mortgage Backed Securities - CMO Cash Flow Bonds

Collateralized Mortgage Obligations (CMOs) are a security backed by a pool of mortgage loans or a pool of pass-through securities which are in turn secured by mortgage loans. Usually they are issued by a U S government agency such as Government National Mortgage Association (Ginnie Mae) Federal Home Loan Mortgage Corp. (Freddie MAC) or Federal National Mortgage Assoc. (Fannie Mae). These securities are “pass-through” securities meaning that interest and principal payments pass-through to the investors.

When CMOs are structured and issued they are usually divided into different tranches or classes to meet the varying needs and objectives of bondholders. The principal and interest of the underlying mortgages is passed through to the various tranches on various schedules so that, for example, one tranche may receive principal payments immediately while other tranches may not receive any principal payments for many years.

The rate of principal return will vary as interest rates change. Principal is returned and flows through for a variety of reasons.

- The normal principal portion of each monthly mortgage payment
- Mortgage payoff from sale of home
- Mortgage payoff from refinancing
- Homeowners voluntary early principal payments

As interest rates fall there will be an increase in pre-payments due to refinancing and home sales. As interest rates rise there will be fewer prepayments since there a few refinancings and home sales can be expected to slow.

Cash Flow Bonds represent a tranche to which these principal payments are directed - beginning immediately. Each month the bondholder will receive both principal and interest creating a cash flow – thus the name Cash Flow Bonds. Because the principal is paid quickly these bonds have a short average life relative to other tranches. Nevertheless this average life can vary as interest rates fluctuate – longer if rates go up and shorter if rates go down.

Example – This issue was first offered this month (October 2002)

Government National Mortgage Assoc.

Coupon 5.50%

Maturity 10-1-32 (anticipated)

Average Life 2.69 years (estimated at time of issuance)

- If interest rates go up by 100 basis points (from 5.50% to 6.50%) the estimated average life will be 7.4 years because homeowners will make fewer pre-payments through refinancing or otherwise.
- If interest rates go down 100 basis points (from 5.50% to 4.50%) the estimated average life will be about 7 months.
- The first principal payment will be made on December 20 and will continue to be paid monthly along with interest.

As the name implies, Cash Flow Bonds may be appropriate securities for investors looking for immediate, monthly cash flow. Risks associated with these bonds include variability of principal payments – the average life can change. If interest rates rise, the average life will extend and the amount of principal returned each month will diminish. On the other hand if rates fall, the bonds will pay off more quickly with faster return of principal which may lead to having to reinvest principal at lower yields.

It is important to understand that although the monthly payments produce strong cash flow, the underlying value of the security is decreasing as principal is paid out. The amount of principal outstanding at any point after principal payments begin can be determined by the factor. For example a \$25,000 lot of CMOs which has seen 15% of the principal paid off will have a factor of .85 which means that the outstanding principal amount for this lot is \$21,500 ( $\$25,000 \times .85 = \$21,250$ ). The factor of a Cash Flow Bond adjusts downward each month to reflect the immediate and continuing principal payments.

The credit quality of these issues is strong since the issuers are U S government agencies.

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