

## Holland Mortgage Backed Series (Hermes) VIII B.V.

**SNS Bank N.V.**  
**MBS**  
**Netherlands**

***PLEASE NOTE:** This pre-sale report addresses the structure and characteristics of the proposed transaction based on the information provided to Moody's as of [12<sup>th</sup> May, 2004]. Investors should be aware that certain issues concerning this transaction have yet to be finalised. Upon conclusive review of all documents and legal information as well as any subsequent changes in information, Moody's will endeavour to assign definitive ratings to this transaction. The **definitive** ratings may differ from the **provisional** ratings set forth in this report. Moody's will disseminate the assignment of definitive ratings through its Client Service Desk*

**CLOSING DATE:**

June 2004

**Lead Analyst:**

Boudewijn Dierick  
Analyst  
Paris  
(33) 1 5330 1025  
*Boudewijn.Dierick@moodys.com*

**Backup Analyst:**

Annabel Schaafsma  
VP-Senior Analyst  
London  
(44)-207 772 5379  
*Annabel.Schaafsma@moodys.com*

**New York:**

Marie Erickson  
Investor Liaison Specialist  
(1) 212 553 4796  
*Marie.Erickson@moodys.com*

**Client Service Desk:**

London: (44) 207 772 5454  
*csdlondon@moodys.com*

**Monitoring:**

London: (44) 20 7772 5399  
*monitor.london@moodys.com*  
Frankfurt: (49) 69 7073 0731  
*monitor.frankfurt@moodys.com*  
Paris: (33) 1 53 30 1074  
*monitor.paris@moodys.com*  
Madrid: (34) 91 702 6601  
*monitor.madrid@moodys.com*  
Milan: (39) 02 5821 5596  
*monitor.milan@moodys.com*  
Johannesburg: (27) 11 217 5470  
*monitor.johannesburg@moodys.com*

**WEBSITE:**

[www.moodys.com](http://www.moodys.com)

**RATINGS**

Class	Rating	Amount	% of Total	Legal Final Maturity	Maturity Expected
A	(P)Aaa	€1,156,500,000]	[92.52]	18/05/38	18/11/13
B	(P)A1	€73,000,000]	[5.84]	18/05/38	18/11/13
C	(P)Baa2	€20,500,000]	[1.64]	18/05/38	18/11/13
D	(P)Baa3	€19,000,000]	[1.52]	18/05/38	18/11/13
Total		€1,250,000,000]	100		

The ratings address the expected loss posed to investors by the legal final maturity. The structure allows for timely payment of interest and ultimate payment of principal at par on or before the rated final legal maturity date. Moody's ratings address only the credit risks associated with the transaction. Other non-credit risks have not been addressed, but may have a significant effect on yield to investors.

**OPINION**

**Strengths of the Transaction**

- The protection against losses through the subordination of the more junior notes.
- The excess spread of 0.45% p.a in the transaction guaranteed via the interest rate swap provided by CDC IXIS.
- The availability of a reserve fund of [1.5]% of the Notes balance at closing building up to [1.9]% and of a liquidity facility provided by SNS Bank N.V. equal to 1% of the Note balance at closing.

**Weaknesses and Mitigants**

- The substitution of new mortgages into the pool until [May 2006] mitigated by the triggers controlling the amount, the eligibility criteria and the conditions to be satisfied.
- Conditional sale, the borrowers have not been notified of the sale of the mortgages to Hermes VIII, this is mitigated by the addition of a notification trigger. In the event SNS Bank N.V. falls below A3 the borrowers will be notified.
- Set-off risk on the life insurance and investment mortgages in the pool, mitigated by the investment grade rating of SNS Bank and the fact that the large majority of the life insurance policies is provided by third parties outside the SNS Reaal Group.
- A high percentage of Interest-only loans, which benefit however from combined life- and capital-insurance policies in case the loan to foreclosure value exceeds certain levels.



## STRUCTURE SUMMARY

Structure Type:	A limited liability company established in the Netherlands
Borrowers:	Private people based in the Netherlands
Seller/Originator:	SNS Bank N.V. ( <b>A2/Prime-1</b> ) ("SNS Bank")
Servicer:	SNS Bank
Interest Payments:	Quarterly, on 18th day of November, February, May and August
Principal Payments:	Principal pass-through structure after the revolving period.
Credit Enhancement/Reserves:	[1.5]% Class D Notes used to fund the Reserve Fund and Subordinated Classes of Notes.
Liquidity Facility:	Provided by SNS Bank equal to 1% of the Note balance at closing.
Interest Rate Swap Counterparty:	CDC IXIS Capital Markets ( <b>Aaa/Prime-1</b> ) ("CDC IXIS")
Principal Paying Agent:	ABN AMRO Bank ( <b>Aa3/Prime-1</b> )
Security Trustee:	Stichting Security Trustee Holland Mortgage Backed Series (Hermes) VIII.
Arrangers/Lead Managers:	Citigroup and Deutsche Bank

## COLLATERAL SUMMARY (BASED ON PRELIMINARY POOL SELECTION OF 30 APRIL 2004)

Receivables:	First ranking mortgage loans to Dutch individuals
Number of Contracts:	[14,925] loan parts
Number of Borrowers:	[8,382]
Average loan size:	[Euro 173,510; max Euro 400,000 per borrower
Geographic Diversity:	[Gelderland 17.6%, Zuid-Holland 14.6%, Noord-Holland 11.6%, Limburg 11.5%, %, Noord-Brabant 9.3%, Flevoland 9.1% Overijssel 8.6%, Utrecht 7.7%]
Weighted Average LTV:	Loan to recorded market value [94.4]%, Loan to initial Foreclosure value [108.2]%
Remaining Term:	No loan has a legal maturity beyond [October 2034]
Seasoning:	[16] months
Delinquency Status:	No loans in portfolio were delinquent on [30 April] 2004
NHG Loans:	0%

## CREDIT SUPPORT

Class	Amount (million)	Rating	Rate type	Initial Margin/Rate	Step-up Margin
A	€1,156,500,000]	(P) <b>Aaa</b>	Floating	[•]%	[1.0]%
B	€73,000,000]	(P) <b>A1</b>	Floating	[•]%	[1.5]%
C	€20,500,000]	(P) <b>Baa2</b>	Floating	[•]%	[2.0]%
D	€19,000,000]	(P) <b>Baa3</b>	Floating	[•]%	[2.5]%

## OVERVIEW

### *Program summary: only minor changes in Hermes VIII*

Hermes VIII is the eighth true sale transaction backed by mortgages originated by SNS Bank to its clients. SNS Bank comes to the market on a regular basis with series issued under the Hermes Program, for the last time in November 2003 when Hermes VII was issued. In January 2004, SNS also came to the market with its first synthetic RMBS transaction, Provide Lowlands 1 B.V.

Hermes VIII is using a structure very similar to the previous Hermes transactions. Similar to Hermes VII, savings mortgages are included in the reference pool and a savings sub-participation is used in the structure and there is a substitution period of two years. Contrary to Hermes VII, no Class of notes denominated in US Dollars has been included.

### *Conditional Sale*

As has become the norm in the Netherlands, the assignment of the mortgages by the Seller to the Issuer will not initially be notified to the Borrowers, hence legal title will not pass to the Issuer on the Closing Date. To perfect security before a potential Bankruptcy of the Seller a notification trigger has been included in the structure in the event that SNS Bank's rating falls below **A3**.

The Issuer will finance its acquisition of the Mortgage Loan Portfolio with funds to be raised through the issuance of notes. The total initial purchase price of the Mortgage Loan Receivables will be equal to the proceeds received from the issue of the rated Class A, Class B and Class C Notes. The Initial Amount of the Reserve Fund will be financed through the issuance of Class D Notes. The Reserve Fund will build up to its required level by trapping excess spread.

### *Excess margin used to redeem Class D Notes*

Any Excess Margin available in the transaction after all other obligations (including replenishment of the Reserve Fund) have been met in full, will be used to redeem the Class D Notes.

### *Principal pass through structure following substitution period*

During the substitution period of maximum two years, any repayments received under the mortgage loans will be used to purchase substitute mortgages. Afterwards, any repayments received under the mortgage loans will be used to redeem the notes on a sequential basis in order of seniority, starting with the Class A Notes.

### *Optional redemption as of November 2013*

The Issuer may also at its option redeem all Notes (except for Class D) outstanding at the First Optional Redemption Date in November 2013 or on any payment date thereafter. An interest-rate step up mechanism is used to create an incentive for the issuer to redeem all of the notes (except for Class D) six months after the first optional redemption date. The first interest Step-up Date is in May 2014 so not on the first optional redemption date as is usually seen in Dutch RMBS transactions. As is the case with most Dutch RMBS transactions, under such circumstances, Notes would be redeemed at their outstanding principal balance less any Principal Deficiency Ledger balance that was then outstanding against that Note. While reviewing this transaction, Moody's has not taken into account such redemption given the optional nature thereof.

## STRUCTURAL AND LEGAL ASPECTS

### *Issuer established as private company (B.V.) in the Netherlands*

The Issuer is a special purpose vehicle incorporated under the laws of the Netherlands with limited liability as a "besloten vennootschap met beperkte aansprakelijkheid". The shares of the Issuer are owned by a foundation established under the laws of the Netherlands: Stichting Holland Euro-Denominated Mortgage Backed Series (Hermes) Holding.

***Transfer of title conditional to notification of borrowers***

As has become the norm in the Netherlands, the assignment of the mortgages by the Seller to the Issuer will not initially be notified to the Borrowers, hence legal title will not pass to the Issuer on the Closing Date.

To perfect security before a potential Bankruptcy of the Seller notification will occur upon one of the following events:

- 1) SNS Bank fails to comply with any of its obligations under the relevant agreements;
- 2) Any representation, warranty or statement made, proves to be untrue or incorrect;
- 3) Suspension of payments or Bankruptcy of SNS Bank; and
- 4) SNS Bank's rating falls below **A3**.

Moody's is of the opinion that the above mentioned notification triggers sufficiently protects the structure against a sudden bankruptcy of SNS Bank which could potentially result in the loss of the mortgage rights linked to the assigned and pledged mortgage receivables.

***Economic ownership transferred via a pledge structure***

In order to allow the Security Trustee to collect all the payments with respect to the mortgage receivables a first ranking pledge is given by the Seller to the Security Trustee on the Closing Date.

A second ranking pledge over the mortgage receivables is granted by the Seller to the Issuer in order to secure the obligation of the Seller to transfer legal title to the mortgage receivables to the Issuer through notification. Another right of pledge is granted by the Issuer in favour of the Security Trustee in order to allow the Security Trustee to benefit from all the rights of the Hermes VIII vehicle.

***Set-off risk with life insurance and investment mortgages***

Due to the tax deductibility of interest on residential mortgages and the ability to set up an independent tax efficient repayment vehicle, set off is an additional risk to Dutch RMBS transactions. This repayment vehicle usually takes the form of a savings or insurance policy.

In the event of a bankruptcy of the insurance company providing the borrower with the insurance/repayment policy, the possibility exists that the borrower is able to set off the value of his policy against the mortgage loan.

One of the requirements for set off under Dutch Law is that the mortgage contract and insurance policy are between the same parties.

In this transaction the mortgage loans with an interest-only mortgage part exceeding 75% (if originated before 1 April 2002) or 90% (if originated after April 2002) of the foreclosure value have a life insurance policy. However, the borrowers are free to choose their repayment policy provider and mortgage loan and life insurance policy are not marketed as one product, as such there is no direct commercial connection between the mortgage loan and the repayment policy. In cases where the insurance policy is provided by a party not linked to SNS Bank, it is therefore unlikely that the court would rule in favour of the borrower and allow set off. However, in relation to a portion of the interest-only loans, the insurance policy is provided by Reaal, which is, like SNS Bank, fully owned by the SNS Reaal Group (**A3/Prime-2**). In these cases, the possibility cannot be ignored that a Dutch court will rule in favour of the Borrower and allow set off.

Approximately 25.0% of the initial pool of mortgage loans are Investment Mortgages. In this product the payments by the borrowers, that are calculated to repay the mortgage at maturity, are invested in funds with of SNS Beleggingsfondsen N.V. The funds are pledged to the issuer via a silent pledge, but the possibility of set off still exists.

Set off risk has been taken in account in the ratings of the Notes by reducing the amount of credit support available to a Class of Notes with the expected loss due to set off. The expected loss is a function of (x) the severity which is the value of the insurance policy or investment product a borrower could potentially set off against the amount of the loan and (y) probability that the SNS Reaal Group will go bankrupt. The ratings of the Notes reflect the set off risk as at closing, but a deterioration of the credit quality of the SNS Reaal Group might affect certain classes of Notes.

***Savings participation Agreement***

Approximately 12.7% of the initial pool of mortgage loans are Savings Mortgage Loans. Set off risk is hereby mitigated through a sub-participation structure where the periodic premiums are passed through to the issuer.

Special provisions have been entered into to get regular principal cash flows from the Savings Mortgages which do not reimburse principal before the final maturity of the loan. According to these provisions the Participants will immediately transfer to the Issuer the savings premium received from the Borrower. The accumulation of these premiums plus accrued interest thereon reflects the principal amortization of an annuity mortgage of the same size. The structure is therefore receiving on each Monthly Payment Date an adequate amount of principal repayment from the Savings Mortgages. The amounts advanced to the Issuer by the Participants will allow them to build up a participation in the relevant Savings Mortgage making sure the Participants can still fulfill its obligations under the Savings Mortgage.

***Substitution until May 2006 unless substitution criteria are not met***

In the transaction, all principal receipts (which include receipts from the Savings Mortgage Participant) are reinvested in mortgages during the substitution period of two years. Substitution introduces additional risks, for example the risk that new mortgage receivables replace good quality borrowers who re-mortgage. This increases the potential loss. To limit the amount of risk that is introduced, the following criteria have to be met for substitution to take place.

- 1) not more than [2.25] per cent. of the aggregate outstanding principal amount of the Mortgage Loans is in arrears for a period exceeding 60 days (i.e. two missed monthly payments);
- 2) no draw on the amount to the credit of Reserve Account has been made;
- 3) the weighted average of the aggregate proportions of the Principal Amount Outstanding of each Mortgage Loan and Substitute Mortgage Loan to the Foreclosure Value of the mortgaged property does not exceed the weighted average at closing;
- 4) the aggregate outstanding principal amount of the Substitute Mortgage Loans and the Mortgage Receivables purchased by the Issuer since the Annual Payment Date immediately preceding the relevant date of completion of the sale and purchase does not exceed [20] per cent. of the aggregate Principal Amount Outstanding of the Notes on such Annual Payment Date;
- 5) cumulative realised losses do not exceed [0.5]% of the outstanding principal amount of the Mortgage Receivables at closing up to the Quarterly Payment Date in November 2005 and thereafter [0.9]% of the Principal Amount Outstanding of the Mortgage Receivables at closing;
- 6) no notification event has occurred.

***Interest rate mismatch removed with an interest rate swap provided by [CDC IXIS]***

Most mortgage loans carry a fixed interest rate, which is reset at a specific date in the future. The Class A, B, C and D Notes carry a floating interest rate payable quarterly in arrears. To mitigate the interest rate risk the Issuer has entered into a swap with CDC IXIS. Under this swap the Issuer will pay quarterly an amount equal to the scheduled interest receipts plus the prepayment penalties received minus an annual excess spread of 0.45% minus certain fees and issuer's expenses. The Issuer will receive the interest due on all the Notes, which includes the increase in margin after the first Step-Up Date in [May 2014], and certain operating expenses. Like in the Hermes VII transaction the notional amount under the swap will be reduced to the extent there is a debit balance on the Principal Deficiency Ledgers, which has been taken into account in the credit enhancement.

An **A1** trigger linked to the strength of swap counterparty CDC IXIS in combination with the standard swap replacement language ensures that interest rate risk is mitigated over the life of the transaction.

**Credit enhancement provided by Excess Margin, Reserve Fund and Subordination**

The first layer of protection for investors in the Notes is the Excess Margin of 0.45% p.a. in the transaction. The prepayment level and the timing of losses have an impact on the value of the Excess Margin.

As mentioned above, any Excess Margin that is not used to cover losses or to replenish the Reserve Account to its target level, will be used to repay the Class D Notes. Moody's assessed the credit enhancement provided by the Excess Margin over time, assuming different prepayment and loss scenarios.

Investors should be aware that the D Notes represent the first loss position in the pool. The allocation of excess spread to repay the D Notes reduces the severity and thus enhances the rating. However, this does not change the frequency of default and losses early in the transaction could lead to the D Notes not being repaid in full.

The second layer of protection is the Reserve fund with an initial size of [1.5]% of the initial balance of the Class A, B and C Notes, building up to [1.9]% of the initial balance of the Class A, B and C Notes by trapping excess margin. A step-down mechanism will reduce the Reserve Fund's size to the lesser of [1.5]% of the initial balance of the A, B and C Notes and [1.9]% of the current balance with a minimum of [0.5]% of the initial balance of the A, B and C when certain conditions are met.

The third layer of protections is provided by the subordination of more junior Classes of Notes.

**Liquidity provided by SNS Bank**

In the unlikely event the amount attributable to service the interest on the Notes is insufficient at a specific date, the liquidity facility equal to 1.0% of the initial balance of the Notes provided by SNS Bank can be used to ensure timely payment of interest on the Notes.

A **Prime-1** trigger ensures a liquidity provider of acceptable credit worthiness will be supporting the structure over the life of the transaction.

**GIC account with SNS Bank**

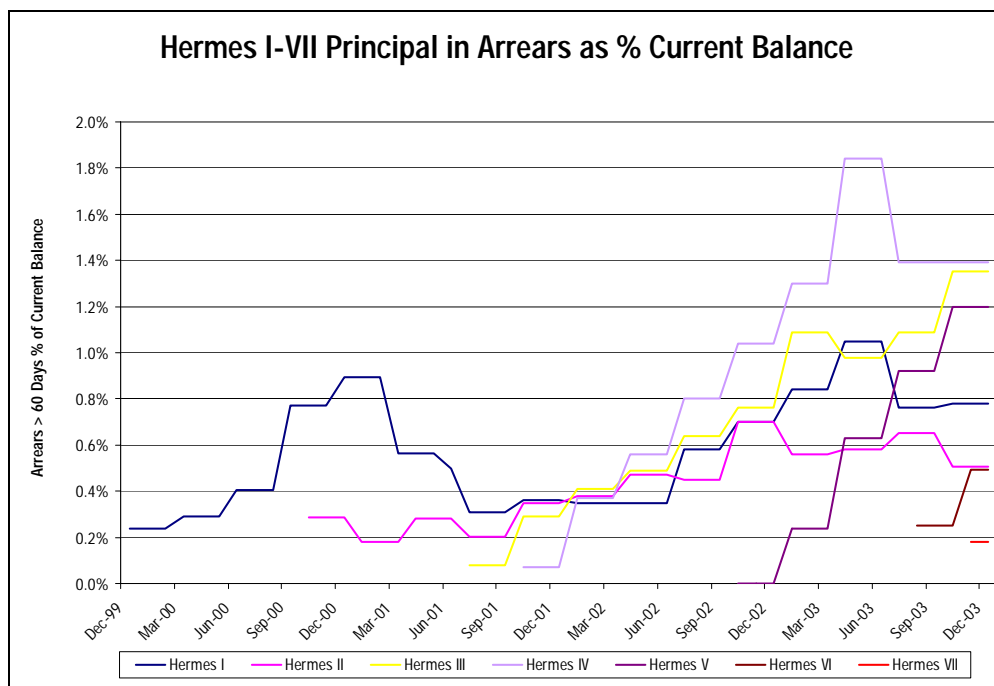
The payments from the Borrowers are due on the first day of the month and are collected by the servicer and paid to the Collection Account with SNS Bank. At the end of each month all the amounts received are transferred to the GIC Account in the name of the Issuer. This GIC Account will be held with the Floating Rate GIC Provider SNS Bank, who guarantees a minimum interest rate of Euribor minus a margin.

In the event that SNS Bank is not assigned a rating of at least **Prime-1** then a GIC Guarantor will be provided or a replacement GIC provider will be found.

## **COLLATERAL - REFERENCE PORTFOLIO**

The notes are backed by [14,925] performing residential mortgage loan parts, which are secured by first ranking mortgages on properties of borrowers in the Netherlands. The weighted average Loan-to-Market Value for the entire portfolio is [98.9]% and the Loan-to-Initial-Foreclosure-Value is [108.7]%. The portfolio is concentrated in the following provinces: Gelderland 17.6%, Zuid-Holland 14.6%, Noord-Holland 11.6%, Limburg 11.5%, Noord-Brabant 9.3%, Flevoland 9.1% Overijssel 8.6%, Utrecht 7.7%. Of the mortgages 60.5% are interest only, 12.7% savings mortgages, 25.3% investment mortgages and 1.1% annuity mortgages or linear mortgages. A vast majority of the mortgage loans carry a fixed interest rate, of which approximately [ x ]% has an interest reset date before the first Optional Redemption Date of November 2013. All interest-only loans have the benefit of a combined risk and capital life insurance policy, as explained earlier.

**Historical performance data of Hermes transactions**



**Some foreclosures occurred but loss on mortgage portfolio limited**

As the arrears levels in above chart show, the levels have shown a rising trend recently but the performance of the previous Hermes transactions is still acceptable and in line with expectations. In 2002 and 2003, some defaults have been reported in the Hermes I, II, III and V transactions following 13 foreclosures, three in Hermes I, II and IV and four in Hermes III, all but one executed by private sale. These concern the first losses since their respective closing dates. In one case (Hermes II), no loss occurred as the redemption proceeds were sufficient to repay the mortgage principal plus arrears interest in full. In the other cases, the average direct recoveries from sales of the properties amounted to an average of approximately [80]%. This trend is similar to the performance of other transactions where the first losses are reported since the respective closing dates. This trend is only partly caused by a higher number of defaults but mainly due to higher losses per default as the houses are not sold with a profit due to the stabilising house prices in more recent years.

**ORIGINATOR, SERVICER AND DUE DILIGENCE**

**All the loans have been originated by SNS Bank**

SNS Bank originated the mortgage loans to its clients through its network of branches and via independent intermediaries.

The mortgage applications are evaluated in the origination departments based on the underwriting criteria of SNS Bank, which are not substantially different from other originators in the Netherlands.

**Servicing provided by SNS**

All the mortgage loans will continue to be serviced by SNS Bank. SNS Bank's primary business consists of mortgage lending, domestic retail banking and small and medium sized companies. Mortgage servicing is performed from one central office. SNS recently finalised the integration of the servicing of mortgage loans originated by other entities than SNS Bank in the central servicing department of SNS Group. Servicing of delinquent and/or defaulted mortgages is done by locally focussed recovery departments.

Moody's has reviewed the servicing operations of SNS Bank and believes that the management and system capabilities fully comply with the required standards.

**MOODY'S ANALYSIS**

To determine the ratings on the Notes, Moody's has used the following methodology, which is applied to most European residential mortgage backed securities markets.

*Determination of the log normal loss distribution*

## The Loss Distribution

The first step in the analysis is to determine a loss distribution of the pool of mortgages to be securitised. Because of the large number of loans and supporting historical data, Moody's uses a continuous distribution to approximate the loss distribution: the lognormal distribution.

To determine the shape of the curve, two parameters are needed: the expected loss and the volatility around this expected loss number. These parameters are found by looking at two important data sources: historical loss data and the loan-by-loan model.

Moody's has made a comparison of SNS Bank's underwriting criteria to other mortgage originators in the Netherlands and of the performance of previous Hermes transactions compared to other securitisations in order to extrapolate expected losses for the loan pool.

Because there is relatively little historical data available for Dutch mortgage loans, this data is adjusted to incorporate Moody's view of additional risks not reflected in the data available.

To obtain the volatility under "stress" scenarios, Moody's will also take into account historical data, however, observed historical volatility may not be significant (given insufficient datapoints, or incomplete data). In addition this may not be representative for the future as it is based on the previous economic environments experienced.

*The Aaa CE enhancement number is determined using a loan-by-loan analysis*

Therefore, Moody's will determine a number representing the enhancement that would be required for a pool of mortgages to obtain a rating consistent with **Aaa** under highly stressed conditions. This enhancement number (the "Aaa CE" number) is produced by using a loan-by-loan model, which looks at each loan in the pool individually and based on its individual characteristics such as loan-to-value or other identified drivers of risk, will produce a benchmark CE number. This assumes stressed recovery rates (through house price decline), time to recovery, interest rates and costs to foreclosure. The weighted average benchmark CE number will then be adjusted according to positive and negative characteristics of each loan or of the pool as a whole to produce the "Aaa CE" number.

The Aaa CE number and the Expected loss number are the basis of committee discussions and are used to derive the lognormal distribution of losses of the pool.

The standard deviation of the distribution is found by setting the probability of a loss greater than the expected loss compliant with the idealised expected loss target of the Aaa CE number.

*Cash flow model is used to assess the impact of structural features*

## Tranching and Rating of the Notes

Having obtained the loss distribution of the pool under consideration, a cash flow model is used to assess the impact of structural features of the transaction, such as the priorities of interest and principal, liquidity and the value of excess spread.

The sum of the loss experience per note class weighted by the probability of such loss scenario will then determine the expected loss on each tranche and hence the rating, consistent with Moody's target losses for each rating category.

*The expected loss is calculated for each class of Notes*

The ratings of the Class A Notes is therefore based on an analysis of:

- The characteristics of the mortgage pool backing the Notes;
- The relative roll-rate levels and arrears in this type of lending;
- Sector-wide and originator specific performance data;
- Protection provided by credit enhancement and liquidity against defaults and arrears in the mortgage pool;
- The roles and creditworthiness of various transaction counterparties; and
- The legal and structural integrity of the Issue.

The ratings of the Class B, C and D Notes are based on the above factors, and also on an assessment of the extent of their subordinate position within the structure.

The likelihood of each Class suffering such loss given the credit enhancement described above and the impact on the expected yield to investors are consistent with the assigned ratings.

*Monitoring on ongoing basis*

### **RATING SENSITIVITIES AND MONITORING**

Moody's will monitor the transaction on an ongoing basis to ensure that its transaction continues to perform in the manner expected, including checking all supporting ratings and reviewing periodic servicing reports. Any subsequent changes in the rating will be publicly announced and disseminated through Moody's Client Service Desk. For all questions linked to the monitoring of the operation, please contact [monitor.london@moodys.com](mailto:monitor.london@moodys.com).

*Related Special Reports*

### **RELATED RESEARCH**

For a more detailed explanation of Moody's approach to this type of transaction as well as similar transactions please refer to the following reports

- 1) Special Report 'Moody's Approach to Conditional Sale of Mortgage Receivables in Rating Dutch MBS', May 2001.
- 2) Special Report 'Dutch MBS: Set off in Securitisation Transactions', September 2001

SF36117isf

© Copyright 2004, Moody's Investors Service, Inc. and/or its licensors including Moody's Assurance Company, Inc. (together, "MOODY'S"). All rights reserved. **ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY COPYRIGHT LAW AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.** All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, such information is provided "as is" without warranty of any kind and MOODY'S, in particular, makes no representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such information. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The credit ratings and financial reporting analysis observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. **NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.** Each rating or other opinion must be weighed solely as one factor in any investment decision made by or on behalf of any user of the information contained herein, and each such user must accordingly make its own study and evaluation of each security and of each issuer and guarantor of, and each provider of credit support for, each security that it may consider purchasing, holding or selling.

MOODY'S hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MOODY'S have, prior to assignment of any rating, agreed to pay to MOODY'S for appraisal and rating services rendered by it fees ranging from \$1,500 to \$2,300,000. Moody's Corporation (MCO) and its wholly-owned credit rating agency subsidiary, Moody's Investors Service (MIS), also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually on Moody's website at [www.moody's.com](http://www.moody's.com) under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."