RMBS/UK
Special Report

Masters of the House – A Review of UK RMBS Master Trusts

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Related Research
The following reports provide additional detail on the UK mortgage market and the Fitch rating approach to the UK RMBS market. They are available on www.fitchratings.com

- "*Pound Stretchers? Self-certification Mortgage Products in the UK*" published 19 December 2003
- "*UK Residential Mortgage Default Model II*": published 13 October 2000
- "*A Guide to Cash Flow Analysis for RMBS in Europe*": published 20 December 2002
- "*Rent Review 2004 – An Update on the UK Buy-to-Let Market*": published 20 January 2004

■ Summary

In recent years, a number of UK high street mortgage lenders have used residential mortgage-backed securities ("RMBS") to diversify away from other forms of funding such as retail deposits. These lenders have, however, adopted highly structured master trust programmes rather than using the traditional pass-through construction seen in RMBS elsewhere. The application of this master trust technology – originally developed for US credit card securitisations – to pools of UK mortgages gives the lenders access to a wider investor community, particularly in the US, and enables them to place large jumbo RMBS issues comfortably.

The following report, which provides an overview of the existing UK RMBS master trust programmes rated by Fitch, includes:

- an explanation of the different types of structures employed;
- how the notes issued by these trusts are redeemed;
- how the substitution of loans is managed and controlled;
- the triggers in place;
- the setting of the minimum Funding and Seller shares; and
- the characteristics of the pools of mortgages used to back the issuance of notes.

The report also focuses on Fitch's rating process for these transactions, as well as its cash flow modelling and surveillance review processes.

To date, all the outstanding UK RMBS master trust transactions rated by Fitch have been performing in line with, or better than, expectations. This is reflected by the regular rating affirmations for all outstanding notes when new issues are launched. For all transactions, arrears remain low and the credit characteristics of each pool are managed by tight substitution criteria to ensure that they remain within prescribed limits. None the less, recent developments in the collateral and origination techniques of master trust lenders have created concern in some quarters. However, Fitch believes any supplementary risks this might present are substantially mitigated by credit enhancement levels, which it reviews for the entire trust at the time of each new issue, as well as the limitations imposed by substitution tests that control the credit quality of the collateral between issues.

The following table summarises the number and value of all closed issues from each master trust to date. Further details of the Fitch-rated transactions can be found in Appendices 3-7.

Table 1: UK RMBS Master Trust Issues as at May 2005

Master Trust	Originator	# of Issues	Total Notes Issued (GBPm Equiv)
Granite	Northern Rock	12	35,605
Holmes	Abbey	8	24,256
Permanent	Halifax	7	30,740
Mound	Bank of Scotland	3	3,274
Aire Valley	Bradford & Bingley	2	2,500
Lothian*	Standard Life	4	5,000

* To date Fitch has not rated issues from the Lothian master trust.
Source: Fitch

Fitch expects future issuance from the master trust structures to remain strong in the short term, although their nature could be influenced by the use of de-linked structures or future innovations. However, recent declines in mortgage origination activity caused by the slowdown in the housing market in the latter half of 2004 may dampen the pace of master trust RMBS issuance in 2005. In the longer term, as implementation of the Basel II capital accords approaches, the capital structure of master trust issuance is likely to change.

Introduction

Master trust technology was first used by credit card ABS issuers in the United States. These issuers originally used stand-alone trusts, in which non-revolving and discrete pools of assets backed individual series of securities, for funding purposes. This type of structure was used until First National Bank of Chicago introduced master trust structuring technology in its First Chicago Master Trust transaction in 1988. By 1991, the master trust had become the preferred issuance vehicle for these issuers.

Master trusts allow issuers to sell multiple series of securities from the same trust, all backed by the same collateral pool of receivables. When further financing is needed, the issuer transfers receivables from additional accounts to the same trust and issues new securities. The receivables are not segregated in any way that would indicate which series of securities they support; instead, all receivables support all series of the securities. MBNA transferred this technology to the UK and began to issue from a UK credit card master trust in 1995.

The first RMBS master trust transaction in the UK was issued by Bank of Scotland, in the name of Mound, in May 2000. In contrast to credit card ABS, the motivation for turning to the capital markets was for banks to find alternative funding sources, other than their retail deposit base and to benefit from reduced regulatory capital requirements.

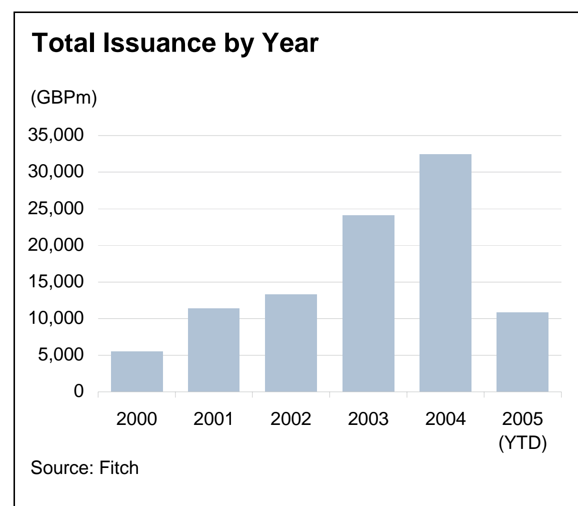
The large prime lenders favour the master trust structure over the pass-though mechanism used by other UK RMBS issuers in, for example, the buy-to-let and non-conforming markets, as it allows for larger transactions. It also enables them to issue tranches with features specifically tailored to investor preferences, such as bullet repayments, as well as scheduled and controlled amortisation principal repayments. Furthermore, the substitution of redeemed loans with new loans also extends the programme life.

Since the first master trust issue, there have been two further Mound transactions, 11 Granite transactions (originated by Northern Rock), 8 Holmes transactions (originated by Abbey) and 7 Permanent transactions (originated by Halifax), all of which have been rated by Fitch. In addition, GBP5 billion has been issued via the four Lothian Mortgages deals originated by Standard Life Bank, since 2003.

Until last year, these were the only originators of UK RMBS master trusts. However, the launch of the Aire Valley master trust in September 2004, consisting of loans originated by, the buy-to-let subsidiary of Bradford & Bingley, Mortgage Express, brought a new programme to the sector. A second issuance from this program closed in April 2005.

Despite this growth, the aggregate trust property in the UK RMBS master trust programmes still accounts for a small proportion of the overall UK mortgage market. As at end-March 2005 (excluding redemptions) the total amount issued in this form accounted for nearly 11% of the total mortgage balance outstanding, as reported by the Bank of England.

Total Issuance by Year



Source: Fitch

Structure

In each master trust transaction, a predefined pool of UK residential mortgages is used to secure the notes

issuance. As later transactions are issued, the size of these pools can be increased. In such a transaction, a mortgage originator transfers an initial pool of mortgages to a trustee (the "mortgages trustee"), which subsequently distributes interests to two beneficiaries – one of which is retained by the originator ("the Seller") and the other held by the special-purpose funding vehicle ("Funding"). These beneficial interests are referred to as the Seller Share and Funding Share, respectively. In some master trust programmes, there may be more than one funding beneficiary. Both shares divide the collateral on a *pari passu* basis: the Seller Share does not provide credit enhancement to the Funding Share.

In subsequent transactions, Funding could acquire a further interest in the mortgage trust property, thereby reducing the Seller Share and increasing the Funding Share. Alternatively, the originator may transfer further mortgages in connection with a further issuance of notes, thereby increasing the overall size of the trust. For each subsequent issuance, a new special-purpose company (each, "an Issuer") is formed to sell RMBS to investors and lend the proceeds to Funding by way of an inter-company loan.

The diagrams in Appendix 1 show a typical master trust structure.

The mortgages trustee typically distributes the interest cash flows from the pool of mortgages that form the trust property to the beneficiaries in accordance with their respective shares. Principal distribution is more complex and is described below in greater detail. Funding uses the principal and interest cash flows to finance the interest and principal payments due under the inter-company loans from the Issuers, which, in turn, use these repayments to make payments to RMBS investors. Although each Issuer is a separate entity, repayments on the Issuer's obligations are funded by the cash flows from a single pool of assets.

In UK master trusts, note principal repayments are made in a number of different ways:

1. in bullet form;

2. via two to four repayments of pre-set amounts on scheduled maturity dates ("scheduled amortisation");

3. through a controlled amortisation of principal up to a maximum amount in every period, starting in a particular month; or

4. on a pass-through basis.

This contrasts with non-master trust transactions in the UK, where principal receipts are usually distributed to noteholders solely on a pass-through basis.

The structure of each transaction incorporates tests to ensure that the mortgages trustee accumulates sufficient principal receipts in advance of bullet or scheduled amortisation payments. These involve cash accumulation periods that are set to occur a predetermined number of months in advance of such a payment date, assuming that principal repayment rates from the mortgage collateral are maintained at a certain predetermined level. Generally speaking, if repayment rates fall below the required level during an estimated period of time, usually 12 months, before the scheduled payment date, the cash accumulation period will begin at the start of that period rather than later. Cash accumulation poses an additional challenge for the structure, as retaining cash creates negative carry since funds invested in bank accounts earn a much lower rate of return than those earned from mortgage loans.

One of the major differences between master trust and pass-through transactions is that the underlying trust property in a master trust structure, which secures all notes issued, can evolve over time through substitution. A pass-through transaction is generally, but not always, secured on a closed, discrete pool of loans which, in the main, does not change.

A second difference relates to the location of principal deficiency ledgers ("PDLs") and reserve funds, as well as the relationship between issuers. Whereas the PDLs and reserve funds in pass-through transactions are always at the issuer level, as only one special-purpose vehicle ("SPV") is involved, the situation is different in master trust transactions. Since there are several levels of SPVs, the reserve funds and PDLs can be held at different levels. This results in two possible structures, the so-called "capitalist" and "socialist" structures.

Socialist Structures

Holmes, Mound, Permanent and Aire Valley are the so-called socialist master trusts. In each, the reserve fund is held by Funding and provides credit enhancement to the notes of all issuers across the entire master trust. As each new transaction closes, the size of the Funding reserve fund at closing generally increases, and a new target amount is set for the reserve fund. This amount is available for use by all issues in a particular programme.

Therefore, the credit enhancement available to previously issued notes will include that provided by the latest issue of notes and the subordination they

give to higher-rated notes. For example, credit enhancement for 'AA' rated notes will be provided by all notes rated junior to this across the trust, together with the Funding reserve fund. The PDLs for socialist structures are also located at the Funding level, where they are separated by rating level. As a result, if an asset loss is registered, for example, on the 'BBB' PDL and is not subsequently cleared by excess spread, this loss will be shared on a *pro rata* basis by all 'BBB' rated notes across all issuers – hence the "socialist" appellation. All the notes from a particular rating class rank *pari passu*.

Capitalist Structures

The contrasting capitalist structure was used by Northern Rock in the first 10 Granite transactions out of the Granite master trust. In these transactions, each issuer has its own exclusive reserve fund, which is available solely to support the notes issued as part of that particular transaction. This means that there is no interdependence between issues, and the level of the reserve fund in one transaction has no influence on the level of the reserve fund in another. These funds are known as Issuer reserve funds because of the level in the structure at which they are found.

In the Granite programme, an additional reserve fund also exists at the Funding level, although it does not provide primary credit enhancement for the notes. Instead, it is used to fund expenses in connection with the issuance of notes by the current or future issuers. Amounts standing to the credit of Funding reserve funds may also be included in the calculation of Funding available revenue receipts to meet any deficit on each issuer's PDLs. Although it is available to any of the first 10 issues, the size of this Funding reserve fund is generally small and it cannot, therefore, be relied on to provide credit enhancement to any particular issue in case of need.

The PDLs are also at the Issuer level for these Granite issues, which means that the liability structure of the programme is also specific to each Issuer. Unlike socialist structures where PDLs are at the Funding level, the use of the capitalist structure could mean that a note with a particular rating from one Issuer could suffer a principal deficiency while a note with the same rating and backed by the same master trust property but corresponding to another Issuer does not. This is because its unique capital structure may have involved additional credit enhancement. In practice, such a situation is unlikely, as the credit quality of the underlying trust property does not typically migrate significantly between issuances.

With the issue of Granite 05-1, the Granite programme adopted a socialist structure, as described above, through a second funding vehicle.

Whichever structure is employed the ratings on all earlier notes need to be affirmed on the launch of each new issuance. The types of cash flow scenarios used to stress such ratings will be consistent with Fitch's latest master trust criteria, which are described in further detail below. Target reserve fund levels are set at the time of issue of the new notes. Once set, this target has not tended to change over time, but has instead remained at the closing reserve fund target level set for each series of notes. Investors should view this as a positive sign, since any increase in the specified reserve fund would indicate a deterioration in the credit quality of the portfolio backing the notes.

■ Triggers

To mitigate against the risks posed by a potential deterioration in the portfolio's credit quality through substitution or negative events specific to the originator, asset and non-asset triggers have been incorporated into the structures. If any of these triggers are breached, the priority of payments will change.

Asset trigger events relate to a severe degradation in the performance of the loan portfolio and will occur when there is a positive balance on the Class A PDL. Following the occurrence of such an event, principal repayments from the mortgages trustee level to the Seller and Funding will be in proportion to their relative shares in the trust property. In such an event, Class A scheduled maturity dates will be abandoned and the priority of payments for principal repayments by Funding (which feed through to the Issuers and thereby to the noteholders) will change to repay advances, as follows:

- Class A notes *pro rata* until repaid;
- Class B notes *pro rata* until repaid;
- Class C notes *pro rata* until repaid, and so forth.

This ensures that Class A notes with shorter maturity dates are not repaid faster than those with later maturities, which could otherwise, face potential defaults on principal repayments.

Non-asset triggers relate to events that may occur outside of the master trust and the portfolio of mortgages and which are unrelated to collateral performance. Examples include: the insolvency of the originator; termination of the originator's appointment as servicer and the failure to appoint a new servicer within 60 days; failure to maintain the minimum trust property size; or a situation where the Seller share falls below the minimum Seller share. Following the occurrence of a non-asset trigger event, scheduled repayment of Class A notes is accelerated, and 100% of principal repayments from the trust property flow to Funding. The priority of payments

for principal repayments by Funding then changes to the following:

- the Class A notes of all Issuers are paid sequentially in order of their legal final maturity dates until repaid;
- Class B notes are paid *pro rata* until repaid;
- Class C notes are paid *pro rata* until repaid; and so forth.

In this case, some Class A notes would receive principal receipts before others and, as a result, a default on the longer-dated Class A notes would theoretically be more likely to occur. However, the non-asset triggers are not related to the performance of the transaction and their purpose is to amortise all notes before any problems arise in the loan portfolio and structure.

Substitution

Notes issued from a master trust are backed by a revolving pool of mortgages. This means that, in addition to the loan portfolio that exists at closing, the Seller may also assign new loans to the mortgages trust purchased with principal repaid from existing loans. The trust size may also be increased through the addition of new loans funded by either an increase in the Seller share or new financing from Funding, pursuant to a new note issuance by a new Issuer.

With re-mortgaging activity intense, originators must use principal receipts received under the Seller share to buy replacement loans for the master trust pools to maintain the necessary collateral levels. When doing so, the criteria to assess which loans qualify for inclusion the pools are tight.

New loans must adhere to the representations and warranties given by the Seller; however, new loans may differ in their characteristics from those in the provisional portfolio, as the programme must have the flexibility to accommodate evolution in the lender's origination criteria or product features.

Master trust programmes such as Permanent, Holmes, Mound and Aire Valley must maintain a certain minimum principal balance of the trust property to avoid breaching a non-asset trigger. This minimum trust size level is particularly important where some notes have a bullet or scheduled amortisation repayment profile, which is reliant, to a degree, on the overall level of principal repayments from the mortgage property and the lender's ability to originate new mortgages that it can substitute into the trust as a replacement. The relevant Sellers are committed to substituting new loans into the portfolio to the best of their ability.

To mitigate the risk that the addition of new loans may result in a deterioration of the portfolio's credit quality, other criteria must also be complied with before new loans are assigned to the structure. These include those detailed below.

- The assignment of new loans must not increase the weighted average frequency of foreclosure ("WAFF") and the weighted average loss severity ("WALS") by more than a set level, typically 0.25%, compared with the WAFF and WALS at closing. The servicer will use the current version of the Fitch RMBS default model to perform this calculation. This test ensures that the aggregate credit profile of the portfolio is not substantially worse than at closing. For example, it may allow certain features to deteriorate (say, affordability as measured by income multiples) provided that other factors change to compensate (say, reduced LTV).

- To prevent the Seller from substituting assets into the trust property when its financial condition has deteriorated, the Short-term unsecured debt obligations of the Seller must be maintained at a minimum rating, typically 'F1'.

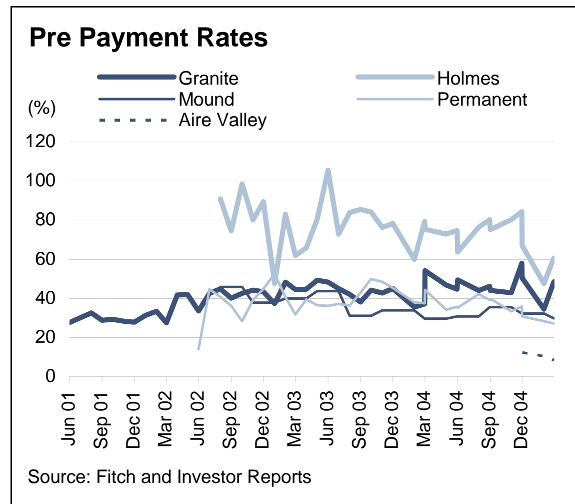
- To manage the evolution of the credit profile of the trust property, especially if the Seller's underwriting criteria have changed, the principal balance of new loans should not exceed a certain percentage, usually 10%-15%, of the principal balance of loans that formed the trust property at the previous interest payment date.

- After giving effect to the margin generated by the Funding swaps and the transfer of new loans, the yield generated by the portfolio must be at least LIBOR plus a specified margin. While the actual asset margin is typically higher than the minimum level, this test will ensure that a minimum margin is maintained on the assets during the substitution period. This will ensure that a minimum level of excess spread is maintained if lower-yielding assets are substituted into the trust – particularly fixed-rate or discount-rate mortgages, which generally have a lower margin post-hedging than variable-rate loans.

In the event of failure to comply with these criteria, substitution will cease. If this situation persists, the structure could eventually hit a non-asset trigger for non-maintenance of the trust size, causing the notes to repay earlier than scheduled.

Prepayment

The master trusts have historically experienced varying prepayment rates, as shown the chart below. These rates reflect redemptions and repurchases.



The Holmes master trust has seen the highest level of prepayments, while Aire Valley has seen the lowest – reflecting the tendency for buy-to-let loans to remain in place longer than those granted for owner occupation. Notably the constant prepayment rates ("CPR") rates for the Granite, Holmes and Permanent trusts have shown signs of decreasing more recently, influenced by the five Bank of England base rate rises since mid-2003 and the slowdown in the housing market. The decline in the CPR for Mound, which has a more seasoned pool, has been less pronounced.

■ Portfolio Characteristics

As competition for re-mortgage business in the UK mortgage market has increased – with a knock-on effect in high prepayment levels – the characteristics of each trust portfolio and the criteria lenders use when assessing mortgage applications have also changed.

Fitch derives an underwriting and servicing default probability adjustment factor for each lender and this is applied to the aggregate default probability for each borrower. When calculating the underwriting and servicing adjustment factor, Fitch evaluates the experience, management expertise, underwriting criteria and servicing procedures of each lender. The process for managing and introducing changes to lending criteria will feature in Fitch's assessment of this lender-specific adjustment factor.

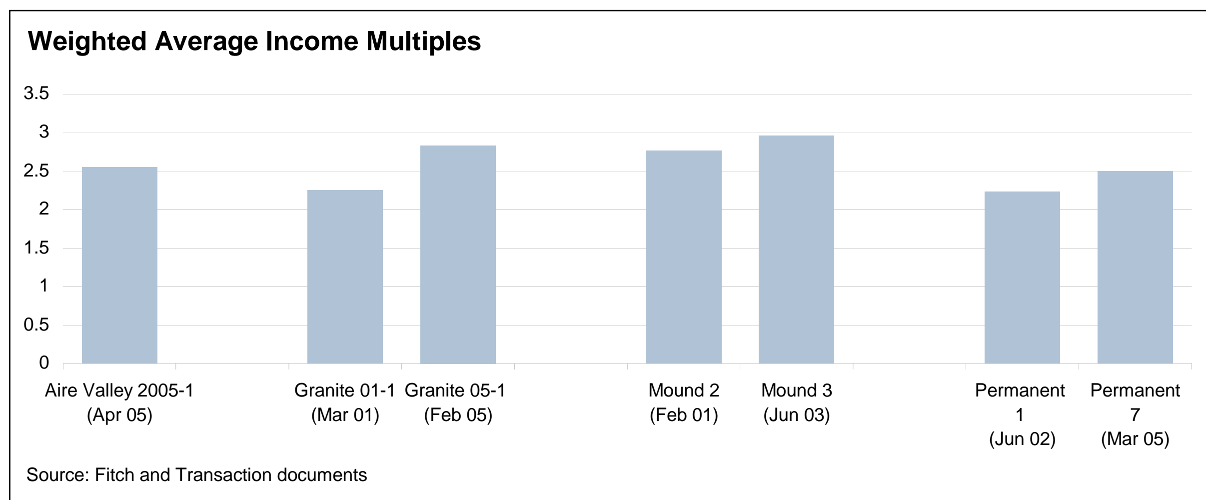
Recently, the lending criteria Halifax, Abbey and Northern Rock apply for the affordability calculations used in underwriting have evolved. More emphasis is now placed on debt-to-income style calculations, which, unlike income multiples, take account of interest rate levels. For higher income levels and credit score bands, these lenders have increased the income multiples at which they will lend. This means that income multiples can, in theory, reach as much as 6.0x gross income for certain applicants, causing a drift away from the standard 3.0x-3.5x single income multiple that used to be the mainstay of the market.

These and other changes in the market over the years are reflected in the composition of the portfolios. Some of the evolving factors that have affected the master trust collateral features are described in this section, as is Fitch's treatment of them when sizing credit enhancement for the notes issued.

Appendices A-E show the evolution of the different master trust portfolios over time.

Income Multiples

All master trusts have experienced a gradual increase in the weighted average multiple of income lent to borrowers, as underwriting criteria have shifted to



take more account of other affordability measures in the current low interest environment and to place more emphasis on credit scoring.

For those Issuers on the graph above with two data points, the graph shows the change in the average income multiple for the trust property at the time of both the first Fitch-rated issue and the most recent issue.

Income data included in the chart above for Aire Valley 2005-1 relate to non buy-to-let borrowers only.

Fitch could not obtain full income data for the Holmes master trust for certain re-mortgage loans to existing customers owing to systems constraints.

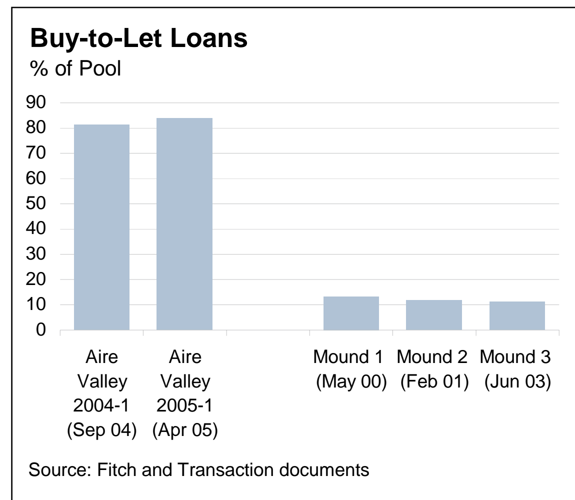
Buy-to-Let

Fitch considers buy-to-let loans to be inherently more risky than those secured on owner-occupied properties. This is because an investment property is not the borrower's home and the incentive to maintain payments may therefore be less than if they were living in the property concerned. Fitch's default analysis therefore increases the base default probability on all buy-to-let loans, generally by 1.25x for a standard buy-to-let product. Buy-to-let loans are assumed to be in the Class 4 income category for the purposes of determining base default assumptions. For more information on the Buy-to-Let market, see the report "*Rent Review 2004 – An Update on the UK Buy-to-Let Market*", published on 20 January 2004 and available at www.fitchratings.com.

Buyers seeking investment opportunities have contributed substantially to the increase in house prices over recent years, thereby pricing many first-time buyers out of the market. This rise in the buy-to-let sector and Bradford & Bingley's repositioning as a niche lender, through its Mortgage Express subsidiary are, for example, reflected in the Aire Valley master trust. The Mound portfolios have similarly included a portion of buy-to-let mortgages since the inception of the trust.

The proportion of buy-to-let loans within these portfolios is shown in the chart below.

Buy-to-let properties with non-professional landlords are often intended as long-term investments and have therefore shown lower historical prepayment rates than loans for owner-occupied properties. While professional landlords may keep a keen eye on movements in interest rates, re-mortgaging wherever this proves beneficial, landlords who do not depend on rental income for their living may not be inclined to switch lenders quite so often.



Buy-to-let loans are not currently eligible for inclusion in the collateral backing the Granite, Holmes and Permanent trusts.

Self-Certification/Non-Verification of Income

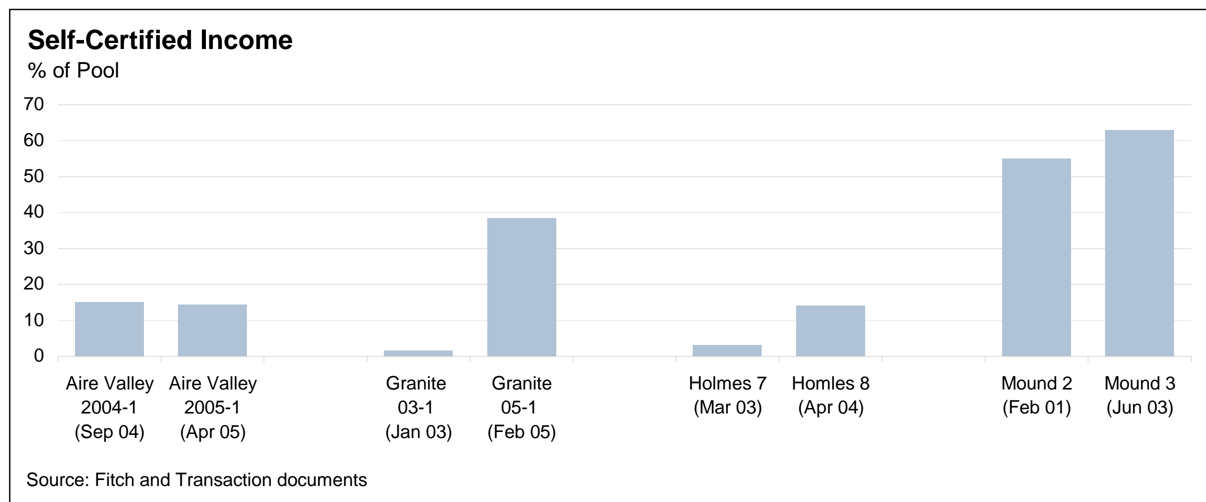
Many prime lenders have now introduced policies whereby they do not verify the income stated on the application forms of borrowers who achieve sufficiently high credit scores and who borrow under a specified LTV limit. In the absence of such income verification, through a review of pay slips, P60s and bank statements, for example, Fitch assumes that these borrowers are more likely to default on their liabilities, given potential uncertainty about the accuracy of the stated income and the borrowers' debt servicing capacity. Accordingly, Fitch typically stresses the base default probability by 1.20x-1.25x for each borrower whose income was not verified.

If no cap is in place to limit the proportion of such loans that are allowed in a pool, Fitch will assume that the proportion of loans with non-verified income will increase from the levels seen at issue over time if current origination levels are higher than the amount in the pool at closing.

Whereas Abbey, Halifax and Northern Rock have policies in place regarding non-verification of income, Bank of Scotland and Mortgage Express have made specific self-certification products available to borrowers.

Flexible loans were first featured by Abbey in the Holmes 7 transaction and have not been identified by Halifax in any of the Permanent pools.

For further details on the non-verification policies of the primary master trust originators and the self-certification and non-verification of income in general, see the report entitled "*Pound Stretchers?*



Self-certification Mortgage Products in the UK" published on 19 December 2003, and available at www.fitchratings.com.

Flexible Mortgages

Flexible loans allow borrowers to alter their repayment profiles, depending on their circumstances and according to various criteria. Options open to borrowers include taking payment "holidays" and making higher-than-scheduled payments into their mortgage account to reduce the capital amount outstanding. They can do this without incurring any prepayment penalty and these amounts can often be redrawn if needed throughout the life of the mortgage, subject to specific restrictions.

Flexible mortgages are well suited to the changing demographics of the UK workforce, where an increasing number of people work part time or are self-employed – which means that many people receive an irregular income rather than a predictable monthly salary. Mortgage products that afford borrowers the flexibility to vary payments in accordance with the profile of their income are therefore proving very popular, although most borrowers have used such flexible features less frequently than anticipated.

Flexible mortgages are also popular in the buy-to-let sector, where borrowers may face void periods between tenancies while they seek a new tenant or make repairs. In such cases, borrowers may take a payment holiday to help ease the financial burden of having no rental income during such periods.

The flexible payment option was first widely promoted in the UK as the "Australian method" of calculating interest – in reference to the market where it had previously been widely used. Under this method, interest due was calculated on a daily basis, immediately taking account of any payments received over and above the scheduled payment amount. Before this product became popular, some lenders would only recalculate the amounts due on a loan once a year. This discouraged overpayment until the end of the year, as borrowers would not benefit from such repayments until their anniversary date.

There is an increasing proportion of flexible loans in the trust property of UK master trust programmes, reflecting changing customer demand and the promotion of the benefits of flexible mortgages in the financial press and the market.

Redraws from flexible loans increase the trust property and the size of the Seller share by the redraw amount, as redraw amounts are funded by the Seller. Where the Seller is unable to provide the requisite funding, the redraws can be funded through a decrease in the Seller's share.

Legal opinions state that the legal obligation to fund a redraw request does not pass to the mortgages trustee with the assignment of the loan. However, if the seller is unable to honour a redraw as a result of bankruptcy, the sundry risk remains that a borrower may seek to offset the increased cost of any alternative funding that they are required to arrange as a result. As a result, the Seller's share is subject to a minimum for each master trust programme, part of which is related to this set-off risk. If this set-off risk were exercised, the Seller's share of the trust property would be reduced by the amount concerned to avoid loss to the Funding share.

To account for the borrower's ability to re-draw on their flexible loan, Fitch uses the maximum amount that can be drawn when calculating current LTV for the purposes of its modelling. This is because redraws would increase the LTV of the loan in question, thereby increasing the potential loss severity if the loan defaults after the borrower has redrawn the loan to the full amount available. Since

losses are shared *pro rata* between the Seller and Funding shares, redraws can therefore increase potential loss severity to the Funding share, although the redraws themselves are funded by the Seller.

The growing popularity of these loans is demonstrated by the changing profile of the various master trust portfolios.

Abbey identified only 7% of the loans in Holmes 8 as flexible, and none in Holmes 3 – the first deal in which such a figure was mentioned.

Halifax has not included any flexible loans in the Permanent master trust to date. However, this eventuality is provided for should they be added to the trust at some point in the future.

The percentage of flexible loans in the Granite trust property has increased sharply, from 11.29% in Granite 01-1 to 85.81% in Granite 05-1. Northern Rock only allows borrowers to redraw amounts up to the total of any overpayments previously made. The "Together" mortgage loan has also come to form a greater part of the Granite portfolio over time. These are flexible loans that are available with various interest types: variable, fixed, fixed for life, discount tracker or stepped tracker. A mortgage loan and an unsecured personal loan can be obtained at a single interest rate. "Together Connections" mortgage loans, which have been offered since March 2001, are linked to certain current and/or deposit accounts held with Northern Rock. These loans offset interest, based on the difference between the outstanding mortgage balance and any deposits held. This type of product, although initially popular has experienced something of a decline. Only the secured part of a "Together" loan is securitised.

Similarly, Bank of Scotland's Mound portfolio included 64.89% flexible products at the time of Mound 3, almost three times the 23.50% included at the time of Mound 1. Over the same time frame, the maximum percentage of the portfolio that can consist of flexible loans has increased from 30% to 80%. The maximum OLTV permitted in the Mound master trust, prior to the granting of a further advance, is 85%. The Bank of Scotland is only obliged to grant a further advance in the context of its flexible loan product; other customers would have to repeat the full application process.

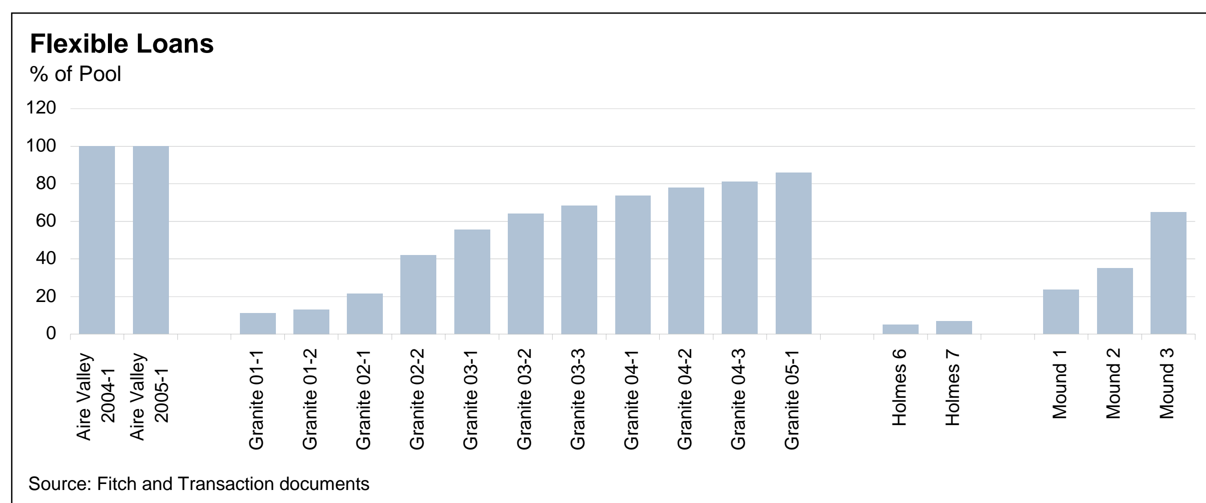
Bradford & Bingley offer a flexible loan to new borrowers where the maximum LTV is 95%. No limit is set on the amount of overpayment permitted. All loans in the trust have flexible features, allowing borrowers to make overpayments and thereby build up a "Choices" balance, which is written down to zero on each anniversary of the loan. Payment holidays, cash withdrawals and reduced payments against the "Choices" balance are also permitted.

Further Advances

Borrowers are entitled to apply for further loan amounts on top of their original mortgage, subject to certain conditions. Further advances differ from flexible redraws in that a new underwriting process always occurs for such loans and borrowers have no contractual right to a further advance.

Where customers have been granted further advances within the Granite, Holmes or Permanent master trust portfolios, the mortgages must be repurchased from the pools by Northern Rock, Abbey or Halifax, respectively. If the lender fails to repurchase the relevant loans, the Seller share of the trust property will be increased by the amount of the further advances granted. In any case, the lender has no obligation to grant a further advance. Such loans may subsequently be included in the pools as a result of substitution, provided that they meet the necessary criteria.

Loans in the Mound portfolio that are subject to a



Source: Fitch and Transaction documents

further advance must be funded by the Seller through an increase in the Seller share of the trust property.

The Aire Valley master trust contains no requirement for further advances to be repurchased by the seller.

Interest Only

Borrowers who take out an interest-only mortgage may be stretched financially at the loan completion date and are looking for a loan that will give them the lowest ongoing monthly mortgage payment. Interest-only loans achieve this by deferring principal repayment until loan maturity. Such borrowers therefore expose themselves to the need to make a balloon payment at the end of the mortgage term, thereby exposing the lender to the risk that it will not receive this payment if the borrower has not made sufficient provision for repayment. Some borrowers do combine these loans with savings plans – such as endowment policies or PEPs – and, indeed, lenders used to require this and take security over the related policy. However, while lenders are required to emphasise the need to make provision for repayment, they do not now generally require proof of such a facility or track the performance of such vehicles.

Fitch increases the default probability of interest-only loans to reflect the possible payment shock associated with a bullet repayment. No credit is given to any repayment vehicles that may be in place, owing to the lack of any formal security over these vehicles and the risk of shortfall.

Despite some fluctuation over time, the Granite, Holmes, Mound and Permanent master trusts have included a decreasing proportion of non-repayment loans (i.e. those that are strictly interest only, involve only partial repayment or those backed by endowments, pensions, PEPS etc) with the issue of further transactions. This is demonstrated in the chart below.

By contrast, the proportion of interest-only loans in the Aire Valley portfolio has increased and is now at a level broadly in line with the overall buy-to-let market, where two-thirds of all mortgages are interest only.

The majority of buy-to-let borrowers favour interest-only loans because monthly interest payments are fully deductible against rental income for tax purposes. Mortgage interest for owner-occupiers is no longer tax deductible, so there is no tax incentive to maintain a high mortgage principal balance.

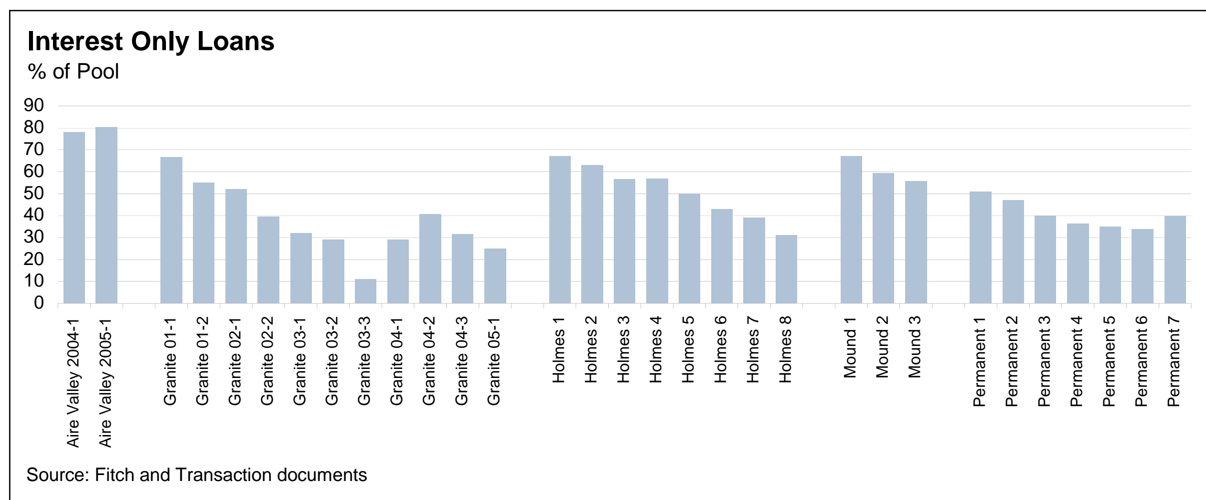
The overall decline in non-repayment loans has been driven, in part, by the decrease in popularity of endowment loans, which have been widely criticised as a result of poor performance, mis-selling and expected shortfalls at maturity.

Loan-to-Value Ratios

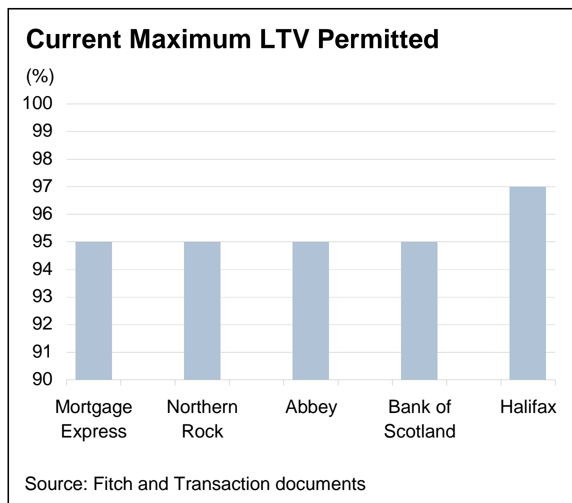
Maximum LTV Ratios

Each issuer has different underwriting criteria regarding the maximum amount they will advance at origination of the loan against the value of the mortgaged property. The current maximum LTVs permitted by each lender are shown in the graph below.

Issuers generally apply lower LTV limits as the value of the property increases. The value limits have increased over time, reflecting the general increase in property values in recent years. Lower LTV limits are adopted for high-value properties because of their more esoteric nature and lower liquidity. Very high-value properties are usually excluded from the trusts through the maximum loan size.



Source: Fitch and Transaction documents



Maximum Loan Size

The maximum loan size across most master trusts is now very consistent: the largest loan permitted in the Aire Valley, Granite, Mound and Permanent master trusts is GBP500,000. Historically, the limit was lower for some lenders, at GBP350,000 for Granite and Mound and GBP 400,000 for Permanent. The subsequent increase reflects rising house prices.

The Holmes master trust, however, currently maintains its original condition of not allowing any loan over GBP350,000 to be included within the portfolio.

This limitation restricts exposure to less liquid high-value properties in the trusts while preserving the granularity of pools, thereby minimising exposure to individual loan concentrations.

LTVs at Issue

For the following discussion of trends in LTVs, data from the offering circulars have been used. As only OLTVs or CLTVs have usually been referenced for each, we have adopted the measurement used in the offering circulars for that programme.

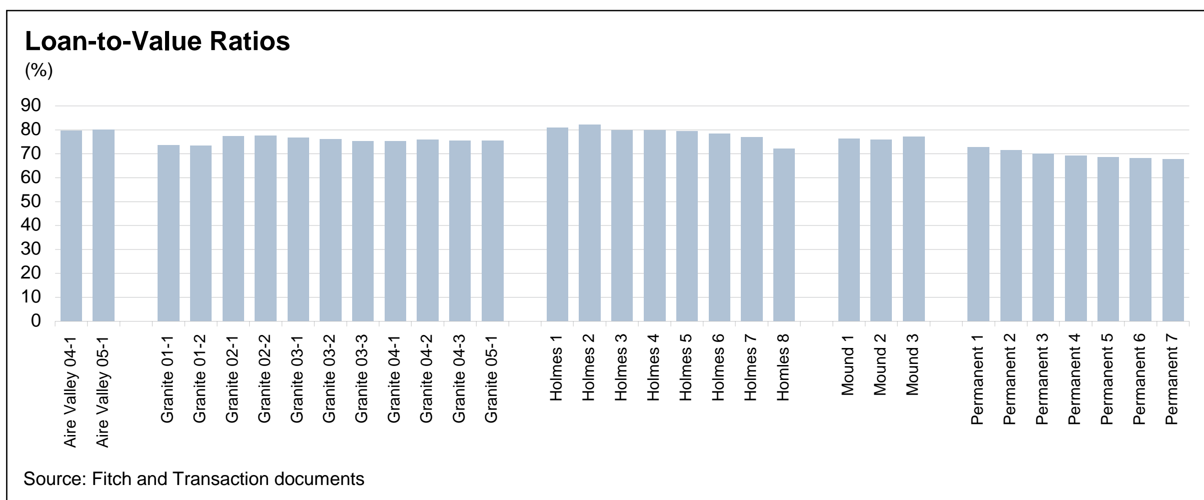
Generally original LTVs have shown a downward trend in recent issues, although this is not the case for all trusts. This is likely to be associated with the large decline in the proportion of first-time buyers in new originations. First-time buyers are often stretched when they first step onto the home-ownership ladder and often need to borrow close to lenders' LTV limits. By contrast, next-time buyers and re-mortgagors, who now make up a greater proportion of new originations, have had time to build up equity in their properties and do not need therefore to borrow to the same LTV level.

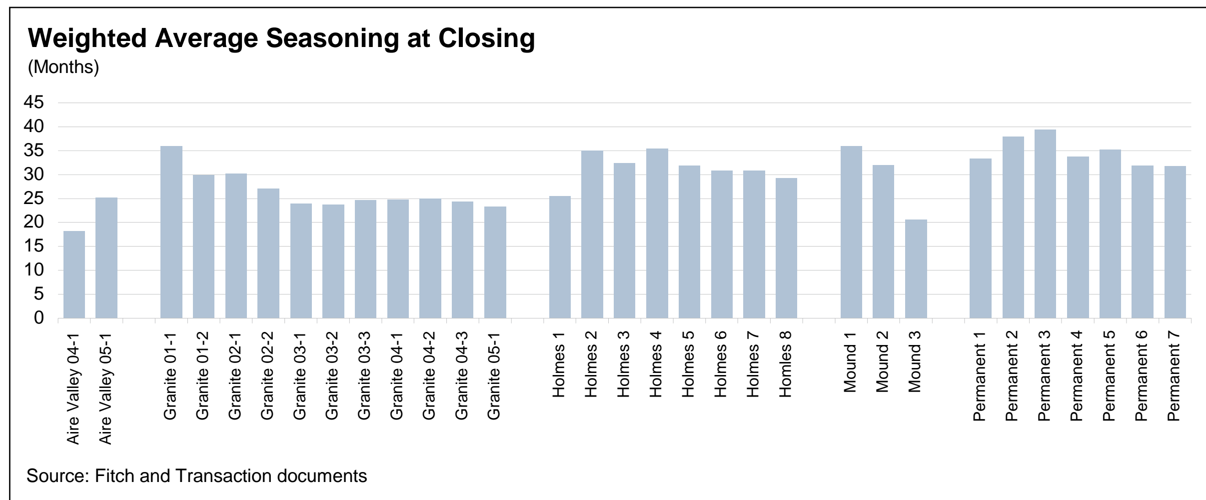
In the chart below, data for Aire Valley, Holmes and Permanent transactions relate to the original LTV of the loans, whereas those for Granite and Mound relate to the current LTVs at closing.

The distribution of LTVs for each issuer is shown in the Appendices.

The current (non-indexed) LTV will be lower than the original LTV as loan seasoning increases and principal payments are received, either through scheduled repayments on repayment mortgages, or as overpayments are received as part of a flexible mortgage product. Redemptions will also influence the trust portfolio profile if they are more concentrated in particular LTV categories, and the make-up of the portfolio will be further affected by the substitution of new mortgage assets if redemptions are replaced by new mortgage loans with a substantially different LTV profile.

Indexed current LTVs are also quoted in the transaction reporting of each of the master trusts. Such LTVs are indexed to house price indices, such as those produced by Nationwide and Halifax. These indices allow for changes in regional property values over time. Until around mid-2004, rising house





prices contributed strongly to reducing indexed LTVs. Since then, house price growth has slowed considerably, and prices have been largely flat since. If this situation persists, the reduction in indexed LTVs will become less marked.

When rating transactions Fitch's modelling gives 50% credit (using the Nationwide house price index) to any increase in the index when assessing the value of a property since the valuation at origination and applies full indexation for any decrease in value. This is because the regions quoted by the indices are large, i.e. London/Greater London or the North, and not all properties and localities within these regions will gain the full benefit of upward movements in the indices.

Seasoning

The weighted average seasoning will often decrease over time for a master trust as new substitutions begin to outweigh the larger base of more seasoned loans sold to the trust at the time of early issues

The weighted average seasoning of loans backing the Mound master trust has fallen markedly over time, following the step change in issue size. The first two transactions were sized at GBP750m each, whereas the third was GBP2,600m. This substantial increase in size meant that more recently granted loans were included in the trust portfolio.

In the Aire Valley master trust, the weighted average seasoning of loans in the latest portfolio was 25.18 months, shorter than for the Holmes or Permanent master trusts and more in line with the Mound portfolio at the time of Mound 3. This reflects the fact that the less seasoned buy-to-let loans of Mortgage Express form most of the collateral.

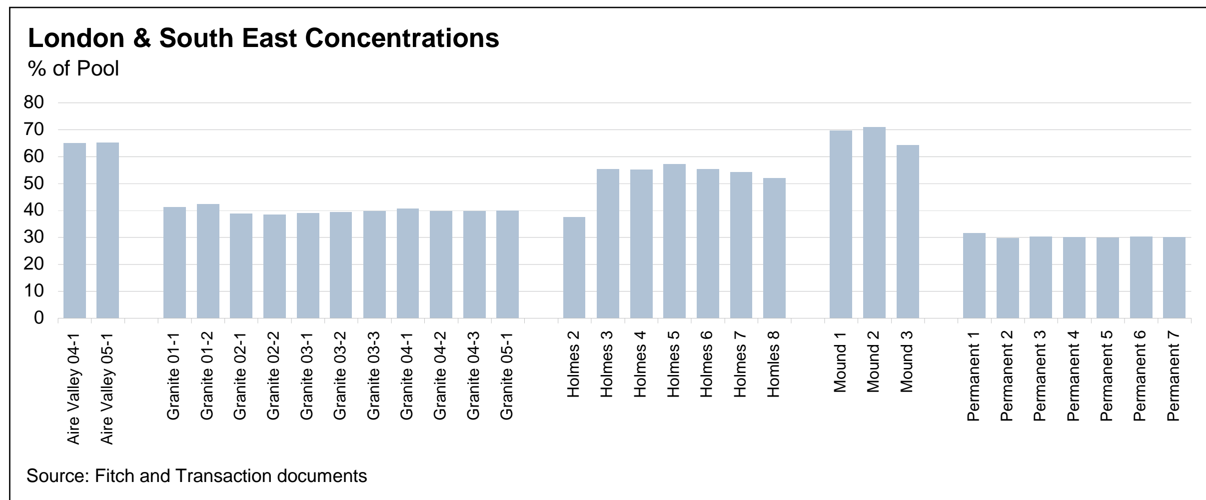
Geographical Concentration

The largest proportion of each master trust in geographical terms consists of loans secured on property in London, the outer metropolitan areas and the south east of England. According to each originator's own definitions of these regions, this concentration has remained broadly stable over time.

The proportions in Mound are driven by the fact that the mortgage book backing the programme was originated from a centralised Bank of Scotland unit that targeted England and Wales. This unit utilised a network of financial intermediaries and brokers, rather than a high street branch network, which tended to concentrate on London and the south east.

The limit of GBP350,000 on properties eligible for inclusion in the Holmes trust may well be the factor behind the decreasing proportion of loans backed by property in London and the south east. The average price of a property in Greater London is now almost GBP285,000 (Source: The Land Registry), a figure that is being heavily influenced by flats and maisonettes. However, in Holmes 8 only 11.56% of loans by value related to flats or maisonettes, while 76.55% were secured on terraced, semi-detached or detached homes. These have a much higher average value, ranging from GBP300,000 to GBP570,000 in Greater London. More homes in this area will therefore be excluded from the trust because they do not meet the eligibility criteria. Prices in London and the south east also slowed earlier than in the north which, for a time, continued to enjoy strong growth. This may also have affected relative regional proportions in value terms.

Given the high proportion of buy-to-let mortgages in the Aire Valley trust, it is not surprising that a high percentage of loans are backed by property in London and the south east, since buy-to-let, as a product, is strongly concentrated in this area. Approximately 95% of Mortgage Express loans were originated through its panel of intermediaries rather than a branch network.



The relative percentages for Abbey and Halifax broadly reflect the origins of these issuers, whereas Northern Rock originations are now mainly from non-branch sources. All were originally local building societies in the south east, Yorkshire and the north east, respectively. Conversion to banking status occurred 15 years ago in the case of Abbey and seven years ago for Halifax and Northern Rock, although branch network distribution still reflects the regional origins to some extent.

Fitch applies higher market value declines ("MVDs") to properties in London and the south east regions when assessing potential loss severity, as these areas have historically tended to experience more volatile changes in property prices than other areas.

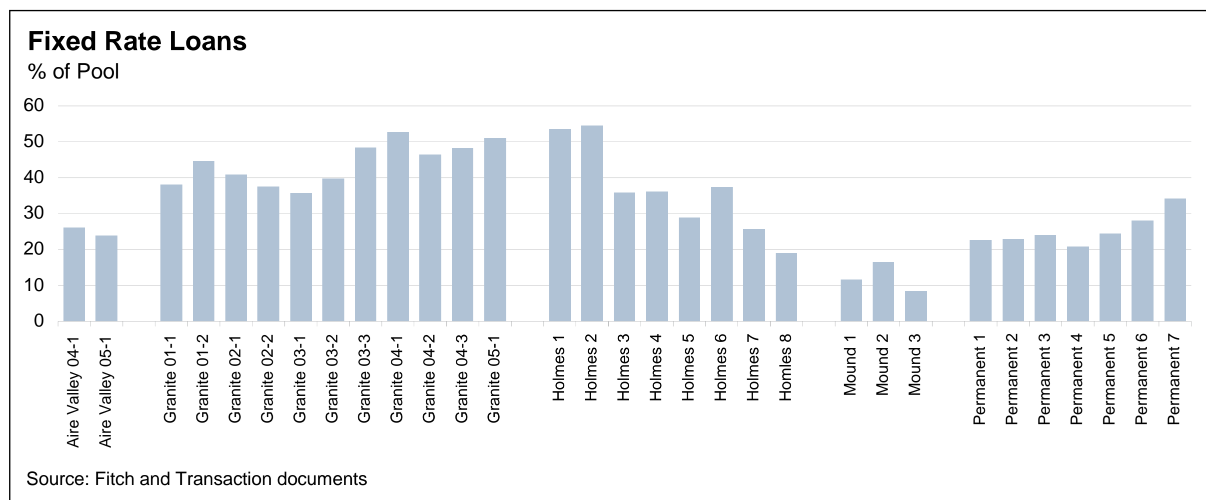
Types of Rates

Customers' take-up of fixed-rate deals has generally been linked with the expected movement in interest rates. Borrowers have been keen to fix their mortgage repayments at times when interest rates were expected to rise or when the differential between fixed and variable rates charged has been low. Also popular are tracker rates, which are set at a fixed margin over the Bank of England's base rate, and discounted variable-rate mortgages, where a discount to the Standard Variable Rate ("SVR") is applied for a certain period before reversion to the full SVR. While base rate tracker rates are often offered for the full life of the loan in the non-conforming market, prime lenders, such as Halifax and Northern Rock, generally only offer these for a set period until the loan reverts to the SVR.

The mix of products included varies across the five Fitch-rated master trust issuers; the following chart shows the proportion of each that is made up of fixed-rate loans.

Details of other products are given in the Appendices. The different mix of products in each master trust results from the different customer bases of each lender.

Reflective of the high proportion of buy-to-let borrowers on the books of Mortgage Express, the majority of loans in the Aire Valley portfolio are either fixed or discounted. At the end of the fixed or



discounted period, these borrowers are likely to re-mortgage to obtain the best rate available at that time. The Granite pool contains a large proportion of fixed-rate products, owing to a shift in the preference of Northern Rock customers towards fixed-rate products at a time when interest rates were increasing, and away from the discounted rates that were in favour in the first half of 2004. Within the Holmes trust, the most popular mortgage is one that tracks the Bank of England base rate, while for Permanent, variable rates predominate.

Although still offered, the take-up of fixed-rate products by Bank of Scotland customers has consistently been below that of the other master trust originating lenders, falling to 8.38% for Mound 3, as its principal product is a flexible 'tracker' mortgage.

There does not appear to be any discernible trend in the mix of products within each trust. This probably reflects the wide range of products offered by the lender at any point in time, as well as the relative attractiveness of those products compared with others available in the market.

■ Rating Process

Fitch uses a three-stage process to arrive at a rating for a UK RMBS master trust transaction:

i. it evaluates the credit quality of the loan portfolio;
ii. it evaluates the financial structure of the transaction, including cash flow modelling of asset and liability flows; and
iii. it assesses the legal structure of the transaction.

This section gives an overview of the approach as it affects UK RMBS master trusts.

Asset Analysis

Fitch uses its UK residential mortgage-backed securities ("RMBS") default model to analyse the trust property collateral. The agency uses this model to perform a loan-by-loan analysis that takes into account the characteristics of each individual property, borrower, loan and lender that might influence the default probability and loss severity determined for the loan.

The Fitch model uses two primary indicators for its assessment of delinquency and default:

- the affordability of a loan to a borrower, as evidenced by income multiple ("ability to pay");
- the amount of equity invested in the home, as determined by the original LTV ("willingness to pay").

Fitch calculates a base default probability for each loan based on these factors and then adjusts the base default rates on a loan-by-loan basis to account for non-standard individual loan or borrower characteristics, based on the categories listed above – such as if a loan is buy-to-let, interest only, in arrears or if the income of the borrower is self-certified or not verified through payslips or tax records.

The features of the flexible mortgage products are viewed as credit neutral when running the agency's default model. However, to fully allow for the potential amounts that customers may draw, Fitch assumes that the maximum amount will be drawn when modelling such loans.

In addition, the agency quantifies loss severity and recovery rates by focusing on several factors, including market value trends, repossession and accrued interest costs, and current LTV.

For specific details of Fitch's RMBS rating approach, please see the UK RMBS criteria report entitled, "*UK Residential mortgage Default Model II*", dated 13 October 2000. "*UK Residential Mortgage Default Model III*" is due to be published shortly.

Using the UK RMBS default model criteria mentioned above, Fitch evaluates the entire trust property for every master trust programme issuance that it rates. The ratings of previous issues from each trust are confirmed as part of the process of awarding ratings to new issues.

Originator/Servicer Review

The majority of master trust originators in the UK continue to service the loans in securitised portfolios "in-house". The exception to this is Abbey, whose primary (non-delinquent) servicing is carried out through a joint venture with EDS Credit Services of the US.

When analysing any master trust transaction Fitch will perform an operational review of both the origination and servicing practices. For repeat issuers, such reviews take place at least annually, at the relevant operational site(s). This process is supplemented by additional event-driven visits. Fitch often makes regular update calls to discuss changes in policy and strategy that may affect transactions.

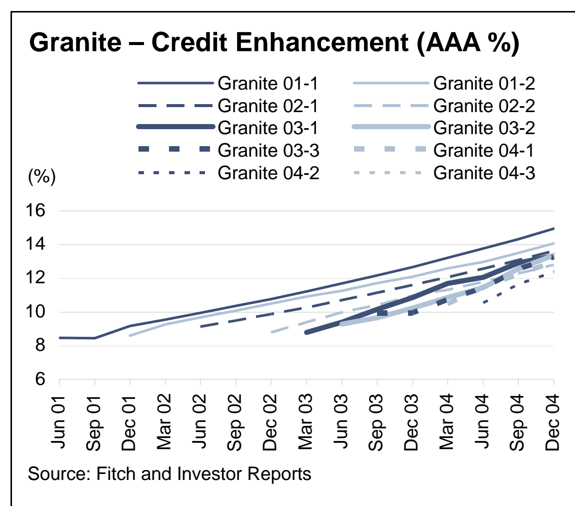
Fitch analysts discuss overall strategies, organisation, procedures and controls with senior management. The reviews focus on a number of key areas including: company structure and history, management and staffing, policies and procedures, origination, underwriting and appraisals, servicing and collections/possession (and the originator's interaction with the servicer where it is a third party)

and, finally, systems. Any changes in any of these areas since a particular master trust's previous issues will be examined closely to assess their impact.

The servicing of delinquent loans continues to be of high importance to investors. For more information on origination and servicing, see the reports "*Rating European Mortgage Loan Servicers – The UK Market Addendum*", published on 25 May 2005 and "*Origination and Servicing Standards in the UK Residential Mortgage Market*", published on 27 May 2005.

Cash Flow Modelling Approach

Fitch's RMBS ratings for master trust transactions address timely payment of interest in accordance with the terms of the documentation and full payment of principal by the legal final maturity date of the notes. Once the asset analysis described above has been completed, a cash flow analysis is performed to test whether sufficient credit enhancement and liquidity support are available to the master trust issues for the ratings to survive Fitch's stress scenarios.

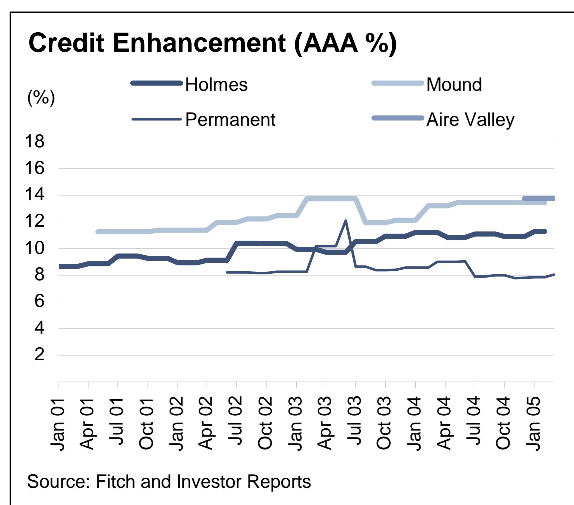


Source: Fitch and Investor Reports

Credit enhancement in RMBS transactions can be provided by one or all of excess spread, subordination, reserve funds at the Issuer and/or Funding levels, overcollateralisation (where the assets of the issuer exceed the liabilities) or third-party enhancement. In addition to the default model stresses described above, Fitch applies liability stresses when deriving each rating scenario to stress the size of the trust property at various points in time as well as the Issuer's ability to make interest payments on a timely basis and principal payments by legal final maturity. Legal final maturities can be on a short-term bullet or scheduled amortisation basis, or on a long-term pass-through basis.

Given the various types of master trust structures, credit enhancement is calculated differently for the capitalist and socialist programmes that were described earlier.

While each "capitalist" issue has its own credit enhancement levels, the levels in "socialist" structures, which provide trust-wide credit enhancement, can decrease following the issue of new notes. This is largely because notes from a previous issuer have generally begun to pay down prior to the issue of new notes. The issue of new securities is structured such that notes issued at the various rating levels equate to the proportion of notes in each rating category at the time of the previous issue. Thus, the overall effect is to decrease the levels of credit enhancement. This reduction is a temporary phenomenon, as the notes will amortise from the balances at the closing of the most recent issue and the reserve fund will begin to climb towards the target level. The charts below show the historical growth in available credit enhancement for 'AAA' rated notes in each of the master trusts. The Granite transactions are shown together on the first chart, while the other master trusts are shown on the second.



Source: Fitch and Investor Reports

Excess Spread

One of the primary objectives of cash flow analysis is to determine the amount of credit support provided by excess spread, which depends not only on collateral performance – such as prepayments, delinquency and defaults – but also on the degree to which the structure uses excess spread to protect against losses. The limited amount of excess spread in UK prime master trust transactions compared with, for example, non-conforming transactions, means that less support is provided through this avenue.

The existence of bullet repayment notes on the liability side means that cash must be accumulated for a period to meet these principal repayments when scheduled. This creates negative carry as cash is retained in the structure, earning a lower yield than if re-invested in mortgage loans. This negative carry further reduces excess spread during accumulation periods and will have a knock-on effect upon credit enhancement levels obtained.

Recession Timing

As part of the rating process, Fitch models seven recession scenarios for each rating class at various points during the life of the notes. Included in each recession are various assumptions about defaults, delinquencies and interest rate stresses. Other Fitch liability stresses involve prepayments, the default of the originator and its impact on servicing fees, substitution and margin compression.

Different recession timings are regarded as particularly important for master trusts, since the profile of the liability structure will change substantially over time as early maturity bullet or scheduled amortisation notes – and often the subordinated notes of the same series – repay, while others remain outstanding. Recessions timed later in the life of the trust may have a different impact than those that occur earlier in the life of the trust.

Another reason for various recession timings is the fact that substitution of mortgage loans can continue for some time throughout the life of the trust. Whereas defaults in a closed portfolio are most likely be concentrated in the earlier years of the transaction, substitution means new loans will be entering the portfolio throughout the life of the trust – thereby reducing seasoning and influencing the timing of defaults that could be expected from trust property.

Defaults

Fitch calculates rating-specific default and recovery rates for each loan, using its UK RMBS default model to aggregate the individual rates and compile a weighted average Foreclosure Frequency ("WAFF") and WA Recovery Rate ("WARR") for the portfolio at the time of a new issue. Fitch believes defaults are more likely to occur during the first years after the origination of a loan – in particular if there is a reversion from a fixed or discount rate to a higher SVR. Accordingly, Fitch models a short-term recession period in which 87.5% of the defaults occur in the first five years after the recession commences. Between issues, the servicer must continue to monitor the WAFF and WALS position as a condition of substitution to ensure that new loans entering the pool are not significantly eroding the credit profile.

Delinquencies

To achieve timely payment of interest, the structure must provide sufficient liquidity support to the notes to sustain a stressed level of delinquencies and defaults in a climate of rising interest rates. Fitch's base modelling approach to delinquencies is to assume that a multiple of the monthly defaulting loan balance falls delinquent for six months. Thereafter, the delinquent balance will become fully performing again and the accrued arrears interest is assumed to be fully repaid over the following six months. Table 2 below details Fitch's standard delinquency assumptions, which are primarily based on the UK experience.

Table 2: Delinquency Assumptions

	AAA	AA	A	BBB	BB
Multiple of Monthly Defaults	1.50	2.00	2.50	2.75	3.00

Source: Fitch

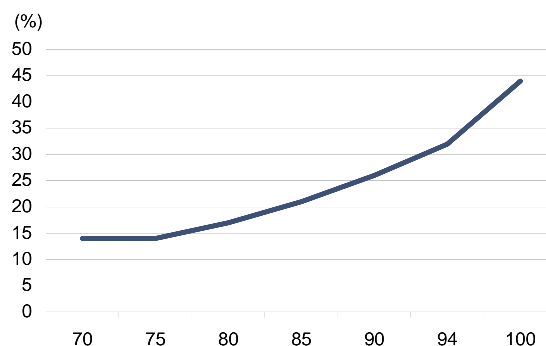
LTVs

Fitch's modelling approach causes a borrower's probability of default to increase as the original LTVs increase for a given income multiple. This reflects the assumption that "willingness" to repay the loan decreases as the percentage down payment the borrower makes on the property falls and the OLTV rises. Fitch sizes for this increased risk in its UK RMBS default model. For example, the base default probabilities for a constant 2.50x income multiple in the agency's 'AAA' rating scenarios are detailed below.

Interest Rate Stresses

Table 3 lists the rates, showing the annual increases applied to the LIBOR level at closing under the

'AAA' Base Default Probability vs Original Loan to Value ("OLTV") Ratio



Source: Fitch

various rating categories. Fitch's LIBOR stresses for UK RMBS transactions stress the Issuer's ability to fund interest payments in a timely manner where note interest rates increase as delinquencies and defaults increase. Accordingly, the agency applies these interest rate stresses both at closing and at the commencement of each recession scenario.

Table 3: Three-Month STG Libor

(%)	Year 1	Year 2	Year 3	Year 4	Total
AAA	+4.9	+2.5	+1.1	-1.6	+6.9
AA	+4.2	+2.2	+0.9	-1.3	+6.0
A	+3.5	+1.9	+0.8	-1.2	+5.0
BBB	+2.9	+1.4	+0.6	-1.0	+3.9
BB	+2.2	+1.1	+0.6	-0.7	+3.2

Source: Fitch

Prepayments

As the sellers are generally required to repurchase loans that have been subject to a further advance and/or product switches, prepayment rates can be approximately twice the rate of those resulting solely from borrower redemptions. Owing to the impact of such provisions, Fitch will increase the assumed prepayment rate whenever the seller is obliged to repurchase loans subject to a further advance or product switches to stress its effects. This condition is not required in the Aire Valley programme as Bradford & Bingley will not be required to repurchase loans in the event of further advances and/or product switches; the level of structural prepayments will therefore be much lower in this master trust programme. The high prepayment scenarios increase loan margin compression in the analysis.

When rating all master trust transactions, Fitch also applies low CPR stresses to various rating scenarios. These stresses specifically test the Issuer's ability to repay the short-dated bullet notes that are issued from most master trust programmes. These notes require a period of principal accumulation, and low CPR assumptions place stress on the ability to accumulate sufficient principal in time to repay the notes by their final legal maturity, which could occur on the scheduled repayment date or up to two years after.

Originator Default

Fitch assumes that in the above rating scenarios the Seller/Servicer defaults at certain points during the life of the transaction. The originator default means that substitution will end. In some scenarios, this causes a breach of the non-asset trigger related to the minimum trust size, which will result in the accelerated repayment of tranches.

Servicing Fees

It is common for Seller/Servicers to agree to a below-market administration fee at closing. However, in stressful scenarios where the originator might default (typically above the rating scenario equivalent to the Seller/Servicer's Long-term rating), Fitch assumes that the rate for such services will be higher if a third-party servicer must be contracted to assume servicing responsibilities for the portfolio.

Substitution

To avoid breaching the non-asset triggers that require a minimum seller share or minimum trust size, originators will often substitute to a level that causes the Seller share to be larger than the minimum Seller share specifically sized to cover set-off risks. It should be noted that the Seller share does not provide credit enhancement as losses must be allocated *pro rata* between beneficiaries. However, on occurrence of a non-asset trigger event, all principal from the entire trust would be allocated to the Funding share, implying that more principal than expected would be available to repay the notes with shorter maturities, which would therefore benefit from a cash flow modelling perspective. Consequently, in its cash flow analysis, Fitch assumes that substitution occurs only up to the minimum trust size requirement to avoid a breach of a non-asset trigger.

Margin Compression

The funding vehicle typically enters into a single basis swap that addresses the three potential different interest rate bases (fixed, SVR and tracker rate) on a weighted average basis, depending upon the relative proportion of each type of loan. The notional principal amount of the swap will thus be determined according to the relative proportion of fixed, SVR and tracker loans comprising the trust property, based on the average daily principal balance during the relevant distribution period. As for the margin at which each loan type is swapped, while the fixed-rate element typically swaps the actual interest received from the related loans, the element of the swap that relates to SVR and discounted SVR may be calculated with respect to a basket of SVR mortgage rates that a number of leading UK mortgage lenders charge to their existing customers, rather than with respect to the lender's own SVR. Therefore, a degree of hedging risk could exist between the basket SVR and the lender's own SVR – although, historically these SVR rates have been highly correlated.

During substitution, Fitch assumes that the weighted average asset margin after taking into account the basis swap compresses towards the minimum asset yield – again after taking into account the basis swap

– as required in the substitution criteria. This is typically around 50bp over three-month LIBOR. The rationale is that substitution could cause a greater proportion of new loans on a discounted or fixed rate to be substituted into the trust property, which would compress the spread from the average at closing. Post substitution, the asset margin would generally be expected to increase gradually as loans in their teaser period reverted to SVR loans. However, if the basis swap pays a rate for a certain product –fixed-rate loans, for example – that is below the minimum substitution floor, if the other products prepaid at a faster rate (if interest rates were rising, for example), the margin could still compress further post substitution. Fitch analyses this on a case-by-case basis depending on the basis swap and products in a master trust.

For more discussion on the topics described above, please see the Fitch report entitled "*A Guide to Cash Flow Analysis for RMBS in Europe*" dated 20 December 2002 and available at www.fitchratings.com.

Legal Structure

Fitch examines the legal structure of the securitisation for each transaction. The legal standing of the SPV, Funding and the Trustees will assessed, as will their relationship with one another.

The loan portfolio will be assigned to the Mortgage Trustee by the originator, as trust property. New loans may then be assigned to the trust on future distribution dates. The trustee will allocate interest, principal and losses to the originator and to Funding, relative to their respective shares in the trust, which may change over time.

The structure of a transaction is designed to ensure that the insolvency of a Seller would not interfere with the flow of principal and interest payments to the investors, as all rights to the mortgages are assigned to the SPV by the Seller, on the transfer of the loans. As such, these master trust deals are considered to be "true sale" transactions, and the loans involved are removed from the Seller's balance sheet at closing.

■ Surveillance

One condition for further issuance from any master trust programme is that the ratings on outstanding notes are affirmed. As full loan-by-loan analyses of the entire master trust is currently conducted before assigning ratings, this process happens as often as new deals are issued. For master trusts, this occurs frequently because of the high number of issues. A recent exception to this was the Mound master trust, which launched its last issue in June 2003. The agency conducted a full review of this master trust using its credit cover multiple methodology; as a result, all outstanding classes of notes were affirmed in September 2004.

It should be noted that the likelihood of upgrade for master trust tranches is generally lower than for pass-through transactions. This is because of the Issuer's ongoing capacity to issue new debt against the trust property alongside previous issues as well as the substitution periods for the loans. During any period of substitution, the size of the master trust is maintained at a certain level through the inclusion of new loans. As a result, the weighted average seasoning of the loans in the portfolio may not change and the time-line for potential defaults remains largely constant. Only once the period of substitution has ended will the seasoning of the collateral run normally and the likelihood of defaults diminish over time.

New issuance requires rating confirmation of tranches from previous issues. If the agency were to take upgrade action on existing notes, the upgraded rating would need to be maintained by subsequent issues and could limit the capacity for new debt to be issued from the master trust. Upgrades are more likely following the end of the substitution period, after which new debt could not be issued from the trust and then-existing levels of subordination and reserve fund balances would generally provide greater credit enhancement as the senior notes repaid.

Issuer Report Grades

Fitch's recent initiatives have included the assigning of Issuer Report Grades ("IRG") to each transaction. The purpose is to give investors an indication of the quality of reporting provided for each transaction.

Fitch calculated these by awarding points for the quality of asset and liability data given, and the counterparty and facility information provided. Delivery methods and ease of use were also taken into account, along with frequency of reporting and timeliness.

Overall scores were constrained so that more emphasis was placed on data quality than on non-data issues.

The resulting scores range from 1 star to 5 stars, with 3 being described as adequate – a level at which Fitch is fully able to analyse a transaction's performance and indicating that all necessary data are reported. Scores of 4 and 5 show that a very high proportion of the data Fitch considers to be of interest to investors is being provided. A score of 1 star means that only the minimum level of information necessary to maintain a rating is being provided.

The IRGs assigned to date can be found in Appendices A-E.

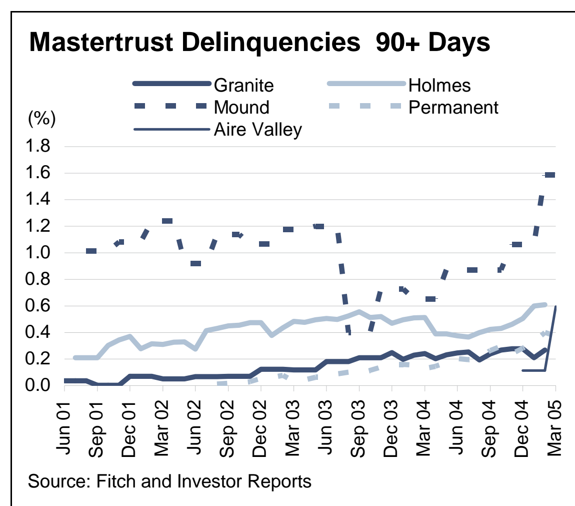
Fitch has already received feedback from certain issuers regarding the necessary improvements required to increase the scores they have been assigned. Once any changes to reporting are made, Fitch will reassess the individual IRGs and amend them as appropriate. All IRG data can be found on the agency's subscription website at www.fitchresearch.com.

For further details regarding post-issuance reporting standards and Issuer Report Grades, see the report s titled *"European RMBS Surveillance: Post Issuance Reporting Standards"* republished in November 2004 and *"Issuer Report Grades"* published in November 2004.

■ Arrears Performance

The UK master trust transactions generally experience extremely low delinquencies.

The chart below shows the percentage of each pool that is in arrears by more than 90 days.



Source: Fitch and Investor Reports

It should be noted, however, that these graphs are presented on a dynamic rather than a static basis. This means that the arrears presented are for the trust at each point in time; in other words, the percentage figures are improved by the substitution of new collateral, which will be performing when substituted into the trust. The figures will be further influenced by any increase in the size of the trust property that results from the addition of new collateral portfolios. Such loans will again be current and will have a favourable impact upon arrears in the trust when measured in percentage terms.

That said, arrears levels in all the master trusts are on an upward trend. Although interest rates rises will have affected all borrowers, the pool backing the Mound transaction, which is more seasoned than the others, has been harder hit by rising arrears than those of the other master trusts. This is because Mound has made no issues since 2003, and has therefore failed to benefit from the sharp declines in arrears percentages that coincide with the addition of new collateral portfolios to a master trust.

Arrears Definitions

When analysing the performance of transactions, Fitch looks, among other things, at the proportion of the outstanding portfolio that is three months or more in arrears (see chart above). However, it is also helpful to understand the way in which arrears are calculated in each master trust.

Arrears are generally defined as any amount that is due but unpaid as at the date arrears reports are generated. Therefore, no arrears will be recorded for borrowers whose mortgage payment is due on the first of the month and who pay their instalments in full by the end of the month.

All master trusts define arrears in essentially the same way. The amount of loans in arrears, which is a snapshot position calculated at the month-end, is measured by comparing any unpaid amount with the scheduled monthly payment amount. Therefore, one month after completion, a borrower who has failed to make any payment will have an arrears amount equal to one contractual monthly payment (including interest and principal, if applicable). Such a borrower would then be classified as being one month in arrears.

However, many loans in this one-month bucket qualify as technically in arrears or underpayment following increases in rates.

Performance data on Fitch-rated transactions are available to subscribers at www.fitchresearch.com.

■ Recent Developments

Origination Slow Down

Over recent months there has been a dramatic slowdown in the granting of new loans secured against residential property. Loans approved by members of the Major British Banking Groups in December 2004 were 19% down on the same month a year earlier. Over the year as a whole, the value of total approvals in 2004 fell slightly (1%) from that approved in 2003, a strong contrast to the 15% y-o-y increase seen in 2003.

Looking at 2004, it is clear that most of the activity was concentrated in the first six months of the year. The total value of approvals granted for house purchases between January and June was 19% higher than between July and December. Data for April

2005 suggest that the downward trend of approvals may be bottoming out, although mortgage lending is still running below last year's level. (Source British Bankers' Association).

The introduction of mortgage regulation by the Financial Services Authority ("FSA") at the end of October 2004, after which lenders concentrated on ensuring that their products complied with the recently introduced mortgage regulation, had a temporary impact on the level of approvals. The overall slowdown in approvals could have a dampening effect on future issuance from the master trusts, since lenders' needs for funding to drive new growth may also fall back.

House Prices

UK house prices rose slightly in the Q105 (+0.2%), compared with a fall of 0.7% in Q404, according to the Nationwide quarterly house price index. Regional figures for Q105 show a decline for five regions, compared with falls in eight regions in Q404. The following chart demonstrates the regional variations in house price movements in recent quarters.

Economy

Given recent negative headlines about the economy, it is clear that borrowers have suffered from the five interest rate increases effected by the Bank of England since November 2003, and arrears have risen in all the master trusts over that period. Fitch considers that the likelihood of any further increase in the Bank of England base rate has dissipated. Its latest base rate forecast is a fall to 4.00% by the end of 2006. Over the same timeframe unemployment is expected to continue at its present level, before rising a little to 5.00% in 2007; growth in real GDP is forecast to be around 2.75% this year and next.

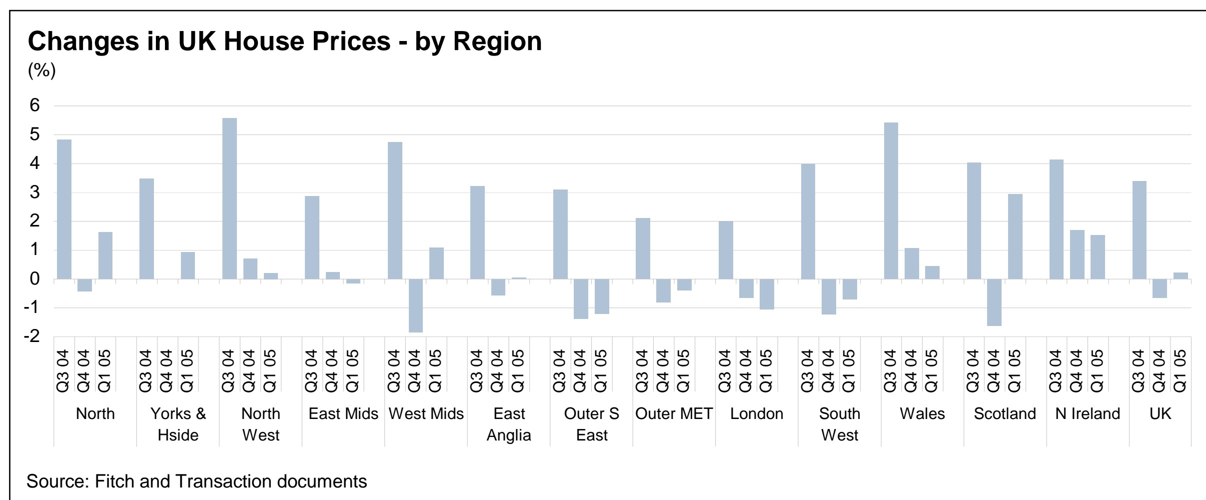
Covered Bonds

UK covered bonds also pose a potential challenge to the RMBS master trust since they provide an additional form of funding to UK mortgage lenders. However, to date, this option has not cannibalised master trust issuance, largely because the investor base is different, consisting of investors in traditional continental European covered bonds. UK covered bonds have therefore provided a complementary rather than a competing source of funding to these UK lenders. The FSA's position on covered bonds also remains unclear. Further pronouncements are expected since the organisation's indication last year that it would closely examine any proposed issuance above 4% of assets on a case–by-case basis. This may have slowed potential covered bond issuance.

De-linkage

Recent developments in the Granite trust suggest that other lenders may seek to modify existing programmes to issue so-called "de-linked" notes, a route that has also been favoured by UK credit card issuer, MBNA. While the use of a de-linked structure has the potential disadvantage of causing over-enhancement through the over-issuance of subordinate notes, it also has a number of advantages to the lender. These include the promise of a shorter time to market, structural flexibility and the ability to exploit opportunities that might arise for small issues tailored to individual investors or that take advantage of favourable spread conditions. This de-linked technology could prove advantageous because it allows this kind of flexibility, rather than requiring a large fully tranched issue to make use of master trust technology.

To incorporate this de-linked issuance technology, the Granite programme recently established a new Funding beneficiary that may be used to facilitate the issuance of de-linked notes through a repeat single issuer, the Granite master issuer. Repayment of the subordinate notes of a given series will not be dependent on the repayment of higher-ranking senior notes in that series. This contrasts with previous



issuances from the Granite master trust programme where the *pro rata* paydown of notes between classes is allowed under certain conditions, including satisfaction of arrears tests and a fully funded issuer reserve fund. In the de-linked transaction, structural features have been used to maintain sufficient credit enhancement levels for each note. For example, required subordination levels, set at closing for each class of notes, are the basis for a series of issuance and repayment tests to ensure that each class of notes has an appropriate level of subordination in place at all times.

For more specific details on the Granite de-linked structure, please see the Fitch new issue report entitled "*Granite Master Issuer plc*" dated 13 January 2005.

Regulatory Call Options

Most master trust issues now feature a regulatory call option, alongside other regular call options, including clean-up calls and tax-related calls. These options give the issuer the ability to call the entire issue on implementation of the Basel II Accords, scheduled for 2007. While it is not a credit-related issue whether these call options are exercised, the agency's modelling includes scenarios for both the exercise and non-exercise of regulatory call options. Investors wishing to assess the likelihood that a regulatory call option will be exercised and the resulting impact on the trust's expected life, should make enquiries with the relevant issuer, since ratings do not address this risk.

Basel II

The regulatory capital relief offered by RMBS under the current Basel I regime was certainly one of the attractions of establishing a master trust programme.

The impact of Basel II on master trust issuance will largely depend on how the new Basel II capital charges on securitised positions compare with the new charges on unsecuritised assets. Ideally, the Basel II charges on a pool of unsecuritised assets should be as close as possible to the total charges across a securitisation of these assets, since the structuring process does not alter the overall economic risk profile of the pool.

However, in practice, this alignment between securitised and unsecuritised assets is difficult to achieve. Thus, to the extent that securitisation results in a net increase in capital requirements for banks, Basel II could hamper further development in the securitisation markets (though this would, in practice, be limited by the Basel II "cap", which limits a bank's securitisation charges to the capital charges held against the underlying pool of assets if held on balance sheet). Conversely, where securitisation leads to lower charges on a given pool of assets, banks will still have incentives to securitise these assets, which, in turn, could spur further securitisation activity.

As noted earlier, many of the trusts incorporate regulatory call options that could be exercised on implementation of Basel II.

Since covered bonds offer no capital relief for the mortgages in the cover pool because the funding is on balance sheet, Basel II may tip the balance in favour of covered bond issuance over master trust RMBS. However, apart from capital relief, master trust RMBS also offers diversification of funding sources, which is another important driver, given, for example, the competition for customer deposits as a source of funds. It seems likely, therefore, that master trust issuance will continue although some Issuers may seek structures that maximise the issuance of higher-rated tranches.

■ Conclusion

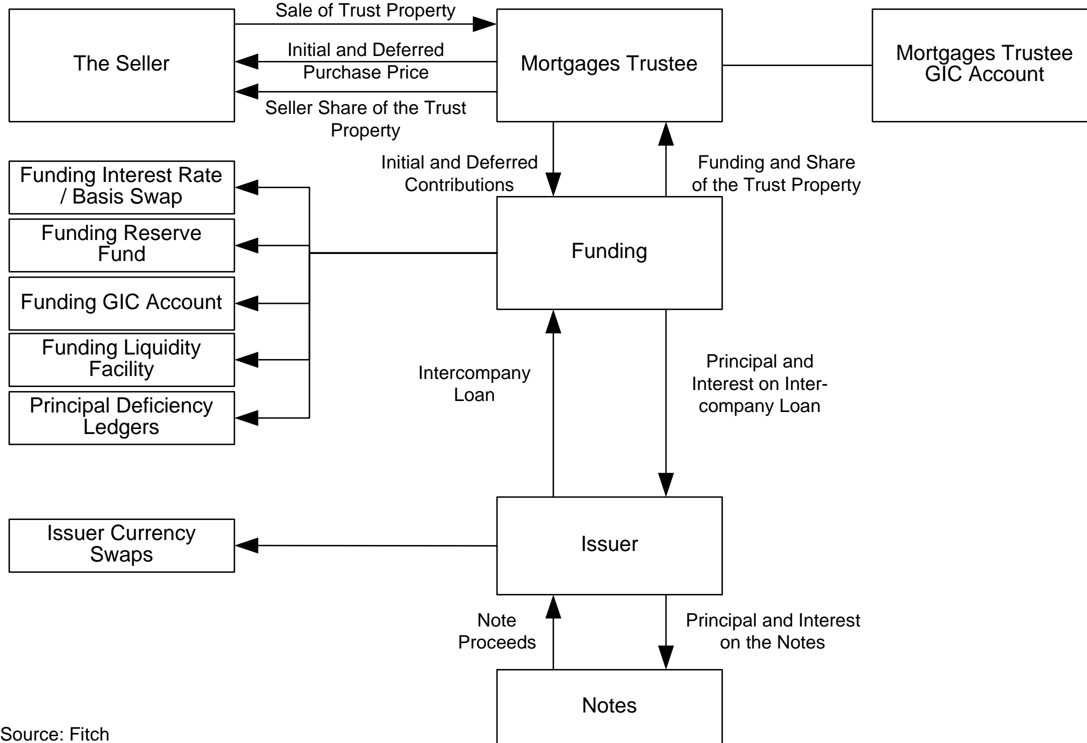
UK RMBS master trusts remain the masters of the house of European RMBS, accounting for some 38% of European RMBS issuance volumes in 2004. While the underlying collateral has evolved, reflecting changes in lenders' mortgage products and origination procedures – most notably with respect to income verification – Fitch remains confident that the overall credit quality of master trust property remains good, and that the extent of credit enhancement available, which is reviewed at the time of each issue, means current ratings of issues from each trust have a stable outlook.

The agency believes that, given the current stable outlook for interest rates, unemployment and GDP growth, and the apparently "orderly" slowing in house prices, house price declines approaching those seen in the 1989-1992 recession are extremely unlikely. However, even if they were to materialise the impact on the master trust's has already been accounted for in Fitch's analysis, which incorporates severe stresses – including higher interest rate scenarios and substantial property price declines. The agency therefore remains confident that the rated tranches of all master trust issues are well insulated from any potential loss.

Slowing origination volumes and alternative funding in the form of covered bonds may have a dampening effect upon master trust issuance volumes in 2005 when compared to 2004. Developments in master trust technology – for example, in the form of de-linked issuance – also promise potential changes in the size and nature of master trust issuance in 2005 and beyond.

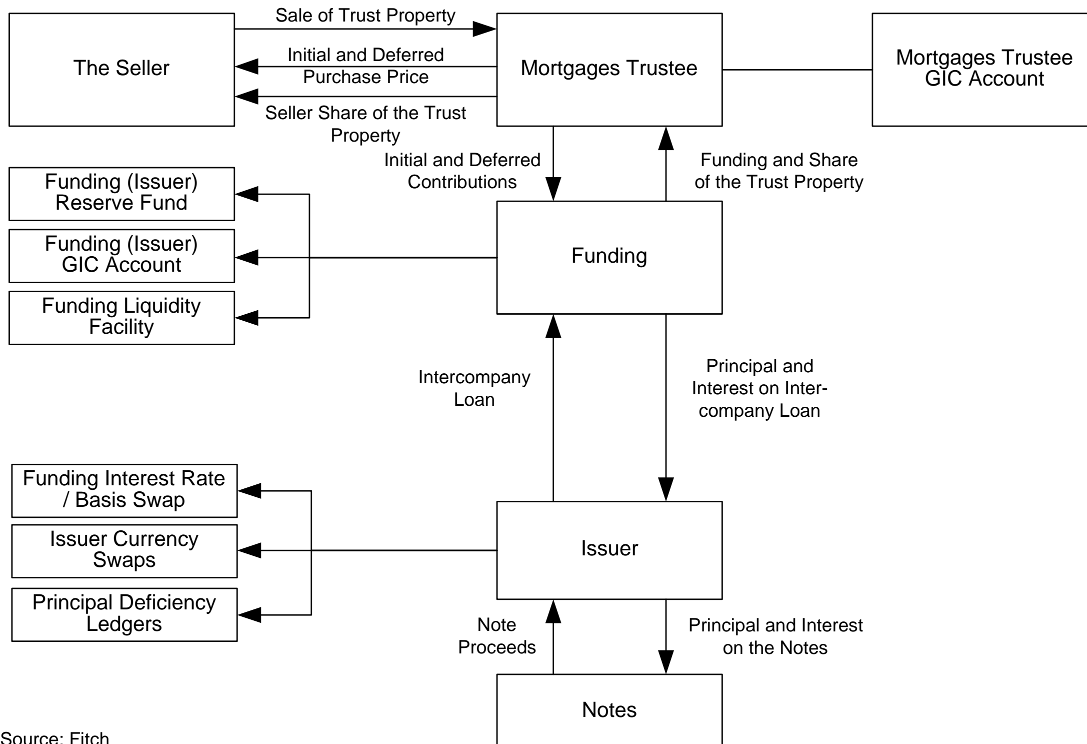
Appendix 1

Structure Diagram - 'Socialist' Master Trust Programme



Source: Fitch

Structure Diagram - 'Capitalist' Master Trust Programme



Source: Fitch

Appendix 2

The following is a notional example of how credit enhancement is calculated in each of the two different types of master trust:

Socialist Structure

Issue 1
Class A, rated AAA, GBP10,000m
Class B, rated A, GBP500m
Class C, rated BBB, GBP400m
Initial and Target Reserve Fund GBP200m

At the time of this issue, the credit enhancement for each tranche is provided by subordination together with the reserve fund, giving

Socialist Issue 1

Class	Rating	Notes Outstanding (GBPm)	Subordination (GBPm)	Credit Enhancement %
A	AAA	10,000	1,100	10.09
B	A	500	600	5.50
C	BBB	400	200	1.83
Total Notes		10,900		
Reserve Fund		200		

Source: Fitch

Issue 2
Class A, rated AAA, GBP5,000m
Class B, rated A, GBP 150m
Class C, rated BBB, GBP100m
New Initial and Target Reserve Fund for Issuer GBP250m

At the time of this second issue, and assuming GBP50m of the Class A notes have been paid down from issue 1, the total notes outstanding will be GBP16,100m. The increased issuer reserve fund of GBP250m is now available to support all notes issued. Credit enhancement as calculated at all four rating categories would be as follows:

Socialist Issue 2

Class	Rating	Notes Outstanding (GBPm)	Subordination (GBPm)	Credit Enhancement %
A (Issue 1)	AAA	9,950	1,400	8.70
A (Issue 2)	AAA	5,000	1,400	8.70
B (Issue 1)	A	500	750	4.66
B (Issue 2)	A	150	750	4.66
C (Issue 1)	BBB	400	250	1.55
C (Issue 2)	BBB	100	250	1.55
Total Notes		16,100		
Reserve Fund		250		

Source: Fitch

Capitalist Structure

Issue 1
Class A, rated AAA, GBP10,000mn
Class B, rated A, GBP500m
Class C, rated BBB, GBP400m
RF GBP200 million

Capitalist Issue 1

Class	Rating	Notes Outstanding (GBPm)	Subordination (GBPm)	Credit Enhancement %
A	AAA	10,000	1,100	10.09
B	A	500	600	5.50
C	BBB	400	200	1.83
Total Notes		10,900		
Reserve Fund		200		

Source: Fitch

Issue 2
Class A, rated AAA, GBP5,000m
Class B, rated A, GBP150m
Class C, rated BBB, GBP100m
New Initial and Target Reserve Fund=GBP250m

Credit enhancement for this second transaction is unaffected by the notes outstanding in issue 1 and is therefore calculated on a stand alone basis as follows:

Capitalist Issue 2

Class	Rating	Notes Outstanding (GBPm)	Subordination (GBPm)	Credit Enhancement %
A	AAA	5,000	500	9.52
B	A	150	350	6.67
C	BBB	100	250	4.76
Total Notes		5,250		
Reserve Fund		250		

Source: Fitch

As mentioned previously, the use of capitalist structures will diminish in future, with the changes to the Granite master trust structure following the issue of Granite 05-1.

Appendix 3

Deal	Aire Valley 2004-1 plc	Aire Valley 2005-1 plc
Originator	Bradford & Bingley	Bradford & Bingley
Issue Date	Sep-04	May-05
Issue Size	1,500,000,000	1,500,000,000
Pool Size	9,504,647,002	8,691,369,717
Issuance Levels		
Series 1 F1+ USD	405,000,000	
Series 1 AAA GBP		140,000,000
Series 1 AAA EUR		444,500,000
Series 1 AA GBP		6,000,000
Series 1 AA EUR		29,000,000
Series 1 BBB EUR		41,800,000
Series 2 AAA USD	360,000,000	50,000,000
Series 2 AAA GBP	250,000,000	229,000,000
Series 2 AAA EUR	803,000,000	276,000,000
Series 2 AA GBP	20,000,000	10,000,000
Series 2 AA EUR	65,500,000	23,000,000
Series 2 BBB GBP	20,000,000	
Series 2 BBB EUR	75,500,000	41,800,000
Series 3 AAA GBP	215,000,000	
Series 3 AAA EUR	460,000,000	
Series 3 AA GBP	20,000,000	
Series 3 AA EUR	25,000,000	
Series 3 BBB GBP	20,000,000	
Series 3 BBB EUR	31,000,000	
Series 4 BB GBP	15,000,000	
Series 4 BB EUR	22,000,000	
Initial Reserve Fund	18,000,000	36,000,000
Target Reserve Fund	30,000,000	67,000,000
Pool Stats		
WAFF Variables (%)		
WA OLTV	79.66	80.12
0-50%	2.82	2.11
50-75%	17.18	18.99
75-80%	11.87	12.91
80-85%	23.15	23.58
85-90%	36.02	38.02
90-95%	8.97	4.38
WA Income Multiple[1]	n.a.	2.55
Self Cert	15.01	14.31
Buy-to-Let	81.44	83.95
Interest Only	78.00	80.37
WA Recovery Variables		
WA CLTV – Indexed (%)		79.54
0-50%	12.14	15.64
50-75%	55.34	70.39
75-80%	21.48	8.23
80-85%	9.26	4.94
85-90%	1.71	0.73
90-95%	0.05	0.05
>95%	0.01	0.01
WA Seasoning (Months)	18.2	25.33
London/SE Concentration[2] (%)	65.08	65.25
Other Variables (%)		
Flexible Loans	100.00	100.00
Payment Type: Fixed	26.11	23.87
Discounted	55.09	50.23
Variable	12.91	25.90
Other	5.89	0.00
Key Substitution/Eligibility Criteria		
WAFF & WALS (%)	0.25	0.25
Max Loan Size	500,000	500,000
Minimum Rating of Originator	F2	F2
Minimum Spread: 1st Year after Closing (%)	0.90	0.90
2nd Year after Closing (%)	0.70	0.70
Thereafter (%)	0.60	0.60
Issuer Report Grade at 30 April 05	***	n.a.

Appendix 4

Deal	Granite 01-1	Granite 01-2	Granite 02-1	Granite 02-2	Granite 03-1	Granite 03-2	Granite 03-3	Granite 04-1	Granite 04-2	Granite 04-3	Granite 05-1
Originator	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock	Northern Rock
Issue Date	Mar-01	Sep-01	Mar-02	Sep-02	Jan-03	Apr-03	Sep-03	Jan-04	May-04	Sep-04	Jan-05
Issue Size	1,500,000,0000	1,510,000,000	2,435,580,322	2,748,444,620	3,009,507,487	2,494,618,461	2,226,469,523	3,471,661,952	3,650,258,662	4,000,009,814	4,530,967,966
Pool Size	1,823,000,000	3,840,000,000	6,541,000,000	9,212,000,000	12,362,000,000	14,035,000,000	14,983,000,000	20,642,000,000	20,750,000,000	25,480,000,000	28,500,000,000
Issuance Levels											
Series 1 F1+ USD					925,000,000			1,185,000,000			
Series 1 AAA USD	1,495,000,000	1,300,000,000	1,978,600,000	1,800,000,000	1,525,000,000	2,751,000,000	2,000,000,000	1,185,000,000	2,443,200,000	2,229,500,000	
Series 1 AAA EUR										494,000,000	
Series 1 AAA GBP											
Series 1 AA USD	50,000,000	43,500,000	69,700,000	60,000,000	42,000,000	76,500,000	72,000,000	52,000,000	40,300,000	59,200,000	
Series 1 A USD							27,000,000	72,000,000	33,200,000	31,400,000	
Series 1 BBB USD	67,500,000	58,000,000	96,500,000	88,000,000	56,000,000	10,500,000	50,000,000	108,000,000	73,500,000	62,700,000	
Series 2 AAA USD								1,185,000,000		713,700,000	
Series 2 AAA GBP	350,000,000	500,000,000	460,000,000						244,000,000		
Series 2 AA GBP	10,000,000	15,000,000	16,200,000								
Series 2 BBB GBP	15,000,000	20,000,000	22,500,000								
Series 2 BB+ GBP		10,000,000	15,000,000								
Series 2 AAA EUR				1,100,000,000	900,000,000	300,000,000	640,000,000	900,000,000	1,340,000,000	800,150,000	
Series 2 AA EUR				41,000,000	62,000,000	72,900,000	23,000,000	91,000,000	92,000,000	74,400,000	
Series 2 A EUR						52,300,000	7,500,000	45,000,000	53,500,000	57,900,000	
Series 2 BBB EUR				53,000,000	94,500,000	65,500,000	55,000,000	60,000,000	89,000,000	139,050,000	
Series 2 BB+ EUR						16,000,000					
Series 3 AAA GBP				665,000,000	665,000,000	352,280,000	340,000,000	600,000,000	752,100,000	1,011,250,000	
Series 3 AA GBP				25,000,000	31,000,000		28,500,000	23,000,000	38,900,000	54,350,000	
Series 3 A GBP							11,500,000	10,000,000	26,500,000	42,250,000	
Series 3 BBB GBP				33,000,000	41,000,000	15,000,000	7,500,000	20,000,000	48,500,000	99,450,000	
Series 3 AAA EUR			600,000,000								
Series 3 AA EUR			21,100,000								
Series 3 BBB EUR			29,300,000								
Series 2005-1 AAA USD											3,000,000,000
Series 2005-1 AAA EUR											2,500,000,000
Series 2005-1 AAA GBP											750,000,000
Series 2005-1 AA USD											60,500,000
Series 2005-1 AA EUR											80,000,000
Series 2005-1 AA GBP											55,000,000
Series 2005-1 A USD											65,000,000
Series 2005-1 A EUR											79,000,000
Series 2005-1 A GBP											55,000,000
Series 2005-1 BBB EUR											139,000,000
Series 2005-1 BBB GBP											60,000,000
Initial Reserve Fund	20,000,000	15,000,000	34,372,240	28,900,000	20,000,000	17,500,000	22,300,000	40,000,000	33,700,000	41,000,000	75,000,000
Target Reserve Fund	20,000,000	20,000,000	34,372,240	39,000,000	45,000,000	35,000,000	33,400,000	60,000,000	44,900,000	48,000,000	75,000,000

Appendix 4 Continued

Deal	Granite 01-1	Granite 01-2	Granite 02-1	Granite 02-2	Granite 03-1	Granite 03-2	Granite 03-3	Granite 04-1	Granite 04-2	Granite 04-3	Granite 05-1
Pool Stats											
WAFF Variables											
WA Income Multiple	2.25	2.34	2.37	n.a.	n.a.	2.44	2.49	2.57	2.59	2.74	2.83
Non-Verified Income (%)	n.a.	n.a.	n.a.	n.a.	1.59	13.73	20.74	24.36	28.51	34.45	38.53
Buy to Let (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Only (%)	66.64	55.05	52.02	39.53	32.02	29.16	29.22	29.13	40.70	31.56	24.88
WA Recovery Variables											
WA CLTV (%)	73.70	73.40	77.39	77.76	76.81	76.12	75.16	75.33	75.82	75.48	75.43
0-50%	12.58	13.06	9.97	10.41	10.95	11.45	12.17	11.79	11.27	11.14	11.08
50-60%	9.76	9.73	7.35	7.58	7.71	7.95	8.44	8.25	7.74	7.84	7.95
60-70%	14.07	13.33	10.13	10.09	10.29	10.58	11.25	11.19	10.56	10.90	11.04
70-80%	18.17	17.72	18.50	14.98	15.99	16.87	17.97	18.49	17.87	18.02	17.75
80-90%	18.90	24.40	23.76	25.79	24.72	24.72	24.11	23.97	26.50	28.22	28.61
90-100%	26.54	21.76	30.28	31.15	30.34	28.40	26.01	26.27	26.00	23.84	23.51
100%+	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.04	0.05
WA Seasoning (Months)	35.9	29.9	30.25	27.14	23.95	23.71	24.72	24.82	25.07	24.37	23.35
L//SE Concentration[1] (%)	41.27	42.47	38.85	38.61	39.08	39.48	39.93	40.89	39.85	39.86	39.97
Other Variables (%)											
Flexible Loans	11.29	13.15	21.50	42.04	55.53	64.10	68.37	73.70	77.73	80.96	85.81
Payment Type: Fixed	38.08	44.60	40.87	37.53	35.73	39.80	48.32	52.67	46.46	48.21	51.14
SVR	27.39	34.38	37.51	32.92	28.16	24.92	20.33	17.39	18.40	15.63	14.46
Discounted	23.24	7.85	2.84	1.06	0.64	0.47	0.31	0.66	4.97	6.87	7.20
Tracker	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.61	1.29	2.66	3.68	3.17
Together	11.29	13.15	18.78	28.43	31.31	27.95	24.86	22.82	24.36	23.35	22.45
Together Connections	n.a.	n.a.	n.a.	n.a.	n.a.	3.78	2.92	2.15	1.76	1.31	0.89
Capped	0	0.02	0.00	0.06	4.15	3.08	2.65	3.02	1.38	0.96	0.69
Key Substitution/Eligibility Criteria											
WAFF & WALS (%)	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.35	0.25
Max Loan Size	350,000	350,000	350,000	350,000	350,000	350,000	350,000	500,000	500,000	500,000	500,000
Minimum Rating of Originator	A-	A-	A-	A-	A-	A-	A-	A-	A-	A-	A-
Minimum Spread over 3m LIBOR (%)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.56	0.56	0.50	0.5
Issuer Report Grade at 30 April 05	***	***	***	***	***	***	***	***	***	***	***

Appendix 5

Deal	Holmes 1	Holmes 2	Holmes 3	Holmes 4	Holmes 5	Holmes 6	Holmes 7	Holmes 8
Originator	Abbey	Abbey	Abbey	Abbey	Abbey	Abbey	Abbey	Abbey
Issue Date	Jul-00	Nov-00	May-01	Jul-01	Nov-01	Oct-02	Mar-03	Apr-04
Issue Size	2,332,000,000	2,409,000,000	2,149,000,000	2,675,000,000	2,773,000,000	4,221,000,000	2,519,000,000	4,589,000,000
Pool Size	7,177,622,123	6,558,836,761	12,479,589,699	11,674,778,060	22,035,364,223	28,598,632,723	28,137,450,990	35,936,243,704
Issuance Levels								
Series 1 F1+ USD					1,000,000,000	1,500,000,000	750,000,000	1,850,000,000
Series 1 AAA USD	900,000,000	1,000,000,000	1,060,000,000	1,050,000,000				
Series 1 AA USD	31,500,000	37,000,000	32,500,000	36,500,000	35,000,000	50,000,000	22,500,000	62,900,000
Series 1 A USD							38,250,000	
Series 1 BBB USD	42,000,000	49,000,000	53,000,000	54,500,000	52,000,000	86,000,000		107,300,000
Series 2 AAA USD	975,000,000	1,000,000,000	1,060,000,000		750,000,000	1,250,000,000	1,250,000,000	1,500,000,000
Series 2 AA USD	34,500,000	37,000,000	32,500,000		35,000,000	42,000,000	37,500,000	51,000,000
Series 2 A USD							63,750,000	
Series 2 BBB USD	45,000,000	49,000,000	53,000,000		52,000,000	71,000,000		87,000,000
Series 2 AAA EUR				800,000,000				
Series 2 AA EUR				35,800,000				
Series 2 BBB EUR				53,800,000				
Series 2 BB+ EUR								
Series 2 AAA CHF					400,000,000			
Series 3 AAA GBP	375,000,000	500,000,000		550,000,000	500,000,000			
Series 3 AA GBP	24,000,000	19,000,000					15,000,000	
Series 3 A GBP							20,000,000	
Series 3 BBB GBP	30,000,000	25,000,000						
Series 3 BB GBP				30,000,000				
Series 3 AAA EUR	320,000,000		805,000,000		600,000,000	1,000,000,000		990,000,000
Series 3 AA EUR			24,000,000		53,000,000	34,000,000		34,000,000
Series 3 BBB EUR			50,000,000		76,000,000	57,000,000		57,500,000
Series 3 BB EUR				27,000,000				
Series 3 AAA USD				410,000,000			500,000,000	
Series 3 AA USD				34,500,000				
Series 3 BBB USD				49,500,000				
Series 3 BB USD				5,000,000				
Series 4 AAA USD						1,000,000,000		500,000,000
Series 4 AA USD						40,000,000		
Series 4 BBB USD						69,000,000		
Series 4 AAA GBP	250,000,000						250,000,000	900,000,000
Series 4 AA GBP	11,000,000			11,000,000				39,900,000
Series 4 BBB GBP	14,000,000			19,000,000				68,000,000
Series 4 AAA EUR		500,000,000					500,000,000	
Series 4 AA EUR		21,000,000					41,000,000	
Series 4 A EUR							56,000,000	
Series 4 BBB EUR		35,000,000						
Series 4 AAA CHF				850,000,000		300,000,000		
Series 5 AAA GBP						500,000,000		
Series 5 AA GBP						17,000,000		
Series 5 BBB GBP						29,000,000		
Initial Reserve Fund	6,000,000	13,500,000	46,000,000	68,100,000	127,000,000	185,000,000	195,000,000	292,000,000
Target Reserve Fund	30,000,000	62,000,000	96,000,000	140,000,000	185,000,000	291,000,000	350,000,000	338,000,000

Appendix 5 Continued

Deal	Holmes 1	Holmes 2	Holmes 3	Holmes 4	Holmes 5	Holmes 6	Holmes 7	Holmes 8
Pool Stats								
WAFF Variables (%)								
WA OLTV	80.90	82.31	79.91	79.81	79.44	78.49	76.97	72.29
0-50%	6.53	6.16	7.67	7.81	8.14	9.03	10.41	14.46
50-75%	20.55	19.73	24.06	24.12	24.23	25.40	27.70	34.94
75-80%	6.21	6.19	6.90	6.92	7.22	7.34	7.41	8.61
80-85%	6.93	6.47	7.60	7.57	7.65	7.78	7.82	7.75
85-90%	14.20	13.62	14.90	14.87	16.80	16.76	16.33	14.39
90-95%	45.59	47.85	38.87	38.71	35.96	33.70	30.33	19.84
WA Income Multiple[1]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-Verified Income (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.13	14.01
Buy to Let (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Only (%)	67.00	63.00	56.70	56.80	50.15	42.98	39.20	31.00
WARR Variables								
WA Seasoning (Months)	25.48	35.00	32.40	35.40	31.90	30.82	30.87	29.32
London/SE Concentration[2] (%)	n.a.	44.71	55.35	55.15	57.28	55.30	54.35	52.11
Other Variables (%)								
Flexible Loans	0.00	0.00	0.00	0.00	0.00	0.00	5.00	7.00
Payment Type: Fixed	53.61	52.45	35.93	36.12	28.87	37.39	22.66	18.83
Tracker	n.a.	n.a.	n.a.	n.a.	n.a.	20.64	29.00	44.00
Other	46.39	47.55	64.07	63.88	71.13	41.97	48.34	37.17
Key Substitution/Eligibility Criteria								
WAFF & WALS (%)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Max Loan Size	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Minimum Rating of Originator	F1	F1	F1	F1	F1	F1	F1	F1
Minimum Spread Over 3m LIBOR (%)	1.00	1.00	0.80	0.80	0.80	0.80	0.80	0.50
Issuer Report Grade at 30 Apr 05	***	***	***	***	***	***	***	***

Appendix 6

Deal	Mound 1	Mound 2	Mound 3
Originator	Bank of Scotland	Bank of Scotland	Bank of Scotland
Issue Date	May-00	Feb-01	Jun-03
Issue Size	750,000,000	750,000,000	2,260,000,000
Pool Size	1,731,000,000	2,764,000,000	10,342,000,000
Issuance Levels			
Class A1 USD - AAA	208,000,000	330,000,000	
Class A1-1 USD - AAA			1,400,000,000
Class A1-2 USD - AAA			500,000,000
Class A2 USD - AAA	200,000,000	330,000,000	
Class A2 EUR - AAA			700,000,000
Class A3 USD -AAA	200,000,000		
Class A3 GBP - AAA		225,000,000	375,000,000
Class A4 GBP - AAA	285,000,000		
Class B GBP - AA		37,500,000	
Class B1 USD - AA			25,000,000
Class B2 EUR - AA			45,000,000
Class B3 GBP - AA			20,000,000
Class B GBP - A+	37,500,000		
Class M1 USD - A+			40,000,000
Class M2 EUR - A+			55,000,000
Class M3 GBP - A+			10,000,000
Class C GBP - BBB	37,500,000	37,500,000	
Class C1 USD - BBB			40,000,000
Class C2 EUR - BBB			70,000,000
Initial Reserve Fund	4,875,000	11,800,000	66,000,000
Target Reserve Fund	15,000,000	37,500,000	90,500,000
Pool Stats			
WAFF Variables			
WA Income Multiple	n.a.	2.76	2.96
Special Status[1] (%)	55.00	55.00	63.00
Buy to Let[2] (%)	13.30	11.81	11.30
Interest Only (%)	67.00	59.35	55.70
WA Recovery Variables (%)			
WA CLTV	76.37	76.00	77.20
0-50%	9.83	10.23	8.64
50-75%	27.32	26.89	23.36
75-80%	11.68	11.58	11.09
80-90%	28.32	30.25	39.11
90-100%	18.24	18.68	16.47
100%+	4.63	2.37	1.33
WA CLTV - Indexed			
0-50%	n.a.	n.a.	23.06
50-75%	n.a.	n.a.	45.26
75-80%	n.a.	n.a.	10.94
80-90%	n.a.	n.a.	18.25
90-100%	n.a.	n.a.	2.50
100%+	n.a.	n.a.	0.00
WA Seasoning (Months)	36.00	32.00	20.64
London/SE Concentration[3]	69.78	70.98	64.26
Other Variables			
Flexible Loans	23.5[4]	35[5]	64.89[6]
Payment Type: Fixed	11.60	16.56	8.38
SVR or Base Rate	88.40	83.44	91.62
Key Substitution/Eligibility Criteria			
WAFF & WALS (%)	0.25	0.25	0.25
Max Loan Size	350,000	350,000	500,000
Minimum Rating of Originator	F1	F1	F1
Minimum Spread over 3m LIBOR (%)	1.10	1.10	0.90
Issuer Report Grade at 30 April 05	***	***	***

Appendix 7

Deal	Permanent 1	Permanent 2	Permanent 3	Permanent 4	Permanent 5	Permanent 6	Permanent 7
Originator	Halifax	Halifax	Halifax	Halifax	Halifax	Halifax	Halifax
Issue Date	Jun-02	Mar-03	Nov-03	Mar-04	Jul-04	Nov-04	Mar-05
Issue Size	3,476,576,310	4,762,015,000	4,150,000,000	6,122,000,000	3,957,000,000	3,853,000,000	4,069,880,000
Pool Size	12,000,000,000	20,500,000,000	20,100,000,000	30,000,000,000	29,636,000,000	35,547,000,000	38,000,000,000
Issuance Levels							
Series 1 F1+ USD	750,000,000	1,000,000,000	1,100,000,000	1,500,000,000	1,250,000,000	1,000,000,000	1,000,000,000
Series 1 AA USD	26,000,000	34,000,000	38,000,000	78,100,000	53,000,000	35,800,000	43,400,000
Series 1 A USD				56,500,000			
Series 1 BBB USD	26,000,000	34,000,000	38,000,000		44,400,000	34,700,000	42,200,000
Series 2 AAA USD	750,000,000	1,750,000,000	1,700,000,000	2,400,000,000	1,300,000,000	1,000,000,000	1,400,000,000
Series 2 AA USD		61,000,000	59,000,000	100,700,000	56,400,000	35,800,000	60,700,000
Series 2 A USD				59,900,000			
Series 2 BBB USD		61,000,000	59,000,000	82,200,000	46,200,000	34,700,000	59,200,000
Series 2 AA GBP	26,000,000						
Series 2 BBB GBP	26,000,000						
Series 3 AAA USD	1,100,000,000		1,500,000,000	1,700,000,000	750,000,000	1,000,000,000	
Series 3 AA USD	38,500,000		52,000,000	75,800,000	32,500,000	35,300,000	
Series 3 BBB USD	38,500,000		52,000,000	55,400,000	27,000,000	34,200,000	
Series 3 A GBP				40,400,000			
Series 3 AAA EUR		1,250,000,000					1,700,000,000
Series 3 AA EUR		43,500,000					73,700,000
Series 3 BBB EUR		43,500,000					71,800,000
Series 4 AAA USD		1,750,000,000			1,000,000,000		
Series 4 AAA EUR	750,000,000		700,000,000	1,500,000,000		750,000,000	
Series 4 AA EUR		56,500,000	62,000,000	85,000,000	43,500,000	26,100,000	
Series 4 A EUR				62,500,000			
Series 4 BBB EUR		56,500,000	62,000,000		36,000,000	25,300,000	
Series 4 AAA GBP	1,000,000,000		750,000,000				850,000,000
Series 4 AA GBP	52,000,000						36,800,000
Series 4 BBB GBP	52,000,000						35,900,000
Series 5 AAA GBP		750,000,000	400,000,000	1,100,000,000	1,250,000,000	1,000,000,000	500,000,000
Series 5 AA GBP		26,000,000		43,000,000	47,000,000	34,800,000	
Series 5 A GBP				32,000,000			
Series 5 BBB GBP		26,000,000		54,000,000	39,000,000	33,700,000	
Series 5 AAA EUR				750,000,000			
Series 5 AA EUR			20,000,000				
Series 5 BBB EUR			20,000,000				
Initial Reserve Fund	59,000,000	120,500,000	167,278,377	247,631,717	288,974,113	311,791,814	415,815,248
Target Reserve Fund	69,000,000	161,000,000	213,000,000	330,000,000	350,000,000	460,000,000	485,000,000

Appendix 7 Continued

Deal	Permanent 1	Permanent 2	Permanent 3	Permanent 4	Permanent 5	Permanent 6	Permanent 7
Pool Stats							
WAFF Variables							
WA OLTV (%)	72.73	71.58	69.95	69.20	68.59	68.18	67.77
0-50%	15.44	16.30	18.00	16.20	18.74	18.64	19.37
50-75%	30.99	33.69	36.20	38.70	39.76	41.43	41.55
75-80%	7.08	7.27	7.50	8.30	8.63	9.37	9.22
80-90%	18.88	17.70	15.80	14.10	13.41	12.56	12.26
90-95%	14.84	14.46	18.50	15.80	10.52	13.49	13.15
95-97%	12.76	10.59	4.00	4.90	8.93	4.52	4.45
WA Income Multiple (%)	2.23	2.29	2.32	2.35	2.38	2.46	2.50
Non-Verified Income[1]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Buy to Let (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Only (%)	51.00	47.00	40.00	36.30	35.16	33.78	39.73
WA Recovery Variables (%)							
WA CLTV	55.70	47.24	46.02	47.80	47.20	47.65	50.00
0-50%	36.94	54.47	58.20	55.00	57.22	55.73	51.03
50-75%	45.52	42.96	38.10	38.80	36.16	36.60	38.12
75-80%	9.03	1.57	1.40	2.30	2.44	2.96	3.65
80-90%	8.15	0.85	1.70	2.90	3.31	4.03	5.24
90-97%	0.37	0.14	0.50	1.00	0.71	0.59	1.59
97-100%	0.00	0.01	0.00	0.00	0.17	0.09	0.37
100%+	0.00	0.00	0.00	0.00	0.00	0.00	0.01
WA Seasoning (Months)	33.32	37.94	39.40	33.70	35.28	31.94	31.76
London/SE Concentration[2]	31.53	29.84	30.40	30.20	30.04	30.27	30.20
Other Variables (%)							
Flexible Loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Payment Type: Fixed	22.59	23.00	24.00	20.80	24.50	28.13	34.21
Tracker/Discounted	77.00	77.00	76.00	79.20	75.50	71.39	65.44
Capped	0.00	0.00	0.00	0.00	0.00	0.48	0.34
Key Substitution/Eligibility Criteria							
WAFF & WALS (%)	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Max Loan Size	400,000	400,000	400,000	500,000	500,000	500,000	500,000
Minimum Rating of Originator	F1	F1	F1	F1	F1	F1	F1
Minimum Spread Over 3m LIBOR (%)	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Issuer Report Grade at 30 April 05	***	***	***	***	***	***	***

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