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Ratings in the Securitisation Industry

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INTRODUCTION

In its 2004 report on rating agencies, the AMF pointed out that business in structured finance (SF) ratings quadrupled between 1998 and 2003, posting 320% growth (all agencies combined). In 2004, this activity generated between 37% and 47% of overall sales at the mainstream rating agencies. Also, in January 2005, the Bank for International Settlements published a report on the issue [1]. As promised last year, the AMF has undertaken an analysis of ratings in the SF segment.

The report has a statutory requirement to cover the French market. However, the law does not define what constitutes the French market. The AMF used the nationality of issuers as its criterion in the first report. This created some problems because the agencies are structured independently of issuers' national markets. Asset nationality was used as the criterion for activities in the SF segment. The report therefore examined vehicles that held a majority of French assets.

This year, the AMF opted to define the French market not as the market in French (or mostly French) assets, but as the market in transactions structured by French arrangers.

French arrangers are defined as banking groups with their registered offices in France. Their SF teams can be located anywhere in Europe and asset nationality is not taken into account.

Only transactions that received a public rating on at least one tranche were included. Covered bonds were excluded.

In terms of methodology, the AMF sent questionnaires to the three main rating agencies operating in France, as well as to the leading French arrangers and law firms specialising in securitisation.

In addition, the AMF interviewed investors, notably insurers and asset managers, to find out how they understood and used SF ratings.

The study follows the thematic guidelines set out in the Financial Security Act. It therefore covers the role of rating agencies, the transparency of their methods and their ethical rules. The final thematic area referred to in the Act – the impact of ratings – is dealt with in a separately-published study of asset-backed securities conducted by IXIS CIB as part of the work of the AMF Academic Advisory Board.

[1] "The Role of Ratings in Structured Finance: Issues and Implications", Bank for International Settlements, January 2005.

1 THE SECURITISATION MARKET AS IT STANDS TODAY

1.1 Technical overview

There are two main types of securitisation.

The first type, often described as the on-balance sheet method, is where a credit institution or company (the seller) issues securities backed by a pool of assets or receivables that remain on the balance sheet but are legally ringfenced. Usually called covered bonds, these instruments include Germany's *Pfandbriefe* and their French equivalents, *obligations foncières*.

The second technique, known as the off-balance sheet method (the only one this report will cover), is where the institution sells assets or receivables to a special-purpose vehicle (SPV)[2], which finances the acquisition by issuing securities, often called asset-backed securities (ABS). Under this type of arrangement, the payments made to ABS investors come directly from the income generated by the assets held by the SPV.

The practice in English-speaking countries is to talk about mortgage-backed securities (MBS) when the securitised claims are mortgage loans, reserving the term ABS for other types of arrangement, like consumer and auto loan securitisations. MBS themselves are further subdivided into commercial mortgage-backed securities (CMBS) and residential mortgage-backed securities (RMBS).

The range of securitisation instruments has recently been extended with the arrival of collateralised debt obligations (CDOs). Though they share the basic principles of ABS, CDOs use different underlying asset portfolios. CDOs can be backed by loans, in which case they are referred to as collateralised loan obligations (CLOs), bonds, in which case they are known as collateralised bond obligations (CBOs), or, as of more recently, credit derivatives referencing corporate risk[3]. Furthermore, while ABS are backed by a portfolio of many standardised assets, CDOs work more on the principle of diversification, via mixed portfolios, and generally comprise fewer line items.

For this reason, different risk assessment approaches are needed for conventional ABS structures on the one hand, and CDOs on the other. ABS-related risks can be assessed through sector analyses, historical default rates and the law of large numbers. CDOs need more individual assessments, based on specific analyses of each asset in the pool, rounded out by an estimate of how default risks are correlated across the different components.

An SPV's liabilities may be very simply configured, in the sense that the income generated by the assets is paid to creditors in proportion to their investment, with no distinction made between different categories of investor. This is called a pass-through system. But an SPV's liabilities can also be structured to offer investors securities with different properties, notably in terms of their exposure to credit and prepayment risk. In this instance, income generated by the pool of assets is not used to make identical payments to all creditors, but is transformed as part of a pay-through arrangement. Liabilities are structured this way using a technique called subordination, which consists in creating an order of seniority for investors. Generally, an equity tranche absorbs most of the risk attached to the asset portfolio. If a credit event occurs, equity tranche holders are first in line to bear any losses (loss of principal, interruption of interest payments). Next comes the mezzanine tranche (or several junior tranches), which offers middling risk exposure. The final tranche is made up of senior debt, which has very low exposure to credit risk. Mezzanine and senior debt are rated by the agencies. By virtue of its special position, senior debt generally receives the highest rating, i.e. AAA/Aaa. Investors choose between these tranches based

[2] Under French law, SPVs are formed as *fonds communs de créance* (FCCs).

[3] When a CDO is created simply to repackage assets that are already present on the secondary market, such as high yield bonds, it is known as an arbitrage CDO (as opposed to a balance sheet CDO). See Bruyère R. *et al.* (2004): Les produits dérivés de crédit, Economica, Collection AFTE. See also Cousseran O. and Rahmouni I. (2005): The CDO market: Functioning and implications in terms of financial stability, Banque de France, Financial Stability Review, No. 6, June.

on their own level of risk aversion or simply to meet regulatory requirements. Often, the bank or company that transfers the assets to the SPV, or even the arranger, will take on the equity tranche, which is the riskiest and hence the highest-yielding tranche.

Arrangers often use asset-backed commercial paper (ABCP) programmes issued by conduits to meet the short-term financing needs of their clients. Conduits are entities that acquire assets from several sellers, sometimes refinancing themselves by issuing long-term securities but usually by issuing short-term instruments like commercial paper (*billets de trésorerie* in France). Conduits usually securitise short-term assets, but may also be used for long-term assets. In the latter case, an SPV can be intermediated. The vehicle's units are recorded as assets for the conduit, which refinances the acquisition of these short-term units by issuing commercial paper. Multi-seller and single-seller conduits exist.

Conduits make it possible to provide financing for assets that would be too small individually to warrant creating separate SPVs, or adjusting the term of financing to match the maturity of the assets. The particular nature of these arrangements justified a separate statistical analysis. As at 31 December 2004, banks domiciled in France had set up 16 conduits[4]. Of these, 75% were multi-seller conduits and 19% were single-seller conduits.

Arbitrage ABCPs also exist and are used to take advantage of the spread between the yield on securities held and the cost of refinancing the vehicle. This kind of conduit may acquire any sort of asset (bonds, etc.). One French bank set up a conduit in this category.

1.2 Participants in securitisations

The seller that initiates a securitisation transaction can be a credit institution acting on its own account or an industrial or commercial issuer. In both cases, the aim is to realise assets or transfer risk.

The transaction is generally structured by a bank, which has to factor in the seller's objectives and constraints, the interests of investors (notably their investment constraints), the nature and location of the assets, as well as any legal, accounting and tax-related constraints.

The securitisation teams of the main French banks are mostly based in Paris, although London-based analysts occasionally provide support. The teams range in size from 9 to 70 people depending on the bank and the area covered (origination, structuring, trading, etc.). To structure the deal, banks usually assign junior analysts, who are supervised by a more seasoned analyst.

Lawyers chiefly advise participants during negotiations and provide a legal opinion on the sale of the assets, often focussing on aspects of bankruptcy law. They are also called on to provide an opinion on particular parts of the transaction. Law firms are usually selected based on the nationality of the underlying assets, especially because the analysis of bankruptcy issues is so crucial, and on other criteria, including the location of the vehicle and tax-related constraints. Lawyers play a central role because of the inherent risks in securitisation. Given how complex these transactions can be, the rating agency and the transaction's documentation (especially the prospectus and legal opinions) need a precise description of the legal risks in relation to the deal's core components and the rights of investors, notably as opposed to the rights of the seller's creditors.

As part of the process of preparing their opinion, which is needed to secure the desired rating and hence the success of the transaction, lawyers have to say at the outset (often at the agency's request) whether there are any impediments and must indicate any reserves that they might include in their opinion. Similarly, agencies say as early as possible which aspects require a legal opinion.

[4] The criterion here is different from the one used by the AMF, i.e. European transactions by banks with their registered offices in France.

Typically, in a securitisation transaction, the agency will deal mainly with the seller and the arranger, aided by their counsels. Other participants are also involved, however.

An asset manager, potentially an investment services provider, may be brought in to manage the SPV. If the assets are French, the arranger or legal firm will generally prefer an FCC-type structure. In this instance, if the FCC makes a public offering of securities, the prospectus must be approved by the AMF and the management company has to have AMF authorisation, which creates a known framework for French sellers[5]. Asset managers are used only with certain structures, however, particularly actively managed deals, which made up 51% of the transactions analysed by the AMF. Asset managers publish regular reports on their performance in managing the SPVs. Some asset managers are involved in the early stages of structuring the transaction, sometimes taking part in the process, or even submitting a potential transaction to an arranger.

Servicers are entities that collect payments in relation to the assets. The seller itself routinely takes on this role.

Credit enhancers or monoline insurers are sometimes involved as guarantors. The guarantees they provide may take a range of legal forms, including first demand guarantees. The monoline may also act as a counterparty by underwriting a tranche that then gets the monoline's rating. The decision to involve a credit enhancer will depend on the type of investors targeted by the arranger, which is often in charge of placing the transaction, and on the trade-off between the cost of this insurance and the yield that can be offered to the market by involving an AAA-rated entity.

Often, structures registered in English-speaking countries also use a trustee, whose role is to ensure that investors are paid and that the transaction's legal documentation is complied with. The trustee publishes factual reports on portfolio performance and may also act as servicer.

These products cater mainly to non-specialised institutional investors, such as insurers and pension funds, and mutual funds, which are especially keen on the senior tranches. Equity tranches usually attract more specialised investors, like hedge funds.

1.3 The French securitisation market

If the French securitisation market is defined according to the nationality of assets (excluding ABCP), the market grew by 67% in volume terms in 2004 on issuance totalling €21.3 billion. As in 2003, RMBS dominated, accounting for 86.43% of total volume, while ABS slid sharply in 2004, with just two public deals.

At the same time, ABCP volumes declined by 8.4% between end-2003 and end-2004, with outstandings coming to €22.16 billion in 2004.[6]

The following table gives the breakdown for publicly-rated structured finance (SF) transactions that were arranged in Europe by French banks in 2004:

[5] Art. L. 214-44 of the Monetary and Financial Code requires FCC units to be rated.
[6] Source: Moody's.

Structured finance transactions issued in 2004*				
	Number of transactions		Value	
	Number of series	%	€	%
ABS	5	4%	1,344,700,000	6%
MBS	17	14%	12,576,969,701	59%
CDO	99	82%	7,401,579,816	35%
Total	**121**	**100%**	**21,323,249,518**	**100%**

(*)Public deals structured by French arrangers in Europe

Appendix I lists the transactions included in the scope of the AMF study.

With total outstandings of €249 billion[7] (up 20% on 2003), the European securitisation market too remained dominated by MBS issuance, which accounted for 59% of the total in Europe. Whereas CDOs accounted for 16% of new issues in Europe in 2004[8], they accounted for 35% in the AMF's sample, a difference that can be attributed to the prominent position of French banks in this sector. While French banks arranged around 10% of Europe's SF transactions, their share of the CDO market was almost 20%.

Conclusion

The securitisation market is a diverse place. In addition to the now-classic ABS and MBS off-balance sheet arrangements used for a wide range of industrial and banking assets, innovation in the finance industry and low bond yields have led to a proliferation of CDO-type synthetic products with strikingly different characteristics and risk profiles from those of their predecessors.

Securitisation transactions involve many participants, some of which play multiple roles in the same deal (arranger/investor, arranger/manager, seller/servicer). These complex transactions come with potentially substantial legal risks, which are a key factor for agencies assessing proposed structures and rating their tranches.

The French securitisation market, defined as transactions arranged by French banks in Europe, surged again in 2004, mainly on strong growth in CDOs. It now accounts for around 10% of the European market.

[7] Source: JP Morgan, Global Structured Finance Research, European ABS Monitor, 22 April 2005.
[8] Ibid.

2 THE SPECIAL ROLE PLAYED BY RATING AGENCIES IN THE SECURITISATION INDUSTRY

A securitisation rating can be viewed as an analysis of the credit risk on an asset portfolio housed with an SPV or of the credit enhancement provided as part of the scheme. Enhancement mechanisms include issuing multiple tranches with different levels of subordination and/or overcollateralising the portfolio (e.g. carrying it as an asset at face value), and/or excess spread, i.e. the difference between returns on assets and liabilities, and/or liquidity support from the seller[9].

2.1 Organisation of rating agencies

The agencies employ between three and 20 analysts in their French securitisation divisions. The dedicated SF teams are organised in the same way as corporate ratings teams, meaning that assignments are typically allocated according to the location of the assets and the seniority and specialisation of the analyst. The teams use a matrix-based country/asset class organisation structure. Senior analysts are heavily represented, at the very least making up the bulk of the staff numbers. To be considered senior, an analyst usually has to have at least four or five years' experience.

As well as having analysts rate transactions when they are conducted, the agencies usually assign at least one analyst to monitor ongoing transactions. This type of surveillance is generally carried out once a year based on data on portfolio performance and recovery rates, which are regularly transmitted by the seller at the agency's request. Surveillance also includes due diligence by the agency, notably with respect to asset managers and servicers. In all cases, the agencies maintain ongoing surveillance of portfolio quality and modify the rating if the portfolio is impacted by an event.

The rating agency usually becomes involved at the request of an arranger, acting on behalf of its customer, the seller. The issuer is allowed to halt the rating process at any time. The agency never initiates the rating process. There are no unsolicited ratings because the agencies are involved early in the structuring process and recommend that entities contact them as soon as possible to present proposed transactions.

The agency, then, is involved from the preparatory stage. Its role is formally established with the signature of a letter setting out the agency's fees or engagement. Usually prepared after the transaction has been presented, this document will be based on a memorandum containing a formal record of the information provided at the presentation, notably the estimated rating fees, which will reflect the complexity of the transaction. (cf. 3.3)

The rating process is the same as for corporate ratings, since in both cases the agency has to consider an issue and a credit profile. The rating criteria, which are usually specific to each asset class, are therefore designed to enable the agency to form an opinion on the ability of the assets to service the debt. The due diligence performed by the agency – examining the documentation, making on-site visits, interviewing the issuer's management and bankers – is also the same as in the corporate rating process, at least where ABS are concerned, since CDO ratings do not necessarily require this type of due diligence. The agencies also follow the same process when formalising their conclusions. The preliminary conclusions are presented to the issuer and then, where applicable, to a rating committee, which decides on the final rating. The issuer is responsible for adjusting the deal's characteristics if the rating is lower than expected.

Fundamental differences separate the two approaches to risk analysis, however. A company's credit profile is inherently based on factors that are typically long-term. Unless there is a substantial change in the scope of the

business or some other major event, the company cannot significantly alter its profile, because this is shaped by factors that are more or less stable, like corporate strategy, management and financial situation.

SF ratings are based on cash flows that are easier to define because they are derived from isolated assets with a circumscribed lifespan and legal capacity (which is confined to the purpose of the transaction). These factors, combined with other qualities of securitisation instruments, especially tranching, offer greater inherent flexibility and may be adjusted to obtain the desired rating.

2.2 Methodologies used to compile securitisation ratings

The agencies' methodologies differ in principle and content. Moody's uses an expected loss (EL) method, whereas Standard & Poor's and Fitch employ a technique based on probability of default (PD). In both cases, the size and subordination of the tranche determine the risk of loss[10]. According to the BIS, the three main inputs in SF ratings are the estimated PDs of the obligors in the pool[11], recovery rates and default correlations (the risk that the default of one obligor will affect the others).

The agencies' methodologies are thus based on modelling the estimated risk of loss on the assets transferred to the securitisation vehicle. The agencies perform these estimates using different methods depending on the granularity of the pool and the type of arrangement, i.e. ABS or CDO.

A key aspect of the analyses, especially when dealing with CDOs, is the estimated correlation of obligors in the pool, and in particular cross-correlations. All three agencies use models with an assumed intra-sector correlation, i.e. the percentage probability that the default of one obligor will impact others in the same industrial sector. Conversely, not all the agencies use assumptions on inter-sector correlations.

Unlike Standard & Poor's, Fitch and Moody's group their intra-sector correlations by region. Fitch groups 34 countries into 10 classes, while Moody's works on the basis of four geographical regions. The three agencies organise correlations by industrial sector, but do not all use the same breakdown. Fitch uses 25 sectors and Moody's 34, while Standard & Poor's has 39 corporate sectors. Intra-sector correlations range from 0%-30% at Standard & Poor's, 10%-20% at Moody's and 7%-44% at Fitch. Inter-sector correlations range from 0%-10% at Standard & Poor's, and 7%-30% at Fitch, while Moody's uses a fixed correlation rate of 3%.

The agencies have made major methodological changes in this area in recent years (cf. 4.2). Moody's introduced modifications in March 2004, Standard & Poor's published a new methodology on 19 December 2005, prior to which it assumed zero correlation between sectors and 30% correlation within sectors. The agency also created a new default matrix for CDOs[12], which it uses to take account of PDs, which are statistically higher for CDOs than for corporate ratings, and to link ABS PDs to tranche maturity[13].

2.3 Agency selection criteria

Rating is required first and foremost by investors. However, the arranger will select one of the three main agencies on the basis of several criteria.

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[9] However, the need to consolidate the vehicle should be analysed in the light of the new IFRS-based consolidation rules; the same analysis could be applied to ownership of the equity tranche.
[10] "Structured finance: complexity, risk and the use of ratings", BIS Quarterly Review, June 2005, p. 67s.
[11] The agencies publish default matrices indicating estimated default risk as a function of maturity and rating.
[12] Standard & Poor's now has default matrices for corporate debt, CDOs, ABS and SMEs.
[13] Previously, the ABS default matrix (excluding CDOs) was the same as the matrix for corporate ratings and used a fixed maturity.

According to arrangers, the most important criterion is the type of investors targeted. Some investors require two or three ratings, some want a particular agency to issue the rating, others demand both. In the vast majority of cases, the arranger is also in charge of placement, hence the importance of this criterion. Investor demands may reflect their own investment constraints or policies.

Another key consideration is the methodology used by the agency and its acceptance criteria for credit enhancement. Arrangers know what models the agencies are using and may therefore select an agency based on its methodology. By applying the agencies' models, arrangers can find out how a proposed product would theoretically be rated and choose the agency that would assign the highest rating. This is especially the case for CDOs, synthetic or otherwise, which are usually rated by just one agency. The arranger knows in theory which agency will provide the desired rating. Even so, the results obtained by applying the models are not necessarily a guarantee of the rating actually awarded.

Expertise and methodology in a particular area are also factors. This is probably why one of the agencies rates 85% of CDOs (93% of the total value of these deals), while a second rates 28% (61% of the total value). The first agency is the sole rater for 70% of the total number of CDO transactions covered by the study.

According to some arrangers, sellers also play a part in selecting the agency, because they sometimes have dealings with a given agency and do not rely entirely on the arranger to take the decision.

Cost is cited by some arrangers as a factor. According to arrangers, the agencies' fees are transparent and known ahead of time, except in the case of unusual transactions.

Furthermore, sellers and arrangers cannot choose two agencies with fundamentally different methods if they want to avoid conflicting demands or different results that are hard to square. However, investors might want to use two agencies using different methods in order to have two different analyses.

In the case of ABCP conduits, two agencies are usually selected, typically at the request of investors, when the vehicle is set up. A single rating is then assigned to the conduit, with the stipulation that the agencies selected at the outset may analyse the individual transactions going into the conduit, without rating the transaction. The rating given to the conduit's issues will simply be confirmed.

2.4 Multiple ratings for structured finance transactions

Just one agency rated 72% of the transactions structured in 2004 by French arrangers. This high proportion is attributable to the fact that CDOs made up 82% of the number of transactions covered by the AMF's analysis, although they accounted for only 35% of the total value.

Thus, in value terms, 62% of the transactions studied by the AMF received two ratings (on at least one tranche). Again in value terms, 14% of the transactions covered by the study were rated by all three agencies.

Arrangers claim that investors request multiple ratings, especially for certain products, such as unusual transactions.

MBS products generally involve extremely large amounts – 35% of them broke the €1 billion mark – and almost always receive multiple ratings. In all, 88%[14] of MBS issues (by number of transactions and value) covered by the AMF study got more than one rating.

[14] 100% excluding the two transactions structured by a Spanish arranger that is 50% owned by a French arranger.

CDOs deal in smaller amounts, with 90% of them (by number of transactions) involving under €80 million. Single ratings are far more common in this category. While in value terms only 43% of the CDOs covered by the AMF's study got a single rating, the proportion was 84% when measured by the number of transactions.

Investors say their decision to choose a particular agency is influenced by the transparency of the agency's CDO methodology, which lets arrangers know what rating an agency is likely to assign.

However, the agencies rate only the mezzanine and senior tranches, not the equity tranche, which is often held by the seller itself or by the arranger. When the equity tranche is placed with investors, they usually have the means to conduct their own analysis, and can forgo a rating. (cf. 5)

2.5 Split ratings

Involving two agencies may make the process of structuring and finalising the transaction more complex. It can also lead to different, or "split", ratings. Of the transactions studied by the AMF, 34 had at least one tranche rated by two or three agencies, and 13 of them (38%) had split ratings on at least one of the tranches. To analyse these splits, they need to be broken down by the number of tranches affected. The 34 transactions received multiple ratings on 101 tranches. Of these, 23 had split ratings, 73% of which involved a one-notch difference, 22% a two-notch difference and 4% a three-notch difference.

Arrangers can take steps to avoid getting into situations of this kind, or the numbers of split ratings might be higher. CDOs rarely get two ratings because arrangers, mindful of the methodological differences between the rating firms, often select just one agency.

Moreover, the few documented cases of arrangers abandoning a rating[15] are linked to methodological differences. If one agency is more conservative than one or both of the others, the arranger might be forced to abandon the rating during the compilation process. According to arrangers, however, these cases are rare.

Split ratings are usually caused by differences in agency methodology, especially where CDOs are concerned (cf. 2.2). Agencies also use different methods to assess asset portfolios. In addition, depending on the granularity of the pool, agencies may opt for the Monte Carlo or the binomial method.

Arrangers are aware of this situation, and so can often anticipate – and avoid being surprised by – the position taken by the agency. However, if two agencies are involved, the task becomes more complicated for participants, because there is an increased risk that the transaction might be delayed by a demand issued at the end of the process. For example, agencies sometimes ask for a portfolio or data audit (for example on the claims) after a first review by the rating committee, even though an audit had not initially been agreed on. The agency might submit its request just before the transaction is launched, thereby provoking a delay.

In terms of the process, interviews with law firms and arrangers show that rating agencies rarely issue directly conflicting requests. The main problems for the agencies' partners are that the agencies' requests mount up throughout the process and discussions have to be conducted with each agency until the point in question is resolved. According to the arrangers and law firms interviewed, however, it is not so much the process of rating and structuring the transaction that leads to specific requests as the discussions on the transaction's legal documentation, including the prospectus and documents pertaining to the creation of the vehicle.

Arrangers say that if split ratings are assigned, investors will work out the spread based on the lowest rating.

[15] Most market participants claim not to keep these data.

2.6 Rating transitions

The following table contains information provided by Moody's comparing transitions for SF and corporate ratings between 1998 and 2004.

Comparative statistics on transitions for structured finance ratings in Europe and worldwide corporate ratings between 1998 and 2004

	1998-2004		
	Corporate ratings	Structured finance (ex. CDOs)	CDOs
Annual downgrade rate	15.3%	1.4%	15.7%
Annual upgrade rate	8.9%	2.3%	1.9%
Annual unchanged rate	75.8%	96.3%	82.4%
Annual average number of notches downgraded	1.8	1.8	2.8
Annual average number of notches upgraded	1.5	2.0	2.3

N.B.: These data are based on the same criteria as the annual papers on structured finance rating transitions provided by Moody's.

The table reveals that SF ratings (excluding CDOs) were more stable than corporate ratings. CDO ratings, however, were more volatile, more closely resembling the pattern seen with corporate ratings[16].

Corporate ratings changed far more often than SF ratings excluding CDOs. However, CDOs were downgraded slightly more frequently than corporate ratings. Over the period, changes to CDO ratings were usually downgrades.

In terms of the magnitude of transitions, SF (excl. CDOs) and CDO ratings moved by more than corporate ratings, especially where downgrades were concerned.

In addition, an analysis of the transition matrices published by Standard & Poor's for 2004 (cf. table below) for structured finance (all categories) indicates that rating transitions for SF instruments are larger than those for corporate ratings. These is especially true in the lower-rated tranches. (cf. 5.2)

2004 transition matrix (%)

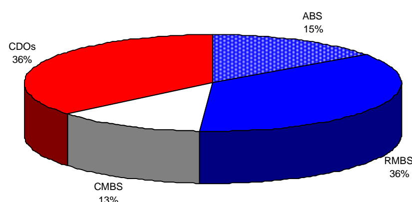
		AAA	AA	A	BBB	BB	B	CCC	CC	C	D
AAA	Structured finance	97.3	2	0.3	0.4						
	Corporate ratings	*86.67*	*13.33*								
AA	Structured finance	3.2	92	4	0.5	0.3	0.1	0.1			
	Corporate ratings		*90.84*	*6.11*							
A	Structured finance	1.5	3.3	91.3	2.9	0.5	0.2	0.2			
	Corporate ratings		*1.55*	*94.41*	*1.24*						
BBB	Structured finance	0.5	0.7	2.3	92	3	0,6	0,7	0,1		
	Corporate ratings			*3.19*	*86.85*	*1.59*					
BB	Structured finance	0.2		0.2	4.4	84.8	4.2	4.5	0.9		0.9
	Corporate ratings				*1.98*	*72.28*	*9.9*				
B	Structured finance					4.8	71	16.1	4.8	1.6	1.6
	Corporate ratings				*1.67*	*6.67*	*60*	*3.33*			

Source: Annual European Corporate Default Study And Rating Transitions, Standard & Poor's - May 2005.
(*) Information is not provided for corporate ratings lower than CCC.

[16] The data on rating transitions for structured finance transactions pertain to the European market. The data on rating transitions for corporate bond issuance refer to the worldwide market.

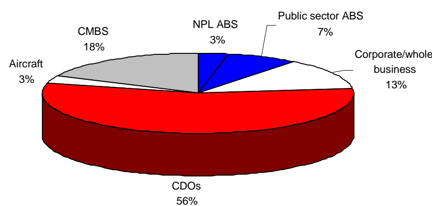
The following piecharts describe the all-agency distribution of rating transitions on the structured finance market, by asset class, in 2004:

Rating upgrades, European ABS (308 tranches, €11 bn)
By asset class



Source: Deutsche Bank Global Market Research, Rating Agencies

Rating downgrades, European ABS (217 tranches, €32.8 bn)
By asset class



Source: Deutsche Bank Global Market Research

Conclusion

While the nature of the rating is the same for SF and corporate ratings, the agency's role and approach are strikingly different in the two cases. Rating is an integral part of structuring securitisation products. The agency is involved at an early stage, and the rating is not an outcome but a target, with the agency indicating the factors that need to be addressed to obtained the desired rating. In particular, the agency has an indirect influence on how the tranches are configured to ensure the senior issue obtains the highest possible rating.

Even so, the agencies still employ relatively heterogeneous rating methods. Arrangers are aware of these methods, in particular the intra- and inter-sector cross-correlation rates, and are also familiar with the categories and default matrices used by the agencies. They use this knowledge to select particular agencies and to structure deals, especially CDOs, based on the expected rating.

The arranger selects or recommends a rating agency based on investor requirements, or, in the case of CDOs, rating methodology. As a result, one agency assigns 70% of the ratings for this type of product.

As a rule, it is noteworthy that one agency rates three-quarters of the total number of SF transactions. Typically, only very large transactions, like RMBS, get two ratings. CDOs usually get a single rating, because these transactions involve small amounts and because differences in the agencies' methodologies could result in split ratings.

As a result, split ratings are relatively rare overall. When they occur, however, they can be sizeable relative to split ratings on corporate issues.

While ABS display a degree of rating stability, rating transitions for CDOs are larger than those for corporate ratings. This is especially true in the lower-rated tranches, which are first in line to absorb losses incurred by the vehicle.

3 ETHICAL ISSUES ON THE SECURITISATION MARKET

3.1 Market concentration and its effects

Concentration is a feature of the securitisation market in general, and of the French market in particular, defined as transactions conducted by French banks.

Relatively few French banks are active on the securitisation market. Just three banks were responsible for 89% of the total number of transactions covered by the AMF study, 94% of the total number of CDOs (71% in value terms), 71% of the total number of MBS (58% in value terms), and all the ABS deals.

Not many law firms do business in this area either. In all, 11 were involved in the transactions covered by the scope of the AMF's study, excluding lawyers called in solely because of constraints linked to the location of the assets or the SPV. Of these 11 firms, 10 were UK or US practices, with just one from France.

Most often, these law firms advise the arrangers, because the main rating agencies do not make much use of outside counsel. Two of the three agencies typically use their in-house counsel, although one sometimes consults an outside firm on specific issues. The agency in question says it usually goes to the same firm, which is also used by many arrangers. The third agency employs the services of two law firms, one of which handles 64% of the transactions rated by the agency.

In principle, then, after a fairly non-adversarial process, the lawyers deliver their opinions to the arrangers, who are the sole recipients. Still, even when the agencies do not use an outside counsel, they will sometimes ask the arranger's lawyers to give an opinion on a question that concerns all the parties. Indeed, some lawyers act as lawyers for the deal and not for any one party. Furthermore, when a proposed transaction is presented to an agency, the agency will ask the lawyers about the content of their opinion, because this will have a bearing on the credit enhancement obtained. These legal opinions concern first and foremost the matter of achieving a "true sale". If there is a danger that the bankruptcy rules or sureties applicable to the vehicle or the seller could result in the sale being challenged or the vehicle's assets being seized by the seller's creditors, the agencies will naturally reflect this in the rating. For this reason, they may discuss the content of the opinions and usually request a copy.

3.2 Same participants present in multiple capacities

Not only are there relatively few participants on the market, but some of them are involved in several capacities.

In one-third of transactions covered, the arranger was also an investor, acquiring a tranche[17]. In 46% of cases where an asset manager was involved, the manager was either the arranger or a company in the arranger's group[18]. The arranger acted as arranger, manager and investor in 20% of cases.

The agencies and arrangers do not believe that any particular conflicts of interest are created when an arranger acquires a tranche. In their view, the banks' and rating agencies' ethical rules cover such risks in any case. But a conflict of interest may be created if, at the structuring stage, the arranger holds onto a tranche and potentially enters into competition with creditors. As investor in the tranche with the greatest risk and returns, the arranger might be tempted to construct the initial pool in a way that would be less favourable to the holders of senior tranches, who want to limit their risk through to maturity.

[17] In three of the transactions covered by the study, the arranger did not indicate whether it had underwritten a tranche.
[18] France Titrisation and Euro Titrisation, two asset managers, are considered to be independent of their shareholder banks.

The agencies' methodologies certainly allow for situations where the arranger acquires a tranche. The agencies even see this as a positive measure, qualifying it as an alignment of interests. It might be a reassuring sign for investors if an arranger, especially one securitising its own claims, were to keep the riskiest tranche, hence placing itself first in line to bear any risk of loss. However, investors usually view such a move as neutral and not a guarantee of participation in the transaction. First of all, the equity tranche might be much smaller than the rest of the transaction. Also, once subscribed by the arranger, this tranche could be sold shortly after the deal goes through. Furthermore, the risk borne by the arranger may be minimal relative to the income generated by the transaction, meaning that the investment offers no protection for investors.

According to investors, if the seller is also acting as arranger, it is more useful to see whether the seller is keeping some of the securitised receivables on its books. Here again, however, investor protection is not guaranteed, because the seller can transfer the receivables off its balance sheet at a later date.

For some investors, the main danger of a conflict of interests arises in situations where the asset manager is also an investor. If the asset manager is part of the same group as the arranger that acquired the equity tranche, and one of the underlying assets seriously deteriorates, the manager might consider divesting itself of that asset. This would be a good management decision for holders of senior tranches, but the capital loss would directly affect the tranche held by a company in the manager's own group. Some investors highlighted this risk. However, they do not see it as a major problem because of the need for arrangers to maintain their reputation. And once again, the agencies' methodologies take account of this risk, in some cases curtailing the actions of managers in this sort of situation.

When agencies and lawyers become aware of such conflicts, they usually include some reference in the deal's documentation. Also, according to one investor, there have been cases where the agencies have called for an asset manager's discretionary powers to be suspended for a given period if that manager found itself unable to operate solely in the interest of investors.

In 2004, 4% of operations structured by French arrangers were underwritten by a credit enhancer (monoline insurer). In other words, enhancers played a marginal role in 2004. This may be partly attributable to demand for this type of product and hence to market conditions, which have produced wafer-thin spreads.

3.3 Income earned by agencies for securitisation ratings

The fees earned by the agencies depend on the complexity of the transaction. They usually include initial rating fees calculated as a percentage or a given number of basis points of the amount issued, often with a floor and a cap. The percentage is based on the type of underlying asset. As well as the initial rating fees, the agencies charge annual surveillance fees.

The fees charged for securitisations are relatively standardised and known to the arrangers. However, if the deal is an unusual one, the fee is negotiated separately by the arranger and/or the seller and the agency and will usually reflect the size and sophistication of the transaction.

The rating agencies earn a substantial portion of their income from their securitisation businesses. On average, securitisation ratings accounted for between 37% and 47% of the European sales of the main agencies (out of worldwide sales, the proportion would be approximately the same).

The three main agencies were asked what proportion of their European sales was generated by the leading French bank (including after consolidating the income from different subsidiaries and SPVs). It is difficult to pinpoint how much income is generated by arrangers, because they might recommend an agency but not pay the

bill, since transaction fees are usually paid by the seller or the SPV. The agencies did not provide information on the arrangements used to invoice rating fees, which makes it hard to verify the data provided.

The handful of French banks present on the market do not appear to be major contributors to the agencies' sales, even after factoring in income earned on corporate ratings. Apparently, no French bank accounts for over 6.7% of any of the agencies' combined European sales. Meanwhile, the leading French bank does not break the 1% mark for income generated by structured finance ratings alone.

However, and even through it is hard to determine the share of income attributable to arrangers, market concentration necessarily increases the agencies' dependency on the institutions that are most active in these sectors. Specialised securitisation reviews publish the market shares of the main underwriting banks[19]. According to these rankings, the leading French bank has 12% of the CDO market and 6.5% of the ABS and RMBS market. By comparison, the leading bank in Europe accounts for around 10% of the ABS market, while the leader for CDOs has a 16% market share. The actual share of French banks in the agencies' sales thus needs to be considered in the light of the type of assets being securitised.

Conclusion

The French securitisation market is concentrated around three main bank arrangers and a small group of legal counsels used alternately or jointly by the banks and rating agencies. Presented positively by some commentators as a factor that helps to build experience and professionalism, this situation also comes with risks, especially if there are weaknesses in the adversarial process used to structure the deal and prepare the legal documentation for these inherently complex transactions.

There is real potential for conflicts of interest in transactions where participants play multiple roles. If the arranger, which is often in charge of placing the transaction, invests in the equity tranche or manages the assets over an extended period, there is an inherent possibility that its interests might be different from those of its client-investors from the point at which it structures the product and selects the underlying pool. There are questions over how the factors relating to this type of risk are reflected in the rating process and in the transaction's legal documentation.

It is hard to assess the risks to agency independence posed by the concentration of the European structured finance market. The data gathered by the AMF and the public rankings indicate that the main banks are responsible for between 10% and 15% of the transactions on the market, depending on the product, and thus generate a significant share of each of the agencies' revenues. This situation, coupled with the rapid increase in the importance of securitisation in the ratings industry, contrasts sharply with the more disparate revenue sources found in the corporate ratings segment.

[19] Source: MCM Structured Finance Monitor.

4 TRANSPARENCY OF METHODS

4.1 Arrangers' access to agencies' methodologies

The agencies publish methodologies that detail their rating criteria for different underlying asset classes. As indicated in the section on agency selection (cf. 2.3), these methods are relatively standardised and the arrangers are familiar with them, especially the CDO-related techniques. That said, agencies are continually having to update their analytical techniques to reflect industry innovations, such as CDO squares for example.

Because the agencies release their methodologies, arrangers, and sometimes asset managers, can propose a structure knowing in advance how it will be modelled. Arrangers run simulations on the historical data of their clients in an effort to anticipate the rating. The main arrangers use all three agencies' models to do this. As a result, arrangers may have a good idea ahead of time how each of the three agencies is likely to rate a given CDO.

While the agencies are reckoned to be transparent in their methodological principles and overall framework, in practice, say the arrangers, the agencies do not always provide information on specific choices, such as the statistical laws they apply or the assumptions they make. For example, if an ABS has a granular underlying pool, i.e. made up of a large number of obligors, the agency might consider various overlapping model selection criteria. However, the arranger cannot always anticipate what the agency's final decision will be in this regard.

4.2 Methodological changes

The agencies claim to be constantly improving their methodologies. In 2004 alone, two of the three main agencies published 13 and 44 press releases respectively detailing changes in their methodology (all asset types and European countries combined). The third agency said it had not counted the number of press releases on method changes, but indicated that while its basic methodological rules were stable, its rating criteria were continually being adjusted to tailor the methodological approach to new asset classes and market developments.

The published methodological changes centred mainly on cross-correlation rates, applied statistical laws, and servicer evaluations. Of the 57 releases mentioned above, 45 dealt with ABS (including MBS), while 12 concerned CDOs.

Methodological changes sometimes affect fundamental issues. For instance, the agencies overhauled their correlation rates in 2004 and 2005. One of the agencies recently published a new method for assessing CDOs that takes into account new inter- and intra-sector correlation rates and new default matrices. Inevitably, these modifications raise the question of the relationship between the old and new methodologies.

4.3 Impact of methodological changes

The agencies rate a transaction when it is carried out. Published changes in methodology apply to future transactions. However, the agencies do not take the same approach when updating ratings for past transactions. Some of the agencies do not revisit the old ratings but use the new method in their surveillance. Thus, the surveillance process is based on both the old and new methodologies.

The most recent methodological change published by Standard & Poor's illustrates this point. In a press release, the agency said it would apply both the old and the new methodologies to determine the credit enhancement required for transactions launched before 31 March 2006. In terms of surveillance, the agency said it would analyse past transactions using the new methodology to see whether upgrades or downgrades were necessary.

For other agencies, ratings are opinions at a given point in time and should not be reviewed if the methodology is altered. These agencies say that investors know how the rating was compiled and are free to use other methods as a basis for their investment decisions. This is doubtless the reason why investors make such different uses of ratings.

The agencies claim that, statistically, methodological changes rarely lead to rating changes. Investors say that SPVs sometimes receive significant downgrades, but it is difficult to say whether these are partly attributable to methodological changes or solely reflect a deterioration in the underlying asset pool. Also, these changes are sometimes masked by other factors, such as the reduction in default risk as maturity approaches.

Conclusion

Overall, the market views the agencies' methods as transparent. Because the outcomes of the agency models can be predicted – this is especially true for CDOs – arrangers can decide how to structure their transaction and anticipate the associated impact on the rating, even before going to an agency with their proposal.

Methodological changes occur relatively frequently and sometimes impact fundamental aspects of asset evaluation, statistical method, or model inputs, especially in relation to cross-correlation calculation. Because the agencies are constantly modifying their methodologies, it is not always possible to tell from their announcements whether they are making major or minor changes.

A rating represents the agency's view based on the method in effect when the rating is assigned. When the agencies modify their methods, they do not revisit all previous transactions. Accordingly, a rating published before the change may be inconsistent with ratings published for new transactions with identical characteristics. In cases where agencies incorporate the new methodology into the surveillance process, it is hard to assess the impact of this change in the multiple factors that influence ratings.

5 HOW THE MARKETS USE RATINGS

5.1 Ratings and the investment decision process

Investors view ratings as necessary. Even so, they do not all base their investment decisions on ratings.

Some investors do not rely on ratings insofar as they have their own in-house analytical techniques. These include investors who are more interested in the riskiest tranches, which are not rated by the agencies, or in the lower-rated tranches. This type of investment strategy requires independent analyses of asset quality. For these investors, the crucial criterion in terms of their decision to invest will be either the performance of the SPV manager, or the predictability and stability of the associated income (i.e. servicer performance).

These classes of investor chiefly include participants investing for their own account or for third parties, but with a base of mostly institutional clients.

Some asset managers do not necessarily have the resources to analyse all the issues on the market. They use ratings as a filter to select the highest-rated transactions for further examination. This group includes risk-adverse investors, such as the managers of conservative-strategy bond funds. Because of the restrictions on their funds, these managers invest almost exclusively in senior tranches and only rarely buy lower-rated mezzanine tranches.

Depending on the resources at their disposal, the fund managers interviewed generally conduct analyses that are not necessarily based on the rating but incorporate some of its elements, such as the credit enhancement level. This again reflects the difference in the approaches taken by the agencies and investors, who know that agencies are looking at the probability of repayment at maturity, not at the recurring revenues generated by the assets.

More rarely, asset managers make explicit reference in fund documentation to the limitations of ratings for CDOs and other innovative products. Some simplified prospectuses for funds authorised in France appear to show that their investment policies are factoring in differences in the nature of SF and corporate debt ratings. For example, if a given fund is allowed to invest in corporate debt in a range extending to BBB-, it may set a minimum rating of A for structured finance. Other funds actually prohibit investments in CDOs.

Fund managers account for around 17% of investors in structured products in Europe[20].

5.2 Comparing market interpretations of SF and corporate ratings

For the purposes of this analysis, CDOs were divided into three main categories:

- CDOs whose assets are made up of loans to SMEs (SME CDOs)
- CDOs whose assets solely comprise leveraged loans (LBO CDOs)
- other structured CDOs, whose assets consist of ABS, CDOs, high-yield bonds and other instruments, in cash or synthetic form[21].

CDOs can be issued in cash, cash/synthetic and fully synthetic form.

The AMF's analysis of CDOs issued in second-half 2005 revealed the following facts.

[20] Source: TBMA estimate for January 2004 to July 2005.
[21] E.g. credit default swaps (CDS).

Primary issues of structured CDOs had longer maturities on average (8.8 years for AAA tranches) than LBO CDOs (7.9 years), which in turn had longer maturities than SME CDOs (4.2 years). No AAA-rated tranche of a structured CDO had a maturity under seven years. LBO CDOs and especially SME CDOs, by contrast, were concentrated in tranches with a lower average maturity. SME CDOs in particular congregated around maturities of between three and six years. Just two out of 15 AAA-rated SME CDO tranches had a maturity greater than or equal to seven years[22]. Structurally, LBO CDOs usually have longer maturities than SME CDOs, because the loans underlying LBOs typically have longer maturities. That said, current CDO maturities partly reflect market conditions. In 2003, the average maturity of CDO issues was around five years. Spreads narrowed considerably in 2005, causing investors to hunt for higher returns by investing in CDOs with longer maturities.

5.2.1 Marked disparities across security types

CDOs with identical ratings and maturities offer different returns depending on the underlying assets, i.e. SME loans, LBOs, ABS, CDO units, CDS, etc. The spread on AAA tranches with a maturity of seven years or more averaged Euribor + 41 basis points (bp) for a structured CDO, compared with Euribor + 29 bp for an LBO CDO and Euribor + 19 bp for an SME CDO [23]. The differences become more pronounced in the lower ratings: average spreads at issuance for BBB tranches were Euribor + 263 bp for structured CDOs, Euribor + 170 bp for LBO CDOs and Euribor + 66 bp for SME CDOs [24]. Also, identically-rated tranches of the same issue may offer different returns depending on their credit support or "attachment point", i.e. the level beyond which they will be impacted by losses incurred by the CDO. Thus, two identically-sized AAA tranches from the same issue will return Euribor + 65 bp and Euribor + 43 bp depending on their attachment point (10% and 15%).

Market practitioners say that returns also reflect:

- the product's construction – cash or totally/partially synthetic[25] – and complexity[26], the parties involved[27] in arranging the transaction, and the assets retained in the structure within a given asset class[28];

- the resources needed to monitor the CDO[29];

- to a certain extent, the liquidity of the CDO tranches, which can generally be analysed based on the size of the issue and the number of participants capable of pricing the structure. This factor is less important for tranches rated lower than A, which, by definition, concern relatively small amounts compared with the overall issue[30], because they are the tranches that will absorb any losses;

- the quality of the asset manager, especially when the CDO is actively managed and the investor wants to invest in the lower-rated tranches;

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[22] One had a maturity of seven years, the other seven years and two months.
[23] Excluding tranches of Spanish SME CDOs that are guaranteed by the Kingdom of Spain.
[24] In the case of an issue with a maturity of over seven years, the spread on a BB tranche can vary from 3mE+235 for an SME CDO to 3mE+625 for a structured CDO.
[25] Based on AAA tranches and information provided by Bloomberg (i.e. whether the underlier is indicated as being synthetic or not), structured CDOs with a completely or partially synthetic underlier averaged a spread of 48 bp over the 3-month Euribor, compared with 30 bp for other structured CDOs. For A tranches, the spread widens to 136 bp in the case of structured CDOs with a completely or partially synthetic underlier, compared with 81 bp for other structured CDOs.
[26] For example, even if CDOs are structurally protection sellers, some CDOs may also be partly buyers of protection on other securities as a result of arbitrage strategies. Generally, this construction is dictated by investor requirements (e.g. Cedo No. 2 issued on 2/12, which is mandated to conduct equity/bond arbitrages).
[27] The Kingdom of Spain is going to guarantee a number of AAA-rated SME CDO tranches. KFW's involvement as swap counterparty (weighted at 0% in the prudential ratios) is also going to impact several deals, including the Promise Mobility issues.
[28] For example, some managers say that if the pool holds corporate bonds, then as well as the rating, they will consider the creditworthiness of each issuer. If the ratings are identical, they will want a higher return if the basket contains stocks that they feel offer mediocre prospects.
[29] Some CDOs have embedded calls and require special surveillance, e.g. Metrix Funding No. 1.
[30] As an illustration, consider the Geldilux issue, which includes two BBB tranches that offer the same credit support but are differently sized, at €25.3m and €15m respectively. There is a 1 bp difference in spread between the two tranches.

- the specific interest of an investor in a given product or asset.

Furthermore, at equivalent ratings, CDOs generally offer a higher return than RMBS. For AAA tranches with a maturity of over seven years, the spread over Euribor for an RMBS averages 13 bp, compared with 19 bp for an SME CDO, 29 bp for an LBO CDO and 41 bp for a structured CDO. Most market participants attribute this situation to a better understanding and grasp of the portfolio, especially in terms of historical data, and to the general uniformity and granularity of these products, which may translate into greater rating stability[31].

5.2.2 At equivalent ratings, fairly large standard deviation of returns within the CDO category

In absolute terms and at equivalent ratings, structured CDOs generally exhibit higher deviations of returns. For an AA tranche of over seven years, the standard deviation of returns ranges from Euribor + 60 bp to 100 bp for a structured CDO, compared with Euribor + 38 bp to 42 bp for an LBO CDO, and Euribor + 32 to 45 bp[32] for an SME CDO.

At identical ratings, deviations of returns for a given type of CDO vary more in the lower ratings. This is because the investors who underwrite these tranches tend to bear the first losses of the CDO and therefore conduct more extensive checks on the nature of the deal (structure, participants, agency's model) and the assets. They base their investment decisions more on the transaction and their ability to properly understand it, than on the rating. RMBS show less pronounced variations, although the deviation of returns on some tranches (A-rated for example) is also fairly high in relative terms[33].

5.2.3 At equal ratings, a substantial difference in spreads between CDOs and corporate bonds

At equal ratings, the return on structured CDOs is markedly higher (as is the standard deviation of the spread) than the return on a simple unsubordinated corporate debt issue. This difference increases as the rating goes down: Euribor + 126 bp compared with Euribor + 54 bp for an A tranche with a maturity of over seven years.

There is reason to wonder whether, aside from the issues mentioned above (cf. 5.2.1), investors are also factoring in the different risk profiles offered by corporate bonds and SF instruments [34] to demand higher returns, particularly on subordinated tranches.

While the same is true of LBO CDOs, the differences are less pronounced: Euribor + 64 bp compared with Euribor + 54 bp for an A tranche with a maturity of over seven years. And the differential is approximately identical for SME CDOs: Euribor + 50 bp[35] compared with Euribor + 54 bp for an A tranche with a maturity of over seven years.

Systematically, at equivalent ratings, the deviation of returns is much greater for CDOs (between Euribor + 90 and Euribor + 175 for an A tranche with a maturity of over seven years) than for corporate debt issues (between Euribor + 50 and Euribor + 60 for the same sort of tranche). This may reflect methodological differences. Corporate ratings can be interpreted as an economic assessment of the issuer, whereas a CDO rating is a

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[31] Between December 2004 and December 2005, out of 228 downgrades, 1% affected RMBS, while 74% impacted CDOs. Conversely, of 620 upgrades, 16% concerned RMBS and 25% CDOs.

[32] Return on a Spanish SME CDO with a maturity of 6.6 years.

[33] This standard deviation is essentially due to RMBS linked to UK non-conforming mortgages. These CDOs generally earn a higher return (Euribor + 50, with a range from 56 to 40), which creates the disparity relative to other RMBS, whose returns seem slightly more uniform (Euribor + 34, with a range from 24 to 51).

[34] In this respect, the Banque de France notes that while ratings on CDOs reflect "the security's average level of risk, they do not factor in the dispersion of risk around its mean. Yet, the sequential allocation of losses to CDO tranches results in expected loss being concentrated in subordinated tranches, which consequently have a very different risk profile, for the same rating, from that of corporate bonds. For the latter, the probability of extreme events, such as the loss of an investor's entire stake, is very low. Conversely, for the mezzanine tranche of a CDO, a fairly low proportion of losses on the underlying portfolio (around 6% -10%) would suffice for an investor to lose its stake". Banque de France, Financial Stability Review, No. 6, June 2005, pp 63-64.

[35] The differential falls to 40 if we include the FTA Santander deal, which was rated A- by S&P but A+ by Fitch.

statistical reading based on the average expected loss or the probability of default of a pool of assets at a given confidence interval[36]. Another less significant factor is CDO surveillance costs. Furthermore, at equivalent ratings, CDOs may display greater rating volatility than corporate paper, in terms of both size and frequency of rating transitions (cf. 2.6)[38]. Note also that at least one agency has a default matrix dedicated to CDOs, derived from specific transition matrices for these products. Even as they deploy a common set of procedures for all segments, agencies must take account of the fact that older historical samples are available for companies than for CDOs, which are assessed using models that have been less statistically tested. While in time the accumulation of historical data on defaults will make it possible to have uniform samples for companies and CDOs, for the time being comparing ratings across the two segments is tricky. The market itself seems to assess risk and set levels of returns differently in the two cases, even where instruments are identically rated.

Conclusion

Investors rely on ratings to different degrees depending on their profile. As a rule, the more they invest in senior tranches, the more they depend on the rating as a substitute for an internal credit analysis. Some asset managers are starting to include details in their fund documentation of the methodological limitations of ratings, especially with respect to CDOs.

The relationship between rating and return for securitised products is interpreted in different ways on the market. At equal ratings, spreads on CDOs and the standard deviation of returns for a given tranche are, on average, higher than those for ordinary corporate bonds. This becomes increasingly true at the lower ratings. These findings are doubtless attributable to the different methodologies used for corporate debt ratings, which are based on an intrinsic economic analysis of the company, and SF ratings, which are based on a statistical analysis that determines the average estimated loss at a given confidence interval. There is reason to wonder whether investors making their asset allocations take full account of this structural difference between corporate and SF ratings, and notably of the fact that SF ratings do not necessarily include the dispersion of risk around the mean.

[36] The statistical laws determine a probability of default at given confidence interval, so risk is assessed statistically, whereas the risk of default on a corporate issue is assessed from an economic standpoint.
[38] This is especially true of CDOs of CDOs.

Conclusion

This special analysis of credit rating agencies' business with regard to securitisation has highlighted the fundamental differences between ratings for this type of product and corporate ratings. These differences lie in the credit rating agencies' actions, their role in structuring deals, the variety and variability of the methods for analysing default risk, and the specific legal risks. There are other risk factors to be taken into consideration, such as the arrangers' combination of functions, which could give rise to conflicts of interests with investors, concentration on the market for credit ratings and legal advice, and the difficulty of conducting adversarial assessments, because a single rating is given to many highly complex products.

Moreover, the magnitude of rating transitions and their non-negligible impact on the value of the underlying assets show that, unlike other bond products, structured financings involve asymmetrical information that works to the benefit of arrangers and credit rating agencies. This asymmetrical information is inherent in the very complexity and the diversity of the arrangements being offered (cf. Ixis CIB study on this subject[39]). Consequently, in this area, where methodology and ethical issues are still far from being resolved, fund managers must be alert to the structural and legal particularities of the products on offer. This is particularly true for CDOs, and fund managers must systematically back up their investment choices with more thoroughgoing analysis than simply reading the ratings assigned by the agencies.

With the boom in securitisation, which was still in evidence in 2005, and the growing complexity and constant innovation that characterise securitised products, some of the problems mentioned above are bound to be discussed further in the next AMF report.

[39] Study published by the AMF on the Market Impact of Rating Agencies' Decisions in January 2006 (cf. Part 2. Impact of Credit Rating Agencies' Decisions on New Bond Products in Europe: the Case of Asset-Backed Securities).

Appendix I: Table of publicly rated transactions arranged by French banks in 2004

Issuer	Transaction name	No. Series	Arranger	Asset type	Fitch	Moody's	S&P	Amount in EUR
APULIA MORTGAGES FINANCE N. 3 S.R.L.	APULIA MORTGAGES FINANCE N. 3 S.R.L.	1	BNP PARIBAS	RMBS	X	X	X	235 100 000
AR FINANCE 1 PLC	AR FINANCE 1 PLC	1	BNP PARIBAS	ABS	-	X	X	42 000 000
CAMBER 1 PLC	CAMBER 1 PLC	1	BNP PARIBAS	CDO	-	X	X	804 500 000
GE CAPITAL FCC	GE CAPITAL FCC	1	BNP PARIBAS	CDO	-	X	X	500 000 000
HUMMINGBIRD SECURITISATION LTD	HUMMINGBIRD SECURITISATION LTD	1	BNP PARIBAS	CDO	-	-	X	85 536 547
LEVERAGED FINANCE CAPITAL III B.V.	LFE BNPP	1	BNP PARIBAS	CDO		X	X	307 000 000
ST MAARTEN CDO LTD	ST MAARTEN CDO LTD	1	BNP PARIBAS	CDO	-	-	X	75 000 000
TENZING CFO S.A.	TENZING CFO S.A.	1	BNP PARIBAS	CDO	X	X	-	165 600 000
THUNDERBIRD INVESTMENTS PLC	3, 4, 5, 6, 8 (MERMAID-1), 10, 11 (EUROBIRD SERIES 1), 12, 18, M1	10	BNP PARIBAS	CDO	-	-	X	1 650 000 000
IBERBOND 2004 PLC	IBERBOND 2004 PLC	1	BNP PARIBAS	ABS	X	X	-	268 000 000
UCI 10	UCI 10	1	UCI*	RMBS	-	-	X	700 000 000
UCI 11	UCI 11	1	UCI*	RMBS	-	-	X	850 000 000
ABSOLUTE III SYNTHETIC CDO LTD	ABSOLUTE III	1	CALYON	CDO	-	X	-	40 495 868
ABSOLUTE V SYNTHETIC CDO LTD	ABSOLUTE V SERIES 2004-1, 2004-2, 2004-3	3	CALYON	CDO	-	-	X	34 700 000
ABSOLUTE VI SYNTHETIC CDO LTD	ABSOLUTE VI SERIES 2004-1	3	CALYON	CDO	-	-	X	58 890 000
BETSEN CDO LTD	BETSEN I, BETSEN II	2	CALYON	CDO	-	X	X	180 000 000
FCC EURO TRUCK LEASE	FCC EURO TRUCK LEASE	1	CALYON	ABS	-	X	X	600 000 000
FCC GIAC	SERIES 5	1	CALYON	ABS	-	X	-	83 700 000
FCC TITRI SOCRAM	COMPARTIMENT TS3	1	CALYON	ABS	-	-	X	351 000 000
IM PASTOR 2 FONDO DE TITULIZACION HYPOTECARIA	IM PASTOR 2 FTA	1	CALYON	RMBS	-	X	X	1 000 000 000
MOMENTUM CDO (EUROPE) LTD	TRIPLAS VI SERIES 2004-1, 2004-2, 2004-7; GRANDE 2004-3; MAISON PLUS SERIES 2004-5, 2004-6	6	CALYON	CDO	-	-	X	130 817 463
OCELOT CDO 1 PLC	OCELOT SERIES 2004-2, 2004-4, 2004-6, 2004-10, 2004-12, 2004-14, 2004-20	7	CALYON	CDO	-	-	X	208 000 000
OPRHEUS LTD	ORPHEUS	1	CALYON	CDO	-	-	X	72 317 263
PRIME SQUARE CDO LTD	PRIME SQUARE SERIES 2004-1, 2004-2, 2004-3	3	CALYON	CDO	-	-	X	21 000 000
SAGA INVESTMENT SERIES LIMITED	SAGA	1	CALYON	CDO	-	X	-	61 713 064
SEA CDO LIMITED	GRANDE I 2004-1; GRANDE II 2004-3; GRANDE III 2004-4; GRANDE IV 2004-5; GRANDE V 2004-6	5	CALYON	CDO	-	X	-	65 128 926
TRIPLAS IV LIMITED	TRIPLAS IV	1	CALYON	CDO	-	X	-	47 050 000
SEA CDO LIMITED	TRIPLAS V 2004-2	1	CALYON	CDO	-	X	-	36 585 366
DCC - DEXIA CREDIOP PER LA CARTOLARIZZAZIONE S.R.L.	DCC - DEXIA CREDIOP PER LA CARTOLARIZZAZIONE S.R.L.	1	DEXIA	CDO	X	X	X	1 128 851 000
P.R.IM.A. F.V.G. S.R.L.	P.R.IM.A. F.V.G. S.R.L.	1	DEXIA	CDO	-	-	X	51 000 000
FCC ANTILOPE 1	ANTILOPE 1	1	CFF - ENTENIAL	RMBS	X	X	X	1 231 000 000
ZEBRE ONE	ZEBRE ONE	1	CFF	RMBS	X	-	X	1 173 000 000

Issuer	Transaction name	No. Series	Arranger	Asset type	Fitch	Moody's	S&P	Amount in EUR
ARGO MORTGAGES 2 S.R.L.	ARGO MORTGAGES 2 S.R.L.	1	IXIS CIB	RMBS	X	X	-	864 650 000
CHROME FUNDING LTD	CHROME FUNDING LTD - ACEO	1	IXIS CIB	CDO	-	X	X	82 000 000
CHROME FUNDING LTD	CHROME FUNDING LTD - SERIES MUST 50/5	1	IXIS CIB	CDO	-	X	X	229 250 000
DUCHESS III CDO S.A.	DUCHESS III CDO S.A.	1	IXIS CIB	CDO	-	X	X	405 000 000
FCC AMAREN II COMPARTIMENT 2004-1	AMAREN II COMPARTIMENT 2004-1	1	NATEXIS BANQUES POPULAIRES	RMBS	-	X	X	1 750 000 000
VALLAURIS CLO PLC	VALLAURIS CLO PLC	1	NATEXIS BANQUES POPULAIRES	CDO	-	X	X	264 532 000
FCC CIF ASSETS	CIF ASSETS (VII)	1	SG	RMBS	X	X	-	1 406 826 000
FCC CIF ASSETS	CIF ASSETS (VIII)	1	SG	RMBS	X	X	-	1 464 274 000
CLARIS LTD	SERIE 37/2004 GASCOGNE	1	SG	CDO	X	-	X	23 500 000
CLARIS LTD	GIVERNY; SERIES 30 A 36 GASCOGNE	8	SG	CDO	-	-	X	114 280 000
CLARIS LTD	SERIES 15 A 19 MONET; VIVALDI; CHANNEL 2004	7	SG	CDO	-	-	X	149 976 721
CLARIS LTD	CHANNEL 2004-3	1	SG	CDO	X	-	X	20 000 000
CLARIS LTD	SERIES 20, 21, 22, 23 MILLESIME; SERIES 29/2004 NAPPA VALLEY	5	SG	CDO	-	X	-	93 745 599
CLARIS LTD	SERIE 14/2004 MONET	1	SG	CDO	-	X	X	50 000 000
CREDICO FINANCE 3 SRL	CREDICO FINANCE 3 SRL	1	SG	RMBS	-	X	X	387 800 000
IRIS SPV PLC	GASCOGNE	1	SG	CDO	-	-	X	50 000 000
PROVIDE CASA 2004-1 PLC	PROVIDE CASA 2004-1 PLC	1	SG	RMBS	X	-	X	88 000 000
SGA SOCIETE GENERALE ACCEPTANCE N.V.	NAPPA VALLEY SERIES 7040/04-09 ET 7041/04	2	SG	CDO	-	X	X	33 500 000
SGA SOCIETE GENERALE ACCEPTANCE N.V.	6293/04-5 NAPA VALLEY	1	SG	CDO	-	-	X	10 000 000
SGA SOCIETE GENERALE ACCEPTANCE N.V.	PRIMROSE HILL 2004-1 5738/04-01 ET 5806/04-03; CHANNEL 2004-1 5809/04-03; MONET SERIES 6172 ET 6174; CHANNEL 2004-2 SERIES6311/04-5 ET 6440/04-6; GIVERNY SERIES 6719/04-09, 6720/04-09 ET 6942/04-09; EVERGREEN SERIE 6801/04-8; GASCOGNE SERIES 7172/04-11, 7	15	SG	CDO	-	-	X	141 610 000
SGA SOCIETE GENERALE ACCEPTANCE N.V.	VIVALDI SERIE 6729/04-8	1	SG	CDO	-	-	X	10 000 000
WHITE TOWER PLC 2004-1	WHITE TOWER PLC 2004-1	1	SG	CMBS	X	X	X	308 059 701
PROVIDE MORTGAGE LOANS FRANCE 2004 PLC	PROVIDE MORTGAGE LOANS FRANCE 2004 PLC	1	SG	RMBS	-	X	X	241 000 000
FRENCH RESIDENTIAL ASSET 2004-1 PLC	FRENCH RESIDENTIAL ASSET 2004-1 PLC	1	SG	RMBS	-	X	X	245 250 000
FRENCH RESIDENTIAL ASSET 2004-2 PLC	FRENCH RESIDENTIAL ASSET 2004-2 PLC	1	SG	RMBS	-	X	X	331 000 000
FCC BPI MASTER MORTGAGE 2003**	FCC BPI MASTER MORTGAGE 2003	1	3CIF	RMBS	X	X	-	301 010 000

(*) Union de Creditos Inmobiliarios - UCI (Group) 50% owned company based in Spain.
(**)This SPV was created in May 2003 and replenished in May 2004.

The data in the table were provided by the credit rating agencies and the arranging banks.