



**Position Paper on the New Basel Capital Accord - Consultative Document from the Basel Committee on Banking Supervision (January 2001)**

**MORTGAGE LENDING**

**REVISED STANDARDISED APPROACH**

***Residential mortgage lending***

The Federation approves of the fact that, under the revised standardised approach, lending "fully secured by mortgages on residential property that is or will be occupied by the borrower, or that is rented, will continue to be risk weighted at 50%". The Federation believes that this partially reflects (i) the central role residential mortgage lending plays in the financial sector and more broadly in the wider European economy and (ii) the low level of losses on residential mortgage lending in Europe and the presence of mortgage collateral securing such lending.

Given the low level of losses and the presence of collateral, European mortgage lenders firmly believe that residential mortgage lending should, in fact, be weighted at lower than 50% (see Annex 1 and 2 for data on Losses with Respect to Lending on Residential Property).

In addition, under the revised standardised approach, the Federation believes that the Committee should allow national supervisors discretion in determining which collateralised residential loans qualify for the 50% weighting under national regulations.

***Commercial mortgage lending***

In the proposed Accord, commercial mortgage lending<sup>1</sup> may, in exceptional circumstances, have the potential to receive a preferential risk weight of 50%. The Federation notes that this preferential risk weight is applicable to lending of up to the lower of 50% of the market value or 60% of the loan-to-value ratio, based on the mortgage lending value of the property securing the loan. There will be a risk weight of 100% for the remaining exposure. The Federation also notes the detailed criteria that must be met prior to obtaining such exceptional treatment for commercial mortgage lending.

In Europe, the weighting of commercial property loans is currently subject to the 1998 Directive modifying the Solvency Ratio Directive, which allows Member States to weight commercial property loans at 50% (98/32/EC). The decision to apply a favourable weighting

for commercial property mortgage loans was an option open to individual Member States subject to several strict conditions, such as that the property must be either used or let by the owner, the 50% weighting should only apply to the first portion of the loan (50% or 60% according to the valuation technique applied). The valuation method is strictly defined and there is a requirement with respect to the revaluation of property.

Supervisory authorities in Denmark, Germany, Greece, Italy, Luxembourg, Austria and Portugal have decided to permit lenders in their countries to avail of this option (*for more information, see Annex 3 on the Transposition of Directive 98/32/EC on Commercial Property Mortgage Loans into National Law*).

On the understanding that the Committee wishes to apply the revised standardised approach on commercial real estate lending throughout the world, the Federation urges the Committee to seriously consider adopting its proposals on commercial mortgage lending in line with the already existing EU legislation in this area. Experience in Europe has shown that the option to weight commercial mortgage lending at 50% has been taken up by a number of national supervisors on the basis of an increasingly professional and prudent approach to property valuation and lending (tried and tested valuation methodologies, training of property professionals, collection and analysis of data, widespread use of LTV ratios etc).

### ***Consistency of definitions***

In the supplement to the Accord, the Federation observes that “construction and development loans (e.g. project finance)” are excluded from the possibility of receiving the exceptional treatment for commercial real estate lending under the revised standardised approach. The Federation suggests that the words (e.g. project finance) should be deleted since construction and development loans are not typical examples of project finance and because the definition of project finance (paragraph 157 of the new Accord) is so wide-ranging that it includes a large part of what can be described as commercial mortgage lending. Therefore, it becomes almost impossible to apply the favourable treatment for commercial real estate lending proposed under the revised standardised approach.

The Federation would welcome consistency in the definition of commercial real estate between the revised standardised approach and the foundation IRBA.

### ***Higher risk categories***

The Federation is very concerned about the suggestion that the unsecured portion of any asset that is past due more than 90 days (after provisions) must be weighted at 150%. The Federation understands that mortgage collateral and other credit risk mitigation techniques

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<sup>1</sup> Mortgages on office and/or multi-purpose commercial premises and/or multi-tenanted commercial premises.

used by mortgage lenders such as mortgage indemnity insurance, insurance against default, incapacity, etc will not be recognised as eligible collateral for credit risk mitigation purposes in this proposal (*see Annex 4 for information on the Insurance of Mortgage Loans*).

This means that own capital requirements for the entire residential or commercial mortgage loan past due would be multiplied by factors of 3 and 1.5 respectively. Quite clearly, this would seriously impact the business of mortgage lending and does not reflect lenders' experience with assets that are past due.

Furthermore, definitions of default differ across Europe as do the frequency of repayments on mortgage loans. 90 days past due is not accepted practice either within individual mortgage lenders in the Member States of the European Union or in Member States as a whole across Europe. Some lenders focus on the number of payments missed rather than on the number of days past due (*see Federation's later comments on the Committee's proposed definition of default and Annex 10 – on Arrears, Defaults, Losses and Mortgage Lending*).

The Federation would welcome clarification from the Committee on the scope of the above suggestion. The Federation questions whether or not the Committee realises the damaging impact the proposal will have on on-balance sheet mortgage lending and on residential mortgage lending, in particular. The Federation believes that mortgage collateral and other credit risk mitigation techniques used by mortgage lenders should be fully recognised by the Committee.

### ***Risk weighting of banks***

The Federation has discussed the two options with respect to the risk weighting of banks and their impact on mortgage lenders access to long-term funding.

Many mortgage credit institutions are currently unrated but could be rated single A by the external rating agencies. Option 1 could see such institutions obtain or retain a 20% weighting, whereas option 2 proposes the application of a 50% weighting on such debt. If a weighting of 50% were to apply, this would represent an additional capital requirement of some 150% for the holders of this debt as compared to the current 20% weighting, and it could significantly impact on the cost of funds for such unrated or single A rated institutions, placing them at a competitive disadvantage compared to the larger universal banks rated at AA- or higher.

Such a weighting is excessive and disproportionate to the underlying risk. The lack of granularity in the risk buckets results in a crude and discriminatory distinction being made rather than a sensitive measure of risk. Option 2 may be intended to make the new rules

more risk sensitive, but that intention is not realised. The Federation, therefore, calls on the Committee to decide that option 1 should be used for all banks in all countries.

### ***Proposed treatment of securitisation***

The Federation has the following remarks with respect to the proposals on asset securitisation. Although many Member States have introduced laws on securitisation, the volume of MBS remains relatively low with only approximately 1% of the total value of residential mortgage loans outstanding in the EU<sup>2</sup>. However, MBS issuance has increased strongly in recent years and securitisation will probably become an attractive funding instrument for mortgage lenders looking to transfer their risks or diversify their funding sources (*see annex 5 and 6 on European Mortgage Backed Securities*)

Currently, in Europe securitisations of residential mortgage loans are weighted at 50 %<sup>3</sup> (whereas under the existing Basel Accord they are weighted at 100%). The Federation supports the new Basel proposals with regard to the rated issues as outlined below:

MBS Ratings	AAA to AA -	A + to A -	BBB + to BBB -	BB + to BB -
Risk weights	20%	50%	100%	150%

With regard to unrated issues, the European Commission proposes to continue the current regulatory arrangement (i.e. the 1998 EU directive), which sets out that the securitisation attracts the same weighting as the underlying assets with regard to unrated issues. The Federation welcomes this proposal since it neutral and would avoid regulatory arbitrage between the weighting of the mortgage lender's portfolio and the weighting of residential mortgage loans.

### ***INTERNAL RATING BASED APPROACH (IRBA)***

#### ***RETAIL EXPOSURES***

##### ***Calibration - no incentive to move to the IRBA***

The Federation believes that the proposed calibration of risk weights for mortgage loans are too high to give mortgage lenders the incentive to move from the revised standardised approach to the IRBA. Therefore, the Federation recommends that, in order to encourage the use of the IRBA by mortgage lenders, the calibration of risk weights for residential mortgage lending must be changed.

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<sup>2</sup> This differs with the US situation, where the government-sponsored enterprises such as *Fannie Mae* and *Freddie Mac*, have given mortgage lenders strong incentives to use asset securitisation.

<sup>3</sup> Directive 98/32/EU of 22 June 1998, amending, as regards in particular mortgages, Council Directive 89/647/EU on a Solvency Ratio for Credit Institutions

Mortgage loans are secured by mortgage collateral. The security of the mortgage collateral depends, of course, on the efficiency and speed of national enforcement procedures. Enforcement procedures vary substantially across Europe and this is reflected in both the recovery amount and timing. The Federation's comprehensive survey on the estimated time and costs taken for enforcement shows that it takes on average between 6 months to 3 years for enforcement and that costs vary on average between 2 to 10% of the sales price (*for further information, see Annex 7 – Efficiency of Mortgage Collateral*).

In addition to the mortgage collateral, mortgage lenders use a wide variety of other credit risk mitigation techniques, such as mortgage indemnity insurances to cover the top slice of a loan. The Federation would welcome clarification from the Committee on how these credit enhancement techniques will be factored into the calibration of risk weights (*see Annex 4 – Insurance of Mortgage Loans*).

A revision of the calibration of risk weights is further supported by data on losses at European level. Although, compared to the US, the data is relatively scarce, the available data proves beyond any doubt that a loan secured by a mortgage on property has a credit risk considerably lower than a loan without collateral (*see Annex 1 and 2 for Data on Losses with respect to Lending on Residential Property*).

The Federation believes that the assumed loss given default figure of 50% is too high for residential mortgage lending since the mortgage collateral allows lenders to recover a large part of their potential losses. In addition, the Federation notes that there is more flexibility in the use of loss given default figures for the calibration of risk weights for corporate exposures (i.e. from 40% to 50%).

The Federation therefore urges the Committee to reduce the 50% figure. On the basis of the loss figures, the Federation proposes that the Committee introduces a segment for residential mortgage lending and that this segment should receive risk weightings of the order of half those proposed by the Committee for retail exposures. This would give mortgage lenders the incentive to move to the IRBA.

### ***Maturity***

The Committee states that, for the time being, it has not set out different risk weights for different retail product types. It has taken over the three-year maturity assumed in its work on corporate exposures as a basis for all retail risk weights – but may, during its work on a revised calibration of risk weights in the final Accord “consider separate risk weights for residential mortgages and other retail products”.

The Committee invites comments on the treatment of maturity in the derivation of risk weights. The current supervisory thinking seems to be that a three-year maturity takes into account the effects of residential mortgages and that the longer a loan, the more risky it is.

The Federation would like to re-emphasise that, on the basis of historical loss data, secured loans such as mortgage loans are considerably less risky than unsecured loans. The actual maturity or term of a loan is distinct from the duration and is often shorter than the duration. Durations vary in each country and can be up to 30 years.

Furthermore, the thinking on maturity with respect to residential property varies across Europe. Certain delegations believe that a three year-maturity does reflect lenders' experience with residential mortgage lending. Other delegations consider that many loans have no definite date of maturity and tend to be rolled over on a yearly basis, whereas other loans are for a longer formal period with agreed renegotiation periods, when interest and other conditions are adjusted. What is important is how soon a lender can change the conditions for a loan. Most loans can be renegotiated within a time-span that is considerably shorter than three years.

The Federation believes that loans with longer durations (time until expiry date) are not necessarily riskier. Statistically, if a borrower has difficulties, the majority of these difficulties or default events usually occur in the first few years of a loan irrespective of the duration (see *Annex 8 - Maturity and Mortgage Lending*). After a certain period (between three and five years) the number of defaults decline significantly suggesting, in fact, a reduction in a lender's own capital requirements. Duration and maturity, irrespective of their length, are already implicitly factored into calculations of probability of default and loss given default by mortgage lenders. These calculations are reviewed on an ongoing basis (at least once a year). Thus, there is no need to include an explicit maturity figure for residential mortgage in the new Accord.

The durations of mortgage loans in Europe range from ten to fifteen years or longer (durations of 30 years or more) and are on-balance sheet whereas in the US, mortgage loans are transformed into off-balance securities. The long-term nature of mortgage markets in many European countries leads to a high level of stability and a low level of volatility on their national real estate markets. Analysis by the Federation (on the basis of the euro value of an average loan, the original duration and LTV ratios) of what can be described as 'typical mortgage products' in Europe emphasises this long-term stability (see *Annex 9 – Typical Mortgage Products*).

In Europe, any punitive treatment of longer maturities in the final Accord could be a disincentive to long-term lending and seriously disadvantage European mortgage lenders. It

could thereby threaten financial stability and increase systemic risk especially if such treatment led to increased demand for short-term credit. This could make access to housing more difficult for the average consumer. Home ownership is the bedrock of any economy's financial stability and the pathway to prosperity for those who own their own homes and for the many who strive to do so.

The discriminatory treatment of longer maturities goes against the entire underlying idea of providing safe long-term finance for the most significant expense for many families. 'Incentivising' short-term mortgage lending is, in other words, conducive to financial instability.

These arguments are further supported both by the experience of mortgage lenders and the data on mortgage lending which proves that a mortgage loan is more vulnerable in the first few years and less risky over time since:

- debt diminishes as capital is repaid through various forms of rigorous amortisation schedules;
- the value of a property in principle remains constant whereas the mortgage debt is repaid and;
- the mortgage is registered and remains enforceable for the whole amount of the loan notwithstanding the amount that has actually been repaid.

Other factors are the seasoning (i.e. the length of time since the loan was made) of the informational and behavioural relationship between lenders and borrowers meaning, for instance, a better overview of the overall gearing ratio of the borrower. This allows the lender to incorporate a lower PD and LGD (and therefore a lower risk weight) across the portfolio over time.

In light of the above, the Federation considers that maturity should not be an explicit adverse factor in the calibration of risk weights for residential mortgage loans.

### **Default**

The Federation notes the stringent requirements proposed with respect to default, for instance, banks must use the Committee's regulatory definition of default in estimating losses on their lending and all internal definitions must be consistent with this definition. Initial findings in a recent Federation study on arrears, defaults and losses show that differences exist in Europe in the classification of doubtful loans, definitions of default, provisioning for future losses and the ratios used to monitor and measure credit risk. Furthermore, in an effort to provide a better understanding of this area, the Federation has developed an indicative timeline outlining in three stages the evolution of a mortgage loan from the moment a borrower fails to pay an instalment on a due date until the end of the enforcement period (*see Annex 10 - on Arrears, Defaults, Losses and Mortgage Lending*).

The Federation urges the Committee to revise the stringent requirements with respect to default and to recognise that there are differences in the treatment of arrears, default and losses by mortgage lenders in Europe. The Federation is against any unnecessary and counter-productive harmonisation in this area.

### ***Criteria for retail exposures***

The Federation supports the Committee's statement that lending to a small business (including small business property lending) may be included in the treatment of retail exposures with the explicit approval of supervisors.

The Committee outlines several criteria that need to be met for lending to qualify for treatment under retail exposures in the IRBA including "each individual exposure has a low value ... national supervisors ... may choose to set a maximum value for individual exposures".

Property prices vary and loan amounts vary across Europe. The Federation believes that the value of a residential mortgage loan should not be used as a factor to determine whether or not such loans are considered to be retail loans. The treatment of a loan by a bank should determine whether or not it is a retail loan.

### ***Partial use of IRBA***

The Federation supports the European Commission's proposal to allow lenders to introduce IRBA gradually. The proposal also includes the possibility to apply the revised standardised approach and the IRBA at the same time for certain exposures. The principle of only partial use of the IRBA should be able to be used not only within a credit institution (e.g. IRBA for residential mortgage credit but not for commercial mortgage credit) but also within a group, for instance, by a parent company on behalf of its mortgage subsidiary. The Federation urges the Committee to respond positively to the Commission's proposal.

## ***CORPORATE EXPOSURES***

### ***Treatment of mortgage collateral – insufficient recognition***

In the foundation IRBA, the Federation is of the opinion that the proposed treatment of real estate collateral for loans to small and medium sized enterprises and the proposed level of loss given default (40-50%) are insufficient incentive for mortgage lenders to move to the IRBA from the revised standardised approach.

The Federation is especially surprised that mortgage collateral is considered as more risk reducing both in the revised standardised approach and in the advanced IRBA than is the case in the foundation IRBA.





### ***Eligible real estate collateral***

The Federation has already referred to the inconsistencies in the definitions of commercial real estate between the revised standardised approach and the foundation IRBA. Under the foundation IRBA, lenders may obtain capital relief from physical collateral such as commercial real estate (CRE) and residential real estate (RRE). Income producing/investment CRE is specifically excluded from collateral types for this purpose. Lending to housing developments or apartment blocks (including social housing) where the risk of repayment of the loan is significantly dependent on the cash flow generated through rental streams is also excluded. The Federation would welcome clarification from the Committee and urges the Committee to recognise the risk reducing impact of mortgage collateral more broadly in the Accord (see Annex 2 and 11 for Data on Losses for Lending on Commercial Property).

Indeed, the Federation notes the Committee's definition of commercial real estate lending refers to long-term lending to either individuals or corporations in the form of a mortgage of approved currently income-producing property<sup>4</sup>. One of the main criteria permitting the 50% weighting for commercial mortgage lending in the revised standardised approach is that the property has rental income with which to service the loan. In the foundation IRBA for corporate exposures this type of lending is excluded and therefore there is no incentive for lenders to move from the revised standardised to the IRBA.

### ***Project finance***

There is inconsistency in the definition of project finance as a result of the definition of commercial real estate in the revised standardised approach not being transposed fully into the foundation IRBA. At present, commercial property and rented property would fall under project finance and a significant part of mortgage credit business would require more own capital than a corporate loan.

It is important that the definition of commercial mortgage credit in the revised standardised approach should be transposed to the definition of commercial real estate in the IRBA. The text in paragraphs 207 and 312 to 314 of the Accord should be revised. The limitations (paragraph 313) on physical collateral pledged by small and medium sized enterprises (SMEs) should be removed.

The preliminary definition of project finance exposures in paragraph 157 of the Accord is too wide-ranging and it should be clarified as follows. On the one hand, project finance concerns property which cannot be used by third parties and which can only be used in a special way or which is reliant on the ability of management to use capital (power stations, water purification plants, bridges, hospitals etc). On the other hand, it concerns incomplete buildings

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<sup>4</sup> p. 1, Definition of commercial real estate lending, Criteria in defining exceptional treatment of commercial real estate lending – Supplement to the New Basel Capital Accord – January 2001

i.e. parcels of land that have not been built on or developed and buildings under construction that have not been rented. That is, the incomplete buildings are not project financed, if the user has rented them in advance and the risks of building costs and building completion are almost entirely excluded.

The Federation proposes the following definition of project finance:

“Credit, in the case of which the performance of the underlying project (whether planned, under construction or in use) does not originate from the income of the property itself, but mainly from the management of the property or from the achievement of business success which is independent of the property. Therefore mortgages on office and/or multi-purpose commercial premises and/or multi-tenanted commercial premises should not be categorised as project finance.”

In addition, the Federation would welcome clarification from the Committee on the proposed treatment of residential real estate, commercial real estate and project finance in the advanced IRBA.

### ***Social residential buildings***

The Federation notes in the revised standardised approach that the definition of claims secured by residential property also includes rented residential property. This definition appears not to have been integrated throughout the Accord since rented residential buildings do not fall under the heading of residential mortgage lending but appear instead to fall under corporate exposures as cash flow producing buildings.

Rented residential property is included under the 50% weighting for residential property in the 1988 Basel Accord and, as noted above, under the revised standardised approach. In Europe, rented residential buildings are viewed as residential buildings on account of the low risk of such buildings (*the Solvency Directive*). No case has been made to erode the current 50% and thus far from making the new Accord more sensitive to risk, in this area, an approach is proposed which is less sensitive to different areas of lending and different risks.

The Federation believes that rented residential buildings should be treated as residential mortgage lending throughout the Accord (i.e. weighted at 50% or less) otherwise there is a risk to a particular subset of rented residential buildings, social residential buildings, of clearly higher own capital requirements with potentially serious economic and social consequences.

### ***Property valuation***

The Federation notes that the supplement to the Accord on commercial real estate provides two equally applicable options with respect to property valuation - market value and mortgage

lending value. This is in line with current EU legislation. In the foundation IRBA, the property valuation approach for commercial real estate is fixed as “objective market value”.

The Federation requests the Committee to ensure that both options are recognised in the IRBA as methods for the valuation of the physical collateral.

### ***Operational requirements***

The Committee lists several operational requirements that must be met for real estate to be eligible for recognition as collateral in corporate lending. The Federation notes that no recognition will be given for second or subsequent claims on physical collateral.

The Federation draws the Committee’s attention to the fact that in a number of countries lenders are able to grant second or third mortgages on a property within an established loan-to-value (LTV) framework for that property. In these countries, the holders of second and subsequent mortgages may, as is the case for the holder of the first mortgage, carry through a forced sale of the property, independently of the other mortgage holders, providing that the proceeds from the sale of the property cover the mortgages with higher-ranking priority. This is typically a robust system based on an official register containing details of all mortgages and their priority.

The Federation urges the Committee to recognise second and subsequent mortgages in the new Accord.

### ***Recognition for real estate collateral***

The Committee proposes that exposures, with eligible collateral, for which the ratio of current collateral value (C) to the nominal exposure (E) is below 30% would receive a loss given default (LGD) of 50% for unsecured exposures or those secured by non-recognised collateral. For exposures with a C/E ratio greater than 140%, LGD would be 40%. Exposures with a C/E ratio between these two levels would receive a LGD that is a weighted average of the secured and unsecured LGD figures.

The Federation considers that the above LGDs for corporate loans do not adequately reflect the risk reducing nature of mortgage collateral and that the Committee should focus instead on LTVs as mentioned above under operational requirements. The LTV framework is used all over the world to measure the creditworthiness of mortgage lending – both in countries which use the concept of first claim/first lien and in other countries. The C/E methodology is only suited for those countries that use the concept of first claim, where the entire value of the property stands to serve the loan.

The concept of first claim and the C/E methodology means that the holder of a second mortgage would not benefit at all from the collateral held – this is clearly not logical or

reasonable especially when there is a low LTV ratio for the second mortgage. Low LTV ratios should mean lower LGD figures than those proposed in the Accord.

The Federation, therefore, recommends that the Committee uses the LTV framework instead of the C/E methodology as a basis for the new capital adequacy rules.

### ***Maturity***

With respect to the treatment of maturity in corporate exposures, the Federation has similar remarks to those made with respect to maturity in residential mortgages under retail exposures. The Federation considers that maturity should not be an explicit adverse factor in the calibration of risk weights for corporate loans secured on commercial and residential real estate collateral.

### **IRBA - Asset Securitisation**

The Federation notes in the Committee's proposals on asset securitisation that issues such as implicit or residual risks as well as consistency between the IRBA treatment of securitisation and various forms of credit risk mitigation will require additional work. The proposals distinguish among the different roles banks can play in asset securitisation as an investor, a sponsor or an originator. As an originator, a key question when determining the bank's exposure is the level of legal and economic separation of the securitised assets from the bank and the risk of reputational exposure. Basel recognises the fallibility of banks whose reputation is at risk if their securitisation falters by addressing the issue of implicit support such banks may provide through actions beyond contractual undertaking. Such actions include implicit recourse. The proposal includes a number of punitive measures, such as a ban on gaining capital relief through securitisation.

The Federation would welcome clarification on what exactly is meant by implicit support in the above proposals and urges the Committee to develop even-handed criteria to be used by supervisors in determining the criteria for implicit support. Supervisory decisions have to be well-founded and made only after close contact with the concerned bank. Many securitisations are complex, as would be the judgement of whether or not a bank has given implicit support. The bank must therefore have an opportunity to explain its actions. It is also important that supervisory decisions are not made just because of minor mistakes by a bank.

The Federation would like to stress that mortgage backed securities offer a valuable alternative funding mechanism for mortgage lenders because of the various benefits securitisation offers. It is correct that the Committee should discourage the use of securitisation solely for regulatory capital arbitrage. Indeed, at this stage, it can be assumed that the role of securitisation as a regulatory arbitrage mechanism will diminish. On the other hand, the supply of mortgage-backed securities will be met by stronger demand, as the

reduced risk weighting for securitisation should expand the investor base<sup>5</sup>. However, securitisation has other benefits for banks above and beyond regulatory capital relief. Banks looking for a transfer of certain risks or the diversification of funding sources will continue to resort to securitisation. The Federation looks forward to working with the Committee on securitisation.

Finally, the new proposals explicitly distinguish between traditional and synthetic securitisation. The argument is that synthetic securitisation creates different exposures (such as asset mismatches, currency and maturity mismatches). However, in the case of a transfer of credit risk of a portfolio, the Federation believes that there should be equal treatment between a true-sale asset securitisation and the synthetic securitisation.

### **OPERATIONAL RISK**

The Federation is concerned that a notional 20% charge for operational risk will be added for mortgage lenders to the capital charge for credit risk. The Committee indicates that it wishes to maintain the overall levels of capital in the system, based on the revised standardised approach to credit risk, and after including the new capital charge for operational risk. However, for the overwhelming majority of mortgage lenders in Europe, whose business is concentrated on residential mortgage lending where there is no change in the standardised approach to credit risk, the new capital charge for operational risk is wholly additional, and will not be counterbalanced by any reductions in capital charges for credit risk.

Typically, mortgage lenders have a long history of well managed lending backed up by qualified people and tried and tested systems. It therefore does not make sense to levy a charge of such magnitude on such a well-run sector. In addition, increased capital requirements for residential mortgage lending, in particular, could be counter productive leading to increased housing costs and financial difficulties for borrowers.

Operational risk is extremely limited in specialised institutions such as the mortgage banks present throughout Europe where the majority of activities follow standardised procedures including, for instance, the use of standardised mortgage forms that are registered in a public registration system.

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<sup>5</sup> Under the 1988 accord, all asset-backed securities were rated at 100%. However, in Europe, Directive 98/32/EU of 22 June 1998, amending Council Directive 89/647/EU on a Solvency Ratio for Credit Institutions, allowed mortgage-backed securities backed by residential mortgage loans to be weighted at 50%.

As a working definition of operational risk the Committee suggests “the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.” It includes the legal risk arising from the conduct of business. The Committee has proposed three approaches to calculating operational risk.

The starting point for the basic indicator approach is the 20% charge and it is based, as far as the Federation can ascertain, on a limited set of data. The actual capital adequacy requirement will be calculated on the basis of a fixed percentage of gross income. The Federation urges the Committee to consider obtaining more data on the applicability and value added of such a crude, if straightforward, approach.

The standardised approach focuses on business lines. There is one business line for retail banking and its relative weightings are assumed to range between 17 and 25 per cent. The Federation would welcome further segmentation of this business line to reflect the low level of operational risk pertaining to the typically well-run business of mortgage lending. In addition, a concentration of business in one line does not automatically mean increased operational risk.

The internal measurement approach proposes to permit credit institutions with sophisticated and well-developed methods for measuring and managing operational risk to use internal loss data to calculate such risk.

To conclude on operational risk, the Federation has the following remarks. If the Committee decides to introduce a capital charge for operational risk, mortgage lenders would welcome both recognition of techniques used by mortgage lenders to mitigate such risk and the difficulties in collecting data on, what are typically infrequent, loss or damage events. Finally, mortgage lenders would urge the Committee to carefully consider the cost/benefit of such a charge on mortgage lenders from the perspective of the key stakeholders concerned – supervisors, lenders, borrowers and investors.

***Annex 1- Data on Losses for Lending on Residential Property with respect to the IRBA for Retail Exposures***

The longest available series of figures on losses on lending by Danish mortgage banks – from 1975 to 1999 – covers all mortgage loans on residential and commercial property. In the period, the losses on mortgage loans were on average 0.22% compared to an average of 1.15% for losses on all lending by the Danish commercial and savings banks. By a fixed ratio calculation based on the period 1990-99, for which more detailed information is available, the 0.22% average for all mortgage loans compares to about 0.1 % for residential loans.

In the United Kingdom, for the period 1989 - 1998, the estimated figures for provisions for bad and doubtful debts charged by UK building societies in their income and expenditure accounts each year, as a percentage of loans outstanding ranged from 0.08% (1989) to 0.95% (1992). Loans were primarily for owner-occupied residential property; but there was some lending for commercial property and on unsecured loans. In Norway, unsecured credits to private retail customers are estimated to have an expected loss given default that is 4 to 7 times as high as an average residential mortgage loan.

An extensive survey was undertaken in Germany, which shows that residential mortgage lending had an average loss rate of only 0.05% from 1988 to 1998 (for LTVs of 60% or less and for LTVs between 60% and 100% the loss rates were 0.03% and 0.15% respectively over the same period). For consumer lending over the ten-year period the average loss was 0.26%.

For a major French mortgage credit provider losses on residential lending from 1993 to 2000 inclusive ranged from 0% to 0.136% averaging 0.024% over that period. In Sweden, the relation between losses and the book value of residential mortgages is below 0.1% per year.

In the Royal Institute of Chartered Surveyors' survey (see Annex 6) on capital losses on mortgage lending on both residential and commercial property and other lending carried out in 1995, very low capital losses on residential mortgage lending were recorded in a number of countries (Germany, Belgium, Italy, the Netherlands, Portugal and Austria). Further details on the RICS survey are contained in Annex 6.

Empirical evidence of loss rates shows that residential mortgage lending is considerably less risky than unsecured consumer credit. The RICS survey, for instance, concluded "in all cases the losses on loans



not secured by mortgages are bigger as a percentage of outstanding loans than losses on mortgage loans."

The Office of Thrift Supervision in Washington DC carried out extensive research<sup>6</sup> in the charge-off and delinquency rates for six categories of loans held by U.S. banks and thrifts from 1984 to 1999. Real estate in general, and 1-4 family mortgages in particular, consistently pose the least credit risk of the six categories considered reporting very low charge-offs and/or delinquencies. The author concludes that collateralised loans generally pose the smallest credit risk and that mortgages are generally overburdened by the Basel risk weights. Commercial and consumer loans typically pose the greatest risk.

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<sup>6</sup> Basel Buckets and Loan Losses: Absolute and relative loan underperformance at banks and thrifts, March 9, 2001, Mark D. Flood, Senior Financial Economist, Office of Thrift Supervision, Washington DC, U.S.A.

## ***Annex 2– Capital Losses for Lending on Residential and Commercial Property and other Lending with respect to IRBA – Results of RICS Survey***

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### **Introduction**

In 1995, as part of the European Commission's examination of lending on property via mortgage loans in the context of the review of the 1989 Solvency Ratio Directive, the Royal Institute of Chartered Surveyors (RICS) carried out a survey on capital losses on mortgage lending on residential and commercial property.

The statistics concerning defaults or capital losses are not collected centrally for most countries. Since no good data sets on capital losses exist, information was collected directly from the source, namely individual banks with the assistance of the European credit sector federations.

The RICS survey concentrated on capital losses instead of default rates because, in the case of a default, a substantial part (if not all) of the capital might be recovered. To quote the survey:

“Capital loss as a percentage of the total outstanding loans is a better figure because it gives a clear picture of the risks involved in mortgage lending. Capital loss is defined as actual losses on capital after foreclosure procedures.”

National federations and individual banks supplied information on:

- capital loss on mortgage lending on residential property
- capital loss as a percentage of outstanding mortgage loans on residential property
- capital loss on mortgage lending on residential property
- capital loss as a percentage of outstanding loans on commercial property
- capital loss on other loans (loans to households and companies not secured by mortgage)
- capital loss as a percentage of other outstanding loans.

### **Comparing capital losses on mortgage loans**

The conclusions and results outlined below do have their limitations. Conclusions have to be drawn with care for a number of reasons.

One of the limitations is the small number of years covered by the survey. This means that the effect of business and property cycles are not fully captured. The low amount of losses on mortgage lending in Portugal, for example, can, to some extent, be explained by the good performance of the economy in the first half of the nineties. In other situations the reverse is true: higher than normal losses may occur due to worsening economic conditions.

The results are also affected by the different national systems under which the lending takes place, like foreclosure procedures and government guarantees. From some countries the stated loss are more like a snapshot than a proper time series.

Finally, for some countries the data represent a bigger market share than for others. In some cases, almost the whole market is captured in the data. A small market share, however, does not affect the conclusions if the institutions involved are representative of mortgage lenders in the country.

The above considerations have to be borne in mind when comparing the capital losses in the different countries. The following conclusions can be drawn:

Losses on commercial property mortgage lending are larger as a percentage of outstanding loans than losses on residential mortgages. This is true for all the countries in the survey, with the exception of Germany and Spain. For Spain, losses are generally at a relatively high level, with on average a slightly higher loss rate for residential mortgages. The standard deviation for both types of loans is high.

In all cases the losses on loans not secured by mortgages are bigger as a percentage of outstanding loans than losses on mortgage loans. In most cases the difference is substantial.

Very low capital losses on mortgage lending (both residential and commercial) were recorded for Germany, Belgium and Portugal. Higher losses were experienced in Denmark, but were predominantly caused by the provisions that were included in the results, and France, Italy (for commercial mortgages), Luxembourg and Spain.

The results of the survey for each country together with conclusions are outlined below.

## **Capital losses in the European Union**

### **1. Denmark**

The Danish figures on capital losses, provided by the Realkreditrådet, represents nearly the total Danish mortgage market (95%). The figures on other loans represent 100% of the market. It is extremely important to note that, from 1990 onwards, the data on losses include provisions for future losses. Accordingly provisions must be made on both foreclosed and non-foreclosed properties. In the period 1984-1989 the losses on commercial mortgage lending were on average 0.17%. For the five years following that period the average was 1.23%. The loss percentage of mortgage banks for the last six years was between 0.20 and 0.75%; the losses on lending for other banks were between 0.5 and 2.5%.

Even given the changed basis of calculation, the data show that the losses on residential mortgage lending are considerably lower than for commercial property mortgages. Losses on commercial property mortgages were substantially lower than for other loans and generally low in the period before 1990. Losses increased after this period due to the fact that provisions were included and due to worsening economic conditions.

**Table 1:** Losses as percentage of outstanding loans in Denmark

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1984</b>		0.28	1.12
<b>1985</b>		0.06	1.14
<b>1986</b>		0.06	0.47
<b>1987</b>		0.08	0.83
<b>1988</b>		0.20	1.51
<b>1989</b>		0.34	1.27
<b>1990</b>		0.83	1.79
<b>1991</b>	0.65	1.08	2.07
<b>1992</b>	0.42	1.57	2.55
<b>1993</b>	0.40	1.47	2.47
<b>1994</b>	0.16	1.19	1.31
<b>Avg.</b>	0.41	1.08	1.91
<b>St dev.</b>	0.20	0.45	0.55

## 2. Germany

The figures on capital losses after foreclosure for Germany are representative for the market. The database from whence the figures of Table 2 are calculated constitutes of 80% of the commercial property mortgage market and 82% of the residential mortgage market. The figures show that the losses on commercial property mortgages (subject to the loan-to-value rules) are of the same magnitude as the losses on residential mortgages. These losses were below 0.1% of the outstanding loans for both categories and for all the years taken into consideration. Compared to the losses on other loans, the mortgage losses are very low.

**Table 2:** Losses as percentage of outstanding loans in Germany

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>	0.08	0.06	0.65
<b>1990</b>	0.05	0.04	0.35
<b>1991</b>	0.03	0.03	0.31
<b>1992</b>	0.04	0.03	0.26
<b>1993</b>	0.04	0.03	0.38
<b>1994</b>	0.02	0.04	0.37
<b>Avg.</b>	0.04	0.04	0.39
<b>St dev.</b>	0.02	0.01	0.13

## 3. Belgium

The survey results for Belgium regarding commercial and residential mortgage lending represents 20% of the market for the period 1989-1991 and 32% for 1993 and 1994 (Table 3). This change in markets share does not have a noticeable impact on the general trend. The market share for the category 'other loans' is 11% for 1988-1992 and 17% for 1993-1994.

The results indicate that commercial mortgage loans are slightly more risky than residential loans. Both type of mortgage loans were subject to very limited losses, on average less than 0.05%. The losses on other loans were much higher.

**Table 3:** Losses as percentage of outstanding loans in Belgium

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>	0.03	0.11	1.60
<b>1990</b>	0.01	0.01	0.32
<b>1991</b>	0.01	0.01	0.28
<b>1992</b>	0.01	0.01	0.28
<b>1993</b>	0.00	0.03	0.18
<b>1994</b>	0.03	0.07	0.23
<b>Avg.</b>	0.01	0.04	0.48
<b>St dev.</b>	0.01	0.04	0.55

#### 4. France

The survey results for residential and commercial mortgages represent 10% of the French market for 1992 and 1993 and 12% for 1994. The market share for the other loans category represent only 10% of the market. The survey results show higher losses on commercial mortgages than on residential mortgages. The results have to be interpreted with care. Comparing these losses with losses on other loans on the basis of the data in Table 4 is dubious because only the 1994 figures is available and this represents only 10% of the market.

It is also important to realise that because of the French legal and tax treatment, property leasing is often a substitute for traditional mortgages. This means that actual commercial property mortgages are relatively very small in volume in relation to overall financing and funding of real estate.

**Table 4:** Losses as percentage of outstanding loans in France

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>			
<b>1990</b>			
<b>1991</b>			
<b>1992</b>	0.21	0.15	
<b>1993</b>	0.16	0.28	
<b>1994</b>	0.23	0.64	10.90
<b>Avg.</b>	0.20	0.36	
<b>St dev.</b>	0.04	0.26	

## 5. Italy

The market share of the institutions represented in the mortgage lending survey is 15%. The results show extremely low losses on residential mortgage lending. The losses on commercial property were on average significantly higher, as Table 5 indicates. It shows that during the observed period the losses commercial property mortgages were steadily declining. In 1993 and 1994 they reached a level of 0.15% of outstanding loans, compared to 0.75% in 1989. No information was available on losses to unsecured loans.

**Table 5:** Losses as percentage of outstanding loans in Italy

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>			
<b>1990</b>	0.06	0.75	
<b>1991</b>	0.04	0.58	
<b>1992</b>	0.03	0.35	
<b>1993</b>	0.01	0.17	
<b>1994</b>	0.01	0.15	
<b>Avg.</b>	0.03	0.40	
<b>St dev.</b>	0.02	0.26	

## 6. Luxembourg

For Luxembourg only average figures are available for the period 1991-1994. These data represent approximately 50% of the market. The survey results show that the losses on loans not secured by mortgages were substantially higher than on mortgage loans. Furthermore, losses on commercial mortgage loans were higher than losses on residential mortgages (0.32% and 0.22% of outstanding loans respectively).

## 7. The Netherlands

For the Netherlands, there are only averages available for residential mortgage lending, and no data was found for commercial mortgage lending. The average loss percentage for residential mortgage is considerably less than for loans not secured by mortgage (0.05% and 0.72%). The fact that many mortgages are subject to a government guarantee (Nationale hypotheekgarantie) is very important in this respect. It has been estimated by respondents that the losses on commercial mortgages are slightly higher than on residential mortgage loans. The database for residential mortgages represents 35% of the market, the database for other loans represents 25-30% of the market.

## 8. Portugal

The data bases for commercial mortgages represents 25% of the market. The market share of the institutions represented in the residential mortgage lending figures is 52%. The data regarding loans not secured by mortgages are based on a market share of 10%.

As Table 6 shows, losses on both commercial and residential mortgage lending over the observed period were very low. Again, a difference between mortgage loans and non-mortgage loans is observed,

with higher losses for loans not secured by mortgages, although losses on the latter are lower than in other European countries.

**Table 6:** Losses as percentage of outstanding loans in Portugal

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>			
<b>1990</b>	0.00	0.07	0.08
<b>1991</b>	0.01	0.09	0.06
<b>1992</b>		0.01	0.04
<b>1993</b>	0.00	0.09	0.13
<b>1994</b>	0.00	0.02	0.46
<b>Avg.</b>	0.00	0.06	0.15
<b>St dev.</b>	0.01	0.04	0.17

## 9. Spain

The figures for commercial and residential mortgage lending represent 60% of the Spanish mortgage market. The database for loans not secured by mortgages represents 40% of the market. The results show relatively high losses on both residential and commercial mortgage loans of around 0.4% of outstanding loans. On average the losses were slightly higher for residential mortgages. Losses on non-mortgage loans were slightly bigger than for mortgage secured loans. Table 7 shows that from year to year there is quite a large variation in the percentage of losses on all three types of loans. Interviews conducted by the survey team suggest that the loss rate on commercial mortgage may be understated.

**Table 7** Losses as percentage of outstanding loans in Spain

	<b>Residential Mortgages</b>	<b>Commercial Mortgages</b>	<b>Other Loans</b>
<b>1989</b>	0.56	0.13	0.37
<b>1990</b>	0.11	0.71	0.69
<b>1991</b>	0.66	0.29	0.32
<b>1992</b>	0.58	0.26	0.39
<b>1993</b>	0.27	0.3	0.52
<b>1994</b>	0.38	0.49	0.75
<b>Avg.</b>	0.43	0.36	0.51
<b>St dev.</b>	0.21	0.21	0.18

## 10 United Kingdom

For the United Kingdom no data were obtained on capital losses on mortgage secured loans. Neither individual banks nor the Bank of England had this information available. In the published accounts, banks and building societies show changes in provisions for bad and doubtful debt. However, the banks do not distinguish between residential (for own use) and commercial provisions.

The actual capital losses are not published. However, the amounts charged to the income and expenditure account as provisions for bad and doubtful debts will, over time, roughly equate to losses of capital and interest.

The provision charges for residential mortgages for 1992 and 1993 were 0.9% and 0.6% respectively. The figures for commercial mortgages were 5.1% and 4.0%. The provisions for commercial mortgages are much larger than for residential mortgages. It is important to note that much of the losses made by residential mortgage lenders have been borne by insurance companies under mortgage indemnity guarantee policies.

The figures shown in the annual accounts are after taking account of these recoveries from insurance companies.

A large part of commercial property mortgage lending is made by the large banks rather than by building societies. Under the Building Societies Act lending on commercial real estate as a share of total lending is restricted. This makes the figures not totally representative.

## **11. Austria**

The capital losses for Austria over the period 1989-1994 were very low. The average loss as a percentage of outstanding loans was 0.03% for residential mortgages, 0.07% for commercial mortgages and 0.47% for loans not secured by a mortgage. These results are very similar to the German results. In the first three years 25-30% of the market was captured. In the last three years the market share was 60-65%.



### **ANNEX 3: TRANSPOSITION OF DIRECTIVE 98/32 ON COMMERCIAL MORTGAGE PROPERTY LOANS**

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Directive 98/32/EC determines the weightings of commercial property mortgage loans. The decision or derogation to weigh commercial property mortgage loans at 50% was left optional and can be extended to all Member States by supervisors that so wish until 31 December 2006. The deadline for the transposition of the directive (i.e. implementation into national legislation) was 21 July 2000.

The directive empowers national supervisory authorities to authorise their credit institutions to apply a 50% risk weighting to loans, fully and completely secured by mortgages, on offices or on multi-purpose commercial premises situated within those Member States that allow the 50% risk weighting. The 50% risk weighting applies to the part of the loan that does not exceed 50% of the market value or 60% of the mortgage lending value, whichever is lower. Federation experts have commented, in the two attached tables, on the current status on the transposition of directive 98/32/EC in their countries. Supervisory authorities in Denmark, Germany, Greece, Italy, Luxembourg, Austria and Portugal have decided to allow their credit institutions to weight commercial property mortgage loans at 50%.

**Table 1 – Transposition of Directive 98/32/EC - Commercial property mortgage loans and MBS – September 2000**

Country	Original Status	Current Status	Comments
B *	100%	50%	The directive was transposed into Belgian law in July 2000.
DK *	50%	50%	The directive has been transposed into Danish legislation by executive order no. 890 of September 21, 2000 on capital adequacy for mortgage banks. The implementation has made it possible to weigh commercial property loans at 50 per cent.
D *	50%	50%	The directive has been transposed into German law the 25 <sup>th</sup> August 2000.
EL	50%	50%	Anticipates transposing the directive soon. Already apply 50% weighting.
E *	100%	100%	Approved legislation has confirmed that Spain will <u>not</u> opt for the moment to weigh commercial property at 50%. Directive 98/32/EC (which modifies the 89/647/EC Directive) has been transposed into Spanish legislation by the Ministerial Order of April 13 <sup>th</sup> 2000 <sup>7</sup> . This order does not include or cover the 50% weighting
IRL *	100%	100%	The 50% weighting for commercial mortgages will <u>not</u> be introduced in Ireland; however, the <u>50% weighting for residential mortgage backed securities will be introduced</u> . The Central Bank will allow Irish institutions to weight qualifying loans on commercial property that are situated in a State which allows the 50% derogation, to be risk weighted at 50%. (Central Bank of Ireland Implementation Notice 3/7/2000).
I *	100%	50%	The directive is already implemented with 50% weighting for commercial property. Regulation no. 229 issued by the Bank of Italy on 24/4/99 allows this weighting.
L *	100%	50%	The directive has been transposed with the 50% weighting.
NL	100%	100%	The Dutch authorities will <u>not</u> implement the option in the directive to apply a 50% weighting for commercial property loans in the Netherlands. When Dutch banks lend to counter-parties in countries applying the option (i.e. Germany) a 50% weighting is allowed.
P *	100%	50%	In Decree 263/2000 (18/10/00) the Portuguese authorities have transposed the directive. Portuguese credit institutions can now weigh commercial property mortgage loans and MBS at 50%.
A	50%	50%	Implemented
S *	100%	100%	As from 1 <sup>st</sup> July 2000 the Swedish law gives the Financial Supervisory Authority the possibility to allow a 50% weighting when Swedish credit institutions grant commercial property loans in countries that have the 50% weighting rules for such loans. The Supervisory Authority will approve such a weighting under the conditions mentioned in directive 98/32/EC. The same rules apply to mortgage-backed securities.

<sup>7</sup> In Spain 13th of April Order modifies Order of 29<sup>th</sup> December 1992 concerning own resources and supervision of agencies and Order of 30 November concerning solvency rules of credit institutions.

UK *	100%	100%	The UK has transposed the directive but has decided <u>not</u> to implement the optional 50% weighting. All commercial property loans continue to receive a 100% weighting in the UK.
N *	100%	100%	The directive was transposed into Norwegian law/regulation on 21 June 2000. The transposition did not change the original 100% weighting of commercial property mortgage loans and MBS.

\* This means that the legislation has been transposed into national legislation.

**Table 2 – Questionnaire on Transposition of Directive 98/32/EC - Commercial property mortgage loans and MBS**

	<b>1. Do credit institutions in your country have the possibility to weigh at 50% commercial property loans they grant abroad in countries that have the 50% weighting for such loans?</b>
<b>B</b>	Yes
<b>DK</b>	With the implementation of the directive into Danish legislation it is possible for Danish mortgage banks to weigh commercial property loans in other member countries at 50 per cent, if the country in question allows 50 per cent's weighting.
<b>D</b>	German credit institutions have the possibility to use a 50% weighting in those countries where their local banks are granted a 50% weighting on commercial property loans
<b>EL</b>	Although directive 98/32/EC is scheduled to be transposed into national law by the end of this year, banks already apply the provisions of the above Directive (50%). This favourable weighting applies also to commercial property loans granted to borrowers in other Member States.
<b>E</b>	No, the Spanish credit institutions do not have the possibility to weigh commercial property loans they grant abroad at 50%.
<b>IRL</b>	Yes, see Ireland's answer in Annex 1
<b>I</b>	Yes
<b>L</b>	Yes
<b>NL</b>	Yes
<b>P</b>	No
<b>S</b>	Yes, see Sweden's answer in Annex 1.
<b>UK</b>	No
<b>N</b>	No
	<b>2. As far as you are aware have the authorities in your country notified the European Commission of their transposition of the Directive into national legislation or of their intention to do so? If yes, when did, or when will they do this?</b>
<b>B</b>	The directive was transposed into Belgian law in July 2000. It is not known whether or not the Commission has been notified.
<b>DK</b>	The directive was transposed into Danish law on September 21, 2000. It is not known whether the Danish authorities intend to inform the Commission of the implementation of the 50% weighting of commercial property loans.
<b>D</b>	No new notification of 50% weighting expected.
<b>EL</b>	Notification will take place when the directive 98/32/EC will be transposed into national law by a Bank of Greece Governor's Act.
<b>E</b>	As the Spanish supervisory authorities have decided not to make use of the exception to the main rule on the risk weighting of loans secured by mortgages on offices or on multipurpose commercial premises, there is no need to inform the European Commission.
<b>IRL</b>	The Department of Finance has notified the Commission on the transposition of the directive.
<b>I</b>	The directive has been notified with Regulation no. 229 issued by the Bank of Italy on 24.4.99
<b>NL</b>	Not known.
<b>S</b>	The directive has been transposed into Swedish law on July 1, 2000. It is not known whether or not the Commission has been notified.
<b>UK</b>	The directive has been transposed into UK law. It is not known whether or not the Commission has been notified.
<b>N</b>	It is assumed that the Norwegian Ministry of Finance has notified the European Commission of the transposition in accordance with the procedures laid down in the European Economic Area (EEA) Agreement.

## **ANNEX 4 – INSURANCE OF MORTGAGE LOANS**

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The European Mortgage Federation carried out an extensive study entitled Mortgage-Related Insurance in Europe in 1988. The majority of country findings in the study remain valid today and they are summarised below:

### ***Introduction***

With respect to the security lenders in Europe take in addition to the property itself, the study indicates that there is no single best practice. Each country has a unique housing finance system that has been shaped by housing policy, the structure of the financial system and the taxation system. There are a number of types of security sought by lenders of which bank guarantees and insurance policies are the most common.

One conclusion that can be drawn from the study is that mortgage insurance does enable higher percentage loans to be made than would otherwise be the case, and also significantly reduces the risks faced by lending institutions. In turn, high percentage loans can, depending on the relationship between property prices and incomes, allow people to become owner occupiers, either who could not do so at all, or an earlier age than would otherwise be the case.

### ***Insurance of Mortgage Loans***

There are several methods by which lenders protect themselves against default by borrowers:

- by the whole loan being insured;
- by the amount of the loan exceeding a set percentage of the valuation of the property being insured;
- by borrowers being required to contribute separately to a reserve fund to cover losses (the system used by Danish mortgage lenders) and;
- by borrowers being required to provide guarantors (as in Germany and France).

There is a close relationship between mortgage insurance and lending terms:

- the mortgage insurers may effectively determine lending criteria, for example loan to income and value limit and;
- mortgage insurance may be needed for all loans or simply for loans which fail to meet certain criteria.

### ***State Assistance***

There is no common approach to state assistance (which can be seen as a form of mortgage insurance) to help borrowers who get into difficulties with their repayments. A number of countries have general provisions to help the unemployed but some, such as Spain and Portugal, do not make specific provisions for homebuyers who become unemployed. In other countries, such as Denmark, Norway, Germany and the United Kingdom, there are specific support provisions, but these have various restrictions to their application. Most Member States target their support to the lower income family groups

In Belgium and the Netherlands, certain categories of homebuyers can obtain support at regional or municipal level. In Germany, certain federal States (Länder) have special provisions in addition to the national support system. As with some other countries, France and Italy direct their main housing subsidies to enable low-income family groups to buy their own homes.

### ***Insurance to Protect Borrowers***

In addition to lenders protecting themselves, in a number of countries, there are schemes to protect borrowers by insuring against loss of income through unemployment, illness etc.

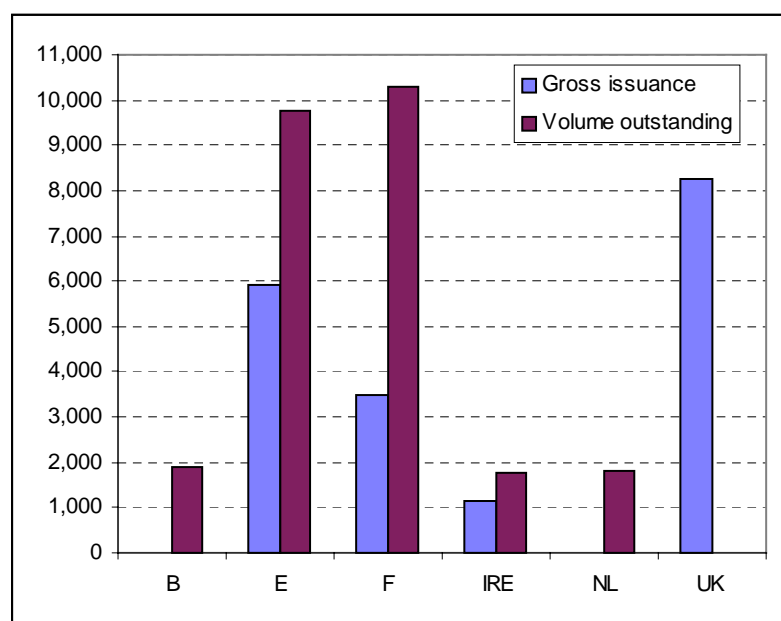
### ***Insurance-Linked Loans***

In some countries, loans can be linked to insurance policies; interest only is paid on the loan and simultaneously premiums are paid to an endowment insurance policy which is used to pay off the loan. In most countries, term assurance pays off the loan in the event of the death of the borrower.

### ***Property Insurance***

In some countries, lenders have a legal right to insist that the mortgaged property is adequately insured. This may be done by the lender effecting the insurance or by having adequate arrangements for ensuring that the borrower effects the necessary insurance. The premium may be added to the loan and repaid through monthly repayments or it might be paid directly to the insurance company.

Figure 1 - European MBS: market size & importance as a funding instrument (EUR million, 1999)



Country	% gross residential mortgages	% residential mortgages outstanding
B	0%	3%
E	14%	6%
F	9%	4%
IRE	18%	7%
NL	0%	0,7%
UK	4%	See footnote
EU	4%	0,8%

Belgium refers to 1998.

The ING Barings report on securitisation for the first quarter of 2001 estimates that, as at 1/1/2001, £STG. 19.4 billion of residential MBS backed by UK mortgages was outstanding (3.6% of the total UK mortgage book).

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Table 1: Overview of legal systems for securitization in Europe

	Legal framework	Comments
<b>Austria</b>	No	N/A
<b>Belgium</b>	Yes	Royal Decree of 29/11/1993
<b>Denmark</b>	No	N/A
<b>Finland</b>	Yes	N/A
<b>France</b>	Yes	N/A
<b>Germany</b>	No	Possibility of ABS/MBS issuance since 1997 following appropriate clarification by the Bakred
<b>Greece</b>	No	N/A
<b>Ireland</b>	No	Only control of the operation by the Central Bank of Ireland
<b>Italy</b>	Yes	Law n° 130/99. Weighting depends on the nature of the underlying assets and on the composition of the portfolio.
<b>Luxembourg</b>	No	N/A
<b>Norway</b>	No	N/A
<b>Portugal</b>	Yes	A very detailed regulation was voted in November 1999 but Portuguese banks or issuers are reluctant to use this type of operations
<b>Spain</b>	Yes	N/A
<b>Sweden</b>	Yes	New legislation on securitisation comes into force on 1/6/2001.
<b>The Netherlands</b>	Yes	N/A
<b>United Kingdom</b>	Yes	N/A

Source: Dexia Capital Markets Credit Research and EMF

## ***Annex 6 - Mortgage-Backed Securities in Europe***

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In a number of European countries, mortgage loans are also funded through the issuance of mortgage-backed securities (MBS). Overall, however, their use remains rather limited. The EMF estimates that around 1% of the total value of residential mortgage loans outstanding in the EU (end 1998) are funded by this method<sup>8</sup>.

The UK is the largest MBS market in the European Union. New issues of MBS in 1999 totalled EUR 8.2 billion, which represents 4.5% of gross mortgage lending in the period. MBS are becoming more popular as a method of removing assets from balance sheets to reduce the amount of capital which has to be retained. As the market for mortgages becomes more competitive in the UK the use of MBS is likely to become more common.

In Ireland, securitisation has increased in importance as a funding source as more mortgage lenders acquire the expertise and systems required to issue MBSs. Outstanding residential mortgages total 26.2 billion EUR and the level of outstanding securitisation is now approximately 2.4 billion representing circa. 10% of the total – a ten fold increase over two years. With the volume of new lending increasing each year on the back of the buoyant Irish economy, lenders are likely to look to issues of MBSs to move quality existing loans off the balance sheet and hence free up capital for additional new lending.

Elsewhere in Europe, securitisation of mortgage loans has been relatively active in Spain (3.2 % of mortgage lending in March 1999) and France. Other countries that issue MBS include the Netherlands, Belgium and Germany but activity remains limited. MBSs have not been issued in Denmark, Greece and Austria. As for the other Scandinavian countries, some UK-style MBSs were issued in the beginning of the 1990s.

In June 2000, a 1 billion EUR issue was made by a Swedish issuer using UK-style techniques. MBS and mortgage bonds are both based on the concept of using the mortgage loans held by an institution as collateral for the issuance of debt securities in the capital market. But beyond this common element, the two are quite different.

The difference may perhaps best be seen by summarising the process of production of a new mortgage loan into the following three phases: A mortgage loan is extended to the borrower (also referred to as « origination »). Similar loans are then grouped or bundled. The mortgage loan is funded. The process whereby a mortgage credit institution issues a mortgage bond combines these three phases. The same institution carries out all the phases. It originates the mortgage loan and issues the securities to fund the loan.

Securitisation, on the other hand, « **unbundles** » this process. The credit institution creates a legal entity known as a Special Purpose Vehicle (SPV) and sells mortgage loans that it has originated (« receivables ») to this SPV. The purpose of the SPV is to isolate the receivables and the associated cash flows from the originator and to perform certain other closely related operations (such as restructuring of cash flows and credit enhancement). The SPV issues the securities which are sold to investors. (If the originating institution continues to participate, it is usually as « service », i.e. collector of principal and interest payments and processor of other related back-office functions.)

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<sup>8</sup> This estimate excludes the UK. Recent figures from the UK suggest a slightly higher figure for the total value of residential mortgage backed securitisations outstanding in the EU. The ING Barings report on securitisation for the first quarter of 2001 estimates that, as at 1/1/2001, £STG. 19.4 billion of residential MBS backed by UK mortgages was outstanding (3.6% of the total UK mortgage book). Industry sources estimate that MBS issuance in 2000 was £STG 13.4 billion compared to £STG 5.1 billion in 1999.



## **ANNEX 7 – EFFICIENCY OF MORTGAGE COLLATERAL**

This table outlines the estimated time and cost taken for procedural steps with respect to enforcement (i.e. recovery with respect to mortgage collateral) in a number of European countries. It summarises the findings of a 1993 comparative study by the European Mortgage Federation on real estate enforcement procedures in the EU.

Country	Procedural steps - total costs of sales prices	Total time taken by the procedure on average		
		<u>Legal minimum</u>	<u>Legal maximum</u>	<u>In practice</u>
BE	16 and 23%	1 year (if the release of registration is done out of court)		
DK	3-4%	-	4 to 6 months	-
DE	4% for a sales price set at 100,000 Euro plus 2% tax on property transfer and registration costs of the new ownership in the land register.	On average 12 to 18 months are necessary		
GR	16%	6 to 15 months		
ES	15% to 5% of the price obtained, inversely proportional variation to this price	From the submission of the petition to obtaining the title deedf <u>2 years</u> on average.		
FR	10-12%	291 days	295 days	707 days
IE	about 10%	10 to 16 months		
IT	on average: 18-20%	3 to 5 years		
LU	1% to 3%	about 12 months		
NL		+ or - 3 months		
AT				
PT	20% for small amounts and 1% for bigger ones.	88 days	73 days	168 days
FI				
SE				
UK	4,74% for a sales price set at 100,000 ECU	12 months on average		
NO				

## ***Annex 8 – Maturity and Mortgage Lending***

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A 1996 empirical study<sup>9</sup> on commercial mortgage credit in Germany shows clearly that the losses are concentrated in the first few years especially for loans with a low LTV ratio.

Subsequently loss rates tend to zero independently of the LTV ratio. In 1990, Van Order<sup>10</sup> looked at a dataset containing 725,000 single-family fixed rate mortgage loans purchased by Freddie Mac. The default hazard<sup>11</sup> profile peaked at year 4 to 5 after loan origination which reinforces the German data above. Using the Van Order data and assuming an average LTV ratio of 80%, the cumulative hazard of a loan aged over 7 years to become a default should be only a fourth of the cumulative hazard of all loans.

In Germany, for instance, the loss rates for long-term residential mortgage loans of 0.05% (0.03% for LTVs of 60%) and 0.08% for long-term commercial mortgage loans (0.04% for LTVs of 60%) show that long maturities do not lead to higher loss rates.

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<sup>9</sup> Time Profile of Commercial Mortgage Default, empirica, Bonn, Germany, 1996

<sup>10</sup> Van Order, R. The Hazards of Default. Secondary Mortgage Markets. 1990

<sup>11</sup> The hazard rate is the conditional probability of the event of “default” occurring in the period observed given that the credit was still alive at the beginning of that period.

## Annex 9 : Typical Mortgage Products

The Federation has examined what can be described as 'typical mortgage products' in Member States of the European Union and Norway and the findings are outlined below.

The differences across European mortgage markets are caused by differences in the property market (stock of dwellings, housing tenure structure, owner-occupation, private and social rental, financial instruments used to finance the housing sector, etc.) and in the construction industry (number of building permits issued, housing completions, number of transactions, etc.). The general economic situation will also have a direct impact on the mortgage market. When the economy is growing and employment is rising, households increase their demand for housing and for housing finance. Despite economic convergence in Europe, significant differences remain in the fundamental macroeconomic variables (GDP, unemployment, inflation, etc.) from one country to the next. It is these differences that shape the development of the mortgage markets.

The table below gives an overview of a 'typical mortgage product' in Member States of the European Union and Norway. Original duration (or the time until expiry date), for instance, can be 30 years in Denmark, Germany, the Netherlands, Austria and Sweden.

**Table 1 - Loans amount, original duration and LTV ratios in European countries (1999)**

Country	Mortgage loan (EUR)	Original duration (years)	Loan-to-Value	
			Average	Absolute max.
DK	107 000	30	N/A	80%
D	174 000 <sup>Notes</sup>			%
EL	35 000	Conversion rates for non euro area countries:		
E	67 500	EUR / DKK = 7.4627		%
F	80 000	EUR / GRD = 330.300		%
		EUR / SEK = 8.5625		%
IRE	92 000	EUR / GBP = 0.6217		%
		EUR / NOK = 8.0765		%
I	62 000			%
NL	122 000			%
A	105 000	Source: European Mortgage Federation and national sources		
S	136 000			%
UK	105 000	© European Mortgage Federation		
				%
N	108 000	20-25	70%	80%

## ***Annex 10 - Initial Findings on Arrears, Defaults, Losses and Mortgage Lending***

### ***Arrears***

Typically, “arrears” refers to the situation where the borrower does not perform the payment of an instalment on the due date. A loan with arrears is an “overdue loan” and the aggravation of the credit situation gives rise to a “doubtful loan”. Normally, the writing off of a doubtful loan from a lender’s credit account is not really implemented until the end of the enforcement procedure. The classification of doubtful loans differs between countries as illustrated in the table below.

***Table 1 – Classification of Doubtful Loans***

<b>Country</b>	<b>Past Due Date</b>
Denmark	14 days (need for more precise national legislation)
Germany	2 repayments missed
Greece	After 3 months
Netherlands	After 3 months
Italy	Time is not a relevant factor (according to Bank of Italy)
Sweden	After 60 days

### ***Default***

Typically, “default” refers to the situation where the borrower does not perform the payment of arrears either within the prescribed period set by national legislation or after having been advised in writing by the lender of an agreed new due date. There are diverging definitions for the concept of “default” as illustrated in the table below.

***Table 2 – Definitions of Default***

<b>Country</b>	<b>Definition of Default</b>
Denmark	Agree with the typical definition above, 3-4 months is considered an approximate time after a payment is overdue and a loan is classified as in default.
Germany	Definition corresponds with typical definition but supervisors do not specify a period after which lenders should declare a borrower in default
Greece	After 6 months of non-payment
Italy	Definition is open to any event likely to lead to default
Netherlands	Foreclosure after an arrears/default period of 12 months of non-payment
Sweden	At least one of several conditions in the Consumer Credit Act should be fulfilled
UK	No legal definition but 3 months in arrears is definition suggested by the Data Protection Registrar

### ***Enforcement***

Typically, the “foreclosure procedure” refers to the action of a mortgage lender in exercising his or her right (in principle, with recourse to either laws or courts) to fix a new date by which the borrower, who

has failed to repay a debt by the due date, must pay the debt. If the borrower fails to do so, the lender obtains statutory or judicial permission to sell the property.

### **Actual Loss**

The “actual loss” is the amount not recovered on a mortgage loan after foreclosure procedures. It is the difference between the total debt and the foreclosure value of the collateral. The total debt is stated as the debt outstanding of the loan including overdue payments, lay-day costs and auction/sales costs.

The Greek, German, Italian and Dutch understanding of the notion of actual loss corresponds to that in the above paragraph. Provisions for future losses are taken into account in Greece, Sweden, the Netherlands and the United Kingdom but not in Germany and Italy. In Sweden, there is a regulatory right to make provisions for future losses estimated on a portfolio basis. In the UK, the provisions are based on expected losses.

### **Expected and Unexpected Loss**

The actual loss can be broken down into “expected loss” and “unexpected loss”. The expected loss is the average likelihood of a loss to any particular class of borrower. The risk of a loss is a cost of extending credit and the lender usually is compensated for this through the rate of interest charged and the credit spread. A lender should normally estimate its expected loss correctly and set aside the appropriate amount of risk provision. Therefore, the loss amount exceeding the risk provision is usually the unexpected loss. This definition corresponds to the definitions in most of the countries surveyed.

### **Credit Risk Management**

The main ratios used to monitor and measure credit risk (in relation to arrears/defaults, actual losses, expected losses and unexpected losses) are outlined below.

#### **In Germany**

A common theoretical approach to measure and reduce risks is the portfolio selection theory from Markowitz. The risk of a portfolio P is:

$$E([Q_{pt} - Q_p]^2) = \sum_j a_j^2 E([Q_{jt} - Q_j]^2) + \sum_{i \neq j} a_i a_j E([Q_{it} - Q_i] * [Q_{jt} - Q_j])$$

In the following case the risk is reduced by avoiding parallel risks:

$$E([Q_{it} - Q_i] * [Q_{jt} - Q_j]) = 0 \text{ (risk diversification)}$$

#### **In Greece**

There is no standardized approach to these matters. Some banks tend to monitor arrears against the total size of the loan portfolio

**In the Netherlands:**

$$\text{Rate of infection} \equiv \frac{\Sigma (\text{loans with some defaults})}{\text{Total value of loan portfolio}}$$

The rate of infection provides an “early warning system” to the lender.

$$\text{Rate of arrears} \equiv \frac{\text{Total value of arrears in the loan portfolio}}{\Sigma (\text{Loans with some arrears})}$$

The rate of arrears provides an indication as to the severeness of the arrears.

Dutch financial institutions nowadays also make use of risk adjusted return on capital (RAROC) and Risk Adjusted Performance Measurement.

**In Sweden:**

- Loan loss level, %
- Provision ratio for doubtful claims, %
- Share of doubtful claims, %

**In the United Kingdom<sup>12</sup>**

- Number of months in arrears = the value of arrears / the expected payment this measure will change according to the prevailing mortgage rate and is therefore difficult to compare through time e.g. when mortgage rates are high the number of months in arrears, for the same value of arrears is lower.
- Percentage of balance in arrears = value of arrears / total outstanding balance including arrears

$$\text{Rate of arrears} = \text{number of loans in arrears} / \text{total number of loans}$$

**Timeline**

The timeline developed below is intended to reflect that in the event of non-performance of a payment obligation there are usually three different processes:

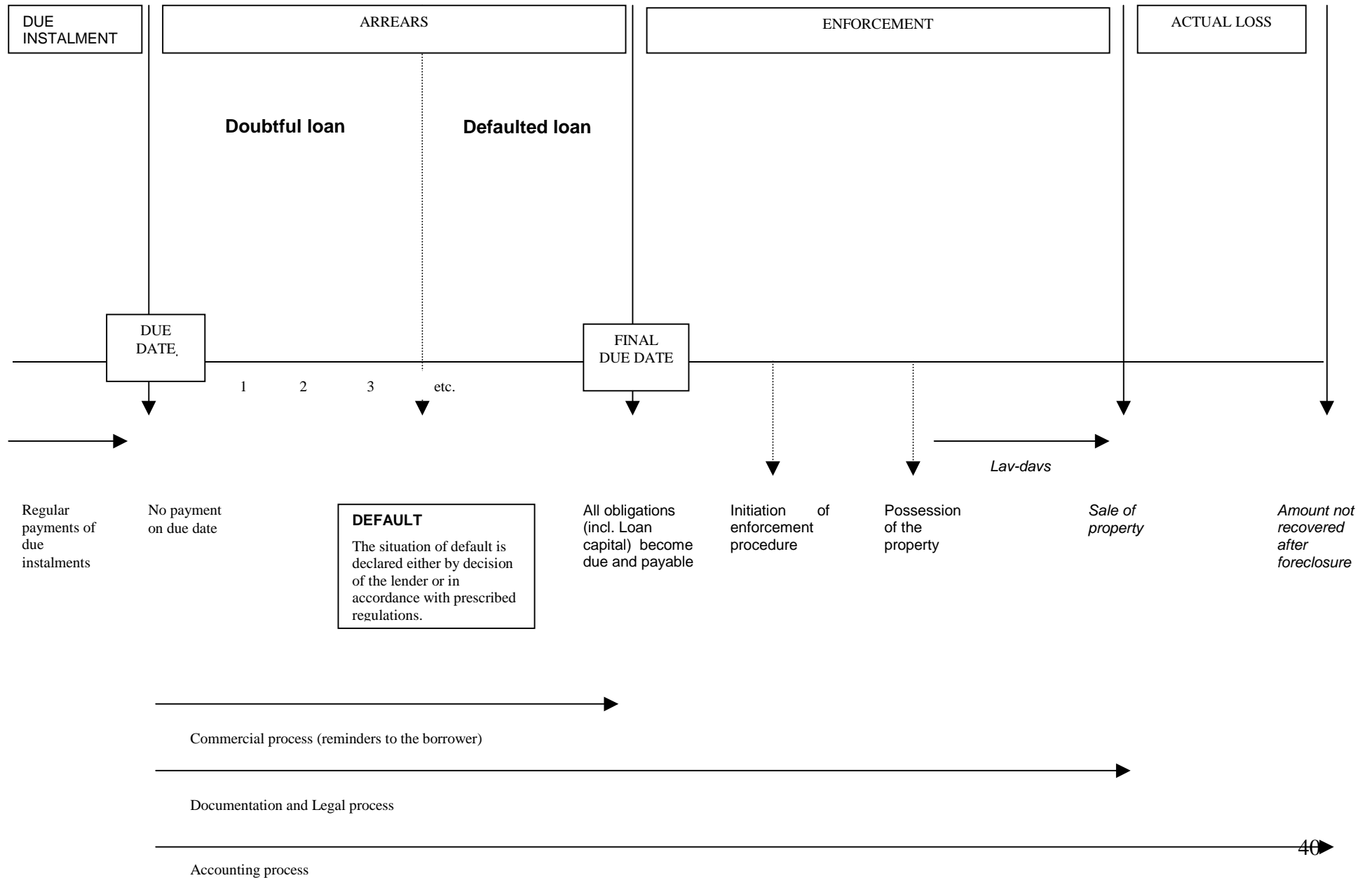
- During the *commercial process*, the lender tries to persuade the client who misses one or more payments to correct the situation. If necessary and possible, amiable arrangements are concluded. This process is usually backed by supporting documentation.
- The *legal process* can lead the lender to request the reimbursement of the loan in full and to foreclosure.
- The *accounting process* records provisions, write-offs and losses incurred by the lender taking into consideration the mortgage collateral and other security. It is not necessarily related to actual default since provisioning is based on past rather than current experience.

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<sup>12</sup> All data is on a number of mortgages basis rather than value



## TIMELINE FOR ARREARS, DEFAULTS AND LOSSES





**Annex 15 - Data on losses for lending on commercial property with respect to the IRBA for corporate exposures**

As is the case with residential mortgage lending, commercial mortgage lending is less risky than other lending. The longest available series of figures on losses on lending by Danish mortgage banks – from 1975 to 1999 – covers all mortgage loans on residential and commercial property. In the period, the losses on mortgage loans were on average 0.22% compared to an average of 1.15% for losses on all lending by the Danish commercial and savings banks. By a fixed ratio calculation based on the period 1990-99, for which more detailed information is available, the 0.22% average for all mortgage loans compares to about 0.1 % for residential loans.

In the period 1994-98, for instance, losses of the mortgage banks in Denmark on lending for commercial property purchase averaged 0.254% compared with losses on all lending by the commercial and savings banks which averaged 0.7%.

An extensive survey was undertaken in Germany, which shows that commercial mortgage lending had an average loss rate of only 0.08% from 1988 to 1998 (for LTVs of 60% or less and for LTVs between 60% and 100% the loss rates were 0.04% and 0.18% respectively over the same period). For consumer lending over the ten-year period the average loss was 0.26%.

The findings of the 1995 RICS survey with respect to lending on commercial property are outlined in table 1 below. The complete findings of the survey are detailed in Annex 2.

**Table 1: Average percentage loss on commercial property lending**

Country	Period	Average percentage loss
DK***	84-89	0.17
	90-94	1.228
	84-94	1.08
DE	89-94	0.04
BE	89-90	0.04
FR	92-94	0.36
IT	90-94	0.40
LUX	91-94	0.32
PO	90-94	0.06
SP	89-94	0.36

Source: 1995 RICS Survey on Property Lending

\*\*\* From 1990 onwards, the data on losses in Denmark includes provisions for future losses.