

## Capital requirements for mortgage lenders — international convergence

By Michael Bridgeman

**F**INANCIAL institutions require capital for three main reasons. Such an institution needs it in order to have:

Capacity to meet losses — revenue as well as capital — without prejudicing depositors.

Capacity to buy time, to allow the institution to adjust to the unexpected, to shift its pattern of business.

Capacity to maintain confidence, both in the institution and in the financial sector generally.

The second and third reasons turn to a significant extent on factors external to the institution, and so the scale of the resultant need for capital is not determined solely by its particular mix of business.

Before turning to what that implies for mortgage lenders, it is important to note that specialist housing finance institutions differ significantly in the way in which they finance their lending. Mark Boleat distinguished three in his book *National Housing Finance Systems*, namely:

Through issuing mortgage bonds: this system is the sole one used in Denmark, and is an integral part of the German system. A variant of it, mortgage backed securities, has been used in the United States and is now appearing in the United Kingdom.

Through savings contracts: the unique method developed by the German and Austrian Bauspar-kassen.

Through deposits: the method

THIS paper attempts to identify the implications for specialist mortgage lenders of the various moves for convergence of capital requirements for deposit taking institutions — the Cooke Committee in Basle, the second EC directive for credit institutions, and other measures associated with it. I first discuss in broad terms how far the risks faced by, and so needs for capital of, specialist mortgage lenders are common between different countries, and how far they diverge. I then outline the rationale behind those international proposals for convergence of standards for capital. Finally, I bring those together, in terms of the implications for the specialists in Europe.

The Building Societies Commission, which I chair, was appointed under the Building Societies Act 1986 to regulate building societies, both prudentially and more generally. The main part of the paper reflects the approach of this Commission to capital adequacy, and of the United Kingdom authorities (that is, the Treasury, the Bank of England and this Commission) to convergence. The final section, looking forward, gives my personal views: neither the Commission nor the Government has yet taken a view on them.

used by UK and Irish building societies and by US savings and loans.

At first sight the risk of capital loss on a mortgage loan itself may appear similar in different countries, whatever the method of financing. In all

cases a capital loss for the lender requires both

- (a) the failure of an individual's covenant to repay, and
- (b) the subsequent failure to recover the outstanding balance of loan on sale of property

But even that risk can depend significantly on national characteristics and practices:

the income criteria applied to potential borrowers; and the extent of any previous track record which is normally required, differ (the contract system is clearly best for this);

the percentage of the value of the property lent differs — generally only up to 80% in Germany but often 95% to 100% in the UK; the characteristics of the housing market differ: the exposure to swings in value depends critically on those characteristics including differences between new and second hand property markets. The market in turn is influenced by factors specific to the country — demographic trends, the role of the rented sector, etc.

Further, the implications for the institution of making a capital loss on mortgage loans may be very different. On the deposit and contract method it falls on the institution — so capital is needed to cover it. On the bond method, the loss may fall on the bondholder, depending on the particular variant. If it does, the

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institution's need for capital is correspondingly less.

Moreover, credit risk is not the only risk which a mortgage lender faces. Interest rate risk can be as important for a specialist mortgage institution, if not more so. Indeed, exposure to such interest rate risk was the major source of problems for savings and loans in the United States, at least in their first round of problems at the end of the 1970s.

But that interest rate risk can be avoided in some systems, and contained in others. The mortgage bond system can avoid it, provided the life of the loan and the life of the bond are matched. Under the German contract system it is avoided by fixed rates on both sides. In the United Kingdom deposit system it has been contained by variable rates on both sides.

Indeed, the irony is that in Britain, interest rate risk has only tended to cause problems hitherto on building societies' holdings of medium and long dated fixed interest government stock, rather than on mortgages: over the past 30 years this has been one of the two most frequently occurring factors for those few societies which have run into difficulty.

There is also the problem for specialist institutions of concentration. Experience in other groups of financial institutions has clearly demonstrated how problems can arise from over exposure to one sector. For example, the property crisis which affected British banks in the mid '70s, the over exposure of some banks to shipping loans in the late '70s, over exposure to aircraft at the turn of the decade, over exposure of banks in the United States "Sun Belt" to agriculture in the mid '80s, and, most recently, over exposure to oil in Texas.

The risk from concentration on owner occupied housing may be less, but is not non-existent. The falls in the last decade in the residential property market in Holland and Germany show what can happen. Here again the extent of exposure differs between countries. Moreover the potential consequences of concentra-



*Michael Bridgeman: interest rate risk can be avoided.*

tion are much more important for a free standing building society than for a Bausparkasse which can be viewed as part of a larger, and more diversified, financial group.

This discussion has only touched the surface of the problem of assessing the adequacy of capital. But I hope that I have said sufficient to show:

the extent of the risks faced, and so need for capital, for a specialist housing finance institution depends to a large extent on choice of system of financing; and in determining the need for capital, differences between specialists in systems of financing outweigh similarities in terms of purpose of loans and nature of security.

#### *International convergence: the need*

The recent international proposals for convergence stemmed from growing concern in the "G10" countries (the original European Six, plus Canada, Japan, the United Kingdom, and the United States) about capital standards for international banking.

The risks of competitive erosion of standards, as national supervisors gave way to pressure not to put their banks at a relative disadvantage, had become increasingly important because of the internationalisation of banking. There was a real danger of a resultant weakening of the world financial system. Accordingly, it was necessary to call a collective halt to such erosion, and to reverse the process.

Agreement was reached this summer in the Cooke Committee, that is, the Committee on Banking Regulations and Supervisory Practices, which meets under the aegis of the governors of the central banks of the G10 countries. That agreement has been endorsed by those governors and it applies to banks operating internationally based in any of the G10 member states.

The conference of all international banking supervisors in Tokyo is expected to urge wider acceptance—to all countries and to a wider range of institutions.

In the case of the European special-

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ist lenders, the effect will come through parallel developments in the European Community as part of a move to a single European market by 1992. That move requires application of the principle of recognising home country authorisation: a bank, based and authorised in, say, France, will be able to operate in any other member state on the strength of that authorisation, without further authorisation from the host state. The draft Second Directive for credit institutions provides for that.

But such mutual recognition presupposes certain minimum supervising standards applied throughout the European Community, in order to give reasonable reassurance to member states that relaxation of host country supervision will not put their investors at risk, and to provide for reasonable competitive equality.

Accordingly satellite directives have been prepared for "Own Funds" and "Solvency". It is envisaged that they will be consistent with the Cooke proposals, although there may possibly be drafting differences due to their being statutory. To help achieve such consistency Directorate General XV of the European Commission has been represented at the meetings of the Cooke Committee for the past 18 months.

#### *International convergence: methodology*

Any system for setting standard capital ratios for a diverse range of institutions has to strike a balance between what is practicable, and suiting the assessment to the circumstances of the individual institution. The need for practicability will inevitably lead to an element of rough justice. The wider and more diverse the group of institutions covered, the greater the element of such rough justice.

It is important not to be too concerned at this. First, the case for suiting the need for capital to the particular institution can be overstated: as I have already noted, an important role of capital is to give the institution, and the part of the finan-

cial sector in which it operates, a capacity to adjust to the unexpected — to shocks such as those following the oil price shifts in the mid '70s. This latter element is not dependent on a particular mix of business or of assets. Second, at the end of the day the assessment of capital is not an exact science: the supervisor may have to end the debate and impose his view.

The simplest test of all would be a standard minimum capital ratio, expressed, say, as a ratio of capital to total liabilities to depositors (including shareholders in the case of building societies); but even that raises issues of definition of capital.

The Cooke Committee went one major step towards suiting the requirement to the character of the business. It built on the "risk assets" approach used by many supervisors in the past decade. Instead of relating capital available to the total size of the balance sheet, it related it to the weighted total of assets, the weights used reflecting in a very broad way the relative degrees of risk associated with broad groups of assets. The agreement requires the ratios calculated on this basis to reach 8% by 1992.

The main categories, and weights adopted are:

#### Main Risk Weight Categories

	Risk Weight %	Corresponding element of; 8% ratio
Cash claims on Central Government/Central banks in national currency	0	0
Claims on banks incorporated in OECD	20	1.6
Short-term claims on banks outside OECD		
Claims on multi-lateral organisations		
Loans fully secured by mortgage on residential property	50	4
Claims on the private sector. Fixed assets. All other assets	100	8

The last column in the table shows each weight translated into a capital requirement, namely, what it would be if the institution were required to meet only the 8% minimum risk assets ratio.

The 50% weight for residential

mortgages is one of a series of compromises between differing approaches on particular elements, which were reached in order to produce an overall package which makes sense as a totality and on which all could agree.

The difference in this case was over the approach to the treatment of collateral for loans — other than government guarantees. National banking supervisors have adopted different approaches. Some supervisors have adopted the line that many, if not most, loans have some form of security or collateral, but with varying degrees of effectiveness. It is impracticable to draw a line between classes of collateral, so all loans to the private sector should carry the same weight. This has been the approach of the Bank of England.

Other supervisors have differentiated loans by the existence of collateral — and this has gone wider than the mortgage loans.

The resultant compromise recognises collateral for residential mortgages only. This has been accepted by the first group of supervisors on the grounds that residential mortgages are *sui generis*, and relatively easily identifiable. They are uniquely secured in the sense that the borrower risks eviction from his home if he defaults. In virtually every country the track record on defaults and losses is significantly better than on the

generality of loans to the private sector. It has been accepted by the second group on the basis that half a cake is better than nothing.

Two other aspects of the Basle agreement are important for the

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implications for specialist mortgage lenders. First, the Cooke Committee's report points out that the risk assets ratio is primarily directed to credit risk, and that there are other risks which may be as important. It specifically identifies three elements of position risk — investment risk, interest rate risk and foreign exchange risk — as requiring further attention and study. Second, it recognises that for this, and other reasons, national supervisors may want to apply higher standards.

#### *Implications for mortgage lenders*

Thus although the G10 convergence exercise did not cover specialist lenders directly, those in Europe will be affected through the move to mutual recognition of authorisation of credit institutions in the EC based on a general minimum risk assets ratio requirement. Building societies, Bausparkassen and other specialist housing lenders will have to meet that minimum requirement by 1992.

But it would be wrong to go on from that to say:

"the correct capital backing for any lending on residential mortgage is 4%"

and then to use that as a basis for determining the appropriate capital backing for specialist mortgage lenders.

As I sought to bring out in the last section, the Cooke proposals seek to provide a very broad assessment of relative degrees of risk between international banks with differing degrees of involvement in the residential mortgage market. But in none of these banks will residential mortgages be a major element in the balance sheet. It would therefore be wrong to take the 50% weight out of context, to apply it, as the sole test to a specialist institution which has a major part of its assets in that form. The Cooke proposals as they stand would not allow in such a case for:

concentration of risk by the specialist,  
interest rate risk,  
the method of financing referred to earlier.

All three, as we have seen, can be as critical as credit risk in determining the capital requirements of specialist lenders. Further, there is the need to allow capital for the overall strength of the institution and of the financial system.

I would accordingly be surprised if any national supervisor found the Cooke Committee minimum standard as sufficient by itself for a mortgage finance institution: he will want to allow in some way for those other factors.

These comments on the applicability of the Cooke system to mortgage specialists would probably be echoed by most national supervisors considering other specific groups of institutions, particularly the more specialist ones. The unavoidable breadth of the "broad brush", and the incomplete coverage, make it inevitable that most national supervisors will want to take the option of higher national standards, to enable them to take account of particular characteristics, and so differentiate between institutions for which they are responsible.

#### *The United Kingdom as an illustration*

In the United Kingdom, the two supervisory authorities for deposit takers, the Bank of England and the Building Societies Commission, have already indicated that they will take this option of higher standards. But it appears likely that the Bank and Commission will follow different approaches, reflecting the marked difference in the two constituencies — the Bank's heterogeneous, the Commission's relatively homogeneous — at least for the foreseeable future.

The Bank of England has already indicated that it will use the "broad brush" methodology of Basle, but set different levels of risk asset ratios for individual institutions. There will continue to be broadly similar ratios for groups of banks with basically the

same business, but a wide spread between the ratios for different groups such as, say, clearing banks, finance houses and, in the future possibly, converted former building societies.

The Building Societies Commission is at present inclined to take the alternative approach, using a more specific methodology to provide a better fit to circumstances of institutions, but pitching the levels so that all complying with it will also meet the requirements of the international minimum standard. This is practicable with the more homogeneous group of 120 societies supervised by the Commission.

This distinction in the method of applying what is essentially the same approach already exists. In 1985-86, when the Building Societies Act 1986 permitting diversification was imminent, those of us preparing for it sought to develop a system for capital adequacy with the following objectives:

to achieve a general level of capital requirements which appeared broadly reasonable in relation to that required for other financial institutions, notably British banks, but taking account of the different composition of business;  
to produce a system which differentiated that requirement in respect of each society's

- (a) mix of existing mortgage business;
- (b) extent of exposure to interest rate risk due to holdings of fixed rate government stock ("gilts");
- (c) extent and forms of use of new powers, eg, consumer credit, housing developments;

to enable a society planning diversification to know readily the capital requirements associated with options it might be considering.

Those objectives were taken up by the Commission when it was formed. The Bank of England's broad brush grouping would not have achieved the second objective, and probably not the third either. The Commission

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accordingly adopted a finer calculus for the requirements than that used by the Bank of England. The main elements, simplifying somewhat, are:

societies meeting it would also meet the EC minimum;

	Capital Requirements
<b>Mortgages</b>	
" Mature " — over 5 years old	1%
" Core " business	2%
High percentage advances to owner-occupiers	4%
Advances to housing associations	4%
Advances to other corporate bodies	6%
<b>Consumer Credit</b>	
Existing borrowers	15% (or 7.5%)
Others	20% (or 10%)
<b>Liquid Assets</b>	A maturity related scale

Some of the propositions in the new approach to capital adequacy came as a "culture shock" to societies. But the system has stimulated thought in societies on what capital is for, and the relative risk of different aspects of their business. It has successfully differentiated between societies. At the end of 1987 the spread of the requirement for capital over the normal range of societies was 60%; in other words, the requirement for a society at the top of the range was more than half as much again over that for one at the bottom of the range.

We are due to review this system with societies, some time in the next year or so. We can already see some respects in which we may want to change. The treatment of interest rate risk is one such — we want to explore the possibility of adopting a system which takes account of net exposure for all types of assets and liabilities, rather than just gross exposure on fixed rate "government securities". But it appears very doubtful whether we would be ready to use at that stage just the "broad brush" categories which Basle considered appropriate for the much more heterogeneous groups of institutions covered by it.

It is likely that the Building Societies Commission will: continue to use a methodology specific to the situation of societies; set its general level so that

have regard to EC relativities in setting our own more detailed ones;

monitor the position of each society also on an EC basis to ensure that the second point is, in fact, achieved.

That last, while necessary to meet EC obligations, should be very much a safety check — a computer calculation. I would expect the Building Societies Commission to have required corrective action by a society in a weak capital position in relation to its requirements before that society was at risk of not meeting the EC requirement.

So the marginal capital requirement for the expansion of activities by a society will depend on the Commission's calculus, *not* the EC requirement. In particular, there will continue to be differentiation between categories of residential mortgages — it will not be 4% for all.

It should not be difficult for societies to meet a capital requirement based on this dual approach. A trial calculation for the 50 largest UK societies on the Basle basis showed

#### Solvency ratios on the Basle basis of 50 largest societies, end of 1987

Solvency Ratio	No. of Societies
8-9%	6
9-10%	15
10-12%	21
12-14%	2
over 14%	6
Weighted average ratio 9.34%	

that they all met the 8% minimum on that basis at the end of 1987.

To generalise, I would expect the effect of the Basle/EC standards on specialist institutions in several other countries to be indirect, as it is likely to be in the United Kingdom. National requirements will be pitched at a level consistent with the international standards, rather than being replaced by those international requirements, at least for some time to come.

#### Further developments

On that basis, I would expect each of the relevant national supervisors to adopt a different means of fitting the specialist mortgage institutions in its country into the regulatory framework for "credit institutions", in the EC sense, as it is adapted to meet the EC minimum standard. The route chosen will depend in particular on:

- whether the institutions are independent, or parts of larger financial groupings;
- the scope and range of business;
- the method of financing;
- the structure of the mortgage and housing markets;
- whether the relative scale of the institutions is such as to merit a distinct approach;
- intended extent of operation in other countries or other markets.

I would not, for example, expect the same capital requirement for a German Bausparkasse, providing second mortgages, but within a limit of 80% of value, charging a fixed rate of interest, but financed by the contract method, and a British building society, providing first mortgages, but up to 100% of valuation, charging a variable rate of interest and financed by deposits (or shares).

So it is doubtful whether it is desirable or practicable to have a single EC standard for specialist mortgage institutions. It seems preferable that they should meet EC standards for the generality of credit institutions *and* whatever standard their national supervisor deems appropriate to them.

But that is not to say there is no role

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for harmonisation. There appears to be a very real, but more modest one.

Both prudence and equality of competition point to the need for institutions lending on mortgage in the same member state, and using the same method of financing, to have broadly the same capital requirements. This will be achieved under existing procedures where the institution from another member state operates through a subsidiary based in the host county: the subsidiary will have to be capitalised to the host's standards. But that will not apply automatically where the institution operates through a branch, or even without any established presence in the host country.

There is accordingly a need for a means of ensuring that, say, a UK building society using the deposit based method of financing mortgage advances in Germany through a United Kingdom subsidiary, has capital for that operation comparable to that required for German institutions doing that type of lending on a deposit based method. My understanding is that the German analogue would be a bank, or savings bank, rather than a Bausparkasse.

Similarly, the capital backing for the operations in the UK of a Danish mortgage bank issuing bonds should be comparable to that of some of the new UK specialist institutions using similar techniques, rather than that for building societies financed by traditional methods.

This approach of applying the other regulator's capital requirements is analogous to that which we are already applying within the United Kingdom: a building society engaging in securities business has to do so through a subsidiary which is capitalised to meet the requirements of the Securities and Investments Board. It may not be critical to apply it internationally at present when specialist institutions are putting, at most, only a toe in the water in other member states. But it would seem essential to have done so before such institutions do engage in cross-border operations

on a scale which is substantial in relation to their balance sheets.

## *Summary and conclusion*

### **Capital for specialists**

The extent of risk, and so need for capital, for a specialist housing finance institution depends to a large extent on choice of system of financing — bond, deposit or contract;

this difference outweighs similarities between specialists in terms of purpose of loans and nature of security;

### **International convergence generally**

Agreement on an international minimum capital standard is essential

— for the continued health of international banking generally

— for the move to the single market in the EC, and the principle of mutual recognition of home country authorisation;

the international standard is inevitably broad brush. The present risk assets approach achieves

## *'Impetus of the European market'*

a useful degree of differentiation of the requirement to recognise the characteristics of individual bank's business. But it does not cover all risks, notably position risk;

in particular, the agreement on the 50% weight for mortgages represents a view that:

"the relative minimum capital requirements for banks engaging in international business will better reflect the relative degrees of risk if those with significant residential mortgage books can attach a weight of 50% to them";

### **Implications for housing finance specialists**

The decision to attach a 50%

weight to mortgage lending for international banks, should not be interpreted as implying a view that 4% is the appropriate backing for all mortgage lending by any lender and in particular for a specialist institution;

more generally national supervisors are likely to require higher standards of their institutions than the Basle or EC minimum; the effect of the Basle/EC standards on specialist institutions in several countries, including the United Kingdom, is likely to be indirect. They will lead to national requirements being pitched at a level consistent with them, rather than replacing those national requirements, at least for some time to come;

### **Future developments**

It would be misconceived to seek to develop a common capital standard for specialist mortgage finance institutions;

the next step forward could be to ensure that there is sufficient co-operation between national supervisors, so that capital requirements are broadly the same in respect of mortgage lending in the same state financed in the same way, irrespective of who is the "home supervisor".

I have concentrated on capital requirements and prudence. That is the role of the prudential supervisor. But I would like to end on a more positive note.

The single European market will give a further impetus to the changes which are already happening in financial institutions and markets. It will bring both opportunities and risks, for specialist housing institutions, like all other financial institutions. It is the response of those running building societies and their European counterparts which will determine whether they successfully rise to the challenge, or whether they wither away. The field is theirs. ■

*MICHAEL BRIDGEMAN is chairman of the Building Societies Commission, the regulatory body for Britain's building societies.*