

To provision or not to provision

Banks' provisioning practices have come under increased scrutiny over recent years from accounting and taxation authorities and from financial supervisors. In part, this scrutiny reflects the important role that provisioning for loan losses plays in enhancing the transparency of banks' balance sheets and the impact it has on the volatility and cyclicity of bank profits. Moreover, proposed reforms to the Basel Capital Accord have served to focus attention on the respective roles of provisions and capital in protecting a bank from credit losses.

Provisioning practices have come under greater scrutiny ...

This growing interest is evident in a number of recent policy proposals and initiatives. These include: the development of an International Accounting Standard that addresses loan valuation and provisioning (IAS 39); the issuing of guidance on sound practices for loan accounting by the Basel Committee on Banking Supervision; the introduction of statistical provisioning regimes in some countries; and proposals by the Joint Working Group of standard setters to introduce fair value accounting for all financial instruments.

While there are common elements to these various initiatives, there are also some significant differences. Importantly, opinions differ over the extent to which an objective deterioration in credit quality needs to be identifiable in individual loans before a provision can be created, and over the effect of loan pricing on provisioning decisions. Opinions also differ as to the relevant horizon for measuring expected credit losses and the appropriate interest rate to discount future cash flows.

... but perspectives tend to differ ...

These differences of opinion reflect, in part, different perspectives. On the one hand, financial supervisors have tended to emphasise the role that provisions can play in ensuring that banks maintain adequate buffers against future deteriorations in credit quality. On the other hand, accounting authorities have stressed the importance of provisions in generating fair and objective loan valuations.

... between bank supervisors and accounting authorities

This special feature discusses the main characteristics of a number of the recent initiatives and proposals, paying particular attention to the tensions amongst them. It also lays out a simple framework within which various proposals can be embedded and considers a number of alternatives to the current arrangements.

Provisions: issues and policy initiatives

Typically, the creation of a provision (or allowance) for impaired loans leads to a charge to the bank's current profits. It also leads to a writedown in the net asset value of the bank, most often through a reduction in the measured value of loans. In principle, provisioning should lead to a more accurate picture of both a bank's earnings and its assets than would be the case if all loans were measured at their outstanding value.

The way in which provisioning is actually conducted varies considerably around the world, although accounting practices commonly distinguish between specific and general provisions. Specific provisions are normally made against losses on individually assessed loans, while general provisions are made against portfolios of loans.

A basic accounting principle that applies in most countries is that financial statements should reflect the outcome of events that took place before the balance sheet date, and should not attempt to reflect events that have not yet occurred. This principle makes it difficult for a bank to create a specific provision against an individual loan unless there is verifiable evidence that a loss is "probable". As a result, specific provisions tend to be backward-looking.

General provisions can be more forward-looking, although there is significant variation across countries. In some countries, banks have been able to base general provisions on their own statistical models of the average losses that are expected due to the non-repayment of contracted amounts. In principle, these models can take account of likely future developments, including business cycle effects. In other countries, the rules are more restrictive and can be thought of as analogous to those governing specific provisions, except that the credit evaluation is done on the basis of a portfolio, rather than on a loan by loan basis. In general, bank supervisors have been more supportive of liberal general provisioning regimes than have accounting and securities authorities. In a number of countries, supervisors have been instrumental in banks increasing their general provisions during periods of deterioration in the credit quality of loan portfolios.

One rationale for the generally backward-looking nature of provisioning rules is that they limit the scope for bank management to manipulate a bank's accounts, either to minimise taxation or to obscure fluctuations in underlying earnings. However, these rules also mean that provisions typically increase in an economic downturn and only after a significant deterioration in credit quality has already occurred (Graph 1). This pattern is a major factor driving the strongly procyclical nature of recorded bank profits. Moreover, it can be seen as contributing to the overall cyclicity of the financial system and the macroeconomy more generally.¹

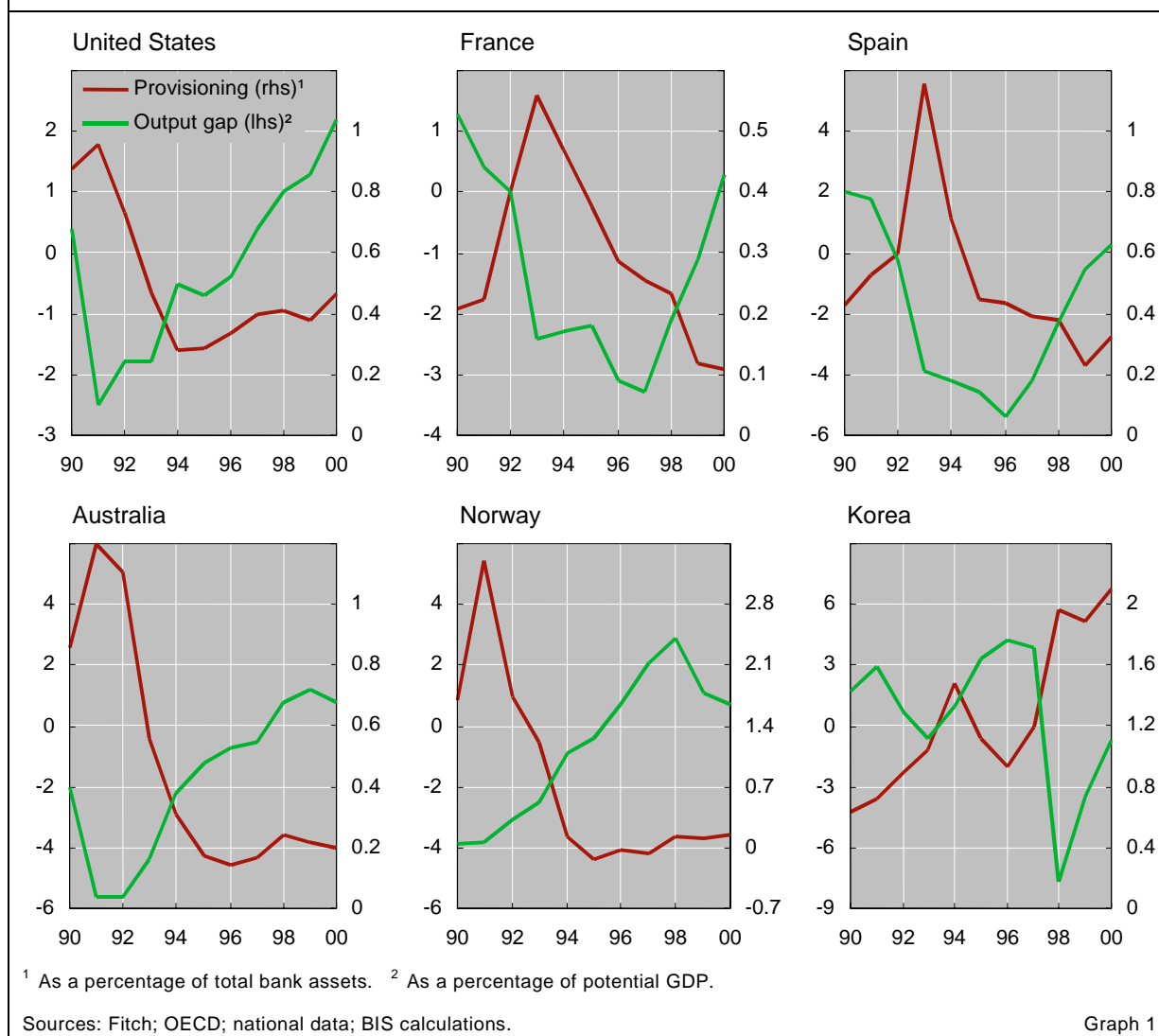
¹ For a more detailed discussion of this issue, see Bank for International Settlements (2001), *71st Annual Report*, and C Borio, C Furfine and P Lowe (2001), "Procyclicality of the financial system and financial stability: issues and policy options", *BIS Papers No 1*, pp 1-57.

Specific provisions tend to be backward-looking ...

... while the approach to general provisions varies considerably across countries

Backward-looking rules reduce potential manipulation but can contribute to financial cycles

Bank provisioning expenses and output gaps



Over recent years, these different perspectives have been reflected in actual and proposed changes to both national and international accounting standards. Table 1 provides a stylised summary of how the various approaches differ in some key dimensions. Each of these approaches is discussed below.

IAS 39

At the international level efforts have been under way for some time to narrow differences in the national treatment of provisions. The effort by the accounting profession has been undertaken under the auspices of the International Accounting Standards Board and is reflected in the development of International Accounting Standard 39 (IAS 39). Under this standard, loans would normally be carried at their outstanding value unless there is “objective evidence” of impairment.² When such evidence exists, the carrying value of a

Accounting standards require objective evidence of impairment ...

² The standard came into effect at the beginning of 2001. Loans held for trading purposes and loans available for sale are to be measured at their fair value.

loan should become the present value of the expected future cash flows discounted at the loan's original effective interest rate.³ The difference between the outstanding value of the loan and this present discount value would then be charged to the income statement. In practice, this difference is called a provision (either general or specific) or an allowance.

... limiting the scope for forward-looking provisioning

The standard provides examples of what constitutes "objective evidence", with most of them being backward-looking. One possible exception is that the objective evidence test can be satisfied if a "historical pattern ... indicates that the entire face value amount of a portfolio of accounts receivable will not be collected". Given that a bank is unlikely to expect that all loans will be repaid in full, this condition may allow the establishment of provisions on a similar basis to that currently used in some countries to determine general provisions.

Fair value accounting

An alternative approach is to adopt full fair value accounting for loans as part of a more general move to fair value accounting for all financial instruments.⁴ This approach has recently been advocated by the Joint Working Group of standard setters (JWG).⁵ If it were to be adopted, the notion of provisioning for impaired loans would most likely disappear. Instead, loans would be recorded directly at

Approaches to provisioning and measuring expected losses				
	IAS 39 ¹	Fair value accounting	Statistical provisioning	Proposed capital regulation (expected losses)
Trigger	Objective evidence	No	No	No
Horizon	Residual maturity for impaired loans	Residual maturity	Average default losses	One year
Discounting of cash flows	Discount expected cash flow using original effective interest rate	Discount contracted cash flows using market interest rate ²	No discounting	No discounting
Pricing taken into account	Yes	Yes	No	No ³
Provision at origination	No	Possible	Yes	–

¹ IAS 39 allows provisions on a portfolio basis provided that individual loans are not of significant size and have not been considered individually impaired. ² Equivalently, expected cash flows can also be discounted at the expected rate of return required by the market. ³ The Basel Committee is considering allowing banks to take account of loan pricing in calculating expected losses in the retail portfolio.

Table 1

³ If the loan has a variable interest rate, the effective rate is calculated using the current loan rate according to the contract. The effective interest rate is defined as the rate that exactly discounts the expected future cash flows to the outstanding value of the loan. In many cases, though, for loans originated by the bank the contracted cash flows are used in the calculation. The effect of this is to overstate the losses from impairment (see the box on page 44 for a simple example).

⁴ Fair value is defined as the price that would be received if the loan were sold in an arm's-length exchange motivated by normal business considerations.

⁵ See Financial Instruments Joint Working Group of standard setters (2000), *Draft Standard and Basis for Conclusions*, International Accounting Standards Committee.

their fair value with changes in fair value flowing through to a bank's income statement. Equivalently, one could retain provisioning, with provisions set to equal the difference between the outstanding value and the fair value of any loan.

This approach to loan valuation is clearly forward-looking. It is also often seen as objective, particularly given its reliance on market prices. However, where market prices do not exist, some subjectivity is inevitable given the need to estimate fair values using a pricing methodology. Key inputs into this process are likely to be the bank's estimate of the probability of default, as well as the appropriate market-based discount rate.

Fair value accounting is forward-looking ...

The JWG's proposals have generated substantial comment, particularly from within the banking industry. Many of the comments have expressed concern that fair value accounting will lead to a significant increase in the volatility of banks' reported profits. A related concern is that it could also increase the cyclicity of profits since the wave of optimism and underestimation of risk that is often associated with economic booms would be translated into an increase in the fair value of loans during good times. Conversely, any tendency by markets to overestimate risk in an economic downturn could artificially depress the fair value of loans in a recession. The end result could be an increase in the amplitude of the type of financial cycles that often lie at the root of financial instability.⁶

... but it might increase the volatility and cyclicity of bank profits

Statistical/dynamic provisioning

Another approach is for banks to base their general provisions on an estimate of the long-term average losses from defaults. This approach leads to comparatively higher levels of provisioning on loans with relatively high average default rates. This is despite the fact that the interest margin on such loans might be expected to cover the higher default rates (see below).

In some countries banks have been able to use their own estimates of default losses, and have even had the flexibility of adjusting their estimates for the state of the business cycle. In other countries financial supervisors have specified provisioning requirements for various types of loans.

Spain has perhaps moved furthest in this latter direction.⁷ Under rules introduced last year banks are required to take a charge to their profits for a so-called statistical provision, with the magnitude of the charge varying across

Statistical provisioning can help reduce volatility ...

⁶ See Borio et al (op cit) on this issue. In addition, a number of other concerns have been raised regarding the JWG's proposals. These include reservations about the conceptual grounds for valuing instruments that are held to maturity on the basis of market prices, the exclusion of intangible assets from the fair value calculations, the difficulty and cost of applying fair value principles to all financial instruments and the ability of users of financial statements to interpret accounts prepared on a fair value basis.

⁷ For a fuller discussion of the Spanish approach, see R Poveda (2000), *Reform of the system of insolvency provisions*, Bank of Spain. See also S Fernández de Lis, J Martínez Pagés and J Saurina (2001), "Credit growth, problem loans and credit risk provisioning in Spain", *BIS Papers No 1*, pp 331-53. Commission Bancaire (2001), *Annual Report 2000*, also contains a discussion of the merits of statistical provisioning.

types of loans.⁸ Then, provided that the statistical fund is large enough, the charge for specific provisions that arises when loan impairment actually occurs (according to the standard definitions) is made against the statistical fund, rather than the current year's profits. The effect is to reduce year-to-year fluctuations in a bank's profits, with the provisioning charge being driven by average loss experience, not current experience.

Some supervisors see this approach as attractive, particularly given its effect on reducing the volatility of recorded bank profits. Moreover, they see it as contributing to the banking system building up financial buffers in good times that can be used to weather bad times. In contrast, accountants and many securities regulators tend to have a different view. They have argued that this form of provisioning can lead to the undervaluation of loans and to financial statements that fail to reflect the true volatility of a bank's profits. As such, it can make financial statements less transparent, increasing the difficulty that investors have in assessing the true health of a bank. A similar argument is sometimes levelled against the use of general provisions where these provisions are not used to cover the recognisable impairment of specific portfolios.

... but there are concerns about transparency

Provisions and capital

The treatment of provisions for purposes of bank capital regulation has also been a topic of considerable interest in recent times.

General provisions are an element of regulatory capital

Under current rules, some general provisions can be included in Tier 2 capital (up to a limit of 1.25% of risk-weighted assets). Moreover, under the proposed revisions to the Basel Capital Accord, capital charges under the internal ratings-based approach are calibrated to cover both expected and unexpected losses, where the expected loss is defined as the probability of default over the next year multiplied by the loss in the event of default.

Differences exist between supervisory and accounting concepts of loss

The banking industry has generally been critical of this approach, particularly given the view that the role of capital is to protect a bank from unexpected losses, rather than from losses in value that have already occurred due to deterioration in borrower quality. The industry has also noted that the expected loss concept used for capital purposes differs significantly from that which underlies the provisioning regime in IAS 39. For example, under the definition used by bank regulators, all commercial loans have an expected loss (regardless of pricing) while under IAS 39 losses are only recognised on loans that satisfy the impairment test. A number of banks have argued that these different concepts can potentially distort banks' capital and provisioning decisions.

⁸ Initially, the provisioning charges have been specified by the supervisor, although it is envisaged that eventually these could be related to a bank's internal ratings system. The statistical provisioning charge is not tax-deductible.

A simple framework

The different approaches to loan valuation and provisioning discussed above can perhaps be best understood as special cases of a more general approach.

To illustrate this, we begin by assuming that the value of a loan at any point in time can be represented by the present discounted value of the associated stream of future cash flows. There are two general approaches to conducting this calculation. The first is to discount the *contracted* cash flows using a *contracted* interest rate. The second is to discount the *expected* cash flows using an *expected* rate of return, rather than a contracted interest rate. In the usual situation in which there is a positive probability that the borrower will default, this expected rate of return is less than the contracted interest rate.

Loans can be valued on the basis of discounted cash flows ...

The former method is more commonly used, although obviously where the loan contract does not clearly specify the exact size and timing of all payments the second approach is more likely to be used. Both approaches, properly applied, should produce the same value (see the box).

... although discounting can be conducted in various ways

Within each method the discount rate can be determined by the market or can be bank-specific. The discount rate can also be fixed at origination of the loan or it can reflect the current risk profile of the loan.

For simplicity, in what follows we discount expected cash flows at an expected rate of return and consider a loan with repayment of principal at maturity. Using this approach, the value of a loan can be represented by the following:

One approach is to discount expected cash flows using an expected rate of return

$$V_t = \sum_j \frac{E(C_j)}{(1+y_j)^{j-t}} \quad j = t, \dots, T \quad (1)$$

where $E(C_j)$ is the expected cash flows in period j , and y is the expected rate of return used to discount these cash flows. The expected cash flow in each period (ignoring operating costs) is given by the interest and principal payments that are due according to the loan contract, less the expected losses from non-repayment of these contracted amounts. Denoting these expected losses in period j as $E(l_j)$ and the contracted interest rate on the loan as i , and normalising the outstanding value of the loan to 1, equation (1) can be rewritten as:

$$V_t = 1 + \sum_j \frac{E(i_j - y_j)}{(1+y_j)^{j-t}} - \sum_j \frac{E(l_j)}{(1+y_j)^{j-t}} \quad (2)$$

Now the appropriate level of provisions can be thought of as the difference between the outstanding value of the loan and the present discounted value of the cash flows. Thus the level of provisions (P) can be given by:

$$P_t = 1 - V_t = \sum_j \frac{E(l_j)}{(1+y_j)^{j-t}} - \sum_j \frac{E(i_j - y_j)}{(1+y_j)^{j-t}} \quad (3)$$

At least conceptually, a provision is required if ...

The first term on the right-hand side is the present discounted value of expected losses arising from the non-repayment of contracted amounts. The second term is the present discounted value of the differential between the contracted loan rate and the expected rate of return used to discount the cash flows. This differential is sometimes referred to as the interest rate margin. This suggests that, in principle, provisions can be thought of as the difference between the present discounted value of expected losses and the present discounted value of margin income. It is important to note that this difference could be either positive or negative.

In what follows we refer to this difference as the *embedded* gain or loss in the bank's portfolio. It is useful to distinguish this concept of loss from that of the *expected* loss, which we use here to refer to the discounted value of the expected loss from the non-repayment of amounts due. Using this terminology, a loan could have a large embedded gain, while still having a large expected loss. This would occur if the interest margin on a high-risk loan more than covered the expected losses from default.

This general approach suggests that, in principle, the creation of a provision is appropriate in three different cases.

... a loan is mispriced at origination ...

The first case is where a loan is mispriced at origination, in the sense that the present discounted value of expected losses differs from the present discounted value of margin income. Such a situation could arise, for example, if a bank underpriced a loan for purposes of maintaining market share or cementing a relationship with the borrower. Conversely, if a bank were able to exercise market power and set a loan rate above the market rate, the value of the loan would exceed the outstanding amount (provided that discounting was conducted at the market rate). At least conceptually, in the latter situation a negative provision would be appropriate.

... or the creditworthiness of the borrower changes ...

The second case is where the credit standing of the borrower changes after origination (leading to a change in the present discounted value of expected losses) but where the pricing of the loan remains fixed. Changes in credit quality can be in either direction, so that both embedded gains and losses are possible. Accordingly, provisions could again be either negative or positive.

... or market interest rates change

The third case is where the differential between the lending rate and the discount rate changes, but the expected loss profile of the borrower remains fixed. This situation arises if the discount rate is allowed to change through time, such as in response to changes in market rates. Such movements generate either gains or losses for the bank (provided that the loan rate does not also move) and this would be recognised in the creation of a provision.

For *fair value accounting*, the discount rate used for valuation is that required by the market on a loan with the same risk characteristics of the loan being valued. If this discount rate is employed (and provisions are used to replicate fair value accounting within the context of a historical cost accounting system) a provision would be created in each of the three cases discussed

Loan valuation and provisioning: some examples

This box provides some simple examples of the different approaches to valuing loans and their implications for the level of provisions.

For simplicity we consider a one-year loan of \$100 on which all payments are due at the end of the year. The bank judges that there is a 98% probability that the loan will be repaid in full, and a 2% probability that the borrower will default, with the bank receiving nothing. We take the risk-free rate to be 7% and the risk premium for this type of loan as 0.8%. Accordingly, the bank should expect to earn a rate of return of 7.8%. This requires charging an interest rate of 10%.

The value of the loan can be obtained in two ways: discounting the contracted cash flows at a contracted interest rate (10%), and discounting the expected cash flows at the expected rate of return (7.8%). Both approaches give the same result.

$$V_0 = \frac{\text{contracted cash flow}}{\text{contracted rate}} = \frac{110}{1.1} = 100$$

$$V_0 = \frac{\text{expected cash flow}}{\text{expected rate of return}} = \frac{110 * 0.98}{1.078} = 100$$

Now consider the value of the loan assuming that immediately after origination the probability of default rises to 5% and that independently the risk-free rate rises by 0.7%, so that the required rate of return is now 8.5%. If the interest rate on the loan could be renegotiated, the new contracted rate would need to be 14.21% to generate this required return. In principle, this required rate of return could be bank-specific or the market rate.

The value of the loan can again be calculated using the two approaches:

$$V_0 = \frac{\text{contracted cash flow}}{\text{contracted rate (if the loan were renegotiated)}} = \frac{110}{1.1421} = 96.31$$

$$V_0 = \frac{\text{expected cash flow}}{\text{expected rate of return (if the loan were renegotiated)}} = \frac{110 * 0.95}{1.085} = 96.31$$

The appropriate provision is equal to $100 - 96.31 = 3.69$. If the required rate used to discount is a market rate, this provision could be thought of as that needed to generate the fair value of the loan.

An alternative approach would be to discount using the expected internal rate of return at origination (IAS 39). As discussed in the text, this approach eliminates changes in value arising from changes in market interest rates. It produces a loan value of:

$$V_0 = \frac{\text{expected cash flow}}{\text{expected internal rate of return (at origination)}} = \frac{110 * 0.95}{1.078} = 96.94$$

Here, the provision would be equal to $100 - 96.94 = 3.06$, which is smaller than the provision needed to replicate fair value accounting. If the risk-free rate had fallen, instead of increasing, the reverse would have been the case.

Another alternative is to discount expected cash flows at the loan's contracted rate. This approach is preferred by a number of banks given that the contracted rate is directly observable. In this example, it produces a loan value of

$$V_0 = \frac{\text{expected cash flow}}{\text{contracted rate (at origination)}} = \frac{110 * 0.95}{1.1} = 95.00$$

and leads to an understatement of the value of the loan. Correspondingly, it generates a provision (5) that considerably exceeds the fair value provision.

above. In particular, provisions would be created for changes both in the credit quality of borrowers and in market interest rates.

In contrast, under IAS 39, the discount rate is fixed through time (at least for fixed rate loans) and so does not change with the credit quality of the borrower or movements in market rates. This means that IAS 39 differs from fair value accounting in three important ways. First, irrespective of how a loan is priced, a provision would not be created at origination. By discounting expected cash flows using the expected internal rate of return at origination, the initial value of the loan is, by construction, its face value. Second, a provision could never be negative, since provisions are only created on impaired loans, with improvements in credit quality not being recognised. Third, movements in market rates have no effect on the appropriate provision, since the discount rate does not move with changes in the market. The only possible exception to this is if movements in market rates lead to changes in the loan rate itself.

Key observations and policy options

The above discussion suggests a number of key observations and policy options. These are discussed in turn below.

Pricing matters in determining the level of provisions

A provision is not required on a correctly priced loan

If the expected rate of return on a portfolio of loans equals the required rate of return, then the current value of the portfolio should equal its face value. There are neither embedded gains nor losses (ie the portfolio is “correctly” priced). Risk premia aside, this means that the current value and the face value of the loan will coincide if the interest margin covers the expected losses from default. If this condition is met, a writedown of the portfolio’s carrying value through the creation of a provision would lead to the portfolio being valued at less than its discounted present value.

An important wrinkle arises in situations in which a bank anticipates that the expected losses on a portfolio of multi-year loans will change over time and prices the loans accordingly at a fixed rate. This situation might occur if default rates are subject to a “seasoning effect” or, alternatively, the bank expects economic conditions to deteriorate over time. In both cases, the interest received initially should more than cover the initial losses on the portfolio from default, with the excess interest income being “compensation” for the fact that, in expectation, loss rates will be higher in the future. This means that even though the loan is correctly priced at origination (and nothing unexpected occurs), provisioning in line with equation (3) is needed to ensure that the bank’s profits, and the value of its assets, are not overstated during the period of low default experience.⁹ In effect, this approach amounts to accruing interest

⁹ If there is no time profile to the expected losses and nothing unexpected happens, margin income would exactly match the credit losses in each and every period. The credit losses

at the effective yield rather than the contracted rate, although the way the accounts would be presented is clearly different.

Automatic provisioning at origination is problematic

A provision at origination is only required if the initial expected rate of return is less than the “required” rate of return. Risk premia aside, this would only occur if the initial interest margin on the loan did not cover the expected losses from default. Given that a bank is unlikely to systematically make loans with an expected rate of return below the bank’s own required rate of return (although in some cases the expected rate of return may be below the market rate), *automatic* provisioning on all loans at origination is problematic (see below).¹⁰

The relevant horizon for provisioning is the life of the loan

In determining the appropriate level of provisions, the relevant horizon is the residual maturity of the loan, not just the next year. This horizon will differ across types of loans and perhaps also through time. For many loans it will be longer than the one-year horizon that is often used for the purposes of determining a bank’s capital.

Provisions to cover expected losses for capital purposes?

If provisions are set to cover embedded gains or losses, then the level of bank capital should be determined simply in relation to the potential for unexpected losses. However, to the extent that actual provisions deviate from the embedded losses given in equation (3), an adjustment to capital is required to cover the difference. This adjustment could be either positive or negative. Moreover, given the different concepts of loss being used for supervisory and accounting purposes, the required size of the adjustment is unlikely, save in exceptional circumstances, to equal the proposed adjustment to regulatory capital for expected losses.

Looking forward, one possibility worthy of exploration is a clearer treatment of the relationship between provisions and regulatory capital. Conceptually, the most obvious way of doing this would be to exclude general provisions from capital and to set provisions so that they cover an estimate of the net embedded loss in a bank’s loan portfolio. Capital could then be calibrated with respect to the variability in those losses (their “unexpected” component). How this could be done in practice would very much depend on the precise methodology for estimating the embedded losses.

Provisions should cover embedded losses and capital should cover unexpected losses

would need to be recognised in the profit and loss statement, but net asset values would not need to be adjusted downwards through the creation of a provision.

¹⁰ It is sometimes argued that a provision should be created at origination even on correctly priced loans given that default can occur before the interest margin has been earned. However, provisioning is about expected outcomes, and it cannot be the case that loans are expected to systematically default before the payment of interest. The possibility of an unexpectedly high number of early defaults should be covered by capital.

Is forward-looking provisioning a viable alternative to fair value accounting for loans?

As noted above, a move to fair value accounting for loans could add to the volatility and cyclicity of bank profits. Given this concern, one possible alternative, particularly for non-traded loans, is for banks to recognise changes in the credit quality of their loan portfolios through forward-looking provisioning, but not recognise changes in value that arise from movements in market interest rates.

All loans could be valued on a present discounted value basis ...

One way of doing this would be to value all loans on the basis of the present discounted value of expected cash flows, with discounting at a rate fixed at origination. This could be seen as extending the valuation approach used in IAS 39 for “impaired loans” to the entire loan portfolio. The effect would be to record all loans at par at origination, but then to allow loan values to change through time in line with changes in the creditworthiness of the borrower (to the extent that loan terms do not also vary correspondingly). One consequence of this is that if a bank’s internal rating of a borrower with a fixed rate loan declined after origination, a provision would be created even though the loan may not be impaired according to the current definition. Similarly, one could envisage negative provisions being created in cases in which the internal rating of a borrower improved after origination.

... although this raises subjectivity concerns ...

This approach involves subjectivity both in the assignment of borrowers to grades and in establishing the appropriate discount rate at origination. Arguably, however, the degree of subjectivity is no greater than that involved in calculating the fair value of a loan portfolio in situations where market prices do not exist - all the more so since under the New Basel Capital Accord a bank’s internal rating system will be subject to validation by supervisors. Moreover, this approach could serve as a measured intermediate step along the path to full fair value accounting, allowing time for some of the more complex conceptual and practical issues to be resolved before passing judgment on its adoption.

... and leaves unresolved the issue of interest rate risk

Adopting this approach would leave unresolved the issue of how to account for changes in loan values arising from fluctuations in market interest rates, if this were deemed useful. In principle, one possibility would be to adjust the discount rate established at origination for movements in risk-free rates. This could give rise to both provisions for embedded credit losses and embedded interest rate losses.

Dealing with the procyclicality of provisioning

A final, yet important, issue is whether changes to provisioning practices could reduce the procyclicality of bank profits and the financial system more generally.

Forward-looking provisioning might reduce financial cycles ...

One point of view is that a move to forward-looking provisioning for the entire loan portfolio, as outlined above, would lead to credit losses being recognised earlier in an economic cycle, mitigating the large fall in bank profits that often occurs in an economic downturn. The earlier recognition of losses

might also reduce the extent to which a bank's capital is subject to large and sudden declines in an economic downturn. As such, forward-looking provisioning might be expected to make a considerable contribution to reducing the cyclical nature of bank profits and the terms and conditions under which credit is available.

An alternative view is that while forward-looking provisioning would work in this direction, the impact is likely to be relatively small. This view reflects the idea that banks (and markets) tend to underestimate both credit losses and risk in an economic upswing, and perhaps overestimate them in a downturn. The underestimation in an upswing would be reflected in the (unintentional) mispricing of loans and consequently in too little provisioning even if provisioning was forward-looking. Moreover, the underestimation of risk might also be expected to contribute to banks holding too little capital during periods of strong economic growth.

... although misassessments of risk remain a concern

One way of partly alleviating these concerns is for supervisors to require banks to create a provision at the origination of every loan. However, apart from the issue that in most countries supervisors do not set accounting rules, this approach is problematic for the reasons discussed above. In particular, it implies that loans are systematically underpriced, failing to recognise that the nature of any mispricing is likely to change over the course of a credit or business cycle. The approach could, however, be justified if it were agreed that financial statements should reflect more prudence and conservatism than might be warranted from an investor's perspective.

Other options include enforced provisioning at origination ...

Another, perhaps quite radical, approach would be to *decouple* provisions for prudential purposes from those set by accounting authorities. In particular, supervisors could supplement capital requirements with a prudential provisioning requirement. One way of doing this would be to implement a system along similar lines to that recently introduced in Spain, but instead of having the annual statistical provisioning charge deducted from a bank's profit and loss statement, have it added to the bank's regulatory capital requirement for unexpected losses.¹¹ One possible advantage of this approach is that it would require banks to hold larger capital buffers against adverse events in good times, while at the same time allowing a move towards constructing financial statements on a basis supported by the accounting profession.

... and additional capital charges to cover potential underprovisioning

Implementing such a change to capital requirements would not be without its difficulties. It would also be at odds with the notion that capital was to cover just unexpected losses. However, one justification for the approach might be that it represents a safeguard against the type of costly financial cycles that can arise from the underestimation of risk in good times. Looking forward, finding ways of dealing with these cycles is likely to be an important challenge for bank supervisors and other policymakers.

¹¹ As in the current Spanish arrangements, there would need to be a cap to the additional capital requirement and the requirement would need to be reduced when specific provisions were created.