

# Dynamic provisioning: issues and application

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This article – a companion to the quantitative analysis of provisioning by UK banks published in the June *Review* – looks at the pros and cons of ‘dynamic’ provisioning. In that approach, banks would make provisions based on the losses expected when loans are originated. This would deliver a rising stock of provisions when actual loan losses were unusually low, which would help to protect banks in periods when actual losses were high. In addition, banks’ income statements would be less distorted in periods when actual losses were significantly higher or lower than the long-run expected level.

**THERE IS CURRENTLY A LOT OF DISCUSSION** about how to value financial instruments in companies’ and – specifically in this context – banks’ financial statements. Some advocate a move to full fair-value accounting; others promote so-called ‘dynamic provisioning’. An article in the June 2000 *Review* set out some of the issues in relation to the former<sup>2</sup>; this article looks at the latter.

It first describes current practice with regard to bank loan provisioning and outlines how dynamic provisioning might work. It goes on to discuss the issues that would be involved in implementing dynamic provisioning, illustrating them with an example of a simple loan portfolio. These issues include how expectations of future losses might be set and whether dynamic provisioning could be used to smooth profits between accounting periods.

## Bank lending and the current approach to bank provisioning

Under historic cost accounting, provisions are made for losses recognised at the balance sheet date. In relation to *specific* provisions, the UK Statement of Recommended Accounting Practice (SORP) on Advances<sup>3</sup> states that:

“A loan is impaired when, based on current information and events, the bank considers that the creditworthiness of a borrower has undergone a

deterioration such that it no longer expects to recover the advance in full”.

Regarding *general* provisions, the SORP says that:

“Experience shows that portfolios of advances often contain advances which are in fact impaired at the balance sheet date, but which will not be specifically identified as such until some time in the future...To cover the impaired advances which will only be identified as such in the future, a general provision should be made”.

The distinction between the two is largely one of practical implementation: in both cases provisions are made only in respect of impairment believed to exist at the balance sheet date. The approach under US and international accounting standards is similar (Box 1).

This accounting approach is rather different from the one implicit in banks’ approach to lending. Banks expect that a proportion of their loan portfolios will be lost each year, as some borrowers will not be able to repay the loans. These are ‘expected losses’, but actual losses may clearly be different from what a bank expects *ex ante*. Such unexpected losses could arise, for example, because of an unusually severe economic downturn. When calculating the unexpected loss, banks increasingly think in terms of a confidence interval around the expected loss figure,

1: We would like to thank Alastair Clark and Patricia Jackson for many useful comments and suggestions.

2: Jackson and Lodge (2000).

3: The SORP is contained in British Bankers’ Association (2001).

## Box 1: Accounting rules for provisions<sup>1</sup>

### United Kingdom

There are few formal rules governing provisioning by UK banks. The British Bankers' Association's (BBA) Statement of Recommended Practice (SORP) on advances<sup>2</sup> suggests that (paragraphs 11–18):

- The amount of the specific provision should be the bank's estimate of the amount needed to reduce the carrying value to the expected ultimate net realisable value.
- There is no specific trigger – it is often a default event but provisions should be made whenever information suggests impairment.
- General provisions should be for advances already impaired but not yet identified as such. The assessment for general provisioning is 'inevitably subjective' but it should take into account past experience and current economic conditions.

While in practice some banks have established provisioning policies with forward-looking elements that attempt to cover some expected losses over the life of a loan, general provisions are only a relatively small part of total provisions. This is probably in part because general provisions are not tax deductible, and the Basel Capital Accord (1988) limited the inclusion of general provisions in regulatory capital to 1.25% of risk-weighted assets.

### United States

The US follows a similar system to the UK whereby provisions only cover loan losses already in the portfolio. Financial Accounting Standards Board (FASB) Statement 5<sup>3</sup>, 'Accounting for Contingencies', states that an accrual for losses should be made when it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated.

FASB staff have recently noted that, under US Generally Accepted Accounting Practices (GAAP), "Losses should not be recognised before it is probable that they have been incurred, even though it may be probable based on past experience that losses will be incurred in the future"<sup>4</sup>.

For banks, the US arrangements include an Allowance for Loan and Lease Losses (ALLL) to absorb estimated existing credit losses<sup>5</sup>. It is the responsibility of the board of directors and management of each institution to maintain the ALLL at an adequate level, though it is recognised that determining this level requires a substantial degree of judgement. To ensure the ALLL is reasonable, bank examiners look at the quality of a bank's credit risk measurement and management systems, and also carry out quantitative analyses of the ALLL, as part of a comprehensive assessment of the loan portfolio and the factors affecting its collectibility. When examiners conclude that a bank's ALLL falls short of an appropriate level, the bank would be expected to increase its provisions.

### International Accounting Standards

Publicly listed EU companies must implement International Accounting Standard (IAS) standards<sup>6</sup> by 2005. IAS 39 covers recognition and measurement of financial instruments, including impairment of financial assets. IAS 39 considers a loan impaired if, on the basis of objective evidence, it is partly or wholly uncollectable, so that its carrying amount is greater than its estimated recoverable amount. Objective evidence in this context includes: 1) significant financial difficulty of the issuer; 2) actual breach of contract; and 3) a high probability of bankruptcy. Another criterion is a historical pattern of collections of accounts receivable that indicates that the entire face amount of a portfolio of accounts receivable will not be collected – this is a concept closer to forward-looking expected loss.

1: Beattie et al (1995) provide a detailed discussion of the accounting, tax and regulatory treatment of loan loss provisioning internationally.

2: See British Bankers' Association (2001).

3: FASB (1975).

4: FASB (1999).

5: Federal Reserve Board et al (1993).

6: International Accounting Standards are set out in IASB (2002).

that will not be exceeded in more than a specified proportion of time periods.

In pricing loans, banks will in principle set interest margins to cover both expected losses and to remunerate the capital held to cover unexpected losses. This margin typically contributes to income over the life of a loan. By contrast, actual losses do not arise smoothly, because they are influenced by a wide variety of often unpredictable factors.

The present accounting treatment does not raise problems for loan valuation if the margin charged fully covers the expected loss, but it can create distortions, at least in terms of timing, in measuring banks' income. It can lead to large profits during booms (when actual losses are typically low), and large losses in recession (when actual losses are high), even if over the whole period margin income exactly offsets expected losses. This volatility in measured income may impart volatility to the wider economy. This could arise, for instance, if higher conventionally measured profits and rising capital encouraged banks to expand their lending procyclically. Concerns about the implications of the treatment of banks' margin income and expected losses are not new – they were raised, for example, by the Bank in the mid-1990s<sup>4</sup>.

#### **Dynamic provisioning, bank income and bank capital**

One alternative approach to the current method of measuring bank loan losses and income is 'dynamic provisioning'. The fundamental principle underpinning dynamic provisioning is that provisions are set against loans outstanding in each accounting time period in line with an estimate of long-run, expected loss. Generally, the level of provisioning on this basis would be less subject to sharp swings stemming from the strength of economic activity than the current approach. Loan losses would impinge on banks' profit and loss accounts and balance sheets more smoothly than at present, because of the primacy of expected, rather than actual, losses in a dynamic provisioning approach.

There is no single, agreed specification of how dynamic provisioning might be implemented in

practice. This article therefore discusses the main principles with the aid of a simple example that illustrates the key features. In broad terms, dynamic provisioning would build up a buffer (reserve) to cover expected loss from the time a loan is taken on. The reserve would build up in any year in which actual losses fell short of expected losses, while in years in which losses exceeded the expected level, the reserve would be drawn down. Some major international banks already set provisions on this basis for internal management accounting purposes.

An important issue would be precisely which losses would impinge on banks' profit and loss accounts in a given accounting period. The basic principle behind dynamic provisioning indicates that banks' income would no longer be measured net of actual losses, but net of contributions to the expected loss provision. Actual losses would be set against the expected loss provisions, including expected loss provisions accumulated in past years. However, if a bank made a loss that was greater than the accumulated dynamic provision, then it would probably be appropriate for the excess to feed through directly into the profit and loss account.

The actual losses that could be set against the expected loss reserve could in principle encompass both loan impairments against which specific provisions are made and write-offs. In the discussion and examples below, actual losses are represented solely by specific provisions. Write-offs (which remove loans from a portfolio entirely) would only have an additional impact on a bank's income to the extent that they had not already been provided for through appropriate specific provisions.

In theory, banks' equity capital<sup>5</sup> should be used purely to cover unexpected loss, with expected losses – ie those anticipated at the outset – covered by lending margins. However, as noted above, in most countries at present there is no systematic mechanism for ensuring that a reserve to cover expected losses is established. The proposed new Basel Capital Accord<sup>6</sup> sets regulatory capital requirements to cover both expected and unexpected losses. Were dynamic provisioning to

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4: Bank of England (1995). The Bank noted that "Banks tend to expand their loan books in an economic upturn and take all the income from the new lending into profit, even though part of the lending margin was charged to cover expected future credit losses".

5: Equity capital (shareholders' funds) is available to absorb losses while a bank remains a going concern. Some classes of capital which qualify for regulatory capital purposes (for example subordinated debt) help to protect more senior creditors of a bank but do not provide a buffer against insolvency.

6: For a summary of the design of the new Basel Accord, see Jackson (2001) and the article in this *Review* on 'Bank Capital: Basel II Developments'.

become established practice, however, it would be relatively straightforward to recalibrate the Accord to take this into account<sup>7</sup>. Another issue in relation to the Accord is that bank regulatory capital is defined to include general provisions, up to a ceiling<sup>8</sup>. This definition was set when the existing Basel Accord was agreed in 1988. If the Accord were recalibrated to cover just unexpected losses, then to the extent that general provisions are thought to cover an element of (forward-looking) *expected* losses, the definition of regulatory capital would need to be changed to exclude general provisions.

### Implementation of alternative approaches to provisioning

A simple numerical example is used below to compare the present, historic cost approach to provisioning with a 'dynamic' approach. The example taken is a loan portfolio of 100 units (for example, 100 individual loans each of 1 unit). The loans are assumed to be of 5 years' maturity; with a fixed interest rate of 6% and funding costs of 4%, implying net interest income of 2%; expected losses of 1% per annum; and actual (percentage) loan impairments – for which specific provisions are made – of zero in the first two years, and 1%, 3% and 1% in years 3–5 respectively<sup>9</sup>.

#### Historic cost accounting

This is the current approach.

Table 1:

#### Historic cost accounting

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Balance sheet</b>					
Loans balance sheet value	100	100	100	100	100
Stock of specific provisions (end-year value)	0	0	1	4	5
Loans balance sheet value net of provisions (end-year value)	100	100	99	96	95
<b>Income statement</b>					
Net interest income	2	2	2	2	2
Specific provision charge	0	0	1	3	1
Total P&L	2	2	1	(1)	1

This example illustrates the volatility which historic cost provisioning can produce: the P&L account swings from a positive balance of 2% of asset value in years 1 and 2 to a loss of 1% in year 4.

#### Dynamic provisioning

Dynamic provisioning recognises that in practice the year-to-year patterns of expected and actual losses are likely to differ. A forward-looking provision, based on long-run expected annual losses, is made each year.

In the balance sheet, actual losses (specific provisions) would be deducted from the accumulated expected-loss provisions as and when they occur. In every year in which actual losses are less than the expected loss charge, the stock of expected-loss provisions would increase; similarly, it would fall if actual losses in a period exceeded the expected level. In the P&L account, expected losses would be charged against the current year's P&L. Any 'unused' expected loss provision would be unwound if and when the relevant portfolio matured.

It should be emphasised again that there are a range of ways in which the principle of dynamic provisioning could be implemented: a number of implementation issues are discussed below. Table 2 shows the mechanics for our simple example; this is intended to do no more than highlight the broad properties of a dynamic approach.

The table shows how dynamic provisioning might, in principle, be reflected in the bank's balance sheet and

Table 2:  
Dynamic provisioning

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Balance sheet</b>					
Loans balance sheet value	100	100	100	100	100
Stock of specific provisions (end-year value)	0	0	1	4	5
Stock of expected loss provisions (end-year value)	1	2	2	0	0
Stock of total provisions (end-year value)	1	2	3	4	5
Loans balance sheet value net of provisions (end-year value)	99	98	97	96	95
<b>Income statement</b>					
Net interest income	2	2	2	2	2
Expected loss provision charge	1	1	1	1	1
Total P&L	1	1	1	1	1

income statement. In the balance sheet, a stock of expected loss provisions builds up in the early years when actual losses are low, but is then run down as actual losses materialise. In the income statement,

7: Though a complication would arise if not all countries adopted dynamic provisioning, or if different countries used different provisioning schemes.

8: General provisions count as part of 'Tier 2' capital, up to a ceiling of 1.25% of risk-weighted assets (and subject to the requirement that the total of Tier 2 cannot exceed Tier 1; the latter is primarily shareholders' funds).

9: In this example, for clarity of exposition, net interest income is not reduced in the light of loan impairment. If, for example, it were reduced in line with the ratio of the stock of specific provisions to the total portfolio at the end of the previous year, it would be marginally lower in years 4 and 5 (at 1.94 and 1.76, respectively).

expected losses are set against net interest income. There would only be a need to make a further charge in respect of specific provisions if it was not possible to cover these in a given year from the accumulated expected loss reserve<sup>10</sup>; that is not the case in this example. The profile for the bank's reported income is much more stable in this example than under historic cost accounting.

It was argued above that dynamic provisioning along the lines of the example might better capture the economic substance of bank lending than current accounting rules. This is broadly the approach adopted since 2000 in Spain – described in Box 2.

The greater stability of the bank's income under dynamic provisioning is dependent on actual losses fluctuating through time. In the unlikely event of actual losses being smooth, and fairly closely in line with expected loss, the results of the current and dynamic approaches to provisioning would not differ greatly.

Greater stability of bank income would also require dynamic provisions to be built up ahead of any downturn – which would not be possible if a dynamic approach were introduced when an economy was in recession. In addition, it depends on banks being able to estimate long-run expected losses reasonably accurately.

### Issues in the implementation of dynamic provisioning

A range of issues would need to be resolved before dynamic provisioning could be implemented in practice, including those discussed below.

*Would banks be able to form reliable estimates of long-run expected loss?* Banks must form some view of likely future losses in order to price loans. Furthermore, banks aspiring to use the internal ratings approach in the new Basel Accord will need to make estimates of this kind<sup>11</sup>. These will typically be based on data relating to past losses, though banks do need to take into account factors which might cause losses to behave differently in future.

While the authorities could prescribe standard assumptions, it would seem preferable for banks to estimate expected losses using their own information, because uniform assumptions would not necessarily reflect the situation of individual institutions.

*Should there be a single dynamic provisioning reserve?*

It might be preferable for separate reserves to be established for different portfolios (eg corporate lending, retail lending etc) rather than a single reserve being put in place. Separate reserves would reduce the scope for an exceptionally large loss in one part of a bank's business to be set against an expected loss reserve built up to cover losses in the bank as a whole. It might mislead users of financial statements if a large loss on, say, a single project-finance exposure caused by factors specific to that project could be offset against a bank-wide reserve, thereby perhaps preventing the loss having any immediate impact on P&L. If there were separate reserves for different portfolios, large losses could be set only against the reserve for the relevant portfolio.

*Accommodating changes in expected loss and interest margin income.* In general it would be expected that banks would set margins to cover expected losses, so that dynamic provisions would be made out of margin income. However, even if the margin on a loan is initially set to reflect the expected loss, over the lifetime of the loan the two may diverge so that margin income falls short of expected loss. This could reflect changes in expected loss or a change in margin because, for example, fixed-rate lending is financed by floating-rate funding. In implementing any new approach to provisioning, it would be necessary to decide whether provisions should be made against any such divergence between expected loss and margin. However, that would entail taking account, *inter alia*, of interest rate risk in accounting for bank loans, which would amount to moving closer to full fair-value accounting, and would raise complex issues<sup>12</sup>.

*How frequently should estimates of expected loss be updated in the light of new information?* One possibility would be for expected loss estimates to be

10: Inclusive of contributions to the stock of expected loss provisions in the current year.

11: Banks on the 'foundation' IRB approach to determining regulatory capital will estimate probability-of-default (PD), with loss-given-default (LGD) being as specified in the Basel Accord; banks on the 'advanced' IRB approach will estimate both PDs and LGDs. Loss-given-default is the variable which takes account of the fact that even if a borrower defaults, often only part of the value of a loan is lost, reflecting factors such as collateral and guarantees taken by the bank.

12: See, for example, Jackson and Lodge, *op. cit.*

## Box 2: The Spanish provisioning system

The favourable economic environment in Spain over recent years has led to an improvement in banks' asset quality and, in most cases, this has resulted in a reduction in loan loss provisions. The Bank of Spain was concerned that as banks' loan portfolios continued to expand, partly because of a low interest rate environment, loan loss provisions were not keeping pace with potential credit losses latent in new lending. Consequently, the Bank of Spain introduced a new 'statistical' provisioning method which came into effect in July 2000<sup>1</sup>.

The idea behind the new arrangements is to recognise (expected) losses reflected in interest margins on loans as an accounting expense over the loans' lifetime, so that this is matched with the recognition of interest income in the P&L account. A 'statistical provision' has been introduced (as part of the general provision<sup>2</sup>) that is built up in good times and drawn on in bad times. The provision is 'dynamic' because it increases when specific provisions (ie actual losses) for a year are lower than expected credit losses, and it is used to set against specific provisions in years when specific provisions are higher than expected credit losses.

The statistical provision is subject to an upper limit of three times the level of annual provisioning and is not tax deductible. Generic provisions (some of which are tax deductible) are a fixed percentage of outstanding amounts<sup>3</sup>. The statistical and generic provisions are not included in banks' regulatory capital.

The statistical provision may be calculated using a bank's own internal models or by a standard method. The former uses a bank's own loss experience to determine the provision using historical data and a bank's assessment of future changes in credit risk. The regulator must verify that the models used represent a proper system of credit risk measurement

and management. There is also a standard method that divides loans into six categories, varying from 'without risk' to 'high risk'. Each category is allocated a risk weight (Table A) by the Bank of Spain that reflects the average net specific provision over the economic cycle based on experience during the period 1986–98. The credit exposure is multiplied by the relevant risk weight to derive the provision for expected credit losses in the period. Currently, the standard method is the one most widely used by Spanish banks. Spanish banks are required to disclose in the notes to their accounts the level and movement of the different classes of provision, and to set out the methods used for calculation of the provisions.

**Table A:**  
**Risk weighting of loans**

Credit risk	Risk weighting per cent
Without risk	0.0
Low risk	0.1
Medium/low risk	0.4
Medium risk	0.6
High/medium risk	1.0
High risk	1.5

Source: Fernández de Lis et al (2000).

Once the expected credit losses have been calculated, they are charged against income on a quarterly basis. The charge is the difference between expected credit losses (as measured by the statistical provision) and the actual net charge for specific provisions in the quarter. If net specific provisions exceed expected losses, then an amount will be deducted from the accumulated statistical provision fund, as long as there is an available balance. Therefore, the charge for specific provisions that arises when loan impairment occurs is made against the provision for expected credit losses that year and – if necessary – the statistical fund established in previous years. This reduces year-to-year fluctuations in a bank's profit, with the provisioning charge reflecting average expected loss experience, not just current experience.

1: See, for example, Fernández de Lis et al (2000) and Fitch Ratings (2000).

2: General provisions are defined as the generic provision (see below) plus the statistical provision.

3: The percentages are zero for public sector and credit institution exposures; 0.5% for most mortgages; and 1% for other risks.

reconsidered at the same time as loans are routinely reviewed for impairment, that is on an annual, semi-annual or quarterly basis. But it would be important that such a review did not undermine the principle that expected loss estimates should be forward-looking over the horizon to maturity of the loans in question. If expected loss estimates for each period largely reflected actual loss experience at that time, a dynamic provisioning approach would not be very different from historic cost accounting.

One challenge for banks would be to distinguish fluctuations in actual loss experience caused by either macroeconomic conditions or idiosyncratic factors from structural shifts that could have implications for the appropriate level of expected loss provisioning.

*Should estimates of expected loss be formed for individual loans or for portfolios of loans?* In estimating expected losses for pools of fairly homogeneous loans, such as retail facilities, a portfolio approach might be more appropriate, although even then it might be helpful to break a retail book down into behaviourally similar items, such as mortgages. For larger, more idiosyncratic loans, it might be necessary to consider them individually in order to build up a view of expected loss.

*How should commitments to lend be treated?*

Banks' books comprise not only loans already advanced but also irrevocable commitments, such as traditional committed facilities for bank and corporate counterparties as well as back-up facilities for commercial paper programmes. For UK banks, total committed lines are equivalent to some 25% of their on-balance-sheet assets. It could be argued that commitments should not be taken into account, because they may not be drawn, and until they are they do not produce an interest income stream to be 'matched' against expected losses<sup>13</sup>. On the other hand, commitments are particularly likely to lead to losses in a downturn, as firms experiencing liquidity difficulties or other forms of financial stress are especially likely to draw down on bank lines. This could suggest establishing dynamic provisions against commitments. It might be possible to treat

commitments in a framework that recognised that they are an option on borrowing<sup>14</sup>, but a more straightforward approach might be for banks to use a framework similar to the Exposure at Default (EAD) methodology in the IRB approach in the new Basel Accord. This requires banks to estimate what proportion of a facility would actually be drawn at the time a loss is incurred.

*What should be the treatment of general provisions? the treatment of tax? and what might be the implications of implementation by accounting standard setters, or by regulators alone?* Given that general provisions are often described as being made against losses already present in the book *but not yet specifically identified*, these would seem to be included in the concept of expected loss. 'General provisioning' would therefore be absorbed into dynamic, expected loss provisioning.

In most countries, *specific* provisions are tax deductible (though in the US, deduction can be made only at the charge-off stage). But in some countries, for example the UK, general provisions are not tax deductible. Were it to be agreed that banks' income is more appropriately measured net of expected losses, then in principle that measure could be considered for use in calculating taxable income. This would involve a material change to tax rules in some countries, and the tax authorities would need to be assured that it did not open up scope for banks to manipulate their tax liabilities.

If accounting standard setters were reluctant to adopt dynamic provisioning in bank financial statements, it would nevertheless be open to bank regulators to adopt it unilaterally. In essence, this would involve a supervisory buffer for expected losses being established in addition to required regulatory capital. If that were done, there would be a case in the interests of transparency for banks to publish financial reports that included the regulatory view as well as data drawn up according to the accounting standards<sup>15</sup>.

### Profit smoothing

It is possible that dynamic provisioning could render banks' accounts – and especially their loss experience

13: Although they do produce a stream of commitment fees.

14: Strictly, an option for a borrower to put a loan to the bank.

15: In banks' published financial statements, contributions to the dynamic provisioning buffer could be presented as an appropriation of retained earnings to a non-distributable balance sheet reserve.

– less transparent, because banks' income would for the most part be measured net of expected, rather than actual, losses. In the extreme, expected loss estimates could be manipulated to smooth profits between years, for example by increasing estimated expected losses during periods when income was especially high. Any such manipulation of profits would make it harder for investors and depositors to assess a bank's financial condition, and would also be a concern for the tax authorities.

It would, however, be possible to build a number of checks and balances into a dynamic provisioning approach. These could be in line with standards set out in the new Basel Accord for banks' use of data on probability of default and expected loss<sup>16</sup>. The key requirement would be that such estimates of expected loss should reflect relevant historical experience and empirical evidence, although, as in the Accord, the standards could also address issues such as the use of models, documentation and data maintenance, and – importantly – the overall corporate governance arrangements within which estimates are formed, assessed and modified. Furthermore, as Pillar 3 of the new Accord envisages in the context of regulatory capital calculations, it would also be possible to require disclosure of *ex ante* estimates of expected loss and *ex post* loss outturns. This would provide insight into the reliability of expected loss estimates used by banks.

In addition, within banks' financial statements, it would be possible to require that details of entries for expected losses, in addition to actual losses, be shown explicitly on the face of the balance sheet and income statement. This would deliver a high level of transparency regarding the impact of dynamic provisioning on banks' financial results.

## Conclusions

There would be merits in considering the introduction of dynamic provisioning for banks generally. Doing so might reduce the artificial volatility in banks' income which can arise from a timing mismatch between margin income being earned to cover expected losses and losses actually crystallising.

The aim would not be profit smoothing – to which accounting standard setters and securities regulators rightly object. On the contrary, genuine volatility in a bank's business would continue to be recorded as

such, for instance arising from large *unexpected* credit losses. Determining long-run expected losses for different loans/portfolios does involve elements of subjective judgement, but that is unavoidably true of other aspects of accounting standards, including current provisioning standards.

A crucial factor in the success of any system would be the reliability of banks' estimates of longer-term expected losses, which has not yet been systematically tested. Banks' experience in preparing for the introduction of the new Basel Accord may provide the authorities with evidence on the accuracy of banks' expected loss estimates and how these might translate into a dynamic, expected-loss provisioning system.

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16: The latest draft of the detailed standards is BCBS (2002).

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