

B Mahapatra: Underlying concepts and principles of dynamic provisioning

Keynote address by Mr B Mahapatra, Executive Director of the Reserve Bank of India, at the Conference on “Introduction of dynamic provisioning framework for banks in India”, organised by the Centre for Advanced Financial Research and Learning (CAFRAL), Mumbai, 21 September 2012.

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Thank you very much for inviting me to this conference to share with you my understanding of the underlying concepts and principles of dynamic provisioning. A discussion paper on the subject was brought out by the Reserve Bank of India (RBI) in March 2012. We are still in the process of examining the comments received from banks and other stakeholders and it may take us a while to finalise anything in this regard.

Why make provisions?

Let me start the discussion with a question: why make provisions? To my mind provision is an accounting concept. Accounting standards define provision as a liability of uncertain timing or amount which can be measured only by using a substantial degree of estimation. The term “provision” is also used in the context of items such as depreciation, impairment of assets and doubtful debts: these are adjustments to the carrying amounts of assets.

It is a requirement for any entity to assess at the end of each reporting period whether there is any objective evidence that any asset has been impaired as also whether a liability needs to be recognised in settlement of an obligation involving an outflow of resources. When such is the case, the amount is required to be recognised in the profit or loss account for the reporting period. This enables presenting a “true and fair” financial position of the entity for the period, which is the *raison d’être* of accounting.

Entities have strong incentives for under-provisioning, because:

- It is generally not fully tax deductible in many jurisdictions; and
- Many business executives take a short term view of showing enhanced profits. High provisioning reduces profits, and hence dividend distribution and share price; and more importantly, bonus payment to top management and staff.

The same holds good for banks also. However, banking business adds another dimension to the issue, that is, of pro-cyclicality. Banks are more prone to business cycles. In good times, there is demand for credit and banks become aggressive loosening credit standards. Debtors also do well and service the loans in time. Loan loss rates are below the long-run average, and need for loan loss provisions are less. Therefore, loan loss provisions are usually under-funded during a boom period.

When the business cycle turns and economic conditions deteriorate, borrowers’ credit quality tends to worsen leading to a higher probability towards default in servicing interest and principal payment. These loans become non-performing assets (NPAs). Banks’ profits go down but at the same time they are required to make higher loan loss provisions for the non-performing loans. This is the cyclical property of credit losses. This results in banks becoming cautious and restricts lending; as a result the risk spills over to the real sector of the economy. Procyclicality thus has the impact of amplifying business cycles.

In terms of the accounting standard for recognizing credit losses, the *IAS 39 – Financial Instruments: Recognition and Measurement*, a financial asset is impaired and impairment losses are incurred if and only if, there is objective evidence of impairment as a result of one

or more events (i.e., loss event/s) that occurred after the initial recognition of the assets, and that loss event (or events) has an impact on the future cash flows of the financial asset that can be reliably estimated.

This approach to provisioning, also known as “incurred loss” based approach waits for certain events to happen such as default, delinquency in interest or principal payments, significant financial difficulty of the borrower, etc., before losses can be recognized. Provision for losses can only be made after the loss event has been identified, or loss has been incurred, and not in a proactive manner *ex ante* before the event, based on “expected losses”.

The incurred loss model came under severe criticism after the recent global financial crisis for delaying loss recognition. There is a view that earlier recognition of loan losses based on “expected losses” could have potentially reduced the cyclical impacts of the recent crisis.

However, accountants were not comfortable with the expected loss based provisioning on the fear that it could foster earnings management by profit smoothing and compromise the *raison d'être* of accounting to give a “true and fair” or transparent picture of the financials of an entity as on the reporting date.

Improvements in credit risk models have supported the concept of expected losses and unexpected losses. From a conceptual point of view, loan loss provisions should cover expected losses while capital provides an adequate buffer for unexpected losses. The internal rating based (IRB) model approach under Basel II credit risk capital computation gave a fillip to the expected loss based provisioning and unexpected loss based capitalisation.

In the immediate aftermath of the crisis, in April 2009, the G20 leaders called upon the accounting standard setters to work urgently with banking supervisors and regulators to improve standards on valuation and provisioning and achieve a single set of high quality global accounting standards.

The Basel Committee on Banking Supervision (BCBS) took it forward by publishing a document in August 2009 titled *Guiding principles for replacement of IAS 39* that was also sent to the International Accounting Standards Board (IASB). These principles state that loan loss provisioning should be robust and based on sound methodologies that reflect expected credit losses in the banks’ existing loan portfolio over the life of the portfolio. The accounting model for provisioning should allow early identification and recognition of losses by incorporating a broader range of available credit information than presently included in the incurred loss model. For the purpose of these principles, expected credit losses are estimated losses on a loan portfolio over the life of the loans and considering the loss experience over the complete economic cycle.

Post-crisis, there is convergence of views among the prudential regulators and accounting standard setters on the desirability of a forward looking expected loss approach to loan loss provisioning. In reality, financial results do objectively worsen in an economic downturn in a way similar to the rise in unemployment rates. Therefore applying an impairment model based on expected losses is arguably a faithful representation of current conditions. The IASB, Financial Accounting Standards Board (FASB) as well as the BCBS are actively engaged in finding a solution to this complex problem. In this context, the expected loss based provisioning approach is a topic of significant interest for the global financial markets.

Even when banks and accountants were making incurred loss based provisioning for identified losses, called “specific” provisions, they also voluntarily did make some sort of “general” provisions or “floating” provisions. These “general” provisions are not based on any expected loss model, but as a prudent practice to strengthen the balance sheets. The Basel Committee also incentivises general provision up to 1.25% of credit risk weighted assets by counting towards Tier 2 capital.

Concepts and principles

Dynamic provisioning is a technique that allows banks to build up loan loss provisions when their profits are growing to draw on these provisions during an economic downturn. There are several variants of dynamic provisioning. However, the underlying principle behind dynamic provisioning is that provisions should be set in line with estimates of long-run, or through-the-cycle expected losses. This will help in breaking pro-cyclicality and creating countercyclical provision buffers. Dynamic provisioning builds on this and can be generally expressed as:

Dynamic provision = Expected loss provision – Specific provision, or

Dynamic provisions = Through-the-cycle loss ratio * Flow of new loans – Flow of specific provision, where specific provisions correspond to realised or incurred losses, or simply put:

Dynamic provisions = Expected loss provisions – Incurred loss provisions. ----- (1)

17. A close look at the formula shows that during good times dynamic provisions are positive and add to loss provisions as realised or incurred losses, that is, specific provisions are lower than their through-the-cycle estimates. During bad times, the opposite takes place and negative dynamic provisions deplete the loss provision buffer. Therefore, provisioning, instead of becoming pro-cyclical, becomes countercyclical.

The Spanish model

Let me now talk about the dynamic provisioning as implemented in Spain. Prior to introduction of dynamic provisioning in Spain, the Spanish banks' provisioning patterns were close to those that currently prevail in most countries. According to the standard system, banks were required to make two types of provisions for loan losses. First, a general provision was made as a fixed percentage of credit growth. This intends to account for losses incurred on an average on a homogeneous portfolio without specifically identifying the suspect loans. Second, specific provisions for delinquent assets i.e., incurred losses on individual loans were made which depended on the level of risk of the loan and on the time overdue.

Dynamic provisioning system was put in place in Spain by its Central Bank, Bank of Spain in July 2000 to cope with a sharp increase in credit risk on Spanish banks' balance sheets following a period of significant credit growth during the late 1990s. Intense competition among banks had resulted in inadequate loan pricing. Moral suasion also proved to be inadequate in inducing banks to become more conservative. There was a significant reduction in non-performing loans in the second half of the 1990s indicating very low specific provisions. In fact, in 1999 Spain had the lowest ratio of loan loss provisions to total loans among OECD countries. It also had the highest correlation between the provisioning ratio and the GDP growth rate (–0.97) for the period 1991–1999. Thus loan loss provisions were very pro-cyclical in Spain: they were very low during periods of expansion and very high during recessions, while credit risk and under-pricing of risk spread during the boom period.

Under the new system (2000 regime) in addition to specific and general provision, *statistical* provision was added which was the difference between the latent risk (risk parameter dependent upon the credit growth) and the specific provision. The statistical provision was charged quarterly. This implied that statistical provisions for a given period could be positive or negative, depending on credit growth and contemporary bad loans. When statistical provisions accumulate they generate a fund called statistical provision fund. The fund had an upper and lower limit.

After the introduction of the statistical provision, the upswing of the economic cycle turned out to be much stronger and longer than anticipated. This, together with an initial design of the limits of the fund that was based on very rough estimates led to a rapid increase in the

statistical provision fund, whereas specific provisions were kept to a minimum, in an environment of historically low non-performing loans.

In 2004 it became evident that the accumulation of statistical provisions was probably excessive. At the same time, the Bank of Spain was being increasingly criticised in international accounting fora for applying a mechanism that appeared to favour profit smoothing, which was considered contrary to the “fair value” principles and International Accounting Standards. To correct this excessive accumulation and to counter the criticisms of accountants, a new accounting regulation was adopted in 2004.

The changes involved reverting to only two types of loan loss provisions, viz., general and specific provisions. General provision was the sum of two components based on two important parameters, alpha and beta. Alpha was the average estimate of credit losses, say expected losses based on past experience and beta was the historical average of specific provisions. The underlying principles behind dynamic provisions in Spain was to build up general provisions that account for (i) expected losses in new loans extended in a given period; and (ii) historical average losses on the outstanding stock of loans at the end of that period after netting off specific provisions incurred during the period. Formula-wise:

General provisions during a period = [alpha * incremental loans] + [(beta – delta specific provision / outstanding loans) * (outstanding loans)] or

General provisions during a period = [alpha * incremental loans] + [(beta * outstanding loans) – (delta specific provision)] ----- (2)

The first component of the general provision was alpha times the incremental loans granted by a bank. This component therefore recognised the credit risk expected during expansions although the loan losses have not yet been identified in a specific loan. The second component was beta times the stock of outstanding loans reduced by specific provisions made during the period. One can observe that in the second component, beta which is historical average specific provision is compared with the current level of specific provision. This difference would be positive during periods of boom when the current levels of specific provisions are lower than the historical average and thus adds towards the balance of general provision. Similarly, in periods of downturns/recession, the current level of specific provision may be higher than the historical average of specific provision; in that case, the second component becomes negative and this component is subtracted from the first component and may cause the general provision fund to be drawn down. Thus the second component is countercyclical in nature which builds up during upturns and is drawn during downturns. The second component is also reflective of the strength and weakness of the lending cycle depending upon the addition/drawals made from the general provision.

Alpha and beta were calibrated by Bank of Spain for six homogeneous risk categories ranging from zero risk (cash, public sector debt, etc.) to high risk (credit cards and overdrafts). An option was also given to banks to use their own calibrated parameters based on their own credit histories and experiences, subject to supervisory approval.

Let me give an example to make things clearer. Assume outstanding stock of loans in a bank X to be Rs. 1000 and the previous year balance of loans to be Rs. 800, thus assuming the incremental growth in credit to be Rs. 200. Further assume that the alpha and beta component as given by the supervisor to be 2% and 1% respectively. Assume the specific provision required for the current year to be Rs. 8. For the first year, bank X would make a general provision equal to alpha times incremental loans i.e. 2% of Rs. 200 i.e., Rs. 4 plus difference between beta times outstanding loans and specific provision which in this case works out to 1% of Rs. 1000 – Rs. 8 = Rs. 2. Thus, a total general provision of Rs. 6 (4+2) would be made by the bank X during the year. Total provision made during the year would be the sum of general provision and specific provision i.e., Rs. 6 + Rs. 8 = Rs. 14.

To avoid under provisioning and excess provisioning and to satisfy the accountants, the general provisions had a floor of 33% and a cap of 125% of alpha times outstanding loans.

These limits were placed in 2004 when most banks were already at the new upper limit at the time of the application of this regulation. In general, excess provisioning would occur in a long expansionary phase as specific provisions remain below the betas and the alphas also contribute positively. The cap is intended to avoid loan loss provisions growing for too long a period, producing coverage ratios (ratios of provisions to non-performing loans) that are unrealistic.

The total provisions under the dynamic provisioning model viz., summation of general provisions and specific provision thus worked out to alpha times incremental loans plus beta times outstanding credit. The Spanish model is conservative as it creates general provision equal to alpha times incremental credit growth i.e., the general provision still increases due to the first component even if the current level of specific provisions are equal to historical average specific provision. However, during economic downturns the second component is solely responsible for reduction in the stock of provisions.

The FSA model

Having explained the basic tenets behind the Spanish dynamic provisioning model, it is also important to briefly cover the FSA, UK model of dynamic provisioning suggested in the Turner Review of March 2009. Under the FSA model, dynamic provisions are the difference between long term loan loss estimate and incremental specific provision. Thus, dynamic provisions will be created when the incremental specific provision will be lower than the long term loan loss estimate which is akin to expected losses. The total provisions required during a year under the model viz., dynamic and specific works out to long term loan loss estimate. Under the FSA model, the flow of dynamic provisions is calculated using the stock of loans outstanding at the beginning of each year and is set as under:

Dynamic provisions (to be made during the year) = Long term loan loss estimate
– Incremental specific provisions ---- (3)

I have taken the following example from the RBI's discussion paper:

Dynamic provisioning under FSA model

	Year	1	2	3	4	5	6	7	8	9	10	11	12
A	Loans (Rs.)	100	100	105	110	120	135	150	170	190	200	200	200
B	Losses (%)	1.60	1.60	1.00	0.40	0.60	0.50	0.50	0.50	0.40	0.80	1.60	1.60
C	Losses (Rs.) (A*B) Incremental Specific Provisions	1.60	1.60	1.05	0.44	0.72	0.81	0.75	0.85	0.76	1.60	3.20	3.20
D	Long term losses (Rs.) (0.80*A)	0.80	0.80	0.84	0.88	0.96	1.08	1.20	1.36	1.52	1.60	1.60	1.60
E	▲ Dynamic provision (Rs.) (D-C)	0.00	0.00	0.00	0.44	0.24	0.27	0.45	0.51	0.76	0.00	(1.60)	(1.07)
F	Dynamic provision (Rs.) i.e. Cumulative balance.	0.00	0.00	0.00	0.44	0.68	0.95	1.40	1.91	2.67	2.67	1.07	0.00
G	RWAs (Rs.)	60	60	63	66	72	81	90	102	114	120	120	120
H	DP Reserve/ RWAs (%)	0.00	0.00	0.00	0.70	0.90	1.20	1.60	1.90	2.30	2.20	0.90	0.00

Key assumptions in the example are:

- i. Ten-year economic cycle,
- ii. An average long-run loss rate of 0.8% of loans, an unchanged mix of loans within the portfolio, and
- iii. An average risk weight of 60% for the loans. It is also assumed that, mainly through the application of a variable scalar approach to Probability of Default (PDs), this risk weight does not itself vary with the cycle.

The example starts with a loan book of Rs. 100 during the downturn, but before a dynamic provisioning approach has been implemented. In the early years, the dynamic provisioning reserve has no impact. Because it had not been set up in the good part of the cycle, prior to the downturn, there is no balance that may be run down in those years when actual credit losses exceed the long-run average.

As the economy reverts to more normal conditions, growth starts to return and credit losses fall. During years 4 to 9 the latter are less than the long run average, and this allows a dynamic provisioning reserve to be built up. This can then be automatically reduced in years 11 and 12 in order to provide substantial coverage of the above average losses of the next downturn.

The example shows how a dynamic approach would operate to build up a buffer in the good part of the cycle, and which could then be used up when the downturn materializes. It is based upon the existing Spanish approach; however, there is no separate alpha factor covering growth in the stock of loans.

The Peruvian model

Some South American countries have also introduced dynamic provisioning, the notable one is Peru. Peru has introduced cyclical provisioning in the form of general provisions, linked to the rate of growth of GDP. When GDP growth exceeds a certain threshold rate (i.e., booming period), the cyclical provisioning is activated; and when GDP growth rate falls below a threshold level, cyclical provisioning is deactivated. It is assumed that GDP growth precedes credit growth and GDP is a better systemic growth indicator than credit.

Proposed Indian framework

Let me now come to the need for introduction of a dynamic provisioning framework in India and the theoretical model suggested in the discussion paper of March 2012.

Although RBI has been following a policy of countercyclical variation of standard asset provisioning rates based on available data and judgement, the current provisioning framework does not have any inbuilt countercyclical or cycle smoothing element based on an analysis of credit cycles and loss history. The need for introducing a countercyclical provisioning framework was long recognized by RBI. However, the lessons from global financial crisis further strengthened the need to introduce such a framework. In December 2009, a minimum provisioning coverage ratio (PCR) was introduced by RBI to ensure build up of provisioning buffer when banks in general were making good profits. However, the same was intended to be an interim measure till the time any comprehensive scientific study based on credit history of our banks was attempted by RBI.

As mentioned above, the concept of dynamic provisioning generated a lot of interest from supervisors world over as most of the Spanish banks remained profitable during the global financial crisis. As we in India were already thinking about implementing a countercyclical approach, dynamic provisioning as a concept came handy in starting further work in the area. After studying various approaches of dynamic provisioning implemented by various countries viz. Spain, Peru, etc, a dynamic provisioning framework was designed by RBI keeping in view the uniqueness of Indian banking system. Let me now briefly talk about the theoretical model discussed by RBI in its discussion paper of March 2012.

Dynamic provisioning framework in India is more or less based on the FSA model. The theoretical formula is as under:

Delta dynamic provisions = Expected losses – incremental specific provisions = alpha * outstanding loans – incremental specific provisions ----- (4)

The provisioning framework suggested by RBI has two components viz. (i) specific provisions and (ii) dynamic provisions. While specific provisions would be as per the RBI guidelines on NPA provisioning, dynamic provisions would be the difference between the long run average expected loss of the portfolio for one year and specific provisions made during the year. Thus, this will ensure that every year the charge to profit and loss account on account of specific provisions and dynamic provisions is maintained at a level of alpha times outstanding loans i.e., expected losses.

As is observed from above, dynamic provisions are created only when the specific provisions are lesser than the expected losses. The framework thus ensures that at any point of time, provisioning equivalent to expected losses should be made. Thus, the objective of the dynamic provisioning framework is to smoothen the impact of incurred losses on the profit and loss account through the cycle, and not to provide general provisioning cushion for expected losses. That is the essence of Indian dynamic provision framework.

Let me now discuss some of the important aspects relating to the proposed framework of dynamic provisioning. Although these are still being reviewed in light of the suggestions and feedback received from banks, I will briefly touch upon some of the important aspects of the framework:

Loss given default (LGD) used in the calculation of expected loss is based on downturn LGD (instead of normal LGD) as used in the internal ratings-based approach for credit risk (IRB) of Basel II. However, this was moderated by putting a cap on this. In India, we have not really seen a severe downturn/cycle. The parameters calibrated by us are based on a data of 5–10 years. Calibration of loss parameters based on say 10 years of data may not adequately reflect the severity of probable losses which may occur if there is a downturn in the current cycle. In order to make a sound estimation, the actual loss data of at least 2–3 cycles, say 20–25 years is generally required. Therefore, there is risk in calibrating the dynamic provisioning rates based on average loss rate of just 10 years, and a reasonable element of conservatism is required to be added to the calibration. It was therefore felt that the downturn LGD rates based on the data for last 10 years could be a good measure of the required conservatism. However, to ensure that banks are not unnecessarily burdened, a cap is put in place.

When the dynamic provisioning framework is first implemented, banks will transfer the entire amount of general provisions and floating provisions to the balance of dynamic provisions. Thereafter, dynamic provisions will grow with an amount equal to the difference between expected losses and specific provisions made during the year.

For the purpose of determining the provisions that may be counted towards capital, in addition to calculation of dynamic provisions based on downturn LGD, banks would also be required to compute dynamic provisions based on normal LGD on notional basis. The difference between the two would be treated as general provisions counting towards Tier 2 capital, while dynamic provisions based on normal LGD would be treated as specific provisions.

In order to ensure that banks do not draw down from dynamic provisions to absorb higher losses due to their own credit appraisal and credit supervision weaknesses and deplete it before the slowdown occurs, its draw down is proposed to be allowed specifically by RBI based on evidence of a slowdown. A suitable framework for release of dynamic provisions will be formulated by RBI.

In times when dynamic provisions have not been released by RBI, banks will not be allowed to dip into dynamic provisions if their profitability is not sufficient to accommodate the specific provisions.

Methodology adopted for calibration of alpha (expected losses)

Expected losses over next one year was calculated using Basel II IRB formula i.e., $PD \times LGD$. Movement of NPA data over 5–10 years was used to calibrate PD and LGD. Alpha was calculated on a system wide basis for all the banks as well as for four asset classes, viz., Housing, Retail, Corporates (other than Infrastructure and SME) and Others based on a sample of 9 banks comprising 32.53% of gross advances of scheduled commercial banks as on March 31, 2010.

Impact of the proposed framework

While the impact of the proposed framework on individual banks was not assessed, on system wide basis, the provisioning charge on profit and loss account stood at 1.37% of gross advances annually. From the system-wide data collected at RBI, the average annual charge on profit and loss account on account of standard asset provision and specified provisions (including write offs) over the 8 year period (from 2003 to 2010) amounted to 1.04% of gross advances. The additional charge is mainly attributed to calibration of alpha based on downturn LGD.

Issues

Some of the issues worth debating and considering while implementing dynamic provisioning are the following:

Data challenges

For the calibration of alpha, apart from the “bank as a whole” data, data was called from all the banks in respect of 8 segments viz. Infrastructure, Commercial Real Estate (CRE), Small and Medium Enterprises (SME), Other Corporate, Retail, Housing, Credit cards and Others. However, useful data for the purpose of this study could be submitted only by 9 banks for Retail, Housing and Other Corporate (corporate excluding infrastructure, SME and CRE). Due to this, the study was limited to Retail, Housing, Other Corporate (corporates excluding infrastructure, SME and CRE) and Others (which was a residual category).

Ideally, alpha (expected loss) should be calculated for different loan segments which may exhibit different levels of riskiness and thus warrant a higher provisioning. Calibration of alpha should be based on forward-looking through-the-cycle probability of default of various asset classes/rating classes and should be based on the credit history of individual banks and reflect their own credit risk profile. However, it is not possible for all banks to have alpha calibrated based on their individual credit histories at this stage as the requisite data is not captured by them. Further, system-level alpha could not be calculated at this stage for all important segments requiring a separate alpha factor owing to the data issue. However, to ensure improved calibration, the discussion paper proposes to increase the number of segments apart from increasing the number of years of data and size of the sample in due course.

Calibration of parameters

Requiring banks to make provisioning based on standardized parameters calculated on system wide basis may penalize some banks which manage their credit portfolio in a better manner and has the risk of under-provisioning in case of riskier banks having poor credit portfolio. However, this may be addressed by requiring banks to gradually move over to calculation of alpha based on their own credit history.

Timing of implementation

It is argued that dynamic provisioning should be implemented in an upturn so that the same can ensure build up of some cushion which may be used during a downturn. With Indian economy and banking system experiencing some asset quality stress presently, a conscious call will be taken to implement dynamic provisioning at this stage of cycle.

Lending cycle effect

A dynamic provisioning system is usually designed using information on credit losses over the previous lending cycle. But there is no guarantee that a system designed in this way will be enough to cope with all the credit losses of the next downturn. Even in Spain, where the period used for the calibration included the worst recession in 40 years, it is not clear that the system will be enough to cover all credit losses.

Profit smoothing

There is widespread criticism that the dynamic provisions disguises crucial information by lumping together provisioning costs for incurred and expected losses in the income statement and is therefore counter to the objective of ensuring availability of timely and reliable information on bank performance. This can, however, be overcome by adequate disclosures about the extent of both specific and dynamic provisions. Such disclosures signal to the users of financial statements the differences between dynamic provisions representing

loss expectations based on historical data and specific provisions for losses actually identified in the loan portfolio.

Interaction with the accounting standards

One question which will invariably arise on implementing dynamic provisions would be whether the concept is in accordance with the international accounting standards? Thus far, the answer is negative since the concept of dynamic provisions deviates from the principle of incurred losses as followed currently in accounting. However, in the wake of the crisis, the two major global standard setters the IASB and the FASB have agreed in principle that the incurred loss model has its limitations and needs to be replaced by an expected loss model. The “trigger events” that is required for loans to be written down under the current incurred loss model of IAS 39 is proposed to be replaced by a forward looking expected loss based provisioning approach in the new IFRS 9 which is set to replace IAS 39.

As per the current update on IFRS 9, it is proposed that in implementing an expected loss model, entities shall take into account information about past loss events, current conditions and reasonable forecasts of economic conditions and future events. It is therefore doubtful whether the dynamic provisioning system will fully be in accordance with the principles in the forthcoming IFRS 9 since it is exclusively based on historical loss experience. We need to carefully watch the developments on the accounting front to figure out how to dovetail the dynamic provisioning concept with the accounting principles. However, the progress made by IASB and FASB in developing an expected loss based provisioning standard is very slow.

Why Spanish banks face problem now?

The Spanish banking system was credited as one of the most equipped among western economies to cope up with the global financial crisis and was appreciated for its conservative and prudent banking rules – specially the dynamic provisioning which was seen in policy making circles as a model for the rest of the world. However, the crisis presently faced by the banking system in Spain mainly due to the real estate bubble that burst in 2007 has become the focal point of interest for supervisors and regulators. Apprehensions have been raised about whether Spanish banks actually faced the crisis or they merely postponed their losses, making it even worse for the banking sector.

It is now apparent that banks in Spain were not reporting all their losses. This thinking was given a boost when Bankia, the largest mortgage lender of Spain, revised its earnings for 2011 from €309 million profit to €4.3 billion loss. There were newspaper reports stating that by exploiting the terms such as dynamic provisioning which became a euphemism for an old accounting trick called cookie jar accounting, Spanish banks understated past profits, and shifted them to later periods to mask future losses. Spanish banks claimed to have excess reserves long after they were depleted and in effect there was profit smoothing and earnings management, which made banks look healthy when they were in fact, quite the opposite.

The Spanish case exemplifies the limitations of any provisioning framework in preventing exuberance in bank lending to inherently risky sectors of the economy. Economic cycles can be too powerful to negate the impact of prudential rules to some extent if there is serial underestimation of risks. While partial recognition of loan losses can buy some time in the short run, in the long run it leads to more problems due to loss of credibility. With specific reference to Spain again, the loan loss reserves proved insufficient for the housing collapse. In 2004, the Spanish Central Bank put a cap of 125% on the general provisions reportedly under pressure from banks. Also, the floor of 33% placed in 2004 was later removed. From that time onwards, Spanish bank lending which was already growing at 14 per cent annually went into a further boom, growing over 25% in 2005 and 2006. The reserves naturally proved insufficient when crisis struck. This further strengthens the belief that economic cycles which are harsher and deeper than previous ones can wipe out the provisions based on earlier cycles.

It should be noted that dynamic provisions are no panacea for all ills plaguing the financial system. It needs to be accompanied by other macro-prudential tools aimed at mitigating pro-cyclicality and systemic risks. Further, while calibrating a dynamic provisioning system, care needs to be taken to maintain countercyclical reserves in line with expected losses so as to avoid both insufficient buffers and excessive provision coverage. There is no guarantee that dynamic provisions will be enough to cope with all the credit losses of a downturn if the cycle turns out to be deeper than anticipated.

Conclusion

The crisis experienced by Spain cannot dilute the efficacy of the concept of dynamic provisioning. Dynamic provisioning is a tool that certainly deserves attention from policy makers and regulators for it distributes the loan losses evenly over the credit cycle and so applies the breaks on an important source of pro-cyclicality in banking. No prudential rules/regulations can help save a banking system if there is failure of corporate governance. To avoid the pitfalls observed in the Spanish model, RBI has preferred to take downturn LGD in calibrating expected losses or alpha. This is a prudent approach.

Let me now conclude. We discussed about the need for provisioning; drawbacks of an incurred loss based provisioning model; post-crisis, the need for countercyclical provisioning tools based on expected losses; the underlying concepts and principles of dynamic provisioning; the framework as implemented in Spain; and the proposed framework in India; issues in implementation and the lessons from the recent crisis in Spain.

Dynamic or expected loan loss provisioning can contribute to financial stability by recognizing the losses early in the cycle at the time of loan origination by building up buffers in good times that can be used in bad times, thereby limiting the consequences during a downturn. While there is no guarantee that dynamic provisions will be enough to cope with all the credit losses of a downturn and therefore may not tame credit cycles by itself, the time has come for forward looking provisions which when properly calibrated can act as a dependable macro-prudential policy instrument, to hedge against risks in banks' balance sheets thereby enhancing the resilience of both individual banks as well as banking system as a whole.