1. Theoretical fragilities of IFRS9

The IFRS9 tries to establish a link between the need for Lifetime EL provisions (LEL) and a “significant change” in the risk profile that creates a (significant) challenge to the profitability of the operations, considering the price already established. The logic behind these new accounting principles seems to emanate from the Bond market. A Bond issued at par becomes “impaired” (under par) when there is a perceived risk deterioration. That devaluation takes into consideration the change in the risk profile until maturity.

However, there are important aspects that are not captured by the IFRS9 and should be taken into consideration.

First, when pricing a Bond in the secondary market, investors take into consideration the change in the lifetime risk profile. However, according to IFRS9, Banks are asked to anticipate (through their results) not the change in the LEL of their credits, but the absolute amount of LEL (ignoring the fact that the initial LEL is already factored in the price).

Secondly, Banks are not allowed to recognize any gains if PDs go down and the LEL factored in interest rates decreases.

Thirdly, when pricing a Bond in the secondary market, Banks take into consideration not only the risk profile, but also the NPV of the lifetime expected income stream. They also take into consideration, implicitly, the cost of funding, capital, composition of Own Funds, and other variables. All these things may change through time.

Finally, the so-called IFRS9 “EL provisions” are not really EL provisions because they lack the true “dynamics” to be considered as such. Banks should create provisions using the income stream from the good credits to pay for the bad ones in the same risk classes. These provisions should be used when a “bad credit” appears. As it happens, when a “bad credit” appears, Banks are only required to do more provisions, instead of using the provisions made from the good credits (and when the good credits are fully amortized these provisions also end with them). Therefore, the provisions for the good credits are similar to capital (and not even recognized as such).

All these aspects represent a burden on Banks that is hard to justify on theoretical grounds.
2. Practical criteria

Besides these significant theoretical deficiencies (with very real and negative consequences for the long term credit market and the profitability of commercial Banks), there are also more pragmatic obstacles that deserve a proper comment.

Banks cannot, of course, assume that they will analyse every single credit and every counterparty/Group through an expert system to ascertain whether there is a “significant deterioration” that deserves LEL provisions. This would be hardly compatible with costs, timing, and the required consistency to do a proper job. They will have to implement automatic rules to identify these credits and only the most important exposures will deserve the experts attention. And yet, there are no hints to any automatic rules in the guidelines. What sort of rules?

2.1 Downgrade measured in Notches?

A certain number of notch downgrades? A one notch downgrade? Or maybe, in some cases, even “less than one notch”? The truth is that any rule based on “notches” is bound to fail. The criteria is clearly dependent on the number of risk classes that a Bank has for every credit segment. Moreover, a downgrade of several notches may be meaningless if the grades have PDs that are very close to each other (and the Bank wants to keep a fixed number of risk classes for practical reasons since the system is used by a vast number of staff or even by the clients). It may also happen that a few notches downgrade takes place in parallel with a revision of PIT PDs, producing lower PDs for all the risk classes, even for some credits that have been strongly downgraded. The opposite (rating upgrade & higher PIT PDs) may also happen. And what about considering “less than one notch”? How come, if a counterparty with the same Rating, has — by definition of a “Rating grade” — the same PD (and risk classes have to be homogeneous)? Moreover, for individuals (mortgages, personal loans, credit cards,...), Banks tend to use application models which use information that is only available at the inception. Afterwards, a behavior model, using different explanatory variables and different risk classes is needed. Therefore, Banks must look elsewhere for proper automatic rules.

2.2 Relative increase in PDs?

Looking directly at PDs (not at notches), can be much more appropriate. But there are also major obstacles. A relative increase in PDs is still not a good solution, since the higher percentual variations in risk tend to be produced by those credits that have very low PDs. For example, if a credit with a PD of 0.03% goes up to 0.07%, its PD is already more than double of the initial PD and yet, it is hard to understand the need for recognizing LEL provisions.

2.3 Absolute increase in PDs?
What about absolute increases in PDs? Rules based on absolute variations of PDs according to each portfolio and maturity, are less problematic. Nevertheless, there are also problems with this approach.

First of all, most Banks don’t have historical information to start with (what were the initial PDs? And other original information?).

Secondly, this still requires a huge amount of stored information as every PD curve for every credit would have to be stored. That’s because the initial PDs curve (and LEL) for every single credit was established for a maturity that became shorter. For example, if initial LEL refers to a maturity of 30Y and 5 years have already elapsed, the Bank cannot compare current 25Y PDs/LEL with older 30Y PDs/LEL. Moreover, the 1Y initial PD cannot be compared with current 1Y PD as a practical expedient because the current 1Y PD can only be compared with the original 6th Year marginal PD. There is also an additional obstacle because IFRS9 requires current PDs to be PIT and the 6th Year PD embedded in the original curve is a TTC PD (Banks cannot guess PIT PDs for long term scenarios).

Thirdly, rules based on absolute increase of residual lifetime PDs would still produce results that are in contradiction with the common understanding of risk and provisioning by Banks, Investors, Analysts, Raters, Auditors and Supervisors. They all tend to share implicitly, an absolute approach to risk/provisions (“Higher risks deserve more provisions”). Example: a credit going from class 1 (PD = 0.03%) to class 9 (PD = 10.1%) may be considered for LEL group, but a credit going from class 8 (PD = 9.3%) to class 10 (PD = 11%) has a lower PD increase and for this reason, it may stay out of LEL group.

Anyway, BCBS doesn’t seem to be satisfied with a large number of different and arbitrary thresholds for every portfolio (and for every maturity within that portfolio) that ignore the effects on profitability of the increase in the PDs. That leads us to the problem of the relationship between a PD increase and pricing/profitability.

2.4 PDs and Pricing relationship?

By adopting a relative criteria, IASB and BCBS support the view that absolute levels of risk are less important as a criteria to determine the need for LEL, than the relationship between the new PDs and the original pricing. Apart from the main criticisms to this idea already commented above (section 1), there are also practical obstacles. Defining different PD increases for different portfolios and different maturities is already a very difficult task that may defy the usual absolute approach (“High risk credits deserve more provisions”) and demands the arbitrary definition and programming of many different “minimum variations” to be considered for LEL purposes. For that reason, there can be no “level playing field”. But mixing these rules with “profitability/pricing rules” (they would also have to be automatic) looks also like “mission impossible”.

Pricing is a very complex subject. PDs are not the only component to calculate the (capital) profitability for each operation. LGDs, Unexpected losses (capital requirements) that may also change with PDs and LGDs, Composition of Capital, Non-interest income, Funding Costs, Operational Costs and Taxes are the most important components and they may vary through time, as PDs do. Ultimately, the initial (expected) profitability depends on what the market
imposes and the negotiation capacity of both parts involved. Because Banks cannot take strategic decisions based on current market prices, sometimes the profitability is very positive allowing for a comfortable margin (even if PDs increase significantly), and sometimes is negative, right from the start. However, Banks cannot keep track of a huge volume of information decomposing the pricing/profitability changes for each credit and counterparty. They cannot isolate the variations in profitability due to PDs, from other components. They cannot establish rules around the significant variation of the profitability of the operations in relation only with PD increases, by ignoring all the other variables and the combined effects of PDs with other variables.

Last but not the least, they cannot ignore that what would really damage the profitability of any long term operation would be to consider LEL provisions during the lifecycle of a regular credit. These provisions are like “capital” in terms of financial calculations, so they are extremely costly in terms of the NPV of the operation. The initial pricing itself becomes much more complex since Banks would have to consider not only the possibility of unexpected losses through their normal capital requirements, but also through these additional “capital requirements”. Therefore, the process becomes circular. Pricing would have to take into consideration the possibility of any credit being forced to LEL provisions during its life cycle. That is extremely difficult.

2.5 The absolute increase in PDs and the low risk exception

Considering the fact that the provision system is already biased no matter what criteria is used, and the difficulties of implementing any of the automatic criteria mentioned above, Banks will have to look for a more practical approach.

This is where the “low risk exception” created by the IASB steps in. Combining the observation of absolute increases in PDs, together with this exception, allows for a much more pragmatic solution (still a burden, but feasible).

By using this exception, the (absolute) variations of PDs are only considered “significant” if they are “big enough” (by any arbitrary standards that have to be discussed with auditors and supervisors), and if the end result is a “High PD” curve in absolute terms.

Obvious candidates for the LEL group would be, of course, the NPEs. If we exclude Non Performing credits bought in the secondary market, all the credits that are NPE had certainly a significant increase in their PDs and their current PD curves don’t fit the “low risk exception”.

For Banks that use Scorings/Ratings in the decision process, performing Credits with PD curves that are now above the “rejection threshold” may also be considered as candidates to the LEL group (eg if clients in classes 1 to 8 are accepted and in classes 9 and 10 are rejected, so PDs for class 9 may represent the “threshold” that separates low and high PDs). However, there are a few challenges to do this. The first challenge is to determine what “rejection frontier” should Banks consider as a reference. The original frontier may be more adequate (it relates to the original pricing possibilities) but it is also more burdensome (requires keeping in memory all the “frontier curves” with their marginal PDs, so that they
can be compared with current PD curve for the residual maturity of the credit. Using the current threshold/frontier is less adequate but also less burdensome.

The BCBS cannot, of course, amend the most significant deficiencies of IFRS9 rules. But the BCBS can at least, recognize the extremely hard conditions imposed on Banks and the threats to the long term credit market that these rules represent. The IFRS9 opens a proper door for a practical solution by allowing for “low risk” credits to stay out of the LEL group. BCBS should not close it by considering only a very exceptional use of the rule. The vast majority of the credits remain with low PDs even after an increase in all PDs (for macroeconomic reasons or other). They are not exceptional.
3. Rating/Scoring Models

Although we recognize that there are differences between the Basel framework and the IFRS9 (costs, PIT/TTC, LGD downturn...) it is extremely important that Banks may use the same Rating/Scoring/LGD models for both purposes (also same approval process, same validation, same supervisory process,...).

The main threat does not come from the PIT adjustments considering the macroeconomic/sectoral forward outlook or the recovery costs that have to be included in one case and excluded from the other. Banks can still use the same model and create a few adjustments on top of the final result to fit both purposes (IRB calculations and provisions). In fact, there isn’t much (if any) forward looking information that can go into a model, except for macroeconomic/sectoral information and this information tends to be reflected directly on PDs (not embedded directly in the models). Macroeconomic factors don’t fit together well with other explanatory variables in scoring/rating models because they demand the use of long term series whereas Ratings and Scorings try to capture the recent population profiles (remember that population stability and explanatory variables population stability have to be validated). Therefore, integration of macroeconomic perspectives can only be done properly as an add-on to the model or to the PDs associated with the models (the scoring can be associated with a TTC PD or with a PIT PD which properly reflects the economic outlook).

Anyway, the main threat comes from the lack of a proper agreement about the way a recovery process can be considered as “finished”. IASB states that a modified credit can be considered as a “new credit” and only requires tracking down the origins; Basel doesn’t seem to agree. This would require different models. In theory, considering 2 defaults in a row (one totally recovered immediately after restructuring, and a subsequent default with an LGD of 50%), is exactly the same as considering only “one long default” (no recovery from the modification) with a final LGD of 50% ($2/100 \times (0\% \times 1/2 + 50\% \times 1/2) = 1/100 \times 50\%$). However, in practice, even knowing that the IRB formula favors combinations with lower LGDs/higher PDs, it is difficult to consider “one long default” because counterparties may change (e.g., a family member steps into the credit process after the first default), amounts change, there are sometimes combinations of n origins x m destinations in a restructuring process, or because the credit moves to a different segment (e.g., personal credits transformed into a mortgage operation classified by a different scoring model). Moreover, corporate Ratings are used for commercial purposes and it is hard to sustain a “default Rating” when the client is already paying. It doesn’t make sense to ask Banks for different models. It is not only very burdensome but very confusing for management purposes.

This doesn’t mean that Banks cannot be conservative. The existence of a “previous default Y/N” or “previous restructured operations Y/N” are typical explanatory variables in a scoring/rating model. Moreover, each Bank may still impose a quarantine period on those clients that came out of a default process before they can be eligible for new credit. But there is no need to consider them still in “default” to do that. That only creates unnecessary “noise”.
4. Stress Tests

Banks already have to produce Stress Tests for several purposes. There are specific guidelines for those stress tests that involve provisions as well. Therefore, we don’t see the need to mix different subjects on these guidelines about EL. Sensitivity analysis or scenario analysis don’t play any role in the determination of EL.

Sensitivity analysis is also not important under many circumstances. A move in only one PD (and not the entire PD curve) is meaningless for LT credits.

5. Other Topics

- The calculation of “durational LGDs” is going to increase the IRB and LEL requirements. These “durational LGDs” have been ignored so far in the Basel legislation (and also in practice, by many institutions). Therefore, any estimates of the true impact of IFRS9 must include this element.

- One of the important factors in the calculation of the LGD – the discount rate of the cash flows (not the contract cash flows but the recovery flows) – has still to be commented by the Authorities. Small differences produce very distinct results. There is no level playing field.

- Certain types of information cannot be treated automatically since they are not part of any database (e.g. “expectation of forbearance or restructuring”).