# Europe's banking bail-in: the implications for Ireland



# Draghi's shift towards burden sharing, a chink of light, but hazards remain

The price for Ireland could be larger than the apparent benefits to be gained, especially if the State's share in the banking system or a deal on 'promissory notes' is traded for beads and baubles, or, worse still, Ireland cedes sovereignty over tax and spending levels, including corporation tax: page 7

### Irish captive insurance company numbers fall



But strong premiums point to a realigning of corporate structures in light of Solvency II, rather than a loss of business according to the *Finance Dublin* Captive Insurance Survey: pages 12 - 13

## Funding the food and agri sector



Innovative financing structures are needed to meet the sector's potentials: page 15

## Financing Ryanair

CFO and deputy chief executive of Ryanair Howard Millar discusses the treasury agenda of the LCC:

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#### State Street buys Goldman Sachs unit

Global acquisition will add \$200 billion in AUA and 40 Irish-based employees to State Street: page 4

## Increasing covered bond transparency

European-wide industry labels to improve the transparency of the asset class: page 17

### Citi's record profits in 2011

Citibank Europe plc's profits of €755 million in 2011 compares with €6.6 million in 2001: page 5

## The danger of static credit risk models

The reliance on static risk models by lenders can mean they do not act until it is too late:

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### The KPMG Tax Monitor

Colm Rogers looks at the increased competition Ireland faces from the UK for foreign direct investment: page 18 22 Credit Risk FINANCE DUBLIN | JULY 2012

# The trust placed in static credit risk tools is a risk to lenders

Reliance on homegrown, static spreadsheets, not the supposed narrow interpretations of 'loss events' under IFRS, is the main reason for lenders' underestimation of credit risk recognition writes PATRICK SHALLOW.

he blame for poor recognition of credit risk and of imminent loan losses by lenders and their accountants is today largely placed on the International Financial Reporting Standards (IFRS). Introduced in 2005, these standards, it has been argued, are too limited to where a 'loss event' has occurred. On the other hand it may be argued, that these 'loss events' have been too narrowly interpreted, being unnecessarily defined as relating to loan write offs and to the emergence of the more serious loan arrears, with the now familiar consequences of provisions that are far too low in the face of escalating loan losses.

Reference to the Irish Regulatory
Document of Financial Regulation (26
October 2005) suggests that IFRS standards
are, in fact, non-restrictive in their urging of
objective risk measurement. In that
document, 'credit impairment' is defined as
'when there is objective evidence of
impairment as a result of one or more
events that occurred after the initial
recognition of the asset and the event will
have an impact on the estimated future cash
flow'....a reduction in the NPV of the
relevant asset 'carrying amount'.

Additional grounds cited in the document for identifying 'impairment' and for provisioning appropriately include: changes in the national and international economies, trends in arrears, trends in concentrations and in the overall portfolio, changes in lending policies and in procedures and changes in the risk profile. On this evidence, IFRS standards are permissive in their identification of credit risk and provide full freedom to lenders to measure and provision realistically against credit risk

There are, however, additional, less contentious, reasons for lender failures to identify and report escalating credit risk.

Ever since banks discovered that they could make more money by lending their deposits out than by giving it to governments, they have had the problem of managing their credit risk. A review of the literature takes one through all the old formulae used by banks over the centuries (e.g. The 5 Cs: Character, Capital, Capacity, Collateral and Cycle). In recent years banks have been overwhelmed in turn, by Basel I, by Basel II and they are currently coming to terms with Basel II.5 and Basel III, while

economies continue their downward spirals.

Among other distractions over recent decades has been bank overreliance on the borrower's credit score the idea that the bank, somehow,



**Patrick Shallow** 

had a stable measure of the reliability of the borrower and could thereby lend safely. Willing lenders often forgot that credit scores change and both asset values and changing economies have the last word. And, as economist, Paul Krugman has wryly observed, 'A consumer who has no money is not a consumer'. He might well have added: 'and will not be able to repay his debts!'

#### Credit Risk and static spread-sheets

In the absence of clear evidence to the contrary, lenders, who do know their customers, tend to believe that they will recover the money they lent out. And what is this evidence?

Across the globe, banks use variations of the following static spreadsheet approach, which purport to relate the level of risk to the level of arrears (Fig.1).

The static spread sheet approach suggests e.g. that if a loan is 3 months in arrears it has a 30 per cent risk of loss, and that if it is 5 months in arrears it has a 50 per cent risk. These estimates are simple guesses which have generally originated in happier economic times. The 30 per cent and 50 per cent figures are neither accurate nor

universal. This spreadsheet also suggests that if a loan is up to date, it has no measurable risk - a beguiling, but fatal, suggestion. In fact, typically, and depending on the maturity of the overall loan portfolio, some 85 per cent of loans are 'up to date', so it is not very sensible to believe that 85 per cent of one's lending is risk free, and blithely to assume that the visible 15 per cent arrears is the full extent of one's exposure to loss! (The modest use of 'general provisions' in that area is no substitute for real risk measurement).

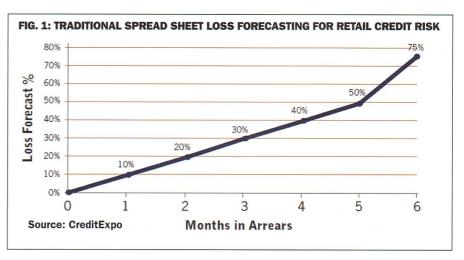
However, lenders do tend to accept these optimistic readings because spread sheet models in current use have been in position for many years and have not been recently tested or challenged.

These models are:

- static and not tuned to economic upturns or downturns, and certainly not to the current recession.
- not tuned to local economics, to local lending policies or to the lender's own borrowing populations, and critically,
- also not 'marked to market' and do not recognise adequately that property values, or car values, have collapsed, resulting in a conversion of borrowers positive equity into negative equity, and also transforming borrower attitudes to their debts.

#### Optimistic risk models

Given that the models in current use are manifestly optimistic, it is surprising that they have not been revised and updated. The answer is of course that these models are embedded in the culture of the lending organisations, and that a change would affect many other aspects of the business.



Change is too often resisted because:

- The loss forecasts (determining the profitability of the overall business) impact on shareholder value, on bonuses and on career prospects.
- Lenders erroneously believe themselves unable to claim corporation tax relief on such 'suspected' loan exposures.
- Traditionally, lenders rely on their auditors to measure, to up-date and to report their loss exposures. In many cases, these auditors designed the original static risk models, imported from other accounting houses. And even where the auditors may suspect some provisioning deficiencies. they find that relevant proving research often falls outside the review budget. Auditors are also caught between the measures of the loss forecast (a gone concern concept) and loss provision (a going concern concept), the measure associated with on-going income recognition.

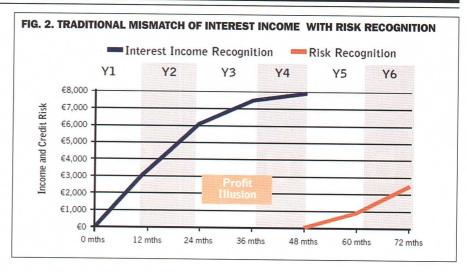
Fig 2 illustrates how, because of the late recognition of credit risk, the reporting of bank profits gets seriously out of step with the reporting of loan interest and of profitability.

What is illustrated here is the automated recognition of loan income for a retail loan, using the actuarial method of income release (formerly the simple Rule of 78). Risk, however, is typically reported only based on the more serious, say 2 to 3 month, arrears (90 days in the case of mortgage lenders) and often when the loan is already overdue. Often only at this point a provision is raised, as shown, by the bank.

But in the meantime the bank, relying on the spread sheet optics, has reported high profits and has often paid out these 'profits' in dividends, bonuses and overheads, leading rapidly, as seen in Ireland and elsewhere, to a run on reserves and to threatened or actual insolvencies.

#### The empirical model

Risk should, ideally, be measured off the lender's own most recent experience, not based on a model estimated and introduced during the Celtic Tiger years. Most importantly, it should also take full account of the measurable risk in the well performing/up-to-date loans, because, without taking that into account, as illustrated above, the lender will tend to underestimate his credit risk and to underprice his lending (to some 30 per cent of actual risk). This error tends to be masked in an expanding economy, but it becomes fully exposed, as currently in Ireland, when loan books contract. (Incidentally, when correctly calculated at the portfolio level, risk can also be differentiated for the different types and maturities of loans, to eliminate loan cross subsidisation).



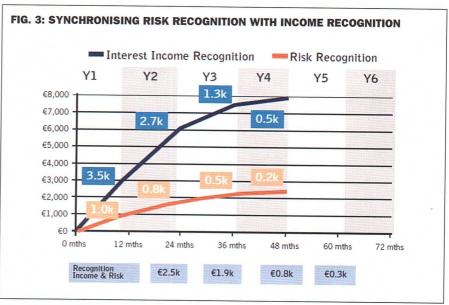


Fig 3 illustrates the alternative proper recognition and the matching of credit risk with loan income, producing a true reporting of profit and a correct analysis of loan types and of trends. It addresses risk as it goes along, and leaves nothing to years 5 and 6! Where bad debts have been fully provided for along the way, i.e. by end of year 4 in our illustration, the act of write off has no direct impact thereafter on the profit

In Fig 3, the loss forecast, which now, critically, includes risk in the well performing/ up-to-date book, is measured from the inception of each loan. Loan loss provisions are then calculated and these keep pace with the loans, in line with the recognition of income, thereby measuring true profitability. This approach also facilitates accurate pricing of all loans and loan types. The process further eliminates the loss forecasting 'surprises' associated with the ageing of debt and with the fluctuations in the local or national economy. It also importantly provides a critical guide to managing arrears and to doing sounder new business in future.

While the misinterpretation of the IFRS standard may be blamed for some underestimation of credit risk recognition, the real culprit, it is argued, is the homegrown static spreadsheet, which seriously understates arrear credit risk and then neglects altogether the risk in the well performing loan book, inducing complacency in the lender and often, as illustrated, delaying action until it is too late for constructive recovery.

The same underestimation of risk is responsible for the initial acceptance of toxic loans, for loan under-pricing, for poor collections policies and for misdirected resource management.

The ideas and methodologies outlined here have been developed, implemented and successfully deployed in a number of major lenders since 2005. The methodology and software, known as Empirical Credit Risk Management (ECM Analytics), has been developed and patented at Nova UCD by CreditExpo Ltd.

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