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Ireland and Iceland in Crisis B: Decreasing Loan Loss Provisions in Ireland[1]

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Yale Program on Financial Stability Case Study 2014-5A-V1
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Abstract

All public companies in the European Union, including Ireland's major banks, were required to adopt IAS 39 for their annual accounting periods beginning on or after January 1, 2005. Under the "incurred loss" model of IAS 39, banks could set aside reserves for loan losses only when objective evidence existed that a loan was impaired, not in anticipation of future losses. As a result, Irish banks saw their aggregate reserve for bad loans drop from 1.2% of loan balances at the end of 2000 to only 0.4% by 2006-07, just before the collapse of the banking industry caused loan losses to soar. In the aftermath of the global financial crisis, financial regulators and accounting bodies recognized the weakness of the pro-cyclical incurred loss model. As a result, they have proposed alternative "expected loss" models that allow reserves for expected losses to be built up over the life of a loan in a counter-cyclical fashion.

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[1] This module is one of four produced by the Yale Program on Financial Stability (YPFS) examining issues impacting Ireland and Iceland in the years surrounding the global financial crisis. The following are the other modules in this case series.

- *Ireland and Iceland in Crisis A: Increasing Risk in Ireland*
- *Ireland and Iceland in Crisis C: Iceland's Landsbanki Icesave*
- *Ireland and Iceland in Crisis D: Similarities and Differences*

Cases are available from the Journal of Financial Crises.

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1. Introduction

In 2003, the International Accounting Standards Board (IASB) released statement IAS 39 in an effort to simplify, standardize, and bring more objectivity to the accounting treatment of financial instruments. All listed European Union companies, including Ireland's major banks, were required to adopt IAS 39 for annual accounting periods beginning on or after January 1, 2005. IAS 39 mandated use of the "incurred loss" model of setting aside reserves for loan losses. Under this model, banks are allowed to make provisions only where objective evidence of impairment exists as of the closing balance sheet date.

As a result, loan loss provisions will typically decline in favorable economic environments, as fewer loans are impaired and banks are prohibited from anticipating future losses in their loan books. For example, Irish banks saw their composite provisioning level drop from 1.2% of loans and advances to customers at the end of 2000, to only 0.4% by 2006-07 immediately before the collapse of the banking industry. Though loan balances at the major Irish banks tripled over this period, reserve balances for loan losses remained approximately the same.

In the wake of the global financial crisis, financial regulators and accounting bodies recognized the weakness inherent in the pro-cyclical incurred loss model. As a result, they proposed alternative "expected loss" models that allow provisions for expected losses to be built over the life of a loan in a counter-cyclical fashion. For example, the IASB replaced IAS 39 with IFRS 9, which implements a three-stage process for recording loan loss reserves in advance of actual impairment depending on the extent to which credit quality has deteriorated. However, IFRS 9 only becomes effective for annual accounting periods after January 1, 2018 (and the comparable accounting standard in the United States will also have a delayed effective date), so banks will continue to report loan impairments under the less conservative incurred loss model for several more years.

The remainder of the case is organized as follows. Section 2 explains the process by which companies recorded receivables at net realizable value before the mid-2000s. Section 3 discusses the motivation for and changes required by the IAS 39 "incurred loss" model of loan loss provisions. Section 4 focuses on the sharp decrease in loan loss provisions as a percent of loan balances at the major Irish banks from 2000 through 2008. Section 5 describes the IFRS 9 "expected loss" model that will be implemented in the later years of this decade as a replacement for IAS 39. Section 6 concludes with the brief question of whether using different rules to calculate uncollectible receivables for financial accounting and regulatory accounting, as was the practice in Spain during the past decade, might be beneficial.

Questions

1. How did the "net realizable value" model of receivables recognition function, and what were the advantages and disadvantages of that approach?

2. Why did the IASB mandate adoption of IAS 39, how did the "incurred loss" model work, and what effect did the accounting standard have on the loan loss provisions maintained by banks in the years preceding the 2007-09 financial crisis?

3. Why did the IASB replace IAS 39 with an "expected loss" model, and how will IFRS 9 compare with current accounting?

4. How might a regulatory accounting practice mandated by the Spanish central bank prove beneficial to other financial regulators?

2. Accounting for Receivables at Net Realizable Value

A company may choose to extend credit to its customers, either incidental to the provision of some other good or service (e.g., a university gives its students 30 days to pay tuition), or as a central component of the company's business model (e.g., a bank lends money to individuals and to businesses). Though the company that extends the credit hopes that each of its customers pays back the amount owed on time and in full, the reality is that some of the monies will not be repaid. This raises the issue of how the company extending the credit should reflect in its accounting records the fact that not all borrowers will satisfy their obligations.

Historically, accounting standard-setters required companies to record both trade receivables (such as account receivables) and loan receivables at "net realizable value," which is the net amount that the company expected to collect after deducting an estimate for uncollectible receivables. If a borrower defaulted by the financial statement reporting date, the company would record a loss for the amount that it did not expect to collect from that specific borrower. For amounts receivable from borrowers who had not defaulted, companies would make a general estimate of the amount of expected future bad debts based on either the balance of receivables at the financial statement reporting date (known as the "balance sheet approach") or the volume of transactions that gave rise to the receivables (the "income statement approach").

Under the "balance sheet approach", management would review the receivables at each financial statement reporting date and estimate the probability that the receivables would default and the loss that the company would incur if a default did in fact occur. A company with a small number of customers, each with a large receivables balance (e.g., a construction contractor who builds bridges and roads for state governments), might assess the net realizable value of each receivable balance separately. In contrast, a company with a large number of customers, each with a small receivables balance (e.g., a bank with 10,000 credit card customers with an average balance of $5,000 per person), might estimate the net realizable value in the aggregate (e.g., 6% of customers are expected to default, with an average loss of 80% of the outstanding card balance).

Under the "income statement approach," management would estimate the amount of losses based on the volume of credit extended during the financial statement period (e.g., 3% of sales made on credit are expected to be uncollectible). As with the first approach, users might adapt the second approach based on the number and size of relevant credit-granting transactions.

Under both approaches, company management would record its estimate of *future* uncollectible receivables [1] as an expense on the *current period* income statement, thereby reducing net income on the income statement and equity capital on the balance sheet, and [2] as an increase in the reserve for uncollectible receivables on the *current period* balance sheet, thus reducing the carrying value of receivables (equal to the gross balance minus the reserve). Companies might use different names for the loan loss reserve, such as the allowance for credit losses. In future time periods, management would raise (or lower) the balance of the reserve if it determined that the amount of uncollectible receivables had increased (or decreased).

Let us take a concrete example. At *time 0*, company ABC has $100 receivables outstanding, all of which are due the following period. ABC estimates that it will collect $95 but lose the other $5, and it thus records $5 bad debt expense (and reserve for bad debts). However, at *time 1*, ABC collects only $92 and loses $8 as the economy is worse than expected, and ABC therefore must record an additional $3 bad debt expense ($8 minus $5 previously recorded).

Requiring management to periodically assess the ultimate collectability of the credit it granted also provided an additional advantage: the financial statements were recorded in a conservative manner, since receivables were shown on the balance sheet at the net realizable value expected to be collected, and interest income was partially offset by an estimate of bad debt expense on the income statement. A disadvantage was the fact that the amount of bad debts recorded was subject to management discretion. However, management's estimates were to be made in good faith, and the estimates would be reviewed by the company's auditors.

3. IAS 39 "Financial Instruments: Recognition and Measurement"

The International Accounting Standards Board (IASB) released statement 39, entitled "Financial Instruments: Recognition and Measurement" (IAS 39), in December 2003. As implied by its name, IAS 39 dealt with many accounting issues pertaining to the recognition and measurement of financial instruments in an effort to simplify and standardize reporting of financial assets and liabilities, which previously had been accounted for under various accounting pronouncements. IAS 39 became effective for annual accounting periods beginning on or after January 1, 2005.

As discussed in Section 2, company management estimated bad debt expense and the net realizable value of receivables at the end of each reporting period. Given the subjective nature of this process, one might assume that many managers would have continuously minimized the losses they recorded by estimating future losses at zero and waiting to recognize losses until the loans went bad. Minimizing accounting losses would have boosted reported profitability and asset balances. However, in practice, many company managers instead preferred to "smooth" earnings by building up reserves (i.e., recording higher bad debt expense) in more profitable years and depleting the reserves (i.e., recording lower bad debt expense) in less profitable periods.

One goal of IAS 39 was to reduce this subjectivity in setting aside provisions for uncollectible receivables. In the case of banks, this translated to bringing greater objectivity to the loan loss provisioning process. Under IAS 39, provisions for bad debts could only be made when objective evidence existed that a specific receivable was impaired at the balance sheet reporting date (e.g., a borrower had filed for bankruptcy or was late in payments by more than 30 days). This is referred to as the "incurred loss" model of recognizing uncollectible receivables. General provisions in anticipation of future losses could no longer be made (Commission of Investigation 2011, 42, §2.8.8). The Financial Accounting Standards Board (FASB) began to require United States companies to use a similar incurred loss impairment model to report their results.

By constraining loss recognition until a loss had been incurred and providing guidance as to what constituted objective evidence of impairment, IAS 39 succeeded in enhancing objectivity of the loss provisioning process. However, the incurred loss model is an example of a pro-cyclical accounting rule that results in higher profits in a favorable economic environment and higher losses in an unfavorable environment than would otherwise have been the case. In contrast, counter-cyclical rules produce less volatile results over the economic cycle by using provisioning buffers that are raised in good times and can be drawn down in bad times (Commission of Investigation 2011, 55, §3.5.4).

In applying IAS 39 in the favorable economic and credit environment before 2007, banks reduced their loan loss provisions as a percentage of their loan balances because they could only set aside money for loans that became impaired. Even as an impending downturn in the real estate sector became increasingly apparent in 2007, banks were not able to increase their loan loss reserves under IAS 39 until the loans actually defaulted or otherwise became objectively impaired (Commission of Investigation 2011, 42-43, § 2.8.9).

4. The Impact of IAS 39 on Ireland's Banks

The focus of this case module will be IAS 39's effect on the accounting for loan loss provisions by international banks, specifically the major Irish banks. Given the effective date of IAS 39, the first full year in which all Irish banks reported under IAS 39 was 2006.

As can be seen in Figure 1, the aggregate loan balances of Ireland's covered banks more than tripled from €120 billion in 2000 to almost €400 billion by 2007.[4] The "covered banks" include the six major Irish banks and the Postbank, all of which had their liabilities covered by government guarantee in September 2008. The growth in loans, most of which were concentrated in the residential and commercial real estate sectors, far exceeded the growth in Ireland's gross domestic product (GDP) over the same time period.

In contrast to the rapid loan growth, the aggregate provisions for loan losses remained almost the same between 2000 and 2007, as can be seen in Figure 2. As a result, the loan loss provision as a percent of the loan balance decreased steadily until 2006-07. In light of the prolonged economic growth and healthy lending markets in the early years, the provision percent likely decreased as Irish banks reduced their forecasts of probability of default and loss given default. In later years, the provision percent also decreased as a result of IAS 39, since banks could only recognize losses on specific loans that actually became impaired but were prohibited from building up general reserves against expected future loan losses.

In its annual Financial Stability Report for 2007, the Central Bank & Financial Services Authority of Ireland observed that "[b]anks' impairment provisions for loan losses have fallen significantly in recent years and are at historically low levels" (Central Bank 2007, 59). As can be seen in Figure 3, the ratio of total loan loss provisions to non-performing loans decreased by half from 2000 through 2007, with a particularly rapid decline after the implementation of IAS 39 in 2005.

However, after noting that the ratio of bank capital to risk-weighted assets was greater than 10% from 2001 through 2006 (and the ratio of capital, operating profits, and provisions to risk-weighted assets ranged from 14.5% in 2001 to 13.3% in 2006), the 2007 Financial Stability Report concluded, "The shock absorption capacity of the banking sector remains robust and the sector remains well placed to cope with emerging issues" (Central Bank 2007, 59).

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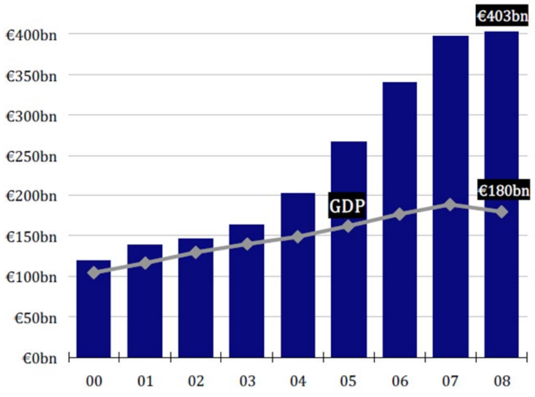
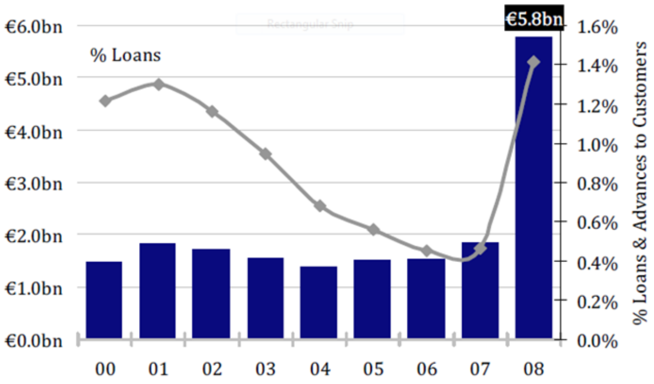
[4] See Zeissler, et al. 2014A for more detailed discussion.

Figure 1: Loans and Advances to Customers by the Covered Banks



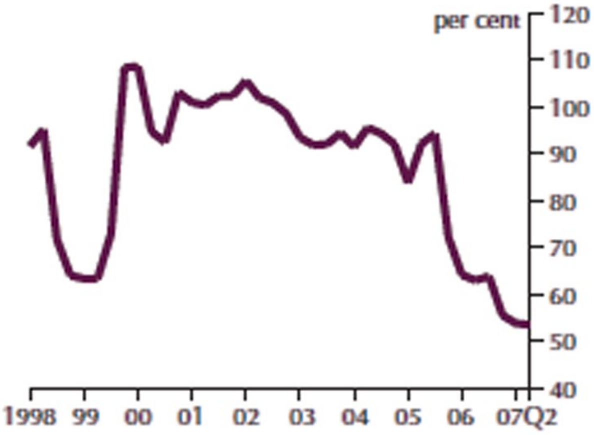
Source: Commission of Investigation 2011, 13.

Figure 2: Covered Banks: Aggregate Loan Loss Provisions



Source: Commission of Investigation 2011, 43.

Figure 3: Provisioning for Loan Losses; Cover Ratio 1998-2007



Note: Ratio of provisions to non-performing loans. Provisions are total provisions.
Source: Central Bank and Financial Services Authority of Ireland (CBFSAI) (Central Bank 2007, 59).

5. IFRS 9 "Financial Instruments"

The IASB and the FASB jointly established the Financial Crisis Advisory Group (FCAG) in November 2008. The FCAG was formed to study financial reporting issues that manifested themselves during the global financial crisis. One of the weaknesses identified by the FCAG and other observers was the incurred loss model of IAS 39, which came under fire for its "too little, too late" recognition of credit losses. For example, in its report on the causes of the systemic banking crisis in Ireland, the Commission of Investigation stated, "Experience…indicates that the prudential value of financial statements can be enhanced through a bank's counter-cyclical ability to anticipate future losses in its annual loan loss provisioning" (Commission of Investigation 2011, 44, §2.8.13).

In response, the IASB accelerated its plan to replace IAS 39 with new comprehensive guidance, International Financial Reporting Standard 9 "Financial Instruments" (IFRS 9). The replacement project included three phases: classification and measurement, impairment methodology, and hedge accounting. In March 2013, the IASB issued a revised exposure draft of the impairment part of the project that will replace the "incurred loss" model with an "expected loss" model. After receiving comments and deliberating further, the IASB finalized IFRS 9 in July 2014 with implementation required for annual periods beginning on or after January 1, 2018 (IFRS 9 Project Status 2014). The expected loss model of IFRS 9 would allow banks to recognize credit losses earlier than with the incurred loss approach (Commission of Investigation 2011, 43 - 44, §2.8.12 - §2.8.13). The IFRS 9 expected credit loss framework is a more structured, standardized approach to the net realizable value calculation described in Section 2, and the main elements of IFRS 9 are briefly summarized in Figure 4.

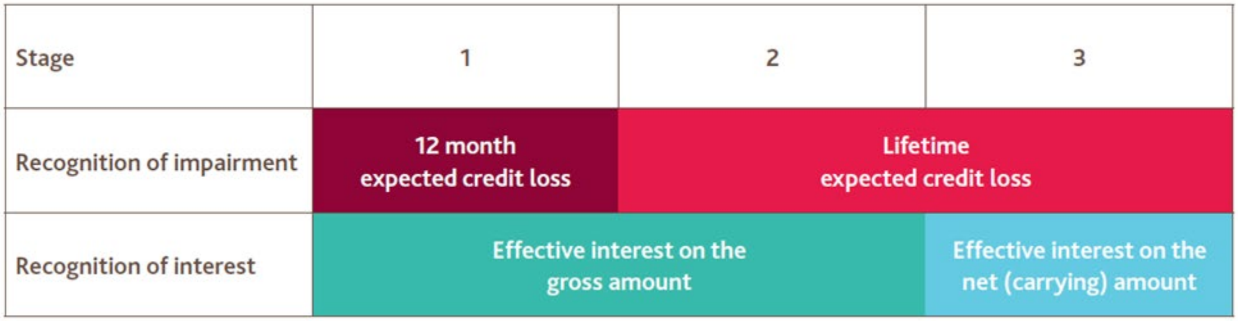
IFRS 9 classifies the possible credit deterioration of a financial instrument into three stages, with impairment and interest revenue recorded accordingly. Stage 1 is for those assets whose credit quality has *not significantly deteriorated* since first recognized or that continue to have low credit risk (investment-grade rating or equivalent). For Stage 1 loans, a bank need only estimate and record the "12-month expected credit loss," which is the expected shortfall in contractual cash flows over the life of the loan but taking into account only the probability of default in the next 12 months. Interest income can be calculated on the gross carrying amount of the loan, without deducting the expected credit loss (IFRS 9 Exposure Draft 2013, 5-6).

Stage 2 is for financial assets whose credit quality *has significantly deteriorated* since first being recognized (unless they have low credit risk, in which case they would remain in Stage 1). For Stage 2 loans, a bank must estimate and record the "lifetime expected credit loss", which is the expected shortfall in contractual cash flows over the life of the loan, taking into account the probability of default at any point. Interest income can still be calculated on the gross carrying amount of the loan (IFRS 9 Exposure Draft 2013, 5-6).

Stage 3 is for financial assets for which *objective evidence of impairment* exists at the reporting date (i.e., the only financial instruments for which credit losses could be recognized under IAS 39). For Stage 3 loans, a bank again estimates and records the lifetime expected credit loss, but interest income can only be calculated on the loan balance net of the expected credit loss (IFRS 9 Exposure Draft 2013, 5-6).

Certain special provisions apply to trade receivables, lease receivables, and financial instruments that were already impaired when first purchased or originated. (See also Appendix 1 for a flowchart of how IFRS 9 works.)

Figure 4: Proposed Recognition of Impairment and Interest Revenue under IFRS 9



Stage	1	2	3
Recognition of impairment	12 month expected credit loss	Lifetime expected credit loss	
Recognition of interest	Effective interest on the gross amount		Effective interest on the net (carrying) amount

Source: BDO 2013, 11.

Though the IASB and the FASB began by working together on a common impairment framework, the FASB decided in December 2012 to propose its own alternative, the "current expected credit loss" model (CECL), because the FASB was concerned that the IFRS 9 criteria to transfer financial assets between stages would be difficult to understand and complex to implement. Not only is the FASB plan simpler than the IASB approach because FASB proposes a single way to measure impairment instead of IASB's three stages, but the CECL model is also more conservative because bad debt expense is always measured using lifetime expected credit losses (BDO 2013, 33-34).

6. Financial Accounting + Regulatory Accounting?

Under the Basel international regulatory framework, banks must calculate certain financial measures in a different way than they do for their audited financial statements. For example, bank capital and stockholders' equity are not calculated identically, and the required amount of bank capital is a function of risk-weighted assets instead of total assets. Nevertheless, much supervisory analysis conducted by financial regulators uses amounts calculated in accordance with generally accepted accounting principles.

Importantly, while banks were required to use the incurred loss model for their audited financial statements, Ireland's Commission of Investigation suggested that financial regulators could have instructed the banks under their supervision to report bad debt expense based on the net realizable value of loans receivable, or a similar approach that incorporated estimates of future loan losses (Commission of Investigation 2011, 55, §3.5.4).

For example, the Bank of Spain introduced a "dynamic provisioning" model for Spanish banks in 2000 that used a statistical model to estimate and set aside reserves for future loan losses. The Bank of Spain mandated that Spanish banks continue to use the dynamic provisioning model for regulatory purposes, even after IAS 39 became effective in 2005 (Commission of Investigation 2011, 44, §2.8.14).

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More information about the YPFS, including hyperlinked versions of some of the cases, is available at http://som.yale.edu/ypfs.

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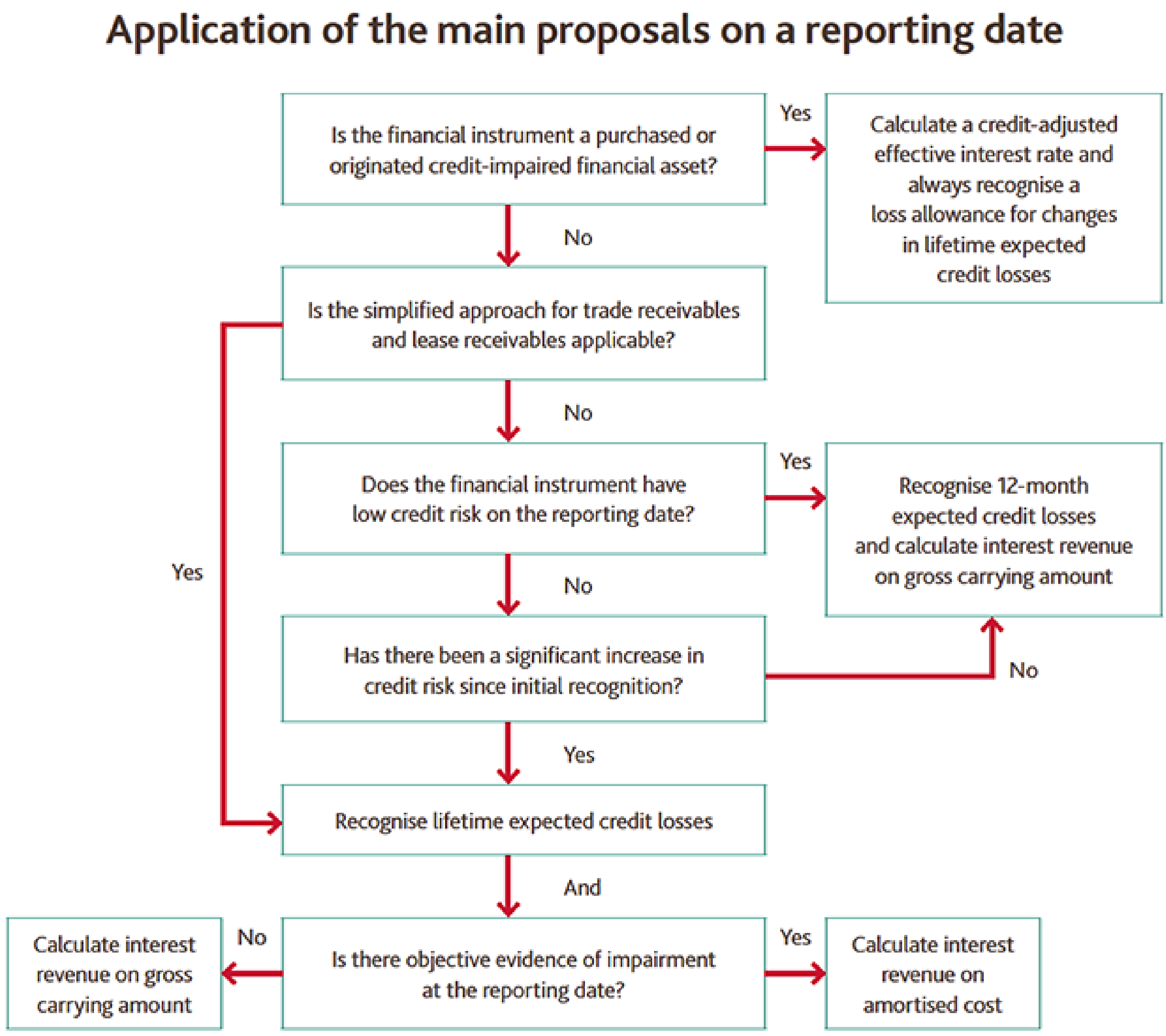
Appendix 1: Summary of the Main IFRS 9 Impairment Proposals


Application of the main proposals on a reporting date
Is the financial instrument a purchased or originated credit-impaired financial asset?
Yes
Calculate a credit-adjusted effective interest rate and always recognise a loss allowance for changes in lifetime expected credit losses
No
Is the simplified approach for trade receivables and lease receivables applicable?
No
Does the financial instrument have low credit risk on the reporting date?
Yes
Recognise 12-month expected credit losses and calculate interest revenue on gross carrying amount
Yes
No
Has there been a significant increase in credit risk since initial recognition?
No
Yes
Recognise lifetime expected credit losses
And
Calculate interest revenue on gross carrying amount
No
Is there objective evidence of impairment at the reporting date?
Yes
Calculate interest revenue on amortised cost

Source: BDO 2013, 24.