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The impact of IFRS 9 on the Belgian banking system: a qualitative assessment

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Antoine Brabant

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Denis Knaepen

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Introduction

On the 1st of January 2018, a new accounting standard, called IFRS 9 – *Financial Instruments* came into effect. This new standard replaced most of the existing standard, IAS 39 – *Financial Instruments: Recognition and Measurement*. IFRS 9 was developed by the International Accounting Standard Board in response to the G20's assessment of IAS 39's performance during the financial crisis as IAS 39's treatment of accounting losses was seen to have aggravated the effect of the financial crisis. The G20 therefore called upon the main accounting standard-setters to solve these issues by "analysing alternative approaches for recognising and measuring loan losses that incorporate a broader range of available credit information" (European Systemic Risk Board, 2017, p. 7)

On July 24th, 2014 the IASB published the final version of IFRS 9 – *Financial Instruments* – It was endorsed by the European Union in 2016 and entered into force on the 1st of January 2018.

This thesis will study the impact on Belgian banks linked to the transition from IAS 39 to IFRS 9. It is the right time to study the impact of IFRS 9 on Belgian Banks. As explained above, the effective date (i.e. the date of compulsory implementation) was January 1st, 2018. Different actors finally have clarity on how IFRS 9 has been implemented by or in their respective organisations.

This master thesis will first start with a deep-dive into the International Financial Reporting Standards. This deep-dive will approach IFRS in a very broad and high-level manner by assessing their history, the goals behind the implementation of common standards and the interaction between the international standards and the European Union.

Once this broad context has been set, this thesis will give a brief explanation of the most important elements of IAS 39 (the accounting standard IFRS 9 replaces) and IFRS 9 to allow the reader to understand the subsequent parts of the thesis (specifically the results and discussion components)

This thesis will then review existing literature in order to develop hypotheses which will be tested. Due to the fact that IFRS 9 is quite recent (published in 2014, implemented 1st of January 2018), a significant component of the literature available covers IFRS' initial implementation (in 2005). This review of literature is split into 3 main parts. First, a high-level assessment of the impact of the IFRS standards on matters such as the transparency, the

accuracy (or reliability) and the comparability of accounting statements will be covered. Second, the literature on both the potential and realized impact of the 3 main components of IFRS 9 (also known as the three phases of IFRS 9) will be studied. Finally, the literature review will cover the implementation of the new accounting standard and the potential difficulties met in reaching this objective.

The next step will be to briefly introduce the reader to the methodology and the reasoning behind it before moving on to the results.

These results will follow the same broad structure as the literature review (i.e. quality of accounting statements, the impact of the different phases and implementation) by sorting the results out in each of the hypothesis before accepting or rejecting each hypothesis.

This thesis will finish with a conclusion which will summarize the most important and relevant elements.

Setting the Frame

International Financial Reporting Standards: a quick introduction

Accounting standards are "a set of requirements followed by companies when they prepare their financial statements". (IFRS Foundation & International Accounting Standards Board, 2018) The Standards set by the International Accounting Standards Board (IASB) are called IFRS Standards. The IASB is "an independent, privately funded body responsible for establishing and improving international accounting standards […] to develop, in the public interest, a single set of high-quality, understandable, and enforceable global accounting standards that require high-quality, transparent, and comparable information in financial statements and other financial reporting" (Law, 2016) The IASB operates under direct oversight of the IFRS Foundation. The IFRS Foundation's mission is similar to the IASB's and is to "bring transparency, accountability and efficiency to financial markets around the world by developing IFRS Standards [and] by fostering truth, growth and long-term financial stability in the global economy."(IFRS Foundation & International Accounting Standards Board, 2018)

IFRS standards aren't legally binding when the IASB initially lays them out. They are rendered compulsory in different jurisdictions by national or extra-national authorities. In Europe, the European Commission has rendered these standards compulsory since 2002 for listed companies through Regulation (EC) No 1606/2002. This regulation is made up of two parts: " a mandatory rule: all EU listed companies must use IFRS as adopted by the EU for their consolidated financial statements; [and] discretionary provisions: EU countries can opt to extend the use of IFRS to annual financial statements and non-listed companies as well". (European Parliament, 2002) In addition to the requirements for listed companies, the EU requires all non-EU companies listed on an EU regulated market to file financial statements either in IFRS (as adopted by the IASB or as adopted by the EU) or in GAAP (Generally Accepted Accounting Practices) "designated by the European Commission as equivalent to IFRSs". (Deloitte, 2017b)

The fact they aren't initially legally binding doesn't impair their widespread use. According to the IFRS Foundation, "144 of 166 jurisdictions (or 87 %) require the use of IFRS Standards for all or most publicly accountable companies [while] most of the remaining jurisdictions permit their use."(IFRS Foundation & International Accounting Standards Board, 2018) The main exception to the widespread application of the IFRS standards is the US where the

relevant standard is US GAAP (i.e. US Generally Accepted Accounting Principles). (Deloitte, 2017b)

The IASB was established in 2001 and replaced its predecessor, the International Accounting Standards Committee (IASC), which was established in 1973 and whose purpose was to harmonise financial reporting standards. The standards it produced were called International Accounting Standards (IAS) while the new standards produced by the IASB are called the International Financial Reporting Standards (IFRS). Both also produce interpretations which are respectively called SICs for the IASC and are called IFRICs for the IASB. In summary, the IASB's full set of requirements are comprised of the IASs, SICs, IFRSs and IFRICs which all have equal authority. Whenever the IASB produces a new standard, it offers a certain transition period to allow stakeholders to adapt to the new accounting requirements (while allowing entities to apply it earlier if they wish to do so). (Deloitte, 2017b) An example of these transition periods could be the transition period for IFRS 9. IFRS 9's final version was issued on the July 24th, 2014 and its effective date/entry into force was the January 1st, 2018. (Deloitte, 2017c)

Over time there have been 41 different IAS standards of which 19 have either been (or will be) superseded by newer IFRS standards or withdrawn. There are 17 different IFRS standards of which the first issued was *IFRS 2 – Share-Based Payment* on February 19th, 2004. (Deloitte, 2017c)

The process for setting IFRS Standards is made up of 4 steps. The first step is to set, every five years, its agenda on its standard-setting priorities. The second step is to explore the issues and identify the possible solutions for which standard-setting may be required during which a public discussion paper is often set up. The IASB then develops, based on the research and the public comments collected, possible accounting solutions which it publishes in order to obtain the views of the IASB's stakeholders. Finally, the IASB analyses and refines proposals to obtain either the new Standard or an amendment version of a Standard. The IASB then follows up by offering implementation assistance and maintains/updates the standards if necessary. (IFRS Foundation, 2017)

Once the IASB has set up a new standard, the standard must be endorsed by the EU to become legally binding. During this endorsement process, the EU has two choices: it can endorse IFRS 'as they are' in order to be fully compliant with the standards, make carve-outs or refuse to endorse the new standards. Non-endorsement and carve-outs imply the creation of

'EU-FRS' and EU firms will have to comply with the new EU-FRS standards but may also have to comply with the full IFRS (e.g. if they want to benefit from IFRS acceptance in the US).

The EU endorsement process heavily relies on the European Financial Reporting Advisory Group (EFRAG). The EFRAG is a non-profit organisation whose role is to "provide advice to the Commission on all issues relating to the application of IFRS in the EU". (Kolassa, 2016) The European Commission asks for the EFRAG's endorsement advice while the EFRAG will check if the standards comply with Community Law. (Kolassa, 2016)

IFRS standards must comply with IAS Regulation No 1606/2006 which sets out three cumulative endorsement criteria:

- The standard respects the 'true and fair view' principle outlined in the EU Accounting Directives (i.e. that the financial statements faithfully represent the entity)
- The standard is conducive to the European public good
- The standards meet the criteria of understandability, relevance, reliability and comparability required of financial information. (Kolassa, 2016)

These criteria are vague by nature. This vagueness allows the EU to interpret these standards as it sees fit and therefore influence, through funding and public consultations, the IASB's standard-setting process. As the IASB strives towards one set of global and unified accounting standards, they must take into account the EU's opinion on new standards. (Kolassa, 2016; Wingard, Bosman, & Amisi, 2016)

The two standards (IAS 39 and IFRS 9) are summarized below. It is important to note that these summaries are not exhaustive but present the key elements that are necessary for the reader to understand the discussion that will be held throughout this thesis.

International Accounting Standards 39 (IAS 39)

The International Accounting Standard 39 (IAS 39) applies to most financial instruments. Instruments covered by other IAS/IFRS standards are deemed to be out of scope. A notable exception to this standard are forward contracts between shareholders that will result in a business combination (merger, acquisition, etc.) at a future date. Common examples of financial instruments within the scope IAS 39 are financial assets such as cash, demand and time deposits, commercial papers, debt and equity securities, asset-backed securities or derivatives. (Deloitte, 2017a)

Measurement

Measurement under IAS 39 is based on three broad categories: Amortized Cost, Fair Value through Other Comprehensive Income (FVOCI)[1] and Fair Value through Profit and Loss (FVPL). Under IAS 39, assets are classified into four categories:

1. Financial assets or liabilities at FVPL

A *financial asset or financial liability at FVPL* can be classified as such if one of the following conditions is met:

- The asset or liability is classified as held for trading (i.e. acquired or incurred for short-term selling or repurchasing or the asset is part of a portfolio of assets managed together and for which there is a recent pattern of short-term profit-taking)
- Classifying the asset or liability as such eliminates an accounting mismatch (i.e. a measurement or recognition inconsistency that would lead to incompatibilities between measurements of assets and liabilities)
- The asset or liability is managed on a fair value basis (i.e. the entity decides to classify it as fair value)

2. Held-to-maturity investments (held at amortized cost)

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity that the entity has the intention to hold to maturity. These assets

[1] Other Comprehensive Income is seen as relevant for income which is linked to transitory items with little ability to predict future cash flows and minimal implications for company value. (D. A. Jones & Smith, 2011)

are assets not classified as available-for-sale, assets classified at FVPL or loans and receivables.

3. Loans and receivables (held at amortized cost)

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted, which aren't held for trading, not designated as available-for-sale or assets for which the entity may not recover the whole sum invested (but not because of a deterioration in credit risk) which will be classified as available for sale.

4. Available-for-sale financial assets (held at FVOCI)

Finally, *available for sale assets* are non-derivative assets which are designated as available for sale and which do not fit the criteria of the 3 other categories explained here above. (International Accounting Standards Board, 2011)

Financial liabilities can either be recognised at fair value through profit or loss or at amortised cost using the effective interest method. Financial liabilities at FVPL can either be designated as such or held for trading (and therefore automatically classified as such).

Embedded derivatives

An embedded derivative is defined by IAS 39 as "a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative." (International Accounting Standards Board, 2011) Such an embedded derivative can be separated (for accounting purposes) from the host contract if:

- "The economic characteristics and risks of the embedded derivatives are not closely related to the economic characteristics and risks of the host contract;
- A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- The hybrid (combined) instrument is not measured at fair value with changes in fair value recognized in profit or loss (i.e. a derivative that is embedded in a financial asset or financial liability at fair value through profit or loss is not separated)."(International Accounting Standards Board, 2011)

The host contract will be accounted under the rules of IAS 39 (explained here above) if it is a financial instrument. If it isn't, it will be accounted under the relevant standards.

Impairment

The following extract defines the broad lines of impairment under IAS 39:

> A financial asset or a group of financial assets 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 that occurred after initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated. It may not be possible to identify a single, discrete event that caused the impairment. Rather the combined effect of several events may have caused the impairment. Losses expected as a result of future events, no matter how likely, are not recognised. (International Accounting Standards Board, 2011)

The most important parts of this extract are that losses are only accounted for when there is objective evidence of impairment and that losses expected as a result of future events may not be provisioned by the entity. This last element explains why IAS 39's impairment model is called an "incurred loss model". Assets can also be collectively impaired if they are managed by homogeneous portfolio. (BNP Paribas Fortis SA, 2018)

Impairment is applied on investments held-to-maturity, loans and receivables and on financial assets available for sale (i.e. assets held at amortized cost or FVOCI). For available-for-sale financial assets, the net loss is the difference between the amortised acquisition cost and the current fair value less any impairment already recognised. Impairments will always be, under IAS 39, reflected in the Profit or Loss statement. (PricewaterhouseCoopers, 2009)

Fair value for a specific asset is determined by first trying to find an active market in which the asset has a quoted market price. If that is not possible, IAS 39 allows valuation techniques that allow entities to develop an estimated fair value. If the range of the estimates produced by valuation techniques is too broad (specifically for equity instruments), the entity may estimate the fair value at cost (when the asset was acquired or incurred) minus impairment. (PricewaterhouseCoopers, 2009)

Hedge accounting

Hedge accounting under IAS 39 can be applied but strict criteria (in terms of hedging relationships and documentation) need to be followed. Hedging relationships are when a financial instrument (usually a derivative) is used to offset an asset's exposure to a certain risk (i.e. interest rate risk).

IAS 39 requires that hedging relationships be formally designated and be proven to be effective. A hedging relationship is eligible for hedge accounting if formal documentation exists of the hedging relationship and on the entity's objective and strategy (behind the hedge).

Hedges can be of three types:

- Fair value hedges (which hedge the changes in fair value of a specific asset which could affect profit or loss)
- Cash flow hedges (which hedge against the cash flow variability of a specific asset which could affect profit or loss).
- Hedge of a net investment in a foreign operation

IAS 39 requires hedging to be highly effective to be eligible for hedge accounting. Effectiveness testing is done in both a prospective and a retrospective manner. The prospective manner entails than an entity must show that the hedging instrument fully offsets (with a slight margin allowed) the risk that is being hedged. Retrospective effectiveness testing implies testing done at each reporting date to demonstrate that each hedging relationship has had an effectiveness ranging between 80 to 125 percent of risk offsetting (i.e. that the hedging relationship covers between 80 to 125 % of the exposure to the specific risk).

Hedging must be discontinued if the hedge fails the effectiveness tests or if the hedging instrument is sold, the underlying position is settled, management decides to revoke the hedge relationship, etc. (PricewaterhouseCoopers, 2009)

Disclosures

Disclosures relating to financial instruments are set out in IFRS 7 – *Financial Instruments: Disclosures* and not in IAS 39. There are disclosures of three types:

- Balance sheet and income statement related disclosures which cover assets held by entities in each of the categories, reclassifications, the impact of each category on the income statement, etc.
- Other disclosures (covering accounting policies, hedge accounting and fair values)
- Qualitative and quantitative risk disclosure through the eyes of management (i.e. as conveyed through internal reports)
    - These disclosures cover credit risk, liquidity risk and market risk (PricewaterhouseCoopers, 2009)

International Financial Reporting Standards 9 (IFRS 9)

The transition of standards that is relevant for this thesis is the transition from IAS 39 – *Financial Instruments: Recognition and Measurement* (and IFRIC 9 – *Reassessment of Embedded Derivatives*) to IFRS 9 – *Financial Instruments*. Significant parts of IAS 39 are being replaced by IFRS 9 but some parts will remain relevant (e.g. entities can currently choose between IFRS 9's incomplete hedge accounting or IAS 39's hedge accounting). IFRIC 16 – *Hedges of a Net Investment in a Foreign Operation* and IFRIC 19 – *Extinguishing Financial Liabilities with Equity Instruments* will also remain relevant. Furthermore, "IFRS 9 does not replace the requirements for portfolio fair value hedge accounting for interest rate risk (often referred to as the 'macro hedge accounting' requirements) because the macro hedging phase of the project was separated from the IFRS 9 project due to its longer-term nature. The macro hedging project is currently at the Discussion Paper phase". (Deloitte, 2017b)

On July 24th, 2014 the IASB published the final version of IFRS 9 – *Financial Instruments* – which replaced IAS 39 on January 1st, 2018. On June 27th, 2016, the Accounting Regulatory Committee of the European Union voted in favour of endorsing IFRS 9 and the standard was adopted in 2016.

IFRS 9's changes can be summarized in three main parts: a more principle-based approach in the classifying and recognising assets, an Expected Credit Loss impairment model and a principle-based hedge accounting model (which hasn't been entirely finalized yet). (European Systemic Risk Board, 2017)

Classification and recognition (Phase I)

IFRS 9 classifies all assets by default at fair value with changes in fair value recognized in profit and loss (FVPL) unless specific criteria are met in which case assets can be classified at either Amortized Cost (AC) or Fair Value through Other Comprehensive Income (FVOCI).

IFRS 9 unifies classifications and measurement models into the three categories cited above (AC, FVPL and FVOCI). The criteria for classifying and measuring financial assets are based on the entity's business model for managing the financial asset (i.e. the business model test) and the contractual cash flow characteristics of the financial asset (i.e. the SPPI test).

The Solely Payments of Principal and Interest (SPPI) test studies the contractual cash flows of an asset. If the cash flows are solely payments on specified dates of principal and interest,

then the asset can either be classified at AC or at FVOCI. If an asset fails the SPPI test, it will automatically be classified at FVPL. (International Accounting Standards Board, 2014)

The Business Model (BM) test studies the entity's business model in holding the asset. If the entity's business model is to hold assets to collect contractual cash flows (hold-to-collect), the asset will be classified at amortized cost (if it passes the SPPI test). If the entity's business model is to hold assets to collect contract cash flows and to possibly sell the asset (hold-to-collect-and-sell), the asset will be classified at Fair Value through Other Comprehensive Income (if, once again, it passes the SPPI test).

Furthermore, IFRS 9 keeps the option to irrevocably designate an asset at FVPL "if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gains and losses on them on different bases" (International Accounting Standards Board, 2014)

The following diagram summarises IFRS 9's Phase I:

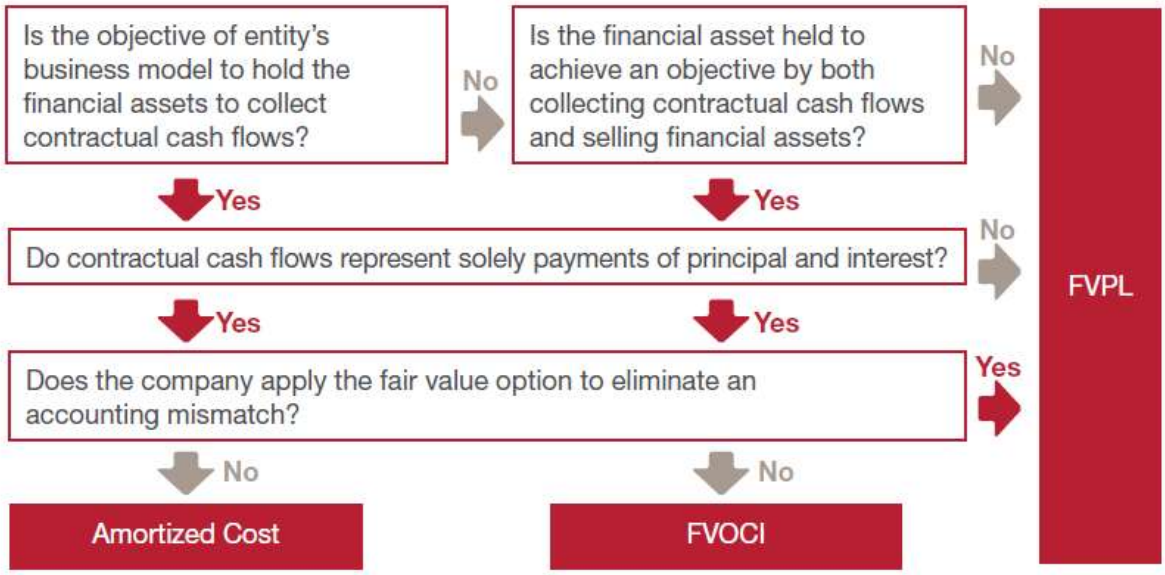

Figure 1: Criteria for classifying and measuring financial assets under IFRS 9 (PricewaterhouseCoopers, 2017)

These tests may seem straightforward at first but may lead to surprising results as it can be difficult to know whether an asset is simple/basic enough to qualify for hold-to-collect or hold-to-collect-and-sell. IFRS 9's approach may seem to be simpler than IAS 39's approach but it comes at the cost of significant added volatility in Profit and Loss. (PricewaterhouseCoopers, 2017) Furthermore, the hold-to-collect business model allows sales of assets if they remain infrequent and insignificant when compared to the entity's holdings.

This element may require significant judgement from entities as IFRS does not offer specifics on determining whether asset sales are infrequent or insignificant. (International Accounting Standards Board, 2014)

The treatment of embedded derivatives is also significantly impacted by the transition from IAS 39 to IFRS 9. Under IAS 39, hybrid instruments (i.e. instruments that are made up of a "normal"/plain vanilla asset and a derivative) could be split into the embedded derivative and the plain vanilla asset. The embedded derivative was classified at FVPL and the plain vanilla classified either at AC or at FVOCI. This split, often described as fictitious, is now impossible under IFRS 9 i.e. both the asset and the derivative must be classified at FVPL. This may mean increased volatility in the Profit and Loss statement for the entities affected. (PricewaterhouseCoopers, 2017)

Other changes include, as explained by PricewaterhouseCoopers (2017):

- "Allowing trade receivables that don't have a significant financing component to be measured at undiscounted invoice price rather than fair value
- Eliminating the exemption allowing for measurements of investments in certain non-traded investments in equity instruments and derivatives settled by the delivery of those instruments at cost rather than fair value
- Restricting optional FVPL and FVOCI designations
- Permitting OCI treatment of changes in the fair value attributable to the issuer's credit risk for liabilities designated as FVPL
- Setting new criteria for reclassifying of financial assets and liabilities"

These changes have less significance than the ones discussed above but may nonetheless have an important impact on the accounting of entities with specific business models.

In addition to these changes, another minor but nonetheless important change is that "An entity may make an irrevocable election at initial recognition for particular investments in equity instruments that would otherwise be measured at fair value through profit or loss to present subsequent changes in fair value in other comprehensive income."(International Accounting Standards Board, 2014) In other words, an entity may make an investment into an equity instrument and designate it as FVOCI. This is interesting for institutions as doing so eliminates unwanted volatility (due to changes in value of the equity instrument) in the P&L statement.

Impairment (Phase II)

The major change caused by IFRS 9 is linked to the impairment of assets. The assets that are subject to the impairment rules are only assets measured at AC or FVOCI.

IFRS 9's impairment model is based on the concept of the "Expected Credit Loss" model. Expected Credit Loss is calculated by doing the following:

1. Identifying the different scenarios in which a loan/receivable defaults
2. Identifying the discounted cash shortfall of each scenario (i.e. the Loss Given Default)
3. Multiplying that loss by the probability of the default happening (i.e. the Probability of Default)
4. Summing up the results of all such possible default events (PricewaterhouseCoopers, 2017)

To illustrate this process, let us adopt a hypothetical (and simplified) scenario in which we have a loan for which all discounted cash flows are worth 1000. There are two scenarios in which default happens: scenario A where the financial institution loses 50 % of future cash flows and scenario B where the financial institution loses 90 % of future cash flows. Scenario A has a probability of 5 % while Scenario B has a probability of 1 %.

The calculation to find the Expected Credit Losses would therefore be (for each scenario):

$$Exposure\ at\ Default * Loss\ Given\ Default * Probability\ of\ Default$$

In this case it would be:

$$1000 * 50\% * 5\% + 1000 * 90\% * 1\% = 25 + 9 = 34$$

In this example, the financial institution will have to provision for Expected Credit Losses of 34. It is important to note that even though the name of the model is Expected Credit Losses, this provision is neither expected (as it is taken now) nor a loss.

IFRS 9 requires entities to "measure expected credit losses of a financial instrument in a way that reflects (a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; (b) the time value of money and (c) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions" (International Accounting Standards Board, 2014)

Due to the complexity of the Expected Credit Loss impairment model, a simplified approach exists for trade receivables and lease receivables.

There are three Stages in IFRS 9's approach to impairment.

Stage 1 is the stage in which most assets are placed at initial recognition (i.e. when asset are originated or acquired). This Stage requires the entity to only provision for 12-month Expected Credit Losses and the interest recognized as income is the interest on the gross (i.e. contractual) amount.

Stage 2 is the stage to which assets move after a Significant Increase in Credit Risk (SICR) (i.e. an increase in Probability of Default) is seen. Once the SICR criteria is fulfilled (and the transition from Stage 1 to Stage 2 happens), the asset must be provisioned at Lifetime Expected Credit Losses. In other words, the entity must calculate Expected Credit Losses on the lifetime of the asset rather than only on the upcoming 12 months. This can imply significantly higher provisions for the entity. Interest is also recognized on the gross (contractual) amount.

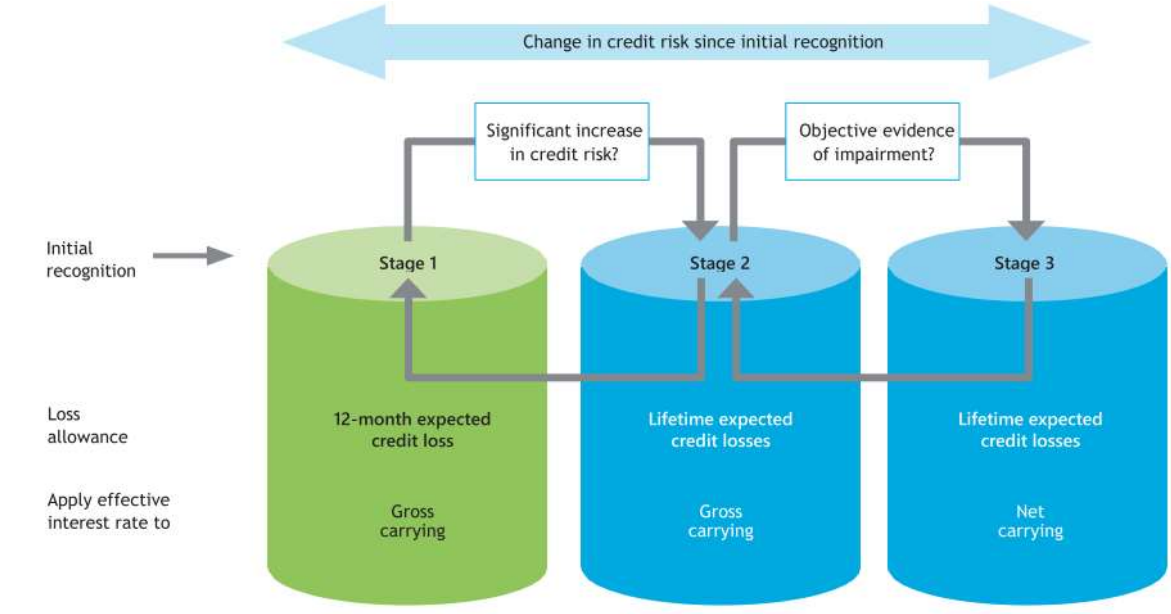

Figure 2: Summary of the IFRS 9 Impairment model (Deloitte, 2016)

PricewaterhouseCoopers (2017) underlines the judgment necessary from entities to judge whether the SICR has effectively taken place. The only exception to this process is if an asset is determined "to have a low credit risk at the reporting date".(International Accounting Standards Board, 2014) An example of such an asset could be a German government bond.

Stage 3 is relevant for assets on which there is objective evidence of loss (i.e. that it will not be able to recover the entirety of the contractual amount). It is very similar to IAS 39's incurred loss approach. In this case, the entity recognises interest on the net (contractual amount – impairment) amount. This Stage can apply to assets which have already had an objective proof of loss or on assets which have been acquired as credit-impaired by the entity. (International Accounting Standards Board, 2014)

Hedging (Phase III)

According to IFRS 9, the objective of hedge accounting is to represent an entity's risk management strategies that use financial instruments to limit exposures to particular risk. Nonetheless, as under IAS 39, applying hedge accounting under IFRS 9 remains optional. Hedge accounting allows an entity to account for its hedging strategies which offset gains or losses on the exposures the entity may have. (International Accounting Standards Board, 2014) Refusing to adopt hedge accounting implies accounting for derivatives at FVPL and therefore introducing significant volatility into the Profit or Loss statement.

Entities can currently choose between applying IAS 39's hedge accounting or IFRS 9's hedge accounting. IFRS 9's hedge accounting is currently not complete as the "macro-hedging" component is only at the Discussion Paper phase (i.e. the Research phase explained in the IFRS sub-section hereabove).

IFRS 9 sets out 3 criteria that are necessary for hedging relationships to be eligible for hedge accounting:

1. Both the hedging instrument and the hedged item need to be eligible for hedging
2. There exists a formal designation and documentation of the hedging relationship and its link with the entity's hedging strategy (or strategies)
3. The hedging relationship meets the hedge effectiveness requirements

IFRS 9 significantly extends the flexibility offered to entities in terms of hedge management and is significantly more representative of possible risk management strategies. Examples of this include significant differences in treatment of the time value of options in hedging strategies or allowing non-derivative financial instruments to be used as hedging instruments.

Under IAS 39, an entity may hedge part or all the cash flows of a financial item due to the risks of the hedged item or decide to hedge part or all the cashflows only for specific risks.

This is only allowed if the risk can be identified and hedge effectiveness can be measured reliably.

IFRS 9 extends the eligibility of risk components to include non-financial items (as long as the component is separately identifiable and reliably measurable) which now allows hedge accounting for risk components of non-financial items (e.g. hedging the price of crude oil in jet fuel). (Deloitte, 2016) In addition to this extension, IFRS 9 allows the accounting of aggregate exposures (e.g. an asset and a derivative) to be an eligible hedged item (in clear opposition to IAS 39 under which this practice was banned).

Under IFRS 9, groups of items resulting in a net position may be hedged collectively if the individual items (assets) are individually eligible for hedging and if the risk of these assets is managed collectively. This can therefore bring significant simplification for entities applying hedge accounting.

Hedge effectiveness requirements under IFRS 9 differ significantly from those under IAS 39. Under IAS 39, hedge effectiveness needed to be tested both prospectively and retrospectively (with the binding rule of 80-125% hedge effectiveness). IFRS 9 approaches the issue with a more principles-based approach and uses three criteria that must be met at the beginning of each hedge period:

- There must be an economic relationship between the hedged item and the hedging instrument
- The effect of credit risk does not dominate the value changes resulting from the economic relationship
- The hedge ratio of the hedging relationship is the same as that actually used in the economic hedge (Deloitte, 2016)

On initial application of IFRS 9 (i.e. on the 1st of January 2018), entities can decide whether to adopt IFRS 9's hedge accounting or to keep applying IAS 39's hedge accounting requirements.

Disclosures

IFRS 9 significantly amends IFRS 7 – *Financial Instruments: Disclosures* by introducing several new requirements linked to classification and measurement, impairment and hedge accounting.

The disclosure requirements linked to classification and measurement are predominantly focused on the gains and losses linked to the derecognition of assets classified at hold-to-collect (i.e. at amortized cost).

Changes in credit risk and credit risk management practices require extensive disclosures under the amended version of IFRS 7. Examples of disclosures include detailed loss allowances by class.

Disclosures for hedging are mainly linked to entities opting to continue to apply IAS 39's hedge accounting.

Literature Review

In order to qualitatively assess the impact of IFRS 9 on Belgian banks, it is necessary to first assess the literature's conclusions. As such, I have split this literature review in three parts. The first is a high-level assessment of the impact of IFRS (broadly speaking and focused on IAS 39 and IFRS 9's impacts) on transparency, accuracy and comparability of accounting statements. The second part studies the specific literature on the impact of the different phases (Classification and Recognition, Impairment and Hedging) on banks. The final part assesses the difficulties that banks faced in implementing both the initial IFRS standards and IFRS 9. This literature review will allow me to build up a number of hypotheses which will be tested through interviews with relevant industry players.

Quality of Accounting Statements

Transparency

Existing theoretical literature studies the link between bank transparency and how it affects risk and risk-taking behaviours of banks and the financial system. Bank transparency is, by its very nature, interlinked with the accounting decisions taken by the institution. Accounting choices, by extension, are both a consequence and cause of risk-taking behaviours and therefore impact bank stability.

Accounting policy can:

> exacerbate capital inadequacy concerns during economic downturns by compromising the ability of loan loss reserves to cover both unexpected recessionary loan losses and […] degrade transparency, which can increase financing frictions, inhibit market discipline of bank risk taking, and allow regulatory forbearance. (R. Bushman, 2016, p. 14)

These factors may cause bank fragility and/or opacity in reporting (and lead to unrecognized risks for investors). Recent evidence shows that "accounting policy choices are significantly associated with a greater downside tail risk of individual banks and with greater systemic risk." (R. Bushman, 2016, p. 14)

Accounting policy choices influence two main types of information: qualitative information (such as disclosures) and quantitative information (which can influence regulatory impact). Transparency, if absent, can lead to risk-shifting inside of the bank and possibly lead to doubts about the institution's viability. R. M. Bushman and Williams (2015) explored the link between accounting policy and risk by assessing the extent to which "individual banks delay

expected loan loss recognition in current provisions". (R. M. Bushman & Williams, 2015, p. 2) They consider this delay to be an expression of opportunistic provisioning behaviour and an overall lack of transparency. Such behaviour is associated with higher levels of firm-level and aggregate liquidity risk (especially in times of stress) and leads to higher financing costs, larger drops (than average) of market values in times of stress and a higher impact of systemic risk on the relevant institutions.

The initial adoption of IFRS was expected to increase transparency levels of many companies (Jermakowicz, 2004) but this effect was significantly mitigated by varying levels of implementation/enforcement of the accounting norms (both in and outside Europe). Ball (2006) reminds us that "most political and economic influences on financial reporting practice remain local". (Ball, 2006, p. 12) As such, it is essential that investors are not misled into overestimating the levels of transparency and uniformity brought by IFRS implementation. Uneven implementation and international differences will therefore continue to slow efforts towards convergence of accounting standards (even in countries having already adopted IFRS). Such uneven implementation can imply elevated information processing costs and hidden accounting inconsistencies leading to suboptimal investment decisions. (Ball, 2006)

Private firms voluntarily adopting IFRS are associated with a higher attractiveness for foreign funding but a neutral attractiveness for domestic funding. These private firms are mainly large and internationally active firms who feel that IFRS adoption benefits outweigh the costs. (Balsmeier & Vanhaverbeke, 2016) Adopting IFRS is akin to improving accounting quality for prospective lenders which allows foreign investors to better assess those firms as, for these foreign lenders, "soft" information is too costly to process and they prefer to rely on the "hard" information supplied by accounting statements. (Christensen, Lee, Walker, & Zeng, 2015) Research has nonetheless shown that voluntary IFRS adopters usually have higher levels of domestic bank funding but this significance disappears once it is controlled to the self-selection factors that voluntary IFRS adopters usually exhibit (higher financing needs, higher transparency, etc.). (Balsmeier & Vanhaverbeke, 2016)

Ashbaugh and Pincus (2001) found that analyst's forecasts were significantly more accurate after the transition to IAS/IFRS and that the gain in accuracy was positively correlated to the size of the difference between domestic accounting standards and IFRS. Further studies found that the largest improvement in forecast accuracy was found to be for mandatory adopters (Horton & Serafeim, 2010; S. Kim, Kim, & Kwon, 2016) and that analysts upgraded their recommendations following the adoption of IAS (Horton & Serafeim, 2010). Academic

research has also focussed on the concept of value relevance which links returns to specific accounting elements such as book value of equity. Results were inconclusive as they varied wildly according to the country studied (countries included France, Spain, Italy or the UK) (Brown, 2011). Furthermore, it has been estimated that IFRS adoption reduces the cost of capital for mandatory adopters by an average of 47 basis points (Brown, 2011).

Daske, Hail, Leuz, and Verdi (2008) also examined the effects of mandatory IFRS reporting. On average, they found that market liquidity and equity valuations increase on average while firms' cost of capital decrease. Nonetheless, these benefits are strongest in countries where enforcement is strong and the incentives to be transparent are strong.

Armstrong, Barth, Jagolinzer, and Riedl (2010) found that investors expected net benefits to IFRS adoption in Europe due to higher information quality and better enforcement of standards. The last point is nonetheless tempered by the perception that code law countries, in which enforcement was expected to be less strict, investors were expecting significantly smaller benefits or even a negative impact. Belgium is one of these countries and Jorissen (2017) found that IFRS had limited influence on private enterprises with a tolerance for non-disclosure of group information for small and medium entities.

This brings us to our first hypothesis:

H1: IFRS 9 will, in line with previous IFRS implementations, boost transparency.

Accuracy/Reliability

Literature showing that IFRS adoption improves accounting quality is plentiful (Zeghal, Chtourou, & Fourati, 2012). Furthermore, these studies usually show that the impact of IFRS adoption is dependent on the divergence from the domestic accounting standards: the larger the difference, the larger the positive impact on accounting quality (Florou, Kosi, & Pope, 2017; Prather-Kinsey, Jermakowicz, & Vongphanith, 2008).

Such improved accounting quality leads to better financing terms (with a larger effect on debt financing), a higher level of reliance on public markets for funding and higher foreign investment levels. (Beneish, Miller, & Yohn, 2015; Florou & Kosi, 2015; J.-B. Kim, Tsui, & Yi, 2011) Li (2010) links this reduction in cost of equity to improved disclosures and better comparability but, in contrast to some of the literature, also shows that strong enforcement mechanisms are necessary to benefit from this financing cost reduction. Biddle, Hilary, and

Verdi (2009) link this improvement in investment efficiency to "reducing information asymmetries" (Biddle et al., 2009, p. 29).

Academic literature shows that IFRS leads to lower levels of earnings management, better loss recognition and overall higher accounting reporting quality partly due to a higher use of fair value measurement.(Chen, Tang, Jiang, & Lin, 2010; Dimitropoulos, Asteriou, Kousenidis, & Leventis, 2013; Iatridis, 2010) Iatridis (2010) specifically associates this decrease in earnings management to both a higher use of fair value and a better recognition of large losses. IFRS adoption also has a larger impact in institutionally weak countries (characterized by a small stock market, concentrated ownership, weak legal enforcement) and on smaller companies according to Schleicher, Tahoun, and Walker (2010). Soderstrom and Sun (2007) find that the quality of the standards, a country's legal and political system and financial reporting incentives are crucial in assessing whether accounting quality will improve.

Nonetheless, Callao and Jarne (2010) have shown that earnings management intensified after the adoption of IFRS and explain this rise by differences between IFRS and local standards in terms of valuation criteria. Jeanjean and Stolowy (2008) have similar results and explain that "the pervasiveness of earnings management did not decline after the introduction of IFRS, and in fact increased in France"(Jeanjean & Stolowy, 2008, p. 14). The variables influencing earnings management such as business size, leverage (both positively correlated with earnings management) or institutional factors (negatively correlated) are as strong before and after IFRS adoption. Barth, Landsman, and Lang (2008) and Christensen et al. (2015) see improved earnings management only in entities having adopted IFRS voluntarily which may imply issues whenever IFRS is rendered compulsory.

Managing earnings is seen as attractive by financial officers due to its perceived ability to boost stock prices and reassure stakeholders. The consequences of failing to smooth earnings are perceived to be severe. Nonetheless, disclosures are made to promote a reputation for transparent reporting, reduce information risk with the caveat that there is a fear of creating unsustainable disclosure expectations. Managers also say that they disclose bad news faster than good news to build investor trust in the company (Graham, Harvey, & Rajgopal, 2004).

Goodwin, Ahmed, and Heaney (2008) focus on Australia and show that, apart from the financial industry, IFRS does not enhance financial reporting quality. Marton and Runesson (2017) find that "high-judgment standards work better with high levels of enforcement and in

the absence of incentives" (Marton & Runesson, 2017, p. 18) and that loan loss provisions made under IFRS have a consistently weaker predictive ability on a bank's results than those made under GAAP.

As Brown (2011) puts it, "In brief, it is obvious that not all studies have reached the same conclusion. Different samples and different proxies for 'quality' must explain much of the confusion in the literature" (Brown, 2011, p. 8).

The literature is sparse on the potential impacts on accuracy of the implementation of IFRS 9. The European Systemic Risk Board (2017) considers that IFRS 9 does well to eliminate a fictitious accounting division of an embedded derivative to its underlying asset (the derivative being classified at fair value while the rest of the asset was classified at Amortized Cost or FVOCI). Furthermore, the transition from Incurred Loss to Expected Credit Loss is also expected to help in "fully recognising existing credit losses earlier in the credit cycle" (European Systemic Risk Board, 2017, p. 19) therefore boosting accounting accuracy.

Investor's reaction to IFRS 9 has been found to be affected by firm-specific factors such as pre-adoption information quality and low information asymmetry. The return is positively related to size, a dispersed ownership structure, liquidity and the presence of a Big 4 auditor. IFRS 9 may not lead to a higher accounting quality due to investor perception of high implementation costs and an overall uncertainty regarding IFRS 9's effects (Onali, Ginesti, & Ballestra, 2017).

Arbak (2017) studied the provisioning policies of Belgian banks and found three main things: provisioning policies are strongly correlated with capital levels (but this relationship weakens when bank-specific factors and differences seem to be linked to differences in business models), provisioning and net earnings are linked which may be proof of earnings management and there is a weak but present link between provisioning and future earnings.

Even if evidence is significantly more mixed towards IFRS improving the accuracy of accounting statements, the hypothesis tested will be the following: I

H2: IFRS 9 will improve the accuracy of accounting statements

Disclosures are an essential part of the information that institutions share with investors. Their importance is highlighted by the fact that 75% of managers are "willing to give up small or moderate economic value to achieve smooth earnings paths" (Graham et al., 2004, p. 40). This underscores the importance of effective and transparent disclosures to allow investors and stakeholders to assess the true state of a financial institution.

Firms are reported to make non-mandatory disclosures to "promote a reputation for transparent reporting, […] reduce the information risk assigned to the firm's stock and […] to address the deficiencies of mandatory reporting"(Graham et al., 2004, p. 40). Nonetheless, CFOs are usually reluctant to disclose too much as such heightened levels of disclosure may lead to unmanageable future disclosure expectations. Managers also state that they, with some caveats, usually release bad news faster than good news in an effort to cultivate a reputation of transparency. (Graham et al., 2004) Nonetheless, Jorissen (2017) observed that, at the Belgian level, there exists "a certain level of tolerance for non-disclosure of group information, except when large or very large groups are involved" (Jorissen, 2017, p. 11).

According to Daske and Gebhardt (2006), IFRS adoption has led to a widespread perception of higher disclosure quality for both voluntary and mandatory adopters. Nonetheless, their study, even if it covered 22% of the adopters of IFRS at the time, was only focused on Germany, Austria and Switzerland (Daske & Gebhardt, 2006). Other research has shown that IFRS-based disclosures have been shown to improve market efficiency, transparency (as quantified by a lower level of surprise for future disclosures) and led to a lower value of private information held by institutional investors (Beuselinck, Joos, Khurana, & Meulen, 2010). These results were tempered by the necessity of having strong enforcement/institutions of standards (Brown, 2011). Voluntary IFRS-based disclosures (and early adoption of the standards) are usually linked to large entities with strong debt and equity financing needs for which transparency boosts credibility and leads to better financing terms (Iatridis & Rouvolis, 2010).

Barth and Landsman (2010) considered that disclosures, especially in terms of measurement and recognition of complex financial products, were insufficient for investors to be able to adequately assess the true underlying risk that banks held. They therefore saw prospective improved disclosure requirements by the FASB and the IASB for asset securitizations as a significant but insufficient step. Their recommendations extended to enhanced disclosures to improve investor knowledge of the market sensitivity of existing derivative positions.

After the 2008 crisis, the IASB highlighted the issue of disclosures specifically when relevant to the issue of fair value measurement of financial instruments in illiquid or inexistent markets (Iatridis, 2010). Research has also shown that fair values disclosures are of value to investors but this usefulness is tempered by measurement error and whether estimates come from management or external appraisers (Landsman, 2007). In addition to IASB's actions, the FSB created a private-public task force, the Enhanced Disclosure Task Force (EDTF), to "develop principles for improved bank disclosures and identify leading practice risk disclosures" (Edwards, 2016, p. 20). It was made up of relevant private players and made recommendations which have been progressively implemented by major international banks (Edwards, 2016).

As discussed extensively in Phase I: Classification, the debate about fair value accounting has left academia split. Nonetheless, literature has shown that "fair value accounting played little or no role in the Financial Crisis"(Barth & Landsman, 2010, p. 20). Fair value accounting is debated when concerned with two types of assets: assets held for cash-flow collection (rarely sold) and assets which don't have a liquid market. For the first type of asset, for which market values could be available, fair value could "induce excessive volatility and potential procyclicality in net income and in regulatory capital if not "matched" by corresponding movements in values placed on liabilities" (European Systemic Risk Board, 2017, p. 11). The worry for the second type of asset is linked to managerial discretion in modelling which could inflate fair values. This could be nonetheless "attenuated, via market discipline, using extensive disclosures of modelling assumptions" (European Systemic Risk Board, 2017, p. 11).

IFRS 9 is far more principle-based than IAS 39. As such, it leaves the door open to interpretation and managerial discretion. Expected Credit Loss modelling, with its broad guidelines, leaves room for interpretation and differences in implementation may lead to modelling differences and create concerns that some entities may modify models in a bid to minimise provisions. These risks "may be addressed via enhanced disclosure of the underlying model assumptions […] and the gradual definition of best practices and convergence in ECL measurement" (European Systemic Risk Board, 2017, p. 23).

Understanding the importance of the new Expected Credit Loss accounting standards (implemented by the IASB and which will be implemented by the FASB), the Financial Stability Board (FSB) requested the help of the EDTF to "recommend disclosures to help market participants understand the upcoming changes resulting from ECL approaches and to

promote consistency and comparability" (Edwards, 2016, p. 20) which will allow readers of financial reports to effectively assess and understand the changes linked to the new Expected Credit Loss frameworks (and the new ECL-induced provisions volatility) . (Edwards, 2016)

The key areas of focus outlined by the EDTF are linked to interpretations and policies linked to ECL, the sensitivity of models to macro-economic changes, and the difference between accounting ECL provisions and regulatory capital. Furthermore, the EDTF recommended that there be a phased disclosure implementation approach (before IFRS 9's final implementation date) by initially focusing on qualitative disclosures. (Enhanced Disclosure Task Force, 2015)

The European Banking Authority (EBA) has highlighted the importance of disclosures to allow stakeholders to assess the impact of the transition to IFRS 9 (European Banking Authority, 2017c). Furthermore, the EBA has recommended, to boost market transparency and minimize complexity, that banks do not adopt a dynamic approach in implementing IFRS 9 (i.e. the European Parliament allows banks to spread the impact of the new accounting provisions on CET1 capital over a few years in the dynamic approach instead of calculating the adjustment once). The EBA believes that such an approach will allow the most prudent path to transitioning to IFRS 9. The EBA underlines the importance of stringent disclosure requirements due to the added complexity of the possibly adopted dynamic approach (European Banking Authority, 2017b). These approaches will be explained in Phase II: Impairment of this literature review.

Mandatory disclosures can have positive impacts by sharing additional information. Nonetheless, Cordella and Yeyati (1998) show that disclosures linked to negative exogenous factors imply increased funding costs and can therefore make management reluctant to disclose. As such, too much disclosure can be negative for the soundness of individual institutions and for systemic stability. The BCBS' literature review shows that mandatory disclosures have a positive effect if they allow investors to understand the effectiveness of the bank's risk controls and that improved disclosures promote safer banks. Nier and Baumann (2006) show that banks that disclose more information are subject to stronger market discipline and have higher capital buffers. (Basel Committee on Banking Supervision, 2015b).

This leads us to the third hypothesis:

H3: IFRS 9 will need reinforced disclosures to present an accurate picture of the financial institutions

Comparability

According to Jermakowicz (2004), the initial adoption of IFRS will increase both transparency and comparability of consolidated accounts for all adopters. This is nonetheless tempered by the complex nature of the standards and the possible divergence in implementation leading to an uneven playing field. S. Jones and Finely (2011) have shown that IFRS adoption has decreased financial diversity (both between and inside countries). Empirical evidence shows that adopting IFRS improves the quality of financial reporting with a significant caveat for institutional factors leading to expected cross-country differences post-implementation. IFRS was expected to increase transparency and comparability through a broader use of Fair Value accounting. Critics argue nonetheless that model-based fair value does not improve investors' information nor does it improve comparability (Palea, 2013).

To improve comparability, the European Union has implemented a strong institutional framework aiming to strengthen convergence (Chen et al., 2010). More than a decade after widespread adoption of IFRS, significant differences remain due to uneven implementation and due to the local specificities of the countries adopting IFRS. As such, comparability remains lacking (Ball, 2016). Furthermore, it was very clearly shown that earnings comparability did not significantly improve after mandatory IFRS adoption (Chen et al., 2010). Lourenço, Sarquis, Branco, and Pais (2015) have shown that the introduction of IFRS has not led to a significant decrease in inter-country accounting differences as national accounting systems remain relevant. Improvements in comparability (linked to institutional factors, financial reporting incentives and the quality of the accounting standards) will be determined mainly by improvements in reporting incentives and national institutions (Soderstrom & Sun, 2007).

The flexibility that IFRS offers is a prerequisite for widespread adoption but may imply a long way to go before reaching comparability and international convergence (Callao & Jarne, 2010). Furthermore, the flexibility offered by IFRS may imply abuse of this flexibility as firms keep their old accounting practices under IFRS (Carmona & Trombetta, 2008).

Ball (2006) examined 16 accounting issues on which divergence was possible under IFRS and compared them before and after initial IFRS adoption. The conclusion was that IFRS, after its initial year, diverged significantly across different countries on both trivial and complex matters. These complex matters significantly hurt comparability while giving investors the misleading impression of uniformity. These divergences can be explained by the fact that

political and economic influences on accounting standards remain predominantly local. Furthermore, these divergences could disappear over time. Marton and Runesson (2017) argue that divergence will be stronger in balance sheet values than in income statements due to the fact that balance sheet values have accumulated over a long time-period and may therefore have a significantly higher persistence.

Nonetheless, convergence remains a controversial topic. IFRS proponents consider that IFRS has reduced earnings management and has boosted transparency. They also argue that the pressure of globalisation and the wish to avoid a remake of past financial crises will lead to ever-growing unification pressures. Opponents argue that accounting standards have and will remain strongly influenced by local practices and incentives will always exist for local players to keep different interpretations of IFRS (Brown, 2011). Furthermore, opponents argue that limiting manager discretion will limit the accuracy of financial reporting as they will not be able to adapt reporting to the company's specificities. Finally, opponents argue that earnings management will rise after global IFRS adoption (Chen et al., 2010).

At the Belgian level, the "context is not very conducive for the IFRS to indirectly influence accounting practices in Belgium or inspire the Belgian legislature and its advisory bodies." (Jorissen, 2017, p. 11) as accounting in Belgium is based on the respect of the principle of fiscal neutrality and which therefore significantly slows international convergence.

IFRS 9 moves to a more principle-based approach when compared to IAS 39. As such, the European Systemic Risk Board (2017) highlights the fact that IFRS 9 has been broadly defined leaving "many important details to the judgement of the reporting entities and their interaction with auditors and regulators." (European Systemic Risk Board, 2017, p. 5)

Investors have reacted positively to news related to IFRS 9 adoption events as they expect IFRS 9 to address IAS 39's issues. The standard may lead to poorer firm-specific information (in countries with low divergence between domestic and IFRS standards) but the added comparability is a significant benefit which outweighs this drawback. (Onali & Ginesti, 2014)

The transition from IAS 39 to IFRS 9 will lead to significant changes in impairment. According to Petchchedchoo and Duangploy (2017), IFRS 9's new impairment approach improves comparability of impairment among assets with similar characteristics. Nonetheless, the European Banking Authority (2017a) highlights the risk to comparability linked to the necessary judgment necessary to implement ECL assessment. The main difference between expected and incurred loss model is that the former is significantly more subjective than the

latter (as the expected model relies on the institution's expectations). Furthermore, the transition from Stage 1 to Stage 2 (which depends on the SICR factor) is left to the appreciation of each bank may have significant impact on provisions and therefore P&L. IFRS 9 does nonetheless provide a non-exhaustive set of factors but this will hinder comparability. Beerbaum and Ahmad (2015) therefore ask themselves "if standard setters and regulators should provide more guidance to avoid that a heterogene set of methodologies are implemented resulting a decreasing comparability" (Beerbaum & Ahmad, 2015, p. 5).

The FASB and the IASB have been working towards accounting standards convergence. Nonetheless, the new credit impairment standards are significantly different: credit losses for the FASB are linked to the contractual cash flows while credit losses for the IASB are linked to cash flows that are expected to be collected in addition to different credit loss provisioning methods (a mixed approach for the IASB and a lifetime-ECL approach for the FASB). (Hashim, Li, & O'Hanlon, 2016)

The Basel Committee on Banking Supervision has issued supervisory guidance on accounting for ECL which sets out a number of expectations to ensure "sound credit risk management practices for credit institutions, associated with the implementation and ongoing application of ECL accounting models" (European Banking Authority, 2017a, p. 4) which highlights the importance of consistent and high-quality implementation of IFRS 9 in order to achieve consistent and accurate applications of IFRS 9. The European Banking Authority has offered guidelines on subjects varying from the use of information to ECL modelling and credit risk management. The EBA highlights the importance of proportionality (i.e. implementation quality will be dependent on the size and the resources of the organisation). (European Banking Authority, 2017a)

This leads us to our 4th hypothesis:

H4: Due to a move towards a more principle-based standard, comparability between banks/countries will decrease

IFRS 9: The Impact of the Specific Phases

Phase I: Classification and Recognition

As a reminder, measurement under IFRS 9 is based on a principle-based approach that uses the business model of the entity holding the asset (hold-to-collect or hold-to-collect-and-sell) and of the characteristics of the asset itself (contractual cashflows being solely payments of principal and interest (SPPI)) as deciding factors. Assets at hold-to-collect and satisfying the SSPI condition are classified at Amortized Cost (AC) while assets at hold-to-collect-and-sell and satisfying the SPPI condition are classified as Fair Value through Other Comprehensive Income (FVOCI). All other assets (not satisfying the SPPI condition) are held at Fair Value through Profit and Loss (with some exceptions).

Surveys on IFRS 9's potential impact do not show any significant increase in the use of fair value as the quantitatively most important asset classes aren't subject to significant changes from their classification under IAS 39. There may be some changes, such as some assets held for managing liquidity being classified at AC rather than FVOCI or assets with embedded derivatives being entirely classified at FVPL rather than being split (as was done under IAS 39). These changes are expected to only have a marginal impact on bank's asset classifications. (European Systemic Risk Board, 2017)

The EBA regularly collects supervisory data on 190 EU banks with total assets of almost €30 trillion (i.e. 90 % of all assets held by EU banks) in which it assesses which assets are held at AC, FVOCI or FVPL. "Assets measured at amortised cost constitute the bulk of total assets (57.6%) for the EBA sample of EU banks, followed by assets measured at fair value (36.5%) and other assets (5.9%). Since IFRS 9 does not change the measurement of derivatives (measured at fair value through profit or loss under both IAS 39 and IFRS 9) and to avoid distorting the assessment because of the fact that derivative positions measured on the liability side of the balance sheet largely match those on the asset side, […] [the EBA] distinguishes between assets measured at fair value other than derivatives (24.8% of total assets) and derivatives (11.7%). The former essentially consists of four major components: cash and cash balances at central banks (6.7% of total assets), assets held for trading (6.8%), assets designated at fair value through profit or loss (3.0%) and available-for-sale financial assets (8.4%)." (European Systemic Risk Board, 2017, p. 14)

At an aggregate level, the items whose measurement might evolve due to IFRS 9 represent only a very small fraction of the total assets of EU banks (i.e. equity instruments classified as

available-for-sale (AFS) under IAS 39 and instruments with embedded derivatives). AFS equity instruments and instruments with embedded derivatives represent respectively 0.4 % and 0.1 % of total assets as of the end of December 2016. These are aggregate amounts so specific entities, countries or business models may be more affected than others. (European Systemic Risk Board, 2017) The European Banking Authority argues that banks with plain vanilla products will be the ones on which the changes in classification will have the least impact. (European Banking Authority, 2016)

Regulatory requirements imply that banks hold highly liquid assets above daily liquidity requirements which can be used in times of acute stress. These assets are meant to be used very rarely and so are managed to maximise interest income. Assets used to manage daily liquidity will be classified at FVOCI but assets held for longer periods of time will be classified at AC will substantially reduce volatility in normal times but may imply significant volatility (and crystallise market risk in times of stress) if those assets are sold for liquidity in times of market stress. (European Systemic Risk Board, 2017)

Academic literature has long debated about the merits of fair value accounting when compared to historical cost accounting. Conceptually, fair value helps investors understand the true value of an entity's assets but issues arise when trying to implement fair value. Fair value works best when exit prices exist in a market and where there is a one-to-one relationship between exit prices and fair value (such as in investment funds). This relationship fails either when fair value is modelled (and not observed) and/or when fair value measurements are dependent on a business strategy rather than exit prices. Fair value also implies a number of asset-liability matching issues. (Penman, 2007)

Worries about the use of fair value in IFRS are not limited to IFRS 9. The first questions about rising volatility in reported values (of assets and earnings) arose when IAS 39 was being implemented. (Jermakowicz, 2004) Harris, Khan, and Nissim (2014) have shown that fair value is, as it should be, a useful indicator for expected credit losses but these values sometimes fail to capture all the information that could be relevant to assessing credit losses. Landsman (2007) explains that disclosed and recognised fair values can add value to investor's information but that this value is significantly affected by possible measurement error.

Fair value accounting may have problems but its alternative, historical cost accounting, also has a list of issues. The bottom line is that historical cost accounting is deemed to be key to

financial stability while fair value accounting puts financial stability at risk. A growing body of literature is criticizing this perception. (European Systemic Risk Board, 2017)

The table below summarises most of the arguments for both sides:

Arguments against fair value (for historical cost)	Arguments for fair value (against historical cost)
Temporary changes in market value are not relevant for assets held for the collection of future cash flows. In particular, for longer term investments.	Temporary market value changes are relevant when determining whether assets can be held for the collection of their cash flows, especially if they are funded in the short term.
FVA produces increased volatility of equity and, if fair value changes go through profit or loss, in net income. The part of such volatility due to interest rate changes is "not relevant" if assets are held until maturity. There is a mismatch between assets measured at fair value and liabilities measured at historical cost.	Volatility under historical cost is artificially low as it does not reflect current market prices. Interest rate changes are relevant for banks, especially when facing refinancing needs. The mismatch between the measurement of financial assets and financial liabilities can be addressed by increasing the role of FVA on the liability side rather than reducing it on the asset side.
Investors are misled by high volatility (and tend to overreact to negative news in a crisis and positive news in booms, feeding volatility). Fair value reveals critical information to competitors and other investors (e.g. proprietary trading strategies followed by the reporting entity).	Investors are misled by artificially low volatility. Market discipline suffers. Lack of information contributes to adverse selection in a crisis. Fair value increases transparency which is generally beneficial.
To reduce the impact of interest rate volatility, banks shift to securities with shorter maturities and reduce holdings of interest-sensitive available-for-sale securities, which might reduce market liquidity.	FVA reduces reluctance to sell holdings of risky, illiquid securities, in particular at the start of a crisis.
FVA contributes to procyclicality and results in fire sales in a crisis when assets become illiquid and decrease in value	FVA encourages banks to take early corrective action at the onset of a crisis (e.g. sell assets or raise capital).

Figure 3: Arguments in favour of or against fair value accounting and implications for financial stability (European Systemic Risk Board, 2017)

All of these elements have brought us to our next hypothesis:

H5: Changes in classification will not have a significant impact on Belgian banks

Phase II: Impairment

One of the biggest changes between IAS 39 and IFRS 9 is the transition from an incurred loss model to an expected credit loss model. As such, it can be interesting to understand the motives behind such a transition.

The lack of forward-looking expectations and of general prudence was the basis of much of the criticism linked to IAS 39. The standard was accused of allowing greater and imprudent credit expansion, limiting transparency and of allowing unrealized profits (Gornjak, 2017) by leading to late and incomplete recognition of impairment losses on financial instruments. Empirical literature has shown that delayed loss recognition of expected losses has a negative impact on financial stability (Beatty & Liao, 2011; R. M. Bushman & Williams, 2015; European Systemic Risk Board, 2017) The standard was also accused of preventing banks of provisioning appropriately for credit losses deemed to be probable (i.e. forcing them to wait for objective evidence of loss to record the credit deterioration) and therefore led to the "too little, too late" statement. (Edwards, 2016) Nonetheless, the academic literature produced right after the crisis does not show any conclusive evidence that fair value accounting, which integrates expected credit losses, would have "triggered, or even extended, the financial crisis" (Gornjak, 2017, p. 127)

Laeven and Majoni (2003) explained that it was essential that regulators pay attention to the regulation of provisioning policies even though the subject was complicated by country-level factors such as tax regulation. They underlined the importance of setting up a level playing field in terms of loan loss provisioning on which the (at the time) new Basel Accords could be added. Empirical evidence shows that "banks on average postpone provisioning when faced with favourable cyclical and income conditions until negative conditions set in"(Laeven & Majnoni, 2003, p. 195). Institutional and regulatory specificities on a national level can create an uneven playing field and create systemic risks. Finally, "risk-based regulation of loan loss provisions and reserves offers the potential benefit of a desirable dampening of the pro-cyclical effects of capital regulation". (Laeven & Majnoni, 2003, p. 194)

Conscious of the failings of the reporting issues that arose from the financial crisis, the IASB and FASB (the IASB's American counterpart) formed the Financial Crisis Advisory Group to consider eventual improvements in financial reporting to repair fragile investor confidence. In July 2009, the FCAG highlighted two main shortcomings of the relevant accounting standards: "the delayed recognition of losses associated with loans, structured credit products,

and other financial instruments by banks, insurance companies and other financial institutions" and "the extraordinary complexity of accounting standards for financial instruments, including multiple approaches to recognizing asset impairment" (Financial Crisis Advisory Group, 2009, p. 3) These comments were in line with both investors' comments and FSB (Financial Stability Board) and BCBS recommendations to the G20 and IASB/FASB. (Edwards, 2016)

The new model aims to have an earlier recognition of credit losses. Under the previous incurred loss model, a "trigger event" was necessary to recognise credit losses. This trigger event was determined by a "loss event" which had to have objective proof of loss. (Novotny-Farkas, 2016) The new standard eliminates this trigger event and forces entities to anticipate expected credit losses before such an event. These expected credit losses need to be updated "to reflect changes in credit risk as estimated using available information, including forward-looking macroeconomic variables" (European Systemic Risk Board, 2017, p. 18)

The integration of forward-looking macroeconomic variables into Expected Credit Loss is an answer to the G20 explicitly asking international accounting standard setters (both the IASB and the FASB) to broaden the range of relevant credit information that had to be incorporated in Expected Credit Losses modelling. The G20 explicitly asked for the integration of macroeconomic variables (both present and future) and to qualify their impact on expected losses. The G20 not only asked for macroeconomic variables to be integrated in the new impairment approach but also, in more general terms, to "strengthen accounting recognition of loan loss provisions by incorporating a broader range of credit information" (Basel Committee on Banking Supervision, 2015a, p. 3). This new approach nonetheless presents significant challenges in terms of implementation (which will be covered further on) (Basel Committee on Banking Supervision, 2015a; European Banking Authority, 2017a)

Such an integration is expected to avoid the pitfalls of "too little, too late" that befell the IAS 39 standard. This Point in Time expectation of expected credit losses will be able to react significantly better than a provisioning policy based on a lagging indicator of credit risk. In other words, the recognition of credit losses was based on factors such as missed payments or unemployment. These materialisation of credit losses (specifically for missed payments) significantly lag the initial deterioration of credit risk. The Expected Credit Loss model is therefore expected to "improve the timeliness of the recognition of credit losses as mandated by the G20". (European Systemic Risk Board, 2017, p. 19) This is obviously a significant change when compared to the IAS 39 standard in which you were, in general, prevented from

recognising future expected losses. IFRS 9 is, for the European Banking Authority, “an improvement compared with IAS 39 in the accounting for financial instruments” and is “expected to address some prudential concerns and contribute to financial stability”.(European Banking Authority, 2017a, p. 4)

The last positive factor highlighted by the European Systemic Risk Board is the fact that IFRS 9 allows entities to group, when indicators/factor related to the credit information of an instrument are not available, financial instruments together and therefore assess (and possibly impair) them in a collective way based on factors such as credit risk features. “IFRS 9 explicitly refers to retail loans as examples of these situations, since there is typically little or no updated credit risk information that is routinely obtained and monitored for an individual instrument until a customer breaches the contractual terms.”(European Systemic Risk Board, 2017, p. 20)

H6: IFRS 9 will improve on IAS 39’s incurred loss model which allowed greater lending and credit expansion and was “too little, too late” in terms of credit provisioning

The European Systemic Risk Board (2017, p. 3) published a report on the impact of IFRS 9 in which it declared that “The shift from an incurred loss approach to an ECL approach for measuring impairment allowances is the most important change introduced by IFRS 9.” The European Systemic Risk Board considers that the standards prevailing at the time under IAS 39 (incurred loss and fair value) were perceived to have procyclical features when a significant increase in losses took place. As such, the G20 called for better standards for the valuation of financial instruments to address future concerns of procyclicality. The G20 urged standard-setters to “reconsider the incurred loss model by analysing alternative approaches for recognising and measuring loan losses that incorporate a broader range of available credit information” based on the argument that earlier recognition would have limited the procyclicality of the recognition of credit losses. (European Systemic Risk Board, 2017, p. 3). In other words, provisions taken at the top of the cycle could serve as buffers for future credit losses which would improve bank stability. (Beerbaum & Ahmad, 2015)

Current criticism of the existing standards is that impairment allowances under IAS 39 are slow with “incurred losses showing up slowly over time and with abnormally elevated absolute levels up to six years after the beginning of the crisis” and fair value measurements deemed to be too volatile. The losses caused by the evolution of fair values in 2008 were

partially reversed in 2009. Furthermore, losses on assets classified at fair value had the same impact on bank capital as assets measured at amortized cost even though the latter represented a significantly larger portion of the assets held by European banks. (European Systemic Risk Board, 2017, p. 17; Marton & Runesson, 2017)

Furthermore, and as explained above, IAS 39 was heavily criticized for its apparent procyclicality: when things were going well, banks extended lending without provisioning. They therefore "overstate the economic value of the loan portfolio and understate losses in the income statement" which allows them to extend lending more than what would've been possible in an Expected Credit Loss accounting system. When there is a downturn, no provisions have been made and institutions have to absorb the entirety of the losses in profit and loss which significantly weakens them. (Beerbaum & Ahmad, 2015, p. 3)

Banks delaying loan loss recognition the most reduce their lending the most during credit crunches when compared to banks who recognise credit losses earlier. The banks recognising credit losses quicker "increase their pre-provision equity more during non-recessionary periods and decrease their pre-provision equity less during recessions than banks with greater delays". (Beatty & Liao, 2011, p. 19) Banks delaying loss recognition are associated with higher stock market illiquidity as well as "higher correlations between bank-level illiquidity and aggregate banking sector illiquidity and returns during recessions" which may imply higher downturn correlation and higher levels of systemic risk. (R. M. Bushman & Williams, 2015, p. 548)

Domikowsky, Foos, and Pramor (2015, p. 2) show that backwards-looking loan loss accounting regimes are more procyclical. They conclude that a "forward-looking approach in the assessment of the credit risk reserve can generally be beneficial from a macroeconomic perspective" but temper their conclusion by stating that discretion in provisioning may lead to heightened levels of earnings management.

The transition from IAS 39 to IFRS 9 will lead to an increase in impairment allowances as the assets currently recognised under IAS 39's incurred loss model will only represent Stage 3 of IFRS 9's impairment process. This means that the ECL associated with assets in stage 1 and 2 will be the main source of any increase in impairment. Banks will be able to have "a timely recognition of expected credit losses" that were previously prohibited under IAS 39. (Gebhardt, 2016, p. 190)

Other impact assessments for the increase in provisions linked to IFRS 9 range from 33 % for Barclays (2017) or 41% for Deutsche Bank. (European Systemic Risk Board, 2017). These provisions will have a direct impact on bank capital with day-one (i.e. the day IFRS 9 will enter into force) shortfalls of 59 basis points according to the European Banking Authority (2017c) with "as was the case with the increase in total credit impairment allowances, […] significant heterogeneity across banks in terms of the size of the impact". (European Systemic Risk Board, 2017, p. 27) In addition to this, and according to the European Systemic Risk Board (2017), higher provisioning may lead to costlier loan structures for banks' customers.

According to the EBA's Impact Assessment survey, 75 % of banks expect increased volatility mainly due to the "cliff effect" of transitioning from stage 1 to stage 2 in impairment and the inclusion of forward-looking information that will need to be reassessed at the beginning of each reporting period. 16 % of banks disagree and say that the more gradual recognition of losses will reduce volatility and 9 % were still unable to assess the impact in 2016. (European Banking Authority, 2016) 2017 results showed a slight decrease to 72 % of banks expecting increased volatility and 28 % expecting less volatility due to a more gradual recognition of losses. (European Banking Authority, 2017c)

Krüger, Rösch, and Scheule (2018) studied a representative portfolio of US bonds from 1991 to 2013 to assess the impact on provisioning. They have shown that for a "median threshold, i.e. a significant increase in credit risk given by a 20 % increase in default risk, the average CET 1 gap is 0.66%" but, due to the system of thresholds and the high amount of threshold breaches in case of crises/downturns, capital deductions would range from 1.45 % in recessions to 2.21 % during the 2008 crisis. It is important to highlight that these drops in capital are at times where banks would struggle to raise more capital due to market stress. (Krüger et al., 2018, p. 36)

Such a shortfall on bank capital is significant for all European financial institutions. As such, the Basel Committee on Banking Supervision (BCBS) laid out, through its *Regulatory treatments of accounting provisions – interim approach and transition arrangements*, the modalities of a proposed "transitional arrangement to avoid a "capital shock", by giving banks time to rebuild their capital resources following a potentially significant negative impact arising from the introduction of ECL accounting". (Basel Committee on Banking Supervision, 2017, p. 1) The transitional arrangement would be for "a transitional phasing-in period of no more than five years, with a linear spread of the impact on CET1 capital, and leaving considerable discretion to the authorities in each jurisdiction to fix details such as the static or

dynamic calculation of the impact". (European Systemic Risk Board, 2017, p. 29) The European Commission has expressed a preference to the dynamic approach (i.e. calculating at every reporting date the sum of Stage 1 and Stage 2 impairment provisions instead of calculating the provisions once on the day where IFRS 9 enters into force) to spread the impact over 5 years. On the other hand, the European Banking Authority (2017b) has expressed its preference towards a static, 4-year approach without a complete transition impact neutralisation. (European Systemic Risk Board, 2017)

In addition to regulatory considerations linked to the capital impact of IFRS 9, the new ECL approach will require significant changes in modelling. This part will be addressed extensively in the implementation chapter of this literature review.

Abad and Suarez (2017) developed a model to assess the possible pro-cyclical effects of the new ECL modelling implemented in IFRS 9. To do so, they compared incurred loss (from IAS 39), one-year ECL (from Basel), lifetime ECL (US GAAP) and IFRS 9's mixed approach. Their results show that both the mixed and the lifetime ECL approach will imply sudden rises in impairment at the beginning of recessionary/credit-deteriorating periods which will directly impact CET1 at those times. They therefore highlight the fact that "while the early and decisive recognition of forthcoming losses may have significant advantages […], it may also imply, via its effects on regulatory capital, a loss of lending capacity for banks at the very beginning of a contraction (or in the direct aftermath of a negative credit-quality shock), potentially contributing, through feedback effects, to its severity" with a possible drop of up to a third of the fully-loaded counter-cyclical buffer. (Abad & Suarez, 2017)

The ECL model under IFRS 9 incorporates a significantly larger set of information which helps to recognise ECLs earlier. IFRS 9 will also require larger provisions which will "reduce the build-up of loss overhangs and the overstatement of regulatory capital in boom periods" which should limit the procyclicality that was present in IAS 39's incurred loss approach. IFRS 9 can also force banks to provision for the risks inherent in European sovereign exposures (which will mitigate a design flaw of the EU's implementation of Basel III in the CRR). Given the size of these exposures, IFRS 9 may reinforce financial stability by mitigating this design flaw. (Novotny-Farkas, 2016) Furthermore, the European Systemic Risk Board (2017, p. 22) explains that implementation of IFRS 9 will "benefit banks through the improvement of the internal systems for credit risk monitoring" and have "positive effects on the management and governance of banks".

An issue raised with IFRS 9 is that the new ECL models apply to assets held at Amortized Cost and FVOCI while impairment under IAS 39 only applied to assets held at Amortized Cost. This widens the scope of managerial discretion and may lead to heightened levels of earnings management and lower comparability. (Gebhardt, 2016)

Academic literature has shown that there is a direct link between managerial discretion in provisioning and earnings smoothing. This could mean that IFRS 9's new impairment policy may imply significantly higher amounts of earnings management. (Ozili & Outa, 2017) Nonetheless, studying discretionary provisioning during time of intense stress (i.e. the crisis or during simulated stress tests) shows that provisions are used for smoothing earnings but not to manage their regulatory capital (Curcio, De Simone, & Gallo, 2017). Arbak (2017) underlines the importance of supervisory monitoring to avoid Belgian banks using their new-found discretionary provisioning powers to manage earnings.

It has been shown that the provisioning of Belgian banks has usually been linked to future losses (with the significant caveat that this link significantly weakened after IAS 39's introduction and during the financial crisis). This implies that the introduction of IAS 39 has made accounting provisions significantly more backwards looking. It is nonetheless probable that Belgian banks changed their loss-recognition procedures amid the financial crisis. This has two major implications: IFRS 9 implementation will change how Belgian banks provision for expected credit losses but, due to previous changes in provisioning policies, IFRS 9 may have, for some banks, a smaller effect than anticipated. (Arbak, 2017)

Cummings and Durrani (2016) have shown that banks increase provisions in anticipation of credit growth, that extra regulatory capital is allocated to provisions and that higher earnings are partially allocated to provisions. Bank managers therefore use this flexibility to allocate provisions to dampen future fluctuations. Their findings show that provisions are both pro- and counter-cyclical: fluctuations in default risk affects provisions but banks anticipate future economic conditions by anticipating for them. Andreou, Cooper, Louca, and Philip (2017) show that conservatism in provisions significantly reduces banks' future crash risk. The impact of conservatism grows in periods of credit crunch and decreases during credit boom periods and does not matter during normal times. As such, IFRS 9, by introducing manager discretion (and therefore possible conservatism) may reduce crash risk.

The ECL model under IFRS 9 will also diverge significantly from the FASB's approach on performing loans (as a broader set of losses will be recognisable). This implies that

differences between the two standards could be significant and therefore postpone the convergence between IFRS and US GAAP. (Hashim et al., 2016). Furthermore, as said above, Krüger et al. (2018) proved that there are significant differences in provisioning between US GAAP and IFRS 9 with GAAP leading to a higher initial deduction of CET 1 for US GAAP when studying a sample portfolio of US bonds but being significantly less procyclical than IFRS 9 during significant downturns.

This leads us to develop the following hypothesis:

H7: IFRS 9 will have consequences due to its change in impairment provisioning (both economic and in provisions)

Phase III: Hedging

Hedge accounting presents significant benefits for financial institutions of which the largest is to avoid volatility in its profit and loss statement. Nevertheless, an entity may not report all its risk management activities due to two factors: it may be hedging with ineligible instruments (which have to be classified at FVPL and will therefore imply heightened volatility in income statements) or it can decide to not adopt hedge accounting. In addition to this, hedge accounting entails extensive record-keeping which is costly and which may limit the entity's appetite for such a solution. All of these factors may make an entity appear significantly riskier than it is actually. The current hedge accounting system is therefore suboptimal as it doesn't allow for the recognition of the variety of instruments currently used to hedge a bank's risk. (Singh, 2017)

The IASB was made aware of this and therefore decided to extend the range of hedging instruments eligible for hedging strategies in order to accommodate a wider variety of hedging possibilities and reduce the situations in which a bank had to choose between hedging optimally or accounting for its hedging in an optimal way.

Hedge accounting disclosures under IAS 39 were linked to individual instruments and no disclosures were necessary on issues pertaining to risk management strategies. IFRS 9 improves this approach by requiring entities to disclose the risks that are being hedged (and not the risks that aren't being hedged), "explain their risk management strategies, elaborate on their derivative positions and the impact of such positions on future cash flows and assess and disclose the impact of 'hedge accounting' on their financial statements" and by limiting the amount of record-keeping necessary to comply to the standards. (Singh, 2017, p. 109)

It seems clear from literature that IFRS 9 will significantly improve IAS 39's approach to hedge accounting. This is our 8th hypothesis:

H8: IFRS 9 improves hedge accounting by, among other additions, broadening the range of eligible instruments

Nevertheless, IFRS 9's hedge accounting component is not yet complete. IAS 39's hedge accounting diverged significantly from risk management practices and didn't require disclosures on risk management strategies. It is hoped that IFRS 9's "macro-hedge" provisions (which aren't available yet) will be a step forward from IAS 39's approach. (Singh, 2017)

The European Banking Authority (2017c) has conducted two impact assessments on the impact of IFRS 9. Most banks in the survey made for the second Impact Assessment responded that they plan to keep applying IAS 39's hedge accounting requirements until they receive clarifications on the IASB's "dynamic risk management" (also known as macro-hedge accounting) project. This reluctance to transition to IFRS 9's hedging requirements may also be explained by a lack of resources which are focussed on the implementation of Phases I and II of IFRS 9. This leads us to our second hypothesis concerning hedging:

H9: Belgian banks will wait for the macro-hedging component of IFRS 9 before implementing IFRS 9's take on hedge accounting.

Implementation

Initial adoption of IFRS was said to be, according to Belgian companies, complex and costly but was nonetheless seen as a positive step forward as it created a "harmonization of internal and external reporting"(Jermakowicz, 2004, p. 59). Nonetheless, IFRS enforcement and implementation was expected to differ significantly from country to country (even in Europe) as most of the influences on accounting standards remain predominantly local. Uneven implementation may lead to investors believing that there is perfect comparability between countries and therefore making suboptimal investment decisions. (Ball, 2006)

Previous IFRS implementation has been shown to hurt profitability and liquidity (possibly due to companies being unfamiliar with IFRS). At IFRS' initial adoption, firms managed earnings to mitigate the effect of IFRS on their accounts but earnings management was significantly reduced once companies became familiar with the standard. (Iatridis & Rouvolis, 2010)

Initial investors' reactions were positive particularly in countries with weak rule of law and weaker divergence between domestic and IFRS standards. (Onali & Ginesti, 2014) Investors' reaction to IFRS 9 adoption were, in clear opposition to IFRS' initial adoption, significantly influenced by pre-adoption information quality. The higher the quality (and the lower the information asymmetry), the better the market reaction to IFRS adoption. All of this means that IFRS 9 is not seen as a direct proxy for an improvement in accounting quality (in direct contrast with initial IFRS adoption) and that there is a significant degree of caution on the exact effects of IFRS 9. (Onali et al., 2017)

IFRS 9 is coming at a difficult time for banks in an environment of protracted low profitability and intense regulatory pressure. Even though IFRS 9 implementation has been seen to be complex and costly for banks, this implementation will help banks through the improvement of "internal systems for credit risk monitoring" as there is a perception that credit risk monitoring systems are outdated/not extensive enough. This will cause significant improvements in decision-making and governance regarding credit risk. (European Systemic Risk Board, 2017) The European Banking Authority (2017c) acknowledges that even after the implementation of IFRS 9, a lot of work will still be need to be done to ensure a high-quality implementation of the standard.

IFRS 9 is made up of three Phases: Recognition and Classification, Impairment and Hedging. The Hedging standards under IFRS 9 haven't been finalised yet, so they will not be covered.

The changes in classification will mean that assets will need to be reclassified and, as said by Petchchedchoo and Duangploy (2017, p. 65), "the devil is in the details […] as AFS securities and FVTOCI securities apparently look alike". Nonetheless, the changes in classification are not expected to be significant (see Phase I: Classification and Recognition).

The changes in impairment are by far the most significant as institutions will have to shift from back to forward-looking and will have to provision every single financial instrument they originate/acquire. (Gornjak, 2017) The expected loss model is not entirely new in accounting but the new model will have "a material impact on the financial institutions especially bank systems and processes" and a "tightening effect on earnings management" (Beerbaum & Ahmad, 2015, p. 5) This impact will be mainly caused by having banks try to implement forward-looking scenarios (including macroeconomic scenarios) and will banks having to address the technical and methodological issues linked to such an integration. In addition to this, macro-economic scenarios will have direct strategic impacts which implies a far broader revamp than just addressing assets at an individual level. Banks will be forced to adapt to IFRS 9 and implement "some fundamental changes into their business models […] involving all of their sectors" as IFRS 9 will have a significant impact on product offerings, profit margins and will require "continuous monitoring of business indicators that might suggest aggravated liquidity or creditworthiness of the debtor". (Brkovic, 2017, p. 49)

Modelling ECLs for all SPPI-classified assets will also involve considerable effort (in terms of data collection, modelling and governance) even for banks which have adopted the IRB approach for Basel requirements. These efforts are linked to the variety and complexity of processes, data, systems and models used to generate ECL provisioning decisions (such as the transition from Stage 1 to Stage 2 in Impairment). (European Banking Authority, 2017c). Nonetheless, most banks (except larger banks and banks having adopted the SA approach) were building on existing IRB models and adapting them to the ECL requirements. (European Systemic Risk Board, 2017)

A key element in the implementation of Phase II of IFRS 9 is linked to how the "significant deterioration in credit risk" (SICR) factor is interpreted by different institutions (and also within those institutions). IFRS 9 does not provide strict thresholds but rather offers guidance and examples on ways of proceeding. The only moderately strict threshold is the "rebuttable presumption that an asset has suffered a significant deterioration in credit risk if that asset is 30 days past due". It would seem that banks will heavily rely on missed payments or changes in default probabilities and restrict usage of external ratings or fair value changes.

Nonetheless, significant heterogeneity was found. There was also a significant increase in the role of internal committees taking qualitative decisions about asset allocation. (European Systemic Risk Board, 2017, p. 23)

Furthermore, the SICR criteria will need to be assessed for grouped assets (i.e. assets that aren't assessable individually) which raises important questions on the methodology of asset grouping and collective assessment. Disclosures concerning a wide range of factors (such as models, data used, SICR criteria implementation, etc.) will therefore be key. Another question is how exactly banks will move assets from stage 2 to stage 1 if the SICR factor reverses. (European Systemic Risk Board, 2017)

The BCBS has released guidance on credit loss accounting by emphasising the importance of "high quality, robust and consistent implementation of applicable ECL accounting frameworks" and aims to drive implementational convergence for the same standards. (Basel Committee on Banking Supervision, 2015a, p. 3) Supervisors will need to take the time to carefully assess the impact of IFRS 9 on supervisory capital requirements and other supervisory tools. In addition, they must continue to strive towards robust implementation to promote transparency while avoiding placing a burden on banking organisations. The BCBS nonetheless expects a disciplined, high quality implementation of IFRS 9 due to the time financial institutions were given to implement it. (Edwards, 2016)

The BCBS has suggested two possibilities for transitional arrangements to mitigate IFRS 9 implementation capital shocks: either a static approach (which would address the one-time shock on capital the new provisions would incur) or a dynamic approach (which would take into account the evolution of ECL provisioning during the transition period). The static approach would mean spreading the one-time shock over a number of years while the dynamic approach would also mean spreading the impact of the transition over a number of years with the added specificity that the provision amount would be adapted at every reporting period. This transition would obviously only cover "new" provisions and therefore mostly cover Stage 1 and 2 provisions which didn't exist under IAS 39 (except possibly as Incurred but not Reported losses) as Stage 3 of Impairment is the same as IAS 39's incurred loss approach. (Basel Committee on Banking Supervision, 2017) The EBA does not consider that transitional arrangements should be used when there are significant macroeconomic changes and, in order to reduce complexity, believes that a static approach would be best. If a dynamic approach were to be used, stringent disclosure requirements would be necessary. (European Banking Authority, 2017b) The EBA considers that transition arrangements should

be the norm but nonetheless allows institutions to use transitional arrangements later if they initially decided not to apply them (if effective disclosures are made). (European Banking Authority, 2017b)

Transitional arrangements can be implemented to:

- Mitigate the one-off impact of IFRS 9 implementation,
- Reduce uncertainty linked to IFRS 9's interaction with the regulatory framework,
- Offer a level playing field between SA and IRB institutions

Basel regulation deals differently with provisions depending on the approach (SA or IRB) taken by the banks. Under the IRB approach, regulatory provisions are already based on ECL with nonetheless methodological differences from IFRS 9 (see table below). When regulatory expected losses exceed accounting provisions, the difference is deducted from CET1. If accounting provisions exceed regulatory expected losses, the difference is added to Tier 2 capital. Provisions under SA are separated between specific and general provisions. Banks assess their capital needs by assessing the standardised framework on their exposures net of specific provisions but gross of general provisions. General provisions can be added back to their Tier 2 capital (within certain limits) but the increased provisions under IFRS 9 may be considered as specific (and therefore not eligible for Tier 2 capital). (European Banking Authority, 2017b; European Systemic Risk Board, 2017)

Banks currently using the internal ratings-based (IRB) approach to their capital requirements will have a significant advantage over banks using the standardised approach (SA) as the former will be able to adapt their models to IFRS 9's requirements without developing models from scratch. This adaptation will nonetheless be limited by differences between the two modelling approaches in issues linked to scope, parameters and relevant time horizons. (Novotny-Farkas, 2016) Similarities between IFRS 9 and the IRB approach are nonetheless extensive. For instance, ECL modelling is similar to the CVA calculation used for Basel calculations with both values integrating forward-looking information. The main difference is that while ECL uses historical data and manager discretion to quantify default factors, CVA uses market information (i.e. pricing information from credit derivatives). (Brunel, Crépey, & Jeanblanc, 2015)

The comparison between IRB models and IFRS 9 is laid out in the table below:

	Internal Ratings-Based Approach (BCBS)	IFRS 9 (IASB)
Definition of default	Specific definition based on a combination of days past due and unlikely to pay.	Consistent with credit risk management practice + rebuttable presumption that default does not occur later than 90 days past due.
Lifetime vs. 12-month	Rating system and associated PDs are based on a 12-month horizon.	Stage 1 allowances are based on a 12-month horizon. Stage 2 and stage 3 allowances are based on lifetime expected losses.
Point-in-time (PIT) vs. Through-the-cycle (TTC)	Models are generally developed using a hybrid approach (considering cyclical and non-cyclical variables) which determines the ratings, which are then calibrated to a PD which may be somewhere between PIT and TTC.	Expected losses should reflect current conditions: it requires a PIT adjustment.
Floor	The regulatory PD has a floor at 0.03% for all exposures except sovereign counterparties.	No floor on the PD.
LGDs	Conservative estimate (downturn LGD).	Unbiased, PIT estimate.
Frequency of estimates	Annual.	Continuous basis (at least, every time financial statements are prepared).
Auditing of figures	Bank supervisors.	Auditors and market supervisors.

Figure 4: Comparison between the regulatory framework for internal ratings-based approaches and the impairment model in IFRS 9 (European Systemic Risk Board, 2017)

IFRS 9 nonetheless allows for simplified approaches (i.e. the use of "loss rate models" or "loss matrix"). Nonetheless the SA banks, even if they use the simplified approaches, will have to collect and process data at a scale they are unfamiliar with. (European Systemic Risk Board, 2017) The EBA and the BCBS have talked about proportionality when implementing IFRS 9 (Basel Committee on Banking Supervision, 2015a; European Banking Authority, 2017a) but the challenges that small banks face are nonetheless quite significant. These smaller banks are expecting larger impacts on their own funds due to IFRS 9 (when compared to larger banks) but have estimated a lower increase in provisions due to IFRS 9 than larger banks. (European Banking Authority, 2017c)

All of these elements lead us to our next hypothesis:

H10: Implementation will be complex and costly (in line with previous IFRS implementations)

In addition to implementation, long term governance of processes and data will be very important to guarantee a long-lasting high-quality implementation of IFRS 9. The European Systemic Risk Board (2017) expects a significant benefit from the high-quality implementation of IFRS 9 with nonetheless significant maintenance costs (for both databases and models). These maintenance costs won't be comparable to the one-off model development costs though these investments are expected to have positive spill-over effects on pricing and risk management. (Basel Committee on Banking Supervision, 2015a; European Systemic Risk Board, 2017) For the forward-looking expected credit loss models to be effective, disclosures of methods applied and periodical back testing need to be set up. (Beerbaum & Ahmad, 2015) Governance of the data will be essential to effectively assess whether the SICR (significant increase of credit risk) criteria is adequate to correctly transition from Stage 1 to Stage 2. (European Systemic Risk Board, 2017)

The BCBS has given supervisory guidance on credit risk and accounting for expected credit losses in the form of 7 principles encompassing subjects such as sound methodologies, effective governance or model validation processes. The BCBS is conscious that IFRS 9 implementation is demanding in terms of data requirements and governance. It highlights the importance of consistency between all the entities of a consolidated group. (Basel Committee on Banking Supervision, 2015a)

The new impairment rules will imply significant organizational changes for banks. All sectors will need to be involved to be able to collect the data needed for ECL modelling and disclosures. In addition to influencing the pre-contractual stage, IFRS 9 will require continuous monitoring of assets which means that data needs to be integrated and treated rapidly for the financial institution to be able to respond and provision adequately. Assets will also need to be influenced by macro-economic changes which will also need to be created/acquired and integrated into the process. (Brkovic, 2017)

Using a fair value classification for assets which do not have a liquid market may be problematic as the fair valuations would have to be modelized by the entity. This will therefore mean greater discretion of the institution in terms of assumptions and may lead to inflated fair values. This could nonetheless be limited by extensive disclosures. (European Systemic Risk Board, 2017)

According to the EBA's Impact Assessment, data quality and availability are the most significant challenges when implementing IFRS 9 and both internal and external sources of

data are expected to be used. (European Banking Authority, 2016) Internal sources are most likely to be used which highlights the importance of governance and valid processes for data management, assumption generation and model validation. A worrying fact was highlighted through the EBA's second impact assessment: most banks had not yet decided on the validation processes for ECL measurement. (European Banking Authority, 2017c)

Small banks will be the ones who will struggle the most with coping with the data requirements necessary for high-quality IFRS 9 implementation as they do not have the processes, governance and infrastructure necessary for this task. They will therefore face a steep learning curve. (European Systemic Risk Board, 2017) Small banks will also be the institutions that are most likely to use simplifications, proxies and other solutions to estimate ECL. The EBA underlines the importance of having a consistent methodology and governance process to produce consistent and accurate ECL estimations. (European Banking Authority, 2017c)

As governance and data management are essential elements of IFRS 9 implementation, our hypothesis is the following:

H11: Governance of data, processes and models will be an essential consideration for the high-quality implementation of IFRS 9

Conclusion

Through our literature review, we have been able to develop 11 hypotheses that will be extensively tested through interviews with industry practitioners. The 11 hypotheses are:

- H1: IFRS 9 will, in line with previous IFRS implementations, boost transparency.
- H2: IFRS 9 will improve the accuracy of accounting statements
- H3: IFRS 9 will need reinforced disclosures to present an accurate picture of financial institutions
- H4: Due to a move towards a more principle-based standard, comparability between banks/countries will decrease
- H5: Changes in classification will not have a significant impact on Belgian banks
- H6: IFRS 9 will improve on IAS 39's incurred loss model which allowed greater lending and credit expansion and was "too little, too late" in terms of credit provisioning
- H7: IFRS 9 will have consequences due to its change in impairment provisioning (both economic and in provisions)
- H8: IFRS 9 improves hedge accounting by, among other additions, broadening the range of eligible instruments
- H9: Belgian banks will wait for the macro-hedging component of IFRS 9 before implementing IFRS 9's take on hedge accounting.
- H10: Implementation will be complex and costly (in line with previous IFRS implementations)
- H11: Governance of data, processes and models will be an essential consideration for the high-quality implementation of IFRS 9

These hypotheses paint a comprehensive picture of the literature and the impact of IFRS 9. We now have to assess whether the literature is in line with the qualitative research carried out.

Methodology

To assess the 11 hypotheses laid out hereabove, a focus on qualitative primary research was chosen. It is also important to remind the reader that when the term Belgian bank is used, it covers all banks having operations in Belgium rather than specifically Belgian-owned banks.

Quantitative research was rapidly ruled out for a number of reasons.

First, and foremost, quantitatively assessing the impact of IFRS 9 is extremely tricky due to the very small amount of public information available. The currently published annual accounts do not go into much detail concerning the true impact of IFRS 9's implementation. Quantitative data available usually amounts to the increase in provisions (either relative or absolute numbers) linked to the new impairment norms and the overall impact on CET1 capital of IFRS 9.

As such, and due to the fact that IFRS 9's effective date was the 1st of January 2018 (i.e. other effects on the Belgian banking system weren't discernible yet), combining information from annual accounts to a qualitative approach seemed to be best suited for the subject at hand.

Another alternative that was brought up was surveying the different banks to quantitatively assess the hypotheses laid out in the previous section. Nonetheless, 2 main problems were to be had with this approach.

First, surveys would not allow the different finance professionals to correctly convey their meaning as surveys by their nature usually lack the nuance to correctly understand the intricacies of the subject at hand.

Second, such a survey would have to be, for it to have a probability of being filled in by relevant people, quite short and to the point. Due to the inherent complexity of the accounting norm, this approach was rapidly seen as not being feasible.

These elements made adopting the approach laid out here above the best option available.

Interviews cover, by their very essence, a very limited amount of information about the present and/or the past. Furthermore, they allow the interviewer to understand the meaning that interviewees give to their actions and to the events that they face. They also allow the analysis of a specific problem by studying the data available, the different perspectives on the topics and the issues at hand. Finally, they allow the reconstruction of past events, experiences and the measures taken (Quivy, Campenhoudt, 1995) As such, they are the ideal tools to

assess the different perspectives/interpretations on the impact of IFRS 9 on the Belgian banking system.

Another significant advantage of these interviews was that it was possible to acquire information that these people wouldn't have necessarily liked to share through a survey (due to confidentiality issues).

These semi-structured interviews broadly followed the structure of the literature review enclosed here above. In other words, these interviews started with a broad, high-level assessment of the impact of IFRS 9, a subjective perspective on the transition from IAS 39 to IFRS 9 and a focus on topics such as IFRS 9's impact on transparency. They then focussed specifically on the impact of each phase by asking some questions to get the discussion started and trying to let the interviewee cover the topics he wanted.

Due to the recent implementation of the standard, the choice was made to purposefully focus on account preparers/validators instead of accounting users (such as financial analysts). Furthermore, regulators were approached but interview requests were refused. Regulators contacted included the Belgian Financial Services and Market Authority (FSMA), the National Bank of Belgium (NBB) and the European Central Bank (ECB. The tax implications of IFRS 9 were deemed to be out of scope.

The people interviewed included several technical specialists (both inside banks and in Big 4s), a Febelfin representative and two auditors. A list of interviewees, and a transcription of the interviews, can be found in appendix.

Febelfin is the non-profit Belgian Financial Sector Federation whose goal is to "reconcile the interests of its members with those of the policy makers, supervisors, trade associations and pressure groups at the national and European level" (Febelfin, 2018).

The interviews were transcribed and then passed through ATLAS.ti 8. ATLAS.ti 8 is a software whose goal is to help researchers assess and interpret qualitative data. The decision to use this software is explained by the number of interviews that had to be processed and the complexity and variety of information supplied through these interviews. Therefore, the 10 interviews were loaded into this program and then "coded". Coding in ATLAS.ti is explained as:

> The basic activity you engage in when using ATLAS.ti and […] the basis of everything else you will do. In practical terms, coding refers to the process of

> assigning categories, concepts, or "codes" to segments of information that are of interest to your research objectives. We have modeled this function to correspond with the time-honored practice of marking (underlining or highlighting) and annotating text passages in a book or other documents. (ATLAS.ti, 2018)

The codes assigned were based off the 11 hypotheses developed through the literature review. 2 codes were developed for each hypothesis: one accepting and one rejecting each hypothesis. Furthermore, hyperlinks were used whenever links between different hypotheses were found. These codes and links were the basis of the following chapter which covers the key insights gained from the interviews.

In addition to these interviews, and as explained above, a qualitative study was done of bank's first annual reports done according to the IFRS 9 standard. The banks assessed are taken from the ECB's Banking Supervision List of significant supervised entities (European Central Bank - Banking Supervision, 2018). All entities who have a balance sheet of under EUR 30 billion have been excluded. The list is the following:

- Investeringsmaatschappij Argenta N.V. (hereafter referred to as Argenta)
- Belfius Banque S.A.
- Dexia S.A.
- KBC Group N.V.
- The Bank of New York Mellon S.A.
- ING Belgium S.A.
- BNP Paribas Fortis S.A.

A less significant bank was interviewed but the interviewee wished to keep his participation confidential.

The annual reports used are those published at the highest consolidation level in Belgium (i.e. consolidated if such reports are available). Finally, due to the scope of this thesis, no information on the insurance business was taken into account for banks (such as KBC) who have both banking and insurance operations.

One small Belgian bank which decided not to appear in this thesis will not be directly cited but is usually referred to with the general term "smaller banks". The interview will be included in the thesis but will remain confidential.

All interviews, except the small Belgian bank cited here above, can be found in the appendix of this thesis. Nonetheless, due to language differences, some interviews were held in French. As such, and to cite them, the excerpts were translated in English. The original versions of each excerpt will be included as a footnote.

Pantelis Pavlou insisted on the disclaimer that the views presented are his personal views and that they do not represent any official views/positions of KBC or any of its affiliates.

KPMG published in 2016 a document called “The cumulative impact of regulation, taxes and a low interest rate environment: An impact analysis on the Belgian banking sector”. This document very rapidly addresses the impact of IFRS 9 on the Belgian banking sector. As such, it was interesting to include in the Results chapter of this thesis rather than in the Literature review. On the contrary, Impact Assessments at the European level have been included in the Literature Review.

Results

High level impact of IFRS 9

Before assessing the relevance of the 11 hypotheses developed through the literature review, it is important to address the general perception of IFRS 9 in the industry. According to Olivier Duron, Prudential Affairs & Accounting Officer at Febelfin, "IFRS 9 didn't come in place of another regulation that already did the same thing. IFRS 9 is something different since it's an accounting framework that everyone agrees is the better way to go". Furthermore, Olivier Duron highlights the fact that "our banks have confirmed that the European average sounds fair to them and that they're certainly not more impacted than what the ECB projected". Nonetheless, other interviewees, such as Yves Dehogne, consider that IFRS 9 implementation is an added burden for an already overburdened financial sector.

H1: IFRS 9 will, in line with previous IFRS implementations, boost transparency

Olivier Duron (Febelfin) believes that "IFRS 9 certainly makes things more transparent than IAS 39" even if he believes that the "Basel Pillar Three Disclosure Framework […] will probably be a bigger influencer [than IFRS 9]". Pantelis Pavlou's (KBC) opinion is that "IFRS 9 tries to provide more transparency on financial institutions in general" but he finds it "very hard to tell if it's a shared view" and that he assumes that "IFRS 9 together with the disclosures associated with (in IFRS 7) gives more information to investors". Eric Gustin (KPMG), in addition to Peter Ujvari (EY), explains that "[To see] the added value for shareholders, I think it will be necessary to wait a few runs to see where we're going in terms of impact and model stability" [2]. Pantelis Pavlou goes even further by saying that "the first years of IFRS 9 we will need to see some kind of steep learning curve for everybody".

Julien Cnyrim (ING) has a slightly different perspective on the issue of transparency. According to him, "[IFRS 9] will clarify things because the business will need to care more about the finance part" [3]. In addition to these internal considerations, Julien Cnyrim (ING) considers the new accounting of embedded derivates (at FVPL) as logical as "if I am exposed to a certain risk, it's logical that the value of my asset on my balance sheet represents this

[2] « [Pour voir] la valeur ajoutée pour les shareholders, je pense qu'il va falloir attendre quelques runs, pour voir vers où on va par rapport à l'impact [et] par rapport à la stabilité des modèles »
[3] « [IFRS 9] va clarifier les choses parce que le business va devoir s'intéresser plus à la partie finance »

risk" [4]. Peter Ujvari (EY) agrees with this approach and considers that this evolution makes things simpler. Nonetheless, Julien Cnyrim (ING) believes that due to the complexity of the discussions linked to the SPPI-compliance of certain assets, the "result may be reduced" [5] (i.e. that the objective of transparency and simplification may not be entirely achieved due to the complexity of the underlying products). Finally, Peter Ujvari (EY) explains how "continental banks (France, Belgium, etc.) try to avoid volatility"[6] by trying to classify as many assets as possible at Amortized Cost as, "for management and for the CEO, it is much harder to explain a result when a part is linked to the evolution of the markets"[7].

On a more negative note, Yves Dehogne (Deloitte) sees the trend where banks "try to reduce [the size of] their reports but IFRS 9 adds new elements" [8]. The trend towards simplification is seen as welcome but the size of the reports has become such that he is "unsure whether 50 people have read everything [for a Belgian bank's annual report]" [9]. Other account preparers in banks highlight the fact that financial analysts are struggling to understand accounts under the new IFRS 9 standards. Eric Gustin (KPMG), sees that "we have been going towards something more complex"[10] especially in terms of impairment.

Smaller banks are worried about the extensive rise of modelling in accounting and regulatory matters as they believe that such banks have more resources to focus on improving and finetuning models which hurts transparency and accuracy of accounting statements.

In conclusion, the added complexity of IFRS 9 is not expected to boost transparency in accounting statements. Nonetheless, some interviewees remained optimistic about the added value of the new accounting standards and underlined the need to wait a few years before assessing the scale of the impact of IFRS 9.

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[4] « Si je suis exposé à un certain risque, c'est logique que la valorisation de mon actif au bilan représente également ce risque »
[5] « Le SPPI est un peu plus large, très complexe, honnêtement ce sont des discussions de techniciens, de théoréticiens sur des sujets pour lesquels on peut passer des heures à discuter d'un seul contrat pour […] un résultat peut-être moindre »
[6] « Les banques continentales (France, Belgique, etc.) essaient d'éviter la volatilité »
[7] « Par rapport à la gestion et pour le CEO, j'ai beaucoup plus de mal à expliquer le résultat quand une partie fluctue en fonction du marché »
[8] « Ils essayent de réduire leurs rapports mais on rajoute IFRS 9 qui va arriver avec de nouveaux éléments »
[9] « Je suis certain qu'il n'y a pas plus de 50 personnes qui ont tout lu ».
[10] « Si je me limite à la partie Impairment […] en termes de complexité on est allé vers quelque chose de plus complexe »

H2: IFRS 9 will improve the accuracy of accounting statements

According to Yves Dehogne (Deloitte), the best people to assess the risks (and more specifically the credit risks) of a population are "the people/teams which manage them daily"[11]. As such, the move towards a more principles-based approach under IFRS 9, and the inherent flexibility it brings, is a positive step for the accuracy of accounting statements. Nonetheless, and as addressed extensively in H10, this "complexity has an enormous cost (People, IT, Operations)"[12]. Olivier Duron (Febelfin) agrees with the fact that "IFRS 9 is principle-based and I think that's the better way to go". Pantelis Pavlou (KBC) explains that "financial reporting should portray the business and not the other way around. Having this flexibility means that the financial reports give some transparency to investors and can accommodate the global standard". This is especially important as he goes on to highlight that "default in Belgium has a different definition than default in the UK for example".

Julien Cnyrim (ING) extends this argument by underlining the fact that "you don't lend to a large corporate such as AB InBev like you lend to Mr. Smith"[13] and that a principle-based approach is clearer and more in line with the underlying business realities which are reflected in the accounting statements. Furthermore, this move, especially in terms of Business Model (BM) and Solely Payments of Principal and Interest (SPPI) tests, will lead to a better understanding of the accounting statements and the underlying risks of the business.

Another significant added value of IFRS 9 is, according to Julien Cnyrim (ING), linked to the accuracy brought by the BM and SPPI tests as they are, in their essence, simpler than IAS 39's method of classification and evaluation. These tests, and specifically the BM test, are seen to be, according to Peter Ujvari (EY), significantly closer to the underlying business reality. As such, it is clearer for both preparers and users of financial statements which instruments are represented where. An example of this is the new embedded derivatives approach which is expected to improve the accuracy and transparency of accounting statements as the cashflows received from the asset will be better represented.

Nonetheless, Peter Ujvari (EY) highlights the fact that culturally, continental banks (i.e. in France, Belgium, Germany, etc.) try to avoid having volatility in their P&L except for assets

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[11] « La personne/l'équipe qui gère ça au quotidien »
[12] « C'est une complexité qui a un coût énorme (People, IT, Opérations) »
[13] « On ne prête pas à une grande entreprise comme AB InBev comme on prête à Monsieur Dupont »

managed at Fair Value (such as trading assets). As such, they are ready to "prove at all costs that the risks and volatility in cashflows of the underlying are limited and that they can therefore be classified as SPPI-compliant"[14]. As said in H1, Julien Cnyrim (ING) believes that due to the complexity of the discussions linked to the SPPI-compliance of certain assets, the "result may be reduced" [15] (i.e. that the drive to maximise SPPI-compliance of assets reduces the accuracy of accounting statements). Yves Dehogne (Deloitte) goes one step further by explaining that "some institutions reviewed or segmented their portfolios"[16] to meet their BM and SPPI objectives and to allow sales on some parts rather than on others.

Julien Cnyrim (ING) admits that the Expected Credit Loss (ECL) approach leads to having accounting statements that are more in line with the underlying reality. Nonetheless, the cliff effect due to the transition from Stage 1 to Stage 2 (due to the Significant Increase in Credit Risk (SICR) factor) will "bring a volatility [in accounting statements] that isn't necessarily representative of the situation on the ground"[17]. This cliff effect may be extremely impactful in case of a deterioration in the credit rating of a sovereign entity. Eric Gustin (KPMG) underlines a technical but very important point: ECL modelling relies on a number of inputs including macroeconomic models. When developing macroeconomic models, banks look at significant downturns, usually in the housing market. This can create issues as, for the last 20 years, the housing market has steadily been going up. As such, this can create an issue in terms of negative macroeconomic scenario planning in ECL modelling.

Furthermore, the widespread use of principles-based standards will lead to interpretation which can hurt the accuracy of accounting statements. These interpretations can differ at every level. Julien Cnyrim (ING) offers a striking example of this: "If I read a paragraph [of IFRS 9], the people at group level may not have the same view on it than I do". [18] Pantelis

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[14] « Y a d'autres banques qui essayaient de prouver à tout prix qu'effectivement que les risques et la volatilité au niveau des cashflows des sous-jacents sont quasiment limités et alors ces instruments peuvent être classifiés comme étant des SPPI-compliant et par conséquent peuvent être comptabilisés en coût amorti ou FVOCI ».
[15] « Le SPPI est un peu plus large, très complexe, honnêtement ce sont des discussions de techniciens, de théoréticiens sur des sujets pour lesquels on peut passer des heures à discuter d'un seul contrat pour […] un résultat peut-être moindre »
[16] « Il y a même eu certains établissements qui ont revus ou resegmentés leurs portefeuilles »
[17] « Je pense que le cliff effect entre le Stage 1 et le Stage 2 va apporter une volatilité qui ne représente pas forcément la réalité du terrain »
[18] « Moi-même, si je lis un paragraphe [d'IFRS 9], les gens au niveau du groupe ne vont peut-être pas avoir la même lecture que moi »

Pavlou (KBC) reminds that "having a principle-based standard includes a lot of room for interpretation and that's where complexity comes in."

Eric Gustin (KPMG) also highlights the fact that "the regulation coming out isn't specifically made for private banks"[19] in terms of Expected Credit Loss management. Private banks usually have very high levels of collateral for the loans they originate. As such, their Loss Given Defaults are usually worth zero and IFRS 9 isn't adapted to such a situation (as Staging is based on Probability of Default rather than Loss Given Default). Small banks also underline the fact that due to this mismatch between their businesses and IFRS 9, these accounting norms are costly and do not represent any added value in terms of transparency or accuracy of accounting statements.

Furthermore, Peter Ujvari (EY) also finds it important to underline that a lot of work was done during the two-three years after the initial implementation of IAS 39 to improve its implementation. He believes that this process will happen once again for IFRS 9 due to internal evolutions and finetuning but also due to the external influence of auditors and regulators who will closely examine the implementation of IFRS 9 in the different banks.

To sum up this hypothesis, both SPPI and BM tests are expected to bring clarity and to make accounting both simpler to understand and more accurate. Nonetheless, this may be reduced by banks striving to reduce volatility in their balance sheets by maximising SPPI-compliance in assets. The new ECL approach is expected to be more in line with how banks manage their business and therefore be more accurate. The new impairment approach comes at a significant cost in terms of complexity of ECL modelling. Furthermore, the transition of assets from Stage I to Stage II is expected to lead to significant volatility in provisions that isn't necessarily representative of the underlying reality. Smaller banks disagree that IFRS 9 will improve the accuracy of their accounting statements. Finally, and as mentioned in H1, the implementation of IFRS 9 will be improved over the upcoming years which may lead to changes in the accuracy of accounting statements.

As such, IFRS 9 is expected, with significant caveats, to improve the accuracy of accounting statements.

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[19] « Private bank […] ça veut dire que toute la régulation qui sort n'est pas forcément pas faite pour les private banks »

H3: IFRS 9 will need disclosures to present an accurate picture of the financial institutions

Disclosures are clearly seen by Julien Cnyrim (ING) as not being the most important part of IFRS 9's implementation.

On the other hand, Eric Gustin (KPMG) considers that the amended version of IFRS 7 brought by IFRS 9 is far from insignificant, especially for smaller entities. According to him, disclosures are really seen as extra reporting that presents a significant burden especially if the ECB or the EBA decides to stress test banks' IFRS 9 provisions. Pantelis Pavlou (KBC) considers that the disclosures are essential to allow investors/financial analysts to go further than just the numbers available on the balance sheet and to assess the financial institution.

KBC is one of the only Belgian banks which opted to go for the transition disclosures in terms of reporting (i.e. extensively report the impact of IFRS 9 at the end of Q1 2018 rather than on the 1st January 2018). (KBC Group, 2018a, 2018b)

In conclusion, the evidence in favour of this hypothesis is mixed and does not allow us to accept or reject it.

H4: Due to a move towards a more principle-based standard, comparability between banks/countries will decrease

Frédéric Lepoutre brings perspective to one of the initial goals of the IFRS: promote comparability. At initial implementation, comparability wasn't necessarily attained but mastery of the standards and a higher level of comparability was attained after a few years. Peter Ujvari (EY) highlights this lack of initial comparability for IFRS 9 by explaining that, for example, it is possible that different sales percentage for hold-to-collect business models be present in different Belgian banks.

Nonetheless, Eric Gustin (KPMG) believes that the regulator was quite present in the initial phases and that the centralization of supervision at the ECB-level significantly helped banks in their implementation. Yves Dehogne (Deloitte) is "not convinced of the comparability [of IFRS 9], time and ECB pressure will tell"[20] and that the regulator will be one of the deciding forces behind achieving comparability.

[20] « Je ne suis pas convaincu de la comparabilité, c'est l'avenir qui le prouvera, c'est la pression de l'ECB »

The comparability issue is compounded, as highlighted by Julien Cnyrim (ING), by the fact that the IFRS 9 standard can be extremely technical and only specialists are able to discuss the differences. For external, non-specialists, such a situation may lead to a false perception of comparability between banks which aren't truly comparable.

Eric Gustin (KPMG) reminded that true comparability can't and shouldn't be attained. Different banks have different business models and different modelling strategies that are adapted to these business models. Enforcing comparability will mean that the "model drives the bank's business model while it should be the opposite happening: the business model driving the models"[21]. Pantelis Pavlou (KBC) considers that "financial reporting should portray the business and not the other way around" and that "having this flexibility means that the financial reports give some transparency to investors" even though it will mean that "the complexity will come from the investor's side when they will try to put one bank next to the other. […] They need to focus not only on the numbers, but they will also have to focus on the narratives to have the bigger picture."

In terms of impairment, banks have had to define what represented a Significant Increase in Credit Risk (SICR). The auditors' role is to verify that the SICR factor is well defined. According to Eric Gustin (KPMG), working groups have been set up between Big 4, etc. to "bring a level playing field for models but the whole process will need time"[22]. Nonetheless, Yves Dehogne (Deloitte) argues that even if SICR was identically defined in all banks, each bank has implemented a different rating system with a different client base. IFRS 9 therefore allows more flexibility to address this issue at the cost of comparability (comparability which, it could be argued, wasn't even present before IFRS 9 implementation). Yves Dehogne (Deloitte) reminds us that the focus on comparability may be slightly overblown and even if different entities had different accounting processes, if the end-numbers reflect the underlying reality, it may not be necessary to focus on comparability.

Another important element of the ECL calculations, as highlighted by Pantelis Pavlou (KBC), is the macroeconomic scenarios. These scenarios are built based on the judgment of the different banks and may lead to significant divergences. For example, Pantelis Pavlou is sure that "the view on Brexit on the continent is completely different than the view of Brexit in the

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[21] « C'est pas le modèle qui doit driver le business modèle de la banque, c'est l'inverse, c'est le modèle qui doit calquer le business model »

[22] « L'idée [est] d'amener un level playing field sur les modèles mais il va falloir le temps… »

UK". This means that "it will be very hard to make comparisons if you focus on the numbers, so you need to take into account the other information that is required to be disclosed".

Smaller banks feel that comparability is hurt whenever complexity is introduced in accounting or prudential regulation. As they do not have the resources to invest into modelling, it creates an uneven playing field.

Olivier Duron (Febelfin) highlights the fact that the ECB is "perfectly within its rights to look at how a certain bank has provisioned against its losses and demand that additional measures, additional provisions, on top of that bank's IFRS 9 implementation, be taken". This will be a significant pressure, if applied, towards comparability.

All things considered, IFRS 9 is only expected to improve comparability under regulatory pressure. Only regulators have the power to implement a level playing field over the coming years but, as mentioned by some interviewees, it remains to be seen whether comparability is desirable.

Impact of Phase I

H5: Changes in classification will not have a significant impact on Belgian banks

According to Yves Dehogne (Deloitte) and Julien Cnyrim (ING), changes in classification have had the direct advantage of making people in the organization more conscious about the accounting and risk implications of their business actions and these people will better be able to understand the numbers produced by accounting. Olivier Duron (Febelfin) explains that this is another positive point for IFRS 9 as it means "going away from the siloed approach in banking". Julien Cnyrim highlights that, specifically for the BM test, "a discussion between finance and business will define the accounting treatment"[23] which he sees as a positive evolution. Furthermore, Julien Cnyrim (ING) highlights the fact that the Business Model test is significantly simpler than the previous classification (by the nature of the instrument) under IAS 39 and is one of the biggest sources of added value of the IFRS 9 standard.

The consensus is that "normal" (i.e. simple) products are not significantly affected by the BM and SPPI tests. Julien Cnyrim (ING) understands the rationale behind the implementation of the SPPI test but underlines the complexity of its implementation which can lead to

[23] « C'est vraiment une discussion entre finance et le business qui va définir la comptabilisation

"discussions by technicians […] on which it is possible to spend hours on a single contract"[24] Furthermore, according to Peter Ujvari (EY) and as addressed above, banks do not like volatility in their balance sheet whenever the underlying activity isn't managed in fair value (such as in Lending) so efforts are made to boost SPPI-compliance. According to Yves Dehogne (Deloitte), "[the tests] will have an impact on new investments and on the new loans that will be originated"[25] by discouraging complexity for assets which banks want to classify at hold-to-collect or hold-to-collect-and-sell. Nonetheless, most of the complexity of these assets is historical (as less and less complex assets are originated) and banks (especially those who had to be rescued during the 2008 and 2011 crises) have therefore struggled to implement and to test SPPI-compliance on these legacy assets. Yves Dehogne (Deloitte) underlines the fact that both the Business Model and SPPI tests are not considered to be the biggest sources of impact of IFRS 9.

Olivier Duron's (Febelfin) perspective on the issue that there was "one potential danger with the SPPI test which was that some loans in Belgium, for example the floating rate mortgage loans, would no longer pass the SPPI test. […] There was a brief concern among the industry, but we've cleared that with the auditors." Furthermore, he adds that "[Phase I] hasn't been considered burdensome to the extent that we've had to write position papers to the authorities complaining about it. So, no, I would say that it hasn't been that burdensome". Julien Cnyrim's (ING) perception is that "on the market, broadly speaking, [there are] very few cases of [SPPI] non-compliance"[26]

Peter Ujvari (EY) highlights the trouble some banks had in accessing the information necessary in assessing SPPI-compliance of some assets. A striking example are Asset-Backed Securities (or Mortgage-Backed Securities) on which it is very hard to acquire information on all the underlying instruments. Assessing SPPI-compliance of these assets is extremely hard

[24] « Ce sont des discussions de techniciens […] sur lequel on peut passer des heures à discuter d'un seul contrat »
[25] « Alors à l'avenir, ça va avoir un impact sur les nouveaux investissements ou les nouveaux crédits qui vont être émis ».
[26] « Je pense que beaucoup de banques ont investies énormément de temps et d'argent pour réaliser ces tests et qui sont arrivées à une conclusion que sur le marché, de manière générale [il y a] très très peu de fails, des cas très particuliers »

as "it is necessary to ensure that every underlying asset is SPPI-compliant"[27]. This has been aggravated by the fact that, according to Peter Ujvari (EY), "IT systems haven't really evolved these last 10-20 years, so a lot of information is missing which is due to a lack of investments in the back-end"[28]

Furthermore, due to the change in accounting standards, part of the Available-for-Sale portfolios (measured at FVOCI) under IAS 39 were split into Hold-To-Collect (HTC) and Hold-To-Collect-And-Sell (HTCAS). As such, according to Yves Dehogne (Deloitte), volatility in the balance sheet of the banks will be reduced. Nonetheless, in terms of impairment, the move towards a higher use of HTC and therefore Amortized Cost may lead to one-off surges in volatility due to the cliff effect linked to ECL staging.

Non-SPPI compliance (such as due to the new accounting treatment of embedded derivatives) can cause significant reclassifications from assets held at Amortized Cost (under IAS 39) to assets held at FVPL. For example, ING Belgium has reclassified EUR 330 million from Amortized Cost or AFS to FVPL with a direct negative impact on capital of EUR 72 million. (ING Belgique SA, 2018)

Another element that could introduce volatility is the new accounting treatment of embedded derivates in which the whole instrument now has to be classified at FVPL. Yves Dehogne (Deloitte) argues that this new treatment will not have a significant impact on balance sheets as these assets aren't significant and will be, in any case, hedged.

Julien Cnyrim (ING) highlights that, through the evolution of the BM test, the issue of the sales allowed has become essential and has become an additional burden for the Finance department. For reminder, sales are allowed if they are either infrequent but significant or frequent but insignificant.

For KBC, most of the accounting impact of IFRS 9 is due to first phase and the reclassification of assets for the Treasury department (KBC Group, 2018b). The total impact of IFRS 9 is estimated at – 41 bps on CET1 or an impact of – 949 million euro of which 661

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[27] « Pour pouvoir vérifier que cet instrument est SPPI-compliant, faut être sur que tous les instruments sous-jacent remplissent les critères SPPI ».

[28] « Un gros problème de beaucoup de banques c'est que le système informatique n'ont pas vraiment évolués ces 10-20 dernières années donc y a beaucoup d'informations qui sont manquantes et c'est lié au fait qu'il y a pas eu beaucoup d'investissements dans ce qu'on appelle le back-end, c'est-à-dire les systèmes administratifs »

comes from the impact of Phase 1. (KBC Group, 2018a). Bank of New York Mellon (BNY Mellon) considers that "based on its assessment, […] the new classification requirements will not affect its accounting for financial assets" (The Bank of New York Mellon S.A., 2018, p. 66). The impact on Belfius is also mainly linked to Phase I of IFRS 9. The Business Model test caused reclassifications of EUR 9630 million of which EUR 9598 million are reclassifications from Fair Value through Other Comprehensive Income to Amortized Cost. The Solely Payments of Principal and Interest test caused reclassifications of EUR 4385 million from Amortized Cost and FVOCI to Fair Value through P&L. EUR 2706 million are reclassified from Amortized Cost to FVPL and EUR 1680 million are reclassified from FVOCI to FVPL. The revaluation of reclassified assets had a net negative impact of EUR 1884 million for which most of the impact came from the revaluation of assets previously classified at FVOCI (and now classified at Amortized Cost). (Belfius Banque & Assurance, 2018)

To sum up, IFRS 9's Phase I had a significant impact on the accounts of banks due to reclassifications and unrealized gains. Nonetheless, its impact is widely seen as being less significant than for the Phase II of IFRS 9 due to a significantly lower implementation cost. Implementation was complicated by a lack of access to information (especially for complex securities) but this Phase isn't the source of most of IFRS 9's impact.

Classification wasn't the biggest source of impact linked to IFRS 9 but nonetheless had a significant impact on Belgian banks.

Impact of Phase II

H6: IFRS 9 will improve on IAS 39's incurred loss model which allowed greater lending and credit expansion and was "too little, too late" in terms of credit provisioning

According to Olivier Duron (Febelfin), "Banks all agree that the switch towards a forward-looking accounting mechanism is more prudent and is the better way to go" and that these banks "certainly agree that IFRS 9 is better because you can't deny that the incurred loss model was partly to blame for what happened during the 2007 crisis". Furthermore, due to the smoothing of provisions under IFRS 9's ECL model, Olivier Duron (Febelfin) sees it as a

positive in terms of financial stability. Eric Gustin (KPMG) argues that it is "interesting to link provisioning to a perceived increase in credit risk when compared to asset origination" [29]

Pantelis Pavlou (KBC) explains that the Incurred loss model had good reasons to be implemented at the time (as explained in the literature review) such as establishing "deterrents to companies/banks who were developing hidden reserves". The context has changed and the evolution towards a forward-looking accounting model and "IFRS 9 tries to provide more transparency on financial institutions in general".

Yves Dehogne (Deloitte) argues that IFRS 9 may not be the deciding factor in the next crisis but that it's operationalization may lead to a better level of risk management throughout the banking sector. Information will flow better, people will be better "educated" which will have a significant and positive impact for banks. Julien Cnyrim (ING) offers a few words of caution linked to a possible improvement when compared to IAS 39's approach: the forward-looking approach means incorporating forecasts in ECL modelling. As such, he wonders whether the right information is incorporated into these models and whether this information will evolve sufficiently quickly to improve on IAS 39's "too little, too late" approach.

In conclusion, IFRS 9 is expected to, at least partially, remedy the "too little, too late" criticism of IAS 39's incurred loss approach.

H7: IFRS 9 will have consequences due to its change in impairment provisioning (both economic and in provisions)

IFRS 9's Phase II has had a series of impacts on banks.

Yves Dehogne (Deloitte) explains that IFRS 9 has forced upper management to understand and learn about how risk is managed inside their organization. They now understand the different stages of Impairment and the impact of these stages on their balance sheet. Finance, Risk and upper management are starting to see positive elements in the systematic provisioning approach and this new perception of risk. Eric Gustin (KPMG) also highlights that, broadly speaking, the current impairment model adds value as it forces banks to deep-dive into their data and portfolios. There are nonetheless significant caveats, such as the added complexity of ECL modelling.

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[29] "Je trouvais que c'était intéressant de relier les calculs de provisions avec une augmentation perçue du risque de crédit par rapport à l'origination »

Furthermore, in terms of provisioning, Julien Cnyrim (ING) highlights the fact that IFRS 9 will allow a better anticipation of risks and that IFRS 9 will cause higher but less volatile provisions as it will avoid the sudden spikes in provisions under the incurred loss model.

Most interviewees agree that the main impact of IFRS 9 lies in its Phase II due to the impact of provisions and operational implementation. Implementation will be addressed in extensive detail in H10.

Olivier Duron (Febelfin) highlights the risk of procyclicality associated with the forward-looking accounting mechanism (as highlighted by the ESRB paper on the topic). In other words, "once the outlook starts becoming more negative, […] everyone will start increasing their provisions which will then impact further the negative outlook on the economy". Julien Cnyrim (ING) wonders whether the provisioning framework hasn't become "too big, too early". Pantelis Pavlou (KBC) calls the new standard "pre-cyclical i.e. before the cyclicality". Olivier Duron, Julien Cnyrim and Pantelis Pavlou nonetheless agree that these are theoretical discussions and that a few runs of IFRS 9 will be necessary to assess whether this provisioning model is effectively procyclical.

Volatility in provisions remains a concern for some actors in the sector. On one hand, Olivier Duron (Febelfin) argues that "it's a big step certainly but the industry will have to accept to deal with that […] but as the impact assessments have demonstrated it's not that dramatic" and that "IFRS 9 is, in the current regulatory storm […], an annex compared to the impact of [upcoming] regulation". Julien Cnyrim (ING), on the other hand, argues that volatility of provisioning (due specifically to the cliff effect when transitioning from Stage I to Stage II) is one of the biggest effects of IFRS 9.

Yves Dehogne (Deloitte) argues that "Belgian banks have always been super cautious in their provisioning. Therefore […] the provisions are already there". [30] Furthermore, Eric Gustin (KPMG) argues that even if Phase II of IFRS 9 has a significant impact in terms of provisions in banks, a real estate crisis will nonetheless have a severe impact on the Belgian banking system. Olivier Duron (Febelfin) explains that people expected, 2 to 3 years ago, significantly higher levels of provisioning but "the general conclusion has been, now that the texts have

[30] « Les banques belges ont toujours été mais super conservatrices dans leur provisionnement. Et donc […] les provisions sont déjà là »

been finalized, that the impact is quite manageable […] for Belgian institutions". Julien Cnyrim (ING) agrees with this statement but underlines the fact, as mentioned above, that "the largest effect won't be the increase in provisions but rather the volatility and the movements of provisions". [31]

Yves Dehogne (Deloitte) minimizes the impact of the IFRS 9 standard. He does not believe that IFRS 9 will be a game changer but rather that the regulator is the defining force in the current banking environment. The regulator adds buffers which according to him, disadvantages smaller entities. Oliver Duron (Febelfin) highlights the difference of impact between larger and smaller banks. Smaller banks, which mostly use the Standardized model for prudential regulations, were expected to be, on average, negatively impacted up to 60 basis points in terms of CET1 while banks adopting the IRB approach (i.e. large banks) were expected to only have to absorb a 40 basis points decrease in CET1 (European Banking Authority, 2017c). Nonetheless, he also declared that "our banks have confirmed that the European average sounds fair to them" and that the "impact was certainly below average".

For smaller banks, and specifically private banks, whose business model does not rotate around interest margin, Phase II of IFRS 9 is a total non-issue. Compliance was obviously compulsory and they've had to build ECL models but, apart from the slight extra cost in terms of audit, it has had no real impact on them. This is compounded by the high level of collateralization that they have whenever they originate a loan.

For banks adopting the standard approach for prudential regulation, any "impairment loss on a loan has a direct impact on CET1 capital, as it reduces retained earnings" (KPMG, 2016, p. 12) while, for banks adopting the IRB approach (i.e. larger banks),

> "The Basel 3 framework requires any shortfall in the eligible provisions relative to expected losses to be deducted from T1 capital. As such, the larger provision stock is less likely to impact T1 capital. This is because the provisions shortfall absorbs any capital impact, i.e. the provision shortfall and T1 capital reduction cancel out (scenario a) […]. In the case of an IRB excess, this excess can be added to T2 capital but only to the extent that the cap of 0.6% of IRB RWA is not reached (scenario b))." (KPMG, 2016, p. 12) (See Figure 5)

[31] « Le plus gros effet n'est pas l'augmentation de provisions mais la volatilité et la fluctuation de provisions »

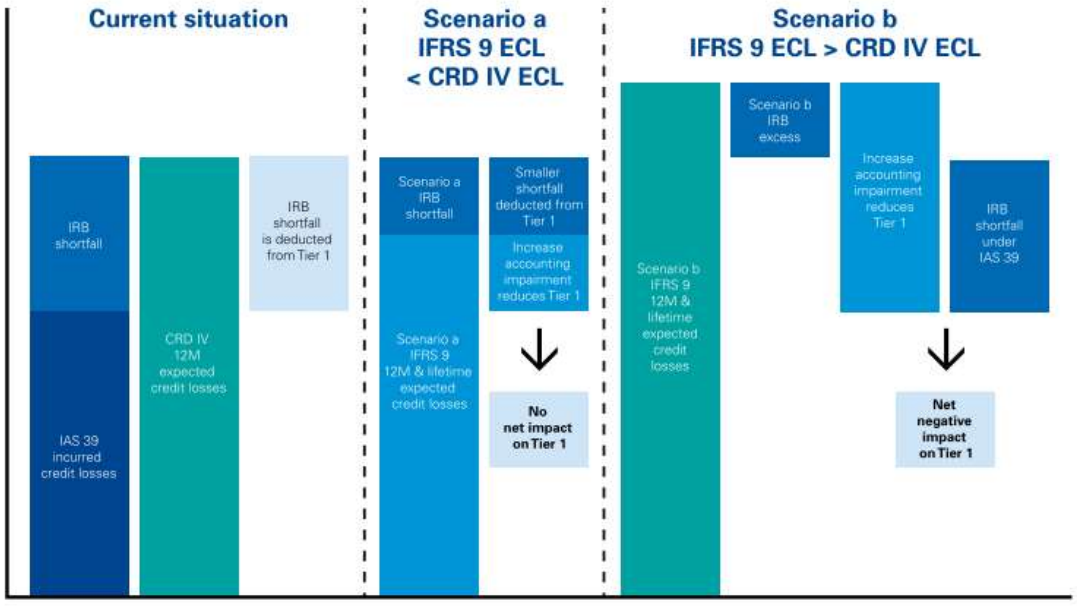

Figure 5: Different Scenarios in terms of Capital Impact of IFRS 9 for IRB banks (KPMG, 2016)

This clearly puts (usually larger) banks adopting the IRB approach at a significant advantage over smaller entities who have only implemented the Standardized approach.

BNP Paribas Fortis has had, as direct impact from IFRS 9, an increase of provisions for impairment from EUR 623 million to EUR 900 million, an increase of 44,46 % (BNP Paribas Fortis SA, 2018). ING Belgium will see an increase from EUR 721 million to EUR 849 million, an increase of 17,75 % with a net impact of EUR 93 million on capital (ING Belgique SA, 2018). Dexia is expecting an increase of EUR 200 million from an undisclosed base amount. (Dexia, 2018). Belfius disclosed a negative impact of EUR 197 million (without taking into account the tax depreciation impact). (Belfius Banque & Assurance, 2018) Other banks in the sample do not disclose any quantitative increase in provisions.

To sum up, it is clear to see that IFRS 9's Phase II has had an impact on Belgian banks. The main effect linked to IFRS 9's Phase II is clearly linked to provisioning. Even though provision levels are expected to be manageable, their volatility and possible procyclicality remain an issue that will need to be assessed over the upcoming years. Furthermore, the modelling necessary behind ECL implementation has forced banks, especially smaller institutions, to deep-dive into their data. Nonetheless, these banks are put at a significant disadvantage in terms of scale and of regulatory treatment of provisions.

Impact of Phase III

H8: IFRS 9 improves hedge accounting by, among other additions, broadening the range of eligible instruments for hedge accounting

Yves Dehogne (Deloitte) considers that the evolution in terms of flexibilization of hedge accounting under IFRS 9 is positive as it is built to significantly better represent the underlying economics of the hedging instruments. The old situation was a situation where a choice had to be made between accounting optimally and hedging optimally. Julien Cnyrim (ING) believes that the promised changes won't necessarily materialize and that the transition to IFRS 9 in terms of micro-hedging won't add significant value. He argues that whatever happens in terms of accounting, if the bank wants to hedge itself, it will hedge itself.

Nonetheless, and as explained in H9, many banks are waiting for the macro-hedging component of IFRS 9 before transitioning their hedge accounting to IFRS 9 (as the option exists to remain under IAS 39).

H9: Belgian banks will wait for the macro-hedging component of IFRS 9 before implementing IFRS 9's take on hedge accounting

According to Yves Dehogne (Deloitte), Olivier Duron (Febelfin), Julien Cnyrim (ING), banks are waiting for the macro-hedging component of IFRS 9 before transitioning from IAS 39 to IFRS 9 in terms of hedge accounting. (Belfius Banque & Assurance, 2018; BNP Paribas Fortis SA, 2018; Dexia, 2018; ING Belgique SA, 2018; KBC Group, 2018b; The Bank of New York Mellon S.A., 2018) Julien Cnyrim (ING) highlights this by saying that the hedge accounting component is currently a detail for them.

The only exception to this is Degroof Petercam which didn't apply hedge accounting under IAS 39 and which, on its first implementation, decided to directly implement IFRS 9. (Degroof Petercam, 2018)

Implementation

H10: Implementation will be complex and costly (in line with previous IFRS implementations)

Implementation is key to reaching a high-quality application of IFRS 9 in Belgian banks.

Yves Dehogne (Deloitte) highlights that a principles-based standard is closer to the underlying economic reality but comes accompanied with a significant cost in terms of people, IT or operations. A struggle for some banks, according to Eric Gustin (KPMG) is that

the implementation of IFRS 9 is a cross-functional project which implies mixing processes and entities which aren't used to working together. For ING Belgium, this meant developing a cross-functional project with the following departments: Risk, Finance, Bank Treasury, Operations and Business (ING Belgique SA, 2018).

According to Yves Dehogne (Deloitte), "the path [to IFRS 9 implementation] has been complicated for banks, in Belgium and abroad" and a lot of banks haven't yet gone to the "business-as-usual phase". In consequence, the overall perception is that IFRS 9 is an additional regulatory burden. Olivier Duron (Febelfin) disagrees with this last statement as he explains that banks consider the changes to be justified even if they are costly. Peter Ujvari (EY) left KBC 2 months before the transition date and he is aware that the project team for Phase I implementation has been disbanded while the Phase II implementation team remained active.

The BM and SPPI tests require, according to Olivier Duron (Febelfin), "a steep implementation cost". Julien Cnyrim (ING) goes as far as saying that "the SPPI was my nightmare because it's something that's extremely complicated"[32] and that the SPPI requires extensive discussion between technical specialists both inside and outside of the bank (with auditors, specialists, etc.). As such, it represented the major source of cost in the implementation of Phase I. According to him, "a lot of banks have invested a huge amount of time and money to implement these tests"[33]. Yves Dehogne (Deloitte) explains that the legacy portfolios of banks (typically made up of highly complex products) were extremely difficult to assess in terms of SPPI compliance. Banks whose Balance Sheets were made up of simpler assets were significantly less impacted.

Another difficulty in implementing these tests is highlighted by Julien Cnyrim (ING) who explains that the implementation of the BM and SPPI tests have required setting up a governance to ensure compliance. Governance will be addressed extensively in H11.

Furthermore, Julien Cnyrim (ING) explains that efforts were made to minimize the amount of assets classified at FVPL. This made the task of many Belgian banks quite complicated. As explained above, and as explained by Peter Ujvari (EY), banks struggled to assess SPPI-compliance of Asset- and Mortgage-Backed Securities. These securities are made up of

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[32] « Le SPPI ca a été mon cauchemar parce que c'est vraiment quelque chose de très compliqué »
[33] « Je pense que beaucoup de banques ont investies énormément de temps et d'argent pour réaliser ces tests »

thousands of underlying assets and the SPPI test requires that each of these underlying assets have cashflows which are solely payments of principal and interest. Nonetheless, and according to Peter Ujvari (EY), banks have usually been winding down their portfolios of complex products since the 2008 crisis.

In addition, to minimizing the assets classified at FVPL, banks were forced by auditors to define sales thresholds on assets measured at hold-to-collect. According to Peter Ujvari (EY), initial guidance on the accepted level of sales was obtained from the auditors but uncertainty remained as the auditors could change accepted sales levels when auditing the bank.

Olivier Duron (Febelfin) explains that the cost of implementing IFRS 9 is seen rather as a one-off. The main source of cost is linked to modelling ECL provisions. Extra teams will be required to maintain and continuously improve these models, which will represent a significant recurring cost, but this cost is expected to be lower than the one-off implementation cost incurred. Both Pantelis Pavlou (KBC) and Eric Gustin (KPMG) agree that the modelling will be the most expensive part of IFRS 9 implementation. Julien Cnyrim (ING) broadly agrees with this statement but expands on it by underlining the fact that post-implementation cost in the first few years will remain significant. Nonetheless these costs are expected to be lower than the costs faced in the first years post-IAS 39 implementation.

Frédéric Lepoutre reminds that when implementing IAS 39, a lot of work was still left after initial implementation before the accounting norm was effectively mature. Smoothing out the different interpretations and achieving a level playing field in terms of implementation will, in a similar manner to IFRS' initial implementation, require time and effort from all the relevant stakeholders.

Eric Gustin (KPMG) criticizes the models of IFRS 9 due to their high levels of complexity and explains that statistically, it can be very hard to link credit default rates with macroeconomic conditions. Julien Cnyrim (ING) expands on this by explaining that, for Phase II, systems had to be expanded and thoroughly changed to incorporate and capture new information. Another struggle that banks faced was assessing which information, especially for forward-looking macroeconomic factors, was relevant for which asset. An example given

was: “Is a change in the European unemployment rate important if it is caused by an evolution in Eastern European countries?”[34]

Olivier Duron (Febelfin) highlights the fact that larger banks have an advantage in terms of modelling as they are able to adapt their supervisory models. Furthermore, “banks who are already using internal models, if they had excess provisions under IRB, there was a way to put those back into their tier 2 capital which is why […] the impact of IFRS 9 is less” (see H7). Pantelis Pavlou (KBC) highlights the importance of leveraging synergies with existing regulatory models and with existing in-house capabilities (such as a group of economists) to ease the implementation of IFRS 9. Nonetheless, Julien Cnyrim (ING) highlights the fact that even though similarities exist between prudential and accounting models, divergences are significant, and one model cannot serve a dual role in accounting and regulatory matters. An example of this is given by Eric Gustin (KPMG): your probability of default for IRB models is set to one year while IFRS 9 requires both a one-year and lifetime approach.

In addition to models, Eric Gustin (KPMG) highlights the importance of the qualitative assessments of the Significant Increase in Credit Risk factor due to a deteriorating economic climate for a specific sector. Qualitative assessments mean implementing governance and processes to ensure good risk and provision management. Pantelis Pavlou (KBC) expands on this by highlighting the fact that there is a significant amount of roll-over in resources from IAS 39 for this specific issue.

As underlined by Eric Gustin (KPMG), smaller banks, especially private banks whose business model isn’t linked to credit origination, struggled to develop models due to the cost associated and to the lack of expertise inhouse. Models are inherently expensive and model validation can cost between EUR 50 000 and EUR 120 000. As also explained by Yves Dehogne (Deloitte), smaller banks have a smaller capacity for investment and need to build up the governance necessary for sufficient data quality. All of this is costly. This has never been necessary previously due to the “human” size of the portfolios of these banks. Eric Gustin (KPMG) highlights the fact that the regulator applies the concept of proportionality in terms of IFRS 9 implementation but the whole process is still very expensive and time-consuming for smaller banks.

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[34]« Est-ce que le taux de chômage européen est important si l’augmentation est liée à un changement dans les pays de l’est ?

The overall perception in smaller banks is that IFRS 9 is not adapted to their business model, it's unstable (due to changes in interpretations brought by IFRICs) and it doesn't bring any added value for them.

"The European Parliament has approved a transitional approach on the implementation of IFRS 9 […] to have a more phased and soft implementation" says Oliver Duron (Febelfin). Most banks have decided to not take this approach as this transitional approach requires a double reporting. As such, the banks decided to avoid the hassle of doing the double reporting and decided to take the (manageable) cliff effect on CET 1 in one go.

Julien Cnyrim (ING) admits that provisions under IFRS 9 will be closely examined whenever they will react/be different than under IAS 39 and that, as such, the underlying models (and Significant Increase in Credit Risk factors) will still significantly be finetuned over the coming years. This is part of a trend that has started before the transition date in which banks try to finetune their models to reach an optimal level of provisions. He also highlights the impact that the regulator will probably have in upcoming years in finetuning the implementation of IFRS 9.

Eric Gustin (KPMG) argues that changes in the future to IFRS 9 implementation will be limited due to previous interventions by both the regulator and the auditors through parallel runs in 2017. Nonetheless, work is still needed to ensure a level playing field.

In conclusion, implementation was the key source of cost linked to IFRS 9 and, specifically, IFRS 9's Phase II was the main source of complexity due to extensive modelling and information system needs. Nonetheless, implementing Phase I was also complicated due to the complexity of existing legacy portfolios. Furthermore, especially in terms of implementation, IFRS 9 is seen as being ill-adapted and costly for small banks (as they are unable to benefit from existing IRB models). Finally, implementation has not entirely been finalized and work will need to be done to ensure a high-quality implementation of IFRS 9.

H11: Governance of data, processes and models will be an essential consideration for the high-quality implementation of IFRS 9

In the current context of "regulatory storm that the financial sector is facing, [IFRS 9] is an annex compared to the impact of [other] regulation" according to Olivier Duron (Febelfin). As such, strong measures are necessary to ensure a high-quality implementation of IFRS 9 even if it isn't at the top of the agenda. Nonetheless, Oliver Duron (Febelfin) highlights the

fact that "the fact that it hasn't been that impactful doesn't mean that banks have had the luxury of being able to disregard it [as] the implementation date is quite firm".

Julien Cnyrim (ING) and Peter Ujvari (EY) give a broadly similar example of a governance issue that may arise: "we will need to know how we define a […] Business Model"[35] (as the Business Model defines how large and how frequent sales can be under Hold-to-Collect). Nonetheless, he underlines the fact that "the true focus point for the future [is] to ensure that sales are at acceptable levels and for good reasons"[36]. Furthermore, he explains that, at ING, governance concerning the BM and SPPI tests has been put in place and that, at least for Phase I, they have already gone back to "business as usual". This implies a certain degree of standardization with significant flexibility nonetheless left to the business. This flexibility is given through processes such as contacting finance whenever there are doubts over the SPPI- and BM-compliance of an asset. Yves Dehogne's (Deloitte) perception is that most banks aren't yet at this "business as usual" phase and that work is still necessary to set up internal controls, processes or governance.

Yves Dehogne (Deloitte) explains that the SICR factor can be manually overridden by employees whenever these employees deem it necessary. Due to the underlying complexity linked to defining a significant increase in credit risk, governance is essential to ensure accurate provisioning. Eric Gustin (KPMG) emphasizes the importance of setting up governance linked to the definition of both the qualitative and quantitative SICR criteria. Julien Cnyrim (ING) also highlights the fact that, even though overrides may be possible, a certain degree of standardization is required and that cherry picking the SICR trigger for each asset is not possible.

According to Olivier Duron (Febelfin), data quality is a growing concern for Belgian banks: "reporting requirements, data requests from supervisors keep increasing not only in quantity but also in granularity". As such, "data quality is a concern and for IFRS 9 I would agree that getting this forward-looking data and having it approved by the supervisor is a concern". Julien Cnyrim (ING) underlines the challenges linked to this forward-looking data as there will always be concerns linked to the choice of forward-looking variables (are they the best ones, will they react sufficiently fast, etc.). Eric Gustin (KPMG) highlights the difficulties in

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[35] « On va devoir savoir comment on définit un nouveau Business Model »

[36] « Ça c'est le véritable point pour l'avenir : c'est de s'assurer que les ventes sont à un niveau acceptable et pour de bonnes raisons. »

linking macroeconomic and microeconomic factors (such as heightened levels of credit default).

Implementing models (such as for IFRS 9) requires implementing governance and revamping existing IT infrastructure according to Eric Gustin (KPMG). Smaller banks, that have never had to set up such a governance due to the small size of their portfolios, are forced to set up data quality and control processes that they did not have before IFRS 9 implementation. Eric Gustin (KPMG) sees this as a positive but costly side effect of IFRS 9 implementation.

On a broader scope, Julien Cnyrim (ING) emphasizes the importance of governance linked to IFRS 9 implementation with questions such as "how will volatility be managed between [impairment] stages? or how are we going to control that the business doesn't originate non-SPPI compliant assets?"[37]. He talks about the work done by the Global Public Policy Committee (GPPC) which gathers BDO, Grant Thornton and the Big 4 auditors (Deloitte, KPMG, EY and PwC). The GPPC released a document in June 2016 called "The implementation of IFRS 9 impairment requirements by banks : Considerations for those charged with governance of systemically important banks" which sets out "broad recommendations for a governance and controls framework", "discusses sophistication and proportionality" before providing guidance on transition. (Global Public Policy Committee, 2016). Julien Cnyrim (ING) highlighted the fact that very few people, even inside the auditors, seemed to be aware of the existence of such a document.

On a more positive note, Yves Dehogne (Deloitte) underlines the evolution in terms of risk awareness and operationalization that will improve the flow of information towards senior management. He sums it up as follows "The processes, thinking, reflection and education of the people behind IFRS 9 will be significantly more important than the changes in numbers"[38]

To sum H11 up, governance has been necessary to ensure a high-quality implementation in areas where IFRS 9 offers flexibility in terms of interpretation. Strong governance will remain important to guarantee a good implementation of IFRS 9. Furthermore, IFRS 9 may create better governance due to a better risk-awareness throughout the organization.

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[37] « Comment est-ce qu'on va contrôler la volatilité entre les stages et alors comment est-ce qu'on va contrôler que le business n'émet pas des loans non-SPPI compliant ».

[38] « C'est pas les chiffres en soi mais plutôt le processus, le raisonnement, la réflexion, l'éducation des gens derrière va être beaucoup plus importante ».

Conclusion

The aim of this thesis was to assess the impact of the transition from IAS 39 to IFRS 9 on the Belgian banking sector. To do so, we assessed the current state of literature before interviewing relevant experts and analysing annual reports from a sample of Belgian banks.

Some limitations need to be considered. First, this thesis interviewed different experts but did not cover the entirety of the Belgian banking sector. As such, some elements may be missing in this thesis. Nevertheless, the interviewees were part of Belgium's largest financial institutions and auditors (such as ING, KBC or Deloitte).

A second limitation concerns the interaction with banking regulation. It was not possible, in the scope of this thesis to comprehensively assess the impact and role of IFRS 9 on the regulatory situation of the different Belgian banks. Nonetheless, the impact on CET1 capital (arguably the most important metric) was extensively discussed.

The **high-level impact of IFRS 9** on Belgian banks remains to be defined as the implementation of IFRS 9 will need to be finetuned over the upcoming years.

The added complexity of IFRS 9 is not expected to boost transparency in accounting statements. This is in clear contrast with IFRS' initial implementation. Nonetheless, some interviewees remained optimistic about the added value of the new accounting standards and underlined the need to wait a few years before assessing the scale of the impact of IFRS 9. The upcoming years will be crucial for both account preparers and users as progress in implementation and understanding of IFRS 9 is made.

The impact on accuracy of the new accounting standards remains significantly more confused. On one hand, Phase I (with the Business Model and Solely Payments of Principal and Interest tests) is expected to bring clarity and accuracy to the recognition and measurement of financial assets. Furthermore, the new Expected Credit Loss impairment model is expected to be more in line with how banks manage their business. On the other hand, Belgian banks wanting to avoid volatility by maximising SPPI-compliance of assets, the complexity of Expected Credit Loss modelling and the cliff-effect in Phase II of IFRS 9 are all factors which risk hurting the accuracy of accounting statements. Furthermore, disclosures are not expected to have a significant impact on neither transparency nor accuracy of accounting statements.

Finally, IFRS 9 is only expected to improve comparability under regulatory pressure (i.e. the regulator will have to intervene to reach true comparability). Nonetheless, interviewees

questioned the desirability of true comparability as it could lead to the elimination of the competitive advantages banks have cultivated over the years.

The **impact of the three Phases** of IFRS 9 is clearer.

IFRS 9's Phase I had a significant accounting impact for the balance sheet of Belgian banks. Furthermore, its implementation was, especially for banks who held complex assets on their balance sheets, complicated by a lack of data concerning SPPI-compliance. However, its impact is widely considered as being significantly less than the impact of Phase II of IFRS 9, especially in terms of operationalization.

The revised Impairment model is seen to have reached its objectives of remedying the "too little, too late" criticism linked to IAS 39's incurred loss model. Different interviewees nonetheless wondered if IFRS 9's model hadn't gone too far and become "too big, too early". The revised Impairment framework has also had a clear impact on provisions. The main issues linked to this heightened level are not linked to their absolute values (which are higher than under IAS 39) but rather to their volatility (due to the cliff-effect between Stage I and Stage II) and their possible procyclicality.

Furthermore, the complexity of modelling necessary for the implementation of ECL modelling has been a significant burden, especially on smaller banks who were unable to benefit from similarities between IFRS 9 and Basel IRB models. Nonetheless, the implementation of ECL has forced banks, both big and small, to deep-dive into their portfolios and clients and may have as a direct impact that these institutions are better aware of the risks associated with their existing portfolios.

Phase III remains a non-issue for most banks active in Belgium. The vast majority of the significant banks are still operating under IAS 39's hedge accounting framework as IFRS 9's macro-hedge accounting hasn't been released by the IASB yet.

In conclusion, **implementation** was the key source of cost linked to IFRS 9 and, specifically, IFRS 9's Phase II was the main source of complexity due to extensive modelling and information system needs. Nonetheless, implementing Phase I was also complicated due to the complexity of existing legacy portfolios. Furthermore, especially in terms of implementation, IFRS 9 is seen as being ill-adapted and costly for small banks (as they are unable to benefit from existing IRB models). However, implementation has not entirely been finalized and work will need to be done to ensure a high-quality implementation of IFRS 9.

In addition to struggles linked to implementation, governance remains an important topic for a high-quality application of IFRS 9. Governance is especially important due to the flexibility offered by IFRS 9 on key technical points. Finally, IFRS 9 may have as direct consequence that upper management be more aware of the risk present in the organisation.

Based on our findings, it can clearly be seen that complexity is the key word linked to the implementation of IFRS 9. Many banks see its implementation mostly as a burden in a context of low profitability and increased regulatory pressure. The positive elements brought by IFRS 9 are seen as being outweighed by the burden of operationalizing the new standard.

The most important element for the future of IFRS 9 is linked to the quality of the governance set in place in Belgian banks. Guidelines (such as the Global Public Policy Committee documents on impairment governance) exist and banks should take these into consideration. This governance, and implementational efforts made in upcoming years, will be key in deciding what the true impact of IFRS 9 will be.

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