CENTER FOR LATIN AMERICAN MONETARY STUDIES

Key Issues in Bank Accounting and Finance

Proceedings of the Regional Conference on Banking, Accounting and Finance

Edited by CEMLA

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Content

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Foreword

Bank accounting took central stage in the aftermath of the Global Financial Crisis (GFC), as soon as the international community recognized the inability to detect and anticipate the financial imbalance provoked by highly leveraged and unproperly valuated and audited banking book.

The consequences for the global financial stability explained by the prevailing accounting and audit standards before the GFC were no minor. This reassured the fact that disclosure and transparency enabled by a sound accounting framework are key foundations for sound market conduct practices, and ultimately financial stability.

As a result of this, there have been innumerous efforts to review the existing international accounting framework. One of the goals of this review was to adapt the standards developed by the International Accounting Standards Board (IASB) and the United States Financial Accounting Standards Board (FASB) to foster greater convergence and international comparability of financial reporting standards that are used in international financial markets. To advance this, it was created the Financial Crisis Advisory Group (FCAG) in 2008, to provide advice on standard-setting implications of the GFC and potential changes to the global regulatory environment.

After a long and thoughtful review process, both, the IASB and the FASB standards, as well as other set of reference accounting standards, including the European regulation 1606/2002 on the application of international accounting standards, are now better adapted to reflect risk exposure and overall financial health of financial institutions and other non-financial entities that are active in capital markets. For instance, within the International Financial Reporting Standards (IFRS) issued by the IASB, aspects related to consolidation, derecognition and disclosure of notes, measurement of fair value, and valuation and impairment, were deeply reviewed; such aspects are critical for the users of reported financial information to understand the business model, cash flows and risk exposure behind different financial instruments, either for investment decisions or for regulatory purposes. Notwithstanding this progress, an emerging challenge that the review has posed is that, according with standards setting bodies, national financial authorities and the industry, the IFRS became more complex, challenging interpretation and adoption efforts that eventually could endanger international harmonization.

In this context of greater complexity of international financial standards, including others like the Basel III framework, domestic authorities play an important role in establishing a policy and legal framework that sets a minimum of regulatory expectations, combining domestic legal requirements with recommendations and international standards that fit their institutional and market setting. Better coordination across jurisdictions is another aspect that will facilitate a proper adoption of new regulatory standards.

For more than a decade, the Center for Latin American Monetary Studies (CEMLA) has devoted significant efforts to contribute with modernizing and strengthening bank accounting practices across Latin America and the Caribbean. The Banco de España, a Collaborating Member to the Center, has played a key role in these efforts providing technical support in various regional activities.

In this context, CEMLA and the Banco de España assembled the Regional Conference on Banking, Accounting and Finance[1] to serve as a forum for the exchange of experiences and knowledge on financial and accounting issues that central banks and financial regulators face to modernize and enhance their accounting regulatory frameworks.

This Conference took place in Santiago, Chile on April 4 and 5, 2019 and was attended by 59 participants of 29 institutions, including Latin American and Caribbean central banks and financial authorities, international organizations and industry representatives.

This document comprises the proceedings of the Conference based on the special contribution of featured speakers that discuss key finance and accounting issues.

Gomes A., former IASB Member, claims the importance of adequately implementing the IFRS revised standards, specially the IFRS 9, 10 and 13, to improve information's quality and trustworthiness reported by financial institutions and other economic agents which financial health could represent a public good from a policy perspective. Gomes recognizes that the improvements in IFRS would not prevent from further crisis, but it will play an important role as the quality of information and the enhanced disclosure, would improve market discipline and financial stability, thus benefitting long-term economic development.

Perez P., FSB Secretariat Member, focuses on the relevance of auditing as the ultimate resort for bank accounting practices. Perez acknowledges that given its role, audit relies also on sound reported information, appropriate valuation and disclosure of notes, to verify whether risks exposure and financial statements in general are well prepared and estimated. Perez underlines the importance for financial authorities to also establish minimum expectations to guide audit firms on their significant task of safeguarding the accurateness and opportuneness of financial information.

Martinez A., Vicechair of the Spanish Securities Commission and Chair of the Financial Information Standing Committee of the European Securities and Markets Authority (ESMA) emphasizes the importance of continuously updating the accounting framework to preserve financial reporting transparent and streamlined, and with that underpins financial regulation and supervision. Martinez also states that achieving a harmonized accounting framework lay the foundations for greater integration of capital markets, regionally and internationally.

Cantera J., Superintendent of Financial Entities of the Banco Central del Uruguay, reviews the evolution of financial regulation and its implications for credit, highlighting that the new credit risk standards as well as other Basel III framework developments will significantly improve the resilience

[1] The Conference was also co-organized with the Latin American Fund of Reserves (FLAR) and the special support of the Association of Bank Supervisors of the Americas (ASBA).

of the global financial system, for instance with the implementation a countercyclical capital buffer. Cantera explains that in the case of Uruguay there have been previous regulatory adaptions that have been useful to fulfill some of the most changing Basel rules, for instance, the provisioning system to face expected credit losses.

Perez, J., Adviser to the Financial Stability Directorate of Banco de España, emphasizes that accounting is a modern convention that is critical to the well-functioning of the financial markets. The author also notes that despite its usefulness, accounting has also its limitations and financial authorities should strike a balance on how financial risks are monitored. A conclusion from Perez is that reliable accounting standards are key to achieve an optimal outcome in financial reporting because no one has an incentive to deviate from his chosen strategy (for instance, calculating risks exposure based on accounting standards), so financial markets reached a Nash Equilibrium.

Finally, De Juan, A., former Director General of Banking Supervision of the Banco de España, concludes on the relevance of a shared responsibility for financial authorities, audit firms, and the top management of financial institutions to contribute to the stability of the financial system by respectively reporting, endorsing and supervising financial information. The author is concerned about potential laxity in financial supervisory practices that could foster misbehaving market practices, which in turn can result in spillover effects and bank failures.

To conclude, looking forward, it is hoped that CEMLA will continue its efforts to support regional central banks and financial authorities to develop and modernize sound and reliable regulatory accounting frameworks, by means of providing meaningful mechanisms, including technical assistance, training and policy debate. These proceedings represent an input to achieve this goal.

Raúl Morales Resendiz

Manager, Financial Markets and Infrastructures division

CEMLA

Financial crisis and accounting

Amaro Gomes
Board Member, International Accounting Standards Board[2]

Introduction

The global economic scenario has changed significantly since the international financial crisis broke out in 2007 ('the crisis'). Since then, the Basel Committee on Banking Supervision (BCBS) developed new capital requirements methodologies and several countries introduced prudential and macroprudential measures. The same is true regarding the establishment of international accounting standards – International Financial Reporting Standards (IFRS): the crisis had a significant impact on financial reporting and new accounting standards have been developed as a result. For example, the criteria for recognition, measurement and disclosure of financial instruments and the principle of control as the basis for consolidation are, in my view, the most striking areas in the International Accounting Standards Board (IASB) response to improve financial reporting, although fair value measurement and derecognition of assets were also subject to review by IASB.

The actions of the IASB were aligned with recommendations of the Group of 20 (G20) and the Financial Crisis Advisory Group (FCAG), formed in 2009 and composed of senior leaders with extensive international experience in financial market regulation with the objective of advising the IASB and the Financial Accounting Standards Board (FASB) about potential measures in response to the crisis. One of the main conclusions of the FCAG emphasized the relevant role of financial statements in providing unbiased, transparent and relevant information. In addition, the FCAG recognized that accounting standards can contribute to financial stability, mainly by promoting transparency, but one should not expect that such rules "transpire" stability by ignoring economic volatility when it exists.

The FCAG also made some specific recommendations such as:

- to improve accounting for what is "in" and "out-of-balance" and related disclosures;
- to solve the issue of own credit risk: the counter-intuitive outcome when an entity recognizes a gain as a result of an increase in its own credit risk. In particular, as the entity 's probability of default increases, the fair value of its debt declines, resulting in a gain recognized in profit or loss; and
- to develop a more "prospective" approach for recognition of credit losses.

In 2009, the G20 issued similar recommendations to the IASB and the FASB to improve the standards for fair value measurement of financial instruments and recognition of credit losses, in order

[2] The views expressed in this piece are from the author and do not necessarily represent the views of the IASB.

to achieve a single set of high-quality global accounting standards. Let me then detail a little bit more about what the IASB has done over the last 10 years.

The Influence of the Crisis in the Standard Setting Activities by the IASB Since 2009

Considering July 2009 as the starting point (when I joined the Board), the IASB concluded several major projects dealing with issues associated with the crisis.

The complete revision of IAS 39 – Financial Instruments: Recognition and Measurement (IAS 39), with publication of IFRS 9 – Financial Instruments (IFRS 9), included a new model for recognition of credit losses, and a new approach for determining the classification and measurement of financial assets. The expected credit loss model, approved in 2014, was the final element of the IASB's response to the global financial crisis. More on this in the next session of this piece.

On consolidation, IFRS 10 – Consolidated Financial Statements (IFRS 10) establishes principles for presenting and preparing consolidated financial statements when an entity controls one or more other entities. In practice, the standard introduces and establishes the concept of 'control' as the basis for consolidation, requiring an entity (the parent) that controls one or more other entities (subsidiaries) to present consolidated financial statements. The IFRS 10 then defines the principle of control, sets out how to apply the principle of control to identify whether an investor controls an investee and the accounting requirements for the preparation of consolidated financial statements.

IFRS 10 carries forward much of the previous guidance in IAS 27 relating to the mechanics of preparing consolidated financial statements and retains the consolidation exemption for a parent that is itself a subsidiary and meets certain strict conditions. In addition, IFRS 10 provides an exemption from consolidation for an entity that meets the definition of an "investment entity" (such as certain investment or mutual funds).

As for the "off balance" items, the main issue was to assess the impact of Specific Purpose Entities (SPEs). IFRS 10 with its new criteria of control as the basis for consolidation amplified the previous requirements for consolidation and the focus of the IASB was in improving transparency. Users of financial statements have consistently requested improvements to the disclosure of a reporting entity's interests in other entities to help identify the profit or loss and cash flows available to the reporting entity and determine the value of a current or future investment in the reporting entity. Those users highlighted the need for better information not only about the subsidiaries that are consolidated, but also about an entity's interests in joint arrangements and associates that are not consolidated but with which the entity has a special relationship. In addition, the crisis also highlighted a lack of transparency about the risks to which a reporting entity was exposed from its involvement with structured entities, including those that it had sponsored. After a thorough analysis of the criteria required by the IFRS, it was concluded that its application produced the correct effects during the crisis, culminating with the decision by the IASB to introduce improvements in the information provided in the notes, particularly on the exposure of risks and the nature of such relationships. IFRS 12 – Disclosure of Interests in Other Entities addresses the disclosure of a reporting entity's interests in other entities when the reporting entity has a special relationship with those other entities, i.e. it controls another entity, has joint control of or significant influence over another entity or has an interest in an unconsolidated structured entity.

With regard to fair value measurement, the fundamental question raised during the crisis was associated with the criteria to be observed when there is no active or properly functioning market. The IASB published IFRS 13 – Fair Value Measurement (IFRS 13) consolidating all IFRS literature and providing a more complete guidance on how to determine fair value in illiquid markets.

IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). When measuring fair value, an entity uses the assumptions that market participants would use when pricing the asset or the liability under current market conditions, including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value. The framework introduced by IFRS 13 assumes that a hypothetical and orderly transaction takes place.

In addition, IFRS 13 introduced the requirement that the fair value of a liability reflects the effect of non-performance risk, guidance on valuation technique(s) to be used for measuring fair value, a portfolio exception, guidance on measuring fair value when the volume or level of activity for an asset or a liability has significantly decreased and, enhancement and harmonization of the requirements to disclose information about fair value measurements.

During the development of IFRS 13, entities in emerging and transition economies expressed their concerns about applying fair value measurement principles to equity instruments that are not quoted in active markets in their jurisdictions. However, the IASB noted that entities in developed economies faced similar challenges during the global financial crisis. As a result, the IASB developed specific educational material on fair value measurement entitled Measuring the fair value of unquoted equity instruments within the scope of IFRS 9 Financial Instruments, published in December 2012.

The IASB completed its review of IFRS 13 (Post-implementation Review) in March 2018. Later, in December 2018, the Board published the Project Report and Feedback Statement, concluding that IFRS 13 is working as intended. In particular, the Board concluded that the information required by IFRS 13 is useful to users of financial statements; some areas of IFRS 13 present implementation challenges, largely in areas requiring judgement (however, evidence suggests that practice is developing to resolve these challenges); and no unexpected costs have arisen from application of IFRS 13.

Financial Instruments Accounting: A Significant Evolution

The most relevant efforts by the IASB were those related to the revision of IAS 39, which dealt with the accounting of financial instruments (recognition and measurement of financial assets, financial liabilities and some contracts of purchase or sale of non-financial items). The complete revision of IAS 39 was the main response by the IASB to the financial crisis.

The most common criticism among the most diverse users of financial statements and other stakeholders was that the requirements of IAS 39 were difficult to understand, apply and interpret.

Therefore, they suggested to the IASB the development of a new, less complex, principle-based accounting standard for financial instruments. It is worth mentioning that the IASB amended IAS 39 several times since its publication in 1999 to clarify the requirements, add guidance and eliminate internal inconsistencies, but had not conducted a fundamental reconsideration of its requirements.

Subsequently, as of April 2009, in response to the FCAG and G20 recommendations, the IASB announced an accelerated timetable for revising and replacing IAS 39.

In dealing with classification and measurement of financial instruments, the focus was on the situations in which these instruments should be measured at fair value and when the amortized cost can or should be used. The IASB has introduced a more logical approach to determining how a financial instrument is classified. The new bases of the classification model depend, in part, on the business model adopted by the entity for managing its financial assets.

With regard to the accounting for financial liabilities, the "counterintuitive" fair value gain arising from an increase in the entity's own credit risk will now be recorded directly in equity and 'recycled' through profit or loss only when realized (i.e. settlement of the financial liability).

One of the most notable improvements in IFRS literature concerns hedge accounting. In recent decades, the extent and complexity of hedging activities has increased substantially due to the increasing adoption of risk management practices and the evolution of processes and techniques available to manage risk exposures, as well as the increased availability of financial instruments to manage those risks.

However, hedge accounting requirements in IAS 39 did not follow this evolution and remained based on complex rules that did not reflect actual practice in the organizations. Throughout this period, entities have attempted to "fit" transactions originated for risk management purposes into the requirements established by IAS 39, which became increasingly divorced from the purpose of the transactions.

These complexities also created challenges for users of financial statements to understand the information reported in the financial statements. Many, in fact, consider the hedge accounting information provided by IAS 39 incomprehensible, often disregarding in their analysis the effects of such accounting treatment. In this context, additional performance measures (usually elaborated on basis other than those required by IAS 39) have emerged to facilitate the understanding of the results of an entity's risk management activities. The main criticism was that hedge activities accounted for under IAS 39 and related disclosures did not adequately and transparently portray risk management.

The complexity of IAS 39 hedge accounting model coupled with the growing criticism on the lack of transparency and relevant information led the IASB to develop an accounting model to better reflect, in the financial statements, the effects of an entity's risk management activities that use financial instruments to manage risk exposures that could affect profit or loss.

Applying the IFRS 9 model therefore makes it possible for financial statements to reflect risk management activities instead of simply complying with an IAS 39 rules-based approach, with significant improvements in the quality and transparency of the information. In addition, entities may use the information available in their risk management systems as a basis for recording the effects and satisfying the hedge accounting requirements imposed by IFRS 9 with significant cost reduction.

The areas in hedge accounting expected to have the greatest impacts are: hedge effectiveness test; eligibility of risk components of non-financial instruments; disclosures; accounting for hedging costs; aggregate exposures; groups and positions; and the rebalancing and discontinuation of hedging relationships.

Finally, the IASB re-evaluated the requirements for determining the allowance for credit losses. IAS 39 requirements were based on the incurred loss model. It is important to note that the model was implemented to limit the ability of management to create hidden reserves during the "good times" that could be used to "embellish" gains during "bad times." The practice of earnings management with the use of provisioning are extremely damaging to the reliability of entities' performance and financial position, and therefore undermines the credibility of the information by reducing the level of confidence of the investors.

However, during the crisis, the model of incurred losses was "removed from the throne" and deprecated as credit losses arising from the increased credit risk of loan portfolios were considered to be "too little" and "too late". In practice, during the crisis, the application of the incurred loss model was, in many situations, quite restrictive, culminating in the recognition of impairment immediately before credit defaults. This late recognition of the credit losses undermined the confidence in the information provided in many banks' financial statements.

The IAS 39 model is said to have also facilitated the adoption of irresponsible attitude by several institutions, which, even in the face of clear warning signals, continued the credit granting process, primarily to borrowers who were in difficulties and, therefore, would provide greater returns. At the same time, credit to lower-risk borrowers, including companies with growth potential, was being stifled.

The new IFRS 9 expected credit loss model assumes that, when acquiring a financial asset or lending money, there is always some level of associated loss expectation, which requires the recognition of credit losses considering such expectation in the initial 12-month period. From this point, when there is a significant increase in credit risk, the credit loss must be recognized considering the lifetime of the operation. Compared to the incurred loss model, the volume of allowance for credit losses is expected to rise as it is recognized long before the actual loss.

In addition, IFRS 9 introduced requirements for disclosure of additional information including the details of assumptions used and the origin of the changes in the allowance for credit losses period by period. I believe the new expected credit loss accounting introduced by the IASB will contribute significantly to the improvement of the recognition and measurement of financial instruments, as well as the level of transparency of the information on an entity's financial position and performance in the period.

Conclusion

I believe that if IFRS 9, IFRS 13, and IFRS 10 are implemented correctly, surprises will be less frequent. The level of an entity's exposure to the various risks associated with its business activity will be much clearer, with a more timely recognition of the effects related to credit risk, which should be reflected in the amount of credit losses recognized in the period.

It is important to stress that IFRS are not developed to prevent further crises. The financial report is only as good as the information on which it is based.

With the publication of the standards associated with the financial crisis, the IASB now focuses on maintaining the quality of IFRS, effectively contributing to the improvement of the level of disclosure of financial statements and transparency of information, market discipline and financial stability, fundamental for long-term economic development.

Bibliography

GILES, Chris, 2007, "Fallout from US subprime market 'limited'". The Financial Times, April 11, 2007. Access: 21-11-2016, http://www.ft.com/cms/s/60656226-e7c9-11db-8098-000b5df10621

HOOGERVORST, Hans, 2018, "Are we ready for the next crisis?". Access: 28-04-2019, https://www.ifrs.org/news-and-events/2018/12/speech-are-we-ready-for-the-next-crisis/

LLOYD, Sue, 2018, "IFRS 9 and equity investments". Access: 28-04-2019, https://www.ifrs.org/news-and-events/2018/04/ifrs-9-and-equity-investments/

MAYER-FOULKES, David, 2009, "Long-term fundamentals of the 2008 economic crisis". SSRN. Consulta: 21-11-2016, https://ssrn.com/abstract=1367918

Basel III: international regulatory framework for banks, https://www.bis.org/bcbs/basel3.htm?m=3%7C14%7C572

Group of 20 – G20 recommendations, http://www.londonsummit.gov.uk/resources/en/PDF/annex-strengthening-fin-sysm

Financial Crisis Advisory Group – FCAG, https://www.ifrs.org/groups/financial-crisis-advisory-group/

Audit and Accounting
Quality, Discipline and Financial Stability

Pablo Pérez[3]
Member of the Secretariat, Financial Stability Board

Background

The once unquestioned relevance of audit is currently subject to increased public attention in response to widely publicized corporate events in different parts of the world. An increasing number of local audit firms have been subject to legal or enforcement actions, which have eroded confidence in their perceived role and the value of their reports, damaging the overall reputation of their networks and raising concerns around their business model and the overall structure of the audit market.

Deterioration in the performance of audit firms was already being reflected in the rate of audit inspection findings reported by member jurisdictions of the International Forum of Independent Audit Regulators (IFIAR).[4] Despite a downward trend in the past five years, overall findings rates are still unreasonably high, and progress remains uneven across firms in different jurisdictions. As an indication, the headline results of the 2017 IFIAR survey published in March 2018 showed a 40% overall findings rate.[5]

In response to heightened concerns, regulatory authorities in some jurisdictions have started exploring the structural features of the audit business, whether the recurrence of audit failures is connected to those features, and if so what measures could address the problem.[6] Similar studies

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[3] Pablo Pérez is Member of the Financial Stability Board's Secretariat and the FSB Advisor on Accounting and Auditing. The opinions expressed in this paper are the sole responsibility of its author and do not represent the position of the Financial Stability Board.

[4] In 2004, the Financial Stability Forum ("FSF", predecessor body of the Financial Stability Board) hosted and chaired the first meeting of national audit oversight bodies from nine major financial jurisdictions, in what later became the informal Roundtables of Audit Regulators. In September 2006, the FSF welcomed the proposal to create IFIAR in order to enhance and bring more global consistency to audit oversight and audit quality (https://www.bis.org/press/p060906.htm). IFIAR is currently composed of independent audit regulators from 55 jurisdictions.

[5] The annual IFIAR reports on audit inspection findings (https://www.ifiar.org/activities/annual-inspection-findings-survey/) identify individual engagement findings –defined as departures from auditing standards, matters around which the firm did not obtain sufficient evidence to support its opinion, or failures to identify or address a material error in the application of an accounting principle– and quality control findings –related to firm-wide processes of quality control. As of the date of writing of this article, IFIAR had not yet published its 2018 survey of inspection findings.

[6] Among those initiatives are the "Statutory audit market study" by the UK Competition and Markets Authority (https://www.gov.uk/cma-cases/statutory-audit-market-study), last updated in April 2019, or the so called Brydon Review on "The quality and effectiveness of audit", open for consultation until 7 June 2019 (https://www.gov.uk/government/consultations/the-quality-and-effectiveness-of-audit-call-for-views).

in the past had sought to address audit quality from a structural perspective,[7] but neither past reports nor the latest initiatives have explored audit quality deterrents with a focus on the impact to well-functioning capital markets and financial stability.

The role of audit and main features of the audit market

In a July 2009 report on the standard-setting implications of the global financial crisis, the International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB) clarified that "effective financial reporting depends on high quality accounting standards as well as the consistent and faithful application and rigorous independent audit and enforcement of those standards".[8]

When those conditions are met (high quality accounting standards that are consistently and faithfully applied and rigorously audited and enforced), effective financial reporting contributes to sound resource allocation and transparent markets. In the case of regulated financial institutions, reliable information about risk exposures and capital adequacy facilitates market discipline and enables appropriate supervisory discretion,[9] also discouraging the build-up of unsustainable equity positions.

On these grounds, effective reporting represents a public good that is protected through different mechanisms. The general requirement for issuers to file audited financial statements is central to such protection,[10] giving audit firms a unique franchise to operate the statutory service of providing assurance on companies' financial statements. In 2018 the global revenues of the so called "Big Four" –Deloitte, EY, KPMG and PwC– reached $148.25 billion, out of which around 38% ($56.01 billion) came from the assurance business.[11]

In the most typical corporate setting, auditors are appointed by the company's board or audit committee, on behalf of its shareholders. Their role is to provide an opinion on whether the financial

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[7] Among the best known are: Oxera's report on "Competition and choice in the UK audit market" (April 2006); London Economics' study on the "Economic Impact of Auditors' Liability Regimes" (September 2006); American Antitrust Institute's working paper on "Financial Reform and the Big 4 Audit Firms" (January 2010); European Commission's Green Paper on "Audit Policy: Lessons from the Crisis" (October 2010); or UK Competition Authority's "Statutory audit services for large companies market investigation" (October 2013).

[8] The report (http://www.ifrs.org/Features/Documents/FCAGReportJuly2009.pdf) was drafted by the Financial Crisis Advisory Group, convened by the IASB and FASB following a November 2008 request by the G20 leaders to "ensure consistent application and enforcement of high-quality accounting standards".

[9] See Haldane, A. G. (January 2011, "Capital discipline").

[10] For instance, in the European Union, Directive 2013/34/EU (art. 34) requires member states to "ensure that the financial statements of public-interest entities… are audited by one or more statutory auditors or audit firms". In the US, the Securities Exchange Act requires companies with more than $10 million in assets and a class of equity securities that is held by more than 2,000 owners to file annual and other periodic audited reports.

[11] The breakdown is as follows (https://www.statista.com/statistics/250935/big-four-accounting-firms-breakdown-of-revenues/): Deloitte $43.2 billion revenue (35% from assurance); EY $34.8 billion revenue (36% from assurance); KPMG $28.96 billion revenue (39% from assurance); PwC $41.29 billion revenue (41% from assurance).

statements fairly represent the company's financial position and performance, in accordance with the applicable accounting standards. In arriving at such opinion, the audit engagement team must gather sufficient evidence and apply the appropriate procedures to provide a reasonably high level of assurance that the financial statements are free from material misstatements.[12]

In a globalized economy characterized by increasingly complex business models, the performance of such activity requires highly resourced audit firms that are able to deploy specialized teams of professionals throughout several jurisdictions subject to different legal and cultural environments, regulatory requirements and corporate climate. In practice, only the Big Four firms have the ability to audit the world's big multinationals, resulting in a highly concentrated market with strong barriers to entry where, as an example, 98% of the FTSE 350 companies, or 99% of the S&P 500, are audited by a member firm of one of the Big Four.[13]

Such pattern is reinforced where the business of the audited company makes its financial reporting more complex, particularly in a context of increasingly judgmental accounting standards. In practice, only the Big Four have the capability of developing methodologies to provide assurance on the complex estimates that make up the balance sheets of internationally active, systemically important banks and insurers. As detailed in Figure 1, all the G-SIFIs (the 29 G-SIBs as of November 2018, and the 9 G-SIIs as of November 2016) are currently audited by one of the Big Four.

Figure 1 – G-SIFIs and their auditors

G-SIB	Statutory auditor
JP Morgan Chase	PwC
Citigroup	KPMG
Deutsche Bank	KPMG
HSBC	PwC
Bank of America	PwC
Bank of China	EY
Barclays	KPMG
BNP Paribas	Joint (Deloitte, PwC, Mazars)
Goldman Sachs	PwC
Industrial and Commercial Bank of China	KPMG
Mitsubishi UFJ	Deloitte
Wells Fargo	KPMG
Agricultural Bank of China	PwC
Bank of New York Mellon	KPMG
China Construction Bank	PwC
Credit Suisse	KPMG
Groupe BPCE	Joint (Deloitte, PwC, Mazars)
Groupe Crédit Agricole	Joint (EY, PwC)
ING Bank	KPMG
Mizuho	EY
Morgan Stanley	Deloitte
Royal Bank of Canada	PwC
Santander	PwC
Société Générale	Joint (EY, Deloitte)
Standard Chartered	KPMG
State Street	EY
Sumitomo Mitsui	KPMG
UBS	EY
Unicredit Group	Deloitte

Source: Financial Stability Board, November 2018

G-SII	Statutory auditor
Aegon	PwC
Allianz SE	KPMG
American International Group	PwC
Aviva	PwC
Axa	Joint (PwC, Mazars)
MetLife	Deloitte
Ping An Insurance Group	PwC
Prudential Financial	PwC
Prudential plc	KPMG

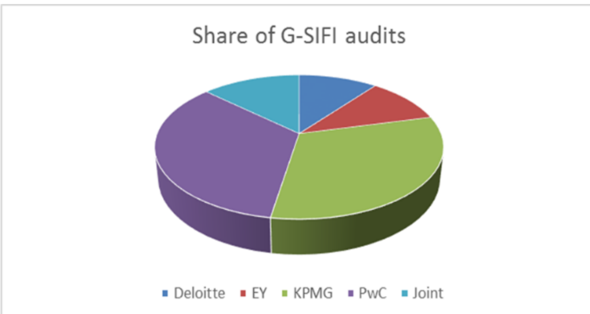
Source: Financial Stability Board, November 2016

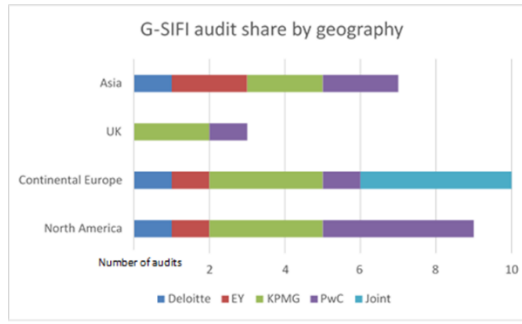
12 International Standard on Auditing (ISA) 200, on the Overall Objectives of the Independent Auditor and the Conduct of an Audit.

13 Financial Times (August 9, 2018).

With a combined 66% of the overall G-SIFI universe, KPMG and PwC dominate this market, particularly in the UK and North America (see Figure 2). PwC audits the only Bucket 4 (JP Morgan Chase) and one of the Bucket 3 (HSBC) G-SIBs,[14] while KPMG has the mandate for the other two Bucket 3 (Citigroup and Deutsche Bank). Deloitte and EY each audit four G-SIFIs individually, and at least one of them participates in each of the four G-SIB joint audits.

Figure 2 – Structure of the G-SIFI audit market





The Big Four are global networks composed of legally separate local member firms that operate in over 150 countries and employ over a million people. To coordinate and provide shared resources, all four use central entities that are legally structured as UK private companies limited by guarantee,[15] except in the case of KPMG, which has its central body incorporated as a Swiss verein (cooperative). These central bodies exercise an increasing influence on member firms through the issuance of harmonized interpretations of accounting standards, common audit methodologies and quality control requirements, advocacy vis-à-vis public authorities, and most importantly branding and reputation. The relationship between member firms and the central entity is determined by individual agreements, pursuant to which members commit to the network's policies in those fields. However, in no way can the networks be considered a single international partnership: services are provided by member firms and not the central entity; partners are only liable with regard to their firm's obligations, and are subject to the laws, public oversight and professional regulations of the particular jurisdiction in which their firm operates.

[14] According to the defined methodology (https://www.bis.org/bcbs/gsib/cutoff.htm), the G-SIBs are classified into "buckets" according to a number of criteria, in order to determine their additional loss absorbency requirement.

[15] The key characteristic of this legal figure is the absence of share capital, which renders the company's control to its members, and in case of bankruptcy commits them to cover up to a guaranteed amount. There is no pooling of profits, with the amount paid to fund the central entity's running costs being based on each member firm's revenue.

Limitations affecting the assurance activity

Business model, auditor independence and the audit committee

Regulation delegates the statutory, public interest role of providing assurance around the reliability of a company's financial statements to a specialized private agent that offers its services directly to the companies that require such assurance. Although the end beneficiaries are users of its financial information, it is the audited company that pays the fees and sustains the audit firm's business model. Given the auditor's inherent incentive to protect the revenue stream associated to the assurance franchise, in the absence of appropriate safeguards there is a risk that the short-term interests of company managers are placed before those of users.

In other words, under the existing revenue model auditors can be encouraged to pursue profit maximization from the assurance activity even at the expense of the end product's quality. Such incentive is at the core of the audit activity, affecting auditors' independence and exercise of the required professional skepticism. Several empirical studies evidence its negative implications for audit quality and the functioning of markets.[16]

While a number of structural features could be established by regulation to overcome such threat, the enhanced independence and technical competence of audit committees is usually referred to as a key safeguard to protect audit quality and public interest. By introducing appropriate incentives that free the auditor from undue interests, audit committees could help in ensuring that the engagement serves the viability of the company, and accordingly the common goals of shareholders and creditors. In the case of financial institutions, prudential authorities must seek ways to avoid that the short-term interests of shareholders are prioritized to the detriment of the institution's safety and soundness.

The expectations gap and adverse selection

The purpose and scope of an audit are not well known to the public. Lack of transparency, partly from the audit firms themselves, has contributed to a general expectation that clean audits –those containing a favorable opinion– guarantee financial statements completely free from material misstatement. The so called "expectations gap" is typically defined as the difference between what users of financial statements expect an audit to do and what an audit is actually required to do. While the value of the audit franchise is driven by its actual mandate, it is audit's perceived remit that supports the decisions of users.

Debates around the drivers of such gap and the desired scope and purpose of an audit tend to follow episodes of unanticipated corporate failure, which usually result in higher costs of capital being imposed on reliable and unreliable companies alike. The expectations gap thus amplifies the negative

[16] The November 2018 report by the Dutch Authority for the Financial Markets on "Vulnerabilities in the structure of the audit sector" (https://www.afm.nl/en/nieuws/2018/nov/kwetsbaarheden-structuur-accountancysector) cites some of those studies.

externalities of information shocks, through adverse capital allocation decisions that affect the sound functioning of markets and financial stability.

Judgment and complexity: the case of financial institutions

Such type of adverse selection is reinforced in the current environment of increasingly complex businesses and highly judgmental accounting standards. As an example, prominent cases of clean audit reports of banks issued shortly before bankruptcy filings, enforcement actions or resolution have not only called into question the performance of the relevant auditor, but the reliability of banks' financial information more broadly and the sector's overall safety and soundness.

The complex and judgmental nature of estimates that primarily determine the financial position of banks and insurers –those related to credit losses and insurance contract liabilities, respectively– casts doubts over the ability of audit firms to develop procedures that are capable of producing reliable opinions, supported by sufficient appropriate evidence, on the related risk of material misstatement of the institution's financial position and performance.[17] Concerns increase in the context of additional judgment calls introduced by the new expected credit loss (ECL) frameworks of IFRS and US GAAP, and the recently published IFRS 17 dealing with the accounting for insurance contracts.

Due to the importance and systemic nature of many of these financial institutions, these concerns are relevant for financial stability. Particularly where institutions feature substantial leverage and maturity mismatch, inappropriate verification of their liquidity positions and asset values (or insurance contract liability estimates) could allow a deferral of losses, in turn feeding the kind of irrational balance sheet expansions that are typical of cycle upturns. Resulting debt overhangs tend to lead to abrupt corrections as asset quality expectations change following an information shock. Given the simultaneous increase in defaults and non-performing assets, this typically complicates the unwinding of positions, consequently damaging liquidity and refinancing prospects.

The deteriorated scenario culminates in generalized price falls and restricted access to funding, curtailing the supply of credit and insurance, and hence damaging economic activity.[18] It is in this way –through misguided application and inappropriate verification of the accounting standard– that

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[17] The IFIAR survey's findings rates remain particularly high in this area, justifying such concerns. As an example, according to the 2017 survey, 36% of audits of systemically important financial institutions where loan impairments were actually inspected experienced at least one finding for such topic, with the root causes being attributed to failures to assess the reasonableness of management assumptions, insufficient consideration of contradicting evidence, or insufficient testing of the accuracy of data.

[18] Relevant academic literature explores the resulting spirals –see for instance Brunnermeier et al. (June 2009, "The Fundamental Principles of Financial Regulation"). Evidence points to higher-risk underwriting being associated to loss deferral and procyclical contractions –as explained by Bushman, R. M. and Williams, C. D. (May 2015, "Delayed Expected Loss Recognition and the Risk Profile of Banks"); or Beatty, A. and Liao, S. (March 2011, "Do delays in expected loss recognition affect banks' willingness to lend?"). Regarding the auditor's role in respect of financial institutions' liquidity risk management, see for instance Valukas, A. R. (April 2011, "The Role of the Accounting Profession in Preventing Another Financial Crisis").

financial information can have procyclical implications. This tends to result from misconceived incentive structures, which emerge through the financial statements in the form of distorted accrual and valuation –deferred credit loss recognition in the case of banks; insufficient technical provisions for insurers.

ECL and IFRS 17

Changes introduced to ECL accounting anticipate the recognition of credit losses, which no longer depends on the occurrence of a loss event but on the mere possibility of a default taking place. The new model more faithfully approximates loss accrual to actual deterioration of initial default expectations. However, it makes the loan-loss estimate even more complex and subjective, as it requires determining the probability that a loss event will take place leading to a measurable cash impact, forcing banks to define the type of events the occurrence of which would trigger the credit loss, and their probability distribution. In practice, most will base their estimate on the distribution's probability of default (PD) and loss-given-default (LGD), such that the mathematical expression to conceptualize loan-loss provisions in this new context becomes more cumbersome, as shown in Figure 3 below.

Figure 3 – Loan loss provisions under the new ECL accounting frameworks[19]

$$LLP_t = BV_t - \left[\frac{\sum_{s=1}^{n} PD_s \times ECF_s^{t+1}}{(1+ie)} + \frac{\sum_{s=1}^{n} PD_s \times ECF_s^{t+2}}{(1+ie)^2} + \ldots + \frac{\sum_{s=1}^{n} PD_s \times ECF_s^{t+z}}{(1+ie)^z} \right]$$

Source: Pérez *et al.*, "*Banca y Seguros. Capital y Contabilidad*", 2018

Divergent interpretation of the requirements in IAS 39 contributed to lax application of the incurred loss model and made the estimates uncorrelated to actual deterioration of the credit portfolios, most prominently during upturns. In the case of IFRS 9, estimating ECL requires considering all available information to determine the 12-month or lifetime PD and the LGD. In turn, the move to lifetime loss recognition depends on the degree of credit risk deterioration. This could turn the standard into a powerful tool for managerial discretion, driving incentives to attenuate the responsiveness of estimation methodologies to variables affecting future cash flows. Deficient implementation would likely perpetuate current mistrust in the loss estimates and introduce artificial noise in the assessment of otherwise equivalent exposures subject to similar risk factors.

Subject to the peculiarities of the insurance activity, similar considerations apply to IFRS 17, the accounting standard for insurance contracts. Some of its potential benefits are evident: upfront

[19] In the formula, LLP_t stands for the loan loss estimate at time t; BV_t is the instrument's book value at time t, representing its amortized cost when held to collect the contractual cash flows, or its fair value when held to collect or sell; PD_s is the probability of default for each of the n possible scenarios identified, as estimated at t. For reporting entities applying IFRS, it represents the probability of a default taking place within the 12 months following t, except if PD has significantly increased, in which case it represents the probability of a default taking place along the foreseen remaining life of the instrument; ECF_s^{t+z} represents the expected cash flows at time z corresponding to scenario s, as estimated at t.

recognition of premiums is replaced by accrual as the insurance service is provided, preventing the depletion of capital; losses resulting from onerous contracts are recognized immediately, avoiding their offsetting with profitable business and hence potential subsidization of higher risk, non-traditional activities; actuarial and financial assumptions are regularly updated to reflect current values, thus avoiding the build-up of unsustainable equity positions, and preventing inconsistent investment patterns that potentially lead to costly resolutions.

All these features will likely enhance underwriting, improve conditions for policyholders and beneficiaries, and foster the integrity of the insurance market, the stabilizing role of traditional insurance, and hence financial stability. However, measurement of insurance contract liability estimates requires weighting the discounted cash flows with the probability of different claim scenarios and incorporating the expected profit for providing insurance coverage during the agreed period. Once again, the increased complexity and subjectivity could lead to higher managerial discretion and procyclical implementation of the standard.

How should auditors react to increased complexity and subjectivity, and thus allay concerns around the reliability of financial institutions' financial statements? While development of proprietary models may not be reasonable, the work of the auditor cannot be restricted to simply verifying the correct functioning and results of algorithms designed by banks and insurers, without questioning their underlying assumptions, parameters and valuation criteria. For example, sufficiently skeptical auditors should challenge the management and audit committees of audited banks with questions such as the following:

- Based on the bank's credit policy, in what range should the ECL estimate be placed?
- Once the boundaries of such range are defined, is the estimate closer to the upper or lower bound? In other words, can the estimate be considered prudent or is it rather aggressive?
- What are the criteria to group assets with the purpose of conducting collective impairment assessment?
- What are the risk factors being considered when tracking credit risk for each portfolio?
- Besides macroeconomic prospects, is the effect of contractual clauses and lending terms – both financial and non-financial– appropriately considered?
- How early are losses recognized when the related transactions have been designed to facilitate/postpone payments?
- How and when is the staging from 12-month to lifetime ECL recognition performed? In other words, how is a significant increase in credit risk identified, leading to full loss recognition?
- Once such increase is considered to take place, is interest income recognized at a pace consistent with cash collections?

These and similar questions reflect the sort of skepticism that should characterize a challenging auditor in light of the increasingly complex environment and judgmental nature of accounting standards. At the same time, in order to mitigate the effects of the expectations gap auditors should provide users of financial statements with a clear view as to their analysis of clients' internal controls, as well as the scope of their assurance and substantive testing.

Corporate structure of the audit business and auditors' liability

As explained in section 2, the commitments of member firms with their respective network are governed by specific agreements with the network's central body. However, regardless of those arrangements local firms are owned exclusively by their partners, who are subject to unlimited, and in many cases joint and several liability with regard to the firm's obligations.

Those obligations are in respect of the legitimate claims that might be enforced in court by users of financial information verified by the auditor. The US legal system facilitates litigation by allowing class action by shareholders, creditors or bankruptcy trusts to be brought against auditors. Both in the US and UK, claims against an auditor based on alleged negligence can be brought by those in "privity of contract", and liability to other users of financial statements exists not only in cases of manipulation or intention to deceive, but also upon a lack of due care.[20] This exposes auditors to losses that may result from a corporate event alongside the audited company, its directors and any underwriter of the company's securities.

Obviously, this is of particular concern given that the US and UK firms are potentially those with greater impact on the overall network's reputation. As demonstrated in the case of Arthur Andersen, difficulties in one of these jurisdictions can result in a run-like situation where both clients and partners defect other network firms to protect their own interests, despite the absence of legally binding commitment to the problem firm. The likelihood of such contagion becomes greater in a globalized environment, and its potential disruption to the functioning of markets looms larger given the Big Four's dominant share of audits of G-SIFIs and big multinationals.

A September 2006 study by London Economics[21] concluded that, in case of an average profit reduction of 15-20% that extended over three-four years, the number of UK partners that would leave their Big Four firms would compromise any of the firms' survival. Exporting the report's assumptions to the US audit market, some commentators estimate each network firm's breakup point in a range of around $3 billion to $1 billion.[22] Claims of this size have already been brought to the courthouses, forcing the firms into expensive settlements and questioning their survival

[20] In the US, the privity doctrine was introduced with the 1932 Ultramares Corporation v. Touche tort law case. In the UK, the 1990 Caparo Industries PLC v. Dickman case yields similar effects.

[21] See footnote 7.

[22] See https://www.jamesrpeterson.com/home/2017/01/a-fresh-year-brings-fresh-problems-a-fresh-look-at-the-big-fours-tipping-points.html.

prospects. As an example, in March 2019 PwC US announced a $335 million settlement of FDIC claims for a total $5.5 billion in respect of Colonial Bank.[23]

The firms' financial buffers required to cover such litigation exposure are thin, given their inability to tap external capital –as a result of exclusive partner ownership– and full profit distribution aimed at lowering corporate taxes –cash-based in most jurisdictions– and minimizing idle cash –precisely to avoid whetting the litigation appetite. Hence, with their personal wealth at risk, partners could be tempted to prioritize their own utility functions at the expense of audit quality and public interest. Skeptically challenging management's assumptions and forward-looking statements can damage the revenue stream, whereas limiting the scope of assurance allows the auditor to accommodate the estimates by sticking to the standard's formalities. With such safe harbor at hand, the greater the complexity and judgmental nature of standards and resulting estimates, the lower the incentive for professional skepticism.

Due to its increasing impact on partner interests and the overall survival of firms and their networks, unlimited liability turns the emphasis of current audit practice on ensuring that financial statements are prepared in accordance with the applicable financial reporting framework, rather than their fair representation of financial position and performance.[24] At the same time, procedures aimed at the substantive verification of value and accruals are increasingly replaced by risk-based audits that rely on the company's assumptions and measurement models.

Regulation and the value of the audit report

Regulation in different jurisdictions defines the required format and wording of the audit report, effectively limiting the firms' scope to a binary, "pass or fail" opinion, and restricting the auditor's ability to provide more insights into the company's financial condition and prospects. Knowledgeable stakeholders –such as sophisticated investors or prudential supervisors– have cast doubts on the usefulness of the current report, and even conduct their own, independent due diligence regardless of the audited financial statements.

In that sense, there are voices calling for a clearer statutory or regulatory focus on the fair representation of financial position and performance, in order to better reflect the public interest mandate implicit in audit, and to prevent partners from unduly limiting the scope of their assurance. However, that would require significant changes to the incentive structures of audit firms and their partners –described in section 5.

As currently defined, producing the audit reports –particularly for audits of G-SIFIs and big multinationals– requires reputation, specialization and resources that only the Big Four enjoy. This drastically reduces choice and incentives for challenger firms to compete, and allows the Big Four's

[23] See https://www.fdic.gov/news/news/press/2019/pr19019.html. In October 2013 Deloitte US settled a similar, $7.5 billion claim by the FDIC as the bankruptcy trustee of mortgage lender Taylor Bean & Whitaker –the settlement amount was undisclosed.

[24] See the October 2010 report by the European Commission, on "Audit Policy: Lessons from the Crisis".

local member firms to exploit their global brands for the delivery of an undifferentiated, standardized product that secures considerable revenue streams and non-assurance business prospects. It also deters their willingness to innovate or invest in better quality products.

In this sense, the audit report is not different to a utility, and the Big Four benefit from the referred advantages as well as information asymmetries that result from their complex methodologies and highly specialized and trans-national activities.

In turn, independent public oversight of an increasingly global and intertwined activity is basically local and focused on the individual firm. Although IFIAR maintains a regular dialogue with the networks, there are no arrangements that enable effective global monitoring. Neither do local oversight bodies address system-wide and structural issues affecting the audit market. Furthermore, oversight is quite recent[25] and still uneven across jurisdictions despite IFIAR efforts to promote global consistency. Inspection practices rely on the findings from lagging surveys of risk-based samples of audit engagements, with a focus on process, only partial connection to the audit outcome, and eventual enforcement actions directed to individual audit firms registered locally.

Conclusions

The NYSE trades around 1.5 billion transactions daily, totaling above $40 billion. Each of those transactions –and more generally resource allocation decisions– reflect confidence in the reliability of issuers' financial information. The depositories of such confidence are currently the Big Four audit networks, given their control over resources required to satisfy the assurance needs of multinational companies –including G-SIFIs.

However, high litigation exposure and thin financial buffers make audit firms vulnerable to information shocks. Given past experience, the risk of one of the Big Four major member firms collapsing or being forced to exit the market is not negligible. Recent examples of corporate events, and claims brought to the respective auditors, warn of the likelihood of such scenario, particularly in a complex and global environment characterized by increased judgmental calls and easier spreading of local problems throughout the networks.

A disruption in the availability of assurance services could seriously impact financial stability, as it would affect confidence in the effectiveness of markets to price risks, likely resulting in adverse resource allocation and failure to assess the safety and soundness of financial institutions and to prevent inappropriate growth in leverage and risk exposures. With no clear alternative to the current model being likely to emerge, the Big Four may indeed be considered "too few to fail".[26]

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[25] IOSCO Principle 19 of Securities Regulation, establishing that "auditors should be subject to adequate levels of oversight", was only introduced in June 2010 (https://www.iosco.org/library/pubdocs/pdf/IOSCOPD561.pdf).

[26] In the case of Arthur Andersen, the reputational contagion of problems at the US firm drove clients and partners away from member firms worldwide, vaporizing the franchise before claims were even settled or final verdicts pronounced. While at the time such "run" ensured the provision of assurance services by surviving firms, it may nowadays prove challenging to secure the interests of clients and partners under a "four to three" scenario.

For the time being, the Big Four networks have been able to protect their franchise value in the wake of crises and scandals that have shook public confidence in the quality of financial reporting. However, as shown by recent events and depicted in inspection findings reports, this may have been at the expense of deteriorated audit quality. The incentive structure defined by existing regulation, firms' revenue model and partners' unlimited liability combine in a context of increasing managerial discretion, restricting audit to a mere compliance exercise. Substantially influenced by the profession, auditing standards also contribute in capping the responsibility of auditors.

In order to recover the focus of audit on true and fair representation of a company's financial position and performance, substantive verification of asset value, accrual and loss recognition should be brought back to stage, particularly for businesses subject to complex and judgmental financial information. Due to their knock-on effects on financial stability and overall economic performance, this acquires vital relevance in the case of G-SIFI audits.

For that revival of audit to take place, it may be necessary to do away with conventional wisdom, and start thinking about ways to arrive at less arbitrary estimates. Fair value could be the final destination, but clear and transparent interpretive guidance to help better apply accounting standards might be a less distant stop. In the case of banks and insurers, harmonized and openly communicated regulatory expectations on contentious issues that drive estimates may go a long way in addressing the audit conundrum. Auditors would not need fear litigation, as eventual losses would be fully attributable to management unwilling to apply the standard in accordance with the prescribed interpretation.

Far from restricting the auditor's role to mere verification of compliance with such interpretation, this would pave the way for an enhanced assurance product. The new audit report would provide users with a detailed and nuanced view around the most relevant aspects of a company's financial statements, validating the value estimates on the basis of regulatory guidance and the auditor's own views around the company's business and strategies, risk appetite and underwriting, and the estimated impact of existing conditions and prospects. The quality of such product would be fostered by knowledge and experience gained throughout an extensive client portfolio, which would allow the auditor to define appropriate value ranges and assess how reasonable the estimate's position is within that range.

Based on such enhanced report, users would likely be able to answer questions of greater importance to their decision process, such as those identified in section 4 in the case of banks. Moreover, the appropriate incentives would be set in motion for management to determine the most complex and consequential estimates on the basis of more reasonable criteria.

The Importance of Financial Information for the Development of Capital Markets

Ana Martínez-Pina
Vicechair of the Spanish Securities Commission

Introduction

Markets development has its foundations, among other features, in timely access to accurate and sufficient information from issuers and tradeable assets (securities, and financial assets in general). In addition, the growing globalization of business and capital markets, as well as the increased need for international financing that financial and nonfinancial entities have, reinforce the need for uniform financial information that can underpin decision making by investors and other relevant users of markets' information.

Financial information related to issuers of securities is one of the core activities of the Spain National Securities Market Commission (CNMV, as its acronym in Spanish), and is also one of the main tasks of the Corporate Reporting Standing Committee (CRSC) of the European Securities and Markets Authority.

The CNMV as the Spanish authority in charge of the regulation and supervision of the securities markets. One of the CNMV's objective is to ensure the transparency of the Spanish securities markets and asset pricing definition, as well as the protection of investors.

Regarding the asset pricing definition, the CNMV is responsible for supervising the disclosure of information related to securities or their issuers, among others, privileged (data that may affect asset pricing) or typical financial information.

ESMA as the European authority for the region's securities markets is mandated to foster the integrity, transparency and proper functioning of financial markets, and strengthening the regional coordination for the supervision of the securities markets. ESMA coordination role comprises the supervision of financial information, mainly through the CRSC of ESMA.

Achieving a truly single securities market requires the combination of three aspects that are address throughout this document, say: 1) the adoption of a single accounting framework, 2) the enforcement and harmonization of transparency requirements related to the reported financial information, and 3) a harmonized supervision framework.

Importance of a single European accounting framework in Europe

The existence of a common language -an accounting framework- to prepare financial information across the European System of Financial Supervision[27], is one of the key pillars for the proper functioning and development of a single market.

European relevant authorities comprising the ESFS agrees that information requirements established in the European national accounting directives were not sufficient to achieve the degree of transparency and comparability of the information that is required to foster the integration of capital markets that would operates in an efficiently way. They also found that to contribute to this goal, it was necessary to requested the securities issuers adopting a single set of accounting standards that were accepted internationally and that were truly worldwide standards.

In this scenario, the European Regulation 1606/2002 was enacted and which requires that the consolidated financial information of the securities issuers taking part of regulated markets, be prepared in accordance with the International Financial Reporting Standards (IFRS), adopted by the European Union (EU).

With the application of the 1606/2002 regulation, all consolidated financial information of listed companies in Europe is presented using the same accounting language since 2005. This is an aspect that becomes critical to achieve a truly single capital market, as it allows the financial information disclosed by the different listed issuers to be comparable on a cross-border basis, without the need to be an expert in the accounting frameworks of each of the countries making up the European Union.

The IFRS that are applied in the EU differ from that approved by the IASB, and are known as the "EU adopted IFRS". This is explained by the fact that the 1606/2002 regulation establishes that the European Commission (EC) must decide whether the IFRS, and its revisions, may be applicable in Europe. More specifically, the IFRS will only be adopted in the EU if it is concluded that:

- They are not against to the principle of ensuring that a faithful image of the equity and the overall financial situation of reporting entities, and they promote the European public interest, and:
- Fulfill the requirements of comprehensibility, relevance, reliability and comparability of the financial information that are necessary for making economic decisions and assessing the management of companies' administration.

To carry out this task, the European Commission is assisted by the European Financial Advisory Group (EFRAG). The mission of EFRAG is to advise the EC on whether the newly issued or revised standards meet the criteria of the 1606/2002 regulation for adoption in the EU.

[27] ESMA forms part of the European System of Financial Supervision (ESFS), a decentralized, multi-layered system of micro- and macro-prudential authorities established by the European institutions in order to ensure consistent and coherent financial supervision in the EU.

Although the adoption process has usually ended with favorable advice from EFRAG to adopt the accounting standards issued by the IASB, there have been specific cases where the new or revised standards have not been adopted. To illustrate these situations, it can be mentioned that the recent adoption of the amendment to the IFRS 4 Insurance Contracts, which allows entities that predominantly develop insurance activities to postpone the entry date of the IFRS 9 Financial Instruments to be enforceable until January of 2021. The effect of this postponement is that the insurance companies can continue reporting in accordance with the current standard, that is, IAS 39, Financial instruments, especially as regards recognition and valuation of financial assets.

At present, at European level there is a debate on whether the current IFRS adoption process is appropriate. In fact, the EC conducted a public consultation in 2018, called fitness check on corporate reporting, aimed at assessing whether the current regulation for corporate accounting and financial reporting meet the specific objectives and, if they should be modernized and if they could meet new objectives. As part of the fitness check, it was also included aspects related to the process of adopting IFRS; the EC pointed out that the current approval process of the IFRS limits de facto the EU's ability to modify the IFRS contents. This consultation also looked up to collect the points of view of the interested parties regarding:

- If the approval process of the IFRS of the EU should allow "carve-ins" (that is, modifications to the content of a standard);
- If the current approval process represents an obstacle to wide EU policy objectives, such as sustainability and long-term investments.
- If a detailed definition of the items that compound the main financial statements of IFRS would improve comparability.

The Commission concluded that EFRAG made a significant contribution by exhaustively analyzing this IFRS related aspects for the EU accounting framework. Besides, the EC encouraged to further develop the EFRAG capabilities to ensure that the approved IFRS standards are appropriately adopted for the European single securities market.

The EC has also stressed out that, while the initial objective of the IFRS was to achieve a single and global set of international accounting standards, the current level of commitment to adopt IFRS by non-European jurisdictions differs significantly. Thus, very few jurisdictions really require the full application of IFRS approved by IASB.

At the national level, the 1606/2002 left discretion to European national financial authorities to extend the use and application of the IFRS for individual and consolidated financial statements of companies with non-tradeable securities.

In this context, the individual financial statements of all financial and nonfinancial entities in Spain, whether listed or not in the securities market, must be prepared in accordance with Spanish regulations: The Commercial Code, the General Accounting Plan and, where applicable, the sector-specific accounting regulations issued by the relevant national authorities. Within this, economic groups where there is no entity that has issued quoted securities may opt, on a voluntary way, to prepare their consolidated financial information in accordance with the adopted IFRS or to continue using national accounting regulations. It should be noted that in 2007, the Commercial Code and the General Accounting Plan and its related regulation were adapted to the IFRS, in all those aspects that were necessary to make them compatible, without affecting the fact that the General Accounting Plan may restrict the alternatives allowed by the “EU adopted IFRS”. Thus, currently there is a high degree of convergence between the accounting standards that are used to prepare the individual financial information and that required to prepare consolidated financial information of the Spanish companies listed in the single securities market.

Transparency: financial information disclosure

Another key pillar of the proper functioning and development of a single market is related to the transparency of the released financial information that is promoted by the authorities, to improve the ability of investors and relevant users to make decisions.

The Transparency Directive (2004/109) enforces issuers of tradeable securities of the regulated European markets to fulfill the financial reporting requirements. It can be noted that the Transparency Directive requires that securities issuers to present an annual financial report, together with their audit report. The latter comprises the audited annual accounts, the management report and a statement made by the issuer’s legal representative noticing that: "as far as they know, the financial statements provide a sound picture of the financial situation (assets and liabilities) and results of the issuer and its economic group, and that the management report includes a faithful presentation of the business evolution and financial results, as well as a description of the main risks and uncertainties that the issuer and the economic group may be facing". According with the Transparency Directive, the annual financial report along with the auditor's report must be released four months after the end of the year.

Additionally, issuers of shares and debt that are accepted as tradeable assets for regulated markets must publish a semiannual financial report displaying summarized financial statements, an intermediate management report and a statement of liability with the same content as the annual financial report and which, on a voluntary way, may be subject to review by the auditors. The semi-annual financial report must be released three months after the closing of the exercise.

In 2013, the Transparency Directive was modified to remove the requirement of the intermediate management statement, a quarterly report with a very limited content that required, as a minimum, to provide an explanation of the relevant events and operations taken place at the corresponding reported period, and its effect on the financial situation of the issuer and its economic group. This statement also included a general description of the financial situation and business results of the issuer and its economic group during the corresponding period.

However, in Spain it was decided to maintain the obligation to present the intermediate management statement. Yet, currently the CNMV is considering to align with the European practices by removing the mandatory nature of presenting this report, to let the issuers to voluntarily determine whether they should continue presenting this information. This debate, among other issues, fits in the discussions that are also taking place at European level to promote sustainable growth and mitigate uncertainty for short-term decision-making process in the securities markets. In this sense, on February 2019, the EC asked the European national financial authorities to gather evidence on the possible burdens that capital markets may have to encourage market participants to focus on short-term performance and the role played by more frequent financial information reported by issuers.

This is a key issue, as it could lead companies to overlook long-term risks and opportunities, such as those related to climate change and other factors related to sustainability. One of the findings of the EC in this regard, is that quarterly reporting financial information on a voluntarily basis should not be incompatible with prudential strategies from investors and issuers to bear with long term considerations.

Supervisory practices related to financial information

The third pillar that has been identified as a foundation for the proper functioning and development of the European securities market is the existence of an adequate supervisory framework that focuses on financial information reported by issuers of tradeable securities.

As it has been explained above, a single accounting framework and harmonized requirements regarding financial information disclosure are in place at the European securities markets. Therefore, working towards a harmonized supervisory framework for EU Member States, result a convenient step to foster an integrated capital market for the region. This is one of the competences of ESMA and, in particular, of the CRSC, which, among other tasks, is in charge of:

- Contribute to the consistent application of the EU adopted IFRS and the development of harmonized approaches among national authorities;
- Contribute to the development of high-quality accounting standards providing the vision of European financial authorities to the IASB standards, the IFRS Interpretations Committee and EFRAG, and the active monitoring of the adoption process of IFRS; and
- Enable the early identification of risks in financial markets by sharing data and supervisory experiences, especially with issues related to the implementation of new accounting standards.

ESMA has been working on this extensively and as part of this, a relevant document was issued in October 2014, comprising the supervision guidelines for financial information.

These guidelines are addressed to the competent financial authorities with the mandate to oversee financial information reported by securities issuers in European securities markets, and specify certain principles on which their supervision should be based.

Relevant national authorities should effort to abide with the content of the guidelines by incorporating them into their supervisory practices and should notify ESMA if they observe them or intend to comply with them, or indicate -if- why the guidelines cannot be complied.

The most prominent principles of these guidelines are the following:

- Relevant authorities should have a selection model based on a mixed system combining a risk-based approach with other based on sampling. In a risk-based approach, it should be considered risks that the financial information could be wrong and its potential effect on the market.
- When a financial authority detects a significant fault in reported information, one of the following actions must be undertaken: (i) require the reformulation of the financial statements; (ii) require the publication of a corrective note, or (iii) require a correction in future financial statements, with a correction of the comparative data, if applicable.
- In order to achieve a high degree of harmonization in the supervision of financial reporting, European financial authorities will exchange and discuss their experiences regarding the application and supervision of the applicable financial reporting framework, mainly the EU adopted IFRS.
- In order to promote consistency in the application of the EU adopted IFRS, European financial authorities within ESMA will maintain a database with the supervisory decisions they have adopted, provided that they meet certain criteria, and will determine which decisions included in this database can be released.

The exchange and discussion of supervisory practices across ESMA Members is essential to achieve a harmonized approach in the supervision of financial information. The guidelines also state that the debate on specific cases of supervision can take place before a decision is made (emerging issues) or once the decision of the national financial authority (decisions) has been adopted. However, it is specified that the national financial authority must present supervisory cases before any final decision is taken, except in circumstances in which the deadline to decide impedes to prepare, present and discuss it at the ESMA sphere.

It should be noted that when the financial authority adopts a decision on a case that has been presented as an emerging issue, it must take into account the outcome of the debate, although the final decision is always the responsibility of the national financial authority. This mechanism limits, to a certain extent, unilateral decision power of the relevant national financial authorities in charge of the supervision of financial information in Europe, but in return a harmonization is achieved in the adoption of highly relevant supervision criteria.

Another instrument to foster the harmonized supervisory framework is the annual release of the so-called common priorities in the area of supervision. In this regard, in October 2018, ESMA and the EU national financial authorities identified and published a set of aspects that securities issuers and their auditors should consider when preparing and auditing the financial statements, focusing the review on the following priorities areas:

- Issues related to the application of IFRS 15 Revenue from contracts with customers.
- Issues related to the application of IFRS 9 Financial Instruments; and
- Breakdown of the expected impact of the implementation of IFRS 16 Leasing

Other areas on which issuers should have special consideration when preparing the financial information, and on which the national financial authorities will pay special attention, which are, among others, were highlighted in this release, as it follows:

- The status of nonfinancial information.
- The application of the ESMA guidelines on alternative performance measures (APM).
- The impact of the decision of the United Kingdom to leave the EU (Brexit).

Additionally, the CNMV decided to include, within the plan for reviewing the annual 2018 financial reports, the supervision of how earnings per share were calculated and a more detailed analysis of the nonfinancial statement.

Other aspect that affects the transparency of financial information is related to the way in which investors "consume" this information. In this regard, it should be mentioned the European initiative that will requires since January 2020 that all annual financial reports of European listed issuers to be reported in a single electronic format, namely the European Electronic Single Format or ESEF. The main advantage of the ESEF is that it enables an automated treatment of the information contained in the consolidated financial statements, providing the opportunity for investors and financial authorities, mainly, to enhance their ability to analyze financial information.

Lastly, one of the CNMV priorities for the supervision of financial information will be the application of IFRS 9 in the financial statements for the first time since 2019. In this vein, one of the biggest challenges that credit institutions have faced in the transition to the new IFRS 9 has been the development and implementation of a robust model of expected credit losses that meets the IFRS 9 requirements. The Spanish financial authorities face the same challenge when assessing whether the model developed by credit institutions effectively complies with IFRS 9.[28]

This transition to the approach of expected credit losses means a great effort for most financial institutions worldwide, since it requires a significant investment in new modeling and calibrating, as well as adapting and improving internal processes and applications of financial institutions, derived from the greater complexity of models and estimates of future cash flows. Notwithstanding this effort, it is expected that new IFRS 9 model of expected credit losses will lead to a more timely and prospective recognition of credit losses, dealing in time with a possible deterioration in credit quality, avoiding unexpected stress situations and implications, and allowing investors to make better and more sound economic decisions in financial markets that will be more transparent.

In Europe, in accordance with the Transparency Directive, the national financial authorities that are responsible for ensuring its enforcement, are the main responsible for the compliance of securities issuers to adopt and apply the single accounting regulatory framework. And although cooperation and a fruitful dialogue between national financial and accounting authorities is needed, accounting

[28] The recent financial crisis revealed that an incurred loss model to provision credit risk led credit institutions to not recognizing credit losses even when they were expected, circumstance that has led to the well-known criticism of the provision model of IAS 39 of "too little, too late":

authorities play a major role on how to apply the IFRS requirements in the consolidated financial statements.

Importance of non-financial information as a complement to financial information

In Spain, the Law on disclosure of non-financial information and diversity was enacted in 2018. This regulation represents a game-changer for entities to report their environmental, social and governmental impacts, as a result of the amendment of the European Directive 2014/95. The Law will force listed entities to adapt their annual reports to include non-financial information.

Since 2018, entities with staff over 500 workers, entities of public interest and those that, during two years either exceed EUR 20 million assets or EUR 40 million income or an average of 250 employees, will have to present this information in their annual report.

The Law specifies the information that should be reflected in the report, particularly in the following five areas: environment, social and personal, human rights, corruption and bribery and society. With this significant advance in the financial and nonfinancial reporting of entities that play a role in the securities market. Spain has become a benchmark at European level in terms of disclosure of non-financial information and diversity, improving the transparency and reliability in how this information is reported for regulatory and transparency issues.

As it has been pointed out, an essential requirement for achieving proper functioning in the capital markets is to foster their transparency for a better decision-making process for investors and relevant financial authorities.

Conclusions

Throughout this document, it has been emphasized how relevant is to adopt a single accounting framework, enforcing and harmonizing transparent reported information and streamlining financial supervision, both at national and regional levels, to achieve a single securities market. This is particularly relevant as markets development underpins economic development and welfare.

I affirm that in Spain and in the European Union, along recent years, a high degree of harmonization has been achieved in the financial information disclosed by listed entities in capital markets, as well as in the supervisory practices to oversee them. Moreover, having a single accounting language, the IFRS adopted by the EU, was the first step for this, followed by the enforcement of a regular reporting for entities issuing tradeable securities, and the firm decision of national financial authorities -thru ESMA- to supervise the financial information according with common guidelines and priorities.

Credit and the International Financial Regulation

Juan Pedro Cantera[29] et.al.
Superintendente de Servicios Financieros, Banco Central del Uruguay

Brief History of Banking Regulation

The regulation of capital in banking existed before the 1988 Basel Accord[30]. However, before the Basel Accord, there were significant disparities in how and when capital requirements in the financial system were estimated. In fact, during the pre-Basel era, the use of capital ratios to establish minimum regulatory requirements was tested for more than a century. In the United States, between 1864 and 1950, supervisors tested with: (i) a variety of capital adequacy measures such as static minimum capital requirements based on the population located at the respective bank's service area, capital ratios against total deposits and assets, respectively; (ii) risk-weighted assets; and (iii) risk capital - asset ratios; but none was universally accepted at that time. Even the banking sector was in favor of a more idiosyncratic system where regulators could decide which capital requirement was suitable for a particular bank as a function of their risk profile.

Increasing banks failures and the decrease in banks capital provoked a regulatory response. In 1981, for the first time, the federal banking agencies in the United States (US) introduced explicit regulatory capital requirements. The adopted standards used a leverage ratio of primary capital (which consisted mainly of own capital and reserves for credit losses). However, each regulator had a different opinion as to what could be considered as regulatory capital.

In the following years, regulators worked to converge to a uniform measure. The inadequate capitalization of Japanese banks, different banking structures (universal banks in Germany vis-à-vis Narrow Banking in the US) and the changing risk profile of banks, hindered to reach an agreement on capital standards.

The US Congress approved the legislation that set common definition of regulatory capital and standard definite requirements for capital in 1985. By 1986, US regulators were concerned about the inappropriateness of the capital ratio that was defined to differentiate between the risks assumed by the banks. Concerns were mainly related to the off-balance-sheet operations presented by the largest financial institutions, as these operations and the capital ratio were not necessarily providing an

[29] Juan Pedro Cantera is Superintendent of Financial Services of the Central Bank of Uruguay and previous President of the Association of Banking Supervisors of the Americas. This discussion note is co-authored with Alejandro Peña and María del Pilar Posada.

[30] The 1988 Basel Accord, also known as Basel I, was the result of deliberations by central banks member of the Basel Committee on Banking Supervision (BCBS) of the Bank for International Settlements. Thus, the 1988 Basel Accord comprised a set of minimum capital requirements for banks, focused on the capital adequacy of financial institutions, based on the potential risk given unexpected losses.

accurate measure of the risks' exposures given innovative and expanding banking business. Thus, US regulators began studying the regulatory framework of other countries, such as France, the United Kingdom and Germany, which had implemented risk-based capital standards in 1979, 1980 and 1985, respectively. Leading the initiative in 1987, the United States, in agreement with the United Kingdom, announced a bilateral agreement on capital adequacy, to which Japan quickly joined. Later, in December 1987, an "international convergence" was achieved on regulatory capital. Finally, in July 1988, the Basel Capital Accord was established under the umbrella of the Basel[31] Committee of Banking Supervision -also known as the Basel Committee-.

It can be distinguished five major waves of regulations issued by the Basel Committee (Penikas, 2014).

1. 1974-86. This first stage had as one of its objectives broader interaction of national financial authorities to deal with weak cross-border banks. This marked the beginning of the first regulatory wave driven by the publication of the first document "Concordat" (Basel Committee, 1975). After the Concordat, deliberations and documents were then prepared, and that years later comprised the set of standards that is best known as Basel I.
2. 1987-98. The second regulatory wave has as anchor the establishment of the Basel I Accord. This agreement establishes a minimum of bank capital of 8% for risk-weighted assets, although in a first stage, it only takes credit risk into account. The final document was approved in 1988 and the implementation was from 1992.

   Later, the 1996 amendment would incorporate Basel I capital requirement for market risk, which could be calculated from a standard method or through internal models approved by the respective financial authority.

   It can be highlighted that the credit risk weights were fixed and standard method, while for market risk they could be dynamic, in the case of using internal models
3. 1999-2008. The third regulatory corresponds to the Basel II Agreement. In June 1999, the Committee issued a proposal for a new capital adequacy framework to replace the 1988 Agreement. After five years of consultations, the Committee approved in 2004 a new agreement called "International Convergence of Capital Measurement and Capital", also known as Basel II framework. Basel II was based on three fundamental pillars:

   - Pillar I. Minimum Capital Requirements;
   - Pillar II. Supervision process; and
   - Pillar III. Market Discipline

[31] The Basel Committee of Banking Supervision was initially known as the Committee on Banking Regulations and Supervisory Practices, and was established by the G10 Central Banks Governors in 1974 as a response to the disturbances in the international foreign exchange markets and in the banking system (in particular, the Bankhaus Herstatt default in West Germany).

The Basel II Pillar I established minimum capital requirements for credit, market and operational risk. For each of them, could be calculated based on the so-called standard methods or internal models.

Among the internal models, the IRB model (Internal ratings-based approach) and the advanced models are noteworthy. In the IRB model, banks had to estimate the probability of default for each debtor. The Basel frameworks established supplementary parameters (Loss Given Default, Exposure, etc.). In parallel, the Basel Committee released the Core Principles for Effective Banking Supervision. (Basel Committee, 2006).

4. 2009-11. The grounds of Basel III are laid in the aftermath of the Global Financial Crisis (GFC) with the aim of improving the resilience of the banking sector to absorb shocks from financial or economic stress of any kind, reducing with that the risk of contagion from the financial sector to the real economy" (Basel Committee on Banking Supervision, 2010).

   The main changes established in Basel III can be summed up as follows:

   - Increase in the quality and consistency of the capital base.
   - Capital requirement for systemic risk.
   - Strengthening the range of risks with capital coverage.
   - Review of the framework for counterparty risk.
   - Introduction of limits for leverage.
   - Reduction of procyclicality.
   - Introduction of minimum liquidity ratios.

5. 2012-17. A series of documents were produced to complete the reforms introduced by Basel III and -in some cases- to propose changes related to the revised framework.

   Among the most important changes and novelties that can be identified in this wave of banking regulation, it can be mentioned the following:

   - Revision of the capital framework for securitization.
   - Capital requirements for bank exposures to central counterparties (CCP).
   - Framework for the control and supervision of large exposures - concentration risk.
   - The Basel III - revision of the Post-Crisis Reforms, which contains, among others, the new way of determining assets weighted by credit, market and operational risk.
   - The review of the Core Principles for Effective Banking Supervision, aimed updating the standards in light of the lessons learned in the GFC.

What the Theory Says

In economic theory, it is usually argued that microprudential regulation is justified even in a world where there is only idiosyncratic risk, due to the problem of limited rationality and the existence of non-sophisticated agents. This theoretical framework is what justifies the regulation that is observed until Basel II.

While if systemic risk is considered, the need for macroprudential regulation appears (De la Torre & Ize, 2013). Aggregate risk is the key factor that separates the areas of micro and macroprudential regulation. If we consider the agents interrelations and the externalities that an agent induces to the system, we have the justification for macroprudential regulation. For example, if a large bank takes excessive risks that increase the risk of the system due to the interrelations. Another example of systemic risk could be medium banks that are highly interconnected, it may be the case that the failure of one of them causes “domino” consequences. Additionally, regulatory arbitrage may cause financial institutions to migrate to jurisdictions where certain operations are allowed. All these arguments focus on the functioning of the system as a whole, and therefore, on macroprudential regulation.

What the Supervision and Central Banking Say

The Bank of Spain points that: "The prudential regulation of credit institutions is aimed at ensuring they operate with sufficient own resources to be able to assume risks derived from their financial activity, contributing in this form to the stability of the financial system".

The main task of the European Banking Authority is to collaborate, through the adoption of Binding Technical Standards (BTS), to the creation of the Single European Regulation in the banking system. The Single European Regulation aims to provide a set of harmonized prudential norms for financial institutions across the EU, helping to create an appropriate regulatory framework and providing high protection to depositors, investors and consumers. In this regard, regulation translates into standards that are mandatory for all member countries of the European Union.

The Banco Central del Uruguay, through the Superintendencia de Servicios Financieros (SSF), is mandated to "ensure the adequate protection for users of financial services by promoting the soundness, solvency and transparency of the financial system and its efficient and competitive operation".

In the three cases mentioned above, the regulation applied in each jurisdiction is inspired in the standards set by the Basel Committee. And, in the following sections, we will explore the Basel standards that are related to credit risk.

The Regulation of Credit Risk in Basel

The Financial Supervision Role in the International Regulation

Basel´s document "Core Principles for Effective Banking Supervision" (2012) establishes a series of changes in the 2006 principles considering the most significant developments in global financial markets and the lessons learned from the GFC.

Core Principle 1 establishes as the main objective of banking supervision to promote the banking system's safety and solvency. The Principles were revised taking into account the new trends and developments, that can be summarized as follows:

a. The treatment to be given to systemically important banks, both at the domestic and international level.

b. Macroprudential aspects and systemic risks. When applying a risk-based supervisory approach, financial authorities should assess risks in a broader context including off-sheet operations of banks. In fact, the prevailing macroeconomic environment, business trends, risks accumulation and concentration in the banking sector -and also outside- inevitably affect the banks' risk exposure, that authorities consider from a macro perspective.

c. Crisis management, recovery and banking resolution. Although it is not the financial authorities' responsibility to avoid bank default, the monitoring function could reduce the likelihood and incidence of eventual bankruptcy. Two types of measures are relevant for this purpose: i) measures to be taken by financial authorities (among others, to develop resolution plans and collaborate and exchange information with other authorities, both national and cross-border, to coordinate the orderly restructuring or the resolution of an entity to be resolved); and (ii) measures to be taken by banks (including the development of contingency finance and recovery plans), which authorities must carefully assess as part of the supervisory framework.

d. Corporate governance, information disclosure and transparency. Deficient corporate governance, which emerged as a common practice during the GFC, could have serious consequences for individual banks and, in certain cases, for the whole financial system. Consequently, a new Core Principles has been included to the Basel framework focusing on effective governance arrangements as an essential element of the safe and sound banking operation.

Among the basic principles that refer to prudential regulations and requirements, Principle 14 refers specifically to corporate governance. likewise, Principle 17 refers to credit risk, while the following four principles refer to aspects with a high relation to credit risk, such as Principle 18 that refers to doubtful assets, provisions and reserves (impairment), Principle 19 refers to concentration risk, Principle 20 refers to transactions with related parties and Principle 21 refers to country and transfer risk.

In what follows, we explain the way in which the Core Principles deal with corporate governance and credit risk.

Corporate Governance

Principle 14 establish that: " The supervisor determines that banks and banking groups have robust corporate governance policies and processes covering, for example, strategic direction, group and organizational structure, control environment, responsibilities of the banks' Boards and senior management, and compensation. These policies and processes are commensurate with the risk profile and systemic importance of the bank". (BCBS, 2012).

According to the Core Principles32, financial authorities are expected to make a detailed analysis of the corporate governance of the financial entities, covering the following aspects:

- Periodically assess practices and policies of corporate governance of the bank, as well as its application. Likewise, it must also require banks and banking groups to correct deficiencies detected in a timely manner.
- Determine if the governance structures and processes for proposing and appointing Board members are appropriate for the bank and for the banking group.
- Assess whether the Board members have an appropriate rating and that they comply with the duty of due diligence and loyalty.
- Assess the way in which the Board approves the risk management framework, the declaration of risk appetite consistent with the strategic objectives, the risk limits and associated policies.
- Assess whether the Board of Directors has established the adequacy and suitability criteria for the selection of senior management; if maintains adequate succession plans and; if actively and carefully monitors the execution of the strategies approved by the Board.
- Determine if the Board actively monitors the design of the compensation system, verifying that it has adequate incentives, in line with a prudent assumption of risks.
- Determine if the Board and the senior management know and understand the bank's operating structure and risks, including those resulting from the use of structures that incumber transparency (for example, the so-called special purpose vehicles).
- The financial authorities, if considers that any of its members does not perform her functions in accordance with the criteria established above, must be empowered to demand changes in the composition of the Board.

At the end of the day, the international regulation expects the financial authorities carry out an exhaustive examination of the corporate governance arrangements of regulated financial entities, in the terms established by the Core Principles.

In the case of Uruguay, the Minimum Management Standards, based on the Basel corporate governance standards, determining one of the fundamental dimensions for the purpose of assessing

[32] BCBS, 2012.

and rating a financial institution. Also, the assessment methodology, consistent with the Core Principles, considers corporate governance in a central manner together with risk management.

The SSF assessment methodology is named as CERT, where: C refers to corporate governance, E to economic financial evaluation, R refers to the evaluation of risk management and T refers to the management of technology.

Similarly, most national financial authorities across the world place a special emphasis on assessing and rating a financial institution based on its practices and policies of corporate governance, before assessing the credit risk and the overall financial risks management of the respective entity.

Credit Risk

What is expected from financial authorities in this regard? In terms of the Basel Committee, in general, it is expected that the financial authorities assess whether banks have an adequate credit risk management process that takes into account their desire for risk, their risk profile and the macroeconomic situation and the financial markets. This includes prudent policies and processes to identify, quantify, evaluate, monitor, report and control or mitigate credit risk (including counterparty credit risk). The entire life cycle of a loan is contemplated, including the concession of credit, monitoring, recognition of deterioration and recovery actions.

In relation to credit risk, the following aspects are expected to be assessed and required by the financial authorities:

- If the bank has credit risk management processes that provide a comprehensive view of risk exposures for the bank as a whole.
- If the Board approves and regularly reviews the strategy for credit risk management and the relevant policies and processes for assuming, identifying, quantifying, evaluating, monitoring, reporting and controlling or mitigating the credit risk.
- If the policies and processes create an adequate risk management environment subject to the applicable controls.
- If the banks have policies and processes to monitor their debtors' overall indebtedness and any other risk factors that may result in non-payment.
- If the banks decide on the realization of credit operations without being subject to conflicts of interest and with total impartiality.
- Authorities must demand that the credit policy confers on the Board or senior management the responsibility to decide about significant exposures to credit risk in relation to the bank's total capital.
- Authorities must have full access to the information of the credit portfolios and to the bank officials in charge of assuming, managing, controlling and reporting on the credit risk.
- Authorities must require banks to include credit risk exposures in their stress testing programs for risk management purposes.

Due to recent changes in accounting standards, issues related to impairment (Principle 18) are addressed in the following sections.

In relation to concentration risk (large exposures), financial authorities are expected to determine that banks have adequate policies and processes to identify, quantify, evaluate, monitor, report and control or mitigate concentrations of credit risk. Subsequently, in April 2014, the Basel Committee decided to be more explicit in the matter and issued the "supervisory framework for measuring and controlling large exposures"

With respect to transactions with related parties, the Basel framework set that financial authorities requires that transactions with related parties and the recognition of accounting losses on exposures to related parties that exceed certain limits or that pose special risks must be approved by the Board. In addition, they must demand that Board members with a conflict of interest be excluded from the approval process in relation to the granting and management of transactions with related parties.

Finally, in relation to country and transfer risk, financial authorities are expected to require banks that have adequate policies and processes to identify, quantify, evaluate, inform and control or mitigate country risk and transfer risk in their loans and investments abroad.

The Capital

The Basel Committee proposed in December 2017[33] with the Basel III report: Finalizing post-crises reforms, the review of all risk-weighted assets, and in particular those assets weighted by credit risk, in order to achieve convergence across different jurisdictions. This was important as significant differences had caused a decreased of the capital ratios in the period of financial crisis 2007-2009.

In order to achieve the above, the international community work towards: a) strengthening the robustness and sensitivity to risk for standard methods, assimilating them -to the greatest extent- to internal models, thereby improving international comparability, b) restricting the use of internal models in certain exposures and c) complement the capital ratio with a leverage ratio and review the stages of the internal models in terms of the standard models.

There are XX risk weightings in the new standard method for the most significant exposures. Emphasis is placed on the standard method, given that:

- There is an intention of the Basel Committee to restrict the use of internal models for exposures of credit risk to banks and financial institutions, to corporate exposures greater than EUR 50bn and for specialized financing.
- Because the change in the standard models propitiated by Basel is to formulate them more sensitive to risk and, therefore, more similar to internal models.

[33] BCBS, 2017.

- Because banks that bring internal models have a capital stage determined by the standard method.

Exposures to sovereigns

With respect to exposures to sovereigns, the treatment granted by Basel II (2006) was kept. Yet, it can be underlined that exposure to sovereigns is under revision by the Basel Committee and given that it was issued in December 2017 a report entitled "the regulatory treatment of exposures to sovereigns" of December 2017, highlighting the following aspects:

- Removing the IRB method for exposures to sovereigns.
- Positive standard risk weighting for most exposures to sovereigns, except for exposures to central banks issued in local currency.
- Removing national discretion to apply a preferential risk weighting to exposures related to national central government.
- Introducing marginal supplement for risk weighting to mitigate the concentration risk for most exposures to sovereigns.
- In relation to Pillar 2, guidance is given on monitoring, stress tests and supervisory responses to sovereign risk.
- In relation to Pillar 3, disclosure requirements are established for exposures and risk-weighted assets of sovereigns by jurisdiction, currency and accounting classification.

Exposures to Banks

For exposures to banks, weightings are applied depending on whether or not jurisdictions allow the use of external ratings for regulatory purposes.

In relation to jurisdictions that allow external ratings for regulatory purposes, there are no changes with respect to the current method, with one exception: exposures to banks with a rating between A + and BBB- had a 50% risk weighting before; in the new framework, a 30% risk weighting is considered for ratings between A + and A- and 50% for ratings between BBB + and BBB-. This is an aspect where the proposed objective is achieved that the weightings are more sensitive to risk.

For jurisdictions that do not allow the use of external ratings, banks are required to classify their exposures to banks at one of the three possible weighting levels (Grade A, B and C) and assign them the corresponding risk weighting according to the following table:

Counterparty credit risk assessment	Level A	Level B	Level C
Base risk weight	40%	75%	150%
Risk weight for short-term exposures	20%	50%	150%

Grades A, B or C depend on the greater or lesser capacity of banks to meet their financial obligations (amortization of capital and interest payments) in a timely manner, during the expected life of the exposures and regardless of business cycles and business conditions.

Corporate exposures

Regarding the exposures with large companies, in a jurisdiction that allows the use of external ratings for regulatory purposes, the following is established:

External rating of the counterparty	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	Under to BB-	Unrated
Base risk weighting	20%	50%	75%	100%	150%	100%

For exposures to corporates in banks with a home country that do not allow the use of external ratings for regulatory purposes, banks will assign a 100% risk weight, with the exception of exposures to identified corporates as "investment grade"[34]; and exposures to SMEs. The risk weight for exposures to "investment grade" corporates is 65%. For exposures on unqualifying SMEs, a risk weight of 85% may be applied.

Exposure to specialized financing

An exposure to corporates will be considered as specialized financing if it presents any of the below features:

- The exposure is not related to real estate; is adjusted to definitions of financing of goods, projects or basic products;
- The exposure is to an entity (a special purpose vehicle - SPV) created specifically to finance and / or operate with physical assets;
- The main source of reimbursement of the obligation comes from the income generated by the asset (s) being financed, rather than from the payment capacity of the borrowing entity.

It can be pointed out that risk weights will depend on the external rating of the SPV.

In case that the use of external ratings for regulatory purposes is not allowed, the exposures of financing of goods and basic products will be weighted at 100% and the exposures of project financing will be weighted at 130% during the pre-operational phase and at 100% during the operational phase. Funding exposures of projects in the operational phase that are considered high quality will be weighted at 80%.

[34] A company with an "investment grade" means that has sufficient capacity to deal promptly with its financial obligations, a capacity that is considered solid even when there are adverse changes in economic and business conditions.

Retail exposures

Retail exposures are weighted at 75% if they meet the following criteria:

- Product criteria: credits and self-renewing credit lines, term personal loans and financial leases, and obligations and facilities granted to SMEs.
- Reduced value of individual exposures.
- Disaggregation criteria: no aggregate exposure to the same counterparty may exceed 0.2% of the general regulatory retail portfolio.

Real estate exposures

Residential properties

Within this group, it can be distinguished two different weightings as explained below:

Amortization does not depend substantially on cash flows generated by the property. In this case an important innovation is made, introducing the Loan to Value ratio in order to determine the weighting:

LTV ratio	≤50%	50%≤60%	60%≤80%	80%≤90%	90%≤100%	>100%
Risk weight	20%	25%	30%	40%	50%	70%

When the service prospects of the loan depend substantially on the cash flows generated by the real estate that guarantees the loan and not on the borrower's ability to pay:

LTV ratio	≤50%	50%≤60%	60%≤80%	80%≤90%	90%≤100%	>100%
Risk weight	30%	35%	45%	60%	75%	105%

It is important to note that these weights are subject to the fact that the property is fully built, the bank has a mortgage on the property -which can be executed-, there is a prudent valuation of the property and there is, for the first case, the borrower's capacity to deal with the payment. If any of these assumptions is not observed, for the first case, it will be applied the weighting corresponding the counterparty, and for the second case, a 150% risk weighting will be applied.

Commercial properties

As regards commercial real estate, it can be distinguished other two different weightings as explained below:

- Amortization does not depend substantially on the cash flows generated by the property. If the property is fully built, the bank has a mortgage on the property -which can be executed-, there is a prudent valuation of the property and there is the borrower's capacity to deal with the payment, the weight depends on the Loan to Value ratio as follows:

	LTV≤60%	LTV>60%
Risk weight	Min (60%, RW of the counterparty)	35% counterpart

If the above requirements are not met, the weighting will be that of the counterparty.

- When the service prospects of the loan depend substantially on the cash flows generated by the real estate that guarantees the loan and not on the borrower's ability to pay, and if the requirements related to the property's construction are met, there is a mortgage -which can be executed-, a fair valuation, the weighting will depend on the Loan to Value ratio as follows:

	LTV≤60%	60%<LTV≤80%	LTV>80%
Weighting by risk	70%	90%	110%

If all the above requirements are not met, the weighting will be 150%.

Exposures to currency mismatch

A non-hedged exposure refers to those in which the borrower does not have any hedge against the foreign exchange risk resulting from the mismatch between the currency in which the loan is denominated and the currency of the borrower's income.

In the case of unhedged retail exposures and exposures to guaranteed individuals with unhedged residential real estate where the loan's currency does not match the source currency of the borrower's income, banks shall apply a multiplier of 1.5 times to the applicable risk weight, subject to a maximum of 150%.

For the purposes of applying the multiplier, these natural or financial hedges are only considered sufficient if they cover at least 90 per cent of the amount of credit, regardless the number of hedges under use.

Off Balance Sheet Items

Off balance sheet items shall be converted into credit exposures by using credit conversion factors (CCFs). The CCF shall be of 100% in the following cases:

- Direct credit substitutes - general guarantees of indebtedness (including standby letters of credit used as collateral for loans and securities) and acceptances.
- Sale and repurchase agreements and asset sales with recourse where the credit risk remains with the bank.
- Lending of banks' securities or the posting of securities as collateral by banks, even when it is the result of repo-type transactions.

- Off balance sheet items that are credit substitutes not explicitly included in any other category.

A CCF of 50% shall be applied to:

- Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).
- Contingent items related to specific transactions (performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).

A CCF of 40% will be applied to the obligations, regardless the expiration of the underlying facility, unless they meet the requirements to receive a lower CCF.

A CCF of 20% will apply both the issuing and confirming bank of self-liquidating short-term trade letters of credit (maturity less than one year) from merchandise circulation operations.

A CCF of 10% will be applied to the obligations that the bank can meet unconditionally at any time and without prior notice, or for which its automatic payments is considered in case of deterioration of the borrower's solvency.

Other exposures

The capital requirement for securitizations, for exposures in investment funds and for exposures with Central Counterparties has a specific framework. Similarly, the equivalent credit risk for derivative transactions (OTC and standardized) followed the counterparty risk framework that the Basel Committee released in 2014.

Provisioning – Accounting Impairment

One of the objectives of Basel III was to reduce the procyclicality in times of stress. Developing and fostering the use of a forward-looking provisions system is purposeful. This is a consensus that was achieved after a long deliberating process that began in early 2009.

Calculating the credit risk impact from the accounting perspective largely relies on accruals. Given this, assets exposed to credit risk should be periodically valuated so that the income statement clearly reflects the impaired cash flow recovery expectations. (Banking and Insurance, Capital and Accounting, 2018)

Until 2009, only credit losses resulting from observed events (incurred losses) could be considered as accruals, but after the GFC, in April 2009, the G20 urged replacing the model of incurred losses to accompany the recognition of losses with the accumulation of risks in the balance sheets of financial institutions. Based on this, an Expert Group made of representatives from the accounting standards setting bodies, including the International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB), to move from an incurred credit losses model to one based on expected credit losses (ECL).

The decision was based on the fact that a model of expected losses better responds to a supervisory approach that distinguishes between expected and unexpected losses. The expected loss can be understood as the difference between the value of an asset and the present value of the flows expected to be yielded by that asset, given the possibilities for deterioration in the future. In this vein, expected losses are made of three main components:

- The probability of default (PD)
- The loss given default (LGD)
- The exposure at default (ED)

For the purpose of estimating the expected loss, the following aspects should be taken into account:

a. Results need to be assessed under different scenarios, each of them with certain probability of realization. An entity does not necessarily need to identify all possible scenarios; however, it will consider the risk or likelihood that a credit loss realizes, even if such scenario is hardly probable.

b. Time value of money must be considered, by means of taking into consideration discount curves / rates.

c. Reasonable and sustainable information that is available without disproportionate cost or effort at the date of calculation about past events, current conditions and forecasts of future economic conditions should be also considered.

In quantitative terms, the expected loss (EC) can be expressed as follows:

$$EC_t = VL_t - \left[\frac{\sum_{e=1}^{n} PD_e \, CFE_e^{t+1}}{(1+i)} + \frac{\sum_{e=1}^{n} PD_e \, CFE_e^{t+2}}{(1+i)^2} + \cdots \frac{\sum_{e=1}^{n} PD_e \, CFE_e^{t+z}}{(1+i)^z}\right]$$

(Banking and Insurance, Capital and Accounting, 2018)

Where:

EC_t is the expected loss at "t"

VL_t is the asset's book value at "t", which may be at amortized cost or at fair value, depending on the business model.

PD_e is the probability for a scenario "e".

n represents the number of possible scenarios

CFE_e^{t+z} is the cash flow of "z" corresponding to the scenario "e"

i is the effective interest rate of the asset

It is clear that there are important technical implications to properly estimate these parameters for the various entity's products and debtors and for the different possible scenarios.

The IASB and the FASB have issued regulations in this regard that have many similarities. Their work was aimed at: a) anticipating and smoothing the provisions' temporary pattern and b) reducing volatility in the profits' temporary changing profile.

In the case of IFRS 9, three stages have been defined:

- Stage 1: Loans with a credit risk that has not increased with respect to its original situation. The amount of expected losses of the operation is estimated over a 12-month horizon. Provided that it is not an excessive cost, the expected economic conditions must be included in the modeling in the 12-months horizon. Interest income from these loans is calculated based on the gross amount of the loan.
- Stage 2: Loans with a credit risk that has increased significantly with respect to its original situation. The amount of expected losses is estimated over a horizon equal to the residual life of the operation. It would correspond to the categories of base risk in special surveillance and doubtful risk for reasons other than default. Provided it is not an excessive cost, the expected economic conditions must be included in the modeling in the horizon of the residual life of the operation. Interest income from these loans is calculated based on the gross amount of the loan.
- Stage 3: Default loans or loans that have already recorded losses due to credit risk. The amount of expected losses is estimated over a horizon equal to the residual life of the operation. Provided it is not an excessive cost, the expected economic conditions must be included in the modeling in the horizon of the residual life of the operation. Interest income from these loans is calculated on the basis of the net loan amount of the provisions made

The central idea of this framework provided by the IFRS concerning the expected credit losses to be calculated by financial institutions is to recognize credit risk losses before they occur, possibly in the high or middle phase of the cycle, in order to provisioning less in the low phase of the cycle, thus achieving a less procyclical provisioning system.

The above has immediate effects, in turn, on the regulatory capital.

Credit Risk Mitigation- Regulatory Treatment

Closely related to the way in which capital is determined and provisions are constituted, is the way in which credit risk mitigants are recognized.

Basel III has not altered the techniques to mitigate the credit risk assumed by banks. The exposures can be guaranteed by claims of first priority, in whole or in part, through cash or securities. Also, a credit may be backed by a third party, or a bank may buy a derivative to hedge credit risks. In addition, banks can accept the loans compensation from a counterparty through deposits. Provided that these techniques satisfy the requirements of legal certainty, the recognition for regulatory capital effects of a wide range of credit risk hedges is allowed.

Three credit risk mitigation techniques are established by the Basel Committee:

- Transactions with collateral: when the real or potential exposure is totally or partially hedged by a collateral delivered by the counterparty or by a third party in favor of the counterparty. There are two approaches to apply this mitigation technique: (i) simple approach replaces the risk weight of the counterparty with the risk weight of the collateral instrument for the collateralized tranche (usually subject to a 20% floor, with some exceptions); and (ii) integral approach, which allows a more precise compensation between collateral and exposures, by reducing the amount of the exposure by an adjusted volatility value ascribed to the collateral.
- Compensation on the balance sheet (netting): those banks that have legally enforceable agreements on netting balance between loans and deposits can calculate the capital requirements based on the net exposures.
- Guarantees and derivatives: for the purpose of calculating capital requirements, a range of guarantors and hedging providers is recognized and a substitution method is applied. The part that remains protected from counterparty risk is assigned the risk weight of the guarantor or hedging provider, while the part not covered maintains the risk weight of the underlying counterparty.

The Capital's Countercyclical Buffer

It is considered that the Basel standard to establish a capital's countercyclical buffer can be included within the regulation of credit risk, since one of the fundamental variables to activate this buffer is the excessive growth of credit and if this implies an increased systemic risk.

This is reinforced by the fact that the Basel Committee suggest to use the long-term trend (gap) of nonfinancial gross credit against Gross Domestic Product, as an indicator to activate the buffer, considering that this indicator would act as a key reference to identify the current phase of the financial cycle.

Research made by the Central Bank of Uruguay (Dassatti, C., Pena, A., Ponce, J., and Tubio, M. 2015) finds that the countercyclical buffer would be complementary to the current regime of statistical provisions (similar to those that had Spain until 2016), to the extent that, by definition, the statistical forecasts are designed to face expected losses, while the buffer is designed to deal with unexpected losses. Additionally, the statistical provisions depend on variables of each institution, while the buffer would apply to all institutions, since their macroprudential dimension.

On the other hand, it can be noted that in Saurina-Trucharte (2016) dynamic provisions are kept and the buffer is used as a complementary instrument, as long as they are well-calibrated.

The Role of Accounting to Prevent Crisis

According with the GFC lessons learnt, the following are fundamental factors that shed light on how accounting plays an important role in preventing crises and, therefore, underpins financial regulation and supervision:

1. The timely recognition of the deterioration of financial assets promotes safe and solid banking systems, thus playing an important role in banking regulation and supervision.

   In response to the GFC lessons learnt, where the late recognition of losses for credit risk amplified the crisis, the international standard setting bodies modified the accounting impairment criteria (provisions). Specifically, both the IASB and the FASB adopted provisioning standards that require the use of ECL rather than a model of incurred losses, as commented on Section III.3.

   The Basel Committee has acknowledged that this new approach for accounting provisions introduce fundamental changes in the provisioning practices of banks in a qualitative and quantitative manner. Significantly, a greater amount of impairment can be recognized taking into account the term until the expiration of a certain loan and considering a forward-looking view that introduces in the calculation the information of the macroeconomic situation that may occur in the future. Based on the foregoing, the accounting impairment is less procyclical and helps mitigate the effects of the financial cycle on the real cycle.

2. Auditors and supervisors internationally, through the profound review of international accounting standards, play a very important role in preventing future crises. For example, in the case of Lehman Brothers, it was clearly identified that the information disclosed and used by investors and financial authorities was misleading and inaccurate, and opportunities were missed to identify serious problems, both in terms of liquidity and excessive leverage.

   In Valukas (2011) some aspects are mentioned in which the auditors can help to prevent future crises, to name a few:

   - Auditors should take any indication of irregularity, no matter how minimal, with the greatest seriousness. While auditors face intense pressures to conclude their analysis swiftly to allow financial statements to be published on time, the foregoing must be weighed against the key responsibility of carefully review and investigate the reported information.
   - Abandon the immateriality rule, in the case that there are indications that what is immaterial today can become material in the future.
   - Statements signed by the institution's top management are part of the evidence, but they should not be conceived as an insurance policy by the auditor.
   - The auditors should consider that their client is the board of directors or the audit committee of the company, but not the top management.

3. Accounting consolidation rules can also be an important factor in preventing future crises.

   The 2008 IMF's Global Financial Stability Report recognizes that the ability of financial institutions to avoid consolidation made it difficult for investors and regulators to detect financial activities carried out through the SPV, suggesting that accounting standards setting bodies should reconsider the consolidation rational to improve an understanding of how relevant are underlying risks.

In this regard, IFRS 10, which entered into force on January 2013, introduces a consolidation model based on single control, regardless the nature of the participated entity. This way, an investor will determine if it controls a participated entity when there are claims to (variable) returns resulting from its participation in the entity and has the ability to influence those returns through its powers. (Banking and Insurance, Capital and Accounting, 2018)

It is considered that the IFRS 10 has helped to progress in the treatment to be given to the SPV, which are characterized by not having a clear ownership structure. However, it must be recognized that reputational risk is not self-sufficient to promote the consolidation of an entity.

Additionally, IFRS 12, which also became effective as of January 2013, deals with the disclosures about participation in other entities.

Regarding the participation in structured non-consolidated entities, the IFRS 12 establishes that entities must disclose information that allows users of their financial statements:

- Understand the nature and scope of their holdings in such entities, and,
- Evaluate the nature of the risks associated with their holdings as well as potential changes in that entities.

Ideally, the accounting and the prudential consolidation frameworks should to converge in the future, mitigating the risk stemming from shadow banking.

In this regard, it should be noted that the Basel Committee has worked in parallel in the prudential consolidation framework, with the idea of identifying and measuring the so-called "step-in risk", which refers to the risk that a bank provides financial support to an entity, vehicle or fund, for which there is no contractual obligation, in the event that the entity experiences a financial stress.

The Case of Uruguay

The credit risk management framework of Uruguay can be characterized as follows:

- The Basel Core Principles have been taken into consideration, particularly with regards corporate governance and credit risk, in order to issue the Minimum Management Standards, which constitute a set of supervisory expectations for the regulated financial entities to put in practice. These practices are consistent with the assessment methodology adopted by the Superintendency of Financial Services (SSF) of the Central Bank of Uruguay and focus mainly on the roles and responsibilities of the entity's corporate governance and risk management, in particular, those related to credit risk.
- Pursuing fully compliance with Basel III standards; yet the credit risk standards are not implemented. Risk weighted assets are determined according with Basel II; however, an

update is underway bearing in mind that the implementation date established by the Basel Committee is January 2022.

- With respect to provisioning, since 2004 there is a system of specific provisions based on expected losses over a 12-month horizon. To the extent that in Uruguay IFRS are applied as of January 2018, but without including IFRS 9 in relation to impairment determination; and implications of such a change are under study. With respect to credit risk mitigants, in terms of determining the capital, a simple approach was chosen. Regarding provisioning determination, the accepted collaterals are much broader than those referred to the capital rule.
- A pending task related to Basel III are the capital's countercyclical buffer. In this regard, it can be reminded that the existing system of statistical provisioning is designed in such a way that the specific provisioning plus the expected provisioning provide the optimal level to fulfill the expected losses model estimations, throughout the economic cycle. In any case, the countercyclical capital buffer regulations are expected to be issued by 2019. Furthermore, and as stated above, statistical provisioning and the capital countercyclical buffer are complementary instruments.
- With respect to the accounting consolidation framework, Uruguay has adopted IFRS as of January 2018, therefore, IFRS 10 and 12 discussed above are being applied too.

Bibliography

Basel Committee (1975) Report on the supervision of banks' foreign establishments – Concordat

Basel Committee (2006) "Methodology of the Basic Principles"

Basel Committee (2012) "Basic Principles for effective banking supervision"

Basel Committee (2014) "Supervisory framework for measuring and controlling large exposures to risk"

Basel Committee (2017) "Basel III: Finalising post-crises reforms"

Dassatti, Cecilia; Pena, Alejandro; Ponce, Jorge and Tubio, Magdalena, Monetaria CEMLA (2015) "Countercyclical Capital Buffer: The Case of Uruguay"

De la Torre, Augusto, Ize, Alain (2013), "The Foundations of Macroprudential Regulation. A Conceptual Roadmap"

Engelmann, B (2018) "Calculating Lifetime Expected Loss for IFRS 9: Wich Formula is Correct?" Open University Ho Chi Minh City

Penikas, Henry (2014) History of Banking Regulation as Developed by The Basel Committee on Banking Supervision in 1974 – 2014 (Brief Overview)

Perez, Jorge; Martinez-Pina, Ana; Lorente, Francisco y Otal, Sara (2018) "Banking and insurance" Fondo Latinoamericano de Reservas – Marcial Pons

Posner, Erik (02014) "How do Bank Regulators Determine Capital Adequacy Requirements"

Saurina, J y Trucharte, C:" (2017) " The countercyclical provisions of the Banco de España 2000-2016"

Valukas, Anton (2011): "The Role of the Accounting Profession in Preventing Another Financial Crisis"

World Economic Forum (2018) Global Future Council on Financial and Monetary Systems "The Global Financial and Monetary System in 2030"

Key Issues in Bank Accounting and Finance

Proceedings of the Regional Conference on Banking, Accounting and Finance

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