

GLOBAL FINANCIAL CHANGES AND RESULTS IN LATIN AMERICA: *À LA CARTE* SELECTION OF REGULATION

Katiuska King Mantilla^a

Fecha de recepción: 2 de marzo de 2020. Fecha de aceptación: 24 de agosto de 2020.

<http://doi.org/10.22201/iiec.20078951e.2021.204.69609>

Abstract. This article analyzes the implementation of the Basel II, II.5 and III rules in Latin American countries by means of specific banking regulations and finds that because the rules were not fully implemented, banks were then able to use some of the principles that give them room for regulatory arbitrage and facilitate illicit financial flows (IFFS). The Basel banking norms supposed that regulatory capital would be a minimum of 10.5%, but equity to asset ratios computed for big banks fell by 1.2 percentage points between 2005 and 2015 and provisions for loan losses on assets increased 0.6 percentage points in the same period. The on-demand implementation of these standards puts the region at the mercy of an underground globalization that favors IFFS.

Key Words: financial regulation; financial institutions; financial system; regulatory arbitrage; illicit financial flows.

CAMBIOS FINANCIEROS GLOBALES Y RESULTADOS EN AMÉRICA LATINA: SELECCIÓN DE REGULACIÓN *À LA CARTE*

Resumen. Este artículo analiza la implementación de las normas de Basilea II, II.5 y III en los países de América Latina a través de específicas regulaciones bancarias y encuentra que debido a que tales reglas no fueron completamente adoptadas, los bancos fueron capaces de usar algunos de los principios que les daban espacio para el arbitraje regulatorio, facilitando los flujos financieros ilícitos (FFI). Las normas bancarias de Basilea suponen que el capital regulatorio debía ser mínimo del 10.5%, pero los cocientes de patrimonio sobre activos calculados para grandes bancos cayeron en 1.2 puntos porcentuales entre 2005 y 2015 y las provisiones sobre activos se incrementaron 0.6 puntos porcentuales en el mismo período. La petición a la carta para implementar esos estándares pone a la región a merced de una globalización subterránea que favorece los FFI.

Palabras clave: regulación financiera; instituciones financieras; sistema financiero; arbitraje regulatorio; flujos financieros ilícitos.

Clasificación JEL: F38; G18; G24.

^a Universidad del País Vasco, Spain and Universidad Central del Ecuador, Ecuador. Email address: kkking@uce.edu.ec

1. INTRODUCTION

After the economic crisis of 2008, important institutional changes occurred in the global economic architecture, with the goal of correcting the problems that caused that debacle. In this context, international institutions whose previous role was to meet with, discuss and exchange experiences with international bodies responsible for defining global norms and standards in different economic areas, were given a greater role. This article examines the changes that have taken place as a result of this new institutional architecture in financial matters, and that have had an impact on what are called illicit financial flows (IFFs) in Latin America.

IFFs can be defined as transboundary movements of money that has been illegally obtained, transferred or used (Kar and Cartwright-Smith, 2008; Tax Justice Network [TJN], 2015). Within these IFFs the main component is tax evasion and avoidance by multinational companies (MNEs), followed by illegal activities and corruption (Kar and Spanjers, 2015), and financial institutions operate as facilitators of these flows. It is therefore necessary to know if the latest institutional changes in financial supervision are inhibiting IFFs, if they were fully implemented and what their effects on key financial variables have been.

The normative changes that were promoted after 2008 were based on what the already existing discussion groups had been working on before the crisis. It must be reminded that the acceptance of the financial regulation to avoid the risks assumed by this sector, came after the Tequila crisis in 1995-1996 (Ros, 2013). For example, with regard to financial matters, changes were made in banking supervision and regulation within the scope of the Basel regulations. In this context, this article seeks to analyze and compare how Latin American countries implemented these new global rules, and to discuss some of their economic impacts on key financial variables that affect IFFs.

The hypothesis is that the new financial regulations provide financial institutions with room for maneuver through the use of their own methodologies and that their voluntary application resulted in a reduction in the equity ratio and a consequent weakening of the soundness of financial systems, thus facilitating the existence of IFFs.

The methodological approach of this article is explanatory: beginning with a description of the transformations in financial institutions that took place after the 2008 crisis; then calculating indicators of implementation of the financial regulatory changes promoted by the new institutional framework, with information from the Basel Committee on Banking Supervision (BCBS),

as well as analyzing their general approach; and finally, studying the equity and provision indicators of the major Latin American banks. The unit of analysis of the information refers to the countries themselves.

The article is divided into five sections: the second presents the theoretical approach of international political economy and the conceptual framework of IFFS, with emphasis on financial facilitators. The third provides a brief description of the institutions and the implementation of supervision and financial regulations in the region. The fourth section validates the hypothesis through the equity and provisions ratios of the major big banks and their implementation is discussed in the region in relation to IFFS; the fifth section concludes.

2. THEORETICAL APPROACH AND CONCEPTUAL FRAMEWORK OF IFFS

In the financial field, global interdependence has become increasingly evident; Rodrik (2011, p. 280) calls it intensified financial integration in which “financial intermediaries increase their ability to evade national regulations”. This interdependence needs to be looked at from the perspective of the international political economy and its relation to IFFS.

Theoretical approach

The theoretical approach used is structuralist, identifying, amongst other issues, “technological lag; external constraints; inequality; structural heterogeneity; instability (real volatility); and the political economy of dependency and power relations based on a center-periphery relationship, as structural obstacles to the region’s economic and social development” (Pérez-Caldentey, 2015, pp. 19-20).

This article deals with the effects of international changes in financial structure, and how they are implemented by Latin American countries that, while participating in discussion forums, are unable to influence final decision making.

Susan Strange, the British forerunner of international political economy, defined the conduits of power and domination in the world, with a particular emphasis on international financial markets. Strange (1986), argues that it is necessary to examine less visible structural power in order to derive a meaningful analysis of international political economy. In the analysis of the power

exercised by non-state actors, it is useful to keep in mind Strange's premise that "authority in society and over economic transactions is legitimately exercised by actors other than States, a fact that has become widely recognized by those who are subjected to them" (2001, p. 33).

Currently, "nonstate entities (...) govern through regulatory techniques that might mimic and sometimes supplement or supplant, but are not effectuated through law" (Backer, 2011, p. 760). The techniques introduced by institutions that define standards, have binding effects and are therefore a less visible source of structural power. Another issue to consider is that "transnational policy processes continue to be presented as value-free, objective, technical" (Ronit and Porter, 2016, p. 64) not related to power.

This article is therefore based on the conceptual framework of IFFs that will be analyzed in the following section, in order to analyze how institutional changes and modifications to banking regulations influence the IFFs.

Conceptual framework of IFFs

IFFs are trans-boundary movements camouflaged by legal entities and financial instruments, and which at some point become opaque. IFFs include tax evasion and avoidance by multinational corporations and wealthy individuals with practices as tax planning, as well as funds from corruption, and activities such as human trafficking, drug trafficking and the illegal sale of weapons, amongst others, which have "common techniques and use of the same structures" (Baker, 2005, p. 206).

In one of the first reports on tax havens and money laundering (Blum *et al.*, 1998), describe how the instruments by which transnational corporations conduct operations, such as transfer pricing (part of tax planning), can also be used to move resources from illegal activities through fraudulent billings, reverse-flip property deals, the loan-back scam, matched trading and underground banking schemes.

This requires opacity, fragmentation, and aggregation, which do not allow detailed information to be distinguished, triangulation or mazes, either through instruments, or by country and location. This all helps to cover tracks, not permit circles of information to be closed, and to keep the motives behind these operations hidden.

On the financial side, the computer engineer and whistleblower, Hervé Falciani, who worked in the Geneva subsidiary of the British bank, HSBC, pointed out and gave details of the different techniques used: such as the creation of three instrumental or ghost companies in three tax havens,

the deletion of information-“when you control the credits you can also delete them” (Falciani, 2015, p. 45), the puzzle principle or the fragmentation of information, amongst others.

The banking secrecy provided by the financial system also protects the identity of the client, no matter who it is, or the goals that may lie behind the evasion, all of which is very useful for IFFs. Added to this are the techniques for simulating rights that hinder the traceability of information, and consequently the origin of money, by judges, prosecutors or control authorities.

In order to hide the details of transactions, for example foreign banks that have subsidiaries in various parts of the world, have the ability to consolidate information, while the volume of information also allows them to mix “incomplete and unrelated information” (Falciani, 2015, pp. 96-97), and to also have informatic servers to process and store information in different countries. The *nostro-loro* (our-their) mirror account system, for example, registers transactions on behalf of third parties in which, in the end only one compensation line appears and it is impossible to find the final beneficiary. While in other “mirror systems”, local banks in periphery countries can make use of remittances sent by workers from abroad in a form of compensation, by not bringing in these resources but rather using the money that a person or group of people keep inside the country to pay the remittances, while in turn allowing these latter to be given their resources outside the country. The entry of remittances is therefore registered, but not the outflow of capital and, in practice, the resources never enter the periphery country’s financial system.

The rules of the Financial Action Task Force (FATF) (GAFI, 2012), give the impression that all types of financial activities connected to crime and money laundering are under control. A classic example is that any deposit above US\$10 000 in cash must be reported to the respective Financial Analysis Units (FAU). To avoid such control, something as simple as the “smurfing” technique can be used: this involves making deposits in different banks for small amounts (Baker, 2005). Another example is when banks omit “due diligence” on their clients and maintain anonymous accounts or accounts under clearly fictitious names (Hernández Viguera, 2005).

This does not mean that the BCBS does not have any mention on money laundering and financing of terrorism, the guidelines to supervisory coordination with FATF were published in BCBS (2014) and a 2020 revision exists. But this 2020’s revision explicitly said there “are not included in the Basel standards and are only applicable for those jurisdictions that choose to implement them on a voluntarily basis” (BCBS, 2020).

The biggest problem is that the tax practices of MNEs are not analyzed by the FATF, despite the fact that crime and corruption use the same financial instruments and frameworks, as mentioned by Blum *et al.* (1998). The BCBS otherwise while overseeing offshore banking structures (Hernández Viguera, 2005) does not pay attention to the practices of the MNEs.

The conceptual framework of IFFs is therefore based on making monitoring difficult, altering valuation at will, fragmenting information in order to confuse, avoiding traceability and keeping information hidden.

3. INSTITUTIONAL ARCHITECTURE, FINANCIAL CHANGES, AND IMPLEMENTATION

The established global economic architecture is defined by the institutions created in Bretton Woods (BW) in 1944. In the financial arena, there is also the Bank for International Settlements (BIS) with its various committees. In the tax sphere, the League of Nations created an expert committee that handled the issue through its Financial Committee (Strange, 2001), however, the issue was not dealt with at BW. Faced with this void, a number of the wealthy countries required the Organization for Economic Cooperation and Development (OECD), created in 1961, to carry out the task.

As well as these institutions, in recent years the informal G groups have grown in importance and strength. Among these, the most cited is the G7 which includes the seven richest countries in the world. Subsequent to the economic crisis of 2008, the G7 acknowledged the “pressing need for reform of the financial system [and the need for] full implementation of the Financial Stability Forum recommendations” (G7 Finance Ministers and Central Bank Governors, 2008, p. 7). The G7 later strengthened this forum, including a change of name, thus giving rise to the Financial Stability Board (FSB) in April 2009.

The FSB reports directly to the G20, is housed in the BIS, and includes the G20 members that did not belong to it (Prates and Peruffo, 2016). With the help of the International Monetary Fund and the World Bank, the FSB assumed the international leadership of the financial sector, and consequently represents a little known underground globalization that promotes, by way of financial stability, standards defined by other lesser unknown institutions, or to be more exact, institutions only well known in their respective fields of influence.

The relationships and memberships of the FSB (Porcelli, 2015) show the regulatory role of non-public transnational actors (Backer, 2011), in the form

of the institutions that define standards, for instance: International Organization of Securities Commissions (IOSCO) (standard setter for securities sector), International Association of Insurance Supervisors (IAIS) (standard setter for insurance sector) apart from the BCBS.

According to Backer (2011, p. 782) there is “a poly-central network at the core of key public efforts to develop governance systems for multinational corporations that are not integrated into the legal systems of States”, in which the FSB is at the center.

The network is divided into specific areas but does not include a comprehensive plan to prevent IFFS. The rules, issued in the form of guidelines or standards, are not formally binding, but in practice they can be implemented at a national level almost as if they were obligatory.

Regarding the possible facilitating role of banks in IFFS, this article focuses on the rules issued by the BCBS, and the main reforms proposed by this council are presented below.

Basel I

The first international agreement on capital requirements, called Basel I, established in 1988 the first rules that defined principles and regulations for banking supervision, setting the minimum amount of capital a bank should have based on the risks it faces. This is known as “regulatory capital”.

Formula 1. The definition of regulatory capital

$$\text{Regulatory Capital} = \frac{\text{Capital Tier I} + \text{Capital Tier II}}{\text{Risk weighted assets}}$$

Source: own elaboration.

The definition of regulatory capital is based on what are defined as Tier I and Tier II capital, divided by credit and operational risk weighted assets. The indicator must be greater than 8%.

This formula is composed of Class 1 capital (Tier I) that includes basic capital (core I), constituted mainly of shares and a class II capital (Tier II), and which must be at least a quarter of 8%, that is, 2%. Below, we analyze how the overvaluation of risks as well as intangible assets can reduce regulatory capital.

In 1998, ten years after the Basel I agreement, the United Nations Office on Drugs and Crime (UNODC) published a study titled *Financial Havens, Banking Secrecy and Money Laundering*. The report recounts how money laundering practices mimic legal practices and use traditional financial schemes for evasion and as means of laundering through offshore centers, amongst other things. The report states that the BIS “is working on improving its regulatory guidelines to prevent the use of financial centers for avoiding regulation” (Blum *et al.*, 1998, p. 110). In the same month of that year, the G7 finance ministers elaborated Ten Key Principles for the exchange of information, in which they guaranteed confidentiality requirements in the exchange of information by the supervisors (G7, Finance Ministers, 1998).

Six years later, in 2004, the Basel II regulations proposing changes in capital adequacy and risk exposure were made public, but these included virtually nothing about regulatory arbitrage in offshore or other financial centers, and even less about financial secrecy. The Basel II regulations are generally considered “as the product of regulatory capture by large international banks in G-10 countries” (Lall, 2012, p. 615).

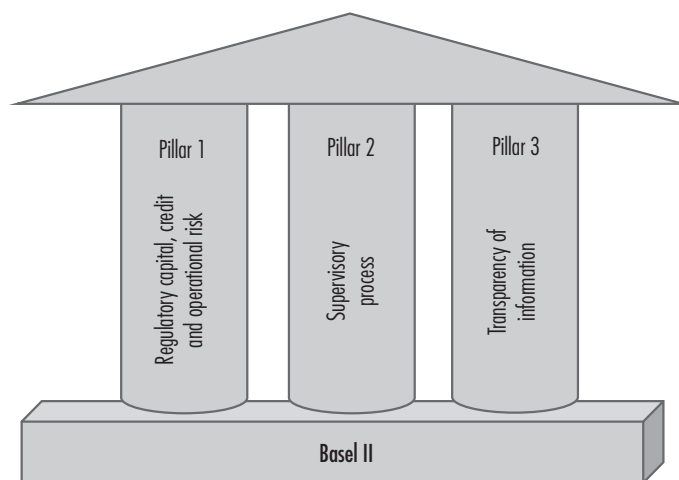
Basel II and II.5 will now be analyzed.

Basel II and II.5

Basel II also established two additional pillars, one related to the process of supervision of the capital adequacy of banks, and another to transparency and disclosure of information. In the first, in-house methodologies for risk estimation were established for risk-weighted assets, in addition to the standard method provided by risk rating agencies (CSBB, 2004). These methodologies grant a margin of maneuver to the financial institutions in the estimation of risk. The objective of Basel II was to correct some points of Basel I, for instance increasing capital requirements when banks assumed greater risks in their operations, and emphasizing solid corporate governance (CSBB, 2004).

Figure 1 is a simplified Basel II structure that includes operational, credit and market risk in Pillar 1, and in Pillar 2 the consideration of more risk when weighting the assets: “concentration of credit, interest in the investment, liquidity, business, strategic and reputation portfolio” (CSBB, 2004, p. 21), which implied higher capital requirements. Basel II’s implementation in LA is shown in table 1.

Figure 1. Basel II structure



Source: own elaboration based on CSBB (2004, pp. 8, 21 y 25).

Basel II has a weighted implementation average of 1.4 in the countries that answered the survey. In the region as a whole, the Basel II regulations remained as unpublished drafts, approximately 7 of the 10 recommendations being applied. As mentioned by Lall (2012), efforts to implement Basel II were abandoned by the regulators before implementation was complete.

Peru implemented all the components, with an average of 3.4; Bolivia had an average implementation of 3.2; Colombia 2.2, and Uruguay, which applied 5 of the 10 components, has a weighted average of 2. For Argentina, Mexico and Brazil, detailed information is not available; by 2013, Mexico and Brazil had implemented Basel II in its entirety, and Argentina was on track to do the same (CSBB, 2013).

In relation to its own risk assessment instruments, Colombia applied the basic method based on internal ratings (FIRB) for credit risk. As of 2015, only Peru had formally applied the advanced method based on internal ratings (AIRB) for credit risk, and the AMA methods for operational risk: *i.e.* it allows its banks to use their own credit and operative risk assessment systems.

These changes have a different impact on banks that can develop their own risk estimation models, compared to small banks that use information from credit rating agencies. Basel II, where it was applied, benefited the large international banks (Lall, 2012) due to the use of an advanced approach based on internal evaluation of both credit (AIRB) and operational risk calculations

Table 1. Implementation of Basel II in Latin America

	Pillar 1: Credit risk				Pillar 1: Operational risk					Pillar 2			P3	Year in force	Components applied	Weighted average
	SA	FIRB	AIRB	BIA	TSA	AMA	SMMI	IM	P2	P3						
Bolivia	4	3	3	3	3	3	3	3	3	3	4	4	2013	10	3.2	
Chile	1	5	5	5	1	5	1	5	1	1	1	1	2017	5	0.5	
Colombia	4	4	5	1	5	5	4	4	1	1	4	4	2015	7	2.2	
Costa Rica	4			4					1	1	1	1	2015	5	1.25	
Ecuador	2	1	1	1	1	1	1	1	1	1	1	1	2018	10	1.1	
El Salvador	1	1	1	1	1	1			1	1	1	1	2019	8	0.8	
Guatemala	4	5	5	5	1	5	5	1	4	1	4	1	2021	5	1.1	
Guyana	1	5	5	1	1	5	1	5	1	1	1	1	2016	6	0.6	
Haiti	5	5	5	1	5	5	5	5	5	5	5	5	NA	1	0.1	

Honduras	1	1	1	1	1	1	1	4	4	2012	10	1.6
Panama	1	5	1	1	5	1	5	4	1	2016	6	0.9
Paraguay	1	5	1	5	5			1	1	2016	4	0.4
Peru	4	4	4	4	4	4	4	1	1	2015	10	3.4
Uruguay	4	5	4	5	5	4	5	4	4	2012	5	2
LA											6.6	1.4

Note 1: The countries that responded to the FSI Survey on the implementation of Basel II in Latin America.

Pillar 1 - Credit risk: SA = standardized approach, FIRB = basic method based on internal ratings, AIRB = advanced method based on internal ratings.

Pillar 1 - Operational risk: BIA = basic indicator method, TSA = standardized / alternative standardized method, AMA = advanced measurement methods.

Pillar 1 - market risk: SMM = standardized measurement method, IM = internal models.

P2 = Pillar 2, P3 = Pillar 3.

Note 2: The numbers refer in each category to 1 = unpublished draft regulation, 2 = published draft regulation, 3 = published final regulation, 4 = current final regulation, 5 = not applicable.

Source: own elaboration based on Financial Stability Institute (2015).

(AMA), which resulted in large reductions in capital requirements in relation to Basel I. This is the most controversial point of the Basel II rules.

In addition to supporting Basel II, a review of the Basel II market risk framework (the standard and internal models) was carried out at the end of 2010, in tandem with some modifications to the three Basel II pillars (known as Basel II.5): adjustments to Pillar 1 were related to operational risk, and those to Pillar 2 were related to the supervision and management of internal funds, while changes to Pillar 3 related to market discipline and transparency. Basel II.5 was the immediate response to the global 2009 crisis (Gulija, 2019).

The table 2 presents the implementation of Basel II.5 in Latin America.

Table 2. Implementation of Basel II.5 in Latin America

	<i>Pillar 1: Credit risk</i>		<i>Pillar 2</i>	<i>Pillar 3</i>	<i>Year in force</i>	<i>Components applied</i>	<i>Weighted average</i>
	<i>Rev. P1</i>	<i>Mkt risk</i>	<i>Suppl P2</i>	<i>Rev. P3</i>			
Bolivia	5	5	5	5	NA	0	0
Chile	1	1	1	1	2017	4	1
Colombia	5	5	5	5	NA	0	0
Costa Rica	1	1	1	1	NA	4	1
Ecuador	1	1	1	1	2017	4	1
El Salvador	1	1	1	1	NA	4	1
Guatemala	5	1	1	1	2021	3	0.75
Guyana		5	5	5	NA	0	0
Haiti	5	5	5	5	NA	0	0
Honduras	1	2	1	3	2015	4	1.75
Panama	3	1	5	5	2015	2	1
Paraguay	5	5	5	5	NA	0	0
Peru	1	1	1	1	2015	4	1
Uruguay	5	5	5	5	NA	0	0
LA						2.1	0.60

Note 1: Includes the countries that responded to the FSI Survey on the implementation of Basel II.5 in Latin America.

Note 2: Rev P1 = revisions to Pillar 1; Suppl P2 = supplementary orientation of Pillar 2; Rev P3 = revisions to Pillar 3. Revisions of the Basel II market risk framework: Mkt risk = revisions of the Basel II market risk framework.

Note 2: Same as previous table 1.

Source: own elaboration based on Financial Stability Institute (2015).

Argentina and Mexico partially adopted Basel II.5 (CSBB, 2013); however, detailed information is not available. In the instance of Basel II.5, no country formally implemented the recommendations, and in the best of cases they remained as final regulations and did not come into force. The weighted average for Latin America is 0.6.

Basel III and new principles

Subsequent to the crisis of 2008, and due to the lack of attention to Basel II and II.5, the Basel III rules were drafted, published in 2011 and were due to be fully implemented in 2019. A reconsideration was made of the quality of eligible capital, as regulatory capital that can absorb losses (Galindo *et al.*, 2012).

The definition of capital was modified, which in the table 3 appears as Def cap, requiring a higher level of ordinary capital or ordinary shares, this rising from 2 to 4.5%, so that instruments eligible as regulatory capital are reduced, and risk-weighted assets increased, as shown in the following formula:

Formula 2. New definition of regulatory capital

$$\text{Regulatory Capital} = \frac{\downarrow \text{Eligible Equity}}{\uparrow \text{Risk Weighted Assets}}$$

Source: Chabanel and Wyle (2012).

Deductions are also reduced, although some are maintained as provisions and intangible assets (Chabanel and Wyle, 2012), which can, however, be overvalued.

This set of standards includes in the definition of regulatory capital, the measurement of risks of over-the-counter derivatives, and requirements for the cushions, or conservation (Conserv) and countercyclical buffers (C-cycl) that require additional reserves. Liquidity indicators are also included, such as the liquidity coverage ratio required for a stress period of rainy days (Liq or LCR), and leverage or indebtedness (LR), which includes off balance sheet exposures, in order to limit excessive risk taking, and also regulations for the treatment of systemically important banks: in the domestic sphere, denominated D-SIB, and globally G-SIB. Systemic importance or risk means that if these banks fail or suffer a run on deposits, then the entire financial system will be affected.

Table 3. Implementation of Basel III in Latin America

	Risk Based Capital			Liquidity and leverage		Systemic risk		Number of components applied	Weighted average	
	Def cap or definition of capital	Conserv Buffer	C-cycl Cushion	Liq o LCR	LR	D-SIBs	G-SIBs			
										Year in force
Argentina	4	1	1	4	3	3	5	2013	6	2.29
Brasil	4	4	4	4	4	1	4	2013	7	3.57
Bolivia	3	5	3	5	5	5	5	2013	2	0.86
Chile	1	1	5	2	1	1	5	2017	5	0.86
Colombia	4	5	5	4	5	5	5	2013	2	1.14
Costa Rica	1	1	1	2	1	1	1	2016	7	1.14
Ecuador	1	1	1	1	1	1	1	2018	7	1.00
El Salvador	1	1	1	1	1	1	1	2017	5	0.71

Guatemala	1	1	1	1	1	1	5	2020	6	0.86
Guyana	1	1	1	1	1	5	5	NA	6	0.86
Haití	5	5	5	5	5	5	5	NA	0	0.00
Honduras	1	1	1	1	1	1	1	2004	7	1.00
México	4	4	1	4	1	1	5	2013	6	2.14
Panamá	3	3	3	1	3	5	5	2016	5	1.86
Perú	1	3	3	3	5	3	3	2013	6	2.57
Uruguay	5	1	1	2	4	4	5	2015	5	1.84
LA									5.1	1.42

Note 1: Includes the countries that responded to the FSI survey on the implementation of Basel III in Latin America as well as three G20 countries that figure in the 9th report to the G20.

Def cap = definition of capital; Conserw = de capital conservation buffer; C-cycl = counter cyclical buffer; Liq o LCR = Liquidity standard; LR = leverage ratio; D-SIBs systemically important domestic banks; G-SIBs systemically important global banks.

Note 2: Same as table 1.

Source: own elaboration based on Financial Stability Institute (2015) and BCBS (2015).

In the case of Basel III, the weighted average is 1.4 in five of the seven components. Brazil is the country with the highest application of Basel III, followed by Mexico and Argentina. Uruguay is the only country in the region that applies the regulations for local banks with systemic risk (D-SIBs). This country and Brazil both apply the leverage ratio (LR), whose aim was to have a globally harmonized measure designed to restrict excessive risk taking. Argentina, Brazil, Colombia, and Mexico implemented the liquidity standard (Liq or LCR) and the new definition of capital (Def cap), which increases capital requirements.

In the region, there is a low, and partial, application of Basel III standards. Perhaps due to fear that Basel III will run the same risk as its immediate predecessors, in September 2012, the FSB promoted the *Basic principles for effective banking supervision*, prepared by the BCBS (CSBB, 2012). These principles are suggested to be considered in the guidelines already mentioned (BCBS, 2020).

Among these, basic principle No. 29 and 18 stand out. Number 29 relates to “the verification of the controls established by the banks in matters of prevention of money laundering and financing of terrorism” (CSBB, 2012, p. 9); although, as already mentioned, this does not include the practices of the multinationals. Number 18 is related to the management of doubtful assets, provisions, and adequate reserves. Provisions are estimates based on the probability of default or a delay in payments that generate a present obligation and involving a possible loss of resources.

These principles are known as “minimum de facto standards for the correct prudent regulation and supervision of banks and banking systems” (CSBB, 2012 p. 1). While the principles do not have legal force, and are known as soft law rules, for some banks it is preferable to implement some of them and not the Basel III framework. A relevant point in the regulatory changes in financial supervision, is that they create opportunities for banks to generate policies and processes for managing provisions based on what they themselves consider “dubious assets”, and therefore facilitate regulatory arbitrage.

Regulatory framework and macroprudential policies have been analyzed from many perspectives credit cycles in Latin American countries (Gambacorta and Murcia, 2020), resilience and prediction of financial institutions’ bankruptcy (Lieberman *et al.*, 2018) risk management on bank cost efficiency (Gómez Daza and Ríos Saavedra, 2016), bank systemic risk (Meuleman and Vander Vennet, 2020). The novelty of this article is that it combines implementation rules to IFF, regulatory arbitrage, and results on Latin American big banks.

The new banking supervision rules and the effects of the partial implementation of the new regulations on banking indicators will now be discussed.

4. DISCUSSION AND ANALYSIS OF RESULTS FROM LATIN-AMERICAN BIG BANKS

Basel III, when implemented, has the merit of increasing capital requirements and attempting to reduce the shortcomings of the Basel II and II.5 principles that were not applied. The capital requirements (Tier 1 and Tier 2) rise from 8 to 10.5% when stabilization buffers are included, and to 13% when including anti-cyclical buffers (Chabanel and Wyle, 2012). The main idea is to combine micro-prudential with macro-prudential regulation in the case of adverse situations (Galindo *et al.*, 2012), and to prevent procyclical behaviors.

The experience of Latin American implementation shows that the formal Basel III rules are not being applied, in part because they imply higher capital requirements for shareholders. Galindo *et al.* (2012) show that for Bolivia, Colombia, Ecuador, and Peru, with the stabilization buffer, the 10.5% equity requirement indicator would be met.

However, within this complex structure, banks can interpret the rules and principles at their own convenience: for instance in the use of provisions and counter cyclical conditions, in the use of their own models for estimating risk, and their own valuation of intangible assets, all of which artificially increase capital. To prevent banks from misusing advanced methods of risk estimation, or misrepresentation by means of calculations based on internal models (*gaming*), a “leverage coefficient cushion is introduced in five sections [for banks with systemic importance] (G-SIB)” (CSBB, 2017, p. 12). In addition, the Basel regulatory framework, together with the almost massive approval of the new IFRS in the countries of the region, allows for the inclusion of intangible assets, such as type II capital, for regulatory purposes. All this complicates the understanding and implementation of the rules.

As mentioned by Fullenkamp and Rochon (2014, p. 5), “complex rules effectively transfer a significant share of the power over enforcement to the banks themselves, which may encourage regulatory capital arbitrage”.

Blundell-Wignall *et al.* (2014), find that a simple indicator of leverage greatly exceeds the definition of class 1 regulatory capital (Tier 1). In the same way as Fullenkamp and Rochon (2014), they promote simplicity, and mention that it makes little sense to have a single approach to all capital rules, but that the characteristics of the business model must be considered.

None of the Basel rules explicitly considers the use of offshore centers to avoid regulation or the use of opaque and non-transparent securities, and that allow the identity of the originator to be hidden. However, the existence of the Basel supervisory banking framework and its principles, as well as the lack of knowledge of its contents, gives the impression that the financial system has a robust regulatory framework that protects it from IFFs. In addition to the aforementioned, the fragmentation of regulation is maintained given that the regulatory agenda is divided into different areas. In matters of insurance, the FSB promoted the principles and standards by the IAIS, and the IOSCO, among others as the 40 recommendations to combat money laundering and the financing and proliferation of terrorism, by the FATF.

On the one hand, this regulatory fragmentation allows banks to manage their doubtful assets and increase provisions, which reduces their profits and consequently their tax burden, thus allowing them to meet the capital requirements through lower tax payments. At the same time, that very portfolio of debtors can be handled and managed off balance sheet and not necessarily represent a loss.

The idea that the Basel rules keep banks well regulated is not true: they have only been partially applied in the region, and do not correct the problems related to IFFs, given that the new standards do not mention the harmful use of tax havens in avoiding taxes and financial regulation.

From the previous analysis, it can be seen that among the strong points of the Basel regulatory framework, are the correction of the problems of the initial regulations, and the willingness to increase capital requirements in order to strengthen financial institutions and confront different classes of macroeconomic difficulties. But Basel's weaknesses are its complexity, which provides power and room for maneuver in the definition of risk to institutions, and the fact that it does not include specific measures to prevent IFFs. Recognizing this, it is therefore important to understand what has happened to the capital and the provisions of large financial institutions.

Capital ratios

Because the Basel I agreement established minimum capital requirement parameters, at the same time instruments were created to avoid regulation and thus not reduce shareholder profits. This is the logic of "maximizing value for shareholders" (Crouch, 2012, p. 252). Moreover, before the announcement of Basel II in 2004 regarding the increase in capital levels, the use of instruments

to circumvent the equity requirements increased through the use of securitization and derivative instruments in cases of bankruptcy (Guttmann, 2011).

Securitization is a vehicle that uses bank asset operations for a specific purpose of the entity. For example, one of these is to sell a loan portfolio to anticipate liquidity or income. In this way, portfolio securitizations are managed off balance sheet, assets are reduced and, consequently, capital requirements calculated according to formula 1. The instruments that caused the 2008 crisis came from the multiple forms that securitization took, such as special purpose vehicles (VPE) and collateral debt obligations (CDO), amongst others.

Derivative instruments, “credit default swaps”, became well known during the boom and subsequent mortgage crisis in the United States; most of these instruments are handled as outside the market over the counter (OTC) private agreements, which means that they can be used for purposes other than risk reduction.

To comply with regulatory capital, it is also possible to resort to valuations of intangible assets, such as bank trademarks, brand franchises, the banking systems used, or a credit technology algorithm used to identify potential clients or debtors.

The first point to be looked at, is what happened to the equity relationships of the major banks in Latin America as a result of the implementation of Basel I established in 1988, considering that Basel II increased capital requirements. Although Basel II was made public in 2004, but as was observed in the previous section, was not implemented in that year, the period from 2005 to 2015 is considered given that the information is complete for 71 large banks whose shares are quoted on the stock market. In the figure 2, the evolution of the equity over assets indicator is seen as a proxy indicator of regulatory capital.

In this period, equity to asset ratios decreased from 9.8 to 8.6%, with a specific increase in 2009 after the global crisis in which the banks reduced their asset levels. In other words, at the regional level, in this period the large banks decreased their equity to assets ratio by 1.2 percentage points with a downward trend towards the 8% limit.

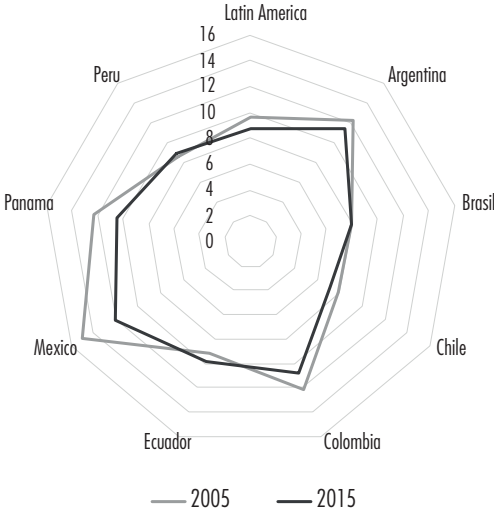
When disaggregated by countries for which information is available, it can be seen that this downward trend has some individual quirks, as observed in the radar or spider figure 3.

Figure 2. Evolution of equity over assets of the largest banks in Latin America 2005-2015 (percentage)



Source: own elaboration based on Bloomberg (2017) and Banking Superintendencies of Latin American Countries.

Figure 3. Change of equity over assets of large banks by countries 2005-2015 (percentage)



Source: own elaboration based on Bloomberg (2017) and Banking Superintendencies of Latin American Countries.

Between 2005 and 2015, the equity relationship was maintained in Brazil, in Ecuador and Peru it increased, while in all other countries it was reduced. In the case of Ecuador, the increase of 0.7% is due to the fact that the country

experienced a serious banking crisis in 1999, in which some financial institutions became bankrupt, and those that survived had to be strengthened in order to recover confidence in the banking system. In Mexico, the country where the equity ratio declined the most, the presence of foreign banks can be considered in the late nineties or 2000 (Turrent, 2007). Ibarra (2012, p. 333) calls it the “foreignization of Mexican banks”. For Moreno-Brid and Ros (2009, p. 248) these banks are “highly profitable [and] their activities concentrate much more on consumer lending and financial commissions than on lending to private businesses”.

Fullenkamp and Rochon (2014) mention that regulations have become too complex to be effective, and propose not allowing the weighting of assets, that only ordinary shares be accepted as regulatory capital, and that this be defined bank by bank. To the extent that they are given the capacity to weight assets, banks have incentives to manage the information at their own convenience and reduce capital requirements. For example, in the report by the U.S. Senate on the manipulation of commodity prices, it was found that JP Morgan had almost 12% of its class 1 capital in commodities, when it had informed the regulator that it had 4.5% (Levin *et al.*, 2014). To verify this type of information, on-site supervision is required, which cannot always be carried out due to its high cost.

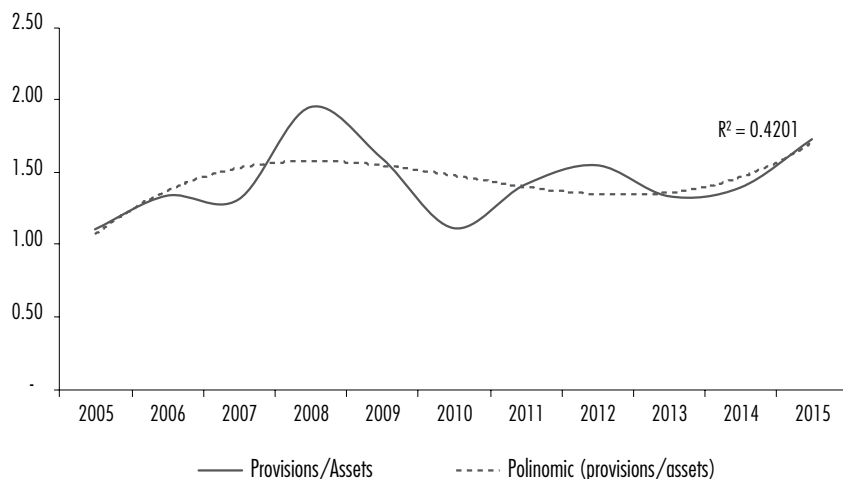
Provisions

The Basel principles (CSBB, 2012) introduced a prudent regulatory framework that, in addition to defining capital requirements, require banks to apply provisions for credit losses (PCL). These are resources that the banks set aside from current income in anticipation of future losses: they are considered as supplementary capital that serves as regulatory capital and provide institutional solvency. Those expected losses can come from risky investments, credits that are in default or are not paid, accounts receivable or goods in payment. Should the losses not occur, provisions can be reversed. As already mentioned, the estimation of provisions requires the use of probabilities in the anticipation of losses, which clearly has a subjective component.

Provisions are related to regulatory capital requirements, because they allow compliance and at the same time have the previously mentioned advantage of reducing taxes as they lower revenues and, therefore, profits.

In figure 4, the indicator of provisions on assets is analyzed as a method of understanding what took place in the 2005-2015 period.

Figure 4. Evolution of provisions on assets of large Latin American banks 2005-2015 (percentage)



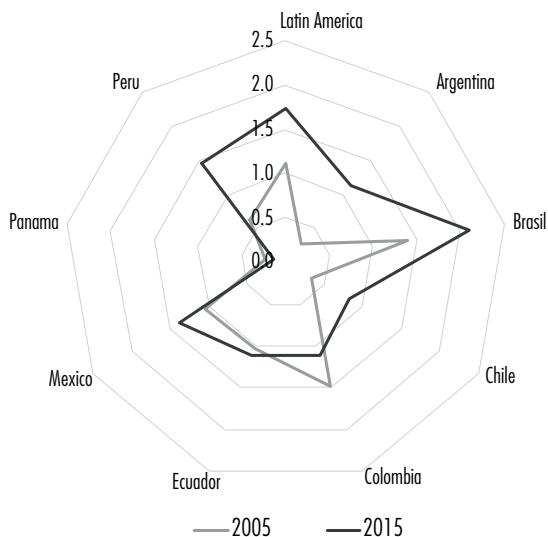
Source: own elaboration based on Bloomberg (2017) and Banking Superintendencies of Latin American Countries.

Figure 4 shows an increase in the ratio of provisions on assets of 0.6 percentage points, with a significant increase in the year of the 2008 crisis, and reductions in 2010 and 2013. This indicator has a cyclical, non-linear behavior and, consequently, a polynomial curve expressed in the broken line; it has an adjustment of 0.42 measured by the R^2 , as it is influenced by the economic situation of the countries.

Figure 5 is an analysis of the provisions divided by assets indicator by country is shown on a radar chart.

In almost all the countries of the region the provisions on assets increased, except in Colombia, which is the only country that requires adoption of the new Basel III capital requirements, and whose provisions were reduced by 0.4 percentage points. In Panama and Ecuador, the relationship remains almost the same in the analyzed period, in the rest of the region's countries the Basel principles that recognize the need for provisions apply. It is worth noting that according to the new principles, supervisors require banks to have provisions, regardless of whether banks are over provisioning or no. As large banks have credit estimation models, they can exaggerate future losses, increase provision expenses, reduce utilities, and pay less tax. In other words, except in Colombia, countries may be using the provisions to comply with the capital requirement, and without them the regulatory capital ratio would be lower.

Figure 5. Change in provisions on assets of large banks by country between 2005 and 2015 (percentage)



Source: own elaboration based on Bloomberg (2017) and Banking Superintendencies of Latin American Countries.

On the subject of the atomization of the regulatory agenda noted in the previous section, one of the areas that should also be controlled is the use of provisions when the credits are insured, in which case, the portfolio is recovered through the charge to the insurer.

5. CONCLUSIONS

This article has reviewed the institutional and regulatory changes that received little attention after the 2008 crisis, as in their areas of application they have been accepted as international best practices. However, the article demonstrates, an *à la carte* implementation of the rules and principles in financial and accounting matters.

These changes, in relation to IFFS, reveal a little-known globalization's architecture that legitimizes standards-defining institutions under the poly centrality of the FSB, whose rules favor large banks that can over value their risks and intangible assets, and whose justification is financial stability.

In Latin America, the implementation of banking rules is low, but the image generated is that the issue is under control, when in reality the big

banks actually reduced their equity ratios. This causes some financial enablers to hide under the umbrella of the Basel regulations or principles, which do not cover substantive issues related to IFFs, such as offshore financial facilitators and other specific regulation is excluded from Basel.

Peru implemented Basel II in 2015, and before that happened, the country's largest banks had reduced their capital levels from 9.5 to 8.9% between 2012 and 2015. With regard to Colombia, this was the only country in the region where the definition of regulatory capital was modified in 2013, requiring greater capital requirements. Between 2012 and 2015, the equity over assets indicator rose, from 10.5 to 10.8%, although still lower than in 2005, when it reached 12.2%. However, Colombia was the only country that did not see an increase in its provisions on assets. Mexico, with the largest presence of foreign banks in the region, is the country that has seen the greatest reduction in the equity ratio of the big banks. Since foreign banks mimic international practices, we can say that its presence has not the desirable effects of foreign capital and its associated merits.

Finally, the hypothesis of this article is verified by the new banking rules, that due to their complexity empower financial institutions by permitting them to design their own methodologies, thus turning them into *à la carte* standards. Except for Ecuador, for the reasons noted, there was a reduction in the equity ratio in the countries in the region, and except for Colombia, provisions increased in all countries. These types of behaviors, that anticipate the application of regulations, weaken the soundness of financial systems, and facilitate the existence of the IFFs that are not considered in the Basel regulatory framework. This article shows how financial markets can ignore regulations and consolidate structural power in favor of a little-known underground and obscure globalization.

Basel III has the merit to include some macroprudential measures that are not considered such as capital buffers, even more necessary in these current circumstances.

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