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THE IMPACT OF COVID-19 ON THE IMPLEMENTATION OF BASEL (III) STANDARDS IN COMMERCIAL BANKS: CASE OF ALGERIA

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ABSTRACT: This study aims to identify the reality of implementation of Basel (III) standards in the world in general and in Algeria in particular, in addition to identify the impact of recent developments on the timetable set by the Basel Committee for the implementation of this accord.
The results show that Basel (III) standards were due to come into force in January 2022, but they will be delayed by a further year, giving a new implementation date of 1st January 2023, in order to provide banks with additional operational capacity to be able to respond to the new financial stability requirements resulting from the impact of the COVID-19 pandemic. As of Algerian banks, they have not been affected by the new timetable because they have applied only a small part of the accord.

Keywords: Basel (III); Basel (III) implementation; Covid-19; Algerian Banks.

JEL Classification: G21; G29.

1. INTRODUCTION:

Banks are exposed to many risks associated with the nature of their work, and monetary authorities in all countries seek to develop the capacities of their banks to confront these risks. Therefore, the Basel Committee on banking supervision (BCBS) met in Basel, Switzerland and issued the first Basel accord for Capital Adequacy in Banks in 1988.

In 2004, the committee issued the second accord, called the Revised Capital Framework, this accord was served as an update of the original accord (Basel I). However, in the wake of the Lehman Brothers collapse of 2008 and the ensuing financial crisis, the BCBS decided to

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update and strengthen the Accords. In 2010, the committee issued the Basel (III) capital adequacy accord.

Basel (III) standards were due to come into force in January 2022, but with COVID-19 pandemic that has pushed the world into a recession, the implementation of these standards may be affected.

Also, the monetary authorities in Algeria endeavor to implement the standards of Basel (III) in order to keep pace with global banking developments. In this regard, we have raised the following problematic:

How does Covid-19 affect the implementation of Basel (III) standards in commercial banks in general and in Algerian banks in particular?

In order to answer the previous problem we divided the research into four main sections:

- Introduction to Basel (I), (II) and (2,5) accord.
- Basel (III) accord and its implementation.
- COVID -19 and the implementation of Basel (III).
- The reality of implementation of Basel (III) standards in Algerian banks.

2. INTRODUCTION TO BASEL (I), (II) AND (2,5) ACCORD:

2.1. Basel (I) accord:

Basel (I) accord is the first international accord on risk-based capital that was signed at the "Bank for International Settlements" in Basel, Switzerland, in July 1988, by representatives of central banks from the G-10 countries (El Tiby, 2011, p. 101). Basel (I) was motivated by two interacting reasons, the first was the risks resulting from low capital levels of internationally active banks and their impact on the stability of the global financial system, and the second reason was the unfair competition of banks subject to low capital requirements (Tarullo, 2008, p. 45).

This accord focused almost entirely on credit risk, which requires internationally active banks in the G10 countries to hold capital for credit equal to, at least, 8% of weighted assets (Bessis, 2011). In addition, banks' assets are categorized into one of the five classes and an appropriate risk weight assigned to them, which was fixed at 0, 20, 50 or 100% (Goel, 2018, p. 52).

In 1996, the BCBS amended Basel (1) and included market risk in calculating the capital adequacy ratio. This amendment was distinguished by allowing banks, subject to strict quantitative criteria, to use internal models to measure their market risk capital requirements (Akkizidis & Kalyvas, 2018, p. 12).

2.2. Basel (II) accord:

In 2004, Basel (II) guidelines were published by Basel Committee on Banking Supervision (BCBS), which were considered to be the reformed versions of Basel (I) accord.

These guidelines were based on three pillars: Minimum capital requirements, Supervisory review process and Market discipline.

Pillar 1: "Minimum capital requirements": Basel (II) accord maintained the minimum capital adequacy ratio (8%), and also maintained the market risk regulations contained in the Basel Amendment of 1996. The changes to modify the definition of risk-weighted assets have two central elements (Coyle, 2004, p. 129):

- Major changes to the measurement and management of credit risk;
- The introduction of an amount for operational risk when calculating the bank's capital adequacy ratio.

To calculate the risk-weighted assets for credit risk we have 3 methods: the standardized approach, foundation internal rating-based (IRB) approach and advanced (IRB) approach, and to calculate the amount for operational risk we also have (3) methods: Basic indicator approach, Standardized approach and Advanced measurement approaches.

Pillar 2: "Supervisory review process": Supervisory review allows supervisors to evaluate the bank's ability to assess its own risks and ensure that its operations are robust (Brunner, et al., 2008, p. 5). Moreover, banks are expected to enhance their internal processes to set targets for capital commensurate with the nature of risk and supervision processes for each bank. These processes will also be subject to more stringent review by the central bank of each country (Padmalatha & Justin, 2010, p. 315).

This pillar is based on (4) principles: the first principle states that banks should assess the adequacy of their total capital and maintain its levels (Kern, 2019, p. 156). Whereas the second principle states that banks and financial institutions must put in place an appropriate system that ensures the adequacy of regulatory capital, taking into account the risk profile, as well as the future plans of business (بونيهي، 2016، p. 12). Principle (3) states that banks should operate above the minimum "regulatory capital ratios", and supervisors should be able to require banks to maintain capital in excess of the minimum set by the Basel Committee (Kern, 2019, p. 158). Finally, principle (4) states that supervisors must intervene early to prevent "regulatory capital ratio" from declining (D. Morris, 2008, p. 3).

Pillar 3: "Market discipline": Basel (II) accord aims to improve financial transparency to enable investors and market participants to better evaluate banks. The accord contains disclosure requirements that banks must follow, and the disclosure will take place at least semi-annually, including: capital structure, risks and their assessment (credit risk, market risk and operational risk), explanation of the system Classification, details of industry sectors, maturity dates, doubtful debt provisions, organizational structure of credit risk management functions, their definitions, calculation of the probability of default for each rated segment, methods of reducing risks and handling collateral... (بونيهي، 2016، p. 13), and if the banks fail to comply with these requirements, they will not be eligible to use internal measurement models (Jorion, 2007, p. 645).*

2.3. Basel (2,5) accord:

The amendments to the Basel (II) framework (2009) included changes in the securitization area and, more specifically, the resecuritisation processes in Pillar 1 (minimum capital requirements). Banks should apply higher risk weights to resecuritisation exposures to better reflect the risks inherent in these products (BCBS, 2009).

The Supplementary Pillar (2) guidance (Supervisory Review Process) addresses many of the weaknesses that emerged during the global financial crisis that began in 2007. The Areas covered include (Hong Kong Institute of Bankers, 2018, p. 68): Corporate governance and risk management, the risk of off-balance sheet exposures, securitization activities, managing risk concentrations, stress testing and accounting standards ...etc.

The Pillar 3 (market discipline) requirements have been strengthened in several key areas, including (BCBS, 2009): securitisation exposures in the trading book, sponsorship of off-balance sheet vehicles, resecuritisation exposures, and pipeline and warehousing risks with regard to securitisation exposures.

3. BASEL (III) ACCORD AND ITS IMPLEMENTATION:

In December 2010, Basel (III) guidelines were released by the Basel Committee on Banking Supervision. These guidelines were introduced in response to the financial crisis of 2008.

3.1. The Basel (III) capital adequacy accord:

The Basel (III) Accord aims to enhance the banking system's ability to absorb economic and financial shocks by focusing on four vital parameters: capital, financial leverage, capital buffers and liquidity.

3.1.1. A new definition of capital:

Under the new accord, banks are required to hold a higher percentage of common equity in their regulatory capital (Chatzigakis, 2016, p. 148). The definition of capital is simplified; tier 1 capital consists of common equity plus retained earnings and some equity-like debt instruments. For Tier 2 Capital, the committee set more stringent criteria, the minimum maturity is set for a period of five years and there are no incentives to redeem. With tier 3 capital being abolished, the core capital 1 increases from 2 per cent to 4.5 per cent (Blundell-Wignall & Atkinson, 2010, p. 7).

3.1.2. Introduction of a “global leverage ratio”:

One of the most important features of the banking system during the financial crisis of 2008 was the accumulation of excessive leverage on- and off-balance sheet. Therefore, the Basel Committee has introduced a leverage ratio that aims to (Eubanks, 2010, p. 7):

– Restricting lending in the banking sector, which helps mitigate the risk of destabilising the financial and economic system as a whole;

- Providing additional guarantees against model risk and measurement error by introducing a simple, transparent and independent measure of risk.

3.1.3. The "capital conservation" and "countercyclical capital buffers":

The Capital Conservation Buffer is "a capital buffer introduced by Basel III to ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred" (Occhino, 2018). Banks are required to maintain 2.5% above the minimum regulatory capital requirement as a "Capital Conservation Buffer", consisting only of regular tier 1 capital (Burra, et al., 2015).

The "Countercyclical Capital Buffer" is an additional capital buffer varies from 0% to 2.5% at regulators' discretion in each country. It was introduced by the Committee under Basel (III) to maintain the stability of the banking sector in periods of excess credit growth (Eubanks, 2010, p. 6).

3.1.4. A new liquidity requirement:

To complement the previous principles, the Basel Committee has further strengthened its liquidity framework by developing two minimum standards for funding liquidity (Gomes & Wilkins, 2013):

- The "Liquidity Coverage Ratio (LCR)": this ratio aims to enhance the bank's ability to face potential liquidity disruptions and to ensure that it obtains sufficient unencumbered high quality liquid assets over a period of thirty (30) days.
- The "Net Stable Funding Ratio (NSFR)": this ratio measures the value of long-term sources of funds (more than one year) available to the bank compared to investments in assets, and it aims to reduce the excessive reliance on wholesale short-term funding during periods of liquidity booms in the market and to encourage better assessment of liquidity risk based on the off-balance sheet items.

3.2. Basel (III) implementation:

The transition from the implementation of Basel (II) to Basel (III) standards is designed in stages over a prescribed period, from 01/01/2013 to 01/01/2019, as it requires the member countries of the Basel Committee to start implementing the agreement as of January 01, 2013 (the transitional arrangements are presented in table 1).

Table N° 01: Implementation timeline for" Minimum Capital Requirements" under Basel (III)

(All dates are as of January 1st)

Type of capital	Year							
	2011-2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Minimum Tier 1 (%)		4,5	5,5	6,0	6,0	6,0	6,0	6,0
Minimum Common Equity (%)		3,5	4,0	4,5	4,5	4,5	4,5	4,5
Minimum Conservation Buffer (%)					0,625	1,25	1,875	2,5

Minimum Total Capital + Conservation Buffer (%)		8,0	8,0	8,0	8,625	9,25	9,875	10,5

Source: Eubanks, Walter W. The status of the Basel III capital adequacy accord, CRS Report for Congress, Congressional Research Service, 2010, p 9.

The table above (table 1) shows that minimum Tier 1 and common equity requirement were phased in between January 1, 2013, and January 1, 2015. On January 1, 2013, the minimum common equity requirement was raised from the current 2% to 3,5%. The tier 1 capital requirement increased from 4% to 4,5 %. The capital conservation buffer of 2,5% was phased in between January 1, 2016, and the end of 2018.

In December 2017, the Basel Committee released new reforms complementary to the Basel (III) agreement issued in 2010, and the new reforms seek to restore credibility in calculating risk-weighted assets (RWAs) and improve banks' comparability of capital ratios.

The reforms endorsed by the Committee in 2017 are summarised in table (2).

Table N° 02: The transitional arrangement for implementing Basel (III) post-crisis reforms

(All dates are as of January 1st)

Revision	Implementation date
Revised standardised approach for credit risk	2022
Revised international rating-based IRB framework	2022
Revised credit valuation adjustment framework	2022
Revised operational risk framework	2022
Revised market risk framework	2022*
Leverage ratio	Existing exposure definition**: 2018 Revised exposure definition: 2022 G-SIB buffer: 2022
Output floor	2022: 50%; 2023: 55%; 2024: 60%; 2025: 65%; 2026: 70%; 2027: 72,5%

***** This will include both the implementation and regulatory reporting date for the revised market risk framework published in January 2016.

** Based on the January 2014 definition of the leverage ratio exposure measure. Jurisdictions are free to apply the revised definition of the exposure measure before 1 January 2022.

Source: BCBS, High-level summary of Basel III reforms, Bank for International Settlements, Switzerland, 2017, p 12.

The above table (table 2) shows the reforms endorsed by the Basel Committee as follows (BCBS, 2017):

- Revisions to the standardised approach for credit risk, in addition to the internal ratings-based approach, where the use of the most advanced internally modelled approaches for low-default portfolios will be limited;

- Revisions to Credit Valuation Adjustment (CVA) framework in order to enhance its sensitivity to risk. The internally modelled approach will also be removed and a revised Standardized Approach will be introduced;
- The Advanced Measurement Approaches (AMA) for calculating the capital requirements for operational risk, In addition of the current three standardized approaches will be replaced by one risk-sensitive standardized approach to be used by all banks.
- Revisions to the measurement of the leverage ratio and a leverage ratio buffer for global systemically important banks (G-SIBs); and
- An aggregate output floor, which will ensure that banks' risk-weighted assets (RWAs) generated by internal models are no lower than 72.5% of RWAs as calculated by the Basel III framework's standardised approaches.

In December 2018, the Basel Committee on Banking Supervision published updated Pillar 3 disclosure requirements. These requirements complete the updates published in March 2017 about Pillar (3) framework. The disclosure requirements in these updates cover three elements (BCBS, 2018):

- Revisions and additions to Pillar (3) framework under Basel (III) regulatory reforms in December 2017;
- New requirements of disclosure on asset encumbrance;
- New requirements of disclosure on capital distribution constraints.

In January 2019, the Basel Committee's oversight body endorsed a set of revisions to the market risk framework (BCBS, 2019), which will take effect as of 1 January 2022, concurrent with the implementation of the Basel III reforms endorsed by the committee in December 2017 (as shown in table 2).

4. COVID-19 AND THE IMPLEMENTATION OF BASEL (III) STANDARDS:

The Basel Committee's oversight body has endorsed a set of measures to provide additional operational capacity for banks and supervisors to respond to the immediate financial stability priorities resulting from the impact of the corona virus disease (Covid-19) on the global banking system, so that the banks and supervisors will be able to commit their full resources to respond to the impact of Covid-19. This includes providing critical services to the real economy and ensuring that the banking system remains financially and operationally resilient.

The measures and changes endorsed by the Governors and Heads of Supervision (GHOS) to the implementation timeline of the outstanding Basel III standards are presented in table (3).

Table N° 03: The measures and changes endorsed by the (GHOS) to the implementation timeline of the outstanding Basel III standards (27/03/2020)

standard	Original implementation date	Revised implementation date
Revised leverage ratio framework and G-SIB buffer	01/01/2022	01/01/2023
Revised standardised approach for credit risk	01/01/2022	01/01/2023
Revised internal ratings-based (IRB) approach for credit risk	01/01/2022	01/01/2023
Revised operational risk framework	01/01/2022	01/01/2023
Revised credit valuation adjustment (CVA) framework	01/01/2022	01/01/2023
Revised market risk framework	01/01/2022	01/01/2023
Output floor	01/01/2022; transitional arrangements to 01/01/2027	01/01/2023; transitional arrangements to 01/01/2028
Revised Pillar 3 disclosure framework	01/01/2022	01/01/2023

Source: BIS, Governors and Heads of Supervision announce deferral of Basel III implementation to increase operational capacity of banks and supervisors to respond to Covid-19, 2017, viewed in 07/04/2020, https://www.bis.org/press/p200327.htm

The above table (table 3) shows the measures endorsed by the (GHOS) to the implementation timeline of the outstanding Basel (III) standards as follows:

- The implementation date of the Basel (III) standards finalised in December 2017 (as shown in table 2) has been deferred by one year to 1 January 2023. The accompanying transitional arrangements for the output floor have also been extended by one year to 1 January 2028.
- The implementation date of the revised market risk framework finalised in January 2019 (As already mentioned in section 3) has been deferred by one year to 1 January 2023.
- The implementation date of the updated Pillar (3) disclosure requirements finalised in December 2018 has been deferred by one year to 1 January 2023.

5. THE REALITY OF IMPLEMENTATION OF BASEL (III) STANDARDS IN ALGERIAN BANKS:

5.1. The reality of implementation of Basel (II) and (2,5) in Algeria:

Despite the efforts made by the monetary authorities to implement the standards of the Basel (II) accord in Algerian banks, the latter knew a clear delay in adhering to these requirements, however, the Regulation No. (14-01) issued on February 16th, 2014, relating to solvency ratios applicable to banks and financial institutions has allowed banks to fully implemented the standards of Basel (II), as for Basel (2,5) standards, Algerian banks have not applied any of them yet.

5.2. Algerian banks under the decisions of Basel (III) standards:

There are currently no regulations or instructions indicate the calculation of capital adequacy ratio in a manner completely similar to what was mentioned in Basel (III) accord. However, it should be noted that Regulation No. (14-01) have stipulated in Articles (2, 3 and 4) that "banks and financial institutions shall be compelled to comply at all times on individual or consolidated basis, a minimum solvency ratio of 9,5% between on the one hand the total of their regulatory equity capital and on the other hand the sum of weighted operational risk, market risk and credit risk". In addition, "the core capital shall cover at least 7% of operational, market and credit risks". As well as "a safety cushion consisting of core capital and covering 2, 5% of weighted risks" as of October 1, 2014.

Thus, this regulation allowed banks operating in Algeria to apply a small part of the standards contained in the Basel (III) accord, namely, the solvency ratio and the capital conservation buffer. As for the liquidity coverage ratio and the net stable funding ratio, they have not been implemented or addressed yet in the prudential regulation of Algerian banks. The Bank of Algeria issued the Regulation No. (11-04) on May 24, 2011, which includes the definition, measurement, management and control of liquidity risk, and required banks to set a liquidity ratio equal to at least 100% in the short term, and in order to clarify the components of the ratio, the Bank of Algeria issued the Instruction N° (07-11) on December 21, 2011, which includes the liquidity ratio of banks and financial institutions, and the Regulation N° (08-11) of November 28, 2011 related to internal monitoring of banks and financial institutions, and there is no mention in these two regulations indicating the formation of the aforementioned indicators according to what is stated in Basel (III) accord, although the two regulations were issued after the publication of the final version of the accord.

With regard to the countercyclical capital buffer and the leverage ratio, these ratios have not yet been implemented in banks operating in Algeria, nor has any draft law been issued regarding their implementation.

6. CONCLUSION :

The Basel committee has introduced a number of fundamental reforms to the international regulatory framework through Basel (III) accord in order to address the failures in the banking sector revealed by the crisis.

This accord put forward a set of criteria that aimed at increasing the quality, cohesion and transparency of the capital base to strengthen the banking sector's ability to deal with economic and financial pressures and improve risk management. This accord also included the leverage ratio that is intended to constrain leverage in the banking sector. In addition to standards for minimum levels of liquidity requirements in banks in order to ensure that banks obtain enough liquid assets to face liquidity risk.

The Basel (III) standards were due to come into force in January 2022 (according to the 2017 reforms), but they will be delayed by a further year, giving a new implementation date of 1st January 2023, with transitional arrangements for the capital floor extended by one year to 1 January 2028 (instead of January 1st 2027), in order to provide banks and regulators with additional operational capacity to commit resources to respond to the global financial and economic impact caused by Covid-19 pandemic.
Algerian banks have implemented the requirements of Basel (II) since October 1st, 2014, after the issuance of Regulation n° 14-01 on February 16th, 2014, as for the Basel (III), they have implemented a small part of the standards contained in this accord, namely, the solvency ratio and the capital conservation buffer. This is why Algerian banks have not been affected by the financial impat of Covid- 19 on the implementation of Basel (III).

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