REVISIONS TO THE STANDARDISED APPROACH FOR CREDIT RISK: ARE THE PROPOSED DRIVERS APPLICABLE IN THE AMERICAS?

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Revisions to the Standardised Approach for Credit Risk: Are the proposed Drivers applicable in the Americas?

1. INTRODUCTION

From its organization, the Basel Committee on Banking Supervision (BCBS) sought to improve the quality of banking supervision through the recommendation of global standards to level the playing field of the banking industry. In 1988, it issued the Basel Accord,[1] which recommended the adoption of a minimum regulatory capital requirement for risk-weighted assets of 8%. However, it was evidenced that this standard was not sufficiently sensitive to risks. The latter represented an incentive for financial institutions to take greater risks since this action would not be accompanied by an increase in regulatory capital requirements.

In 2004, the BCBS issued the standards known as Basel II or the New Capital Accord,[2] which proposed various methods for calculating the regulatory capital for credit risk, such as the Standardized (SA) and Internal Rating Based (IRB) approaches. Nevertheless, provided the IRB approaches have not proven to be the most effective, the current trend is to prioritize the use of simpler approaches while considering the importance of an appropriate balance between simplicity and sensitivity to risk.

The financial crisis of 2008, the most significant of recent times, revealed important weaknesses in the global financial system. Thus, the BCBS recommended a series of standards known as Basel III to improve the supervisory framework. In this context, the BCBS has reviewed the standardized approach for credit risk,[3] with the objectives to: improve risk sensitivity; decrease dependence on external risk ratings; reduce national discretion; strengthen the links between the standardised and the internal ratings-based approaches and; enhance comparability between banks capital requirements.

In October 2010, the Financial Stability Board (FSB) expressed its concern on external ratings when it published a set of principles to reduce their use.[4]The FSB was worried about the mechanical use of external ratings by market participants, affecting due diligence processes, and appropriate risk management by lenders and investors.

Thus, in the revised proposal of the Standardised Approach, the reliance on external risk ratings is reduced and replaced by drivers that seek to improve risk sensitivity through proper weighting of each type of exposure according to a given driver. However, the BCBS said that considering both the challenge of identifying risk drivers for global application as well as the local particularities of some exposures, this proposal is at an early stage of development and under revision.

Due to the importance of the Standardised Approach in the Americas and the impact that its revision may have on banks in the region, in June 2015, the Association organized the 2nd High-Level Technical Meeting (HLTM) in Lima, Peru. At this meeting, bank supervisors and officials of the Bank for

[1] Bank of International Settlements, “International convergence of capital measurement and capital standards”, 1988

[2] Bank of International Settlements, “Basel II: International convergence of capital measurement and capital standards: a revised framework - comprehensive version”. The first version of this document was published in June 2004, while the final version in June 2006.

[3] Bank of International Settlements, “Revisions to the Standardised Approach for credit risk”, 2014

[4] Financial Stability Institute, “Principles for Reducing Reliance on CRA Ratings”, October 2010.

International Settlements (BIS) discussed the regional adequacy and applicability of the drivers proposed in the revised Standardised Approach.

The conclusion of the HLTM was that due to the peculiarities of the financial markets in the Americas, it was necessary to have a better understanding of the views of bank supervisors on the applicability of the revised Standardised Approach. Thus, the Association of Supervisors of Banks of the Americas (ASBA), carried out a survey aimed at:

(i) Identifying the credit types and categories in the loan portfolios in the Americas and their correspondence with the BCBS classification; and
(ii) Identifying more appropriate risk drivers to calculate risk-weighted assets in the context of the proposed modifications to the Standardised Approach.

This briefing presents the results of the survey mentioned above, which was responded by eighteen[5] countries. The conclusions of the Association's analysis was submitted to the BCBS to inform its revision process of the Standardised Approach.

2. MAIN FINDINGS

2.1) Composition of Credit Portfolio in the Americas and their Correspondence with Basel

Most jurisdictions do not have credit categories only types of credits. However, among those with categories, the main categories are wholesale and retail.

The typical structure of portfolios in the region is made up of loans to enterprises, consumer loans, and mortgage loans for housing.

Some countries in the region disaggregated loans to companies according to their size. In this regard, a peculiarity of the region is that microcredit is considered as a specific type, which is in line with the importance of micro enterprises in the region.[6] Other criteria for determining the types of loans are economic sectors and differentiation between loans to the financial and the non-financial sectors.

Thus, it may be concluded that countries in the region are not in line with the credit exposures defined by the BCBS,[7] which affects the comparability between jurisdictions and any effort to carry stress tests at a regional level.

2.2) Adequacy and Applicability of Drivers and Treatments proposed by Basel for Risk Weighting of Credit Exposures in the Americas.

The revised Standardised Approach for Credit Risk proposes drivers and treatments for each type of credit exposure. The following sections present the view of regional supervisors on the adequacy and applicability of these drivers and treatments.

[5] Countries that answered the survey were Belize, Bolivia, Brazil, Chile, Ecuador, Guatemala, Haiti, Honduras, Cayman Islands, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Turks and Caicos, Uruguay and Venezuela.
[6] Eight (8) countries in the region have microcredit as a specific type of credit: Bolivia, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Paraguay and Peru
[7] In "Revisions to the Standardised Approach for credit risk", Bank of International Settlements, 2014, credit exposure types are referred to Banks, Corporates, Specialized Lending, Retail, Residencial Real Estate and Commercial Real Estate.

2.2.1) Exposures to Banks

In the current proposal of the Standardised Approach, the weighting of exposures to banks is determined according to the sovereign risk or the risk rating of the entity. The revised proposal suggests establishing risk weights based on capital adequacy and asset quality, and proposes the following drivers:

i. Capital Adequacy: $\frac{Common\ Equity\ Tier\ 1\ (CET1)}{Risk\ Weighted\ Assets}$

ii. Asset Quality: $\frac{Non\ performing\ loans - Provisions}{Total\ Assets}$

In this regard, there is a divided opinion among supervisors in the region. 50% consider the suggested drivers to be inadequate to capture risks of these exposures.

Regarding the driver on Capital Adequacy, the calculation of Common Equity Tier 1 (CET1) may differ depending on whether Basel II or Basel III is being implemented. The latter may be due to differences in the treatment of deductions between each framework.

For the Asset Quality driver, a ratio based on Non-Performing Loans (NPL) lacks prediction capacity.[8] Therefore, it would not be an indicator that adequately captures the risk of the loan portfolio because it does not consider concepts such as renegotiated loans and off-balance sheet loans. In addition to being affected by the presence of loans with repayment only at maturity, it does not capture the effect of a rapidly growing portfolio either.

In addition to the drivers proposed by the BCBS, since they seem not to capture the total risk of exposures to banks, the region supervisors suggest the incorporation of the Leverage Ratio and the Liquidity Coverage Ratio (LCR), both proposed under Basel III.[9]

2.2.2) Exposures to Corporates (Senior Debt)

Currently, the weighting of corporate exposures relies on external risk ratings of corporate borrowers. To achieve a better risk sensitivity for such exposures, the BCBS proposes that risk weights be determined by the following drivers:

i. Revenue

ii. $\text{Leverage} = \frac{Total\ Assets}{Total\ Liabilities}$

As with exposures to banks, the region continues divided (50%) about the adequacy of the proposed drivers for corporate exposures.

[8] Indicators based on credit delinquencies are not early warning signals that contribute to prevent financial crises, according to Superintendency of Banks, Insurance and Pension Funds of Peru, “Indicadores alternativos de riesgo de crédito en el Perú: matrices de transición crediticia condicionadas al ciclo económico”, 2013, Aparicio, C., Gutiérrez, J., Jaramillo, M. y Moreno H. Approved by Luy, M.

[9] Bank of International Settlements, “Basel III leverage ratio framework and disclosure requirements”, 2014.
Bank of International Settlements, “Basel III: International framework for liquidity risk measurement, standards and monitoring”, 2013.

Firstly, the revenue driver was questioned because it is an absolute terms measure. This may result in higher capital requirements for financing small companies, which would have a significant impact on the region. Secondly, the lack of reliable information on revenue volumes could become a challenge at time of implementing the driver.

To overcome the annotated limitations associated with using the Revenue driver, alternative drivers related to the generation of cash flow and profitability were suggested, such as Earnings Before Income, Taxes, Depreciation and Amortization (EBITDA),[10] Return On Assets (ROA) and Return On Equity (ROE). The last two are relative measures of revenue in contrast to revenue volumes.

Regarding the Leverage driver, it is noted that leverage levels differ between economic sectors. For example, the construction sector, which demands higher levels of financing usually has a higher leverage than other sectors that require less working capital, as the services sector[11]. Also, as in the previous case, there is a concern about the availability of reliable information on the level of corporate leverage.

Alternatively, the region's supervisors suggest considering other indicators of leverage, such as the level of financial debt and debt service. The latter has the advantage of being closely related to the flow of payments than to the stock of debt.

Also, since the proposed drivers many not fully capture the risk sensitivity of such exposures, the region supervisors suggest the use of alternative indicators such as receivables turnover and inventory turnover ratio, associated with the management of the company.

2.2.3) Specialised Lending

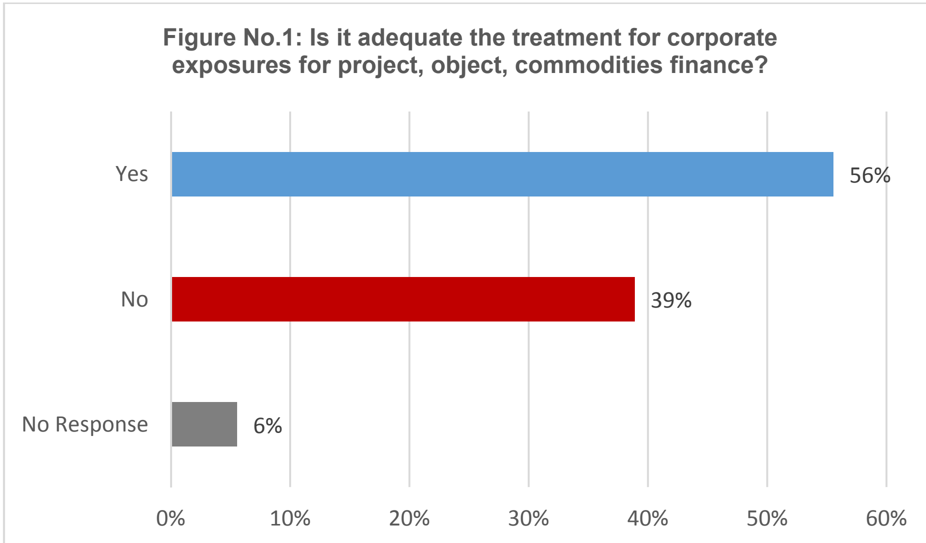
Empirical evidence suggests that specialised loans usually have a higher levels of risk and losses than other types of corporate loans[12]. In this sense, the revised Standardised Approach proposes a differentiated treatment for these exposures, which is in line with the distinction made in the IRB approach for this type of credits.

For this type of exposure, the BCBS envisages two types of financing:

i) Project, Object and Commodities Finance

The BCBS's proposal considers the higher value of the counterparty weighting and a fixed weighting of 120%, this treatment is considered adequate in the opinion of most supervisors in the region. (see Figure No. 1)

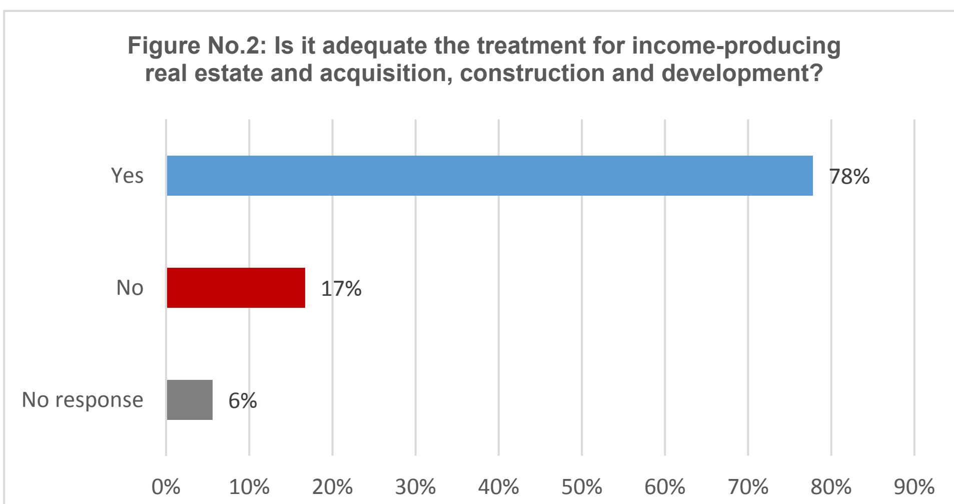
[10] EBIT is one of the variables that affect corporate performance according to Altman, R., "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy", 1968.
[11] According to "Comportamiento de las 1,000 empresas más grandes del sector real" published by Superintendency of Societies of Colombia, at 2013, financial leverage in the construction sector amounted to 2.13 times, while the service sector was 1.43 times.
[12] Bank of International Settlements, "Revisions to the Standardised Approach for credit risk", 2014



Nevertheless, an alternative derived from the survey is to establish a fixed weighting, given that the proposal is complex. Also, an alternate driver is the Cost / Benefit ratio of the project. However, it has the difficulty of determining flows and the discount rate thereof.

ii) Income-producing Real Estate and Acquisition, Construction and Development

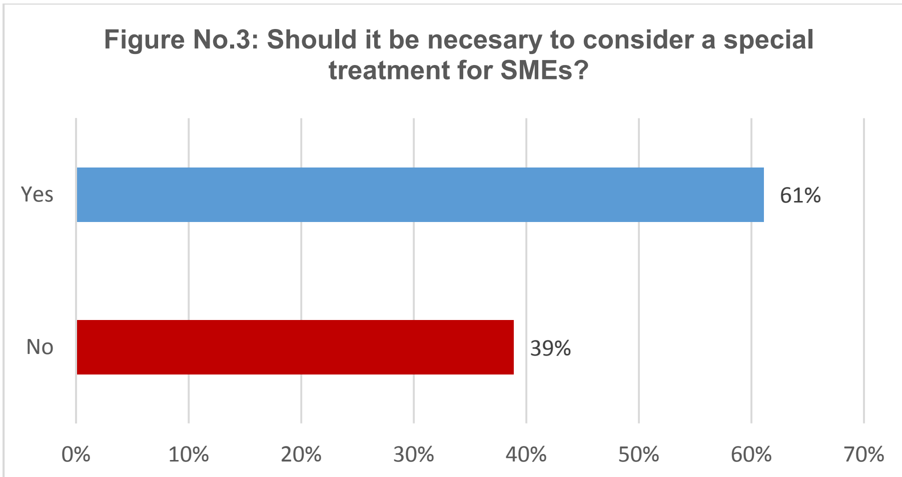
The BCBS considers the higher value between the counterparty weighting and a fixed weighting of 150%. The majority (78%) of supervisors considers that this proposal is suitable (see Figure No. 2).



Although the majority of respondents find the driver mentioned above adequate, establishing a fixed weighting treatment or consider the degree of progress of the project, reducing the weights as these projects generate income, are suggested as viable alternatives.

2.2.4) Exposures to Small and Medium Enterprises (SMEs)

The BCBS recognizes the heterogeneity of financing to enterprises[13]. For this reason and considering the importance of SMEs in the region, most supervisors agreed that a differentiated treatment for SMEs is needed. (see Figure No. 3).



The survey suggests using a simple method such as a fixed weighting, given that for these enterprises preparing financial statements is costly (in relative terms) and their reliability may be low.

Other drivers are suggested, such as the level of debt in the financial system, types of collateral, seniority of the company and the business relationship with the bank. These are considered indicators that appropriately capture the risk sensitivity for these exposures, given the particular characteristics of this sector.

Finally, the importance of defining thresholds and criteria to identify companies as SMEs (i.e. sales volume, personnel number, or type legal entity), was highlighted.

2.2.5) Retail Exposures

Current treatment envisages a fixed weight of 75% for exposures that meet the criteria to be considered in this category. Although the BCBS has decided to maintain this weighting, in its next Quantitative Impact Study (QIS) the following drivers will be assessed:

i. Length of relationship with the client.

ii. Debt Service Coverage (DSC) ratio.

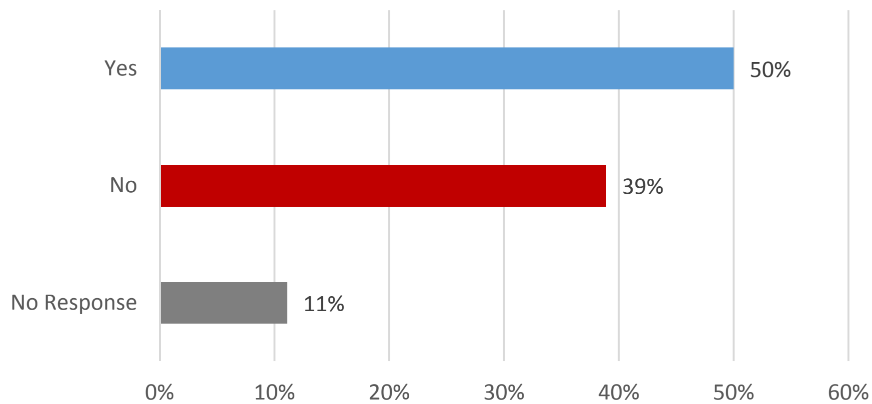
iii. Maturity.

iv. Secured and unsecured lending.

[13] Bank of International Settlements, “Revisions to the Standardised Approach for credit risk”, 2014

About half of the supervisors who participated in the survey consider that these drivers are adequate (see Figure No. 4). However, for greater risk sensitivity, it is recommended to disaggregate retail exposures by-products that differ in risk due to their nature. For example, in the case of Peru, there are different weights for revolving, non-revolving and payroll loans.[14]

Figure No.4: Are the proposed drivers for retail exposures adequate?



2.2.6) Residential Real Estate Exposures

According to the BCBS, a residential real estate exposure is defined as an exposure secured by a mortgage on a residential property, provided that it does not meet the criteria to be considered specialized lending.[15] The current treatment assigns a fixed weighting of 35%; however, such treatment would not be sufficiently sensitive to risk because, within these exposures, conditions differ.[16] Thus, the BCBS proposes weights ranging between 25% and 100% depending on the following drivers:

i. Loan-to-value (LTV) ratio, with valuation of property at origination.

ii. Debt Service Coverage (DSC) ratio, measured at origination.

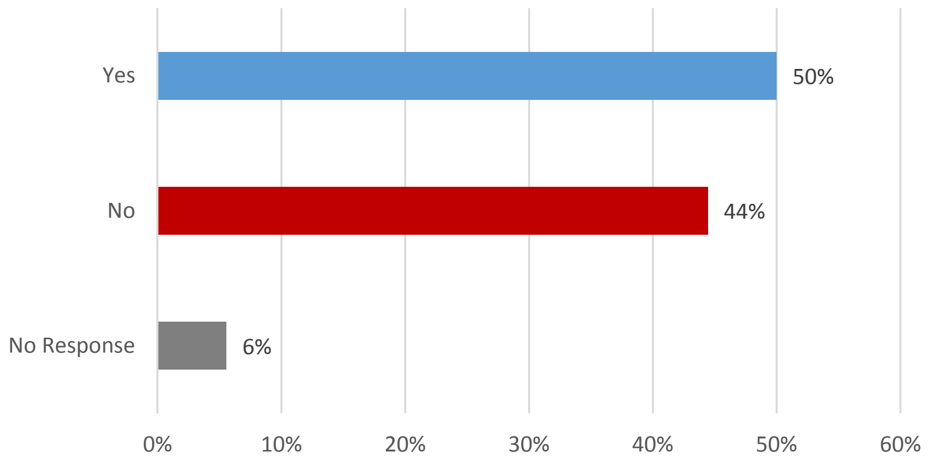
Half of the respondents consider the proposed drivers suitable. However, 44% think the opposite (see Figure No. 5) because the proposed indicators vary according to the economic cycle. Therefore, they should be updated periodically.

In the case of the DSC, since the borrower's income may be composed of different items (some of which are non-recurring) and measured in different bases (gross or net of taxes), it is important to define the mechanics of its calculation. Once again, the region's

[14] SBS, *"Reglamento para el Requerimiento de Patrimonio Efectivo por Riesgo de Crédito"*, approved by Resolution SBS N° 14354-2009 of October 30th, 2009
[15] Bank of International Settlements, "Revisions to the Standardised Approach for credit risk", 2014
[16] *Ibidem*

supervisors consider that the availability of information constitutes a signifgicant challenge for calculating these indicators.

Figure No.5: Are the proposed drivers for residential real estate exposures adequate?



A suggested driver is the historical past-due loans. Also, the term structure of interest rate is a recommended driver. If a loan has a variable interest rate, the probability of default may increase given higher market interest rates, being the riskiest scenario an inverted interest rate curve, where short-term rates are higher than long-term.[17]

2.2.7) Commercial Real Estate Exposures

These exposures are defined as those secured by a mortgage on a commercial property, which can not be considered as specialized lending.[18]

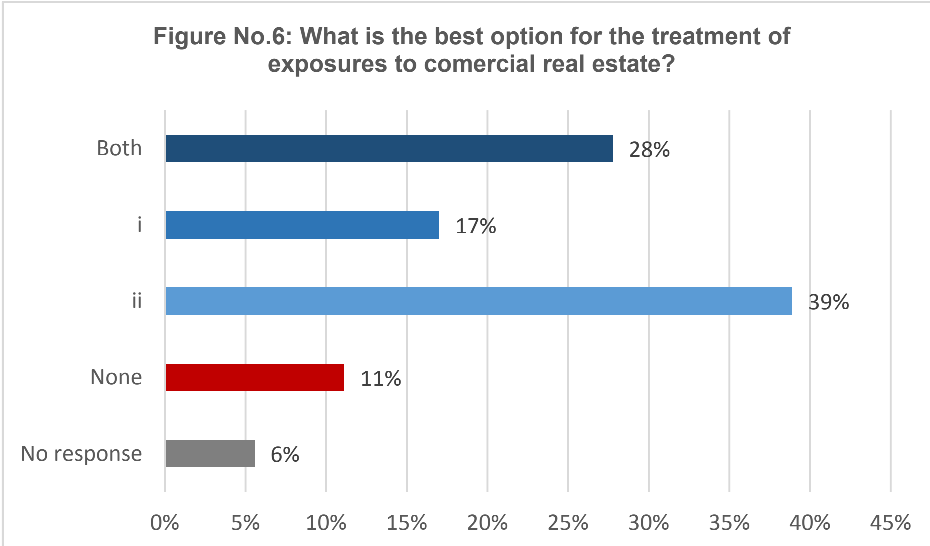
For such exposures, the current treatment is a weighting of 100% and can be reduced to 50% at national discretion. In the revised Standardized Approach, the BCBS suggests two options for its treatment:

i. Applying the risk weight of the counterparty, disregarding collateral or maintain national discretion.

ii. Enhancing requirements aligning with IRB or risk weighting based on LTV.

The preferred option by supervisors is (ii) (see Figure No. 6), while also an important percentage (28%) consider that both options are appropriate. It is worth noting that alternatively, a combination of (i) and (ii) is suggested.

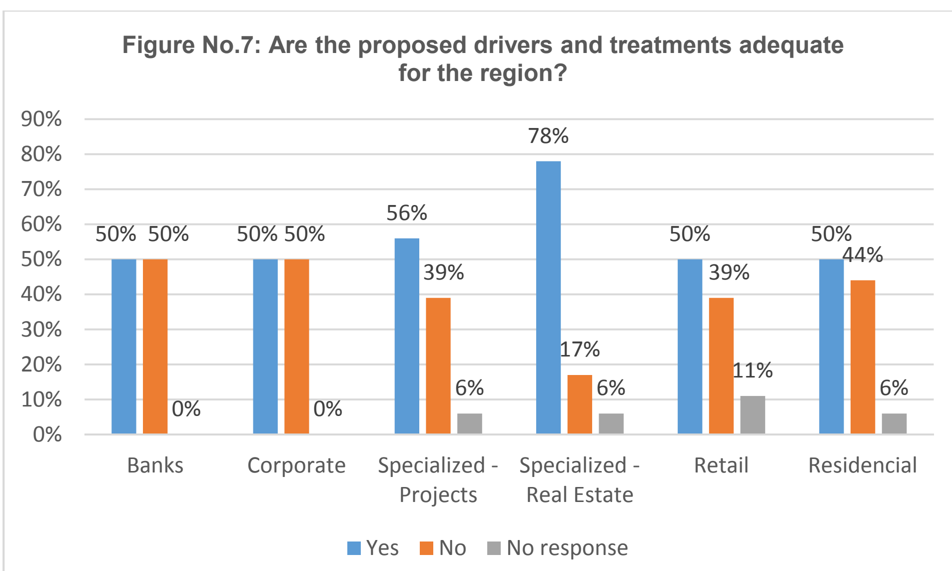
[17] According to Igan, D. and Pinheiro, *M.*, “Exposure to Real Estate Losses: Evidence from the US Banks”, 2009, interest rates are one of the main determinants of default of mortgage loans.
[18] Bank of International Settlements, “Revisions to the Standardised Approach for credit risk”, 2014



3. CONCLUSIONS

This briefing shows that the typical portfolio structure of the region is comprised of loans to enterprises; consumer loans and mortgage loans for housing. Also, the region's markets do not have the credit classification proposed by the BCBS, which affects comparability between jurisdictions and limits regional stress testing efforts.

In general, although the BCBS seeks to propose a more risk sensitive methodology, the revised standardized approach to credit risk would not meet this objective because it remains rigid. This rigidity is due to the use of fixed parameters for determining risk weights. Hence, as summarized in Figure No.7, the region has a varied opinion on the adequacy of drivers and proposed treatments. Thus, it suggests a series of alternatives to the proposed drivers that may better reflect the risk exposures in markets such as those in most of the Americas.



Moreover, there is a perception that the approach is primarily intended for complex banking and it is not taking into consideration some peculiarities of the financial system in the region. A case in point is that risk weights are established according to revenues, which would affect the financing of SMEs. Thus, a significant percentage (61%) consider that exposures to SMEs should have a different treatment than corporate exposures, which is in line with the importance of SMEs and financing aimed at this sector in the region. It is also a constant concern the lack of information for the calculation of drivers.

Finally, it is important to mention the BCBS is aware of the important challenge of identifying risk drivers of global application and that consider the local particularities of some exposures. In that sense, we have tried to collect the opinions from the supervisors of the region and the peculiarities of it, to make a contribution of the Americas at the moment of defining the best global standards. In this regard, at the end of 2015, the BCBS plans to have a new revised version of the Standardized Approach for Credit and at early 2016, conducting a quantitative impact study on the subject.[19]

[19] Speech by Mr. Stefan Ingves, Chairman of BCBS and Governor of *Sveriges Riksbank* in the 2015 *IIF Annual Membership Meeting*, Lima, October 9th 2015.