ASBA
ASOCIACIÓN DE SUPERVISORES BANCARIOS DE LAS AMÉRICAS

# Regulatory and Banking Supervision Expectations in the Americas

Mexico City, Mexico

2017

# CONTENTS

# A. INTRODUCTION

On April 2016, the Association of Supervisors of Banks of the Americas (ASBA) published its first report on Banking Regulation and Supervision Expectations for 2016 in the Americas.[1] Said report covered discussion topics for the region, regulatory and supervisory actions, the expected behavior of the main financial risks and indicators, the impact of the global and regional economic situation on the financial systems and the business lines that would be affected consequently.

This year, the global financial market continues to be in a stage of uncertainty, highlighted by political and economic events. The new administration of the United States of America has generated uncertainty in some members of the region due to the possible political changes that could be implemented. Also, we must consider the expected increase in the federal fund's rate and the appreciation of the U.S. dollar.

In part due to the previous, the International Monetary Fund (IMF) updated its expectations regarding the global perspective in January of the current year. Some of the notable changes include a decrease in the expected growth rate of the emerging economies and of those in development, where the cases of Mexico and Brazil are the most noticeable because their updated growth rates have decreased 0.6% and 0.3% respectively, in comparison to the October forecast.[2]

Another reason for concern is the speed of evolution of technological innovation in the region. It is clear that the development of new financial technologies and the arrival of new stakeholders in the financial sector are triggering a substantial change in the financial ecosystem and generating challenges for regulatory development and supervisory practices.

In this framework, ASBA distributed among its Associate Members a survey on regulatory and banking supervisory expectations for 2017 in January of the current year. This survey addresses topics such as events that may have repercussions in the region, the change in the main variables of the financial systems, business lines affected and types of risks that could impact the markets in the region. Also, questions regarding the degree of compliance with international standards, the scope of financial inclusion processes and knowledge of new technologies are included. Finally, the survey identifies topics of interest to be discussed within the institution during 2017. At the end of the period established, the Association obtained the response from 25 countries, which represents 69.44%.

This report, divided into three sections, an annex and a bibliography of reference, presents the results of the survey whose objective is to present the expectations of the Associate Members of ASBA for the current year regarding the different relevant topics and to detect areas that require follow-up and attention. At the same time, this report will help the Association to address the needs of its Associate Members better and to develop a technical discussion agenda that complies better with the requirements of the region.

It is important to point out that the results of the survey are presented in a general manner. Therefore, the results do not reflect the individual point of view of the countries that responded. Moreover, the same weight was allocated to each one of the countries surveyed. This implies that, when results were

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[1] ASBA, *Expectativas de Regulación y Supervisión Bancaria para 2016 en las Américas* (2016).
[2] IMF, *World Economic Outlook Update: January 16, 2017* (2017).

aggregated, certain elements of the results could be leaning towards the regions from where more answers were received.[3]

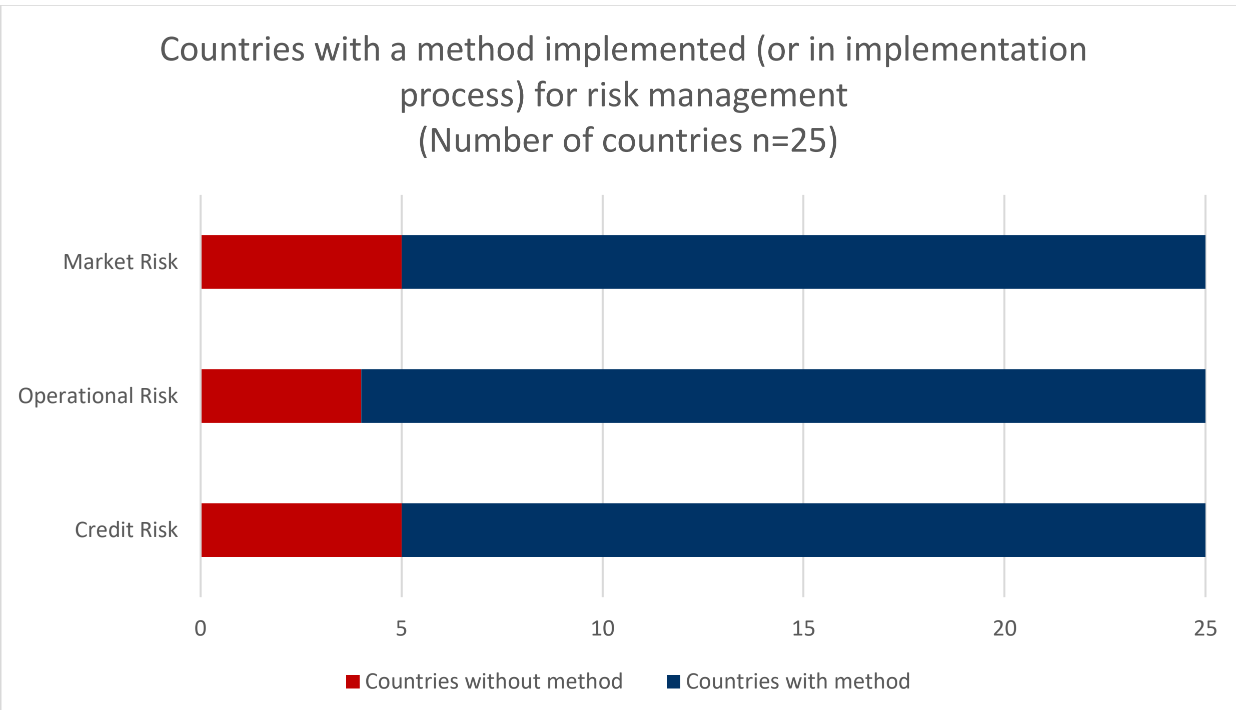
[3] Number of countries that responded from each region: North America: 1, Central: 8, Andean Region: 4, Southern Cone: 3, Non Regional: 1.

# B. Analysis

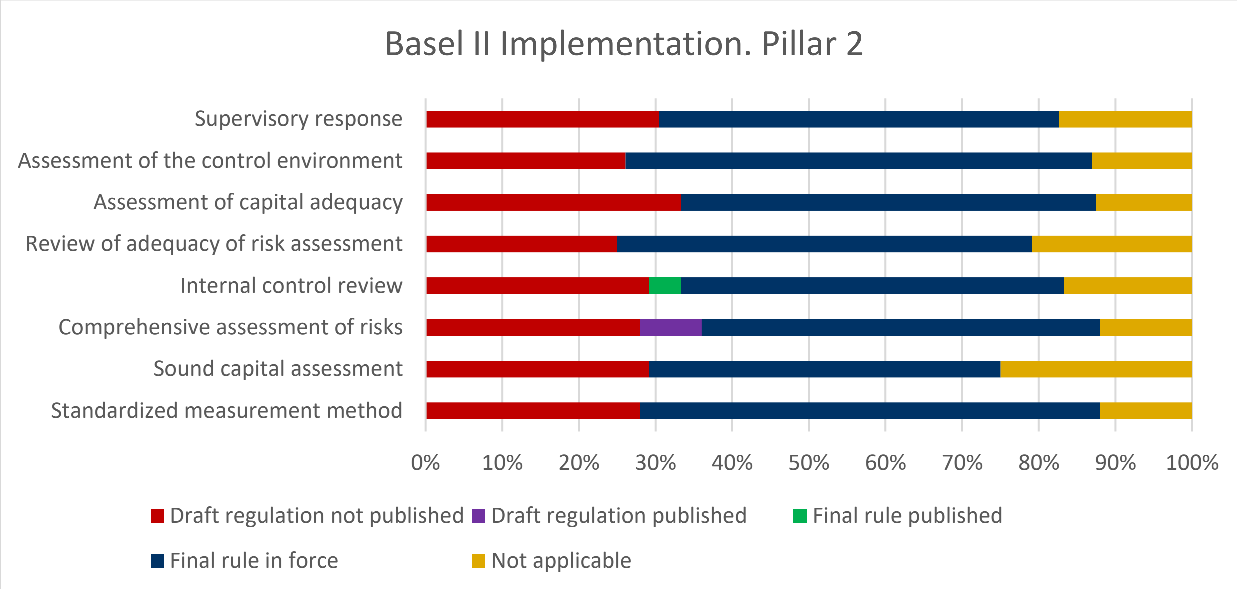
## I. Implementation of Basel Standards

The implementation of the international standards has its main strength in Basel II, Pillar two. The latter means that the countries in the region have focused their efforts on improving risk management and the supervisory process, even though transparency aspects are still lagging behind.

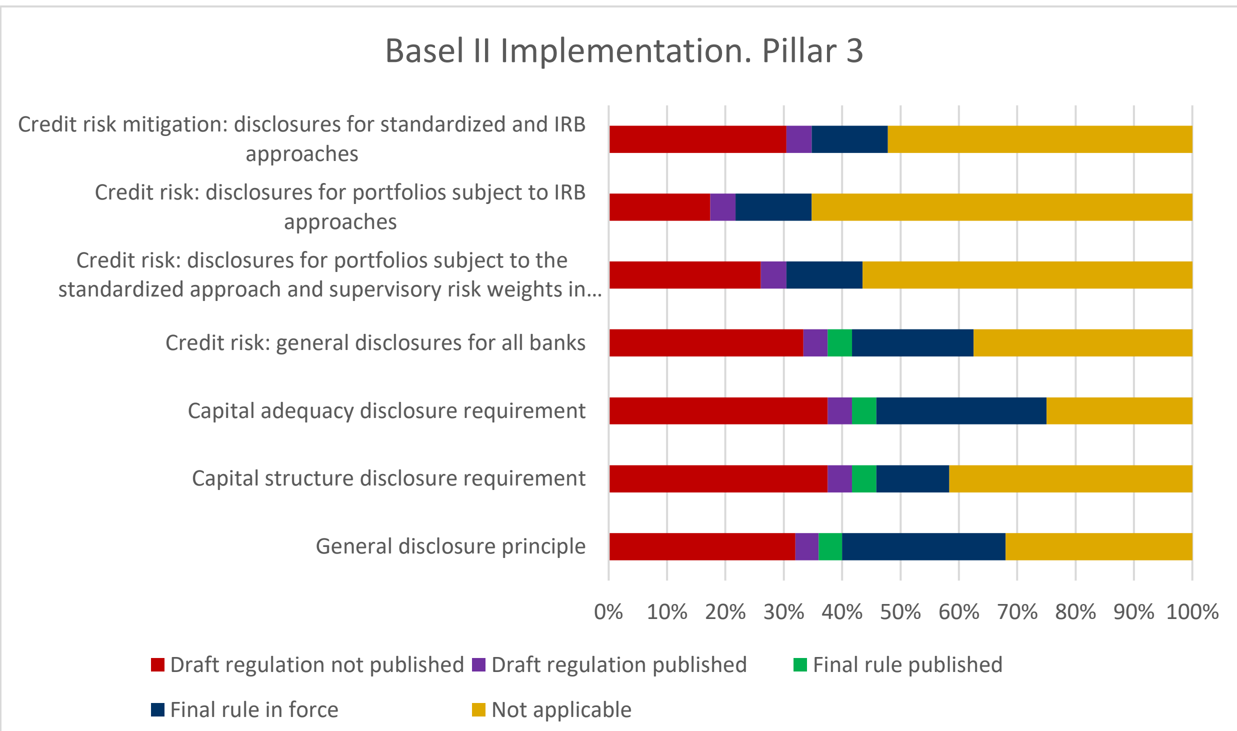
Despite the heterogeneity of the methods adopted, the ideal is that the Members have at least a method to measure risks that can be tailored to the needs of their jurisdictions. Thus, it is motivating to learn that the region has taken the necessary steps in the adoption of Pillar 1 in Basel II. Indeed, considering the countries that have already implemented some method to measure risks as well as those that are in the process of developing a similar standard, it is expected that at least 80% of the Associate Members have a risk management framework, as can be confirmed by the following chart.

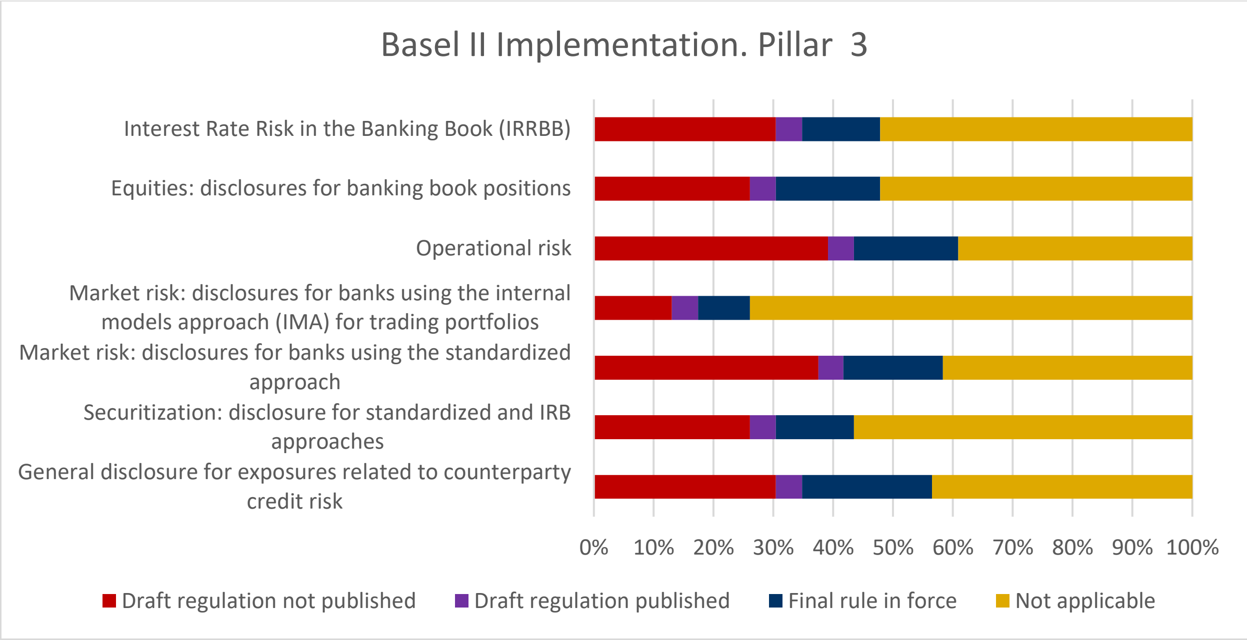



Pillar 2 in Basel II, also presents an acceptable level of implementation. The implementation level of this Pillar lies between 44% and 60%. If we consider the number of Members that are in the process of developing the corresponding standards, the range increases to 76% and 88%. These figures show a substantial progress if we take into account the approval demands of the statutory bodies found in this Pillar.

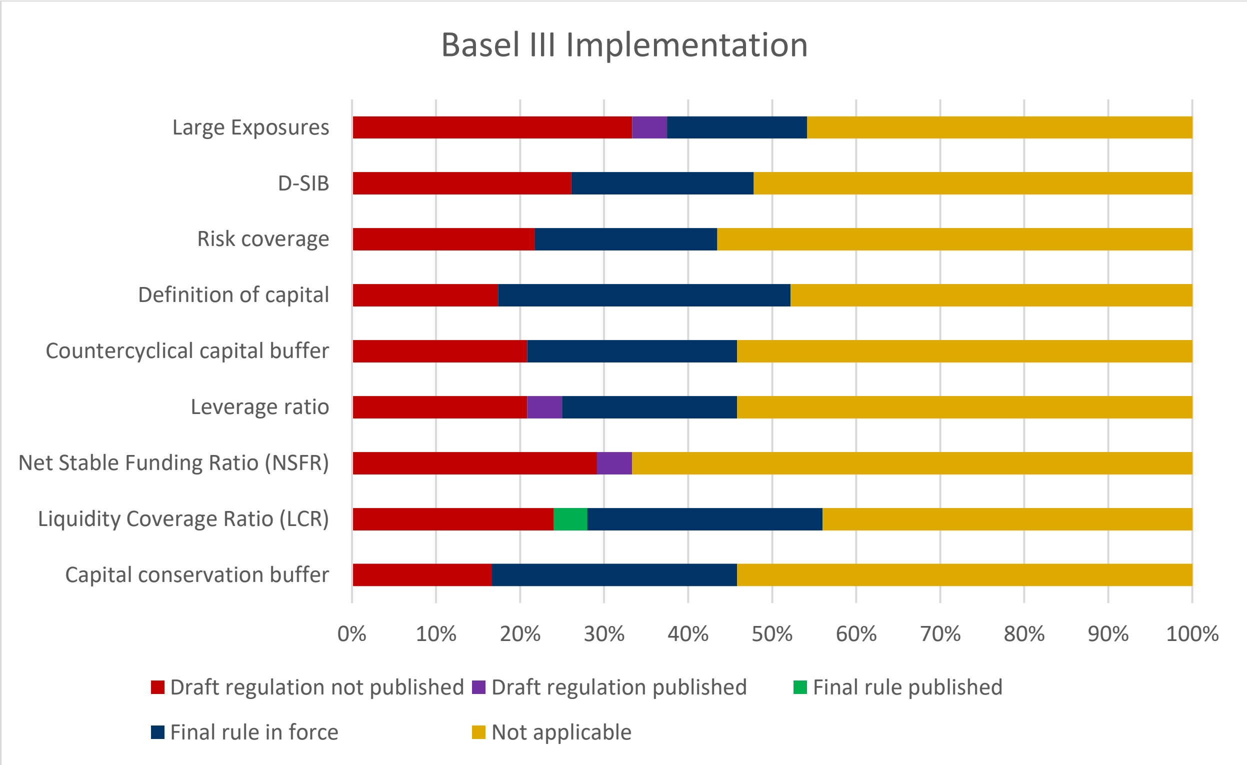



The difference between the Pillars mentioned and the third Pillar in Basel II is that that the latter has a low level of implementation. If we include the countries that are in the process of developing the standards of the different components, the number fluctuates between 35% and 75%. Therefore, this Pillar represents an area of opportunity to strengthen the financial market discipline in the region.






Regarding Basel III, the region shows a much lower level of adoption than in Basel II, which is a situation that is understandable due to the degree of development in its markets. Despite this, we can highlight the revisions to the definition of capital, the treatment of significant exposures and the liquidity coverage ratio. Also, the region has been working on the generation of capital buffers and the revision of leverage ratios.



As can be confirmed by the previous statements, the region has made significant progress in the implementation of Basel II while it gradually adopts Basel III. The adoption of the standard and basic approaches denotes the degree of development of the markets, as well as their heterogeneity when verifying that many of them have made use of the advanced approaches. On the other hand, the work to ensure capital quality and liquidity adequacy in the region is a supporting factor in the progressive and proportional implementation of Basel III.

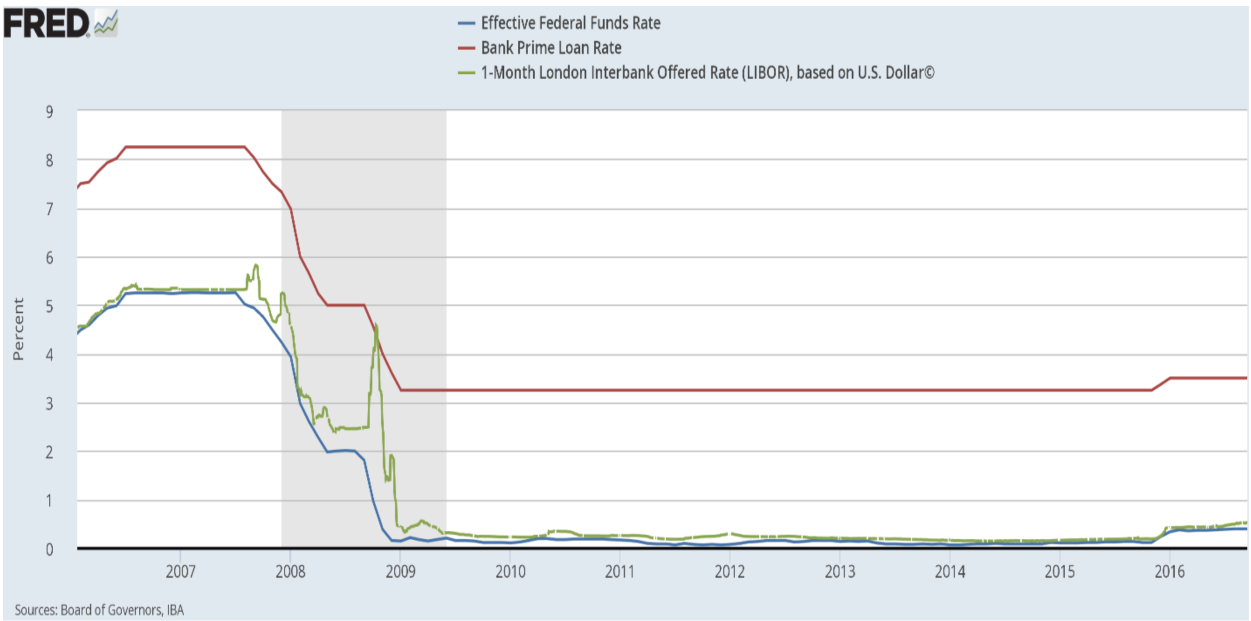
Despite these developments, it is necessary to point out the need to go forward in the implementation of Pillar 3 in Basel II, and consequently in Basel III. This Pillar is a central part of the development of the markets, and in particular for the financial inclusion efforts.

It is important to point out that in the implementation of the Basel Standards and despite their numbering, they do not represent a sequence. Thus, from the information received one may infer that there are countries in Basel I just as there are others that are adopting parts of the Basel III framework. The latter reflects the relevance of the standard adopted to provide stability to the markets in the region according to their degree of development. Therefore, the more developed the market, the greater the regulatory demand and type of standard to be implemented.

## II. Federal Funds Interest Rate and Commodity Price Volatility

The events that generate more concern in the region are the rate increase in U.S. federal funds, volatility in the price of commodities and changes in economic and financial policies. These events correspond to external macroeconomic shocks that may put the stability or the resilience of the financial system in the region to the test.

First, the increase in the rates of federal funds has an effect on other interest rates, for example, the *prime* [4] rate. The following graph shows the relationship between the federal funds rate (blue line) the one month LIBOR rate (green line) and the U.S. *prime* rate (red) in the period between 2006 and 2007.




Due to the above, the increase in the federal funds rate may cause a price increase in the external debt, both public and private, in the rest of the region. This will directly affect the cost of the debt of countries and businesses with liabilities in U.S. dollars. In spite of this, the sovereign risk does not seem to be a concern for the respondents. As a consequence, it is probable that the interest rate increase may not have a substantial impact on the public debt.

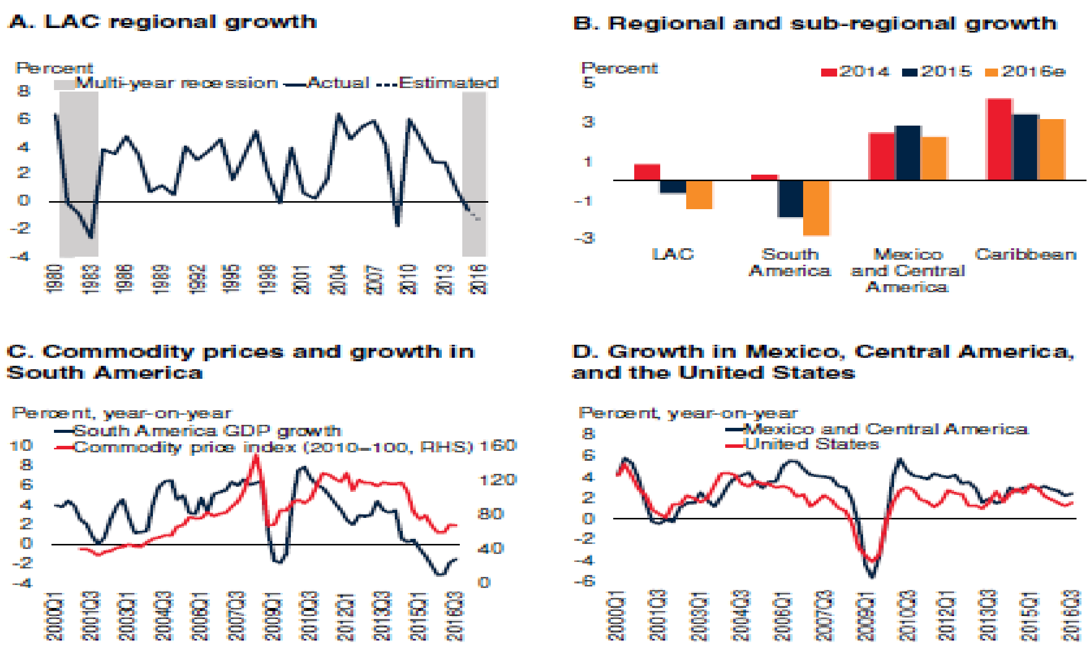
The risk that is of greater concern for most of the Associate Members, in a much bigger way than the risk that occupies is the one in second place,[5] is credit risk. As an additional effect, a higher interest rate in the United States could mean that investing in said country could become more attractive, which would appreciate the value of the American dollar, increasing the cost of the domestic debt. This could lead to

[4] Board of Governors of the Federal Reserve System, *Effective Federal Funds Rate [DFF]*, Federal Reserve Bank of St. Louis.
[5] The rating of concern for credit risk is 2.30, while the rest of the risks have values starting at 4.13, with less than a 1.00 difference among them.

an increase ni the probability of default of the users of the financial system, consequently, to a deterioration in the quality of assets.

Other macroeconomic shocks can increase this type of risk. If the price of commodities goes down, the exporting countries may experience a decrease in their trade balance. Additionally, the secondary effects may imply an increase in the unemployment rate.[6] Both factors imply a lower disposable income, making difficult for consumers to repay their debts.

Due to the previous points made, it is important to do a follow-up to the pressures from the increase in interest rates, price volatility in commodities and the uncertainty regarding the exchange rate. Firstly, because of the risks involved. Secondly, the volatility in commodities' prices may have direct macroeconomic implications, such as a downturn in growth for countries that export those products. The following graph shows the relationship between the price of commodities and growth in South America, the regional growth in the Americas and the growth by sub-regions. The Caribbean, Mexico and Central America have not suffered the same impact as South America. The authors point out that these sub-regions have a better relationship with the United States.[7]




*Source*: World Bank, *Global Economic Prospects: Weak Investment in uncertain times* (2017), 116.

However, adverse shocks in commodities may also have repercussions in the financial sector. Kinda, Mlachila and Ouedraogo use a sample of 71 commodities exporting countries [8] to determine the relationship between commodity price shocks and financial stability. The authors found that negative

[6] Kinda *et. al.*, *Commodity Price Shocks*.

[7] World Bank, *Global Economic Prospects: Weak Investment in uncertain times* (2017).

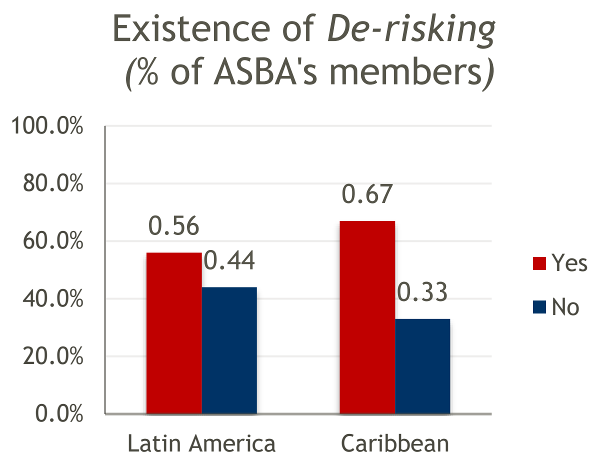
[8] The authors include countries in the region of the Americas. Some examples are Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Guyana, México, Peru, Trinidad and Tobago, and Venezuela.

shocks to commodities are related to an increase in past due loans, bank costs and a higher probability of a bank crisis. Furthermore, these shocks are also related to a decrease in bank benefits, liquidity and the quality of provisions to non-performing loans. Some transmission mechanisms of said shocks to the financial sector mean less GDP growth, a decrease in savings, an increase in the external debt and more unemployment.[9]

[9] Tidiane Kinda, Montfort Mlachila, and Rasmané Ouedraogo, *Commodity Price Shocks and Financial Sector Fragility* (IMF, 2016).

# III. CORRESPONDENT BANKING, *DE-RISKING*, AND ITS EFFECTS

A third theme that arises from the analysis belongs to correspondent banking. These types of entities are a concern for more than half of the members. Additionally, *de-risking* is in third place on the list of risks that generate concerns. This means that both answers are going in the same direction: legal/regulatory risk is becoming an important problem that affects correspondent banking, especially in the Central American and Caribbean regions.




Source: Michaela Erbenova et al., *The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action* (IMF, Junio 2016), 11.

Correspondent banking plays a major role in the financial systems, providing services, such as cross-border payments, remittances and electronic transfers, which are affected by the legal/regulatory risk.[10] The latter is particularly the case in emerging economies and low-income countries. For this reason, there are certain sub-regions in the Americas where services are no longer being provided due to the withdrawal of entities, which play the role of a correspondent bank of the local bank, due to the potential regulatory risk that the latter can pose for them. This phenomenon is known as de-risking and has affected some economies in the region by eliminating the possibility of carrying out transactions that support the transfer of resources, foreign trade, and others.

Some of the reasons for the withdrawing of correspondent banks include a high-risk client base, the impossibility of carrying out client due diligence (CDD) – due to the high costs or lack of information-, and concerns about money laundering and terrorism financing risks.

The direct effects of *de-risking* include socioeconomic impacts, due to the difficulty in transferring money to small economies; a smaller financial inclusion system; the pressure exerted on small banks to accept high-risk customers that have not been catered to as a consequence of services that are no longer available; and deterioration in trade financing.

Furthermore, *de-risking* can also have indirect effects. For example, the changes in business models or reduction in providing services may foster a higher use of shadow banking and of entities that provide services supported by technology, because traditional financial system users must look for alternatives to continue carrying out their transactions. This leads to a higher provision of these services by non-regulated entities that may be exposed to illegal or high-risk transactions, or to customer abuse.

Despite the risks that the existence of shadow banks may pose, it is worthwhile noting that the expectations of the members are minor. This could be due to the indirect effects of the legal/regulatory risks are not very important, at least for some sub-regions in the Americas[11]. On the other hand, the

[10] Committee on Payments and Market Infrastructures, *Correspondent Banking*, (BIS, 2016).
[11] The most affected sub-regions by *de-risking* are the Central and Caribbean Regions.

lower level of importance allocated to the new technologies and the shadow banks could be a signal that their effects are being underestimated.

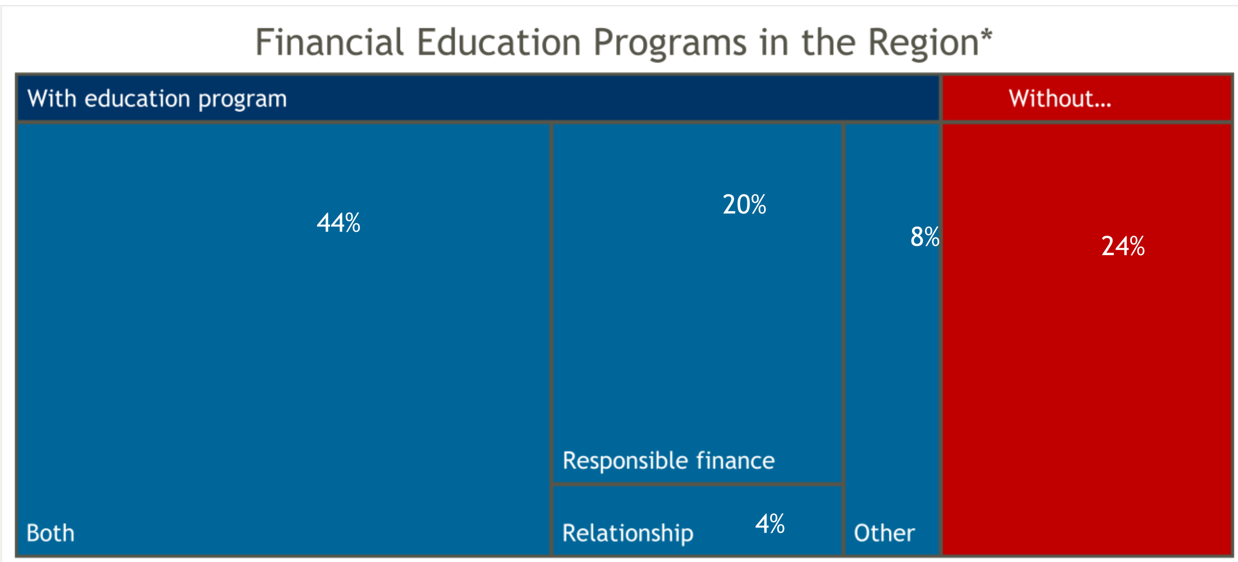
# IV. Financial Inclusion and New Technologies

52% of the Associate Members have a national financial inclusion strategy. From this group of countries, all of them are focused on access to financial services, while 92% are also focused on the use of financial services. This means that almost half of the region has a strategy focused on access, which increases the use of products and services according to the needs of the population.[12] However, no specific data is available to indicate if said approaches consider consumer protection or the promotion of transparency in the offering of products and services of the financial system.[13]

Independent from the fact that financial education and consumer protection are part of the financial inclusion national strategy, there are entities specialized in consumer protection in 61% of the Associate Members, while 76% reported having formal programs on financial education.

The latter indicates that a large part of the region is seeking to increase the system's coverage so that a greater number of people can access financial services. This helps to bolster the proper growth of the financial system.

The following chart was developed considering the responses received on financial education programs, which indicates how said education approaches may be classified.



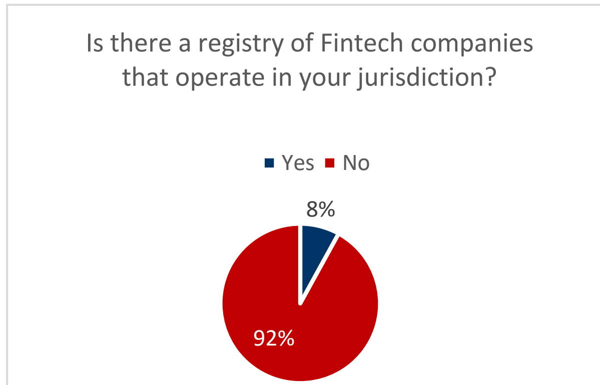

*NOTE: Relationship refers to institution-client relationship. Each category may include additional approaches. The "other" category must be understood as programs not focused in responsible finance nor client-institution relationship.

[12] ASBA and FOMIN, *Mejores Prácticas de Regulación y Supervisión de Productos, Servicios y Canales de Comercialización que Aportan a la Inclusión Financiera,* (2013), 11.
[13] 61% of the members have a specialized financial sector consumer protection entity. However, if said entity is not part of the approach of the inclusion strategy, there might be a case where market penetration is achieved faster than what the entity can handle. Data from the survey is not enough to affirm or deny this.

Furthermore, the financial innovation process could be part of the inclusion strategies with the objective to use its advantages to solve possible imbalances in the sphere of competence. To achieve this, it will be necessary to develop regulatory frameworks that allow the authorization of products and services that arise from innovation in a sustainable, safe, competitive, and transparent manner.

Regarding technological innovation, 24% of the respondents said that there are specific regulations on Fintech products and services and for companies providing these types of services (e.g. electronic money and mobile payments). This number, in our opinion, is low; specific regulations on new technologies of the financial sector have been established in only one-fourth of the Americas. As to the knowledge of technological innovation based products, only 8% of the Associate Members have some type of registry- mostly related to mobile payments- of companies that provide new technologies and the Fintech products and services offered in their jurisdiction.

The insufficient knowledge of new financial technologies that operate in the region poses a substantial risk to the financial system. Not enough information exists regarding the level of risk that new technology providers take on. Therefore, the fast evolution of the sector implies that the efforts to establish a Fintech regulatory framework - that allows the adequate integration of technological innovation based products and services - will become a growing challenge for the authorities.




The previously mentioned concerns will be seen reflected in another section of the survey. The second risk that more members believe may materialize is the operational risk. The development and adoption of new technologies in financial markets imply a higher probability of system failures occurring due to more complexities and dependence on the technology. On the other hand, the transition to information technology digitalization adds vulnerability to the financial system entities. For example, failures in the data storage centers or errors in the new technological tools may represent potential risks of the operating component of the entities. The previous elements indicate that the evolution of the financial systems will have additional challenges regarding operational risk matters.

On the other hand, cyber risk is in third place in descending order of importance. Within an environment of fast technological development with the tendency to digitalize information and where new technology based services are constantly appearing, the low perception of the respondents calls our attention.

Currently, no new technology-based products and services registry exists nor efforts being made to understand its implications. To adequately include these products and services, it is suggested to develop registries of them, assess their risks and business models, develop standards that strengthen market conduct, and implement regulatory frameworks proportionate to the risks identified. This will contribute to the strengthening of the resilience of the financial system and the financial inclusion in the region.

# V. TOPICS OF INTEREST

Regarding priorities in the region, there is a significant concern relating to the establishment of stress tests in the financial systems in the region. The development of stress tests may mean having useful tools to measure system resilience when facing adverse scenarios. However, the quality of these types of tools depends on the availability and quality of the information, which means it is necessary that the databases in the region contain sufficient and precise information and that these be regularly updated.

The approaches reviewed for credit, market and operational risks do not seem to be a priority for regional discussions. Nevertheless, due to the different mechanisms that generate pressures in the increase of these risks, the recommendation is that the region should not stop dealing with risk management in its various discussions, training and even analysis.

Another important element is the *de-risking* process. This may generate a series of problems that represent a risk for the financial system. For example, different services may suffer substantial impacts such as trade financing, foreign currency exchange services, and foreign investment. Additionally, another indirect effect of the *de-risking* process consists in the development of shadow banking, which is furthered by the adoption of new technologies.

Furthermore, these technological and cyber security risks are matters of high priority for regional discussions. This concern would seem to be contradictory in the absence of actions that allow the regulation of new Fintech products and services that, by their very nature, have an inherent information and technological risk. In any case, the results seem to indicate that the priority in the matter of technological security is focused on the incumbents and not on new entities, who probably manage quantities of information or processes in a larger proportion than traditional banks.

## C. CONCLUSIONS AND RECOMMENDATIONS

The intention of the current report is to learn about the concerns, expectations and current situation of the Associate Members to detect the strengths, weaknesses, areas of opportunity and recommendations that contribute to having better financial systems.

First of all, the region has focused its strengths on the implementation of Pillars 1 and 2 in Basel II. Even though in almost half of the region, these pillars have not been implemented yet, 80% of the countries are in the process of developing the corresponding regulations. This implies that a large part of the region will have a risk management framework and an internationally accepted supervisory process. On the other hand, the challenges include improving transparency and discipline in the financial markets of the region.

In second place, we must stress the fact that the current macroeconomic conditions and policies generate a relevant environment of uncertainty for the world and the region. This can clearly be seen in the survey, since the events that represent the biggest concerns are macroeconomic shocks, such as the increase in the federal funds' interest rate, volatility in commodity prices and the appreciation of the U.S. dollar.

In third place, *de-risking* represents a significant concern in the region. The modification of the business model of the correspondent banking system may be the cause of, first of all, the reduction in the access to the financial system. Secondly, the users who may be unable to carry out transactions that are no longer available may be looking for alternative ways to do so, perhaps through shadow banks or the new financial technologies. Both aspects are already present in the region and may increase their negative impacts if other solutions are not offered. Among the possible solutions are the standardization of tools such as (KYC) know-your-customer that help to increase the quality and consistency of the information provided; the creation of regional and national central databases that enables the reduction of efforts; the regulated adoption of virtual currency that allows carrying out international payments at lower costs; the consolidation of large correspondent banks that facilitate aggregating volumes of transactions, thus increasing their profitability. In any case, the solution requires a tripartite effort on the part of the correspondent banking system, the local banks, and the regulators.

In fourth place, the financial innovation is not being supported adequately in matters of knowledge, analysis, and regulatory proposals. This segment evolves quickly and may become a true disruptor of the soundness and transparency of the markets in the region.

In fifth place, technological and cybernetic risks must have a prominent place in the region. Not only would a regulatory gap in technological risk matters would be taking place, but also, the most important financial sector development driver in years to come would be cast aside. On the other hand, cyber risk and information security have become an essential element to maintain the confidence of the public in the sector.

As a closing remark, regarding the development of the financial sector, the region should take a more proactive role instead of a reactive one. In this matter, the role of the regulator and the supervisor as the main source of information and direction is key.

## D. Bibliography

Appelbaum, Binyamin. “Fed Raises Interest Rates for Third Time Since Financial Crisis.” *New York Times,* 15 de Marzo de 2017.

ASBA. *Expectativas de Regulación y Supervisión Bancaria para 2016 en las Américas*. 2016.

ASBA y FOMIN. *Mejores Prácticas de Regulación y Supervisión de Productos, Servicios y Canales de Comercialización que Aportan a la Inclusión Financiera*. 2013.

Banco Mundial. *Global Economic Prospects: Weak Investment in uncertain times*. 2017.

Board of Governors of the Federal Reserve System. *Effective Federal Funds Rate [DFF].* Federal Reserve Bank of St. Louis.

Committee on Payments and Market Infrastructures. *Correspondent Banking*. BIS, Julio de 2016.

Erbenova, Michaela et al. *The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action*. IMF, Junio 2016.

IMF. *World Economic Outlook Update: January 16, 2017*. 2017.

Kinda, Tidiane y Mlachila, Montfort y Ouedraogo, Rasmané. *Commodity Price Shocks and Financial Sector Fragility*. IMF, 2016.

# E. ANNEX: RESULTS OF THE SURVEY

## VI. RELEVANT EVENTS

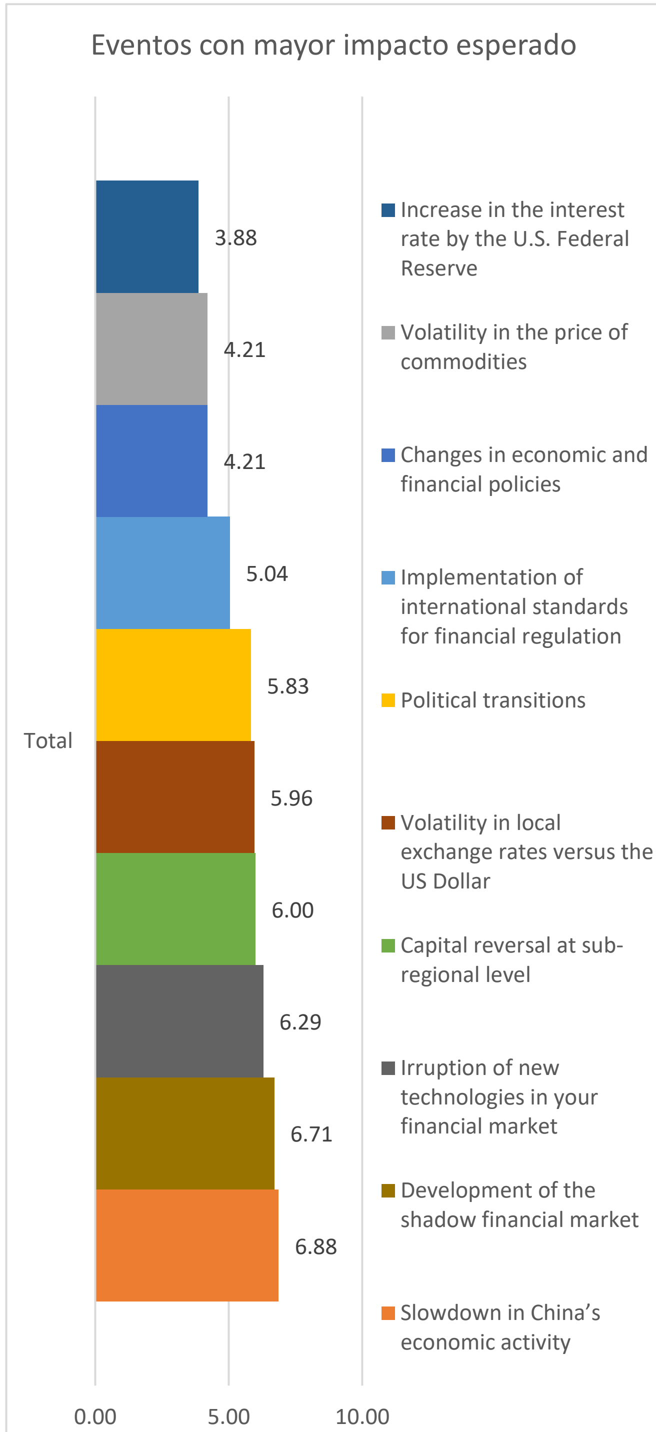
The survey asked the Associate Members to consider a series of events and, according to their perception of the impact they would have on the financial system within their jurisdiction, to rank them so that the most important events would have the lowest numbers.

Furthermore, the members were permitted to include other events which, in their opinion, could be relevant for the region.

The graph shows the average values that were assigned to each one of the events.

The most important events in the region, according to their expected impact are: increase in FED's interest rates, volatility in the price of commodities and economic and financial political changes.

On the other hand, the least relevant effects, according to their expected impact on the region, are the downturn in China's economic activity, development of the shadow financial market and the incursion of new technologies in the financial markets.




Some additional concerns:

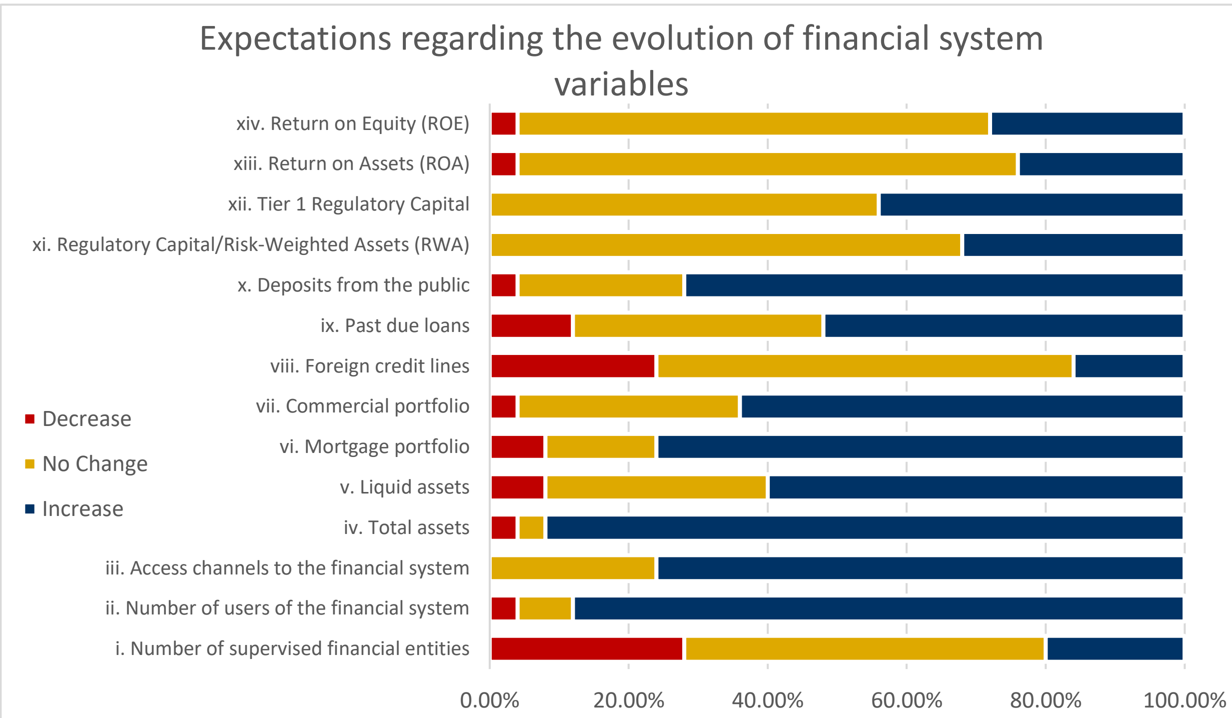
- Economic and political situation of trade partners.
- Natural disaster Impacts.
- Important stakeholder's protectionist measures.
- *De-risking* and cancelation of correspondent bank transactions.

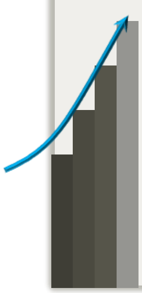
## VII. Financial System Variables

For this section, a series of financial system variables were presented and the respondents were asked to indicate their expectation on the evolution of each one for the current year. The options for each variable were: decrease, no change, increase.

The graph shows the results of the survey and indicates the percentage that corresponds to the evolution of each variable, according to the expectations of the Associate Members. Based on the previous, we find three groups of variables.

First of all, more than 60% of the members expect that no changes will take place in return on assets (72%), return on equity (68%), nor on regulatory capital / risk-weighted assets (68%) nor on foreign credit lines (68%). In second place, it is expected that there will be an increase in total assets (92%), in the number of users in the financial system (88%), in the access channels of the financial system (76%) in the mortgage portfolio (76%), deposits from the public (72%) and in the commercial portfolio (64%). Finally, there are differences of opinion regarding regulatory capital level 1, number of banking institutions supervised, default portfolio and liquid assets.

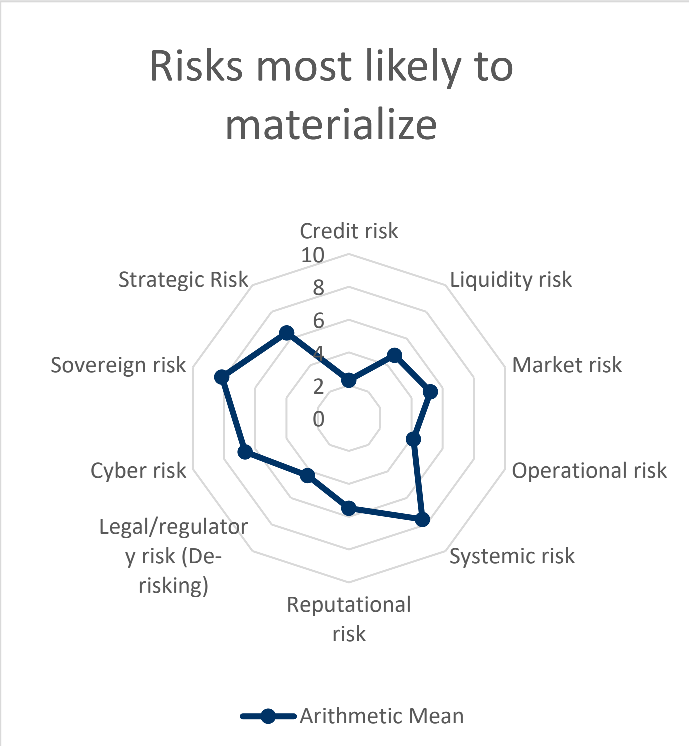


There is an expected increase in:

- Total assets
- Number of users in the financial system
- Access channels of the financial system
- Mortgage portfotlio
- Deposits form the public
- Commercial portfolio

# VIII. RISKS




Regarding risks, the Associate Members were asked, based on their response to the evolution of the variables in the previous section, to rank a risk catalog according to the probability of their materialization in 2017. Additionally, the respondents were allowed to add other risks as an open answer.

From the answers obtained, an arithmetic mean was calculated and the graph of this section was developed. A value that is closest to the center indicates a higher probability of materialization.

The risk that was allocated a higher probability of materialization is credit risk, followed by operational risk and, in third place, legal/regulatory risk.

Liquidity and market risks were considered as intermediate risks regarding their probability of materialization in the region.

Finally, sovereign risk, systemic risk, and cyber risk correspond to types of risks that the Associate Members considered being of less concern.

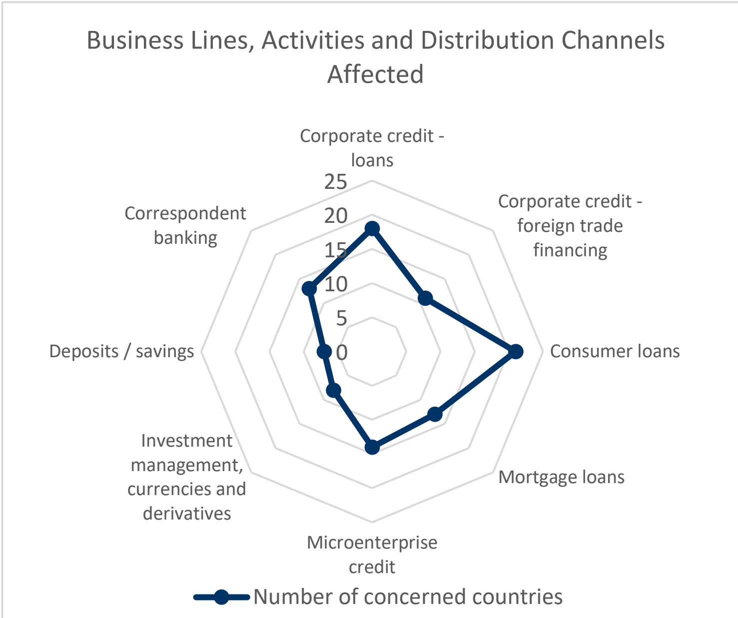
**Additional Risks:**

- Unaccounted impacts due to restrictions to commerce.
- Money laundering and financing of terrorism.

| Risk Type | Arithmetic mean |
|---|---|
| **Credit Risk** | 2.30 |
| **Operational Risk** | 4.13 |
| **Legal/Regulatory Risk (De-risking)** | 4.30 |
| **Liquidity Risk** | 4.74 |
| **Market Risk** | 5.22 |
| **Reputational Risk** | 5.48 |
| **Strategic Risk** | 6.43 |
| **Cyber Risk** | 6.65 |
| **Systemic Risk** | 7.61 |
| **Sovereign Risk** | 8.13 |

# IX. Business Lines, Activities, and Channels of Distribution

For this section, a group of eight elements was provided, for which the Associate Members indicated which lines/activities/channels they considered will be affected more and will require more attention during the current year. The respondents were allowed to select any number of options, that is to say, from 0 to 8 lines/activities/channels that require attention. Additionally, they were asked to indicate which other lines, activities or channels required particular attention. The graph was developed by adding the number of countries that were concerned about each line, activity, and channel.




Based on the results of the survey, the products that generate more concern are consumer loans and corporate loans. Moreover, the services that require less attention are investment management, currencies and derivatives, customer deposits/savings and corporate loans for foreign trade funding. Finally, approximately half of those surveyed consider that microenterprise credit, mortgages loans, and correspondent banking require attention.

Additional Business Lines or Activities that Require Further Attention:

- Money Laundering
- Financing of Terrorism
- Shadow Banking
- Remittances
- Mobile Banking
- Payday loans

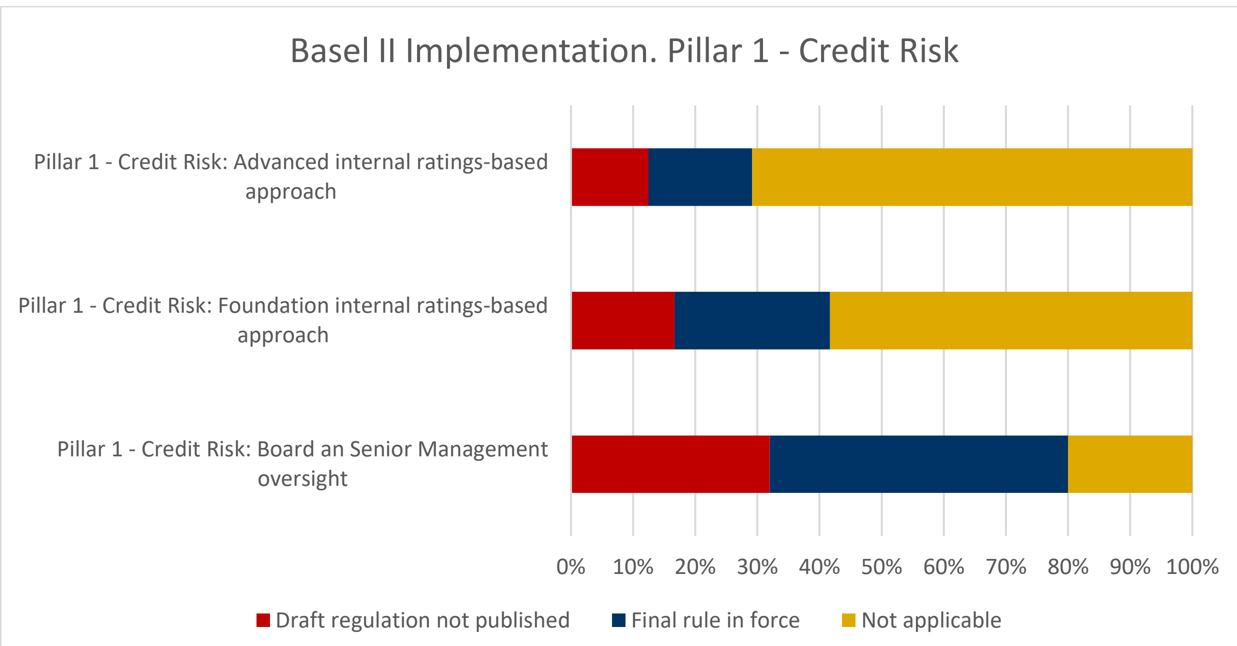
| Credit Type | Number of Concerned Countries |
|---|---|
| **Consumer loans** | 21 |
| **Corporate credit - loans** | 18 |
| **Microenterprise credit** | 14 |
| **Mortgage loans** | 13 |
| **Correspondent banking** | 13 |
| **Corporate credit - foreign trade financing** | 11 |
| **Investment management, currencies and derivatives** | 8 |
| **Deposits/savings** | 7 |

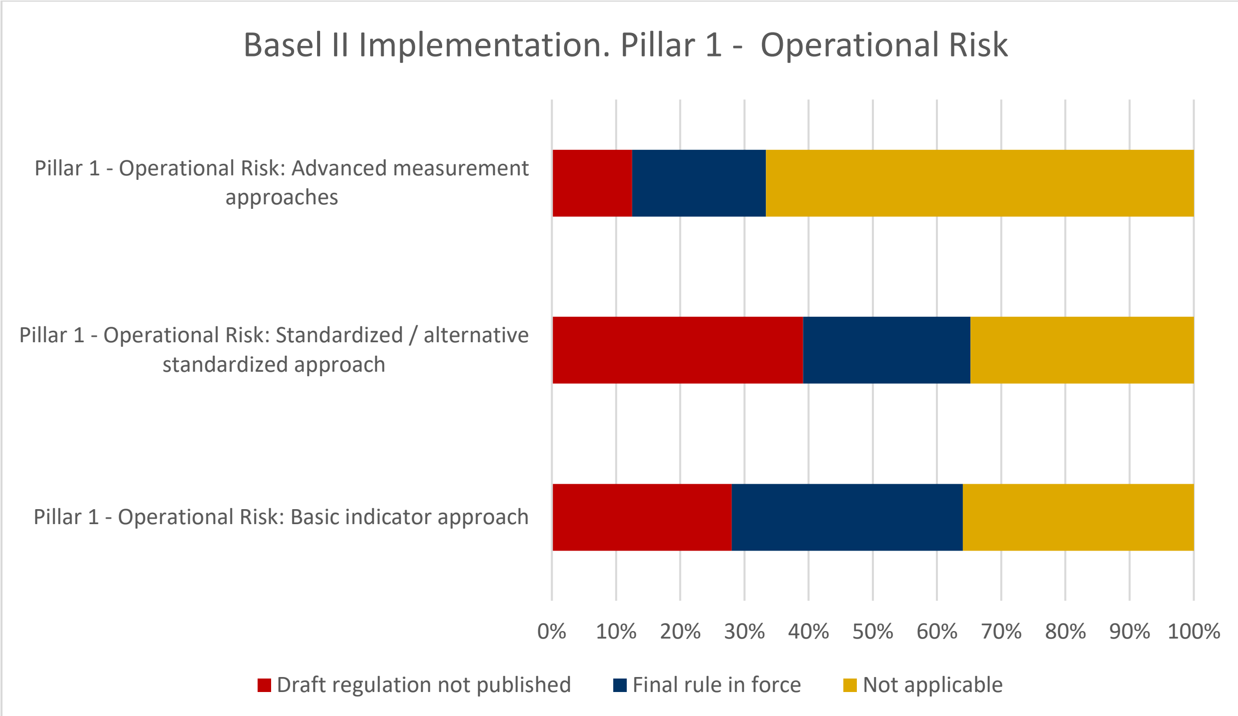
# X. COMPLIANCE WITH BASEL STANDARDS

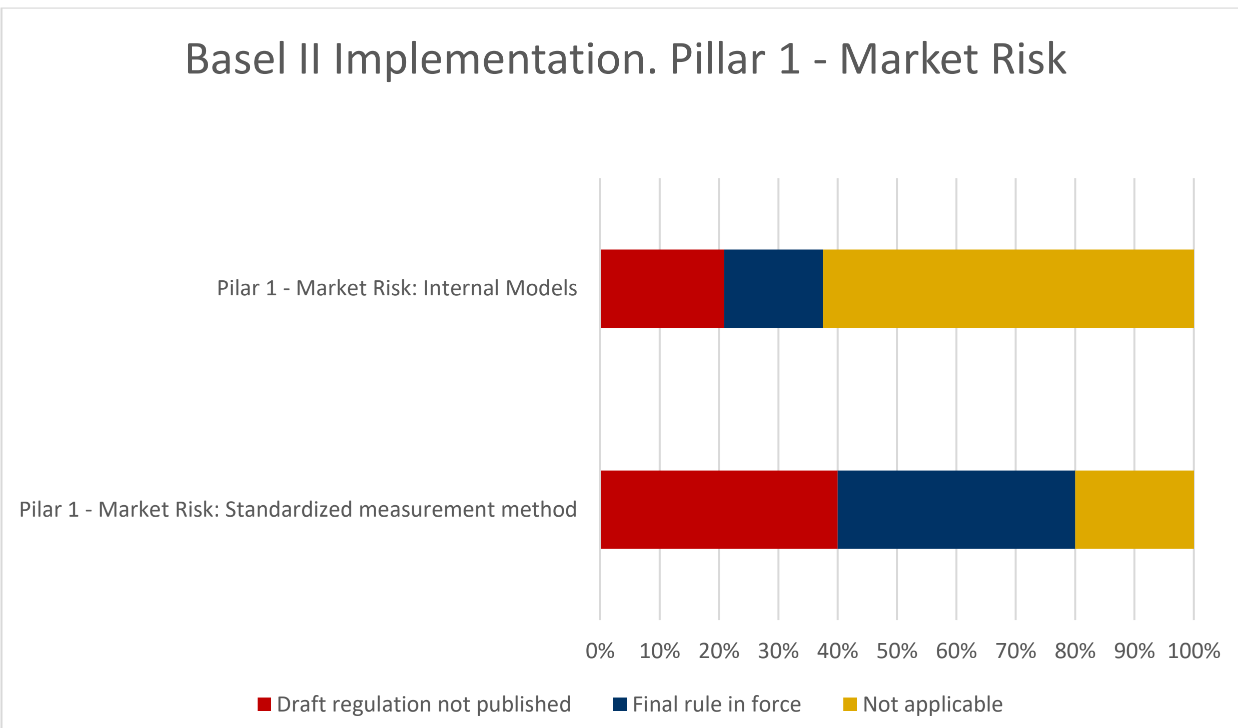
The survey included questions regarding compliance with Basel II standards –divided in 3 pillars-, Basel 2.5 and Basel 3. Based on the standards, each category was divided into different sections, and the Associate Members were asked to indicate their level of compliance using the following options: draft regulation not published, draft regulation published, final rule published, final rule in force, and not applicable. The following graphs contain all the data collected, with a report indicating the percentage of countries that fall in each category. It is important to highlight that, due to unavailable answers, some components have less than 25 responses. Therefore the percentage was calculated based on the existing answers.

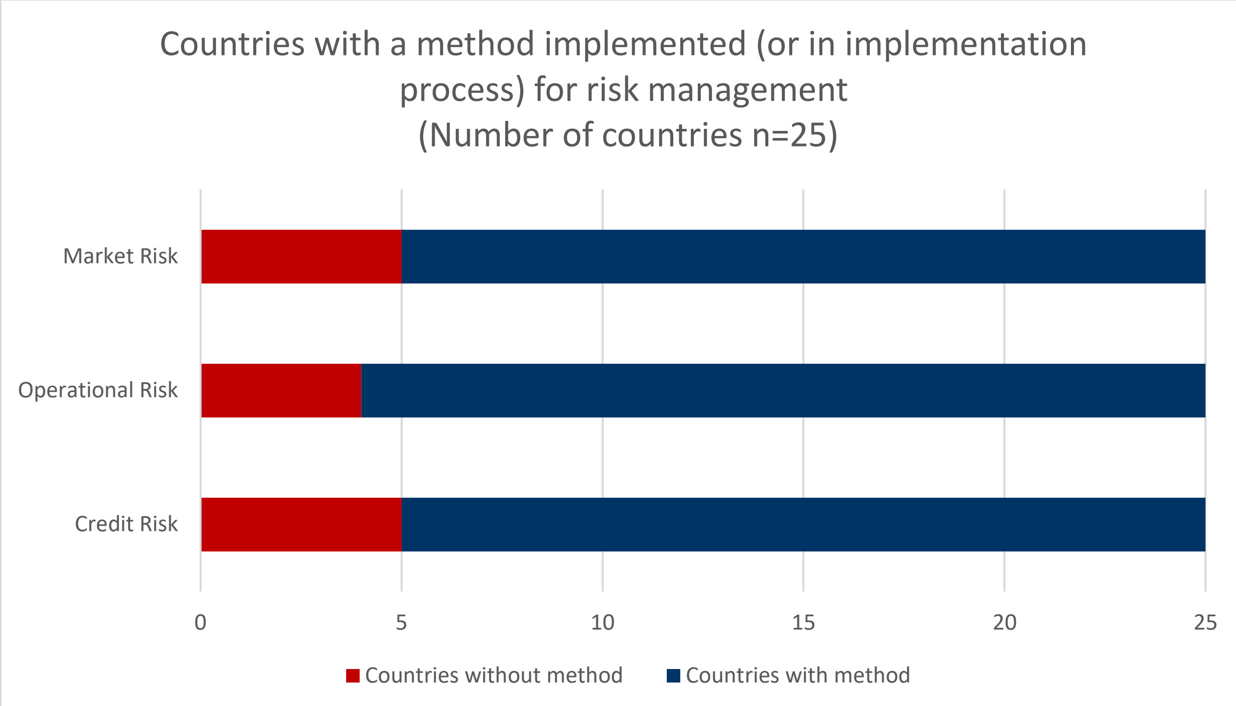
Regarding Basel II, Pillar 1 we can observe that no risk measuring method has been implemented by more than 50% of the Members, although the numbers reported indicate adoption rates between 20% and 40%. On the other hand, the supervisory process elements that correspond to Basel II, Pillar 2, have a higher implementation rate, close to 50%. Unlike the first two pillars, pillar 3 in Basel has a low level of implementation. Just like Basel II pillar 3, Basel II.V has a low implementation rate. Finally, in the region, Basel III has an implementation rate between 20% and 30%.

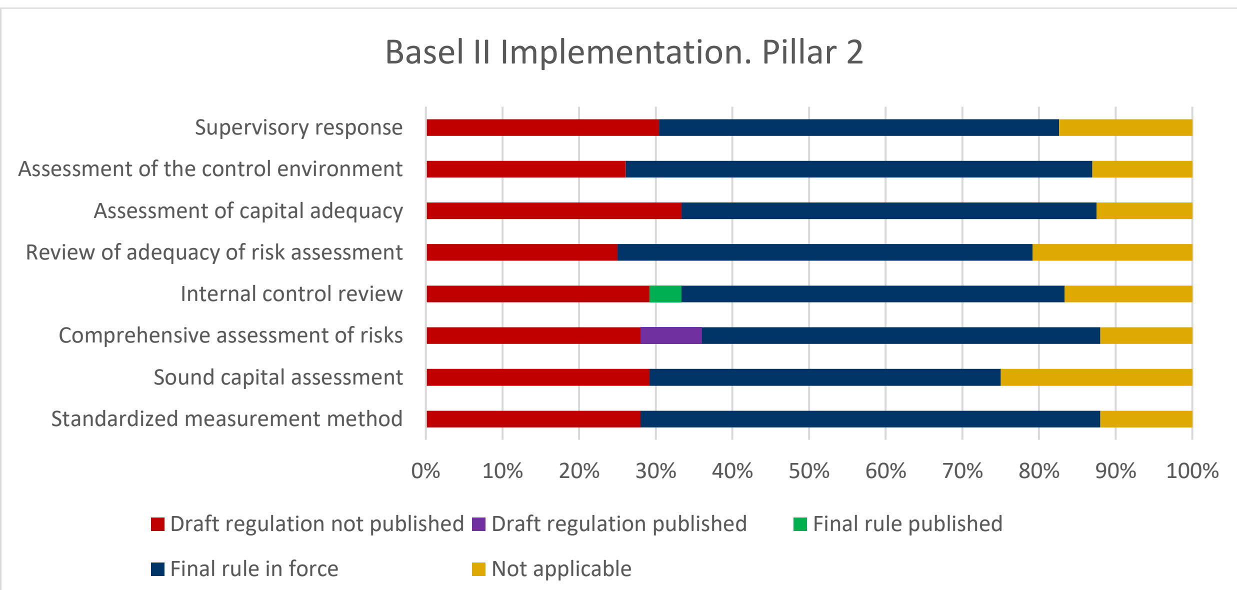
The following graphs show the implementation of Basel standards in the region.

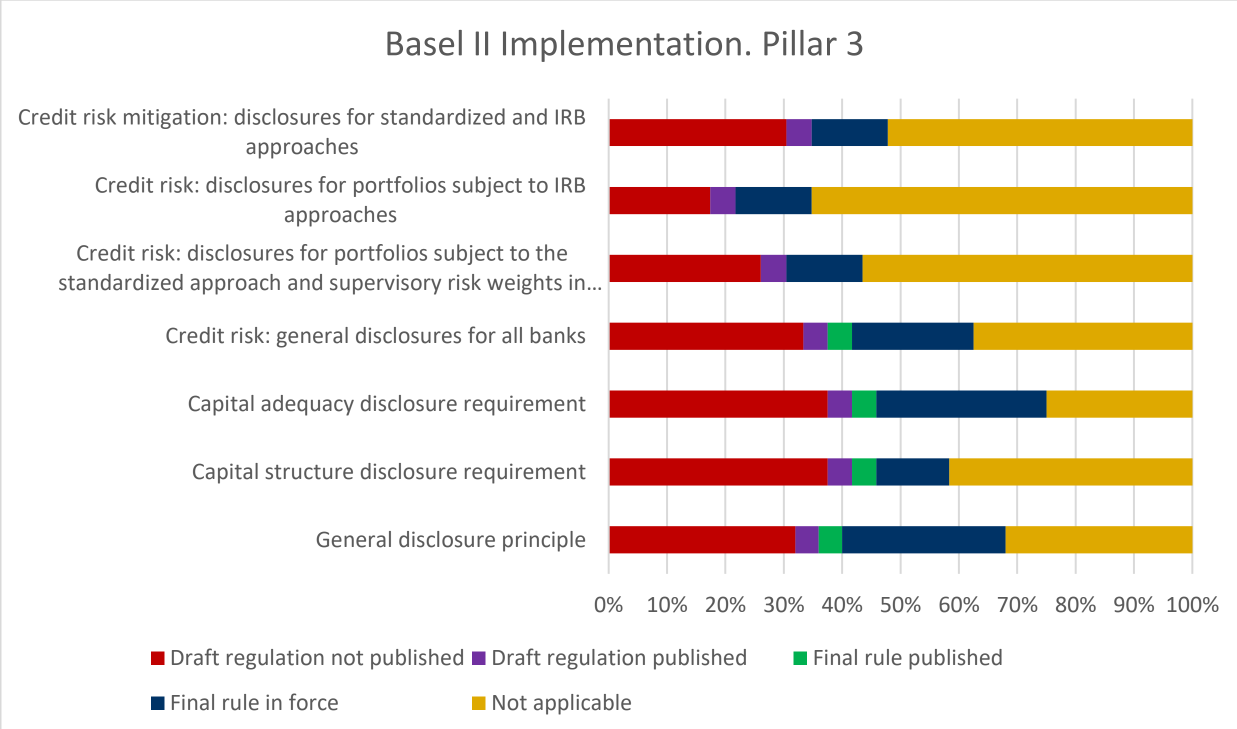


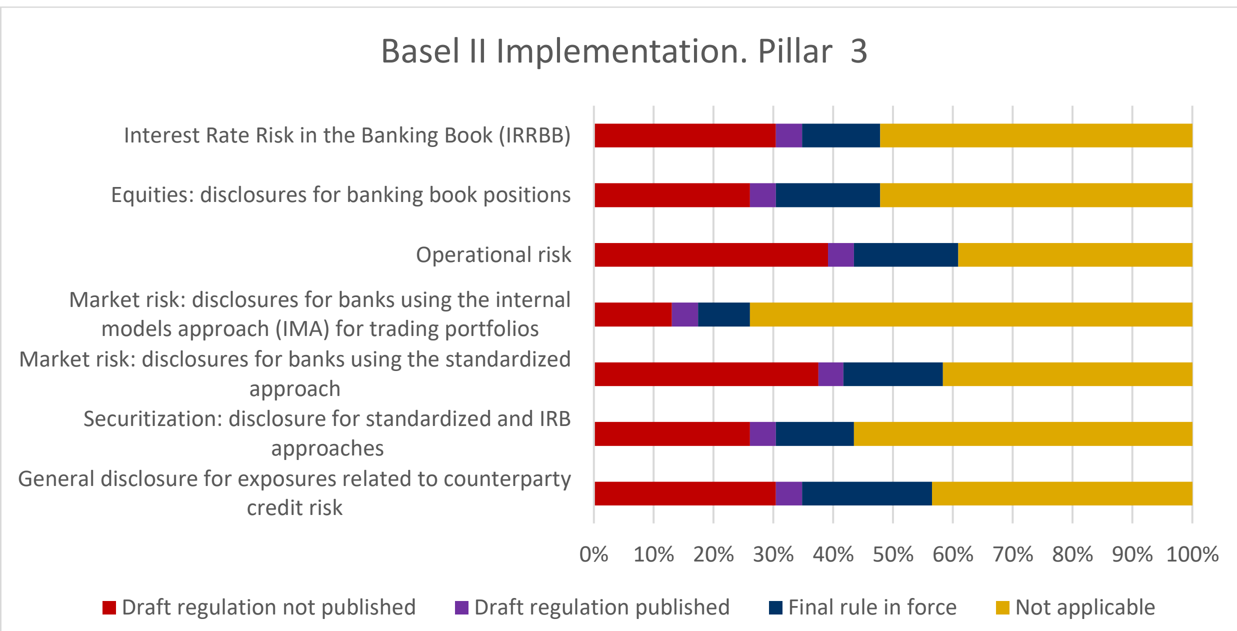

Basel II Implementation. Pillar 1 - Operational Risk
Pillar 1 - Operational Risk: Advanced measurement approaches
Pillar 1 - Operational Risk: Standardized / alternative standardized approach
Pillar 1 - Operational Risk: Basic indicator approach
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Final rule in force
Not applicable

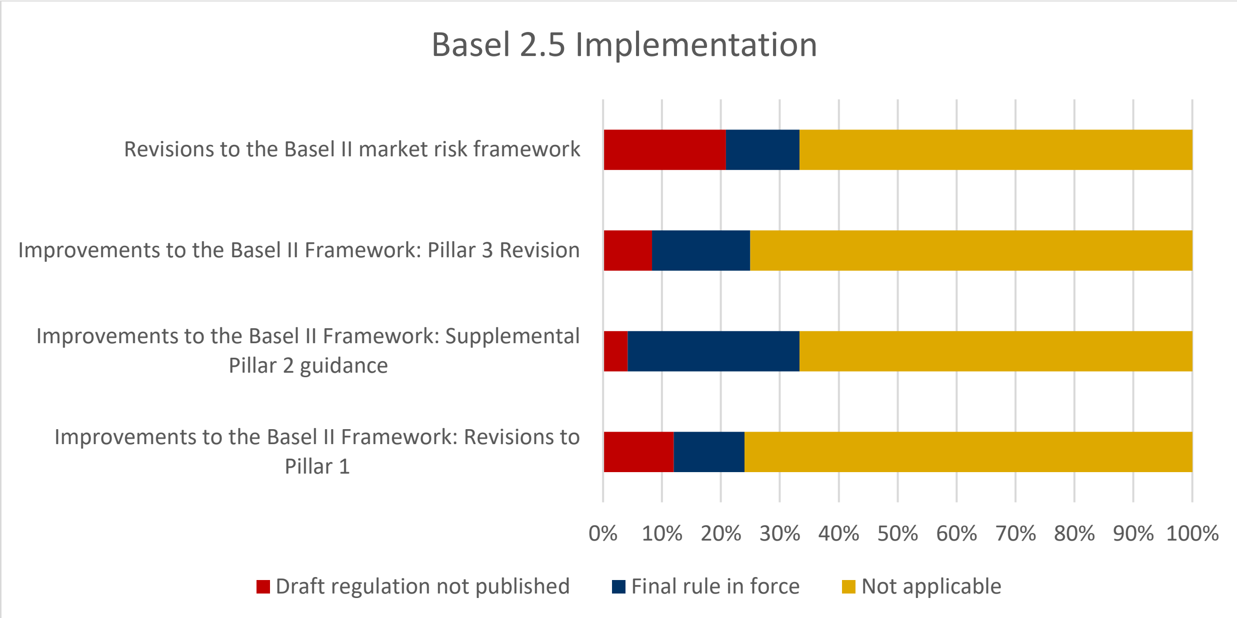

Basel II Implementation. Pillar 1 - Market Risk
Pilar 1 - Market Risk: Internal Models
Pilar 1 - Market Risk: Standardized measurement method
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Final rule in force
Not applicable

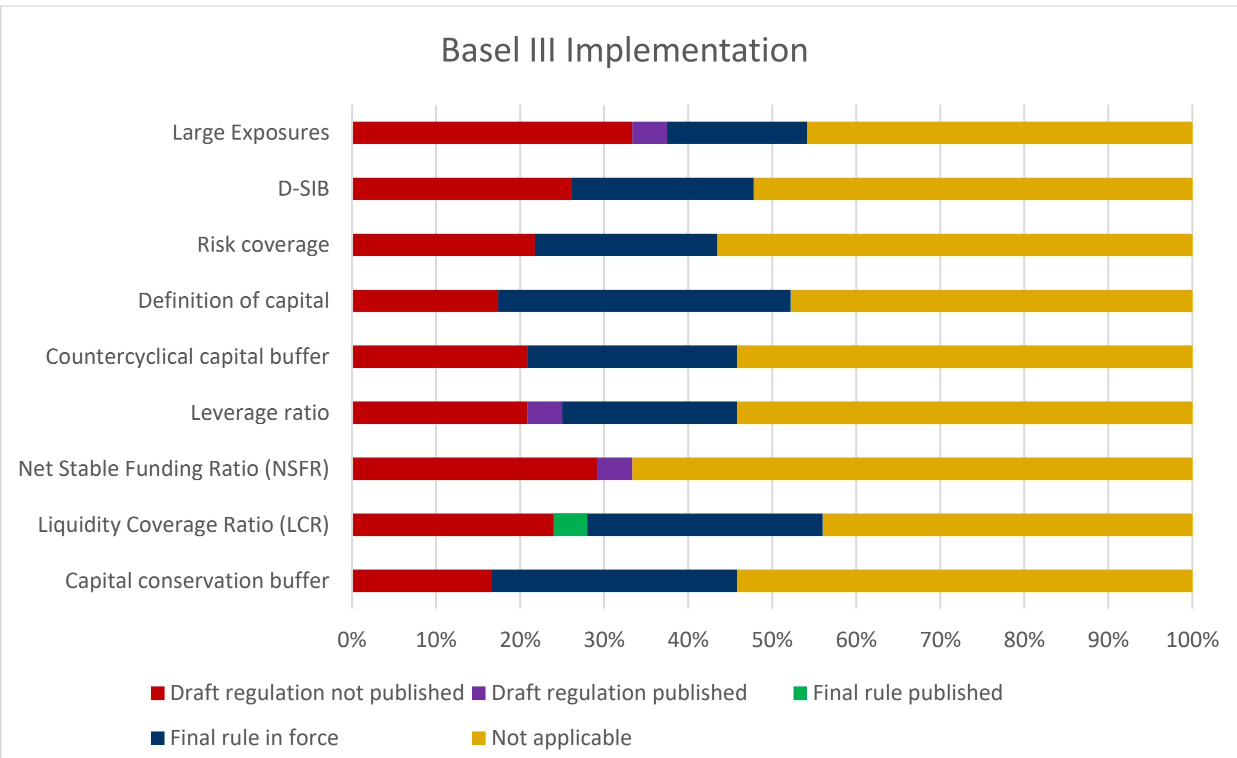

Countries with a method implemented (or in implementation process) for risk management
(Number of countries n=25)
Market Risk
Operational Risk
Credit Risk
0
5
10
15
20
25
Countries without method
Countries with method

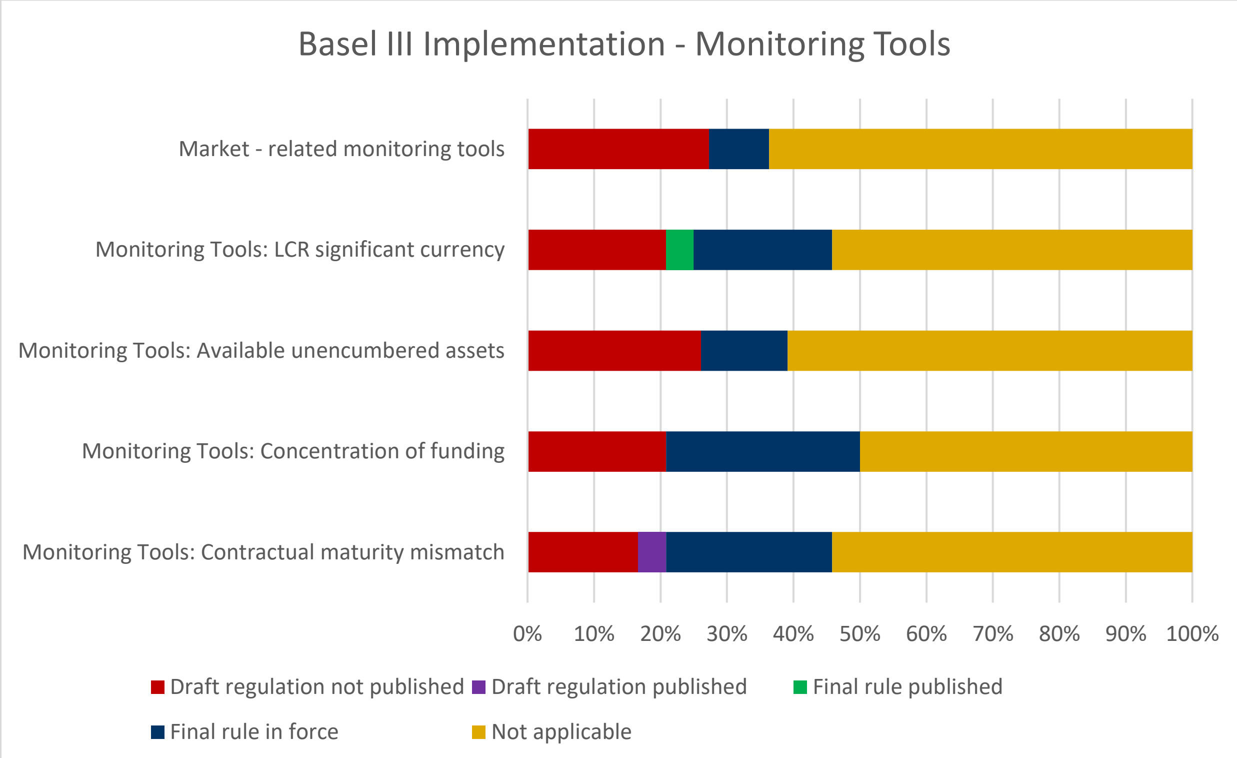

Basel II Implementation. Pillar 2
Supervisory response
Assessment of the control environment
Assessment of capital adequacy
Review of adequacy of risk assessment
Internal control review
Comprehensive assessment of risks
Sound capital assessment
Standardized measurement method
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Draft regulation not published
Draft regulation published
Final rule published
Final rule in force
Not applicable


Basel II Implementation. Pillar 3
Credit risk mitigation: disclosures for standardized and IRB approaches
Credit risk: disclosures for portfolios subject to IRB approaches
Credit risk: disclosures for portfolios subject to the standardized approach and supervisory risk weights in...
Credit risk: general disclosures for all banks
Capital adequacy disclosure requirement
Capital structure disclosure requirement
General disclosure principle
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Draft regulation published
Final rule published
Final rule in force
Not applicable


Basel II Implementation. Pillar 3
Interest Rate Risk in the Banking Book (IRRBB)
Equities: disclosures for banking book positions
Operational risk
Market risk: disclosures for banks using the internal models approach (IMA) for trading portfolios
Market risk: disclosures for banks using the standardized approach
Securitization: disclosure for standardized and IRB approaches
General disclosure for exposures related to counterparty credit risk
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Draft regulation published
Final rule in force
Not applicable


Basel 2.5 Implementation
Revisions to the Basel II market risk framework
Improvements to the Basel II Framework: Pillar 3 Revision
Improvements to the Basel II Framework: Supplemental Pillar 2 guidance
Improvements to the Basel II Framework: Revisions to Pillar 1
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Final rule in force
Not applicable

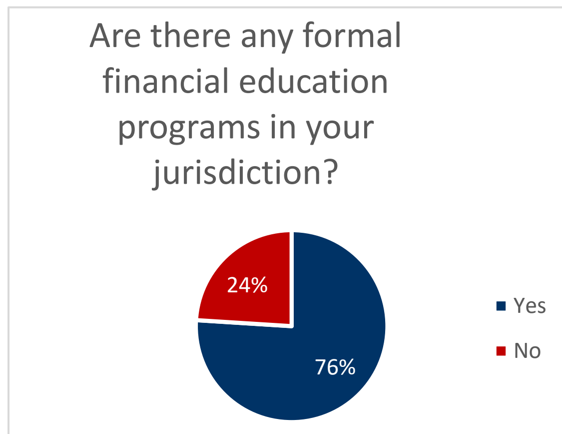

Basel III Implementation
Large Exposures
D-SIB
Risk coverage
Definition of capital
Countercyclical capital buffer
Leverage ratio
Net Stable Funding Ratio (NSFR)
Liquidity Coverage Ratio (LCR)
Capital conservation buffer
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Draft regulation not published
Draft regulation published
Final rule published
Final rule in force
Not applicable

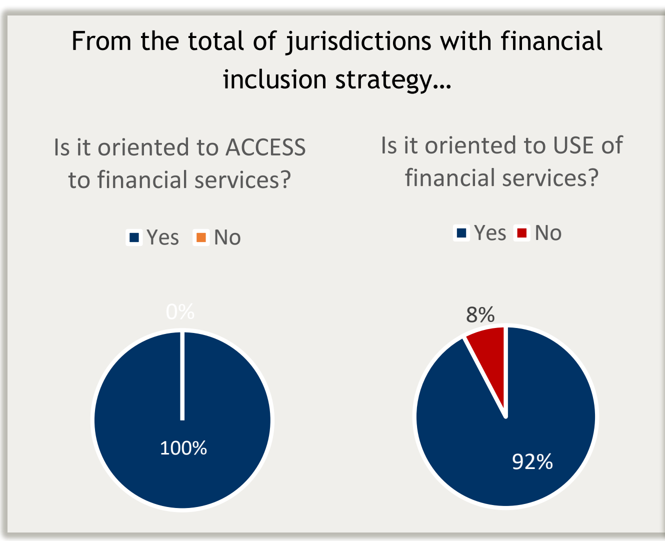

Basel III Implementation - Monitoring Tools
Market - related monitoring tools
Monitoring Tools: LCR significant currency
Monitoring Tools: Available unencumbered assets
Monitoring Tools: Concentration of funding
Monitoring Tools: Contractual maturity mismatch
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Draft regulation not published
Draft regulation published
Final rule published
Final rule in force
Not applicable

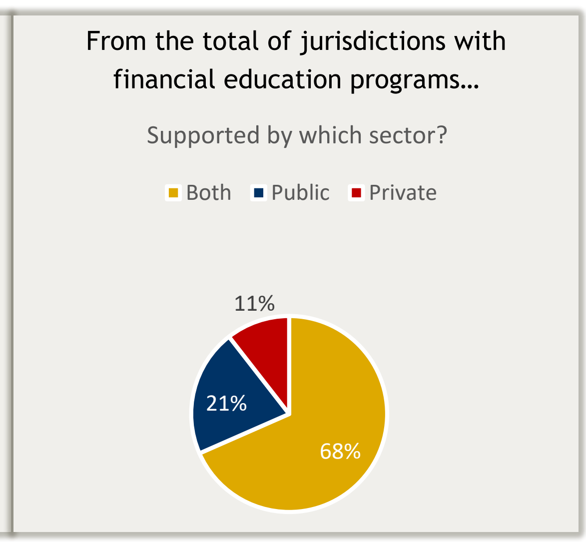
## XI. Financial Inclusion

To assess the financial inclusion topic, the Associate Members were asked if they have a national financial inclusion strategy and, in case they do have one, if it is focused on access and/or use of financial services. Furthermore, they were asked if they have a specialized entity in financial sector consumer protection. Afterward, the members were also asked if they have financial education programs, and to indicate if these are public and private and what is their approach.

For this section, the graphs represent the percentage of countries that corresponds to each question. For example, the only thing considered was the group of countries that do have a financial inclusion strategy to calculate the percentage of countries that focus their strategy on the use and access to services. The same thing applies to financial inclusion programs.

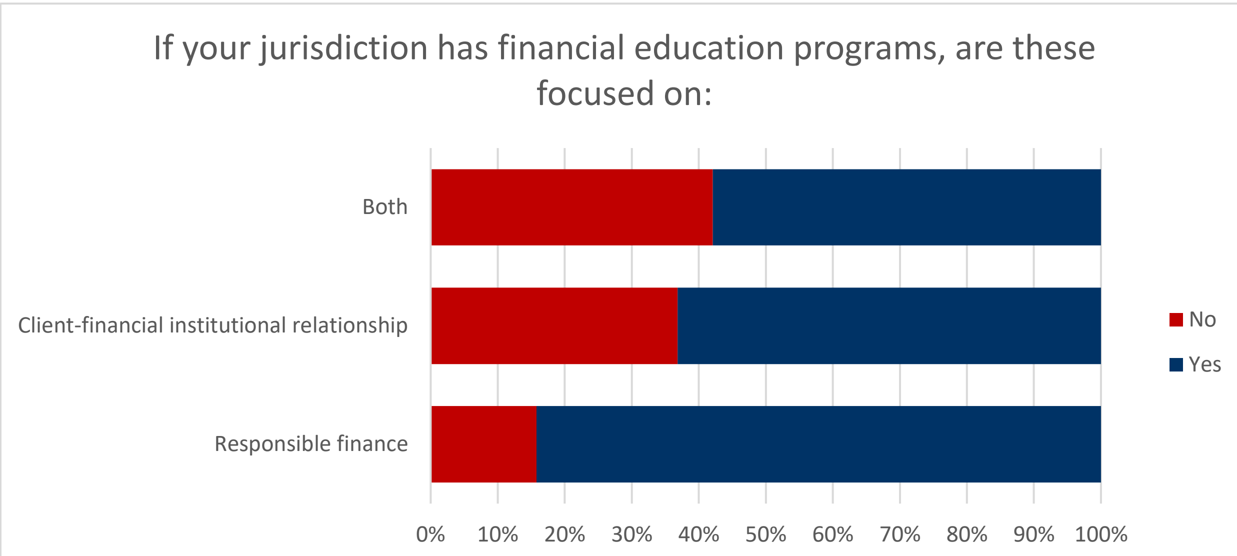



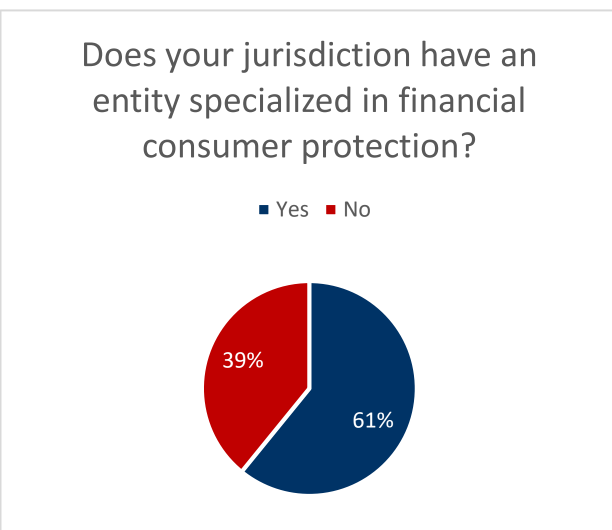

From the survey results, 52% of the members have a financial inclusion strategy. Within this group, all of them focus their strategy on access to financial services, while 92% focus on the use of financial services.

On the other hand, 76% of the Associate Members have financial inclusion formal programs. 11% of the education programs are private, 21% are public, and 68% are mixed.

The formal financial education programs are focused on responsible finances in 84% of the cases, and 63% on banking institution customer relations. 58% of the programs focus on both, customer relations and responsible finances.

As to financial sector consumer protection, only 61% of the Members reported having some specialized entity on this topic.

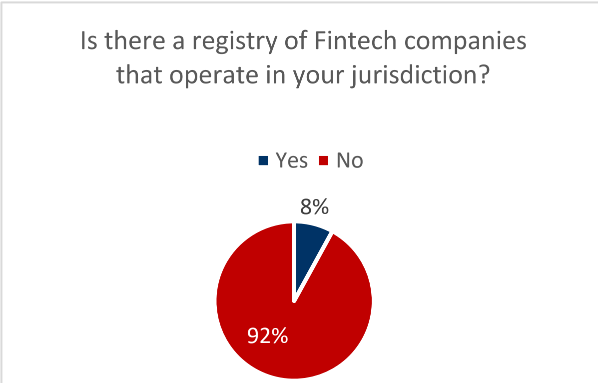


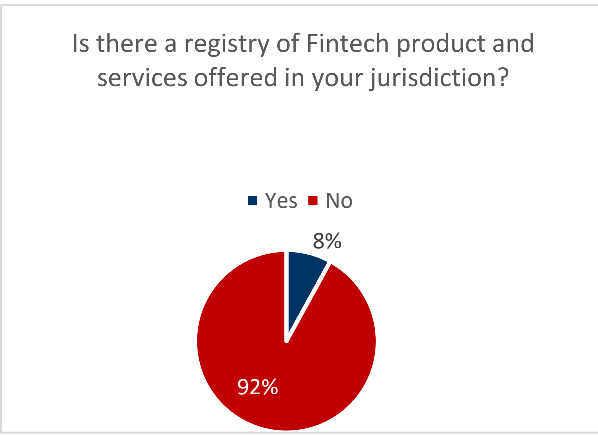



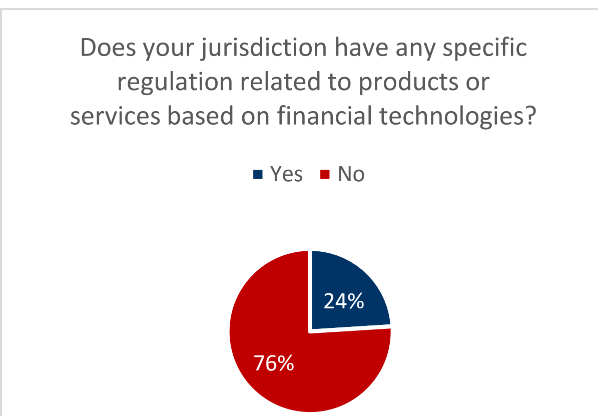

**Other focus of financial education programs:**

- Relationship with non-banking institutions.
- Explaining basic financial concepts in scholar system.
- Programs such as "Saving Week".
- Inform about the functioning of the system and consumer protection.

# XII. TECHNOLOGICAL INNOVATION




A series of questions regarding technological innovation were included in the survey. The Associate Members had to reply if they have a register of new financial technology companies in their jurisdiction; a registry of new financial technology products and services; and/or a specific Fintech product and services regulation. Moreover, they were asked what types of services these Fintech companies provide in their jurisdictions. The results can be seen in the following graphs.

Only 8% of the Associate Members reported having some type of register of new financial technology companies. Furthermore, only 8% have a registry of Fintech products and services provided. It is important to highlight that said registers are mainly focused on electronic money.

On the other hand, the percentage increases in the specific regulation of Fintech products and services. Under said heading, 24% of the Associate Members reported having a regulation of this type. Some of the examples of regulated products and services are electronic money and mobile payments. They also reported having regulations for companies that provide mobile payment services, for the establishment of risk management and due diligence processes and the different traditional banking system service providers.

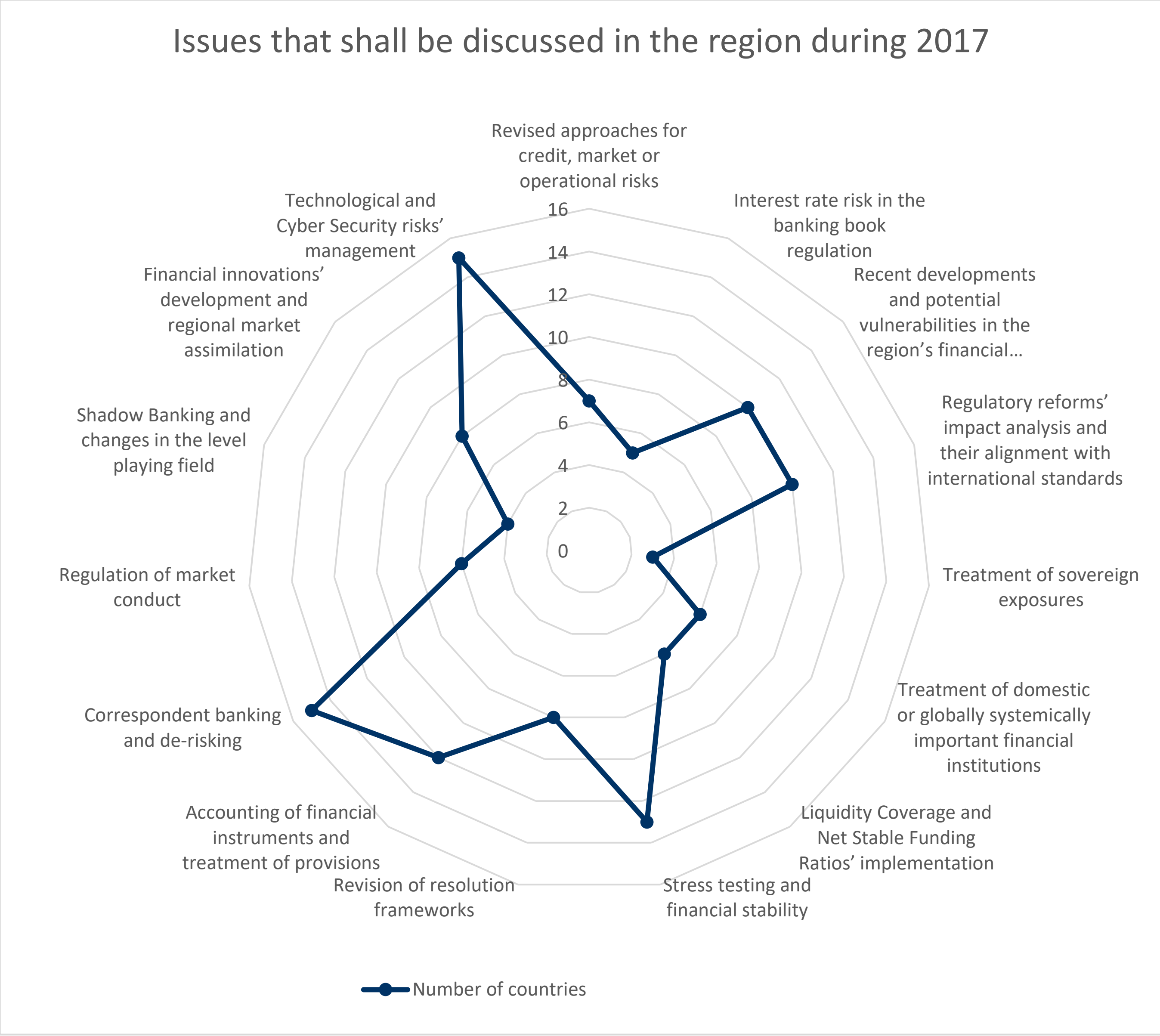
Some services offered by Fintech companies in the region:

- Crowdfunding
- Electronic Payments
- Peer-to-peer lending
- Virtual Currency
- Foreign Currency Sale
- Financial Automated Advice
- Insurance
- Platforms that Act as Intermediaries for Banking Deposits.

# XIII. Topics of Interest

In the last section, the Associated Members were presented with a 15 topic menu. The respondents selected five topics that they consider should be discussed in the region during 2017.

For each subject, the number of countries, who consider that the topic should be discussed in the region, was added. The results are presented in the following graph. The topics further away from the center indicate a larger number of Members interested.



Based on the answers obtained, the only topics that concern more than half of the countries are technological and cyber security risks management; correspondent banking and *de-risking;* and stress testing and financial stability. Accounting of financial instruments treatment of provisions are of concern for almost 50% of those surveyed.

The second group of topics includes those that should be discussed according to the opinion of 8 or 10 countries. The following are found in this group: recent developments and potential vulnerabilities in the region's financial markets; regulatory reforms' impact analysis and their alignment with international standards; Shadow Banking and changes in the level playing field; and the revision of resolution frameworks.

Finally, the topics that are of concern for less than eight members are the revised approaches for credit, market or operational risks; treatment of domestic or globally systemically important financial institutions; Liquidity Coverage and Net Stable Funding Ratios' implementation; regulation of market conduct; financial innovations' development and regional market assimilation; interest rate risk in the banking book regulation; and treatment of sovereign exposures.

| The issues with a greater number of interested Members are: | The issues with a lesser number of interested Members are: |
|---|---|
| • Correspondent banking and de-risking.<br>• Technological and Cyber Security risks' management.<br>• Stress testing and financial stability.<br>• Accounting of financial instruments and treatment of provisions. | • Treatment of sovereign exposures.<br>• Interest rate risk in the banking book regulation.<br>• Shadow Banking and changes in the level playing field.<br>• Regulation of market conduct.<br>• Recent developments and potential vulnerabilities in the region's financial markets. |