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Abstract

This document introduces the characteristics of Recovery and Resolution Plans proposed by the *Financial Stability Board*. To achieve this objective, the document presents a literature review about the essential aspects of these plans, the guidelines for their implementation, some international experience where these plans have been implemented, and the policy implications of the adoption of this tool in Colombia.

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1. Introduction

The banking sector has an important role in boosting the development and growth of the economy. It allocates limited resources through channeling savings to investors, financing the most productive projects, reducing the probability of default, and facilitating risk management and transactions between economic agents (Diamond & Dybvig, 1986). To develop these functions, banking institutions must undertake several risks that, without the adequate monitoring, can trigger risky situations that generate economic losses and instability in the financial system (Seelig, 2006).

The financial crisis of 2008 showed that the authorities were not prepared to deal with the failure of systemic banks¹. According to Gallemlere (2013), one of the main causes of the crisis was the opacity of the financial system. This opacity obstructs the risk and sound evaluation of financial intermediaries, and consequently reduces the authorities' abilities to conduct an efficient monitoring and a timely intervention. The described situation can propel bank runs, contagion and systemic risk. Under this scenario, it is not possible to determine the economic value of bank assets, which in turn give rise to uncertainty and loss of confidence in the financial system (Morgan, 2002).

The loss of confidence during the crisis of 2008 forged a reduction in the interbank lending, which diminished the total liquidity of the market and expose the entire world payment system to risk. To deal with this problem, authorities developed several measures aimed to rescue systemic banks, through the use of public resources, which accounted for approximately 50.4% of developed economies GDP (2008) (Fiscal Affairs Department, IMF, 2009). An example of these measures was the *Trouble Asset Relief Program* in United States, under which assets and equity were bought from financial institutions (Flannery, Kwan, & Nimalendran, 2012).

Supervisors lack of understanding about risks undertaken by financial institutions produces moral hazard in the proceedings of managers and/or shareholders. If banks were totally transparent and it was possible to recognize their characteristics and problems, economic agents and supervisors would distinguish perfectly between fragile and sound banks. For this reason, supervisors around the world have started proposing and promoting structural changes in banking regulation in order to understand the structure and organization of financial institutions and facilitate decision making in an eventual intervention.

New regulatory standards aim that financial institutions, especially the systemic ones, can be intervened without requiring the use of public resources. In this sense, the *Financial Stability Board* (FSB) states that to accomplish a successful intervention, it is necessary that authorities have extended resolution powers that enable them to resolve all kinds of financial entities. Furthermore, the new regulatory standards require planning of the possible proceedings and international cooperation between resolution authorities in case of intervention.

One of the tools that has been developed since the past crisis is the Recovery and Resolution Plans (RRP). The “*Key Attributes of Effective Resolution Regimes*” (KA) establish that those plans must be implemented by the banking institutions whose failure could jeopardize the financial system. These institutions must identify options to reestablish their financial viability under any stress scenario (Recovery Plans), and propose resolution strategies that protect the payment system without using public resources (Resolution Plans). It is worth highlighting, that RRP have been associated to the term “Living Wills” that in the United States refers only to Resolution Plans. However, this document refers to RRP as a joint tool that ensures the effectiveness of resolution in financial institutions.

The RRP aim to produce a roadmap to deal, in a timely manner, with a fragile systemic entity when it becomes non-viable, and to ensure that no financial entity is “too-big-to-fail”. These plans have the following objectives: i) to design strategies or mechanisms that could be applied if the institution has financial problems; ii) to reduce the probability of using public resources; iii) to allow authorities to have all the information and powers needed to define the more efficient and appropriate resolution options; iv) to improve and ensure financial stability and to reduce moral hazard; v) to protect depositors and; vi) to maintain the payment system.

In Colombia some of the tools that contribute to efficiency during an intervention are: i) a Memorandum of Understanding between Fogafin and the Superintendence of Finance (SFC); ii) cooperation agreements with international insurance agencies; iii) the creation of the Colombian Financial Sector Coordination and Monitoring Committee (CCSF);

¹ Banks whose bankruptcy poses a threat to the stability of the payment system.

iv) the Superintendence of Finance early warning system² and, v) the development of intervention protocols by Fogafin. However, Recovery and Resolution Plans have not been established.

In order to review the RRP characteristics and to explore the possibility of implementing this tool in Colombia, this document presents a literature review and answers the following questions: i) How do Recovery and Resolution Plans work to resolve deposit-taking institutions? ii) Which is the institutional structure needed to implement these plans? And iii) Is the implementation of these tools in Colombia viable and pertinent?

For these purposes, this document is divided in five sections, of which the introduction is the first. The second section presents literature showing the principal characteristics of Recovery and Resolution Plans. The third section describes the international regulation developed around the elaboration of these plans and shows the way in which some countries have adopted these tools. The fourth section explores the relevance and political implications of including these plans in Colombia. Finally, conclusions are presented.

2. Literature Review

This section presents the literature review about the background and essential characteristics of the RRP.

2.1. Recovery and Resolution Planning background

In 1998, the report presented by the *Basel Committee on Banking Supervision "Enhancing Bank Transparency"* discussed the importance of disclosing information in order to carry out market discipline in the financial system. The mentioned report recommended that financial institutions should provide periodic and accurate information that will allow market participants to establish the risks in which banks were incurring. Banks were required to submit: financial performance, financial position (capital, solvency and liquidity), strategies and practices to manage risk, risk exposure (credit risk, market risk, liquidity risk, operational risk and legal risks), accountability policy and corporate governance, and management information.

In 2001 the New Basel Capital Accord emphasized the importance of market discipline to promote the stability of financial systems. Such agreement recommended that banks should release information, at least once a year, about: capital structure and its components, terms and conditions of the main characteristics of capital instruments, quantitative and qualitative information about risk exposure, capital adequacy, and a contingency plan in case of financial stress.

However, it was since the last economic crisis and in order to avoid the effects of the default of *Lehman Brothers* on the world economy that the *Basel Committee on Banking Supervision* suggested that systemic banks, especially the transnational ones, send updated information to the authorities about their organizational structure, counterparties, assets of entities belonging to the conglomerate, funding contingency plans, and necessary information to liquidate financial contracts. The gathering of this information facilitates the maintenance of banks essential functions during times of stress and the execution of an orderly resolution. These plans are known as Recovery and Resolution Plans (RRP). The topics that RRP should contain are presented below.

2.2. Characteristics of the Recovery and Resolution Plans as facilitators in the intervention of financial entities

The "*Key Attributes of Effective Resolution Regimes for Financial Institutions*" (2014) establishes that RRP should be, at least, implemented by financial firms whose failures could impact the payment system. These plans aim to improve the efficiency in the recovery and resolution of systemic entities by providing a wider range of information, including potential problems that the entity may have in a fragile situation. The RRP must provide, to the authorities and banks, clarity on the strategies to restore or resolve a fragile financial intermediary.

As for the design of such plans, these can be made by the financial entities and be submitted for review and approval by the competent authorities (supervisor and/or resolution authority) (Avgouleas, Goodhart and Schoenmaker, 2010), or

² They are the facts, situations, events, amounts, quantitative and qualitative indicators, financial ratios and other information that the entity supervised by the SFC determine as relevant, from which one can infer timely and / or prospectively the possible existence of a fact or situation beyond what the entity, in the development of SARLAFT, determined as normal. (Circular Externa 022 of 2007, SFC)

they can be elaborated by the supervisory and/or resolution authorities with information provided by banks. In either case, the RRP should contain a set of strategies that could be implemented if the institution presents financial problems.

Although these tools have been welcomed by resolution authorities, their implementation has not been exempt from criticism, especially in the United States. The Federal Deposit Insurance Corporation (FDIC) argues that the assumptions made by banks, for those plans, are unrealistic, or the solving strategies proposed require the use of public funds directly or indirectly. Also, it is said that there are not enough resolution strategies and alternatives that will mitigate the impact systemic banks have over the financial stability.

According to Avgouleas, Goodhart, & Schoenmaker (2010), an efficient RRP should allow: i) to restructure businesses, ii) to mitigate problems of liquidity and capital in times of crisis, iii) to continue providing bank critical functions, iv) to define intervention triggers, v) to perform an efficient resolution, and vi) to implement cross-border cooperation agreements between resolution authorities. Each of these aspects is addressed in the following subsections.

2.2.1 Businesses Restructuring

One of the most important aspects for the development of the RRP is the restructuring of business lines, which can allow an efficient intervention of a financial institution. To achieve this objective, RRP must contain the assessment of risks associated with each business line, and the strategies to restructure these lines to mitigate the risks identified. Within this analysis, the corporate structure of the entity should be assessed to guarantee that, if the non-viability point is reached, the other institutions under the same umbrella can continue their normal operation. In addition, supervisors should be able to require banks to simplify its structure to ensure an effective monitoring and recovery or resolution.

2.2.2 Mitigation of liquidity and capital problems

In the early stages of a crisis, liquidity pressure on the banking system increases as some depositors withdraw their funds as a result of their inability to distinguish between fragile and sound banks. This situation could spawn bankruptcy in a solvent bank (Hoelscher & Ingves, 2006). For this reason, the RRP require funding strategies that would be used under various crisis scenarios evaluating sources of liquidity and proposing additional sources of funding. Consequently, market discipline is strengthened, reducing dependency on the lender of last resort.

Additionally, in a crisis scenario, bank's equity can decrease and cause an agency problem for shareholders, motivated by expectations of bailout (Admati & Pfleiderer, 2010). Because of this, the RRP should include strategies that should allow banks to increase their capital in times of crisis. To achieve this goal, it is possible to use the following strategies: i) reduce risky assets (liquidating portfolios, selling assets, selling businesses lines, etc.), ii) seek new investors or iii) plan how to conduct a bail-in.

2.2.3 Continuity of critical functions

Given the fundamental role of banks in the payment system, it is required to ensure that the essential functions of banks are maintained during a crisis. This process must be filled immediately, even if it has not been decided which resolution mechanism is going to be implemented (Huertas, 2010b). In this sense, the RRP should ensure the necessary information about the services provided by the entity, particularly those that should be prioritized in an intervention (Avgouleas, Goodhart, & Schoenmaker, 2010). This aspect is relevant, since the expectation of a possible disruption of financial services acts as a barrier to the efficient intervention of insolvent complex institutions (Herring & Carmassi, 2010). The RRP should enable actions that allow the continuation of essential financial services such as sales of subsidiaries, business lines and portfolios. Within this aspect it is of vital importance to establish mechanisms to ensure that the above actions have the backing of the shareholders of the intervened entity. This approval protects the authorities in case they decide to apply any business restructuration. (Huertas, 2010a) (Huertas, 2010b).

2.2.4 Establishment of intervention triggers

It is required to define which elements will initiate the activities for recovery or resolution of an entity. For this reason, the RRP should include triggers that would begin their implementation. In case where financial institutions are responsible for preparing the RRP, these triggers should be in line with the guidelines that have been established by the resolution authorities for the intervention of a financial institution. It is necessary to clearly define the thresholds, and

identify the quantitative and qualitative criteria that lead to the activation of such plans.

The ability to enforce these triggers depend on the ability to detect problems and on the resolution authority's commitment (Jones and King, 1995³). The establishment of triggers on the RRP facilitates compliance with the measures contained in these, and limits the possibility of compensating shareholders for violating their property rights. This is due to the fact that shareholders were part of the development of the RRP, or approved these plans.

2.2.5 Efficient resolution

Searching for an efficient alternative of resolving financial entities is an aspect that allows the RRP to comply with the objective of facilitating resolution. This efficient alternative must: i) reduce total costs of intervention, ii) preserve the banking essential functions, iii) cover deposits and, iv) reduce the probability of contagion (Bolzico, Mascaró, & Granata, 2007).

The RRP should include sufficient information to determine feasible alternatives to resolve the entity without requiring public resources (Huertas, 2010b). To achieve this goal, these plans must contain a description of the legal structure of the entity as well as the activities and assets of all parties that comprise the financial conglomerate, these will allow the establishment of more efficient resolution alternatives that prevent the use of public resources (Avgouleas, Goodhart, & Schoenmaker, 2010).

2.2.6 Cross-border cooperation and compatibility of resolution regimes

The RRP should allow cross-border cooperation and coordination between other jurisdictions in which a financial institution has presence (Avgouleas, Goodhart, & Schoenmaker, 2010). The multinational nature of complex financial entities increases the difficulty of resolution in crisis scenarios due to the following factors: i) differences in intervention triggers, ii) uncertainty in the selection of the insolvency regime to be followed, iii) differences between the local and international resolution objectives, iv) differences in the criteria for the distribution of losses between countries, v) distrust in the ability of resolution of other countries, and vi) differences on the valuation of the importance of the target financial institution for each of the economies involved.⁴ The RRP should be able to address these issues through an effective planning and coordination among the resolution authorities involved (Claessens, Herring, & Schoenmaker, 2010).

3. Institutional structure for the implementation of Recovery and Resolution Plans

3.1 Regulatory framework

The characteristics of RRP were presented in the previous section. From these ideas, several countries have proposed guidelines or regulations to implement and use the RRP as an effective tool. On one hand, in the United States, the *Systemic Resolution Advisory Committee* (SRAC, 2011) has developed guidelines to meet two complementary laws: i) the Dodd-Frank Act (DFA) and ii) the law of Insured Depository Institution (IDI). The first regulation applies to the largest financial conglomerates operating in the United States and the second applies to the largest depository institutions of the country. On the other hand, in Europe, the *Bank for International Settlements* (BIS, 2010) and the *Financial Stability Board* (FSB, 2011) have defined the elements that must be contained in a resolution regime to be effective. The European Parliament in June 2012 issued a directive establishing a framework for the recovery and resolution of credit institutions (European Commission, 2012). A description of the RRP international practices is mentioned below.

Within the literature review it is possible to find a set of requirements that must be incorporated into the legal and procedural framework to comply with the desirable characteristics of the RRP. Among these requirements are: i) obligation for financial institutions to have in place RRP, ii) prohibition on the use of public resources, iii) inclusion of all the necessary information to deal with a crisis, iv) development of an analysis of various strategies for recovery or resolution, v) guarantee that information can be produced in real time, vi) discretion in the application of changes in the organizational structure of the institution by resolution authorities and, vii) coordination with foreign resolution regimes where the financial institution

³ Cited by Avgouleas, Goodhart & Schoemaker 2010

⁴ Herring & Carmassi, 2010, Basel Committee on Banking Supervision, 2010 and Centre for European Policy Studies, 2010.

has presence.

3.1.1 Requirement of having in place RRP

In order to mitigate the liquidity and capital problems in a crisis and ensure the critical functions of the banking system, among other features, it is essential to implement the RRP as a mandatory requirement for systemic institutions (*Financial Stability Board*, 2012). These institutions fulfill critical functions within the financial structure, so the failure of one of them brings serious damage to the economy. Additionally, in times of crisis, liquidity pressure increases due to the rise in withdrawal of resources from uninformed depositors, a situation that could destabilize the payment system. Therefore, the RRP must contain an analysis of various funding strategies that would be used during this times ensuring the continuity of essential functions of the bank.

3.1.2 Prohibition of the use of public resources

One aspect that allows RRP to meet their objectives is the search for an efficient resolution alternative which minimizes the intervention costs to taxpayers. This objective is achieved through the analysis of diverse resolution alternatives that do not use public resources and through the definition of intervention triggers. Therefore, the legal framework should define new resolution mechanisms that limit the use of public resources and eliminate or restrict measures that involve the use of them to rescue financial institutions (SRAC 2011, FSB 2011, European Commission 2012).

3.1.3 Information needed to handle a crisis

In order to achieve an efficient resolution that allows the protection of bank critical functions, reduce intervention costs, and decrease the likelihood of contagion, it is required to have information to understand how institutions work. This suggests that within the legislation there should be no obstacles in the exchange of information between supervisory authorities, central banks, resolution authorities and the entity subject of the plan (BIS 2010, FSB 2011, SRAC 2011).

In this sense, the RRP should contain the following: i) description of the institution's organizational structure, ii) information about incumbent counterparties, iii) mechanisms to address liquidity and capital problems, iv) description of the institution's participation in the payment system, v) regulations to which the institution is subject in other jurisdictions, vi) technological platforms, and vii) information about incumbent markets (BIS 2010, FSB 2011, SRAC 2011, European Commission 2012).

3.1.4 Analysis of the various strategies of recovery and resolution

The RRP should entail a variety of stress scenarios with different mechanisms of recovery or resolution. The former aims to generate a scheme that allows the efficient intervention of the incumbent financial institution, ensuring the essential functions of the bank, and mitigating liquidity problems. These mechanisms should define the funding strategies of the institution, facilitate the restructuring of businesses in order to preserve the essential payment system functions, and propose strategies for the recovery or resolution through private sector mechanisms. Also, as an essential element of these, financial institutions or resolution authorities should establish the criteria that would trigger the implementation of the plans and operating elements necessary for such strategies to be carried out promptly (FSB 2011, European Commission 2012).

It is fundamental that prior to the implementation of the RRP, resolution authorities have the necessary powers that enable the RRP to meet their objective of facilitating the intervention of institutions in an efficient manner, such as assisted transfer of assets and liabilities, bridge bank, and bail-in. The availability of various mechanisms allows the authorities to determine the most feasible and efficient resolution strategies.

3.1.5 Generation of real time information

In order for the RRP to fulfill an efficient resolution of systemic institutions, it is necessary to generate timely and accurate information (SRAC 2011). For this reason, it is essential to ensure that the financial entity submit the information contained in the plans in real time, and those plans must be flexible enough to be adapted in case of new regulatory proceedings are made by the supervision authorities (BIS 2010, FSB 2011, SRAC 2011).

To achieve this goal, institutions must maintain a detailed inventory of their main services and critical functions, they

should identify and address legal restrictions that impede the exchange of information between institutions belonging to the same financial conglomerate, and demonstrate that they are capable of producing essential information to implement the RRP in a short period of time (FSB 2011).

3.1.6 *Changes in the organizational structure of the financial institution*

The RRP are tools that allow authorities to deal with a crisis in an orderly manner without disrupting the vital economic functions banks offer (FSB 2011). The analysis of the RRP may suggest that an entity cannot be resolved and therefore these could become useless. To avoid this situation, the RRP must consider business restructuring options aimed to reduce the target bank complexity and thus ensure a feasible resolution. For that it is necessary that the resolution regime allows the authorities to request changes to the financial institutions, such as: i) capital increases, ii) corporate restructuring, or iii) clearing business lines (FSB 2011, SRAC 2011).

3.1.7 *Coordination with foreign resolution regimes*

Complex financial institutions have a challenge in terms of coordination among various resolution authorities, since each of them has incentives to maximize domestic recoveries. To help solve this problem, the RRP must contain information about countries in which the firm operates and an analysis of the regulation and resolution authorities in those countries. Based on this information, the resolution authorities should coordinate to make compatible the different legislations with wide powers of resolution and the possibility to share information (BIS 2010), (FSB 2011), (SRAC 2011). Within this work, arrangements for the coordination of resolution regimes should be included. In particular, the identification of responsibilities and functions of the authorities, the establishment of the process under which the information will be shared to carry out the development of RRP and abnormal situations that arise.

3.2 *Empirical Evidence*

This section outlines the ways in which the RRP have been implemented in some countries.

3.2.1 *United States*

The RRP in the United States were established by the FDIC and the *Federal Reserve Board* (FRB) in compliance with the *Dodd-Frank Act Rule* and the *Insured Depository Institution Rule* (IDI). These measures were designed to limit the risk of the financial systemic institutions on the US financial system. On January 23, 2012, the FDIC issued the guidelines under which the RRP must be conceived and included them in the resolution regulation. The principal characteristics are as follows.

The financial institutions that must submit the RRP are: i) banks of US origin with more than USD 50 billion in assets, on average, during the last four transmissions of financial information, ii) foreign banks with agencies or subsidiaries in the US with at least USD 50 billion in total assets globally, on average, over the last four transmissions of financial information; and iii) non-bank financial institutions that have some kind of implications on the financial system. The RRP must be elaborated by the financial institutions and presented to the resolution authorities.

Also, the RRP must meet the following requirements: i) to allow depositors to access their deposits in one day, ii) to maximize the net present value of the entity's assets through the established strategies, iii) to minimize losses to creditors, including the Deposit Insurance Fund, and iv) to show the way in which the financial entity will separate its subsidiaries from the organizational structure and will sell business lines and assets, in case of financial difficulty.

Upon receipt of the plan, the FDIC decides whether to accept it. If it is determined that the RRP are incomplete or are not credible, that is, the strategies to solve the entity are not well-reasoned based on verifiable information, then the entity should forward the RRP with the appropriate modifications. In no case is the FDIC required to resolve entities in the manner that is exposed in the plan.

3.2.2 *United Kingdom*

The RRP were established and regulated by the *Prudential Regulation Authority* (PRA) through the document

“Recovery and Resolution Plans” in December 2013. This document determines the parameters under which the RRP must be created and establishes that these plans should ensure the preparation for an eventual recovery or resolution of a systemic institution in crisis.

The creation of the RRP is developed in two phases. In the first phase, the company must provide basic information about its operational, financial and legal structure and the economic functions that it performs. This information should be sufficient to allow the authorities to decide the best resolution strategy. In the second phase, additional information is requested depending on the entity’s intrinsic characteristics. Based on the strategies outlined in the first phase, the PRA can determine if it needs additional information to ensure that the entity can be resolved, and information related to the protection of some critical functions provided. In this phase, the PRA works with the financial institution collecting the specific information required. The more complex the institution, the more information will be required. To achieve the objective of the second phase, the PRA may request, among other, information about: i) the implementation of a specific recovery or resolution mechanism, ii) the continuity of critical functions, and iii) any additional resolution or recovery process.

In the regulatory document, the PRA proposes three basic resolution strategies: i) bail-in, ii) assisted transfer or bridge bank, and iii) insolvency proceedings (liquidation). The strategies may be extended depending on the analysis of the entity.

These plans are preventive, which means that if the PRA observes signs of financial stress that may be affecting an entity, it can request, at any time, additional information.

3.2.3 Germany⁵

The RRP were implemented in Germany, in June 2012, in the “*Entwurf eines Gesetzes zur Sanierungs- und Abwicklungsplanung von Kreditinstituten und Finanzgruppen*” (Draft Bill on Recovery and Resolution Planning for Credit Institutions and Banking Group). This law establishes two separate entities in charge of preparing the RRP. The Recovery Plans must be developed by the banking institutions, while the Resolution Plans must be developed by the Federal Agency for Financial Market Stabilization, FMSA, which is the German resolution authority. The latter should be prepared only for entities that represent some kind of systemic risk to the country. According to the regulation, systemic institutions are those that cannot be resolved under the banking regulatory framework without using substantial resources from the “German Restructuring Fund”.

The Recovery Plan must be elaborated by the bank, which is the parent of the group, and should be elaborated for the entire conglomerate as a consolidated plan. In the plan, all measures that would be taken by the bank in different stress scenarios should be included. The German supervisor, based on the Recovery plan, assesses the obstacles that the entity may face confronting stress scenarios and may request the adoption of strategies to eliminate such obstacles. However, the supervisor cannot require changes that may interfere directly with the bank’s business, based solely on the Recovery Plan.

The elements that must be included in the Recovery Plan are: i) organizational structure, ii) description of market segments, iii) legal, financial and operational interdependence, iv) measures to address capital and liquidity pressures (recapitalization, suspension of dividends, refinancing, asset sales, etc.), v) stress tests, vi) triggers to implement the Recovery Plan, and vii) communication plan for times of crisis.

In the case of Resolution Plans, the FMSA shall prepare a single plan for the entire banking group. This agency unit should evaluate that systemic banks can be solved with the resolution powers that the supervisor has or through the insolvency proceedings (liquidation). In addition, the Resolution Unit should coordinate its Resolution Plans with other jurisdictions where the banking groups have operations.

If after developing the plan, the *Deutsche Bundesbank* and the FMSA determine that the entity has obstacles that limit the ability to resolve it, these authorities may require changes to the bank or banking group. If these obstacles compromise the stability of the financial system and the entity did not adopt the required changes, the FMSA can order an assets sale, disassemble business lines or change the structure of the group, as applicable. Finally, the plan is confidential and cannot be shared with the bank under analysis.

⁵ Section based on the analysis made by Clearly Gottlieb Steen & Hamilton LLP, 2013

4. Policy implications

In order to evaluate the possibility of including the Recovery and Resolution Plans in the Colombian financial system, the feasibility and consideration of requesting these plans to credit institutions was analyzed, using as a basis the criteria presented in section 3.1. This analysis is presented below.

4.1. Requirement of having in place RRP

In order to enforce the elaboration of RRP by Colombia's systemic institutions, it is necessary first to define two aspects: i) the authorities that will prepare, monitor and sanction the compliance of RRP, and ii) the eligible list of institutions that must implement the RRP according to their relative risk to the stability of the system.

Regarding the first point, it is necessary to clearly assign the responsibility of implementing the RRP to one or more of the authorities of the Safety Net of the Financial System, *Red de Seguridad del Sistema Financiero*, (RSSF) and define the powers that each one of them will have. In particular, these powers must be sufficient to execute the functions associated with the implementation of the RRP such as: i) the identification of the financial entities subject to the RRP, ii) requirements and necessary information, iii) monitoring compliance of work plans for their development, iv) coordination with the other members of the RSSF, and v) reviewing and correction of the RRP presented.

Regarding the second point, it is necessary to define the financial institutions subject to develop a RRP based on their impact, given a failure, on the payment system. Initially, the institutions that should implement these plans are those that are systemically important to the Colombian economy and/or those with branches abroad, as long as the exposure is material or the risks are important for the recovery or resolution of the bank.

4.2. Use of public resources and available mechanisms

In order for an efficient implementation of the RRP, it is pertinent to validate the need to reinforce limits in the use of public funds to rescue systemic financial institutions and or implement further mechanisms that allow resolution without using them.

Under the Colombian law, there are support operations to financial institutions such as capital increases or loans that could benefit shareholders and unsecured creditors of a troubled institution and motivate higher risk-taking behavior. Therefore, it is important to validate the need of this type of mechanisms and/or the relevance of implementing barriers that limit the use of public resources, directly or through the deposit insurance reserve.

In this sense, the RRP become very important for the protection of public resources, as it is established in the KA by the FSB. The RRP are limited to strategies that allow the recovery and resolution of the institution without considering the use of public resources or thorough the deposit insurance reserve. To achieve this goal, it is necessary, prior to or at the same time of the implementation of the RRP, to validate the existence of resolution mechanisms that accomplish this objective. Therefore, it would be essential to include other mechanisms different from the liquidation or nationalization that could complement or substitute these such as: bail-in, assisted transfer of assets and liabilities and bridge bank.

4.3. Information needed to handle a crisis

The effectiveness and usefulness of the RRP, as a policy instrument to achieve fast resolutions that do not compromise public funds, rely heavily on the information used to analyze alternatives for resolving troubled institutions. If there are doubts about the veracity and quality of the information contained in the RRP, resolution authorities will tend to use traditional strategies to deal with troubled banks (capitalizations, loans, or nationalizations), just as it was done in Colombia in the crisis of the late nineties. Therefore, the parameters must be established under which the RRP should be elaborated, including all relevant information about the strategies that would be used in case of fragility or bankruptcy of the target entity. As presented throughout this document, at least the following information should be included: i) organizational structure, ii) counterparties, iii) assets of entities belonging to the conglomerate, iv) contingent funding plans, v) description of branches or subsidiaries in other jurisdictions, and vi) all the needed information to settle financial

contracts. Furthermore, information about national context, that has implications for the plans to be developed, should also be included.

To achieve this, the Colombian resolution authorities must have tools to collect and verify the information contained in the plans. To develop these tools, it is necessary: i) to develop workshops between different resolution authorities to evaluate and harmonize the requirements of information, and ii) to generate and disseminate, between credit institutions, the needs of information, the procedure for its presentation, disclosure times, and penalties for credit institutions that do not present the required information or presented it in an incompletely or inaccurately way.

4.4. Analysis of the various strategies of recovery and resolution

Once the necessary information is obtained, the next step is to choose the least costly resolution strategy that has no significant impact on the payment system. For the analysis of these strategies, the resolution authorities need a technical team with knowledge of the current regulations, theory, and international experience in the implementation of resolution mechanisms. Also, this team should be independent in its actions, from the central government or pressure groups such as banks associations, according to the provisions of KA within the essential criteria of the resolution authority (KA2.5).

It needs to be defined if the RRP will be developed only by the bank, the resolution authorities, or by both parties. This decision should consider the scope of the RRP, the information and ease of access to it, the availability of authorities' resources to the implementation and the definition, within the legal framework, of resolution mechanisms that will allow to establish the strategies to resolve effectively the entity, such as presented in Section 4.2.

4.5. Generation of real time information

Obtaining information promptly, especially of high frequency, is necessary to ensure the effectiveness of the RRP. Without timely gathering of information, intervention times estimated in the RRP could not be met, which would affect the credibility of the resolution authorities. It would be convenient to design platforms that allow financial institutions to transmit private information in an accurate and fast way, especially in critical moments. Likewise, an institutional framework for coordination among resolution authorities must be created, in order to transmit this information timely.

4.6. Changes in the organizational structure of the financial institution

As in the previous cases, the margin of maneuver of the resolution mechanisms is vital to ensure the suitability of the RRP. This flexibility is closely linked to the power of requiring changes in the target entity, particularly in management and the organic structure. In Colombia, this power could be challenging because of the lack of legal protection of managers and staff from the resolution authorities, and the limited powers to modify the structure of an intervened entity.

4.7. Coordination with foreign resolution regimes

In order to effectively implement the RRP, it is essential to strengthen cooperation and coordination between the countries in which the Colombian financial institutions have subsidiaries. This is pivotal to harmonize Colombian regulation with the resolution measures and parameters established in foreigners RRP. For this reason, a work plan should be designed between Colombian and foreign authorities to establish the guidelines of the RRP and the strategies that will allow the efficient resolution of the entity. Additionally, there must be a plan that guarantees the coordination between authorities for the transmission of information.

5. Conclusions

The 2008 crisis highlighted the existence of inefficiencies in financial institutions resolution that arise from lack of information. From these experiences, the supervisors and resolution authorities began to develop strategies and tools that allow a more efficient intervention of systemic institutions without resorting to taxpayer resources, such as the Recovery and Resolution Plans (RRP). These plans are already becoming a reality in several countries and will allow, both supervisory and resolution agencies, to access to detailed information on the supervised financial institutions.

Proper use of the information contained in the RRP could have important consequences on the efficiency of the Safety Net in handling future crisis. The time and resources devoted to analyze how to resolve financial entities today, will probably be key in times of crisis, when time and resources are particularly scarce. Also, the establishment of the RRP could, in case of a crisis, avoid a bailout and increase market discipline of financial institutions as a result of resolution and recovery mechanisms that have direct impact on shareholders.

In order to fulfill their objective, of facilitating the resolution of systemic institutions, the RRP must meet, at least in general, the criteria presented in this document. The United States, England and Germany have already incorporated these plans as a tool for resolving entities and are in the process of fine-tuning them to make them effective tools in the future.

Regarding the Colombian case, RRP are relevant and would surely be useful tools if implemented. There are local financial institutions whose failure would threaten the payment system and a previous analysis of resolution alternatives of these firms, included in the RRP, will result in increased efficiency, transparency and opportunity in case of a crisis.

The challenge of these authorities is to ensure the viability of the RRP. For this reason, it is necessary, among other aspects: i) to guarantee the existence of resolution authorities with explicit powers for the implementation and monitoring RRP and the coordination of the members of the RSSF in the development and implementation of the plans, ii) to review the existence of mechanisms, within the legal framework, that limits the use of public resources to bailout financial institutions and validate if it is necessary to establish additional barriers; it seems key to include new resolution mechanisms such as bail-in, assisted transfer of assets and liabilities, and bridge bank, iii) to determine whether the RRP should be developed by the financial institutions, by the resolution authorities or, by both parties, iv) to define the eligible financial entities for the implementation of the RRP, v) to define the information requirements needed to develop the RRP and the tools to transfer the information in a promptly manner, and vi) to strengthen cooperation and coordination between different jurisdictions where Colombian financial entities subsidiaries exist.

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