Practical Guidelines for Effective Bank Resolution

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Abstract

Key Words:

JEL:

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I. Introduction

Bank failures and banking crises are a common and costly phenomenon. For example, Caprio and Klingebiel (2000) found that from the late 1970s until 1999 there were at least 113 systemic crises in 93 countries (16 from Latin America and the Caribbean -LAC) and 50 non-systemic in 44 countries (4 from LAC). Bank failures often result in large costs and impose diverse risks that affect other banks and the stability and health of the financial system in general through contagion. Costs involved are varied, including fiscal expenditures as large as 40-60 percent of GDP in some cases,[1] deposit losses, and other less evident costs such as hampered access to finance and reduced trust in financial systems. This reduces the capacity of financial systems to enhance growth and reduce poverty. Among risks, contagion is particularly harmful as a bank failure may generate systemic effects (i.e. affecting one or several banks that account for a large share of the financial system). This is heightened in developing countries, where contagion can be more harmful and spread more easily given institutional weaknesses. In this context, theoretical and empirical evidence indicates that the manner in which bank failures are dealt with (or "resolved"), makes a large difference in terms of total costs, capacity to preserve banking business, coverage of deposits, and minimization of contagion.

Notwithstanding the importance of individual bank failures for policy making and implementation, the literature on bank resolution (BR), even when extensive, tends to focus on systemic failures.[2] This study complements existent literature by adopting **a non-systemic approach, while focusing on BR in practice**. Existing literature on BR was reviewed and integrated with the practical knowledge learned from World Bank operational and analytical work and direct experience executing and advising various BR processes in LAC.

The ultimate goal of the study is to develop a practical set of guidelines on how to design an adequate bank resolution framework (BRF) and how to implement an efficient bank resolution method (BRM) among available choices and within a given framework. The study is organized into six sections that deal with different BR issues and together aim to guide policy making and implementation. Section II describes six basic pillars required to build a BRF that will facilitate the implementation of efficient BRMs. Section III analyzes the main BRMs, delineating their advantages and disadvantages, describing the circumstances under which they tend to be most appropriate, and establishing efficiency requirements. Section IV looks into the good bank – bad bank (GB-BB) approach, as it is found to be one of the most efficient BRMs according to the specified criteria. This Section provides a description of the method, analyzes how it meets efficiency requirements defined, and offers practical tips for its implementation. Section V presents the GB-BB method in practice by illustrating with three examples different prevailing environment, banking institutions, ways to implement this BRM and results. Finally, Section VI presents some concluding remarks.

[1] Examples include the following countries, with estimated costs as a percentage of GDP in parenthesis (Caprio and Klingebiel, 2000): Argentina (about 55 percent 1980-1982), Indonesia (50- 55 percent in 1999), China (net losses of 47 percent in 1999), Thailand (net losses of 42 percent in 1999), and Chile (42 percent). These examples correspond largely to systemic crises. In general, average costs of BR are much lower than these examples, but still relevant. For instance, based on questionnaires to 19 deposit insurers, the International Association of Deposit Insurers (IADI 2005) found that in the last ten years the average BR cost as a percentage of GDP has been 5.5 percent.

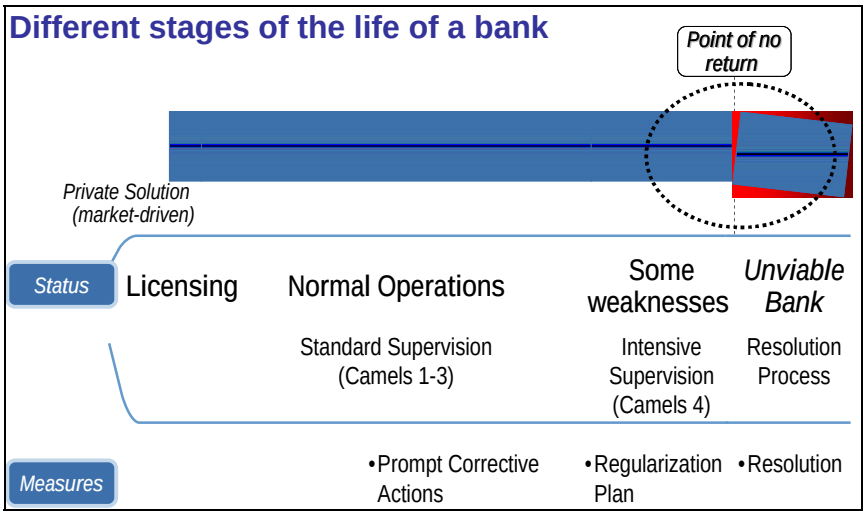
[2] See, for instance, Dziobek and Pazarbasioglu (1998); Lindgren et. al. (1999); Claessens, Klingebiel and Laeven (2001); and Hoggarth, Reidhill and Sinclair (2004).

II. Bank Resolution: Concept and Framework

II.1. Conceptual Issues

In this study, BR is understood as the set of procedures and measures taken by the authorities to solve the situation of an unviable bank. BR is an integral element of bank supervision that takes place at the last stage of the life of a bank, when (and if) the measures taken during the previous stages of standard and intensive supervision (prompt corrective actions and regularization plans) fail to improve the situation of the problem bank (see Figure 1). Ideally, only a few banks will enter the intensive supervision stage and those are expected to return to normal operations. The shareholders and management of the bank have the primary responsibility to revert weaknesses during this period of intensive supervision, typically through the implementation of a regularization program. However, when any given bank does not manage to recover, it becomes unviable and crosses the "point of no return". That is, the banking authority must proceed to implement a BR process, per triggers specified in the law.

Figure 1:



BR is a complex process that involves several participants or stakeholders playing different roles, which should be carefully taken into account. These include (see Box 1 for a description of their role in the process): managers, shareholders, employees, depositors and creditors of the failed bank; the banking supervisor; the Deposit Insurance Agency (DIA); and the acquiring bank(s) with all their direct stakeholders. Other indirect or potential participants to consider in the process include the financial system, the judicial system, and – if it exists- the bank capitalization fund (see below).

Box 1: Roles of Direct BR Participants

- *Management of the failed bank.* The role of the failed bank (through its management) should be cooperative to enable the best possible resolution process. In practice, however, bank management may obstruct BR process and fail to cooperate with banking authorities. If this is the case, the legal framework should provide supervisors with the authority to remove them.

- *Shareholders of the failed bank.* Banks cross the point of no return when their shareholders are unable or unwilling to restore capital as required. Similar to the case of the management of the failed bank, shareholders can have a cooperative or non-cooperative role. Therefore, the legal framework should grant authorities with the power to suspend their rights when necessary. However, once the bank has been resolved shareholders have rights (which need to be taken into account) over the assets that may remain after all other creditors are paid and the DIA recovers the funds it contributed to the process. Even when in practice assets are generally not sufficient to benefit shareholders, their rights or expectations over residual assets imply that the supervisory authority must lead the resolution process in a manner that preserves the value of assets as much as possible. These authorities should also take well supported decisions, as objective as possible, to avoid lawsuits.

- *Personnel of the failed bank.* The collaboration of personnel is crucial for a successful resolution process as they are in practice in control of access to information and documentation. Given their potential for blocking the implementation of the process, can sometimes be convenient to guarantee the coverage of their legal claims and try to preserve their jobs (when feasible).

- *Depositors and other creditors.* Although depositors of the failed bank have a relatively passive role, given their number, they can exert pressure over the supervisory authority to cover their deposits. Other creditors are generally few in number and have smaller credits with high probability of loss. Nevertheless, they generally have larger lobbying capacity to pressure authorities to recover their funds. Depending on the linkages between depositors of a failed bank and those of other banks, there may also be larger contagion considerations.

- *Banking supervisors.* Usually, the supervisory authority has the main responsibility of coordinating the BR process among participants with conflicting interests such as those described above. In some countries, however, this responsibility has also been granted to the DIA, the central bank (beyond the supervisory authority, if it is part of the central bank), the Ministry of Finance or other institutions (e.g. the judicial system, or financial services agencies).

- *DIA.* The agency is typically responsible for providing funds to cover guaranteed deposits and importantly, to support BR processes beyond the case of liquidation which is generally crucial for BR. If the DIA is not mandated to participate, the financial sector authority could convince it to participate voluntarily to enhance the implementation of any given BRM, (but taking into account moral hazard implications).

- *Acquiring Bank(s).* Although purchasing bank(s) do not always participate in BR processes as some methods do not require their involvement (e.g. bank closure and deposit payout), when the method needs their participation, they are crucial players that determine the success of the resolution process.

II.2. Bank Resolution Framework: Pillars for Efficient Bank Resolution

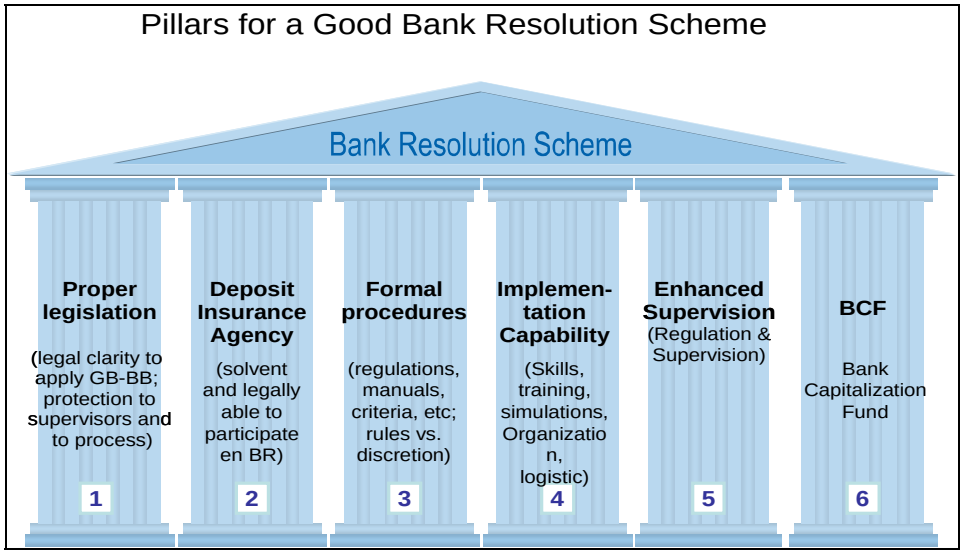
Adequate bank supervision requires a broad institutional framework to support and guide the different activities banking authorities have to perform during the life of the bank, including licensing, standard supervision with prompt corrective actions, intensive supervision with regularization plans, and resolution. This study focuses only on the BRF component of the broad institutional framework, which comprises the set of laws, norms, institutions and procedures that determine the structure within which BRMs are implemented.

Ideally, the BRF should consist of certain elements or pillars that do not constitute stringent pre-requirements for success, but rather guidelines for constructing a foundation to allow an efficient

BR process.[3] A BR process is considered to be efficient when: (i) it minimizes financial and economic costs (including protection of the supply of credit to the economy) as well as contagion risks;[4] (ii) ensures a minimum level of protection to depositors; (iii) does not bail out shareholders; and (iii) it is implemented in a transparent and timely fashion (see Section III.2. for more details).

This study identifies six pillars that are useful for setting new BRF or for evaluating and improving existent structures: Proper Legislation, Deposit Insurance Agency (DIA), Enhanced Supervision, Formal Procedures, Implementation Capabilities, and a Bank Capitalization Fund (BCF) (see Figure 2). These are based on lessons gathered through the implementation or guidance for BR processes, complemented by recommendations from the somewhat disperse literature. While the first five pillars are essential elements of a BRF, the BCF constitutes a useful (but not indispensable) tool that could strengthen the BRF. Also, BRF should be dynamic and continuously improved, enabling them to adapt to the changing environment.

Figure 2



II.2.a. Proper Legislation

An adequate legislation that specifically contemplates the resolution of banking institutions is a key element of an effective BRF, as the failure of financial institutions, and particularly banks, is different in many respects from the insolvency of non-financial institutions. No matter how well the government monitors banks, failure can still (and probably will) occur, much like in other industries as part of a normal competitive process. However, as noted, when handled badly, bank failures can generate very high costs. In this context, it is particularly important that adequate BR legislation is already in place when failure occurs to avoid introducing legislative changes in the

[3] However, setting an effective BRF is not easy and can be costly, but it has been proven to be worth implementing to the extent that it enables the authorities to lower costs and risks, as described above.

[4] The application of the less cost criteria by the Deposit Insurance Agency is particularly relevant to obtain minimization of costs (see Section II-2 b).

middle of a bank resolution process, as this increases risks for the authorities, shareholders, depositors and the financial system. The lack of legislation to handle unviable banks not only attempts against the implementation of efficient BR processes but also generates uncertainty about the resolution of future failure problems, which has a negative impact on the stability of the financial system and promotes moral hazard.

In most countries, the legal authority of bank regulators goes beyond that granted to other public agencies, typically due to legal and economic considerations. The cost of interfering with banking activity is justified by the need to protect the public interest through the promotion of a healthy banking system (Asser 2001). As noted in De la Torre and Mascaró (1998), due to information asymmetries in the banking system, the "invisible hand of the market" does not allow the conversion of private and public interests, thereby validating government monitoring of banks to defend the interests of depositors and increase society's welfare.

The goal is to provide the supervisor with sufficient legal authority to adequately deal with BR and the different situations that can emerge during the process, while balancing the rights of creditors, shareholders, and other BR participants (as detailed in Box 1). Reaching such a balance is a challenging task and requires providing adequate authority but with sufficient accountability. Additionally, the legislation for BR should clearly establish the rights of all involved parties, so that they know ex-ante the rules that affect them. To facilitate the adoption of a legal framework that promotes the effective and efficient resolution of failed banks, it is advisable to design it along the following lines:

- *Clear and consistent assignment of roles and responsibilities.* The legal framework should provide for clear, specific and comprehensive assignment of responsibilities for the entire bank resolution process, avoiding gaps, duplication, and overlapping of functions. The World Bank and the IMF (2005) recommend including the following elements: basic institutional arrangements (e.g., roles, responsibilities and objectives of banking authorities), operational autonomy, decision-making powers and procedures, arrangements for interagency coordination and information sharing, legal protection for banking supervisors accompanied by mechanisms for accountability and judicial review, and triggers for official administration.

  Functions related with BR can be performed by one or several agencies (including the superintendency of banks –which may be housed by itself or at the central bank, the central bank, the judicial system, DIA, ministry of finance or financial services agencies) and there is no generalized consensus as to what constitutes the best practice regarding the distribution of responsibilities among them. Each arrangement has different advantages and disadvantages, which will depend on the particularities of each country in many cases. Nevertheless, centralization enhances accountability. Therefore, if the legal framework involves more than one institution in the bank resolution process, it should strive to minimize the number of participating agencies and people, and name one of the agencies as the leader (often the supervisory authority) and ultimate decision maker of the bank resolution process, avoiding overlapping of duties.

- *Legal capabilities of the supervisor.* The legal powers of banking authorities in charge of bank resolution should be consistent with their mandate. Therefore, they should have all the necessary legal powers to initiate, conduct and supervise failure proceedings, including the

ability to administer, restructure, collect assets and liquidate failed banks (World Bank and IMF 2005). Among these, the authority to issue and revoke bank licenses, remove and replace banks' management and shareholder rights, decide up to what extent the bank is to be restructured or resolved and choose among a wide variety of strategies are specially important.[5] Among BRMs, within the type of Purchase and Assumption (P&A) transactions, the GB-BB method requires an additional legal capabilities because bank supervisors should be able to transfer assets and liabilities of the failing bank (including a partial transfer), split the bank in two (the GB and the BB) and sell the GB. This will be discussed in more details in Section IV below.

- *Legal protection to the authorities and of the resolution process.* Public officials involved in the implementation of BR should have adequate level of protection against penal and civil law suits. That is, they should not be liable for actions performed as part of their functions, except in cases where it can be shown that damage was intentional due to gross negligence.[6] Legal protection, nonetheless, should be accompanied by accountability and transparency so that it does not lead to impunity.[7] In addition, it is crucial that the resolution process itself is legally protected, in the sense that it cannot be stopped once it starts, regardless of ongoing legal claims against it.
- *Clearly defined priority of claims.* A successful implementation of BRMs requires having a clearly stated understanding of the seniority of the different liabilities of a failing bank. The legal framework should establish the priority of different classes of claimants, which ought to be consistent across alternative BRMs that can be implemented in a given BRF, including a liquidation process. The order of such priority of claims is a policy choice and as such, should be adapted to particular country circumstances. However, the general principle is that priority should be given to deposits that are smaller, as their owners generally cannot monitor banks, and those that are more liquid, to avoid dramatically disturbing the payment system.[8] In practice, and especially when banks are large employers and employees can exert substantial pressure, prompt BR might require granting employees a favorable category as their cooperation is needed to obtain valuable information during the resolution process.
- *Liquidation and pay out of deposits*. The liquidation of the failing bank reduces moral hazard and is part of a normal competitive process, but in practice, governments are often reluctant to implement this alternative fearing the negative externalities it might bring. This is the case because a bank closure and deposit payout implies, among other things, termination of bank functions, disruption of credit relations between the failed bank and its customers, public knowledge of the failure and the related potential contagion effects through a confidence crisis, and losses for uninsured depositors (see Section II.1.e). However, there may be instances when liquidation is the most feasible option. In this context, it is important to have as part of the regulations to resolve banks those covering the liquidation of the failed bank so that the bank resolution process does not go into a "dead end" and costs can be minimized.

[5] For more details on the capabilities of bank supervisors see World Bank and the IMF (2005), World Bank (2001) and Asser (2001).

[6] See World Bank and IMF (2005) for mechanisms to provide adequate protection to bank supervisors.

[7] A description of the strategies to increase accountability can be found in World Bank and IMF (2005; pp. 18-19).

[8] An example that complies with this principle is: small demand deposits, large demand deposits, saving deposits (which tend to be small), time deposits, commercial paper, state deposits, subordinated debt and equity.

- *Legal certainty*. For a BRF to operate effectively, the enabling legal and institutional environment must ensure legal certainty. In this case, legal certainty is interpreted in the broader sense, including different institutional elements that influence the conduct of relevant parties in the bank resolution process. Therefore, it is not only related to bank failure regulation and implementation but also to property and contractual regulation and enforcement and even broader economic and political institutional elements.

  Legal certainty implies that there are clear and relatively stable rules of the game that ought to be consistently implemented, guaranteeing that the implementation of BR will not be unduly interrupted or impeded at any stage by any court, political power or other influence, and that bank resolution participants will be able to enter timely and without fearing unexpected changes. This is particularly important for BRMs that require the participation of solvent acquiring institutions to assume assets and liabilities of the failed bank.

  To promote certainty, BR implementing agencies and authorities need to be autonomous from market and governmental influence enabling decision making based on technical considerations. Autonomy, in turn, requires operational, financial and legal capacity so that agencies have the necessary budgetary and human resources as well as the legal authority to perform their functions. This can be achieved by assigning bank supervision to an autonomous unit (like the central bank or an independent supervision agency), assigning security of tenure to its personnel, levying its costs on the banking industry and limiting governmental consultations to the systemic cases that require public funds (World Bank 2001 and World Bank and IMF 2005).

II.2.b. Deposit Insurance Agency

The discussion on the convenience of setting an explicit deposit insurance system –centered around a Deposit Insurance Agency (DIA)– has been (and continues to be) intensively studied in the literature. This paper does not focus on that discussion, although a summary of main recommended design features is discussed below, but rather on the role of DIA to facilitate the implementation of BRMs.

DIAs must be carefully designed to facilitate BR and provide adequate incentives in the financial system, thereby decreasing the probability of undermining bank stability, market discipline, financial development and the effectiveness of crisis resolution (Kane and Demirüç-Kunt 2001). Also, it is important to provide DIA authorities with flexibility to implement alternative BRMs. In some cases, such as P&A transactions, the DIA provides financial assistance to enable the continued business of the viable part of an insolvent bank, making it commercially attractive for potential buyers. DIAs may also help avoid delays in the resolution of banking weaknesses as depositors have fewer incentives to exert political pressure to delay the process or to file lawsuits given that they expect to recover a large portion, or all, of their deposits in a short period of time.

Below is a summary of recommended DIA design features discussed in the literature to reduce moral hazard and promote adequate BR:

- *Defined by law and regulations*. The DIA should be created by law and supporting regulations, with clearly established and public rules of operation (see Holway Garcia 1998). The regulatory framework should allow the DIA to participate in bank resolution processes through a “less cost” (or similar) criteria. That is, setting a limit for DIA to provide funds for

the implementation of a BRM up to the cost to provide the maximum level of coverage established by law when a bank is closed and liquidated.[9] The DIA regulatory framework should also seek a balance between autonomy and accountability, so that the agency has independence from political interference but is also responsible for its mistakes.[10]

- *Limited Coverage.* Empirical evidence indicates that DIAs should have limited coverage "per deposit and depositor" to enhance market discipline by avoiding full coverage of the private account holders that can better monitor banks. As Beck (2003) points out, the coverage limit should also be established in a credible way so that the introduction of DIAs is not interpreted as a signal of authorities' willingness to bail out all creditors in case of bank failure. Covered liabilities should only include deposits and they should be clearly defined in the law. To enhance market discipline the DIA can exclude relatively larger deposits (i.e. establish a maximum amount per deposit to be covered),[11] inter-bank deposits, and insider deposits. Additionally, the DIA can establish a coinsurance, which forces depositors to bear a share of their bank's accrued losses when it fails, even when deposits are below the insurance limit (Kane 2000 and Kane and Demirgüç-Kunt 2001).[12]
- *Appropriate funding features.* The DIA should have clear funding features that generate adequate incentives in the banking system and be solvent so that it can comply with its obligations with depositors.[13] First, based on theoretical grounds, it is convenient to use risk-sensitive premiums as they are a very useful mechanism to adequately align incentives, while also avoiding cross-subsidies from safer to riskier banks. In practice, however, flat rates are still used more often than risk sensitive rates as the latter require more rich information to be implemented. Nevertheless, the trend towards risk-based supervision and the existence of legal frameworks that are consistent with risk-sensitive rates has been increasing and may increase further in the future. Second, although mixed (private and public) financing is recommended as it allows enhancing market discipline and enhancing solvency, funds to cover losses should come primarily from banks so that they are forced to pay according to the risks they take. Private funds can be complemented with public financing but this should be limited to the DIA's start-up period and to increase readiness for a potential systemic crisis to ensure solvency of the DIA. Third, even when there is no agreement as to whether the funding of the DIA should be ex-ante or ex-post, the ex-ante system is more suitable for BR

[9] The "less cost" criterion is used instead of the "least cost" to facilitate and accelerate the resolution process. The former reduces the burden on the DIA as it does not need to evaluate all possible theoretical options (including those that could not be implemented or that would be hard to evaluate) to assess that a given one is the least possible cost. This "less than liquidation cost criteria" makes the resolution process more expedite as the DIA can provide funds for a given BRM after checking that its contributions would be below liquidation costs.

[10] For more details on mechanisms to enhance the accountability of the DIA (e.g. auditing financial statements and requiring periodic reports to the government and the public) see Holway Garcia (1998).

[11] The IMF suggests a maximum coverage per account of twice per-capita income (Hawkins and Turner 1999; p. 47).

[12] The Financial Stability Forum (2001) recommends not applying the coinsurance to small deposits as they are not well positioned to monitor banks and the requirement can motivate their exclusion from the banking system.

[13] As a "rule of thumb" the DIA needs available funds to cover losses from the failure of one or two non-major banks (Frolov 2003; p.20).

purposes as it ensures that the DIA has operative reserves to run in an effective and timely fashion.[14]

- *Compulsory membership.* Compulsory membership to the DIA increases the size of the insurance pool, prevents low-risk institutions from opting out and encourages them to monitor riskier banks (Kane and Demirgüç-Kunt 2001).
- *Monitoring function.* To avoid subsidizing bank risk taking, the deposit insurer should monitor increases in volatility of deposits and leverage of bank activities. Depending on the institutional structure that prevails, market discipline may also be enhanced when the DIA has certain supervisory powers, such as being able to participate in the licensing process and in the restriction of growth of deposits covered by the insurance and having the right to request extraordinary audits of banks that are perceived as unsound and exclude member banks that are recklessly managed (Beck 2003).
- *Adaptation to the institutional environment*. Much of the recent literature on explicit deposit insurance schemes stresses the importance of considering weaknesses in the institutional environment when designing them so that official supervision can compensate for the decline in the monitoring performed by depositors (motivated by the introduction of explicit DIAs). Edward Kane (2000), for instance, argues that safety-nets should include design features to mitigate countries' weaknesses in transparency, deterrency and accountability.[15]

II.2.c. Enhanced Supervision

The importance of adequate banking supervision is widely recognized, as it promotes the stability of the financial system, reduces moral hazard and promotes bank prudence, reducing the number of unviable banks that must enter the resolution process. Additionally, once a bank fails, adequate banking supervision facilitates an effective resolution process by ensuring the existence of reliable information about banks and promoting timely intervention, so that failed banks are not too damaged when they need to be resolved. The relevance to have timely and reliable information and early intervention for BR is summarized in the next paragraphs.

- *Timely and reliable information.* Information quality and timing is of key importance for BR as many crucial decisions take place within very low time margins, raising the need to have as accurate (and not an excessive amount of) information to support them as possible. Timely and reliable information facilitates both early intervention –by allowing supervisors to detect bank weaknesses at an early stage –and an effective BR once a bank fails–by ensuring that the supervisor either has or is able to access the necessary information about the failing bank and potential buyers. In this context, it is particularly important that regulation specifies information requirements and disclosure standards for financial institutions.

  Financial institutions should follow clear rules when preparing their financial statements to achieve an accurate representation of their financial position, financial performance and cash

[14] Frolov (2003), Kane and Demirgüç-Kunt (2001), and Beck (2003) discuss advantages and disadvantages of ex-ante funding features.

[15] According to Kane, while transparency refers to the disclosure of information on the changes in bank performance and risk-taking activities to depositors, deterrency is related with depositors' understanding of the implications of this information and their ability to protect themselves costlessly from potential threats to their wealth. See Kane 2000 for more details on how to adapt the design of the DIA to the institutional environment.

flows. The International Financial Reporting Standards, a detailed set of accounting standards developed by the International Accounting Standards Board (IASB), an independent, privately-funded accounting standard-setter, provides guidance to local regulators on how to adapt domestic accounting standards to international best practice, enhancing reliability of the information. In turn, supervisors should monitor banks to ensure that accounting standards are being followed.[16]

Even when financial statements contain rich information on the financial condition of banks, the Bank for International Settlements (BIS, 2002) adds that supervisors should collect information from a wide variety of sources, including bank management, the Board of Directors, regulatory reporting and offsite review, onsite examinations, external auditors, bank internal control and internal auditors, and other external sources –e.g. market signals and external credit ratings.

- *Early intervention.* The costs of not handling bank problems in a timely fashion are large, as weaknesses can grow rapidly making resolution efforts more difficult and expensive and increasing the possibility of contagion. Thus, early intervention should be an essential element of banking supervision so that a smaller proportion of banks turn unviable and those that enter the resolution process are in better shape, thereby allowing the supervisor to resolve them at lower costs, choosing BRMs that might not be applicable at a later stage.

  Bank supervisors should step in when banks engage in unsound banking practices or fail to comply with supervisory requirements –including capital requirements— and their corrective actions ought to be proportional to the seriousness of the problem. As Asser (2001) points out, ideally, there should be a gradual progression from enforcement to corrective action that, if unsuccessful, leads to taking control of the bank. The progression is best specified in the law, indicating clear triggers for each stage in the process, as noted above. The specific triggers for early intervention or resolution vary by country, but are typically related to capital adequacy ratios below the required, persistent deficiencies in the compliance with reserve requirement, repeated lack of compliance with mandates or written requirements from the superintendency, and provision of false data to the authority, etc. (see Annex 1 for a sample set).

  At a minimum supervisors should focus on fostering adequate capitalization of banks; monitor connected lending; ensuring appropriate rules for loan-loss provisioning, asset-classification, and income-recognition; and promoting risk diversification.[17] As globalization and deregulation have increased the complexity and potential risks of the banking business, supervisors are not only assessing the financial condition of banks but also their risk profile and risk management capabilities so that they can identify bank weaknesses as early as possible (Sahajwala and Van de Bergh 2000). In fact, supervisory risk assessment and early warning systems are becoming increasingly popular measures to timely detect deteriorating

[16] In this context, the Core Principles for Effective Banking Supervision of the Bank for International Settlements (1997; pp. 6-7) mention that "Banking supervisors must be satisfied that each bank maintains adequate records drawn up in accordance with consistent accounting policies and practices that enable the supervisor to obtain a true and fair view of the financial condition of the bank and the profitability of its business, and that the bank publishes on a regular basis financial statements that fairly reflect its condition".

[17] For more details see De la Torre and Mascaró (1998 p. 52) and BIS (1997 pp. 5-6).

banks and the specialized literature on banking supervision is progressively recognizing the importance of making capital requirements more risk sensitive.[18]

The Basle II rules are thus inspired, with the Basel Committee on Banking Supervision's new capital adequacy framework aiming to make regulatory capital requirements more risk-sensitive. This framework promotes early intervention by supervisors when capital falls below the minimum levels required to support the risks of the bank and prompt corrective action to rapidly restrain risk-taking by owners and managers and quickly solve capital deficiencies (BIS 2004).

II.2.d. Formal procedures

Bank supervisory authorities should follow clear ex-ante rules and procedures, going beyond specifications in the law, so that no time is spared during the restructuring process. This will allow increasing the speed and transparency of the bank resolution process, avoiding improvisation and minimizing the principal-agent problem when authorities take control of failing banks or impose strategic management during the bank resolution process. Moreover, when procedures are approved by law, they provide resolution processes with legal certainty.[19] Formal procedures must seek a balance between rules and discretion during the resolution process, to enable sufficient guidance but also sufficient flexibility to handle special circumstances. At minimum, formal procedures should include a bank resolution manual or handbook, pro-forma contracts, and regulations.

A *bank resolution manual* should be developed, as an operational guide to apply BRMs. Its elaboration provides an opportunity to think through the entire bank resolution process, take advantage of past experiences, better coordinate involved areas and personnel and save time, resulting in an improvement of the process. The manual also benefits authorities, by allowing them to know their functions in detail, limiting their responsibilities and providing guidance and training. At a minimum, to better enable implementation of BRMs the manual should cover the following topics in more detail than specified in the law and supporting regulations: (i) triggers to determine the beginning of the bank resolution processes and activities related to it; (ii) procedure for selecting the most appropriate BRM according to circumstances, (iii) procedures to be applied during the resolution process, including the seizure of the bank, replacement of authorities, data gathering, adjustments to be applied to balance sheets, and selection of potential buyers; (iii) treatment of deposits; (iv) participation of the deposit guarantee fund; and (v) responsibilities and functions of the participating areas, including time estimates, responsible staff and reporting method to the strategic authority (specifying required type and amount of information, frequency and feedback).

Also, most BRMs require *contracts* among the parties involved in the resolution process. Designing these contracts can be time consuming, and subject to extensive negotiation between parties, thereby inhibiting timely resolution. Preparing standardized contracts is recommended,

[18] See Sahajwala and Van de Bergh (2000) for a classification of early warning system initiatives.

[19] Legal certainty and clarity in the actions that need to be taken and their timing can also help minimizing moral hazard that could translate, among other things, into delayed intervention by the authorities, hoping that the situation would improve without intervention or even to avoid potential accusations that they did not fulfill their duty as supervisors because a bank failure occurred during their watch.

as it not only saves time during the resolution process but also allows knowing the conditions of the parties involved and solving their disagreements before the bank resolution process takes place. Thus, the authorities could prepare pro-forma contracts with the main issues covered, but which can be adapted to the particularities of any given process. Pro-forma contracts should consider both, international best practice and domestic legislation, jurisprudence, and practice. Bank resolution *regulation* completes and complements the relevant legal framework, providing the bank resolution normative framework with more detail. It is emitted by the banking supervisory authority and determined by laws in the sense that it covers those aspects that the law specifies should be resolved through regulation or lies within the scope of legal authority that was granted to the banking authority.

II.2.e. Implementation capability

The BRF will only be as useful as the authorities' ability to put it into practice, since adequate norms, institutions and procedures need sufficient monetary and technical resources to be implemented. Resolving banks is more an art than a science and involves multiple inter-related activities that should be performed in a short period of time, coordinating tasks with all involved parties, who can have different and even opposed interests. Additionally, authorities need to deal simultaneously with several issues related with the resolution, like legal matters put forward by bank owners or management, depositors' uncertainty about the recovery of their funds, repercussions in the local media, etc. In this context, it is crucial for the banking supervisor to count with the necessary human and financial resources.

Banking authorities should count on qualified personnel with relevant training and experience on bank resolution as these processes imply a different set of abilities than those required for bank supervision. It is advisable to train a group on BR and update the training periodically to keep up with new developments. Training should include the study of existent literature on BR, study and analysis of best practices, participation on specialized seminars, and detailed knowledge of the domestic bank resolution legal and procedural framework.[20] This should be complemented with practical training, consisting on case studies and bank closure simulations.

Implementation capability can be strengthened through the creation of a specialized bank resolution unit, in charge of conducting bank resolution procedures but also of strengthening the BRF, updating formal procedures, identifying ways to improve relevant legislation and norms, and updating training. The establishment of a specialized unit improves the implementation of resolution procedures and their framework, allowing economies in the process through specialization and ensuring that these procedures do not diminish supervision capabilities.

In relatively small financial systems with fewer expected resolution cases, the costs of creating a specialized unit might not be justified though. If this is the case, it is possible either to create a specialized bank resolution unit assigning it other supervision responsibilities to ensure adequate availability of resources or to create a "virtual" specialized unit assigning bank resolution tasks to supervision personnel, who would be committed to perform them full time when needed.

[20] Relevant seminars and training for their member countries is offered by the World Bank, the Inter-American Development Bank and the International Monetary Fund.

II.2.f. Bank Capitalization Fund

Practical experience has shown that an adequately designed BCF is a useful tool for bank restructuring processes, facilitating timely ownership changes of troubled banks either through acquisition or mergers (The World Bank 1999). BCFs can help enhancing the attractiveness of banks that enter the resolution process by strengthening their capital and liquidity position through long-term and low interest subordinated loans that count as tier-two capital. Nevertheless, the usefulness of BCFs depends on its institutional and market environment and design. Thus the specific environment should be carefully analyzed to assess the convenience of setting up a BCF and attention must be paid to its design.

World Bank lending to support the establishment of BCFs in LAC (World Bank 2004) has found that implementation of a successful BCF requires, at a minimum, the existence of certain pre-requirements. These include prudential regulatory framework in line with Basel principles, the superintendency with the capacity to enforce its implementation, solvent banks with adequate management, and an Operating Manual to specify the procedures and criteria of operation of the BCF. In turn, Operating Manuals for BCFs should include several elements, although these may vary depending on the different institutional structures and country practices (Annex 1 illustrates key elements to consider, based on recent Bank operations and practical experience).

Even when a discussion on the design of BCFs goes beyond the scope of this paper, it is worth noting some key elements to be considered. It is convenient to avoid allowing BCFs to provide support to financial institutions in a way that (public funding) could be converted into stocks when solvency issues arise, thus leading to a majority ownership of the State in that particular institution.[21] Also, BCFs that facilitate bank resolution process should in general be restricted to solvent banks, to avoid supporting weak banks that may fail subsequently

III. Bank Resolution Methods and Selection Among Available Choices

Once a bank crosses the "point of no return", the supervisory authority has to choose the most appropriate BRM according to prevalent circumstances. To illustrate the supervisor's task, this section presents advantages and disadvantages of the different methods, highlighting the circumstances that typically surround their selection and a "check list" of requirements that should help the selection process.

III.1. Bank Resolution Methods: Definitions, Advantages and Disadvantages[22]

Following the classification of the Basel Committee on Banking Supervision (Bank for International Settlements 2002), we distinguish six categories of BRMs: bank closure and

[21] A bank restructuring fund, not akin to the type of BCF described here, was once created in Bolivia to support bank restructuring. Its design allowed it to convert its subordinated debt into stocks to capitalize a bank that had solvency problems as the bank that had weaknesses was not willing to increase capital on its own to comply with regulatory capital. Consequently, the government gained majority ownership of the given bank through the BCF, which served a purpose that was in conflict with its mission.

[22] This section is based on the presentation "Conceptual Issues Related to Bank Resolution" by Javier Bolzico and Yira Mascaró (Washington, DC 2004) complemented by "General Guidance for Resolution of Bank Failures" by the International Association of Deposit Insurers (IADI – 2005).

deposit payout, radical restructuring, purchase and assumption (P&A), mergers and acquisitions (M&A), bridge bank and open bank assistance.[23] Each method implies advantages and disadvantages and could be more appropriate or not depending circumstances.[24] The six categories are presented to illustrate better the alternatives for handling failing banks, even though these do not represent a mutually exclusive typology. That is, a combination of some of the methods described below can be implemented in a sequence or in tandem to address problems at a given failing bank. For instance, a failing bank may first have a radical restructuring and receive open bank assistance, then undergo a merger, and still end up failing and go through a P&A.[25]

This paper focuses largely on the GB-BB method, a variety of P&A transaction, as it argues it is suitable according to the selection criteria specified. However, this does not imply that the GB-BB method is always the most convenient, nor feasible, especially considering that its implementation needs certain pre-requirements (see Section IV). In fact, the decision to implement a given method is not trivial, often based on aspects not fully under the control of the authorities. This includes: the size of the bank involved, the overarching political situation, the availability of funds at the DIA, prior experience, and other considerations. Also, sometimes an alternative is chosen and it fails, leading to a second alternative that may ultimately work, or instead, it may make the resolution even costlier.

- *Bank closure and deposit payout.* This is the method whereby the failing bank is closed and liquidated, thereby exiting the system. Deposits should be paid to the fullest extent possible and in accordance with their seniority and priority of claims from the resources of the bank and, when applicable, from the DIA. Based on advantages and disadvantages illustrated (see table) . A 2005 IADI survey found that this resolution method was the second most used, but it was generally applied to small banks that had typically small systemic implications (although there are exceptions). Jamaica is a case in point, where several banks were closed and deposits paid out, while the government kept non-performing assets under an asset management company (AMC) that was in charge of recovering as much as possible. The crisis involved the bulk of the domestic financial system (i.e. systemic), which limited the feasibility of alternative choices.[26]
- *Radical restructuring.* The supervisor intervenes in certain key areas of the unviable bank, which may involve different degrees and types of intervention. The most common interventions include: replacing management for supervisory officials, curtailing the powers

[23] BRM have been ordered according to the degree of intervention of authorities, for illustration purposes.

[24] As noted, the focus of this paper is on non-systemic cases. For systemic cases, other elements are at play, including large (negative) macroeconomic implications, and the suitability of mechanisms is less clear. For instance, administrative measures (such as those used in Argentina during the 2001 crisis) may be implemented.

[25] The alternative of using a mutually exclusive typology, such as classifying the alternatives into open and closed bank resolution was not as illustrative of the listing of the specific alternatives involved within each type. Moreover, even the alternatives that may be considered as pure closed bank types, such as the "bank closure and deposits payout" and "P&A" can be interpreted differently. Arguably, the latter (P&A) does keep most of the employees and most of the business, thus potentially mimicking an open bank resolution.

[26] Experience with AMCs has been mixed at best (Claessens, et al, 2001), although in the case of Jamaica (a systemic crisis), the overall return at about 20 percent was well above the typical average. Notwithstanding, the total fiscal cost was about 40 percent of GDP in 2001.

of shareholders, implementing operational and organizational changes, writing off certain assets, using debt to equity swaps, and considering certain instruments as capital. In general, however, solving the problem requires more than recapitalization as this does not address the institutional and incentives problems that led the bank to cross the "point of no return", requiring also changes to management, incentives, organizational structure, governance and, possibly, clients and ownership (Neyens and Hanson forthcoming). This method is most suitable for large banks that cannot be merged, closed or sold. However, it has also been used for the handling of weak state-owned banks, which are either too large (such as the case of federal banks in Brazil, restructured in 2000) or because they presumably need to remain in operation to fulfill a given social goal and are thus preserved through restructuring.[27]

- *Purchase and assumption.* Under this method, healthy institutions or private investors purchase some or all the assets of the failing bank and assume some or all of its liabilities. The process is conducted by the authorities and typically implies the withdrawal of the bank license, with a potential removal of original shareholders and managers. According to the survey by IADI (2005), this method has been the most frequently used in the last ten years, although most of the users of the P&A method were developed countries.[28] The implementation of P&A may result in transactions that can be structured in many different ways, depending on the objectives and requirements of the deposit insurer, the government, and/or the acquirer. For instance, if it is a GB-BB, the extent of deposits covered may result in haircuts to larger depositors to maximize the availability of (limited) funds at the deposit insurance, enhance market discipline, and increase the expected return of assets available to back up the deposits transferred, arguably increasing the likelihood of success of the resolution. The latter was the case of a resolution undertaken in Paraguay in 2004 (see Section IV.2).

- *Mergers and acquisitions.* This method refers to those mergers or acquisitions of failing banks by other private banks that are induced by banking authorities (that is, the "pure" private M&A are not considered as a BR method, since it does not involve persuasion by the authorities). In the event of bank failure authorities contact healthy bank(s) in the system to motivate a merger largely by using "moral suasion" or offering regulatory or fiscal incentives.[29] This should not be considered as a highly recommended method for bank resolution, unless it is justified by exceptional circumstances, since it could generate a bigger problem that what it tries to resolve (creating problems for what could be otherwise solvent banks), generating moral hazard and discouraging private investments.

- *"Bridge bank".* Under this largely untested method, the authorities close the troubled bank and, at the same time, create a new bank (the "bridge bank") with some or all of its original assets and liabilities, allowing the failing bank to continue its operations until its shares are sold to the market by the designated liquidator. Until this happens, the failed bank is temporarily administered by the government or a group of banks and receives external support from the deposit guarantee fund and/or the government. The "bridge bank" could be

[27] This paper abstracts from the discussion of whether state-owned banks should exist or not, to achieve social objectives. However, there is ample literature on the subject. See a summary in Yaron et. al. (2006).

[28] The survey comprised 34 countries (including OECD countries) and was distributed in June, 2004.

[29] Sometimes this is use for very large failing banks, complicating the merger process (e.g. Banco de Comercio in the Dominican Republic, then the third largest bank, merged with another bank that later failed -Baninter).

found to be suitable when the authorities believe there is value to be realized or costs to be minimized by applying a resolution method different from liquidation but do not have a ready solution other than a payout at the time of failure. The IADI survey (2005) found that this method has been rarely used in the last decade, while it had the longest average resolution period.[30] Thus, it is important to avoid the temptation of using the method to avoid finding a permanent solution for a problem bank, unless the alternative is to liquidate, for instance, a very large bank.

- *Open bank assistance.* The government keeps the troubled bank open by providing solvency and-or liquidity support that can include direct capital injections, government loans, and purchase of troubled assets by asset management companies that are created exclusively for this purpose or other institutions (with their losses covered by the government). Although open bank assistance does not constitute bank resolution per se as it does not provide a lasting solution to the underlying weaknesses of the bank, it is useful for systemic situations that pose the risk of loss or disruption of banking services to a large number of customers. Therefore, it is generally used for handling the failure of larger banks (IADI 2005) or under a fragile political and social environment that the authorities assess could lead to a broader systemic problem if the bank is resolved and closed. Given the negative incentives it creates and the high costs it involves, open bank assistance is the least recommendable alternative, although it has been the most widely used, often with very large costs.[31] If implemented, this method should consider precautions, including, at a minimum, a benefit-cost analysis of the alternatives, authorization by congress to provide solvency,[32] and implementation of an action plan including measures to restore profitability and sound and prudent management.

The table below summarizes the main advantages and disadvantages of the discussed BRMs.

Method	Advantages	Disadvantages
Bank closure and deposit payout	- It is simple to execute. - Provides a final solution to the problem. - Minimizes moral hazard and enhances market discipline, providing bankers and depositors with the right incentives	- Cannot be implemented in many cases. - Typically leaves a large portion of depositors unpaid, which may fuel a run on total deposits. - Could have systemic impact under given circumstances. - Tends to be costly, leading to the deterioration

[30] There is at least one case in LAC (in Argentina) that used a "bridge bank" method. However, arguably, there are other cases in LAC that mimic the method of a "bridge bank" in the sense that there is an interim management that "bridges" between the failing bank and the sale to another bank after a few years, but a new license is not created in the meantime. These "quasi bridge banks" are those resulting for instance when the Government (directly or through an AMC) purchases the entire portfolio of (bad and other) assets from a failing bank to bring it back to solvency and as a result takes over the management of the bank (kept in operations), run it for a while, until they can sale it through a bidding process. Examples of these "hybrid types" include NBC in Jamaica and Serfin in Mexico.

[31] Illustrations of resolution processes in LAC countries that have had this effect include Baninter in the Dominican Republic (2002) and Banco Capital in Honduras (2001) among others. While the former implied open bank assistance by the central bank beyond that stipulated by law, followed by its resolution through acquisition by another bank and coverage of all liabilities, the latter involved an initial capitalization with public funds for an amount equal to the amount that would have cost to pay guaranteed deposits, which eventually had to be covered nonetheless when the bank did fail.

[32] As solvency support puts taxpayers' money at risk, the decision to do so should always be taken and funded by the government and the legislative body, not by the central bank.

		of assets during the judicial liquidation process. - Implies the loss of banking services and jobs.
Bridge bank	- Preserves bank operations. - "Bridges" the time-gap between the occurrence of bank failure and the moment in which the authorities can evaluate and market the failing bank to allow a satisfactory acquisition by a third party. - Provides potential buyers with the time to assess the bank's condition and submit offers. - Allows uninterrupted service to customers. - Enhances the confidence of the public.	- Rarely used. - Has the tendency to become a "road" more than a bridge, thus unnecessarily prolonging the resolution period. - May require capital and liquidity support from the government, increasing costs for the government and-or the DIA. - Can increase the final cost of resolution. - Boosts moral hazard when the institutional framework is weak. - Interferes with the market.
M&A	- Preserves bank operations. - Under given circumstances, could avoid the turmoil of implementing an alternative resolution mechanism that could be costlier in fiscal terms or have systemic implications.	- Involves pre-requirements: (i) the failing bank should have a positive net worth and (ii) the acquiring bank should be in sound condition and the operation should not harm it. - May discourage private investment and decrease bank capitalization. - Can increase moral hazard, enhancing bankers' incentives to take risks.
Open bank assistance	- Preserves bank operations. - Temporarily avoids the cost of bank failure.	- Very costly with fiscal and monetary impacts. - Does not attack the root of the problem. - May increase the final cost of resolution. - Increases moral hazard, motivating bankers to take more risks. - Increases the risk of having the majority of banks under public management/ownership.
P&A	- Constitutes a market oriented solution. - Has involved the shortest average duration as compared with alternative resolution methods (IADI 2005). - Can preserve the functions of the failed bank with no interruption in service. - Provides greater coverage of deposits (generally all). - Has implied the smallest expenses and disruptions (IADI 2005).	- Requires finding interested purchasing banks, which is more difficult when the economy and the financial system are weak. - Needs intensive involvement from supervisory authorities. - May require provision of financial inducements to make the problem bank attractive for potential acquirers.
Radical restructuring	- Preserves bank operations. - Temporarily avoids the cost of bank closure.	- Can be very costly with fiscal and monetary impacts. Institutional frameworks that are weak and mismanagement of public companies heighten costs to other banks and the economy. - May increase the final cost of resolution. - Does not attack the root of the problem - Enhances moral hazard.

III.2. Selection Criteria for Bank Resolution Methods

BRMs should be selected through a cost benefit-analysis, considering not only direct financial costs and benefits but others that are less evident and more difficult to determine. The goal is to

choose the method that will minimize current and future social and economic costs that emerge from the resolution process.

Below is a list of the desirable requirements for BRMs. Although the enumeration is not necessarily exhaustive and has been classified in a subjective way, it aims to provide authorities with a basic check list of relevant criteria to sort BRMs.

- *Minimization of direct financial and economic costs.* Hoggarth, Reidhill and Sinclair (2004) suggest to start the selection process by calculating the direct financial cost of liquidation (i.e. the difference between the liquidation value of bank assets and the value of insured liabilities and related administrative costs) and follow up by comparing it with the direct financial costs of different resolution methods that imply keeping the bank as a going concern. In general, the higher the value of the bank as a going concern, the stronger the case against liquidation but the decision will also depend on the value of insured liabilities, with liquidation being least costly as a greater proportion of liabilities are uninsured. The chosen method should also decrease the loss of economic output due to misallocation of public resources (i.e. fiscal or inflationary costs that emerge from the resolution process) and the disruption of banking services (including credit and payment services).

- *Minimization of contagion risk.* BR processes should minimize the likelihood of a deposit run on other banks (i.e. contagion risk) and the financial and economic costs they represent. This is crucial for sound BR as the stability of the financial system should take precedence over the protection of individual deposits beyond a minimum level. However, as discussed in Bolzico and Mascaró (mimeo), it is important to focus on the full extent of contagion risk (i.e. total contagion risk) which they describe as the combination of direct and indirect contagion risks. While direct contagion risks are an inverse function of external resources[33] and are triggered by losses or unavailability of deposits, indirect contagion risks are a direct function of external resources and are triggered by the negative externalities of using external resources. The combination of both components leads to the Total contagion risk, which is a U shaped curve that initially diminishes as more external resources are used (since more deposits are paid out and direct contagion risks decrease) but that increases after reaching a minimum, as depositors start worrying about the solvency of the DIA and/or government finances when excessive coverage is provided (through the use of higher levels of external resources). Thus, the minimization of total contagion risk does not necessarily imply using the maximum possible level of external resources.[34] On the other hand, the maximization of the net present value of assets of the failed bank implies boosting factors that are positively related (i.e. strengthening the supervisory, bank resolution and risk management frameworks and their implementation and increasing GDP growth), which are closely associated with the effectiveness of BRFs and BRMs.

- *Ensure a minimum level of protection to "widows and orphans"***.** The metaphor refers to the need to cover small and less-sophisticated depositors, who cannot exert market discipline.

[33] External resources are funds coming from sources other than assets from the failed bank –e.g. DIA, government, central bank, etc- and allow increasing deposit coverage. They can be calculated as the difference between deposit payout and the net present value of the assets of the failed bank.

[34] This is consistent with the DIA literature that recommends it to have limited coverage, to minimize moral hazard.

This principle has gathered universal acceptance throughout the years and, as a result, most countries incorporate such coverage in their BRFs. [35]

- *No bail out for shareholders.* The BR losses must be bear first by shareholders. External resources to aid the process should not benefit shareholders. Failure to do so will likely increase the total cost of resolution and create perverse incentives (i.e. moral hazard) for bankers.

- *Adequate transparency.* Transparency is needed to avoid hampering the credibility of the authorities during the resolution process and ensure a positive perception of the process by market participants. The procedure should be perceived to be fair and in compliance with the BRF.[36] A good framework, with clear ex-ante rules and procedures helps to increase transparency (see Proper Legislation and Formal Procedures Pillars in Section II). The goal is to obtain a level of transparency that will not disturb the resolution process and allows ex-post accountability with a clear distribution of responsibilities. This implies that the process should be clean, follow rules and have a certain level of disclosure but without being public to avoid unnecessary disruption and losses during resolution.

- *Timely response and resolution.* During a bank resolution process, time is of the essence. Therefore, practitioners need to start the process as soon as problems are identified, following triggers and actions that as discussed above, should be clearly defined ex-ante. Failure to do so will result in an aggravation of problems and costs. Once the resolution process is in motion, it is also crucial to speed it up. Due to the special nature of bank assets that can deteriorate rapidly when not properly monitored, their transfer to another institution should take place in a short period of time to avoid significant deterioration.[37] In fact, the lack of timely transfer of assets to proper administrators is one of the main sources of losses in resolution processes (see Section V.2 for examples from Bolivia).

- *Available capacity and resources.* Since implementation capabilities and resources vary across different points in time, they can limit available choices and, therefore, should be considered when selecting a BRM.

III.3. Focusing on one Bank Resolution Method: The Good Bank - Bad Bank

This paper looks in more depth into the GB-BB resolution method because it has been particularly successful at meeting the efficiency criteria described in Section III.2. Although its implementation may not be trivial and needs certain pre-requirements, when feasible, it offers several advantages as compared with alternative methods (most importantly minimizing moral hazard, TCR, and resolution costs while preserving banking services and jobs at the failed bank) and can be implemented in diverse circumstances (see Section V for illustrations). By 2004 several countries in LAC had already implemented the GB-BB method (including Argentina,

[35] An illustrative example is the resolution of the Argentine bank "Banco Integrado Interdepartamental" in 1995, which implied the loss of 75 percent of deposits and several years of delay to recover remaining deposits.

[36] This includes compliance with rules related with the allocation of losses, priority of claims, and access to information among others.

[37] A useful analogy presented a few years ago by one of the authors is to compare bank assets with ice-cream: the ice-cream (assets) do not melt as long as they are kept in the freezer (bank), but if it does not work (a bank fails), the ice-cream should be put shortly in a functioning freezer (healthy bank) or else it will invariably melt (deteriorate).

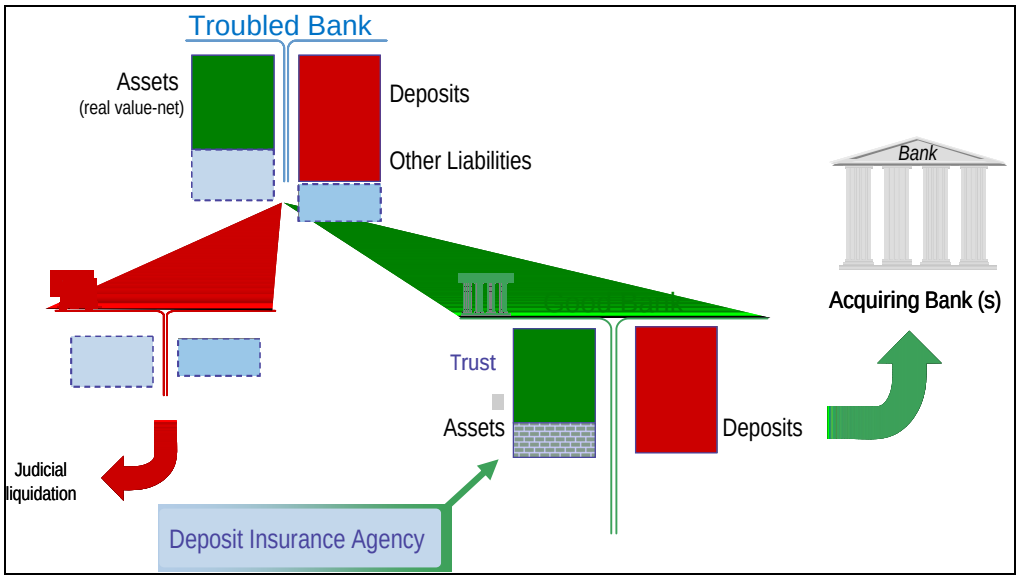
Bolivia, Peru, Paraguay, and, most recently, Guatemala to resolve two banks within a 3 month period). Moreover, the use of the method could become more widespread in the region as there are several countries that already have a legal and regulatory framework that is in line with GB-BB,[38] as well as the necessary operating manuals and procedures and adequate implementation capabilities.

The GB-BB method belongs to the category of P&A transactions that consists in: (i) taking a business unit of the problem bank (the GB), (ii) transferring it to a suitable bank that is willing to acquire it, and (iii) applying a liquidation process to the residual of the problem bank. This Section explains conceptual issues of the GB-BB method and provides suggestions to facilitate its implementation, including relevant elements of the BRF and a plausible sequence of activities to be followed in the process.

III.4. Definition; Advantages and Disadvantages

The method hinges upon the separation of the failing bank into two: the GB and the BB (see Figure 3). While the former contains privileged liabilities and good assets (in terms of real economic value) up to the amount of liabilities transferred, the latter takes the remaining liabilities and assets. In the process, the GB is transferred to one or more sound banks willing to acquire it and the BB is liquidated. Although the method can be considered as a particular case of P&A transactions there are two main differences between them: (i) in P&A transactions assets and liabilities can be transferred separately (i.e. the transaction might imply transferring only assets or liabilities or both, but separately) while the GB-BB method requires matching assets and liabilities to enable the transfer; and (ii) while P&A do not necessarily imply keeping the business unit ongoing, GB-BB always preserves the banking business.

Figure 3:



The method allows the separation of assets from the failing bank that have an economic interest to potential buyers (including branches), thereby enabling the preservation of banking services

[38] These include, at least: Argentina, Bolivia, the DR, El Salvador, Guatemala, Honduras, Paraguay, and Peru.

and jobs.[39] Since buyers are not responsible for handling the (rest of the) failing bank, they do not assume any responsibility with respect to the creditors of the BB, thereby increasing incentives for acquiring institutions. Since the transferred branches from the failed bank can start operating under the name of the acquiring bank or banks, depositors can have their funds available in a timely fashion with minimal disruption. On the other hand, shareholders of the failed bank must go through a bankruptcy process, thus minimizing moral hazard.

The main objective of the GB-BB method is to preserve the stability of the financial system or, in other words, to minimize the TCR. Subject to this goal, it works to guarantee timely resolution and minimize unavailability and losses to depositors. Resolution costs are also minimized through the prevention of further deterioration of assets and accumulation of operating and financial losses. This has been the case even when it has been implemented in: (i) unfavorable economic environments, (ii) countries with diverse degrees of development of bank resolution pillars, and (iii) banks with different features and intervened at different stages of their life cycle.

The GB-BB method is one among various alternatives and has several advantages, but its implementation needs certain pre-requisites. First, and foremost, it requires finding solvent private institutions that are willing to buy the failed bank, which may be difficult. Second, it requires a solvent DIA or similar arrangement that can provide resources to the resolution process to enable a larger transfer of deposits to the purchasing bank (provided this fulfills a minimum cost criteria). Other requirements are less binding, but are also relevant. For instance, it is convenient to have in place a BRF that includes proper legislation, formal procedures (regulations, manuals, criteria, etc.), implementation capability (skills, expertise, training, organization, logistic), and enhanced supervision. Finally, the implementation of the GB-BB is facilitated when it is backed by political will, which can be reduced as the process implies losses for different parties (but mainly bankers). Importantly, the GB-BB in most cases is not suitable for systemic cases and is useful under given circumstances. Yet when it is feasible, benefits can significantly out weight costs.

III.5. Compliance with Selection Criteria

The GB-BB method fits the efficiency criteria described in Section III, as follows:

- *Minimization of direct financial and economic costs.* The GB-BB approach seeks to minimize costs for all participants. The method does not imply extra fiscal cost for the government as these are calculated during the design of the DIA, at the time of determining deposit coverage. Depositors have little or no cost, since GB-BB allows the recovery of deposits over the amount guaranteed by the insurance and preserves banking services. The failed bank preserves the value of its assets as they are transferred to sound acquiring banks[40]

[39] The real value of assets transferred should be carefully taken into account in the transfer to avoid passing on the problem to the purchasing bank(s). The estimated value of the assets transferred should be enough to match the liabilities assumed by the purchasing bank(s).. The use of the special purpose vehicle SPV (as a trust) is advisable, since it facilitates the process of assets transferring and reduces the risk for buyers. However, consideration needs to be given to transfer less than 100% of the deposits when the quality of assets is questionable beyond a given level as otherwise it could hinder the success of the resolution or result in future problems.

[40] International experience shows that assets can deteriorate rapidly on liquidated banks. Inadequate administration, rushed sales, and debtors' non-compliance emerging from the perception that their obligations will not be enforced have all contributed to the deterioration of bank assets in these cases.

and acquiring banks have no negative effect on solvency or liquidity as transferred assets equal transferred liabilities. Finally, bank employees can retain their jobs with the transfer of branches to acquiring bank(s).[41]

- *Minimization of contagion risk.* The GB-BB method can minimize total contagion risks by reducing both direct and indirect contagion risks. The former is minimized since generally all deposits are covered and transferred to a sound bank in little time, reducing or eliminating the period of unavailability.[42] Indirect contagion risk is also reduced because the GB-BB method uses a limited amount of external resources (as it enables the preservation of net asset value) in spite of high deposit payout level, limiting negative externalities. [43]
- *Ensure a minimum level of protection to depositors.* The method ensures a minimum protection level of coverage for "widows and orphans" as its implementation requires the establishment of a DIA to provide support by making the viable part of the failed bank attractive to sound banks. In turn, a DIA that complies with the design features specified in Section II (especially the elements of limited coverage, compulsory membership and appropriate funding features of the DIA) ensures a minimum protection level to depositors.
- *No bail out for shareholders.* GB-BB minimizes moral hazard for bankers as bank managers and shareholders are responsible for the liabilities of the BB and have the last claim over assets, motivating bankers to avoid risky decisions (i.e. "gambling for resurrection"). When the GB-BB is applied, the failed bank's shareholders do not benefit from public resources or any other government actions.
- *Adequate transparency.* The method allows for adequate level of transparency through the implementation of formal procedures that allow ex-post accountability. Procedures should be designed to ensure such accountability and an adequate level of transparency, by establishing the criteria to select potential purchasing entities, mandating authorities to invite eligible buyers to outbid offers, and specifying the criteria to determine the best offer among others.
- *Timely response and resolution.* GB-BB enhances timely response and resolution by facilitating the prompt intervention and realization and transfer of assets. With the GB-BB process, there is no need for a time consuming due diligence process because the trust fund allows the holders of senior bonds to realize the assets that are due first (regardless of the type of assets). Also, the method enables rapid intervention by the supervisory authority and acquisition by other banks by protecting acquiring banks from legal contingencies,[44] avoiding the use of depositors as "hostages" to delay BR. When deposits are not effectively transferred, bankers may use depositors as "hostages" to avoid the necessary resolution measures and obtain government resources. The GB-BB process avoids this undesirable

[41] For some countries this is an important element for facilitating timely response and resolution as potential increased unemployment can generate political pressure for the supervisory authority.

[42] For high net value of bank assets, the optimal solution (i.e. deposit payout level that minimizes total contagion risk) is reached when the GB-BB method enables a full deposit payout level without increasing contagion costs. On the other hand, if the net value of bank assets is not sufficient to reach such payout levels, this method still allows authorities to build a GB with a portion of deposits. See Annex 2 for more details.

[43] The use of external resources is limited by design in this method, since it needs a limited deposit guarantee fund to support the transfer of deposits.

[44] For example, hidden liability claims stay at the BB.

outcome as it decreases the political cost of bank resolution; enabling authorities to transfer deposits rapidly, even without the agreement of the stockholders of the failed bank.

III.6. Practical Tips for the Implementation of the GB-BB Method

- *Proper legislation.* The legal capabilities of the supervisor and their protection against law suits noted above within the pillar on proper legislation are particularly relevant for the GB-BB method. Also, the law should empower the supervisory authority to determine the exclusion of assets at its own discretion for an amount equivalent to the excluded liabilities.[45] As another way of reinforcing the legal security for acquiring institutions, laws should foresee the exemption of responsibilities for damages for those participating in restructuring processes (i.e. the supervisory authority, trustees appointed in trusteeship and third parties that might be involved in any of these processes). Another provision that tends to reinforce legal security and increase the interest of eventual acquirers is to ensure that any act authorized, ordered, or disposed by the supervisory authority will not be subject to any judicial authorization and will not be deemed inefficient.

- *Deposit insurance agency.* If the assets of the failing bank are smaller than the excluded liabilities, the DIA may intervene to close the gap. This must be done under the least cost resolution scheme. With this provision, fiscal cost is set up at a maximum at the time of determination of deposit coverage.

- *Use of trust funds to transfer assets.* Trust funds are useful for transferring and administrating the assets of the GB. The good assets of the failed bank are placed in a trust fund, which backs the issuing of bonds with different privileged claims. The trust fund usually issues two classes of bonds with different seniority: A-Bonds and B-Bonds to be subscribed, respectively, by acquiring bank(s) and the DIA. A-Bonds enjoy absolute priority of claims and their value equals undertaken liabilities by acquiring bank(s), which is generally significantly lower than the total value of assets in the trust fund, implying a low default probability. The assignment of certain assets through a trusteeship agreement establishing privileged claims for the acquiring institution significantly reduces the risks it assumes in the operation, thereby increasing the incentives for the acquisition of excluded assets and liabilities and contributing to a more rapid and efficient reorganization of buyers.[46]

- *Importance of Sequence of Activities.* It is important to have a pre-determined sequence to enhance the implementation process.[47] The following table illustrates one possible sequence for the implementation of the GB-BB method, which can be adapted to specific country circumstances (including some practical tips):

    1. Issue resolutions declaring the start of the BRP and appointing intervention officers.

[45] The liabilities that the supervisory authority may exclude (i.e. privileged liabilities) are deposits and labor claims.

[46] The use of a trust fund is also convenient for the case of more than one acquiring bank, as claims on good assets are equally distributed among them. The Guatemalan authorities report this was a very useful feature of the bank resolution mechanism embedded in the law, which helped them implement two resolution cases within three months, including the resolution of the third largest bank in the system. The BCF was also found to be helpful; as of March 2007, its board has approved transactions for all banks that participated in the resolution of the first case.

[47] In a recent implementation of the GB-BB method in Bolivia, supervisory authorities noted the importance of having this feature in their manual to guide during times of stress while ensuring that all crucial activities are properly followed and timed adequately.

2. Obtain database of failing bank and gather all available information (e.g. number and geographic distribution of branches, personnel, risk ratings, inspection reports, etc).
3. Make adjustments to the failing bank's balance sheet according to market values and get estimates of assets and liabilities. To calculate liabilities: (i) group deposits according to the range specified by the DIA, indicating the number of accounts within each and the total amount they represent to help estimate insured deposits payout, (ii) compute the total deposit insurance to be paid in case of bankruptcy, (iii) estimate DIA costs, or the difference between the total insured deposits to be paid versus net returns after liquidation, (iv) identify "sensitive" deposits (e.g. pension accounts) and define a contingency plan for them, (v) compute current labor costs on monthly basis and, (vi) calculate the cost of dismissing all personnel.
4. List potential buyers, specifying their assets, liabilities, net worth, branches, financial condition, and ownership.
5. Short-list "eligible" purchasing banks, based on pre-established eligibility criteria, and assign scores. Eligibility criteria may include: solvency (e.g. solvency ratios, private ratings, and capacity to issue capital and debt instruments), minimum CAMELS rating of 2, size relative to assets of the potential buyer (should be at least twice of those of the weak bank), and management qualifications (the purchasing banks should be able to maintain their management standards after the purchase)
6. Calculate draft balance sheets for GB and BB, per information from previous steps.
7. Short list potential trustees (if this figure is included in the BRF), based on pre-established criteria. Select the most appropriate candidate, making it contingent on the approval of the buyer. The selection criteria may include: minimum CAMELS rating of 2, past experience as trustee of banks assets, reputation, widespread branch network, and sufficient scale (assets about twice as large as the asset portfolio to be managed).[48]
8. Prepare: (i) notifications to shareholders, authorities of the problem bank, the DIA and the bank capitalization fund; and (ii) press releases.
9. Prepare and program the take-over of bank premises specifying, among others, needed resources, schedule, personnel, and documentation.
10. After taking control of the bank, check assets to assess pledges, duly instrumentation, and authenticity of loans and other assets, as well as, duly instrumentation of deposits identifying holders. Also, prepare inventory of assets and liabilities per branch.
11. Improve earlier draft of the database (2) with information obtained after taking control.
12. Adjust draft balance sheets of the GB and the BB (6) based on the improved database.
13. Prepare the trust fund balance sheet.
14. Invite all eligible banks to analyze the database and make offers.
15. Select the best offer in light of the bank rankings.

IV. Examples of the Implementation of the GB-BB Method

[48] Although the banking authority should be in charge of selecting the best candidate, final appointment should be subject to the approval of the buyer.

This section selected three examples among successful implementation of the GB-BB method in Latin American, which resulted in minimum cost, coverage of most deposits, preservation of the banking business, and preservation of most jobs. It describes the different characteristics of financial institutions involved, prevalent domestic and international economic environment and the state of development of the BRF and the implementation process. This is intended to illustrate that the GB-BB method can lead to an efficient bank resolution process under very diverse circumstances. Therefore, the main selection criterion for the examples was diversity in terms of bank characteristics, environment, pillars for bank resolution, and implementation process, while being successful at minimizing costs and risks.

The section also present the results of the resolution process, specifying deposit payout level, costs for the DIA and preservation of personnel and banking services, comparing them with the results that would have been obtained by applying the bank closure and deposit payout method (i.e. default option).

IV.1. Argentina, 1998: Banco Mayo

Basic description of the financial institution. Banco Mayo was a medium to large financial institution (16th largest bank in Argentina), with approximately US$ 900 million in deposits, 118 branch offices and agencies, and 1,700 employees. By 1998, Banco Mayo had several weaknesses, including capital shortfalls, weak management and problems with asset quality (deficient portfolio with high immobilization hidden by creative accounting).

Domestic and international context. The resolution took place within a favorable domestic environment, but against inauspicious international circumstances. After the 1995 Tequila Crisis put in evidence weaknesses of the domestic financial system, there was a strengthening effort that increased the financial system's liquidity, solvency, growth and efficiency, as well as the participation of international banks (De la Torre 2000). Additionally, the government strengthened the framework for bank resolution. By 1998, supervisory authorities relied on a strong BRF with solid legislation and regulation, an experienced bank resolution unit, a solvent DIA defined by law and regulation –with limited coverage, appropriate funding features and joint management,[49] a BCF and, enhanced supervision with early intervention. In contrast, the international context was worsening as the effects of the East Asian financial crisis that started in mid 1997 spread to Latin America and the Russian crisis was about to emerge.

Resolution Process. From April, 1997 until July, 1998 Banco Mayo suffered persistent deposit withdrawals, leading to a decrease of 20 percent of total deposits approximately. Nevertheless, since July the Bank managed to reverse the decline in deposits and recovered the public's confidence. This was mainly the result of: acquiring a (strong and liquid) GB from a bank (Banco Patricios) that was resolved at the time, receiving capital contributions from the bank

[49] In Argentina, the deposit guarantee fund is administered by "Seguro de Depósitos Sociedad Anónima" (SEDESA), a private corporation that operates as a trustee with a capital stock of one million Argentine pesos and has the National Government and Caja de Valores S.A. as shareholders. SEDESA was established by the Decree N° 540/95, in fulfillment of the provisions of the Law N° 24,485. The domestic legal framework (i.e. Law 24,485) indicates that the DIA has limited coverage and its funding is covered exclusively by financial entities. The functioning of the system is regulated by different decrees, which, among other things, authorize SEDESA to participate in bank regularization and resolution processes.

capitalization fund and liquidity from the central bank, improving its management and announcing the sale of its credit card company.[50]

As the international context deteriorated with the Russian crises, the health of Banco Mayo declined and the sale of its credit card company failed. In fact, by September its deposits fell to levels inferior to those observed in May. Liquidity assistance by the central bank could not reverse the decline of deposits and the bank was suspended in October, 1998.

The Superintendency of Banks implemented the legal framework and applied the GB-BB, the mandated method.[51] The best offer received consisting of a combination of an offer by Citibank to buy the main portion of Banco Mayo and Provencred and a joint offer by a group of five banks to purchase additional branches of the failed bank.

The transaction received support from the existing DIA (SEDESA), the BCF and the central bank. Most of the assets were transferred to a trust that issued three subordinated certificates (A, B and C), to Citibank, the central bank and SEDESA, respectively. The central bank supported the operation by recovering its liquidity assistance in the form of certificates (B-Certificates) for US$ 300 millions instead of in cash, and issuing regulatory waivers. SEDESA provided its legal maximum contribution by purchasing C-Certificates for US$ 350 millions[52] and the BCF subscribed subordinated loans that financed the capital requirement for the operation (tier-two capital) and provided liquidity.

Summary of results and comparison with a hypothetical bank closure and deposit payout

Results	GB-BB	Bank closure and deposit payout
Deposit payout	100 %	Guaranteed deposits[53]
DIA support (% of legal maximum)	99	100
Preservation of personnel	Large	0
Preservation of services	Yes	No

Bolivia, 2003: Mutual La Frontera

Description of the financial institution. Mutual La Frontera was a small financial institution with about 3,500 deposits and only one branch, but remained the sole provider of financial services in a remote district. The institution had weak internal control and management, a large proportion

[50] Banco Mayo's credit card business (Provencred) was one of its most valuable assets and its sale was needed to improve the liquidity position of Banco Mayo.

[51] Including preparatory work and actual implementation of this resolution, the overall process took about two months to finish. However, counting only the time the banking business was closed, that is, from the suspension date, the resolution time was halved (compared to the most recent case) and bank closure was minimized to one weekend. The shortening of the resolution period was the result of gained know how and improved resolution processes, which led to the gradual shortening of the period of unavailability of deposits with successive implementations of the method. The following resolutions through the application of the GB-BB were completed during a weekend. Since Argentina was the first to implement the GB-BB method in LAC, its learning process has served as an example for other countries implementing a similar framework.

[52] Part of the contribution was paid with debt certificates to avoid running out of cash, in case there was a run.

[53] The share of guaranteed deposits in this case was about 48 percent, which is within the typical range of coverage.

of doubtful credits and insufficient capital, which had been below the regulatory threshold since December, 1996.[54] In this context, the Superintendency of Banks and Financial Institutions (SBEF) applied a regularization plan in 2000.

Domestic and international context. The resolution of La Frontera occurred against an unfavorable domestic economic and political environment but with an improved BRF and international environment. The Bolivian economic crisis that started in 1998 had a strong negative impact on the corporate sector and, consequently, on the financial sector, reducing its size, solvency, profitability and quality of assets (Mascaró et. al. 2006). Within the financial sector, banks were particularly affected, suffering frequent and recurrent deposit runs motivated by social and political instability. Additionally, authorities had encountered several problems with the implementation of traditional resolution methods, including high costs taken over by the State, increased instability and distrust by the public, destruction of present value, long and unnecessary litigations and legal obstacles and, long and cumbersome resolution processes taking as long as 15 years. [55]

The BRF had been recently strengthened through: (i) the improvement of the legal and regulatory framework for BR by the approval of Law 1488 and its regulation; (ii) establishment of formal BR procedures based on international best practice, including a BR manual and standardized contracts; (iii) creation of a solvent Financial Restructuring Fund (FRF) serving as a DIA for the BR process; and (iv) establishment of a specialized bank restructuring unit at the Superintendency, with trained personnel.

On the other hand, the region was already recovering from the Argentine crises and its spillovers to neighboring countries (including Bolivia) and financial turmoil in Brazil, with a bottoming up of the Argentine crises, the return of confidence to Brazil, increased financial inflows and industrial production and positive adjustments of current account balances (Perry 2003).

Resolution process. The strengthened BRF enabled the implementation of the newly established method, the GB-BB. Even when the SBEF had never implemented it, the institution managed to resolve Mutual La Frontera in 3.5 days (from Friday, May 9 until Monday, May 12 2003). They followed the detailed formal procedures that were already in place and learned from the experience of other countries in the region that had successfully implemented this method previously.

The Bolivian version of the so-called, "resolution in a weekend" was as follows: On Friday, the "Intendente Interventor" (assigned official) took over the entity, while the superintendency secured central bank support for the operation,[56] adjusted balance sheets, and met with interested

[54] Although the Banking Law (of April, 1993) established that mutuales were obliged to adjust their minimum capital in six months, Decrees 23914 and 23918 (sanctioned on December 1994) indefinitely postponed capital and other adjustments previously established.

[55] Some examples of lengthy liquidation procedures in Bolivia include: Banco Oruro in 1987 (15 years), Banco Agricola in 1991 (7 years), Banco Cochabamba in 1994 (8 years), BIDESA in 1997 (5 years) and BBA in 1999 (process still ongoing).

[56] Two years before the failure of La Frontera, Bolivia had set a DIA-type fund (FRF – Fondo de Reestructuración Financiera) for bank resolution purposes, with initial public funds and premia charged to the industry. However, since it was incipient, it did not have sufficient resources to support the operation. Therefore, and following legal

entities. On Saturday pre-selected interested parties made inquiries and offers to the authorities. On Sunday, authorities compared offers, handed over the entity to the purchasing financial institution that made the best offer (Mutual Paitití), appointed a trustee and signed contracts with them. On Monday the central bank covered deposits and Mutual Paitití reopened for business.

Summary of results and comparison with a hypothetical bank closure and deposit payout

Results	**GB-BB**	**Bank closure and deposit payout**
Deposit payout (%)	100	Guaranteed deposits
DIA support (% of legal maximum)	100	100
Preservation of personnel (%)	large	0
Preservation of services	Yes	No

IV.2. Paraguay, 2004: Financentro

Description of the financial institution. Financentro was a small financial institution ("financiera") with irregular operations (i.e., booking of inexistent assets), which led the superintendency of banks to require a regularization plan, per requirements by law. As Financentro did not present it, the plan was imposed by the superintendency. Following 15 days of on-site surveillance (under the regularization plan), the superintendency decided to start BR operations.

Domestic and international context. The 1999 Brazilian devaluation and the turmoil that Argentina went through during 2001-2002 had a strong negative impact on Paraguay, a small open economy that relies heavily on regional conditions (World Bank 2003). In fact, by 2002 the country went through an economic crisis that led to excess liquidity and lower profits within the domestic financial sector. Although by 2004, the financial system was only slightly smaller than in 2001, a group of finance companies (*financieras)* were severely affected.

When Financentro was suspended, the authorities were able to rely on a strengthened legal pillar for BR, as the government was in the midst of implementing a general banking reform program to improve its legal and regulatory framework (International Monetary Fund 2006). The legislation on the resolution of banks and financial institutions and the deposit guarantee fund (Law 2.334/03), approved in late 2003 regulated supervision, regularization, limited central bank assistance for transitory illiquid situations and resolution activities.

The existing regulation of activities within the process of bank resolution provided for the suspension of banking operations, limited deposit insurance by the DIA (Fondo de Garantías de Depósitos), additional transitory assistance during systemic emergencies with federal funds administered by the central bank, and the power to issue waivers of prudential requirements compliance to ease P&A and M&A transactions. The regulation prohibited the central bank and the Superintendency to assist failed institutions indefinitely, manage its operations (maximum of

provisions, the central bank provided funds on behalf of the Ministry of finance, for which it was compensated by the emission of long term bonds by the treasury.

30 days) or provide implicit deposit insurance. Law 2334/03 is distinctive in that it explicitly favored the GB-BB method. In fact, the Law mandates the central bank to attempt a GB-BB solution for a failing bank that triggers intervention according to legislation and specifies the treatment of assets and liabilities during the application of the method.[57]

Notwithstanding advancements on the legal framework, other BRF elements were not as strong. First, new legislation was in the process of being regulated by the central bank and the DIA had not been funded yet. Second, procedures (including a bank resolution manual) were still in the process of being defined. Third, the personnel of the superintendency had not been trained on how to resolve banks under the new rules and were discouraged and subject to legal issues arising from past bank interventions and closures. Finally, there was no BCF.

Resolution process. After Financentro went through a failed regularization process it was resolved through the GB-BB method, the first time such process was used in Paraguay.[58]

Sequence of some of the steps in the process were: gathering information, selling credit card loans and the sole branch office of Financentro, inviting all financial institutions in the system to present bids and inducing the purchasing bank to make an offer. The purchasing entity (a medium sized bank), became the acquirer as its offer was not outbid by the other participants. The resolution transferred or sold all assets with positive economic value.

Summary of results and comparison with a hypothetical bank closure and deposit payout

Results	**GB-BB**	**Bank closure and deposit payout**
Deposit payout (%)	Less than 100[59]	Guaranteed deposits
DIA support (% of legal maximum)	50[60]	100
Preservation of personnel	Low	0
Preservation of services	Yes	No

V. Concluding Remarks

This study has sought to analyze BR and make a contribution to relevant policy making and implementation, providing a set of practical guidelines for the design of BRFs, selection of BRMs, and implementation of the GB-BB resolution method.

[57] Assets have to be valued at book values and pledge and mortgage claims have to be respected. On the treatment of liabilities, labor claims must be fully paid before the split of the bank, the DGF follows least cost criteria, deposits and foreign trade pre-paid operations have the first order of priority and related parties deposits have no priority.

[58] The traditional BRM until then was direct intervention by the central bank with replacement of management of the problem bank with Superintendency officers, selling of assets, payment of deposits, and closure of the bank.

[59] 300 out of 470 depositors recovered 100 percent of their deposits while remaining suffered partial losses.

[60] All deposits could not be covered because the initial draft of the GB balance sheet, which included not only fully guaranteed deposits and labor claims but also other privileged deposits, had a negative net worth when using the legal maximum of DIA assistance. Since a GB cannot have a negative net worth, authorities decided to exclude other privileged liabilities from the balance sheet.

The exit of banks from the financial system is a key aspect of banking supervision policy. International experience shows that policymakers have several alternatives when designing BRFs and there is no unique suitable model. Nevertheless, BRFs should comply with certain requirements, which have been summarized under the concept of pillars for efficient BR in Section II.2.

Similarly, policy makers can choose from a set of BRMs, and each of them can be the most adequate depending on the particularities of the failed bank and its environment. When selecting a method, authorities should make sure it complies with certain principles or criteria (specified in Section III.2) to ensure that resolution costs are minimized.

The GB-BB method, analyzed in Sections IV and V, has been very successful at meeting the specified efficiency criteria, chiefly including the minimization of contagion costs. Although it cannot always be implemented as it requires, at least, eligible private banks that are willing to acquire the GB and a solvent DIA, once these minimum requirements are met, the method is quite flexible. GB-BB can be successfully implemented in diverse circumstances, including differences in the types of financial institutions, the stage at which they are intervened, the degree of development of the BRF, and the domestic and international economic and social environment.

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ANNEX 1: Example of triggers for intervention in three Latin American countries

Country	Triggers for regularization plan	Triggers for resolution
Bolivia Law No. 1488 (*Ley de Bancos y Entidades Financieras*) of 1993 and modifications (including, Law No. 2297 of 2001) and articles No. 112, 120	- Tier 1 capital reduction between 30-50% within 12 months. - CAR below required (art 47). - Lack of compliance with reserve requirement for an amount equivalent to at least 1% of the required, for 2 consecutive periods, or 4 non-consecutive periods within a year. - Ratio of performing assets to total deposits below the target specified by the authorities, at the request of the Superintendency of Banks, which will be between 0.8 and 1.2. [61] - Repeated lack of compliance with written instructions and orders from the Superintendency of Banks. - Reporting false financial data or fraudulent documentation, once it is properly documented. - Capital increases for stockholders financed directly from the own financial institution. - Lack of publication of an audit report, or one that has a negative opinion from the auditors or a qualified opinion. - Use of public or private funds held in trust for its own purposes. - Credits, investments or other contingent operations with individuals or groups, beyond the limits of the law. - Credits, investments, or other contingent operations with related-party individuals or groups, or those that have as collateral the stocks of the same financial institution.	- Cessation of payments of one or more liquid liabilities. - Tier 1 capital loss above 50%. - CAR below 50% of the required ratio (art 47) - Lack of presentation of a regularization plan once required, or rejection by the authorities of the proposed plan. - Once the plan is in curse, evidence of activities that would compromise the achievement of the goals under the procurement plan. - Once the plan expires, if the original causes are not fully addressed.
Dominican Republic Law No. 183-02 (*Ley Monetaria y Financiera*) of 2002 - Articles No. 60, 62	- Regulatory capital reduction between 10 and 50% within 12 months. - CAR below requirement and above limit specified in article 62 literal b (50%) - Lack of compliance with reserve requirements for a number of periods, as determined by regulation. - Reiterated access to LOLR, as assessed by the Monetary Board. - Reporting false financial data or fraudulent documentation, or repeated lack of compliance with requirements and written orders by the Central Bank and the Superintendency of Banks. - Engaging in activities that put in grave danger the deposits of the public, or the liquidity and solvency of the entity, such as prohibited activities or those that required authorization without securing it before implementing them, credit to related parties etc beyond limits in the law.	- Cessation of payments. - CAR below 50% of the required. - No presentation or rejected Regularization Plan. - Undertaken activities while under a Regularization Plan, which endanger the objectives of the plan. - When the period for the plan is completed and the original deficiencies are not fully addressed. - Revoked license emerging from a sanction.
Guatemala Banks and Financial Groups Law (*Ley de Bancos y Grupos Financieros)*, and Decree No. 19-2002 Art 70, 75	- CAR below the requirement (when a financial institution realizes this, it should report it immediately to the Superintendency of Banks).	- Cessation of payments. - CAR below 50% of the required. - As required by the Monetary Board due no presentation or rejection of regularization plan, lack of compliance with it, or other causes duly documented by the Superintendent of Banks.

[61] Performing assets include loans classified 1 and 2, cash, temporary investments, fixed assets, permanent investments in bonds with investment grade.

ANNEX 2: General Guidelines for the design of Bank Capitalization Funds

Based on empirical evidence, including World Bank lending operations, the creation of BCFs should include setting Operating Manuals that have, at a minimum, the following elements:

1. Mission. The mission of BCFs is to provide resources to strengthen the equity position of qualifying banks.

2. Objectives. BCFs should aim to strengthen the solvency and stability of financial systems, generate the solvency conditions to allow a stable and sustained development of the financial sector, and to facilitate and promote the participation of the private sector in capitalization plans.

3. Resources. Funding for BCFs can be obtained from the public sector, international organizations, or the recuperation of loans and sales of BCFs' instruments.

4. BCF operating principles

- *Transparency and technical criteria*. BCFs should operate on the basis of technical criteria clearly defined, subject to verification and well known to the involved parties.
- *Market principles*. The decisions adopted by BCFs with respect to the provision of funds ought to be based on private investment criteria.
- *Equal treatment*. All financial entities with similar problems must receive equal treatment. Additionally, banks' requests should be evaluated with the same parameters and criteria.
- *Temporality*. The investments of BCSs in banks should be temporary and reimbursed or sold within a prudential time frame.
- *Priority of private funding*. The operations in which BCFs participate have to give priority to the provision of private funds. Although the OM may foresee well justified exceptions, as a general rule, shareholders of the banks to be capitalized should contribute funds in the same amount as the BCF.

5. Allowed operations. BCFs can participate in operations like the incorporation of excluded assets and liabilities, mergers, regularization plans and purchases or acquisitions. These should be specified in the OM.

6. Amount of capitalization operations. OMs have to define the maximum amount of funds that BCFs can provide in each of the operations in which they participate, which will depend on the type of operation, the relationship between the contribution of shareholders and the BCF, the relationship between the contribution of the BCF and the capital requirement of the bank, and the strength of the acquiring bank –e.g. offer larger loans on better terms to stronger banks.

7. Criteria for the management of assets. OMs should establish the guidelines and policies for the management of the assets o the BCF.

8. Capitalization instruments. In order to carry out their mission, BCFs should have the faculty to use a range of instruments, including subordinated loans, convertible loans and shares. OMs

should describe the characteristics and conditions of the different instruments that BCFs can use to capitalize banks.

9. Stages of the capitalization process. OMs should describe the stages of the capitalization process, including:

- *Presentation of request for assistance by banks.* OMs should define the characteristics and requirements to be met by the entities that request assistance to the BCF and the documentation they should present with their requests. There are two types of eligible banks: (i) those with insufficient capital, but with a positive net equity position, which are economically viable and have adequate management and controls; and (ii) those that have enough capital, but want to participate in a process of purchase of excluded assets and liabilities or in an absorption process. In both cases entities need to receive a good qualification from the Superintendency of Banks. Non-eligible banks include those with negative net equity, unresolved matters with the Superintendency of Banks, unviable business, public ownership, and doubtful financial information. On the other hand, required documentation should include: reports of the capital situation of the entity, business plan, policy of honoraries and other retributions of the directors and managers, situation of related enterprises, plan of action of the entity and commitment of contributions by shareholders. The information provided should be on a consolidated basis of all the enterprises that participate in the group and based on the Superintendency of Bank's evaluation criteria.

- *Evaluation of requests.* OMs are supposed to specify evaluation processes and general evaluation criteria, including capitalization, structure of assets, quality of management, profits and liquidity. Evaluation of eligibility should be based on criteria defined by the Superintendency of Banks and applied on a consolidated basis to the economic group to which banks belong.

- *Response of the BCF to requests of assistance and disbursement of the approved capitalization operations.* Procedures and time frames for the response of the BCF to assistance requests and the disbursement of approved operations should also be included in OMs.

10. Conditionality and sanctions. OMs should describe the faculty of BCFs to impose different conditionality and sanctions to the banks to be capitalized. These ought to depend on the type of operation used for the capitalization and the particular conditions of each bank and OMs should describe them.

11. Guarantees. BCFs can obtain guarantees from the shareholders when they provide support for mergers and regularization plans and the instruments used are convertible obligations or subordinated loans. Asking for guarantees reduces risks for the BCF but also makes their funds less attractive and might reduce the number of operations in which it will participate. Therefore, the decision on allowing or requiring the BCF to request guarantees should be preceded by a cost benefit analysis.

12. Authorities. The OM should specify the authorities of the BCF, who could come from the ministry of finance, the central bank, the superintendency of banks or be designated by them.

13. Legal structure. Regulations should establish the legal structure and participants of the BCF. BCFs can have the structure of a trusteeship. Since they should act as private institutional investors, according to the guidelines of OMs, they ought to have an autonomous structure, and management and organizational capabilities under the principles of healthy and prudential management. BCFs should also be subject to external audits by internationally recognized auditing firms, which should analyze their books and financial statements and their compliance with the commitments under capitalization operations.

14. Evaluation and follow up. The BCF should not carry out by itself the inspection or verification of participating banks. Instead it should hire an auditing company for the analysis and follow up of the operations in which it participates and use all Central Bank and Superintendency's reports and dispositions necessary to carry out its operations. This is relevant to prevent the BCF from becoming a supervisory authority parallel to the Superintendency of Banks or to generate an expensive operating structure.

15. Life span. BCFs should be dissolved once their mission has been completed.