

BAIL-IN AS AN ALTERNATIVE FAILURE RESOLUTION
MECHANISM IN NIGERIA

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Abstract

The 2007-2009 global financial crisis resulted in public sector capital injections used to directly bail-out major global banks in excess of US\$1 trillion. When the guarantees and insurance provided by major governments were added, the cost of the bail-out was estimated to be more than US\$8.5 trillion. The 2009 Nigerian banking crisis led to the capital injection of ₦879 billion (more than 10% of GDP) into the Nigerian banks in the form of subordinated loan as well as through the purchase of bad loans. To prevent re-occurrence of bail-outs using taxpayers fund and in order to reduce the risks posed by systemically important banks, various reform initiatives were undertaken at both national and international levels, especially in the area of resolution planning. Consequently, a new tool, known as bail-in, was developed. Bail-in allows the authorities to make sure that shareholders and creditors of a bank bear the costs of failure, first before recourse to public funds.

This paper describes the bail-in resolution tool available to regulators to resolve failing banks. The paper presents the bail-in creditor-funded resolution regime, its structure, merits and demerits. The paper also applies the bail-in regime to three Nigerian banks that were resolved using the bridge-bank mechanism. It was found that the bail-in resolution could have also achieved the successful recapitalisation of those banks within a much shorter time and at a fraction of the injected funds (only the liquidity support feature of the 'lender-of-last-resort' was required). However, key changes have to be

made to the law establishing the Nigeria Deposit Insurance Corporation (NDIC) as the Resolution Authority in Nigeria to be able to implement bail-in resolution mechanism.

1.0 Introduction

In the midst of the global financial crisis of 2007-2009, some major financial institutions were at the verge of failing and some did fail and the government had to bail-out the failed institutions with huge amount of public funds. Such bail-out funds would have been directed to developmental programmes for the benefits of the citizens particularly in a period of scarce resources. During the financial crisis, public sector capital injections used to directly bail-out major global banks were in excess of US\$1 trillion but when guarantees and insurance provided by major governments were added, then, the cost of the bailout was more than US\$8.50 trillion (Alessandri and Haldane, 2009).

The Nigerian financial system was not insulated from the global financial crisis. The economy witnessed one of its worst meltdown in the stock market that collapsed by about 70 % in 2008-2009. As a result, many Nigerian banks suffered huge losses, due to their exposures to the capital market (margin loans) and downstream oil and gas sector. Following this development, a Special Joint Committee of the CBN and NDIC was constituted to conduct a special examination of all the 24 Deposit Money Banks (DMBs) in Nigeria. The result of the examination revealed that 10 banks were critically distressed. Consequently, the CBN as the lender of last resort had to inject ₦620 billion into 8 of the affected banks in the form of a subordinated loans (Sanusi, 2012). That was in addition to guarantees of the banks' interbank takings and foreign credit obligations.

To avoid such bail-out costs in the future, financial regulators have been exploring bail-in as an alternative failure resolution strategy. That would transfer the responsibility of bank recapitalization to the shareholders and creditors. The implication is that, banks will

be required to issue contractual debt instruments which in the case of a trigger event could be used to recapitalize the bank by converting such debts into equity.

In pursuit of this effort, the Financial Stability Board's "Key Attributes of Effective Resolution Regimes" endorsed by the G20 recommended that resolution regimes should put in place a bail-in tool in order to improve the toolkit for dealing with the failure of large, globally systemic banks. Modern regulatory proposals, like Basel III and the Dodd-Frank Act have been putting emphasis on instruments that in principle have the capacity to be really loss absorbing through their design. Bail-in is part of the international efforts to address the potential risks to the financial system by institutions considered as 'too-big-to-fail'.

IADI Research and Guidance Sub-Committee on "Bail-in implications for Deposit Insurance and Funding" noted that as a remedy for the failure of a Systemically Important Financial Institution (SIFI), bail-in is one of the concepts that envisages loss absorption and/or reconstruction of a failing entity's capital base by its shareholders and creditors.

Consequently, the essence of the bail-in initiative is to be able to recapitalize the non-viable bank so that it can continue to provide banking services without bail-out with public funds. Since the global financial crisis, there have been series of new international banking rules put in place to help reduce the risk of another financial crisis occurring and to make banks stronger so that it is less likely that a bank would fail and one of the measures that countries around the world are implementing is a "bail-in regime".

Bail-in, apart from avoiding taxpayers' exposure to loss, assists in maintaining financial system stability particularly with respect to Systemically Important Banks (SIBs). A bail-in takes place before a bankruptcy and under current proposals; regulators would have the power to impose losses on bondholders while leaving untouched other creditors of

similar rank. A bank bail-in is an attempt to resolve and restructure a bank by creating additional bank capital (recapitalization) via forced conversion of the bank's creditors' claims (potentially bonds and deposits)¹ into newly created share capital (common shares of the bank). Bail-in will ensure that in the event that every other thing fails, the shareholders and creditors (owners of short and long-term bonds issued by the bank) will be wiped-out first before the tax payers and depositors bear losses. That would enhance confidence and the systemic risks would be reduced.

To the best of our knowledge, most of these policy responses have not been applied in Nigeria. The aim of this paper is to apply the bail-in debt creditor-funded resolution regime in three (3) failing banks for which bridge-bank option was applied in order to determine which approach would have been less expensive. The paper also presents some observations on implementation issues observed in other jurisdictions which may be pertinent to the Nigerian context. Furthermore, the paper examines the advantages and disadvantages of bail-in debt and its potential role in crisis prevention (by making banks more resilient to shocks and less worst-case scenario). In addition, it proposes a template for a simple approach, without taxpayer support but based on creditor-funded recapitalization mechanism that the CBN and NDIC could employ to clarify the allocation of losses when a Domestic-SIB (DSIB) needs to be recapitalized.

The rest of the paper is structured as follows. Section 2 examines bail-in creditor-funded resolution regime, structure, merits and demerits. Section 3 presents a template for resolving a DSIB in Nigeria using bail-in based on selected jurisdictions that have used these mechanisms. The section also applies the framework to a practical case in Nigeria.

¹Goldcore (2013)

Sections 4, 5 and 6 presents findings, concludes and presents recommendations, respectively.

2.0 Bail-in Debt and its Rationale

During the financial crisis, several governments bailed out failing financial institutions because letting them fail and enter insolvency would have caused excessive disruption to the critical services that they provided and to the wider financial system.

Between October 2008 and October 2011, the European Commission approved €4.5 trillion as aid to financial institutions (equivalent to 37% of EU GDP) and the International Monetary Fund (IMF) estimated that the average increase in public debt associated with the crisis was around 18% of GDP (Chennells and Wingfield, 2015).

In Nigeria, the economy faltered and the stock market collapsed by 70% between 2008 and 2009 and many Nigerian banks sustained huge losses, due to their exposure to the capital market and downstream oil and gas sector. That led to the injection ₦620 billion into the banks by the CBN (NDIC, 2013; NDIC Annual Report, 2004-2012²).

Bailing out large and sophisticated banks is undesirable and very costly. It would encourage moral hazard by undermining the incentives for firms to be run in a prudent manner. Similarly, it would discourage investors from monitoring the activities of the firm to prevent excessive risk-taking from jeopardizing their investment. Therefore, in order to protect taxpayers from exposure to bank losses as well as reduce the risks posed by big banks otherwise referred to as too-big-to-fail (TBTF) or systemically important banks (SIBs), various reform initiatives have been undertaken at both national and international levels, including expanding resolution powers and tools.

²downloadable from <http://www.ndic.gov.ng/annual-reports.html>

One of such proposals is bail-in resolution mechanism instead of taxpayer bail-out as advocated by Financial Stability Board (FSB) which has included bail-in as one of the key attributes of effective resolution regimes (FSB, 2011a and 2011b), United Kingdom (Independent Commission on Banking, 2011) and European Commission (EC, 2011). In 2012, the Federal Deposit Insurance Corporation (FDIC) and the Bank of England (BOE) issued a joint paper outlining the merits of a single-point-of-entry (SPOE) strategy for resolving a large, internationally active financial firm.

2.1 What is Bail-in?

Bail-in is a statutory power that enables a resolution authority to write-down or convert into equity unsecured and uninsured claims so as to maintain continuity of systemically vital functions of a failing bank. This can be achieved by either recapitalising the entity providing these functions, or, alternatively, capitalising a newly established entity or bridge institution to which these vital functions have been transferred following closure of the residual firm (FSB, 2011a). The statutory bail-in power is intended to achieve a prompt recapitalization and restructuring of the distressed institution. The idea is to eliminate insolvency risk by restoring a distressed financial institution to viability through the restructuring of its liabilities and without having to inject public funds (except for the provision of liquidity support as a backstop).

Bail-in is a creditor-financed recapitalization or resolution of a troubled bank. A bail-in is a statutory mechanism which differs from contractual contingent capital instruments with write-off or conversion features. With bail-in bonds, the regulatory authorities have the statutory power to force a loss on the bond holder.

Bail-in is a regulatory tool, usually backed by an Act or Law, that enables resolution authorities to eliminate or dilute existing shareholders, and to write down or convert, in a specified order, any contractual contingent capital instruments that have not already

been converted to equity, subordinated debt, and unsecured senior debt. Generally, the management of the failing bank is changed during the bail-in resolution process and the resolution authority should have such power or authority.

Bail-in forces bond holders to take their burden of the bank's losses and it can be written down or converted into shares immediately before the financial institution reaches a state of bankruptcy (Spiegeleer et. al, 2014).

According to *Chennells and Wingfield (2015)*, some of the misconceptions about bail-in include:

- Bail-in is not an alternative term for contingent capital instruments;
- It does not interfere unduly with shareholder and creditor property rights;
- Bail-in is unlikely to be a cause of contagion to the wider financial system; and
- It is not, by itself, the silver bullet that ends 'too big to fail'.

2.2 Rationale for Bail-in

The 2007-09 global financial crisis and the 2009 Nigerian banking crisis have amply demonstrated the danger posed by SIFIs/SIBs. Through the following ways, a failing SIFI/SIB can endanger financial stability (Rutledge et al, 2012):

- i. Direct counterparty risks when the failing institution fails to meet its financial obligations or high demand for collateral (or "margin");
- ii. Liquidity risks and fire-sale effects in asset markets, when the distressed institution is forced into asset sales to obtain liquidity, which further depresses asset prices (and thus raises demand for higher "margin") and causes credit crunches; and
- iii. Contagion risks when the panic caused by the failure of one institution spreads to other financial institutions.

According to Rutledge et al (2012), any credible and effective resolution framework for SIFIs must therefore be able to reduce the possibility of government bail-out by ensuring that shareholders and creditors bear losses which limits moral hazard risk and improves market discipline. Other features are the minimization of systemic risks by quickly restoring confidence and being able to achieve effective cross-border resolutions.

2.3 Advantages and Disadvantages of Bail-in

- i Bail-in resolution could mitigate the systemic risks that could have resulted in liquidation.
- ii It is a going-concern resolution which reduces deleveraging pressures as well as preserve asset values that might otherwise be lost in a liquidation.
- iii Bail-in could help in fostering banking system stability because financial institutions may be incentivized to raise capital or restructure debt voluntarily before the triggering of the bail-in power. This is possible with a credible threat of stock elimination or dilution by debt conversion and assumption of management by resolution authorities or regulators.
- iv In addition, compared with most resolution tools, it ensures continuity of the bank's critical business functions as well as allows the bank to maintain a significant amount of franchise value.

On the other hand, bail-in could trigger a run by short-term creditors and aggravate the institution's liquidity problem. This is because the use of a bail-in power can be perceived by the market as a sign of the institution's insolvency. Ideally, therefore, bail-in should be activated when a capital infusion is expected to restore a distressed financial institution to viability, with official liquidity support as a backstop until the bank is stabilized.

2.4 Design Features

- i **Application**

Regulatory authorities should possess bail-in powers as one of their resolution options. Bail-in can be a complement to other resolution tools, could be activated alone or most likely would be used in combination with other resolution tools (FSB, 2011a). Furthermore, resolution authorities should have the statutory power, but not the obligation, to apply a bail-in within resolution.

Bail-in resolution involves writing down and/or converting into equity the claims of shareholders and unsecured creditors to absorb the losses of the failed bank and recapitalise the bank or its successor. In this approach, the hierarchy of claims prescribed in insolvency law is followed or as dictated by the resolution authority.

Bail-in would be imposed upon the failing bank and its creditors by the resolution authority. There is no requirement to get the consent of shareholders, creditors or the existing management of the firm. And there is no requirement for court approval of the bail-in, since it should have been one of the powers of the authority as given to it by the law.

Other design features like, triggers, ensure a credible, transparent, and effective bail-in regime, when properly designed and if effectively implemented on time, will also help to mitigate the risk of the bail-in option not achieving the desired result of curbing financial instability or bail-out using public funds.

ii Trigger

Resolution proceedings of a well-designed resolution regime typically contains a number of different qualitative and quantitative thresholds. An overall goal of the well-designed resolution framework is to empower the resolution authority. Bail-in resolution also

requires triggers that should be consistent with those used for other resolution tools. The following are some of the triggers used in Bail-in resolution.

a) *Insolvency-related triggers:* Bail-in power would be triggered at a stage when a bank is close to insolvency either due to balance-sheet or cash-flow problems. This bail-in trigger is supported by the fact that it is only when the bank is insolvent and in danger of liquidation that it is invoked and shareholders and other creditors are affected. However, a key disadvantage of this trigger is that it may be too late for the bail-in to achieve its intended purpose of restoring the bank to viability.

b) *Pre-insolvency triggers:* This approach recognises that bail-in could be implemented before the bank is insolvent. This trigger could be qualitative which arises because of repeated breach of regulatory rules or quantitative when capital adequacy ratios fall below a certain level (e.g., below 50 percent of the required level).

Therefore, it may be appropriate for the trigger in bail-in resolution to apply at a point that is close to but before the institution is balance-sheet insolvent. The trigger should be based on a combination of quantitative and qualitative assessments. The trigger should be discretionary and not be seen as arbitrary. This implies that the resolution authority should be able to decide to apply bail-in only when the trigger criteria is met.

2.5 Potential Impact of Bail-in Resolution on Banks' Funding Cost and Implications for Financial Stability

Investor confidence will be enhanced which could positively reinforce financial stability if the market believes the viability of a failing SIFI/SIB would be restored with bail-in resolution. However, bail-in resolution could result in the undesirable effect of triggering a run by various creditors and lead to financial instability, if its use is perceived negatively by the market (Rutledge et al., 2012).

The removal of the too-big-to-fail premium will help in differentiating between SIBs and non-SIBs on the basis of their risk-profile. This can help in bringing funding more in line with the risk profile of banks, which can have positive implications for financial stability. In addition, bail-in could create value by providing creditors with higher returns after succeeding in restoring the viability of a failing bank, since the loss-given default under bail-in is likely to be smaller than under failed bank liquidation.

3.0 Resolving D-SIBs in Nigeria using Bail-in

This section proposes bail-in approach to the resolution of SIBs by the NDIC. It is intended to provide guidance on NDIC's statutory responsibilities as the resolution authority of banks in Nigeria. The section also explains the purpose and objectives of FSB resolution regime, its key features, the approach that the NDIC can take to resolve a failed bank and the arrangements for safeguarding the rights of depositors, clients, counterparties and creditors.

The "Key Attributes of Effective Resolution Regimes for Financial Institutions" (or Key Attributes) developed by the FSB are central to policy measures to address the risks posed by SIFIs. The Attributes are a set of international standards that outline the essential features that resolution regimes in all FSB member jurisdictions should have. The Key Attributes were endorsed by the G20 leaders at the Cannes Summit in November 2011.

The Attributes describe the powers which should be available to designated authorities in each FSB member jurisdiction to intervene in a swift and decisive manner (for example over a weekend) to bring about the orderly resolution of a failing financial institution (FI) to safeguard financial stability and depositors' funds. They state that, resolution of a failing bank should not expose taxpayers to losses while protecting vital economic functions, and that losses should be allocated among shareholders and creditors while observing the hierarchy of claims.

In order to implement bail-in in Nigeria, the UK approach (Bank of England, 2014) can be adopted, which has four (4) core elements within its resolution framework:

- the run up to a resolution, where preparations are put in place for the resolution weekend, including policy announcements and identification of liabilities within bail-in resolution regime;
- the bail-in period, including the resolution weekend and confirmation of the liabilities that are within scope of the bail-in;
- the announcement of final bail-in terms and compensation arrangements; and
- restructuring of the firm after bail-in.

3.1 Resolution Tools Available to Regulatory Authorities in Nigeria

In Nigeria, the NDIC and CBN share the responsibility for bank failure resolution. NDIC derives its resolution powers from the NDIC Act 2006 and BOFIA, 1991 as amended. These two Acts granted power to the NDIC to carry out the following resolution options: Open Bank Assistance; Depositor Reimbursement; Purchase and Assumption; Bridge Bank Mechanism; Assisted Mergers and Purchase of Assets. So far, the NDIC has used the following resolution options to resolve failing/failed banks: Depositor Reimbursement, Purchase & Assumption, Open Bank Assistance, Bridge Bank Mechanism and Assisted Mergers.

The BOFIA Act provides CBN powers to carry out Open Bank Assistance, act as the Lender of last resort (LOLR) or transfer a bank to NDIC for recapitalisation or any other resolution measures.

AMCON, through its Act, has been empowered to purchase Non-Performing Loans (NPLs) and recapitalize distressed banks; and the Ministry of Finance is the Guarantor of Lender of Last Resort

It should be noted that no agency in Nigeria has bail-in resolution powers. The FSB Key Attributes stated that resolution regimes should have statutory powers to carry out a bail-in. The NDIC, in the proposed amendment of its Act, has included bail-in among the resolution options.

3.2 Converting Liabilities into Equity

The following are pre-conditions for converting failing bank liabilities into equity:

- i) The NDIC should be given statutory powers for bail-in arrangements.
- ii) Banks should be required by CBN/NDIC to include bail-in features within their contractual provisions governing each eligible liability/instrument, like bonds, preferred shares, etc. that may arise.
- iii) If a bail-in conversion was to prove impossible, however, a failing bank could be broken up, and its assets sold off, wound down or liquidated.

3.3 Applying Bail-in in Nigeria

This section presents an application of bail-in recapitalisation using the three (3) distressed banks that were resolved using bridge-bank option to see which approach should have been better as well as demonstrate the applicability of bail-in in Nigeria. The aim of the application is to determine the benefit derived from bail-in and to gain a better understanding of the concept.

According to FSB (2014), bail-in powers should enable resolution authorities to:

- (i) Undertake write-down of equity or other instruments of ownership of the firm to the extent necessary to absorb the losses;
- (ii) Write-down subordinated claims;
- (iii) Write-down of other subordinated or senior unsecured and uninsured creditor claims against the firm; and
- (iv) Convert into equity or other instruments of ownership of the institution under resolution (or any successor in resolution or the parent company), all or parts of its subordinated or senior unsecured and uninsured creditor claims (including any contractual bail-in instruments, on a post-write-down/conversion basis).

Table 1 presents the Liabilities of the three (3) distressed banks as at 30th September, 2009 and the estimated recapitalisation required that can be used for the Bail-in exercise. The balance sheet of the banks in **Table 1** is where we start their bail-in exercise. In each of the steps of this bail-in process, it is the NDIC as the Resolution Authority taking the initiative.

Table 1: Bail-inable Liabilities of the three (3) problem banks as at 30th September, 2009 and the estimated recapitalisation required

	Afribank (Mainstreet) N	Spring Bank (Enterprise) N	Bank PHB (Keystone) N
Insured Deposits (200k)	13,875,118,836	8,316,870,695	31,327,810,913*
Uninsured Deposits	187,887,695,539	123,830,160,960	416,212,344,984**

Total Deposits (from eFASS)	201,762,814,375	132,147,031,655	447,540,155,897
Due to banks outside Nigeria	59,137,502,767	-	-
Other Liabilities	78,161,049,549	58,757,612,880	308,263,518,216
Govt Deposits	19,935,043,722	28,753,489,089	-
Takings from Discount Houses	3,000,000,000	-	-
Interbank Takings	130,200,000,000	34,200,000,000	149,514,550,000
Due to CBN	32,905,806,569	-	-
Tier 2 Capital	1,093,524,380	-	-
Tier 1 Capital	(82,661,463,463)	(69,228,830,661)	(126,843,211,595)
CAR	(28.54)	(60.12)	(22.63)
Recapitalisation Required	115,040,977,167 .53	80,744,448,705 .26	182,898,883,410 .22

Source: eFASS,

* Estimated as 7% of Total Deposits, ** Estimated, () denotes negative values

3.4 Key Assumptions

The scope and limitation of the bail-in tool to be applied in this section are as follows:

- i. Insured deposits are not part of the bail-in resolution mechanism.
- ii. NDIC would not participate in the funding of bail-in until shareholders, bond/debt holders, creditors, both secured and unsecured, have absorbed the losses.
- iii. The contribution of the NDIC to bail-in is limited to the amount it would have paid under normal liquidation and depositor re-imburement.
- iv. Losses are allocated to shareholders and creditors in the order of claims as shown in **Figure 1**.
- v. The choice of bail-in as the resolution mechanism should result in bail-in being the most cost-effective in comparison to bridge-bank and deposit payout.
- vi. There will be no legal risk arising from the use of bail-in because it is anticipated that the NDIC Act will be amended to grant bail-in powers to the Corporation. The ammendment of the Act also specifies that shareholders can lose all their investments as they are the first in the hierarchy of losers.
- vii. Bail-in mechanism can be applied in conjunction with other resolution options like adoption of a new business plan and replacement of Senior Management.

Figure 1 shows the hierarchy of bail-in based on the balance sheet of the banks and based on global best practices. Liabilities are shown in order of 'seniority' in the hierarchy of creditors, with the most senior liabilities at the top and the most junior, which are first to absorb losses, at the bottom. Both senior and junior liabilities include lower-quality, or subordinated, debt as shown. Equity, which is fully loss absorbing, is the firm's capital.

Figure 1: Hierarchy of Bail-in

Deposits Not in Bail-in	Insured Deposits, <i>A</i>
	Uninsured Deposits, <i>B</i>
	Due to banks outside Nigeria, <i>C</i>
Senior Liabilities: Bail-inable	Other Liabilities, <i>D</i>
	Government Deposits for daily transfer to TSA, <i>E</i>
Subordinated Liabilities: Bail-inable	Takings from Discount Houses, <i>F</i>
	Interbank Takings, <i>G</i>
	Due to CBN, <i>H</i>
Automatic Loss Absorbency	Tier 2 Capital, <i>I</i>
Full Loss Absorbency	Tier 1 Capital, <i>J</i>

Source: Authors' design

It should be noted that all resolution tools, including bail-in should enable a failing bank to be stabilised prior to a restructuring. Therefore, applying the bail-in in the case of the three (3) banks will be as follows:

Step 1: Asset Write-down to Absorb Loss

The first step is to estimate the outstanding losses of the bank which is achieved through an initial valuation of its asset and liabilities. This step is depicted in **Figure 2**. The banks' liabilities and capital (sources of funds) are shown on the left-hand side, and the corresponding amounts are shown on the right-hand side. In these case, existing shares are transferred to the NDIC as the resolution authority and has the voting rights of the holding company.

The assets of Afribank (Mainstreet), BankPHB (Keystone) and Spring (Enterprise) banks could be valued at much more conservative levels, thereby eventually wiping out all the value of the equity. The NDIC would have to set each bank's new capital requirement; such that the banks would need to be recapitalised to the same level as they were before they entered resolution. However, in this case, through the eFASS regulatory tool whose

relevant output is given in **Figure 2**, the recapitalisation required by each bank to attain the minimum prudential CAR is calculated.

Figure 2: Estimate of Outstanding Losses of each Bank

		Before bail-in			
		Mainstreet		Keystone	
Enterterprise					
Deposits	Insured Deposits, A	Recapitalisation Reqd. per Bank Mainstreet= N115 billion Enterprise= N81 billion Keystone= N183 billion			
	Uninsured Deposits, B		(N' Bn)	(N' Bn)	(N' Bn)
	Due to banks outside Nigeria, C				
Senior Liabilities:	Other Liabilities, D		59	0	0
	Govt Deposits for daily transfer to TSA, F		78	59	0
Subordinated Liabilities:	Takings from Discount Houses, G		20	29	0
	Interbank Takings, G		3	0	0
	Due to CBN, H		130	34	150
Automatic Loss absorbency	Tier 2 Capital, I		33	0	0
	Tier 1 Capital, J		1.1	0	0
Full Loss Absorbency		0	0	0	

Step 2: Restore Equity Base by Writing-down according to Debt Seniority

The second step of the bail-in is to restore the capital the bank needs to support its activities as prescribed by the prudential supervisors (CBN and NDIC) so that confidence in the bank is restored. The bulk of the recapitalisation is likely to be achieved by converting the claims of creditors into equity as shown in **Table 2**.

Table 2: Recapitalisation using debts with percentages written down

	Afribank (Mainstreet) ₦	% written down	Spring Bank (Enterprise) ₦	% written down	BankPHB (Keystone) ₦	% written down
Insured Deposits (200k)	13,875,118,836	0	8,316,870,695	0	31,327,810,913*	0
Uninsured Deposits	187,887,695,539	0	123,830,160,960	0	416,212,344,984**	0
Total Deposits (from eFASS)	201,762,814,375	0	132,147,031,655	0	447,540,155,897	0
Due to banks outside Nigeria	59,137,502,767	0	-	0	-	0
Other Liabilities	78,161,049,549	0	58,757,612,880	0	(308,263,518,216)	0
Govt Deposits	9,967,521,861	50	28,753,489,089	100		
Takings from Discount Houses	1,800,000,000	60				
Interbank Takings	78,120,000,000	60	34,200,000,000	100	149,514,550,000	100
Due to CBN	29,615,225,912	90		80		
Tier 2 Capital				100		
Tier 1 Capital						
CAR						
Total Value of Recapitalisation Obtained	119,502,747,774		62,953,489,089		149,514,550,000	
			(17,790,959,616)			
Excess Recap to boost confidence	5,555,294,986				(33,384,333,410)	

To implement bail-in by recapitalising the banks' balance sheet, the NDIC as the resolution authority simultaneously writes-off all of the Tier I and Tier II Equity together with a proportion of all subordinated liabilities and senior unsecured uninsured liabilities.

The NDIC will determine the proportion of liabilities to be written off, which should be based on an estimate of the amount of equity that must be created if the bank is to absorb the full range of potential losses expected to incur. This is to enhance confidence in the system.

The investors affected by the write-offs are given claims on the temporary holding company (in the form of securities) that are equal in size and rank to their written-off claims.

Afribank (Mainstreet bank) that had equity of ₦1 billion was written off before the bond holders could be bailed in. BankPHB (Keystone) and Spring (Enterprise) banks had no equity so the bond holders were bailed-in through a write-down of debt and conversion into equity of some senior bonds (**Table 2**). Junior (Subordinated) debt was converted first and the equity conversion mechanism moved all the way up in the balance sheet to include senior debt. This is according to hierarchy of bail-in depicted in Figure 1. The value of the debt written-down as equity now represents the amount of equity contributed by the debt holders and are now the new shareholders of the bank.

At the bottom of **Table 2**, the amount in excess of equity is reported as well as the Total Value of Recapitalisation Obtained. The AfriBank bank had excess beyond the recapitalisation required while both Spring and BankPHB banks still had deficit of ₦17.80 billion and ₦33.38 billion, respectively. These can be provided by CBN as liquidity support. The debt of the banks is smaller than it was before the bail-in, but the banks have adequate capital to operate. We didn't write down other liabilities because there is no conversion or haircut on "customer activities" (e.g. transaction payments, settlements, prime banking, normal derivatives – activities that are crucial for a banking franchise).

The NDIC, as the resolution authority, must respect the insolvency creditor hierarchy when applying the bail-in tool. The creditors are now better off but if they were worse off than they would have been in insolvency, they would therefore be entitled to compensation following the resolution.

It should be noted that the banks have been resolved effectively without recourse to public funds. And the remaining debt could be better rated because of the broader equity base. Also, the banking system will be under less stress.

Step 3: Change or Replace the Management

The NDIC/CBN would, in one of the final steps, replace the Management of the three (3) banks.

Step 4: Liquidity Management Plan

The new Management must come up with a clear and convincing plan on repayment of the liquidity support as well as ensuring the continuous existence of the bank as a liquid going-concern.

Applying these four-step process shows that senior debt holders in the three (3) banks would have been better off by having some of their initial investments as well as being equity holders of well-capitalised banks with strong asset base.

3.5 The Bail-in Resolution vs. Bridge Bank Mechanism

Bail-in resolution can be carried out on open or closed bank. In the open bank, bail-in is done through the use of powers to write-down and convert liabilities into forms of ownership in the restored firm, or using a bridge bank (Chennells and Wingfield, 2015).

Open bank bail-in entails write-down or conversion of liabilities into equity in the existing bank while it remains open for business throughout the process. In the 'closed bank' bail-in, the liabilities that are to absorb losses remain in the original legal entity that is put into an insolvency process and/or bailed in while the activity that is to be continued is transferred to a newly created entity. The bail-in mechanism applied under section 3.3 is the "Open Bank" bail-in.

Following the regulatory intervention in eight (8) banks and the inability of three (3) of the banks to recapitalise, the NDIC after due consultation with the CBN and the Federal Ministry of Finance, established three Bridge Banks for the subsequent transfer of assets and liabilities of the three insolvent banks (AfribankPlc, Bank PHB Plc, and Spring Bank Plc). The new Bridge Banks were: Mainstreet Bank Limited which replaced Afribank

Nigeria Plc; Keystone Bank Limited which replaced Bank PHB Plc and Enterprise Bank Limited which replaced Spring Bank Plc. The three banks were subsequently acquired by Asset Management Company of Nigeria, AMCON, (NDIC, 2013). **Table 3** shows the financial conditions and the balance sheet of the three (3) Bridge Banks as at 30th September, 2011.

Recall from **Table 2** that the recapitalisation required for Afribank, Spring and BankPHB banks are ₦115.04 billion, ₦80.74 billion and ₦183.00 billion, respectively. Also, recall from the same table that the total value of recapitalisation obtained using bail-in is **Table 3: Financial Conditions and the Balance Sheet of the 3 Bridge Banks as at 30th September, 2009**

Bank	Afribank (Main Street)	Bank PHB (Key Stone)	Spring Bank (Enterprise)	Total
No. of Depositors	1,206,875	2,026,332	1,286,608	4,719,815
	(₦' Billion)	(₦' Billion)	(₦' Billion)	(₦' Billion)
Total Deposits	247.40	383.30	178.70	809.40
Total Insured Deposits	38.60	32.33	59.64	130.57
Amount Injected By CBN in 2009	50.00	70.00	60.00	180.00
Total Outstanding Non Performing Credits	92.50	58.30	4.90	155.70
Current Amount Injected by AMCON	285.40	283.00	110.40	678.80
Amount of NPL ¹ Bought by AMCON (₦' Billion)	EBA ² Sold = 400.80	EBA Sold = 155.80	EBA Sold = 111.20	528.30

₦120.00 billion, ₦63.00 billion and ₦150.00 billion. As obtained from the table,

	AMCON Purchase Price = 57.60	AMCON Purchase Price = 16.30	AMCON Purchase Price =20.70	234.10
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Source: eFASS, NDIC (2013). ¹ NPL is Non-Performing Loans, ² EBA is Eligible Bank Assets

recapitalisation with bail-in produced an excess of ₦5.60 billion in Afribank, while Spring and BankPHB banks required ₦17.80 billion and ₦34.00 billion, respectively. It was suggested that the CBN could extend the sum of about ₦52 billion required by Spring and BankPHB banks to be well-capitalised and to have CAR of over 10%.

The benefit of this approach is that it has allowed the shareholders and creditors of the banks to bear the burden of the mismanagement of the banks before bail-out with taxpayer funds.

Comparing the ₦52 billion liquidity support for the three (3) banks based on the proposed bail-in mechanism and the ₦180 billion injected by the CBN in 2009 using the bridge bank model, a clear winner emerges. The sum of ₦879 billion was injected by the AMCON and CBN (public funds) in 2009 so as to recapitalise the banks and purchase the NPLs using bridge bank mechanism while the proposed bail-in mechanism required only ₦52 billion as liquidity support by the CBN to achieve the same recapitalisation.

Following the resolution, an independent valuer can be appointed to assess whether any additional compensation may be due to the shareholders and creditors affected by the bail-in. This aims to ensure that the bail-in has not left any creditor worse off than would have been the case had the whole firm entered normal insolvency proceedings (Chennells and Wingfield, 2015).

4.0 Findings

- i. The size of the bail-inable debt is important for the success of the bail-in mechanism. Therefore, banks should be encouraged by regulators to issue debts that could be converted to equity. This is because to implement bail-in by recapitalising the banks' balance sheet, the NDIC as the resolution authority simultaneously writes-off all of the Tier I and Tier II Equity together with a proportion of all subordinated liabilities and senior unsecured liabilities.
- ii. Insured, and in most cases, uninsured deposits are not part of the bail-in mechanism all over the world. Other features of bail-in, like the scope, issues of liquidity support by the regulators, etc. should also be clearly outlined. A public awareness strategy should be developed and implemented that communicates this message so as to have confidence in bail-in mechanism.
- iii. For bail-in to succeed, both CBN and NDIC as Resolution Authorities would need to work harmoniously. Other members of the FSRCC, like SEC, would need to be carried along in the process given their role in regulating the capital market activities.
- iv. That the NDIC is in a better position to determine the proportion of liabilities to be written off, which should be based on an estimate of the amount of equity that must be created if the bank is to absorb the full range of potential losses expected to incur. This is to enhance confidence in the system. Internally, AMD, BED, CRD, ISD and RPIRD should together decide the percentage losses to allocate to creditors based on their seniority of claims as part of the procedures for adoption of a bail-in as a resolution tool.

5.0 Conclusion

A major lesson from the 2007-09 global financial crisis was that many jurisdictions did not possess tools to deal with the failure of SIBs. Consequently, the banks received capital injection or public bail-out from their various governments. Nigeria went through the same experience in 2009, where the CBN as the lender of last resort had to inject

₦620 billion (US\$4.28 billion) into troubled banks in the form of a subordinated loans. This paper described the features, characteristics and application of bail-in in Nigeria as an alternative resolution mechanism that prevents use of public or taxpayer funds.

The implementation of bail-in in Nigeria for DSIBs will strengthen the regulators' resolution toolkit and that will be consistent with the FSB Key Attributes for Effective Resolution Regimes.

Bail-in resolution mechanism stabilises a failing bank by cancelling, diluting or transferring the interests of existing shareholders while at the same time the claims of unsecured creditors are written-down sufficiently to absorb the losses incurred by converting them into equity to recapitalise the bank. These actions ensure that the essential functions of the bank can continue, without any need to liquidate, split up the bank or inject public funds. The application of the mechanism in Nigeria should have resulted in significant savings of public sector funds over the use of bridge bank model. Moreover, the mechanism was seen to recapitalise the banks to the required regulatory threshold, with little liquidity support, paving the way for the banks to operate once again under private ownership and control. However, the creditors have to be provided with compensation that corresponds to the net asset value of the banks following the write-down of liabilities during the bail-in. That compensation will be allocated in accordance with the creditor hierarchy in insolvency.

Bail-in can reduce moral hazard and incentives to take excessive risks by banks because SIBs will not be bailed out but creditors will share the burden of their risks. Bail-in is therefore a very important measure that can be implemented in Nigeria.

Bail-in resolution requires further analysis by policy-makers and other researchers. These include the amount instruments to required, the precise form of any prudential rules to

bring these mechanisms into effect, relationship between bail-in and other resolution toolkits as well as the implications for investors such holding instruments that are not subject to conversion.

6.0 Recommendations

i. Encourage Banks to Issue Debt

There is a need for a Regulatory Statement, Guidelines or Policy on debt/bond issuance by banks outlining the seniority and bail-inable features of the instrument. Other jurisdictions, like Canada, have offered such guidance.

ii. Choice of resolution strategy

Given that bail-in resolution can be carried out on open or closed bank using a bridge bank, the resolution strategy to use for a D-SIB should emerge from the process of resolution planning which is based primarily on information provided by the DMBs. Recall that all D-SIBs are required to prepare and submit RRP, which contains information on their financial, legal and operational structure, as well as the critical economic functions they perform. This information is used by the authorities to identify the preferred resolution strategy. Resolution planning through RRP as well as timely balance sheet and capital structure information in the possession of regulators is key to a successful bail-in and other resolution models.

iii. Liquidity Support

While in most cases the equity of failed banks are wiped-off, many banks that reached the point of failure during the financial crisis had positive amounts of accounting equity (Melaschenko and Reynolds, 2013). Due to the fact that the equity left was not sufficient to cover market expectations of future losses, the markets were not willing to lend to such banks. However, if the authorities were also unwilling to provide liquidity support, those banks failed. Therefore, CBN and NDIC, should be ready to provide liquidity support to some of the banks that may be resolved using bail-in.

iv. Hierarchy of Liabilities

Given the importance of liabilities in resolution, such information must be maintained by banks and also submitted electronically, monthly to regulators for assessment and planning.

v. Nigeria Bank Recapitalisation Bail-in Law for D-SIBs

A bail-in legislation should grant statutory conversion power to the NDIC, as the Resolution Authority, that shall allow for the permanent conversion of eligible liabilities of a failing D-SIB into Ordinary Shares on the occurrence of certain trigger events. The law should specify which debt instruments (subordinated debt and preferred equity) can be subjected to conversion. The Board of the NDIC should be given the power to add debt instruments issued by banks to existing bail-inable instruments due to rate of change of the banking sector and the increasing introduction of new instruments.

The law should require banks to issue contractual debt instruments that could assist in their recapitalization and that these bail-inable debts can be converted into ordinary shares should the need arise as may be determined by the regulator. The law among others should specify the triggers for various resolution actions, the terms and conditions of the conversion, including its timing.

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