

ISSUES IN FUNDING OF DEPOSIT INSURANCE SYSTEM: LESSONS FOR NIGERIA

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ABSTRACT

The paper attempts to give insights into the criticality of funding to the implementation of deposit insurance system (DIS) as well as highlights the various issues involved in funding the system. In the course of examining the funding issues, experiences of some countries, namely, the United States of America, Malaysia, The Philippines and Japan as well as best practices as represented by the International Association of Deposit Insurance (IADI) Core Principles for Effective Deposit Insurance System were reviewed and lessons for the deposit insurance system in Nigeria were drawn. The funding issues reviewed by the author ranges from funding methods to funding sources, premium assessment, determination of the adequacy of funds, separate or merged funding and fund management. The lessons drawn for the deposit insurance system in Nigeria from the review of practices in other countries and best practice are in the areas of: Target Fund Ratio; Premium Assessment; Treatment of Operating Surplus; Separate or Merged Funding Arrangement; and Investment Policy.

1.0 INTRODUCTION

Formal deposit insurance has been in practice since 1934. It has witnessed rapid growth particularly in recent times following the recent global financial crisis. As at 2011, there were a total of 111 countries practicing explicit deposit insurance system (IADI, 2011). Whereas some countries have more than one deposit insurance system (e.g. Austria, Canada, Columbia, Cyprus, Germany, Italy, USA and Portugal), others have single system covering more than one country (e.g. FDIC covers The Marshall Islands, Micronesia, and Puerto Rico). In a deposit insurance survey involving 79 countries conducted by IADI in 2011, 49 countries had ex ante funding arrangement, 9 had ex post funding arrangement while 16 countries had hybrid funding arrangement (IADI, 2011).

Funding is very essential to the implementation of Deposit Insurance System (DIS), regardless of the type in practice. It is in realization of this that IADI and Basel Committee for Banking Supervision (BCBS) made it one of the Core Principles for Effective Deposit Insurance System. According to IADI Core Principle 11, "A deposit insurance system should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors' claims including a means of obtaining supplementary back-up funding for liquidity purposes when required" (IADI, 2009). It therefore means that a DIS must have access to adequate sources of funding to meet its obligations when they fall due and to cover its operations' expenses. Furthermore, IADI, through its Research and Guidance Committee had developed a guidance paper on funding with a view to assisting jurisdictions either wishing to set-up new systems or undertaking a review of the existing one. Indeed funding to a DIS could influence, to a large extent, the credibility of the scheme and the public confidence in the scheme, thus enhancing or impairing its stabilizing capability; among other factors (Diz, 2004). However, it is imperative to note that regardless of how DIS is funded, it is not designed to withstand, on its own, a systemic crisis, especially when large proportion of insured depository institutions are in severe trouble or a large insured institution fails at the same time. Nor should it be assigned the responsibility of funding such a crisis. Policymakers should therefore consider how failures would be handled, both in normal times and in times of stress (IADI, 2009).

In Nigeria, the type of DIS in practice necessitates the availability of a funding arrangement for the insurance agency to be able to discharge its mandate and at the same time sustain its operations. Although the system has been in practice in the country for over two decades, there are some lessons that could still be learned from the experiences of other countries particularly in the area of

funding. It is in the light of this that this paper seeks to examine the various issues in DIS funding as well as draw some lessons for the system in Nigeria.

To achieve the above objectives, the rest of the paper is divided into five sections. Section 2 examines some conceptual issues in funding of DIS. Section 3 gives a cross country experiences in funding deposit insurance, while section 4 looks at the funding arrangement for the DIS in Nigeria. Section 5 draws lessons from best practices and practices in other jurisdictions for the system in Nigeria. Section 6 concludes the paper.

2.0 CONCEPTUAL ISSUES IN DIS FUNDING

2.1 Funding Methods

Different funding methods exist for the use of deposit insurers, but suffice it to say that whether one method is preferred to the other will depend in part, on individual jurisdictions' circumstances, developments in their financial systems, the history of financial crisis as well as the deposit insurance system's public policy objectives and design.

DIS is funded in several ways depending on the type, environment and the level of crisis confronting the banking system, which the insurer would have to resolve. As found in the literature, DIS is financed through either ex-ante premium collection or through ex-post levies or via a combination of ex-ante and ex-post mechanisms (IADI, 2006).

i) Ex ante Funding Method

This is a method by which the DIS agency generates funds before bank failure. The funds are usually generated through periodic premium contributions by participating institutions. The frequency of the collection varies as some deposit insurance agencies collect premium on a biannual basis while majority collect on

an annual basis.

Some of the advantages of ex-ante system of funding according to Diz (2004) include the following:

- i) It is transparent and tends to enhance confidence in the efficacy of the scheme;
- ii) It is incorporated in the banks' planning and includes the contribution of any failing bank, thus improving the fairness of the scheme;
- iii) It permits funding to be accumulated slowly over time, thus spreading, rather than concentrating, the costs to the participants;
- iv) By making available a pool of resources that can be invested in low-risk, highly liquid, domestic or foreign assets it can avoid most of the risks usually associated with episodes of banking difficulties or the foreign exchange risk of insuring foreign currency-denominated deposits;
- v) By being readily available when a failure occurs, it allows the insurer to apply its funds without undue delays and with no liquidity pressure on banks at critical moments;
- vi) By gradually creating a cushion paid for by the banking industry, it helps to raise the probability of safeguarding taxpayers from financing bank failures; and
- vii) It is more amenable to the introduction of differential premiums.

A drawback of an ex-ante system of funding DIS is that, like any insurance system, it increases moral hazard, that is to say it creates an incentive for member institutions to take on more risk than they otherwise might (IADI, 2006).

ii) Ex Post Funding Method

It is a method in which participating institutions are assessed for premium payment after bank failures. It seems to be less popular as a funding method

than the ex ante method as revealed by the result of a survey conducted by IADI in 2011. The survey indicated that only nine (9) out of 79 respondent countries use ex post method in funding their DIS (IADI, 2011).

One of the advantages of ex-post system of funding DIS is that it is less onerous during periods when there are no or few failures because premiums are not continually collected. Another advantage is that it is less expensive in the long run than the ex-ante system since it avoids the administrative cost associated with the on-going collection of premiums and portfolio management of the funds.

The disadvantages of the ex-post system include:

- i) It is less equitable because a failed institution would not have contributed to the cost of reimbursing its depositors;
- ii) It carries greater financial risk for the government;
- iii) Prompt reimbursement of depositors may be difficult since the systems, procedures and qualified personnel may not be in place to collect and distribute the required funds.

iii) Hybrid Funding Method

The hybrid funding method combines features of both ex-ante and ex-post funding methods. It incorporates an ex-ante fund financed by premiums contributions and includes a mechanism to obtain funds ex-post from member institutions, through special premiums, levies or loans, should the need arises. For instance, a DIS adopting ex ante funding arrangement could be empowered to levy ex-post contributions to make up for any fund shortfall. Hybrid funding method is relatively more popular than the ex post. In a survey conducted by IADI in 2011, 16 out of 79 countries used hybrid funding method. With ex-ante funding, under very adverse circumstances, losses may exceed the fund's reserve which may necessitate access to other sources of funding outside regular

premium collection, as in the case of FDIC during the recent financial crisis. Thus, in practice, the real choice may not be between pure ex-ante and ex-post funding, but the relative extent to which the deposit insurance system relies on both (IADI, 2006).

The level of DIF at any given time is dependent on the premium rate charged and assessment base used. Where the level of DIF cannot cope with the level of distress in the system, adjustment of the premium rate and/or assessment base may be required, with a view to raising the level of DIF and vice versa.

2.2 Funding Sources

The sources of funds for a deposit insurance system could come from either the private sector or public sector or both.

i) Private Sources

This is a situation where funds are raised through premium contribution by the participating institutions. The premium amounts due from each particularly institution, are determined by applying the premium rate to the assessment base. Where the funds contributed by participating institutions through regular premium contribution turn out to be insufficient following a failure, the deposit insurance agency may resort to other sources of funding such as special premiums or levies to bridge the funding gap.

ii) Public Sources

Most deposit insurance systems have arrangements that enable them access public sector fund when the need arises. The public sector funding takes the form of initial contributions from government at the take off stage of the system, loan from government or central bank to cover special circumstances and grants to cover losses. Most DIS rely on government funds for an initial capital injection to establish the system (IADI, 2008). That was based on the argument that the

promotion of financial system stability and the operation of a financial safety net are important government objectives which benefit the country as a whole, and therefore it is appropriate for the public sector to give the system some financial support by providing some initial capital to establish a fund and/or provide supplementary funding in crisis situations. In some jurisdictions, central bank or government directly grants the deposit insurer line of credit. Experience has shown that it is less expensive for the deposit insurance agency to obtain funds from the public sector than obtain loans from the private sector, as the public sector can raise funds at lower cost, given its credit rating.

iii) Contingent Financing Sources

Where the deposit insurance system finds itself with inadequate funds in reserve to meet its commitments, the gap between resources and financial obligations of a deposit insurer can be covered through back-up financing from sources such as government, the market or multilateral financial institutions like the International Monetary Fund (IMF) or the World Bank. The backup funding allows for a prompt reimbursement of insured deposits and could be repaid through special levies on the surviving institutions. Where contingent funding mechanism is in place, it is important for the deposit insurer to have clearly defined rules on its use so that the funds will not be excessively relied upon or misappropriated.

Although most deposit insurers are government agencies, a government guarantee may nevertheless reduce the cost of borrowing from the private sector since it can enhance the credit rating of the financial instrument used. In some cases, the lack of a government guarantee may even block access to private sector credit.

2.3 Premium Assessment

A principal means through which a deposit insurer raises funds as indicated earlier, is through premium contributions by participating institutions. The

framework for the assessment of premiums should be clearly defined. It is usually determined using a rate and the assessment base, taking into account the funding needs of the insurer and the ability of the participating institutions to pay. Policymakers must determine both the assessment base as well as the premium rate and method.

2.3.1 Assessment Base

Premium assessment base is the amount to which the rate is applied to arrive at the premium level collectible from a member institution. The most widely used assessment bases are insured and total deposits. However, some jurisdictions use broader bases which include domestic liabilities or all liabilities and obligations while some use other variables such as non-performing loans or risk-weighted assets. In a survey involving 87 countries practicing deposit insurance conducted by IADI in 2008, statistics revealed that 43 countries, including Brazil, Canada, Taiwan Korea, Japan, used insured deposits as assessment base, while 29 countries including USA, Philippines, Kenya, Argentina, used total deposits and the remaining 15 countries used other indices such as risk weighted assets (e.g. Norway and Poland), credit accounts (e.g. Lebanon) etc as bases for premium assessment.

Total deposits in this case, refer to all deposits in all categories that are covered, including amounts in excess of the limit on insurance claims. Insured deposits are the amount of deposits that are protected within the limit of insurance claims. Calculating premiums on the basis of total deposits means that premiums would be charged even on deposits, which are in excess of insurance coverage level. Although, insured deposits are the most widely used base for premium assessment, it has been argued that it does not fetch more premiums to the deposit insurer and can be more complex to administer. However, it has been observed that charging premiums on insured deposits appear more equitable

since the premium payable is equated to the perceived level of protection offered by the deposit insurance system (NDIC, 1999).

Total deposits on the other hand though not widely used as seen from the survey by IADI, it was mostly popular amongst newly established systems that needed to build their DIF as rapidly as possible. The use of total deposits for premium assessment seems to be fetching more money to the DIF than the insured deposits. It is however not equitable, which is the advantage that the use of insured deposit has over it (IADI, 1999).

2.3.2 Assessment Method

The premium systems could be either flat rate or differential (risk-adjusted).

i) Flat-Rate Premium Approach:

This is a situation where member institutions are assessed using the same rate. It is relatively straightforward to implement and less cumbersome to calculate. The flat rate premium system has the advantage of ease of administration and provides the deposit insurer the opportunity to rapidly build the deposit insurance fund. That is why most newly established or transitional systems always go for the flat rate assessment method (Hoelscher et al, 2006). The major disadvantage of the method, however, is that it is inequitable since low-risk institutions tend to subsidize high-risk institutions and the exposure to moral hazards is higher.

ii) Risk-Adjusted/Differential Premium System

This is a method that incorporates the risk posed by a member institution to the deposit insurer into the premium assessment structure. The approach reduces the moral hazard issue by providing member institutions with an incentive to be more prudent in their operations. The method appears more equitable, since cross-subsidization among institutions is greatly reduced. In a risk-related

method, premium is charged based on the relative risk of failure, that is, banks that engage in riskier behaviour would pay higher premium rate and in the process restores the elements of market discipline (Demirguc-Kunt, et al, 2005).

One of the advantages of risk-adjusted systems is that it can lead to pressure by the member institution's board of directors on management to address risk-related issues when premium rates are high. One of the disadvantages of risk-adjusted assessment systems is that it is more complex to develop and administer. Furthermore, the adoption of this approach could lead to reduction in premium collectible particularly for jurisdictions transiting from a flat rate system to a risk-adjusted assessment system and this has implications for the deposit insurance fund. In terms of the applicability of the risk-adjusted premium system, there has been significant increase in the number of countries using it. As at 2011, there was a total of 24 countries using risk-adjusted premium assessment system (IADI, 2011)¹.

A critical requirement for the deployment of a risk-adjusted premium assessment system is finding an appropriate method for differentiating among the risk profile of banks. There are different approaches for differentiating the risk profile of banks. The most common approaches include, among others, Quantitative Criteria Approaches, Qualitative Criteria Approaches and Combined Quantitative and Qualitative Criteria Approaches. Although the approaches are difficult to accomplish, the approach chosen by any deposit insurer for differentiating risks and assignment of premium rates should be forward looking (IADI, 2011).

The **quantitative criteria approaches** generally try to use measures that are factual or data driven to categorize banks for premium assessment purposes.

¹ This was based on the results of the CDIC International Deposit Insurance Surveys (2003 and 2008), Garcia (1999), and the surveys conducted during the updating of the General Guidance for Developing Differential Premium Systems.

Some quantitative systems rely on only one factor to assess risk while others combine a number of factors. Factors that are commonly considered for such systems usually include (IADI, 2011):

- i) a bank's adherence with regulatory capital requirements or other measures of the quantity, quality and sufficiency of a bank's capital;
- ii) the quality and diversification of a bank's asset portfolio both on and off-balance sheet; the sufficiency, volatility and quality of a bank's earnings;
- iii) a bank's cash flows (both on and off-balance sheet) and ability to generate and obtain sufficient funds in a timely manner and at a reasonable cost;
- iv) the stability and diversification of a bank's funding; and
- v) a bank's exposure to interest rate risk, and where applicable, foreign exchange and position risk.

The **qualitative criteria approaches** generally rely on a number of qualitative factors to categorize banks into different categories for premium assessment purposes. The primary method used is reliance on some form of regulatory and supervisory judgment or rating system and information such as adherence to guideline, standards, compliance measures or other supervisory or deposit insurance requirements (IADI, 2011).

The **combined quantitative and qualitative criteria approaches** use both quantitative and qualitative measures to categorize banks. This appears to be the most common approach being used by deposit insurance systems, like: Canada, USA, Malaysia, Taiwan, Turkey Argentina, Nigeria and Kazakhstan, among others (IADI, 2011). A critical point of note in systems which combine both quantitative and qualitative factors, as indicated in the IADI Guidance Paper on Differential Premium Assessment System (DPAS), is the relative weighting of the factors. It has been observed that in some systems quantitative criteria receive equal

weight as qualitative factors. Yet in many other jurisdictions, such as Canada, qualitative criteria are weighted less than quantitative criteria. The advantage of a combined criteria approach is that it can be a highly effective and comprehensive way to assess the risk profile of banks. However, the main shortcoming of the approach is that it may impose a higher level of information requirements on banks and could be more open to challenges compared to approaches using mostly quantitative criteria (IADI, 2011).

Although there are a wide variety of approaches to differentiate risk among banks and assign premium rates, the approach chosen should: be effective at differentiating banks into appropriate risk categories; utilize a variety of relevant information; be forward looking; and be well accepted by the banking industry and financial safety-net participants (IADI, 2011). It is also imperative to note that risk-adjusted assessment method is administratively demanding and is unlikely to work well unless supported by effective supervision and regulation, and prompt intervention (Hoelscher et al, 2006).

2.4 Determining the Adequacy of DIF

A deposit insurance system that uses an ex ante funding arrangement will need to charge premiums and accumulate funds that would be adequate for the system. Determining the adequacy of the fund requires detailed knowledge of the condition of a country's banking system and deposit insurance system (Hoelscher et al, 2006). Two approaches of determining the fund adequacy as found in the literature are: target reserve ratio and credit portfolio approach (IADI, 2009).

Target reserve ratio provides a measure of how large an adequate reserve should be. The target fund level should be at least adequate to cover the potential losses of the insurer under normal circumstances. A large number of factors need to be taken into account including: the composition of member

banks (number, size, lines of business); the liabilities of members and the exposure of the insurer to them; the probability of failures; and the characteristics of losses that the insurer can expect (IADI, 2009). It is pertinent to indicate that target reserve is mainly a proxy as deposit insurers and the member institutions can be exposed to a wide range of factors that are difficult to specify in advance.

There are several methods of calculating the appropriate size of target fund ratio. The most common of the methods, which is widely used by a number of countries is that which considers the country's historical experience with bank failures and associated losses (IADI, 2009). Some of the advantages of this approach are that it is relatively straightforward, it is easy to understand and it relies on existing information. Its major shortcomings is that it does not take into account the current risk profile of member institutions as well as other information, which may be useful in assessing potential losses to the deposit insurer (IADI, 2009).

Some of the advantages of adopting target fund ratio under an ex ante funding arrangement according to Yvonne (2008) include: to prevent delay in bank resolution; to avoid pro-cyclical effect on the economy; to reduce political interference; to relieve burden on taxpayers; to demonstrate a calculable funding regime to the industry; and to enhance financial health of a deposit insurer and public confidence in sustainable DIS.

As at December 31, 2007, there were a total of 15 countries² using target fund ratio for determining the adequacy of Deposit Insurance Fund. The average of

² The countries are: Venezuela (10.11%), Colombia (5.00%), Jordan (3.00%), Tanzania (2.70%), Indonesia (2.50%), Jamaica (2.00-2.25%), Brazil (2.00%), USA (1.25%), Argentina 0.50%), Canada (0.40-0.50%), Taiwan (0.30%), Singapore (0.30%), Bahamas (0.20%), Honduras (0.10%) and India (0.05%)

the target fund ratio of the 15 countries stood at 1.45 per cent as at December 31, 2007 (IADI, 2009).

The second method for determining the adequacy of DIF is the credit portfolio approach, which seems to be more analytical than the target fund ratio method. Although the method is not very popular amongst IADI member countries, it is being used in countries such as United States of America, Canada, Singapore and Hong Kong (IADI, 2009). As observed by IADI, the portfolio consists of individual exposures to insured banks, each of which has the potential (some greater than others) of causing a loss to the fund. In most cases, there will be a relatively high probability of small losses and a much lower probability of very large losses. The probable large losses would tend to be associated with the presence of large banks (IADI, 2009).

Adopting the credit portfolio approach requires an insurer to consider: developing a specific provision for each member bank taking into account the risk of losses and the range of losses that could occur over a specified period of time; and setting aside additional funds (or surpluses) to cover situations where actual losses, as a result of unexpected factors, may exceed reserves. Another issue to consider is the fact that a DIF is exposed to both expected and unexpected losses and these need to be taken into account in determining the target size of the fund (IADI, 2009).

2.5 Separate Deposit Insurance Fund

Most deposit insurance systems that use ex ante funding arrangement maintain single deposit insurance fund for the entire DIS. However, there are instances where separate deposit insurance funds for different types of member institutions could be created. For instance, where there are major differences

between the risk profiles of different types of institutions, having separate funds could be more desirable. Furthermore, separate funds could help reduce the scope of cross subsidies between the sectors. It is imperative to note that in the process of separating funds for different categories of institutions under the DIS, common costs can be shared, sector specific costs can be isolated and premium rates can vary among the different sub-sectors. One of the shortcomings of having separate funds for different categories of insured institutions is that it can result in risk being overly concentrated (particularly if there are a small number of institutions in each fund). The advantages and disadvantages of separate funds must be weighed carefully when deciding to establish how best to proceed. If separate funds approach is adopted, it is important to ensure that the integrity of the funds is maintained and that distinctions among the institutions and their funds are real and do not contribute to competitive distortions.

2.6 Deposit Insurance Fund Management

For deposit insurance systems that are funded on an ex-ante basis, policymakers need to consider what investment or portfolio management policy to pursue. In the course of doing that, there is usually a trade-off between liquidity and return. The deposit insurance agency must have adequate liquid assets on hand to enable prompt compensation of insured depositors in the event of failure of an institution. Depending on the mandate of the deposit insurer³, funds may also be required to support its other activities such as extension of financial assistance to banks facing liquidity problem, its day-to-day operations and engagement of quality staff, among others.

The normal practice is that deposit insurance funds are held in low-risk, highly liquid assets, typically short-term government securities. However, policymakers

³ The mandate could either be a Pay-Box, which simply settles insured sums or a Risk-Minimizer, which has the broad mandate of settling insured sums, supervision of participating institutions and distress resolution.

may pursue an investment strategy that places more emphasis on achieving higher rates of return but with the safety of the funds in mind. That becomes necessary as the pursuit of a higher-return policy may result in funds not being available for insurance purposes when they are needed and /or the loss of principal, if securities have to be sold at an inopportune time. The implication of this is that the DIS risks erosion of public confidence. A middle approach would be to choose an investment strategy that balances higher rates of return with the availability of the funds whenever it is needed and as much as possible guards against loss of principal.

Other issues to consider under DIS funding include whether a deposit insurer should invest in the participating institutions. The merit of that is that it amounts to returning the funds taken from the banking system by the deposit insurer back into the system. But the shortcoming of that is that the deposit insurer stands the risk of investing in members that could subsequently fail and lead to the loss of the principal. The best practice is that the insurer should refrain from placing funds with high risk or troubled institutions and should invest funds in financial assets denominated in the currency in which potential claims are most likely to occur to avoid foreign exchange risk.

3.0 COUNTRY EXPERIENCE IN DIS FUNDING

Different countries use different types of deposit insurance systems, which invariably means different funding methods. It is therefore intended in this section to review the various funding methods used by some selected countries with a view to drawing some lessons for the Nigerian system. In this regard, the cases of USA, Philippines, Japan and Malaysia are reviewed.

3.1 United States of America

The United States operates an explicit deposit insurance system with ex ante funding arrangement since 1934. Currently, the system operates different

deposit insurance windows for the two different categories of deposit taking financial institutions, namely, Deposit Money Banks and Savings and Loans Institutions. The main source of funding to the FDIC remains the premium contribution by participating institutions. The premium being collected constitutes the insurance fund from which deposit insurance claims are settled. At a time, FDIC maintained separate funds for each category of the insured institutions, namely Bank Insurance Fund (BIF) for deposit money banks and the Savings Deposit Insurance Fund (SDIF) for the savings and loans institutions. The funds were eventually merged through an amendment to the charter establishing the FDIC. The FDIC has back-up funding arrangement through direct borrowing from government and loans from other sources such as the capital market in times of serious need. To be able to determine the adequacy of its BIF at any point in time, the FDIC developed a Target Funding Ratio Framework.

FDIC had changed to risk-based premium assessment system after using flat-rate method for a very long period. In the course of risk-based method, they grouped the institutions into 9 risk buckets for the purposes of premium assessment (IADI, 2006). They later proposed to further consolidate the number of assessment risk categories from nine to four with the evidence that the existing nine categories are not all necessary and some of the categories contain few, if any, institutions at any given time.

Like in a number of jurisdictions with explicit DIS adopting ex ante funding arrangement, the BIF is invested and the returns from the investments are used in meeting the expenses of the FDIC. It is imperatives to note that at the FDIC, any surplus realized at the end of a financial year is retained and transferred to the BIF. The only situation under which the FDIC could transfer funds back to the US treasury is when it borrows funds from the government.

The investment of the BIF is guided by an investment policy developed by FDIC, with a number of controls designed to ensure that the funds are managed prudently and at the same time conform to the principles of liquidity and safety. Indeed, the FDIC developed detailed procedures and guidelines for managing the day-to-day operations of the funds. Furthermore, the FDIC created an investment advisory group to monitor the performance of the fund (FDIC, 2009). The BIF investment portfolio of the FDIC has the following objectives, among others:

- i) Managing money in a professional manner, consistent with maintaining confidence in the deposit insurance program and with the Corporation's strategic objective that the BIF remains viable.
- ii) Holding all BIF investments to maturity, including securities both designated as held-to-maturity (HTM) and designated as available-for-sale (AFS) (All or a portion of the BIF investment portfolio may be designated as AFS under Accounting Standards Codification Topic 320, *Investments – Debt and Equity Securities*.) However, sales of such securities may be consummated to meet BIF's funding needs. To the extent that security sales are deemed necessary, all of the BIF portfolio held in AFS securities shall be sold before selling any HTM securities.
- iii) Managing the investment program at the lowest reasonable cost, without compromising standards of quality, security, or control.
- iv) Striving continuously to improve investment and cash management techniques, including periodically measuring and assessing the BIF's investment performance.

The Corporate investment policy of the FDIC requires that the BIF is invested mainly in government securities issued by the US Department of the Treasury's Bureau of Public Debt (BPD). The policy also requires that the BIF should consist of both primary and secondary reserve. A KPMG's review of the FDIC's Corporate

Investment Program indicated the need for the FDIC to enhance its response planning by developing a comprehensive, written contingency funding plan that describes how the Corporation would implement its strategy under the various contingency scenarios that could occur (FDIC 2009).

3.2 The Philippines

The Philippine Deposit Insurance Corporation (PDIC) is a government corporation established in June 1963 under Republic Act (RA) 3591. PDIC's role is to encourage savings in banks and draw idle funds into the banking system, protect insured deposits in the event of bank closures, help promote a sound and stable banking system, and foster public confidence in the banking system. The PDIC, as an explicit deposit Insurance system has an ex ante funding arrangement, with premium contribution by the participating institutions as the main source of its funding.

As a deposit insurer, PDIC collects semi-annual assessments from member-banks (the current rate is 1/5 of 1% of total deposits). The premium collected is what constitutes the Deposit Insurance Fund (DIF), which should be preserved and maintained at all times. As clearly stated in the RA 3591, "the Deposit Insurance Fund shall be the capital account of the Corporation and shall principally consist of the following: (i) the Permanent Insurance Fund; (ii) assessment collections, subject to the charges enumerated in Section 6 (d); (iii) reserves for insurance and financial assistance losses; and (iv) retained earnings". The reserves for insurance and financial assistance losses and retained earnings shall be maintained at a reasonable level to ensure capital adequacy. The Corporation may, within every five (5) years conduct a study on the need to adjust the amount of the Permanent Insurance Fund, insurance cover, assessment rate and assessment base, and thereafter make the necessary recommendation to Congress for adjustments. For this purpose, the Corporation usually hires the services of actuarial consultants to determine, among others,

the affordability of assessment rates, analysis and evaluation of insurance risk, and advisability of imposing varying assessment rates or insurance cover on different bank categorization (*As added by R.A. 9302, 12 August 2004*).

The funds of the Corporation not immediately employed are usually invested in the debt instruments of the Republic of the Philippines or in obligations guaranteed as to principal and interest by the Republic of the Philippines. (*As amended by R.A. 6037, 04 August 1969; renumbered from Sec. 12 by R.A. 9302, 12 August 2004*)

PDIC had developed an Insurance Reserves Target (IRT) Ratio framework for determining the adequacy of its DIF relative to the funds exposure to the insured institutions. The Insurance Reserve Target was estimated at Php72.8 billion as at December 31, 2011. In April 2011, the FIRST2 INITIATIVE of the World Bank approved the proposal for a technical assistance grant on the Enhancement of the IRT Framework and Amendment to the PDIC Charter. The Project entailed the review, validation and enhancement of PDIC's IRT framework, taking into account international best practices and acceptance of major stakeholders, assessment of the viability of measures to ensure/sustain adequacy of insurance reserves; and assistance in drafting necessary amendments to the PDIC Charter.

3.3 Japan

Japan's deposit insurance system was established in 1971. Under the scheme, the Deposit Insurance Corporation of Japan (DICJ) collects from financial institutions insurance premiums using differential assessment method. This system was strengthened in 1986 when the DICJ obtained the power to provide grants to those financial institutions with a view to rescuing failed ones among them and ultimately protecting their depositors. Until the end of the fiscal year 1995, the level of the liability reserves of the DICJ was positive because there

had been a few failures of financial institutions. Between the 1971 and 2002, the DICJ provided grants of nearly 19 trillion Yen. Despite the injection of public funds exceeding 10 trillion Yen, the balance sheet of the DICJ shows deficits amounting to four trillion Yen as of the end of fiscal 2002. Since then, however, the number of failures has declined substantially with only one failure of Ashikaga Bank (DICJ, 2012). Under these circumstances, the Governor of the DICJ decided on organizing a Study Group as a private advisory body to discuss an ideal system of deposit insurance premium from the medium and long-term perspective.

For back-up funding, DICJ is authorized to raise funds in the form of borrowing and/or DICJ bond issues up to the amount stipulated by government ordinances for General Account, Crisis Management Account, Financial Reconstruction Account, Early Strengthening Account, Financial Function Strengthening Account and Jusen Account⁴. The government guarantees shall be given for the above accounts except for Jusen Account based on the budgetary arrangement approved by the DICJ. As at the end of March 2008, the funding for the deposit insurance system in Japan stood at approximately 7.0 trillion Yen, of which borrowings accounted for 0.5 trillion Yen and bond issues accounted for 6.5 trillion Yen. Both were with government guarantees (JDIC, 2012).

Financial institutions shall, within three months after the start of each business year, submit documents as stipulated in ordinances of the Cabinet Office and the Ministry of Finance, and shall pay insurance premiums to the DIC, provided, that one-half of the total amount of deposit insurance premiums due for a given business year may be paid within three months following the last day of the first six months of that business year. However, the DIC may exempt a financial

⁴ Jusen account is an account that is for operations related to the claim resolution by a bank contracted by DICJ.

institution that falls under any of the following items from payment of deposit insurance premiums in accordance with the Articles of Incorporation:

- (1) Financial institutions that have come under a category of insurable contingency;
- (2) Failed financial institutions that have been authorized for eligibility under the provisions of Article 65 of the deposit insurance law No. 88 as amended;
- (3) Financial institutions that have been ordered to be placed under management under the provisions of Article 74 of the deposit insurance law No. 88 as amended;
- (4) Bridge banks; and
- (5) Banks that have been approved based on a decision made under the provisions of Article 111 of the deposit insurance law No. 88 as amended.

As clearly stated in Article 43 of the deposit insurance law No. 88 as amended, "The JDIC invest its deposit insurance funds only in the following instruments: Holdings of government bonds or other securities designated by the Prime Minister and the Minister of Finance; Deposits in financial institutions designated by the Prime Minister and the Minister of Finance; and other methods stipulated in ordinances of the Cabinet Office and the Ministry of Finance".

3.4 Malaysia

The Malaysia Deposit Insurance Corporation (MDIC) was established under MDIC Act of 2005 as a statutory body to provide explicit deposit insurance for depositors in the event of a member institution's failure and administer the deposit insurance system in the country. The deposit insurance in Malaysia is mainly funded through premium contribution of the member institutions ex ante. Currently MDIC extends coverage to three categories of financial institutions, namely conventional financial institutions, Islamic financial institutions and Takaful and insurance companies. The extension of insurance coverage to Takaful and Insurance Companies necessitates the setting-up of four separate

funds, which when added to the separate funds created for conventional and Islamic banks gives a total of six (6) separate deposit insurance funds, namely, the Conventional Deposit Insurance Funds, the Islamic Deposit Insurance Fund, Family Solidarity Takaful Protection Fund, General Takaful Protection Fund, Life Insurance Protection Fund and General Insurance Protection Fund being managed by MDIC. The Islamic Deposit Insurance Fund and the two Takaful Insurance funds⁵ are being managed separately and invested in accordance with the Islamic Shariah Principles.

The MDIC is also empowered by the MDIC Act to borrow or raise funds to meet its obligations in times of need. The Corporation could also request the Minister of Finance to lend it funds from the Consolidated Revenue Fund on such terms and conditions as the Minister may determine.

When the system started in 2005, member institutions had options on premium payment. Members had the option of paying either 0.02% of its total deposits or 0.06% of the total insured deposits held as at September 2005 subject to a maximum of RM250,000 during the first year. The MDIC has the power through the MDIC Act to set premium rate and also review it, subject to the approval of the Minister of Finance when the need arises. In less than five years after the commencement of its operation, MDIC had been able to develop a Differential Premium Assessment System (DPAS) and started its implementation in 2008. The DPAS being used by the MDIC uses a combination of both qualitative and quantitative criteria. The participating institutions are also grouped into 4 risk categories for the purposes of premium assessment (MDIC, 2008). It is expected that as the institutions improve on their risk profiles, they move from category 4 (high risk) to 1 (low risk). The advantage with the risk bucketing is that it helps

⁵ The Islamic Deposit Insurance Fund and Takaful Funds were set-up as a result of the extension of insurance cover to the Islamic banks and as well as the Islamic bank branches and windows being operated by the conventional banks and Takaful Institutions in Malaysia.

the institutions to develop the need for not just reducing the premium burden but also improve on their risk management.

The MDIC Act provides that the Corporation should manage and invest the Funds prudently to generate a reasonable return for MDIC while ensuring that the Funds are readily available to cover operating costs and make payments to depositors as well as owners of Takaful certificates and insurance policies in the event of a member institution's failure.

The MDIC investment policy is to invest in Ringgit denominated securities issued or guaranteed by the government or Bank Negara Malaysia or any high investment grade as rated by a reputable rating agency. Consequently, the DIF is invested in government securities, Bank Negara Malaysia Bills and Negotiable Notes of not longer than 12 months. The investment policy also prohibits making investments or depositing the DIF with any member institution except for the day-to-day operating purposes.

The net operating surpluses of the Corporation are usually remitted to the Deposit Insurance Fund (DIF). No part of the operating surplus is remitted to the treasury. Section 29 (2) of MDIC Act 642 of 2005 clearly states thus:

""The Corporation is empowered to credit all direct operating income to, or charge all expenses, costs and losses against, the Islamic fund or the conventional fund, as the case may be, or where such income, expenses, costs or losses cannot be specifically attributed to either the Islamic fund or the conventional fund, such credit or charge shall be proportional to the amount of Islamic and conventional premiums collected in the assessment year prior to the year in which such credit or charge is made"".

MDIC also has a policy of building reserves in the DIF over time to enable it accumulate sufficient funds to meet its future obligations. That was done using target fund ratio framework developed internally but with the assistance of a consultant.

4.0 FUNDING OF DIS IN NIGERIA

4.1 Funding Sources

The deposit insurance system in Nigeria uses an ex ante funding method. Section 10 (1) of the NDIC Act No. 16, 2006⁶ specifies four sources of funds to the DIS in Nigeria to include: premium contribution by participating institutions; capital contributions and periodic recapitalization provided by government through the CBN and the Federal Ministry of Finance; borrowing from the CBN; and special contribution by the participating institutions.

The contribution by member institutions through the payment of premium is determined by the application of an assessment base and rate. The Corporation started with the application of a flat rate of 15/16 of 1% per annum, which in percentage form was equivalent to about 0.94 per cent and used against the total deposits as assessment base for deposit money banks as provided for in the NDIC decree, 1988. It also charges Microfinance banks and Primary Mortgage Banks 8/16 of 1% per annum, which translates into 0.5 per cent of total deposits. But in 2008, the Corporation changed to the use of a Differential Premium Assessment System (DPAS)⁷ for the deposit money banks following amendments to its enabling Act, which allows for flexibility in the adoption of assessment approach and rate.

⁶ This Act replaces the NDIC Act No. 22 of 1988.

⁷ DPAS is a system in which banks are charged premium based on the risk they carry. It was introduced in 2008 following amendments to the NDIC in which the Board of the Corporation was given the power to review the rate as at when necessary.

The DPAS framework being used by the NDIC has a combination of qualitative and quantitative criteria. For the purposes of determining the risk profile of the participating institutions and each bank is assessed on quarterly basis while the average is taken at the end of the year for the purposes of premium assessment. However, it is imperatives to note that contrary to what obtains in other jurisdictions such as USA, Malaysia, The Philippines, etc, where risk buckets were created for the institutions to be grouped, the Nigerian framework allows only for each bank to assessed individually. That implies that there could be as many risk buckets as the number of institutions being assessed at any point in time. Under the DPAS, the Corporation charges 0.5 per cent as the base rate on all banks and add-ons that should not exceed 30 basis points (0.3%) based on their risk profile. The base rate was reduced to 0.4% in 2010 following the establishment of Financial Stability Fund to which all banks make annual contributions. The assessment base remains total deposits. However, insider deposits, counter claims and inter-bank placement, were exempted from the total deposits of deposit money banks for the purposes of computing premium. The Board of Directors of the NDIC has the power to exclude any form of deposits it deems fit.

As for the initial capital⁸, which comes from the owners (Central Bank of Nigeria and Federal Ministry of Finance), it was fixed at N100 million in 1988 when the Corporation was established. It was reviewed to N500 million and N2.3 billion in 1995 and 1998 respectively. As clearly stated in the NDIC Act No. 16 of 2006), the authorized capital was reviewed to N5 billion in 2006 to enable the Corporation cope with its rising capital expenditure.

The Corporation is empowered to borrow from the Central Bank of Nigeria when the need arises. One of the conditions upon which the Corporation could borrow from the central bank is when the DIF is insufficient to settle claims arising either

⁸ The initial capital was provided by the CBN and Federal Ministry of Finance in the ratio of 60 to 40 respectively, as contained in the NDIC enabling Act.

from multiple bank failures or the failure of a large bank. So far, the Corporation never had course to use this source of funding. But that is not to say that the DIF was adequate relative to the exposure of the Corporation to the banking industry. A look at Table 4.1 reveals that the total deposit liabilities of banks in the system increased from N5, 357.69 billion in 2007 to N12, 330.26 billion in 2011. Also, within the same period, the total deposit liabilities of distressed banks rose from N296.82 billion in 2007 to N3, 177.16 billion in 2010. The risk exposure of NDIC was on the increase from N110.06 billion in 2007 to N978.09 billion in 2009. It later declined to N719.76 billion and N62.99 billion in 2010 and 2011 respectively. The observed increase in the risk exposure of NDIC between 2007 and 2009 could be attributed to the rising number of distressed banks in the banking sector, which increased from 3 in 2007 to 11 in 2009. The fall in the exposure was as a result of a drop in the number of distressed banks from 9 in 2010 to 2 in 2011. The sudden drop in the risk exposure of the NDIC in 2011 could be explained by the resolution of some distressed banks in the system using bridge banking option and other supervisory measures.

The funding gap experienced by the NDIC in the recent past as shown in Table 4.1 was very alarming. The Corporation's funding gap was negative N76.39 billion and N86.92 billion in 2007 and 2008 respectively. It later improved to N18.74 billion as at December 2011. The implication of the gap experienced was that, had the risk crystallized, the Corporation would have suffered insolvency, which would have necessitated borrowing from either the Central Bank of Nigeria (CBN) or any other source permitted by its enabling law.

If supplementary funding is required, the NDIC has the authority to temporarily raise premiums up to 200 percent from participating institutions, in addition to their annual premium contribution. This is to augment the deposit insurance fund. This source of funding has not been tapped by NDIC so far.

TABLE 4.1
A FIVE-YEAR TREND OF SELECTED STATISTICS ON BANKING
AND DEPOSIT INSURANCE FUND IN NIGERIA

SN	Particulars	2007	2008	2009	2010	2011
1.	Number of Banks	24	24	24	24	20
2.	Number of Distressed Banks	3	3	11	9	2
3.	Total Deposits of Banks (N Billion)	5,357.69	8,703.00	9,989.84	10,837.14	12,330.26
4.	Total Deposits of Distressed Banks (N Billion)	296.82	417.24	3,606.83	3,177.16	327.74
5.	NDIC's Risk Exposure (Insured Deposits of Distressed Banks) (N Billion)	110.06	155.97	978.09	719.76	62.99
6.	Total Industry Insured Deposit (N' billion)	1,166.57	1,468.70	1,594.53	2,566.90	1,699.76
7.	Deposit Insurance Fund (N Billion)	134.91	175.63	235.81	295.72	356.90
8.	Ratio of DIF to Total Bank Deposits (%)	2.52	2.02	2.36	2.73	2.81
9.	Ratio of DIF to Total Deposits of Distressed Banks (%)	45.45	42.09	6.54	9.31	105.60
10.	Deposit Insurance Funding Gap (N Billion)	(76.39)	(86.92)	112.52	(73.71)	18.74

Source: Insurance and Surveillance Department, NDIC

4.2 Funding Arrangement for Different Categories of Participating Institutions

Following the extension of deposit insurance coverage to Microfinance Banks (MFBs) and Primary Mortgage Banks (PMBs) in Nigeria through amendments to the NDIC enabling Act in 2006, a separate fund called Special Insured

Institutions Fund (SIIF) was created and is being managed side by side with the DIF. The decision to separate the two funds was based on certain considerations, including deposit profile, the risk profile of the special insured institutions in the country, the premium rate charged and their coverage level (NDIC 2009). The implication of having separate funds for the different categories of participating institution is that, only money meant for a category of insured institutions would be used to resolve their failures/crisis when it occurs. This arrangement ensures that cross-subsidization can be easily accounted for.

When SIIF was set-up, there was little or nothing in the fund while at the same time, the Corporation faced the risk of failure of a sizeable number of the Microfinance Banks. Having realized that, the Board of NDIC approved that some seed funds be made available to SIIF as contingency fund from the operating surplus of DIF. That was to take care of any eventuality in terms of the failure of any special insured institution, pending when the SIIF would grow to a comfortable level.

4.3 DIF Investment Policy in Nigeria

The DIF investment policy put together by the NDIC is guided by the provisions of the NDIC Act 16 of 2006. Section 13, subsection (i), (ii) & (iii) of the Act, which state as follows (NDIC 2012):

"the Corporation shall have power to invest money not immediately required in Federal Government Securities or in such other securities as the board may from time to time determine. The incomes from the money invested shall be credited to the account of the Corporation. All administrative expenses shall be defrayed out of the income of the Corporation".

The broad objective of the DIF investment policy in Nigeria is that of optimal returns without compromising safety and liquidity. The specific objectives of the policy are (NDIC, 2012):

- i) To provide liquidity for its deposit insurance responsibilities and meet normal operating needs. The provision of an adequate liquidity profile will be informed by potential, anticipated or contingent insurance payouts and conditions operating in the financial markets. To this end, all investments held by the Corporation should be readily realizable or convertible to cash.
- ii) Preserve capital and optimize investment returns by adopting a conservative investment policy. This requires that all investments should be of very high quality, in terms of the ability of the investee to meet its obligations to the Corporation and arrangements, which are in place to protect the Corporation as investor.
- iii) Minimize overall risk by portfolio diversification.
- iv) Ensure expeditious investment of all residual cash without threatening the safety and liquidity concerns. In that regard, the Investment Policy aims at ensuring that no residual Fund meant for investment remains idle.
- v) Periodically measure its investment performance against acceptable bench- marks.

In an effort to realize the objectives of the policy, the Corporation developed an investment management structure. The structure comprises the Board, Senior Management, Investment Advisory Committee, Finance Department and Claims

Resolution Department (NDIC 2012). The roles and responsibilities of each of the components of the structure have been clearly spelt out in the policy.

The Corporation also developed investment guidelines that deal with portfolio composition, investment limits, target rates, investment performance review, evaluation of risks, policy review and disclosures. For instance, the investment portfolio of the NDIC is made up of Short-term, Medium-term and long-term investments in eligible securities (NDIC, 2012). The short-term investments should be highly marketable and serve as a source of Asset Liquidity through maturation or potential sale. The portfolio would be maintained at a level sufficient to provide adequate liquidity, having regard to other liability management options. The medium and long-term investments on the other hand, should possess a high degree of marketability or convertibility to cash since they are regarded as a secondary source of liquidity (NDIC, 2012).

5.0 LESSONS FROM BEST PRACTICES AND PRACTICES IN OTHER JURISDICTIONS

The above review of best practices and practices in other jurisdictions in terms of deposit insurance funding and fund management offers some very useful lessons for the DIS in Nigeria and other sister DIS to learn from. The following are some of the lessons identified, among others:

- i) **Target Fund Ratio:** As seen above, determining the adequacy of DIF would aid the effectiveness of a deposit insurer in discharging its resolution responsibilities. That is why the best practice as captured by the IADI core principles emphasizes the need for DIS to have in place a Target Funding Ratio Framework for determining the adequacy of DIF in meeting the potential exposure of the DIS to the insured institutions in the system. A number of countries including USA, Philippines and Malaysia, among others, use the Target Fund Ratio Framework in determining the adequacy of their DIF. Other countries including Nigeria uses a method

that gauges the current DIF level with the deposits of distressed banks in the system, which is not robust enough. There is need for the NDIC to put more efforts in developing a Target Funding Ratio Framework for determining the adequacy of its DIF so as to conform to the best practice and comply with IADI Core Principle 11. Although the NDIC does not have the expertise in-house as was the case with the FDIC, it can engage the services of a consultant as was done by some countries such Malaysia and the Philippines. In fact, the Philippine was able to develop its Target Fund Ratio Framework through the assistance of the FIRST INITIATIVES PROJECT of the World Bank. The NDIC could leverage on the project of the World Bank, since it had benefitted from it in December 2011 when an assessment of the Corporation for compliance with the core principles for effective deposit insurance system was conducted under the sponsorship of the First Initiatives of the World Bank. The Corporation was found to be non compliant with Core Principle 11, partly on the ground that Target Fund Ratio Framework was not being used in determining the adequacy of its DIF.

- ii) **Premium Assessment:** What has been found to be common practice amongst most deposit insurance systems is assessing the participating institutions for the purposes of premium payment on an annual basis. That is equally the current practice in the NDIC. However, some Deposit Insurance Systems such as the Philippines Deposit Insurance Corporation (PDIC) have adopted a system of assessing the participating institutions for premium payment on a quarterly and semi-annual basis. These approaches would not only help spread the burden of the "block" premium payment at the beginning of each year, as is the currently the case in Nigeria, but also help check and minimize the cases of deposit manipulations by participating institutions at the end of the year for purposes of avoiding premium payments. Although best practices as

captured by the Core Principles for Effective Deposit Insurance System is silent on the frequency and method of collection of premium by Deposit Insurers, countries are then free to use the most efficient frequency and method of collecting the premium from participating institutions based on its peculiarities. In this regard, the NDIC could borrow a leaf from this approach, so as to address the intermittent agitation of the participating institutions on the burden created by premium payments rather than reducing the premium rate as witnessed in the recent past. The approach could also help minimize the cases of banks concealing information on deposits in December to avoid payment of appropriate premium.

Another lesson for the NDIC to learn under the DPAS has to do with the grouping of the insured institutions into risk buckets for premium assessment. A number of countries such USA, Malaysia, etc, are implementing their DPAS using risk buckets, which allows the institutions to be grouped on the basis of their risk appetite for the purpose of premium assessment. Currently, the NDIC does not use risk buckets in implementing its DPAS framework. The institutions are assessed individually such that there are as many risk groups as the number of institutions being assessed. That will not be good in promoting sound risk management practices in the insured institutions, as no avenue has been created for them to graduate from one risk group to another. The NDIC should therefore consider a review of its current DPAS framework, such that risk buckets are created and the institutions are given the opportunity to graduate from one risk bucket to another as obtained in other countries. This is critical particularly that the objectives of adopting DPAS in Nigeria is not just to reduce the premium burden but also to improve on the risk management practices in the institutions. The countries whose framework Nigeria under studied to arrive at its own framework, namely Canada and Turkey had moved to grouping the institutions into risk

buckets. Canada for instance developed a four (4) premium categories on the basis of risk (IADI, 2006).

- iii) **Treatment of Operating Surplus:** As seen in the practices in other jurisdictions with regards to the treatment of surpluses at the end of fiscal year, the entire surplus is remitted back into the DIF to enable the fund grow as rapidly as possible so as to strengthen the effectiveness of a DIS. The above review of practices in other jurisdictions indicated that no part of the surplus is remitted to government particularly under a circumstance in which the DIF is grossly inadequate relative to the risk exposure of the funds to the banking system. This is a case for Nigeria to learn from. The current practice where the NDIC is compelled by the Fiscal Responsibility Act to remit 80 percent of its operating surplus to the treasury negates the principles of best practices and would greatly undermine the capability of the Corporation to build a robust DIF that could cope with its risk exposure to the industry without any recourse to the treasury for funding in times of crisis. There is therefore the need for the government to exclude NDIC from the agencies that would have to comply with the provisions of the Fiscal Responsibility Act. That would no doubt facilitate the buildup of a robust DIF in the country.

- iv) **Separate or Merged Funding Arrangement:** From practices in other jurisdictions, both separate and merged funding arrangements have their merits and demerits. The choice of any one of them is determined by the peculiarities of the DIS being practiced in a country and the nature and level of development of the financial system. A number of countries such as USA and The Philippines commenced with a separate funding arrangement and eventually merged the funds because the risk profile and deposit profiles of the different types of financial institutions had become similar, among others. Other countries such as Malaysia, Korea,

and Turkey that operate either noninterest deposit insurance system or integrated deposit insurance system have a separate funding arrangement. In fact, Malaysia Deposit Insurance Corporation operates 6 separate funds, 2 funds for noninterest deposit insurance system and 4 funds for the Takaful and Insurance Benefits Protection System (TIPS). That is because of the disparity in the nature of the participating institutions in the DIS of Malaysia. Nigeria currently operates a separate funding arrangement for deposit money banks, special insured institutions and noninterest deposit insurance system⁹. The lesson from this is that as the risk profile of the categories of insured institutions become similar, the deposit insurer should consider merging the funds created for the different categories of insured institutions. This as seen in the paper has the advantage of cross-subsidization in terms of using the funds to resolve crises in the system and is in line with the practices in the USA and The Philippines.

Another lesson to consider beyond just the separation of the funds is the accounting treatment of the funds. A number of countries such as the USA, The Philippines and Malaysia treat the funds on their financial statement as income as well as flows, which implies that the fund and revenues accruing from its investment are lumped together and all expenses of the deposit insurer are charged to it. This makes the funds susceptible to the risk of misappropriation and diversion. Another treatment of the funds as being used by some countries, including Nigeria, is to treat it as stock. This separates the funds from any additional income arising from investment of the funds. It also shields the funds and protects it from any form of misappropriation and diversion as the expenses of the deposit insurer are defrayed against the income

⁹ This commenced recently after licensing the first noninterest bank (Jaiz Bank International) in the country

generated from the investment of the funds. This is a lesson for other DIS to learn from as the approach presents the first line of defense for preserving the DIF as it shields it from misappropriation and/or diversions.

- v) **DIF Investment Policy:** The DIF investment policy differs from country to country. However, notwithstanding the difference, best practice dictates that the investment policy must comply with the principles of safety and liquidity of the funds as well as high returns, so as to avoid situations where a deposit insurer could fall into a state of insolvency. Practices in other jurisdictions have shown that investment policies are tailored towards getting more returns while preserving the safety of the funds. A good number of DIS including FDIC and PDIC classify their DIF investments into Hold-To-Maturity (HTM) and Available-For-Sale (AFS) and such an arrangement proved to be working fine. The HTM is the portfolio that could be disposed off only at maturity while the AFS could be disposed off any time the need arises. Although the NDIC has an investment policy, its portfolios are classified into short, medium and long-term, all of which are held to maturity and not on the basis of having some portfolio as HTM and some as AFS. There is therefore the need for the Corporation to adopt this investment strategy for effective investment planning to avoid having to wait for maturity dates or discount investments to meet obligations whenever the need arises before the maturity dates.

Another lesson to learn from other jurisdictions particularly the FDIC is the need to develop a contingency funding plan to adequately prepare for situations where the Corporation may necessarily have to borrow funds from other sources to meet some funding gaps. Although the NDIC Act clearly specifies sources from which the Corporation could obtain back-up

funding, it had never had course to utilize that opportunity. It is therefore imperative for the Corporation to come up with a framework on how to tap such opportunities in order to operationalise the process.

6.0 SUMMARY AND CONCLUSIONS

The paper examines the issues involved in the funding of a deposit insurance system. Funding has been identified as very crucial for any deposit insurance to be effective. The paper reviews the funding arrangements and fund management as practiced in other jurisdictions and found that majority of the countries operating explicit deposit insurance system had an ex ante funding arrangement and that the funds not immediately used are invested only in government debt instruments. Furthermore, where different categories of insured institutions exist, it has been established that most jurisdictions start with separate funding arrangements but eventually merge the separate funds for cross-subsidization as the system matures. However, where noninterest deposit insurance systems exist, the funds are permanently kept separate on ethical grounds. These are some of the lessons the deposit insurance in Nigeria should learn from.

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