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Importance of a Financial Intelligence Unit for a Country and the Case of Sri Lanka

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- **Introduction:**

People are enticed to commit financial crimes because of the large monetary benefits they could gain from such activities. Criminals make various attempts to conceal the origins of illegally earned money and this is known as the process of laundering money. Hence, money laundering is the process of concealing the illicit origins while attempting to attribute a legitimate appearance. This concept of money laundering is similar to laundering clothes. For example, a person earning money by illegal means such as drug dealing may launder that money by investing in a legal asset such as real estate. If there is no legislative requirement to question the source of funds at the time of the investment, the money launderer will be able to easily sell the real estate property later and deploy that money in furthering illegal activities such as crime or terrorism. This process encourages criminals to embark on a vicious cycle, where funds raised through illegal means are re-deployed in illegal activities, both of which are harmful to the society. Financing of terrorism is also another harmful act that may be related or independent from money laundering activities. Avoiding money laundering and terrorist financing would contribute towards the well-being of the society. Hence, every country requires a comprehensive anti-money laundering and anti-terrorist financing regime with a proper institutional framework to combat these illegal activities.

Financial information plays an important role in ceasing the flow of funds to both crimes and terrorism. Accordingly, financial information coupled with intelligence derived using that information are vital in identifying, addressing and mitigating money laundering and terrorist financing risks. Financial intelligence plays a vital role in this era as globalization and advancement in technology have triggered money launderers and terrorist financiers to operate across borders. In this context, combating of money laundering and financing of terrorism are key concerns that needs special attention of each country as it is clear that both money laundering and terrorist financing threaten the integrity of a country's financial system. Hence, the weight a country should give to collect and receive financial information or intelligence is significant.

Therefore, availability of proper institutional arrangement to collect or receive financial information related to activities of various institutions is a fundamental requirement. Further, supervision of financial institutions and other relevant institutions for their compliance to mitigate money laundering and terrorist financing activities and cooperation among domestic law enforcement authorities, reporting institutions, international agencies and governments to mitigate cross-border money laundering and analysis of terrorist financing risks are extremely important for a country. Hence, there should be a central institution to oversee such activities and it is a fundamental component of every national anti-money laundering and countering of terrorism financing framework.

- **What is a Financial Intelligence Unit?**

Financial information and intelligence should be readily available or accessible to quickly trace fraudulent or doubtful transactions. Information related to financial transactions such as depositing or transferring money between bank accounts, investments in shares or properties such as lands, vehicles or precious metals and gem etc. should be collected by a central authority. Once collected, they should be analyzed in order to verify any suspicious transactions. On the other hand, when there is a money laundering or terrorist financing suspicion behind specific transactions, there should be a reporting mechanism and an authority to inform such doubtful transactions. Also, collecting or receiving such financial information and analyzing them must be carried out by an authority or an entity which is vested with powers by laws of the country. An entity which a country establishes to carry out these critical functions and other key roles relating to prevention of money laundering and combating of terrorism financing is known as a Financial Intelligence Unit (FIU).

- **Global Recommendation on Establishing of an FIU**

Establishing of a central authority or an FIU for a country or jurisdiction to facilitate this requirement, in-line with the global standards against money laundering and terrorist financing has become a concern as such illegally earned funds threaten the global financial system. To successfully face and fight against this growing global concern, an entity named Financial Action Task Force (FATF) was formed by the G-7 Summit in 1989. Since then, the FATF works as the global policy setter against money laundering and terrorist financing. The FATF plays a prominent role in encouraging countries to say "no" to money laundering and terrorist financing. The FATF has issued 40 Recommendations as a plan of action to be addressed in order to fight money laundering, terrorist financing and financing of proliferation. In implementing its 40 Recommendations, the FATF collaboratively works with FATF-style regional bodies. For example, "the Asia Pacific Group on Money Laundering (APG)" is the FATF-style regional body for the countries belonging to Asia and Pacific region. Hence, every country in the world is not a direct member of FATF, however, they belong to their FATF-style regional body and work to combat money laundering, terrorist and proliferation financing together with the rest of the world, by ensuring the compliance with the FATF Recommendations.

Every country is responsible to pursue the 40 Recommendations of FATF and countries are subject to periodical assessments on the progress of implementing FATF 40 Recommendations, technically as well as effectively, by peer countries. The FATF's Recommendation 29 requires countries to establish an FIU to serve as a national center for the receipt and analysis of mainly two types of information. The first is the suspicious transactions reports which are filed by the reporting entities such as financial institutions and designated non-financial institutions of that country. The second is the other relevant information on money laundering, its underlying offences and terrorist financing. Also, the results of analysis are disseminated among the relevant law enforcement and competent authorities.

As per the FATF Recommendations, the core functions of an FIU are receipts of disclosures filed by reporting entities, analysis of those information, and dissemination of results of analyses among relevant competent authorities. Further, the FATF's Recommendations require that FIU should have powers to access any other information relating to money laundering, its predicate offences and terrorist financing. More importantly, FIUs should have policies and procedures for handling information securely and confidentially. The other highlighted fact is the operational independence and autonomy of an FIU. Every FIU should be free from undue influence or interferences in obtaining and deploying the resources it requires to carry out its core functions. Thus, operational independence and autonomy are fundamental elements of an FIU.

Further, the FATF Recommendations require each FIU to apply for the membership of the network of worldwide FIUs known as the Egmont Group. This is mainly for the purpose of developing a mechanism between FIUs in exchanging information among them on money laundering and terrorist financing activities.

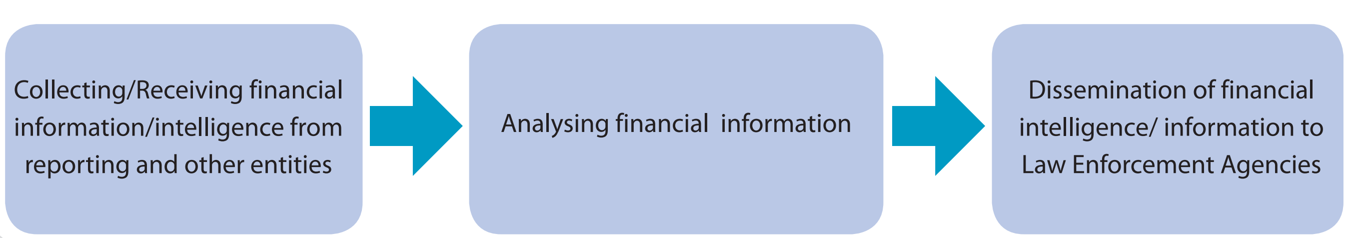
The FIUs are also required to have mechanisms for financial institutions and designated non-financial institutions to report all domestic as well as foreign transactions above an identified threshold. Hence, an FIU should facilitate a way for its reporting entities to report their cash and other financial transactions, including electronic fund transfers.

- **Core and other Functions of an FIU:**

The core function of an FIU is receiving financial information or intelligence from reporting entities and the general public, analyzing them with the purpose of identifying any relationship to criminal activities on money laundering, terrorist financing and proliferation financing and sharing relevant financial intelligence with relevant law enforcement authorities to facilitate further investigations and prosecutions. The following graph shows the process of core functions of an FIU.

In practice, while FIUs are mainly involved in attending to their key functions, they also attend to various other functions and duties related to combating illicit financing activities. Developing national level strategies for more effective anti-

Graph 1: The core functions of an FIU



money laundering and anti- terrorist financing regime, issuing or amending rules and regulations to strengthen the anti-money laundering and anti-terrorist financing framework, examining the compliance of relevant reporting entities, coordinating with domestic as well as foreign entities on related matters and making public awareness on anti-money laundering and countering the financing of terrorism measures, entering into memoranda of understandings to share information with other institutions and countries and freezing and holding of funds which may relate to money laundering, terrorist financing and proliferation financing are some of the other functions carried out by FIUs.

- **Different Types of FIUs:**

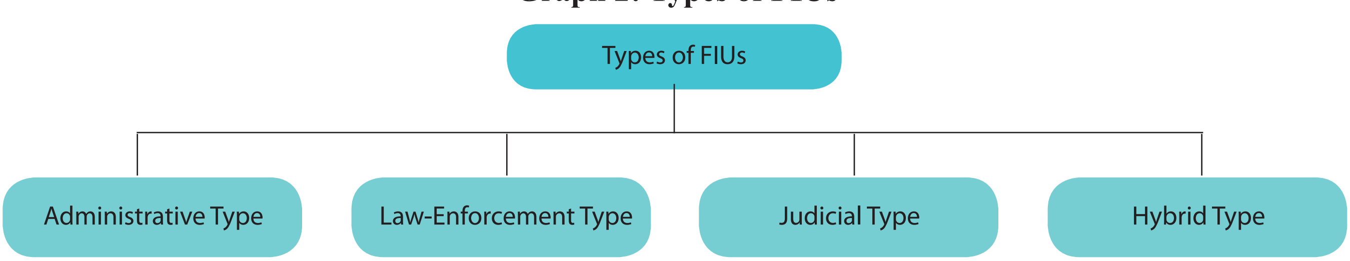
The ways that the FIUs administer and handle their core and other activities differ significantly from one country to another. Hence, the operation and administrative structures of worldwide FIUs are different. Accordingly, FIUs are categorized mainly under four different types: (1). Administrative type, (2). Law-enforcement type, (3). Judicial type, (4). Hybrid type.

When an FIU is a part of or under the supervision of another agency other than law enforcement or judicial authority, it is called an administrative type FIU. An FIU which is established under a Ministry is an example for administrative type. This type of an arrangement for establishing an FIU makes a buffer between the reporting entities and the law-enforcement authorities of that country. When reporting entities do not have the necessary capacities to decide whether a transaction is connected to a criminal activity or not, the administrative type FIU works to fill up that gap and analyze the information disclosed by the reporting entities and disseminate the results to law-enforcement authorities, if a significant suspicion is formed. However, in this case, the FIU does not have investigative or prosecutorial powers. Some administrative type FIUs have supervisory authority over reporting entities, where such FIUs conduct compliance examinations of reporting entities to ensure compliance.

In some countries, the FIUs are a part of the law-enforcement mechanism with law enforcement powers with the prime objective of functioning as the law enforcement arm in tracking and investigating money laundering and terrorist financing offences. It functions as a division of the Police. Then the FIU itself has powers to freeze and seize transactions. The staff in such FIUs are officers of the law enforcement mechanism with experience in financial investigations. This type of an FIU is called the Law-enforcement type FIU.

In some countries, FIUs are established within the court system (judicial branch) of the country and they are called judicial-type FIUs. The FIU exercises the judiciary powers such as freezing accounts, seizing funds, detaining suspects, and conducting searches.

Graph 2: Types of FIUs



Also, there are FIUs which are combinations of at least two types of above described arrangements and they are known as hybrid FIUs. These FIUs have one or more features of administrative type FIUs as well as law-enforcement type FIUs. Sometimes, the powers of customs office and the police are combined with these FIUs.

Each type of an FIU has its own advantages as well as disadvantages. Therefore, in selecting the type of an FIU which suits to a country should be carefully done with a good analysis of country specific factors such as administrative, legal and economic strengths and weaknesses as well as the regional specific factors.

- **The Case of Sri Lanka:**

Establishment of the Financial Intelligence Unit of Sri Lanka (FIU-SL)

Sri Lanka is one of the founding members of the FATF-style regional body, the APG. Sri Lanka has enacted the required laws and regulations which are essential to combat money laundering and terrorist financing and established the core institutional set up which is required to have an effective anti-money laundering and countering the financing of terrorism regime for the country. The key institution among those is the FIU Sri Lanka (FIU-SL) which was established in March 2006 in terms of the provisions of the Financial Transactions Reporting Act, No. 06 of 2006 (FTRA). The FIU-SL functions as an independent institution within the administrative structure of the Central Bank of Sri Lanka since February 2007, in terms of the order made by H.E the President under the Act. Accordingly, the FIU-SL is presently working as Sri Lanka's national center for collection, analysis and dissemination of financial information/ intelligence. The FIU-SL is empowered to collect or receive financial information or intelligence from its reporting Institutions. Financial institutions such as banks and non-Bank finance companies, insurance companies, stock brokers, foreign exchange dealers and money value transfer service providers as well as non-financial institutions and professions such as casinos, real estate businesses, gem and jewellery dealers, accountants, lawyers, notaries and company service providers have been defined as its reporting Institutions under the FTRA. Other than its core functions, the FIU-SL engages in many other activities under its mandate. When analyzing its core functions, the FIU-SL is more similar to an administrative type FIU as it does not have any law enforcement powers. However, FIU-SL has powers to freeze transactions and accounts based on a suspicion.

a. **Powers and Functions of the FIU-SL:**

The FIU-SL is mainly vested with powers to collect or receive reports or information which may relate to money laundering, terrorist financing as well as financing of proliferation from designated domestic entities, government agencies, law enforcement agencies or governments or institutions of other countries. Also, the FIU-SL analyses information provided, and reports filed by its reporting entities and have powers to refer them to law enforcement agencies if required on the basis of its analysis.

FIU-SL is authorized to carry out examinations of its reporting institutions. Under this, the FIU-SL or any person authorized by it on that behalf can examine the records of the reporting institutions for the purpose of ensuring compliance with the anti-money laundering, countering the financing of terrorism and proliferation rules and regulations. The FIU-SL not only has powers to examine its reporting institutions, more importantly it is empowered by law to impose penalties to enforce compliance with these legal requirements of the country. Collection of such penalties imposed by the FIU-SL is also a responsibility of the FIU-SL and these monies should be credited to the government Consolidated Fund. Once the penalties are imposed, names of such institutions are shared with the public by way of naming and shaming.

The FIU-SL is also empowered to issue or make arrangements for the supervisory authority of an institution to issue rules and guidelines relating to identifying customers/ beneficial owners, retention of records and reporting obligations. For example, the FIU-SL works closely with Insurance Regulatory Commission (IRC), Securities Exchange Commission (SEC) and Sri Lanka National Gem And Jewellery Authority (SLNGJA) in supervising particular industries on applying anti-money laundering and countering the financing of terrorism measures relevant to those sectors.

Also, the FIU-SL conducts training programmes for its reporting institutions and the other supervisory authorities on FIU related subject matters.

Further, the FIU-SL conducts research into trends and developments in the areas of money laundering and terrorist financing in different industries, educate the public and reporting institutions and create awareness on related matters.

In addition, the FIU-SL is empowered to enter into agreements or arrangements with any domestic government agency, institution or an agency of a foreign state, international organizations or a foreign law enforcement agency regarding the exchange of information with the approval of the Minister of Finance.

The FIU-SL also has powers to direct its reporting institutions to not to proceed transactions if there is a reasonable ground to suspect that it is related to any unlawful activity or connected with offences under Prevention of Money Laundering Act, No.05 of 2006 or the Convention of Suppression of Terrorist Financing Act, No. 25 of 2005.

Further, the FIU-SL is empowered to transmit any information from its examination to the appropriate domestic or foreign law enforcement authorities on the reasonable grounds to suspect that the information is suspicious.

b. The FIU-SL as an Operationally Independent FIU:

As explained above, the FIU-SL functions under the administration structure of the CBSL. However, the core operation of the FIU-SL is conducted independently as required by the international recommendations to stand as an entity with no influences for effective anti-money laundering and countering the financing of terrorism operations in the country. By doing so, the FIU-SL facilitates and supports investigations and prosecutions against persons suspected for money laundering or terrorist financing without any undue influence. Therefore, the information provided by reporting institutions are handled confidentially within the legal provisions provided by the FTRA.

c. Operational Structure of the FIU-SL:

The FIU-SL administratively functions under the CBSL and is overseen directly by the Governor of the CBSL. However, for the administration related activities it follows the normal reporting and authorization procedures as other departments of the CBSL.

The FIU-SL has its management structure with a director who oversees the overall functions (Core and other functions) of the FIU-SL. The functions carried out by the FIU-SL are assigned to different divisions for their smooth functioning and there are controls between divisions to protect confidentiality of the financial intelligence/ information it received/ collected. The FIU-SL has strengthened its pool of human resources with diverse backgrounds such as legal, accounting, economics, examinations/ inspections and financial analysis.

Further, to smoothen the functions of the anti-money laundering and countering the financing of terrorism regime in Sri Lanka, there is an Anti-Money Laundering and Countering the Financing of Terrorism National Coordinating Committee (NCC) to provide directions on policy matters and other related strategic issues. The Chairperson of the NCC is the Governor of the CBSL and there are 23 key officials representing relevant ministries and government institutions for anti-money laundering and countering the financing of terrorism regime matters of the country. The FIU-SL closely works with such ministries and institutions in relation to matters handled by it in achieving its goals in this regard.

d. Recent Developments of FIU-SL & the Way Forward:

FIU-SL serves as the national center for the receipt and analysis of suspicious transactions and other financial information relevant to suspicious transactions of money laundering and terrorist financing and dissemination of the outcome of such analysis to the law enforcement agencies and regulatory bodies of Sri Lanka. In this process, FIU-SL aims to improve the quality of its financial analysis and referrals. The FIU-SL has already taken different strategies in this regard. Mainly, clear guidance has been provided for its Reporting Institutions in reporting suspicious transactions with high quality. Moreover, the FIU-SL provides educational and awareness programmes periodically on reporting high quality suspicious transactions. Further, training facilities are provided to its staff for the use of analytical software to increase the efficiency of its analysis. Regulatory actions are being used if there are weaknesses found in compliance programmes of the Reporting Institutions. This is to improve the quality of reporting suspicious transactions. In order to report a quality suspicious transaction, the reporting institutions should have proper risk-based programmes and customer due diligence procedures. Hence, the FIU-SL recently started a naming and shaming procedure for its reporting institutions which fail to comply with requirements under the provisions of Financial Transactions Reporting Act, No. 06 of 2006. At the same time, the FIU-SL coordinates with all the relevant national institutions to have an effective national AML/CFT regime for the country. In this matter of having an effective national AML/CFT regime, the lessons learnt from the FATF listing in Oct 2017 are always in focus. Accordingly, the FIU-SL takes the leadership to promote international standards of AML/CFT within Sri Lanka with the cooperation of other relevant institutions. Under the FATF listing, which is known as the Grey Listing an action plan was given for Sri Lanka to implement within a stipulated timeframe. The country was under close monitoring of the FATF and APG during that period. Sri Lanka was then delisted in 2019 due to the progress made during the stipulated timeframe. The FIU- SL with its other relevant counter parties such as ministries, government entities and private sector institutions worked together to fulfil the requirements under the given action plan to get Sri Lanka delisted from the Grey List considering the cost of being listed as a country. Accordingly, the FIU-SL always strives to improve the effectiveness of measures initiated during the listed period by Sri Lanka to strengthen its AML/CFT regime which include the following:

- Further strengthening the AML/CFT legal and regulatory framework of the country by issuing regulations, rules, and guidelines under prevailing AML/CFT laws.
- Strengthening monitoring measures for the financial institutions.
- Introducing and strengthening monitoring mechanism to designated non-financial businesses and professions through an established working group.
- Introducing beneficial ownership requirements under compliance monitoring.
- Further strengthening cooperation among international countries on related matters.
- Implementing supervisory measures for non-compliance by its reporting Institutions.
- Raising awareness among the reporting institutions on compliance measures.
- Investing more resources to strengthen the human capital of FIU as well as technological improvements.

Furthermore, the FIU- SL continuously works to strengthen the AML/CFT framework of the country through various measures such as signing of memorandum of understandings with different government entities & international agencies and working closely with relevant ministries and other governments as well as private sector institutions to make the country's AML/CFT regime more robust.

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Reserve Management and Trading along the Yield Curve

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1. Introduction

Reserve management involves the management of an important and valuable pool of foreign currency assets of a country. The commonly accepted objectives of reserve management are to ensure safety, liquidity and return of the foreign reserves. In the aftermath of the Global Financial Crisis in 2008, many key central banks introduced unconventional monetary policies which leads towards the use of very low interest rates and quantitative easing policies to drive the supply of currencies. These strategies resulted in a gradual decline in the return generated on reserves. As reserve managers searched for alternative methods of increasing their return while ensuring the safety of reserves. They realized that the yield curve, or the relationship between bond yields and bond maturities, could be used as a means of increasing returns, using the shape of the yield curve and its expected movements as active trading strategies.

2. Reserve Management

The International Monetary Fund (IMF) defines foreign exchange reserves as the external stock of assets that a country's monetary authorities hold. Reserve assets comprise of foreign currency balances, bank deposits in foreign currencies and holdings of other government securities such as treasury bills and bonds. Countries differ in a great number of ways; for example, size of the population, type of the government system, state of development, wealth, openness to international trade, even between those who borrow exclusively in their domestic currency and those who also borrow in foreign currency. In whichever condition, in nearly every case, every country has a need for holding foreign exchange reserves. This is as true for countries with large self-sufficient economies as it is for smaller, more open economies. For many countries, the official foreign reserves are a major national asset, as it shows the external strength of an economy by way of supporting the local currency valuation, import expenditure, etc.

In developed economies, reserve assets consist of small percentage of GDP, while in some emerging market economies, the reserve assets to GDP ratio is substantially higher.

Therefore, from the standpoint of preserving this national asset, the management of foreign exchange reserves is an important one for almost all central banks. On the other hand, poor management of the reserves may put at other elements of national policy, causing severe economic damage in addition to the financial loss suffered by the reserve assets themselves. Thus the management of official reserves has become a particularly important role of the monetary authorities.

2.1 Reasons for maintenance of Reserves

Reserves are sometimes held as **formal backing for the domestic currency**. This is a very traditional way of use the reserves, especially gold reserves. This use of reserves was at its height during the Gold Standard and survived after the Second World War under the Bretton Woods system. After the breakdown of the Bretton Woods System it became less common, though the use of gold, especially to back a currency, has never completely disappeared, and the idea of using foreign exchange reserves (rather than gold specifically) to back and provide confidence in a domestic currency has recently been revived with the resurgence of currency boards. Nevertheless, for most countries this is not the prime use of the reserves these days.

The more common use of the reserves is as a **tool of exchange rate or monetary policy**. This is most obviously, the case for those countries pursuing a fixed exchange rate policy, and who wish to be able to influence the market in their domestic currency to maintain a fixed rate. In addition, countries may choose to use the FX markets to affect domestic monetary policy, by supplying domestic currency to the market or buying it in the market against foreign currencies. This will affect the domestic money market balance and domestic interest rates and is a useful tool for those countries whose domestic markets are not yet fully developed. But even countries whose domestic markets are fully adequate for the exercise of monetary policy and whose currencies are floating may wish to intervene to "manage the float" to affect the rate at which their currencies trades. Only a very few countries have decided not to intervene on the exchange markets at all to maintain the "free float" of their currencies and even for these countries, holding reserves enable them to intervene or adopt a managed float later on, if circumstances or policies change.

The third use of reserves is to provide funds for **servicing foreign currency liabilities and debt obligations**. Clearly, foreign currency is needed when debt servicing payments fall due, to avoid a default. While it would be possible to meet this need for foreign currency by buying it in the market (i.e.by selling domestic currency) as and when the need arises, this is not a course that many countries pursue, for several reasons:

- the FX markets might be unfavorable at the time that the foreign currency is needed;
- the transactions might be disruptive to the markets;
- the strategy entails large open currency risks on the liability portfolio;

This approach reduces credit rating agencies' confidence on the country as an issuer, and as a result, reduces the attractiveness of the country to lenders and increases the cost of foreign currency borrowing.

Reserves can also be held as a **source of funds to pay for government expenditure overseas**. For many countries, especially those with significant import bills for the authorities to meet, it can be sensible to plan their financing using the reserves, particularly when foreign exchange receipts or outflows are "bumpy" or show a marked seasonal pattern. In these cases, the reserves can be used to smoothen out the payments.

Reserves can also provide a **defense against emergencies or disasters**, by acting as a fund to finance recovery and rebuilding. This is most likely to be appropriate for small countries that are not large enough to provide self-insurance while larger countries are more likely to fund recovery from a crisis in one part of their domestic economy from elsewhere in the economy, a small country may be completely overwhelmed by a disaster. For example, a natural disaster that wipes out the only export, or a collapse in their terms of trade, or even military disaster. The reserves can provide a diversification of assets, a pool of readily usable funds and security that would provide some comfort for the potential lenders.

Finally, reserves may be held as an **investment fund**, primarily for financial gain. This will not be a sensible reason for holding reserves for the majority of countries; few countries will find that the monetary income on their reserves represents the best use of those assets in the wider context of their whole economy. But for some countries, an investment fund can be a logical policy, where the local economy cannot absorb more spending without overheating, or where windfall profits would otherwise disrupt the domestic economy. Reserves also helps to prepare for a less certain future (perhaps as natural resource runs out); and to diversify a small country's asset base.

2.2 The need for extra return from reserves

In the aftermath of the 2008 Global Financial Crisis, a number of advanced economy central banks pursued unconventional monetary policy, some of which are still ongoing (Draghi, 2016; BOJ, 2016). The United States Federal Reserve, the European Central Bank, the Bank of England and the Bank of Japan were among those that led the quantitative easing (QE) in the light of the fact that a number of these banks had started to approach the 'zero lower bound' in conventional policy interest rates. This form of QE was implemented through asset purchases, which facilitated direct injections of liquidity into the various sectors of the economy; the scale of which was unprecedented.

This increased global liquidity has led to, among other things, nearly a decade of low interest rates, and in some cases, negative real (inflation-adjusted) interest rates. Low US yields encouraged investors to seek higher returns, at higher risk, and catalyzed investment flows into emerging and developing countries (Fratzscher et al., 2012; Forbesand Warnock, 2012).

3. Active Trading vs. Passive strategies for Reserve Management

Passive index investment strategies are designed to mirror the composition and performance of a benchmark index. In contrast, active strategies can differ from the index in the pursuit of better returns. Active bond funds and Exchange Traded Funds (ETF) have the potential to outperform passive index funds, using intentional approaches for selecting bonds or setting sector weights.

Investment firms with deep resources can support the efforts of fundamental research, quantitative analysis, and expert trading, all of which may help actively managed funds outperform their benchmarks.

Experienced active managers, supported by research and trading experts, seek to earn "excess returns" (returns greater than those of the benchmark index). In contrast, passive investment strategies seek only to match the return and risk of a benchmark index, by attempting to mirror the characteristics (sector, issuer, credit quality, and yield-curve exposure) of the underlying index and are limited to securities that meet the index's inclusion criteria. Active managers can consider a much broader spectrum of potential investments, and can act on informed assessments and market outlooks, to construct a portfolio that may differ from the benchmark-driven exposures of a passive strategy.

3.1 Yield Curve

The yield curve graphs the relationship between bond yields and bond maturities. More specifically, the yield curve captures the perceived risks of bonds with various maturities to bond investors. A yield curve is a way to measure bond investors' feelings about risk, and can have a great impact on the returns an investor receive on the investments. A yield curve can even be used to help gauge the direction of the economy.

People often talk about interest rates as though all rates behave in the same way. The reality, though, is much more complex, with rates on various bonds often behaving quite differently from one another, depending on their maturity.

3.1.1 The normal yield curve

The short-term bonds carry lower yields to reflect the fact that an investor's money is at less risk under normal economic conditions. The thinking behind this is that the longer an investor commits funds, the more portfolio manager should be rewarded for that commitment or rewarded for the risk taken that the borrower may not pay you back. This is reflected in the normal yield curve, which slopes upward from left to right on the graph as maturities lengthen and yields rise. This is a situation where it can be generally seen when bond investors expect the economy to grow at a normal pace, without significant changes in the rate of inflation or major interruptions in available credit. There are times, however, when the curve's shape deviates, signaling potential turning points in the economy.

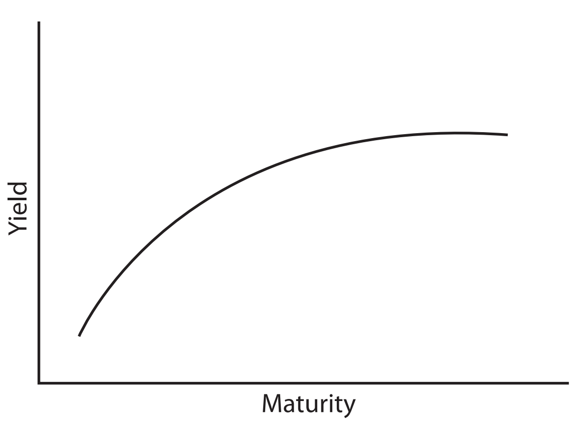
3.1.2 Steep curve

The yield curve would become steep, generally, at the beginning of a period of economic expansion. At that point, economic stagnation will have depressed short-term interest rates, which were likely lowered by the central banks to stimulate the economy. But as the economy begins to grow again, one of the first signs of recovery is an increased demand for capital, which many believe would lead to inflation.

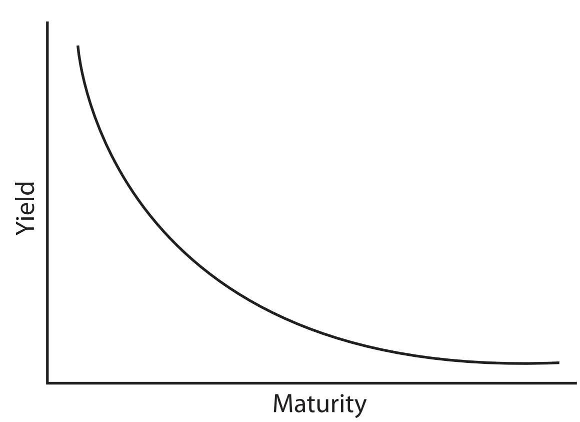
3.1.3 Inverted curve

When the investors believe that the longer end of the yield curve would be the last chance for long-term investors to lock into the prevailing rates before they fall even lower, they become slightly less demanding of lenders. As an investor might expect, (since lower interest rates generally mean slower economic growth), an inverted yield curve

Graph 1: Normal Yield Curve



Graph 2: Inverted Yield Curve



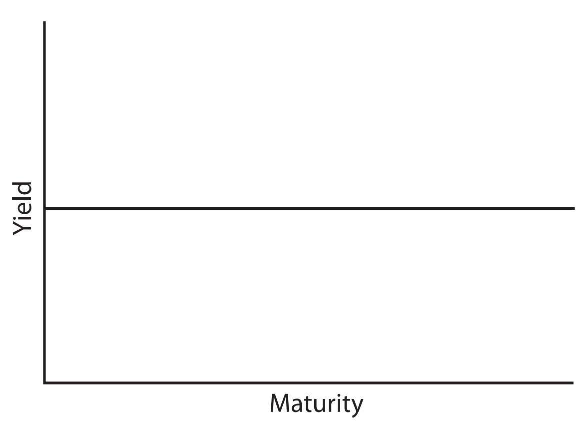
is often taken as a sign that the economy may soon stagnate. While inverted yield curves are rare, investors should never ignore them. They are very often followed by economic slowdowns or outright recession defined by lower interest rates along all points of the yield curve.

3.1.4 Flat or humped curve

Before a yield curve can become inverted, it must first pass through a period where short-term rates rise to the point they are closer to long-term rates. When this happens, the shape of the curve will appear to be flat or, more commonly, slightly elevated in the middle.

While it's important to note that not all flat or humped curves turn into fully inverted curves, should not be discounted a flat or humped curve. Historically, economic slowdowns and lower interest rates, have tended to follow a period of flattening yields.

Graph 3: Flat/humped Yield Curve



3.1.5 The concept of Duration

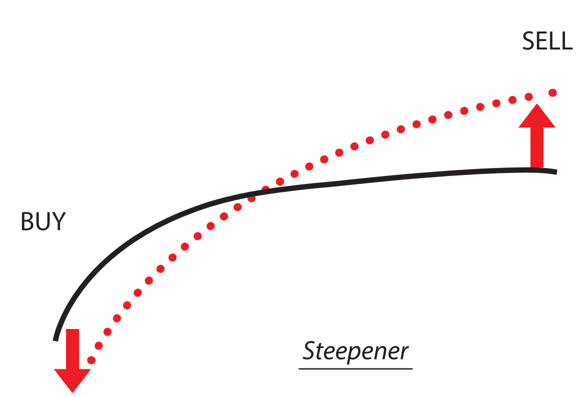
While no one can predict the future direction of interest rates, examining the "duration" of each bond, bond fund, provides a good estimate of how sensitive your fixed income holdings are to a potential change in interest rates. Investment professionals rely on duration because it rolls up several bond characteristics (such as maturity date, coupon payments, etc.) into a single number that gives a good indication of how sensitive a bond's price is to interest rate changes. For example, if rates were to rise 1%, a bond or bond fund with a 5-year average duration would likely lose approximately 5% of its value.

Duration is expressed in terms of years, but it is not the same thing as a bond's maturity date. That said, the maturity date of a bond is one of the key components in figuring duration, as is the bond's coupon rate. In the case of a zero-coupon bond, the bond's remaining time to its maturity date is equal to its duration. When a coupon is added to the bond, however, the bond's duration number will always be less than the maturity date. The larger the coupon, the shorter the duration number becomes. Bonds with long maturities and low coupons have the longest durations. These bonds are more sensitive to a change in market interest rates and thus are more volatile in a changing rate environment. Conversely, bonds with shorter maturity dates or higher coupons will have shorter durations. Bonds with shorter durations are less sensitive to changing rates and thus are less volatile in a changing rate environment.

3.2 Trading opportunities along the yield curve

There are number of trading strategies for an investor to use the based on the investor's faith to

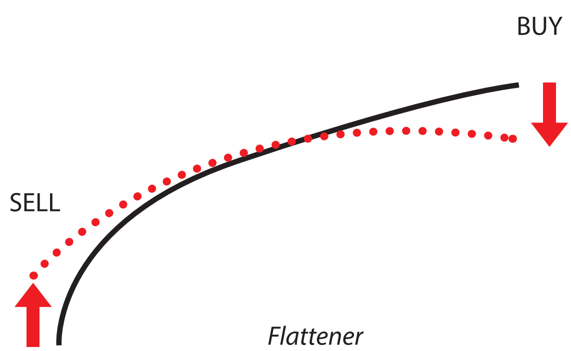
Graph 4: Steepener Strategy



earn a few basis points by exploring the mismatches in the yield curve or the different views on the expected changes in interest rates. Active yield trading strategies are duration neutral, where there is no views on the changes in the interest rates are considered.

Steepener strategy involves buying a bond in the shorter end of the yield curve while selling a bond in longer end of the curve, by matching the overall duration of the portfolio.

Graph 5: Flattener Strategy



In a flattener strategy, portfolio manager buys a bond in longer end of the curve and selling a bond in short end of the yield curve. The transaction size of the bonds need to be determined considering the duration of each position as there should not be any changes to the portfolio duration by implementing flattener strategy.

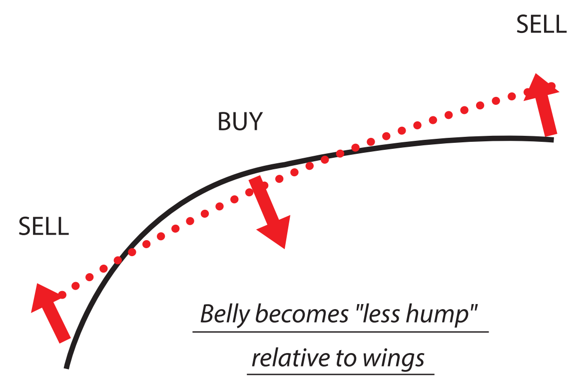
Butterfly strategies

The implementation of butterfly trading strategies requires three trades to be done simultaneously. These trades include one transaction at the middle of the curve (belly) while two trades at the short and long end (wings) of the yield curve. Butterfly strategies are focused on trading with the expected changes at the different parts of the yield curve by the portfolio manager. The risk of these strategies are managed by matching the overall duration of the portfolio with the benchmark of which the portfolio is managed.

Sell the wings and buy the belly

In this strategy, the portfolio manager expects the middle part of the curve to become less humped compared to the two wings of the yield curve. Therefore, implementing this strategy involves buying a bond in the middle of the curve while simultaneously selling two bonds at the two ends of the yield curve.

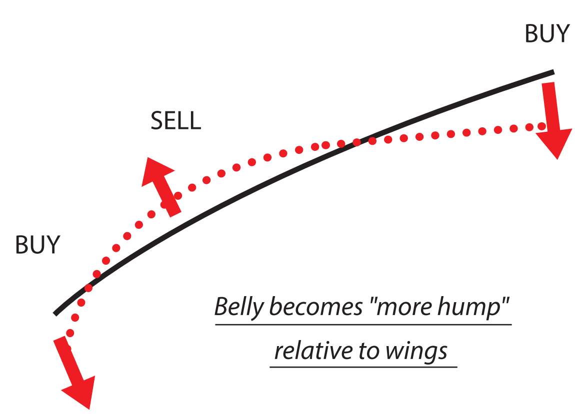
Graph 6: Butterfly Strategy 1



Buy the wings and sell the belly

This strategy involves three trades in opposite side of the previous strategy where the portfolio manager buys the bonds at two ends of the curve while selling the bonds at middle of the yield curve to match the overall risks.

Graph 7: Butterfly strategy 2



In butterfly strategies, if the yield curve reverts to the shape expected by the portfolio manager, to generate profits such anomalies that prevail in the market could be capitalized.

4. Managing the Risks of the strategies

4.1 Stop loss and take profit

Since these strategies involves the portfolio manager's views on the expected changes of yield curve and the conviction of the expectation, profit or loss from the trades need to be continuously monitored. When financial market conditions change with the new information and changing economic conditions, portfolio manager's strategies may be affected negatively. In such a situation there should be a pre-determined stop loss limit in order to avoid further losses. Stop loss limits helps to minimize behavioral biases through which portfolio manage try to hold on positions with the expectation that direction may reverse.

On the other hand, in order to avoid the behavioral biases associated with not realizing gains at an acceptable level of profit, there should be a pre-determined levels for the strategies at which profits are taken.

4.2 Impact on carry return

There is another risk where money can be lost from these strategies unless they are properly structured. The carry return is the income that can be earned from holding a Fixed Income Security against cash, otherwise referred to as the difference between a yield of a bond and interest on overnight cash.

5. Money Market strategies for earning extra return - Covered Forward Swaps (CFS)

Further to earning a better return by trading along the yield curve, there are strategies to invest in different yield curves by optimizing interest rate differentials of countries. In doing this yield enhancement, investors could identify arbitrage opportunities that prevail in the market by analyzing FX spot forward rates and the interest rates, subject to being protected against any foreign currency risks. In the simplest form, a forward currency exchange rate can be arrived at by adjusting forward points based on interest rate differentials on the spot rates of a currency pair.

The basis for this kind of trading opportunity starts with the product currency swap. A currency swap can be explained as a two-leg transaction where two parties agree to exchange and re-exchange one currency for another on two different value dates. Currency swaps are over the counter derivative products where, a fixed principal amount is usually exchanged at both the initiation and termination of the swap, and interest payments are exchanged during its life. Interest can be paid at either a fixed or floating rate.

Stemming from the currency swaps, Covered Forward Swaps (CFS) has been introduced in the financial markets in order to increase yield enhancement deriving through interest rate arbitrage opportunities. Popularity for CFS has increased over the recent years with global central bank's monetary policy divergence. With the initiation of tapering in the US, funding for USD was restricted, while European Central Bank and Bank of Japan continued their QE policies, with cheaper funding for EUR and JPY. The negative interest rates prevailing for these currencies and continued QE policies made both EUR and JPY less attractive for investors while increasing the demand for USD. These market conditions have adjusted the forward rates for EUR and JPY accordingly, and made CFS transactions in these currencies more profitable for investors. Hence, CFS has turned out to be a product which would make the investment return less negative.

6. Conclusion

The paper discussed the reserve management and its importance to countries and the increased importance on earning a few extra basis points due to continuation of QE in different parts of the world and potential revert back by Federal Reserve Bank on its interest rate view back to QE. There are different strategies that can be implemented depending the shape of the yield curve and its expected changes to the yield curve. The curve strategies like steepener, flattener and butterfly strategies do not assume any duration deviation to the benchmark, and overall changes in the interest rates in the economy does not affect the return of the portfolio. CFS is relative new product which was emerged after Global Financial Crisis in 2008 where whole world faced relative scarcity of US dollar compared to other internationally tradable currencies like EUR and JPY. Even a decade has passed since Global Financial Crisis still the CFS is providing an additional return over short term financial instruments for investors who have US dollars.Hence, the trading strategies discussed in this paper are low risk as these strategies can be implemented by matching duration of the portfolio to that of the benchmark. Further, risk of these active strategies can be managed by defining stop loss and take profit for each trade.

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The Role of Financial Institutions and Markets in Causing and Resolving the 2008 Global Financial Crisis

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1. Introduction

Financial institutions and markets facilitate the financial intermediation process in the economy, enabling the efficient accumulation of capital for institutions. They also provide liquidity for market participants, ensuring an efficient payment and settlement process. However, sometimes, financial institutions and markets have been instrumental in triggering financial crises, with substantial adverse impacts on the real economy. While some countries bounce back quickly, others take a long time to rebound. The Global Financial Crisis of 2008, triggered by the Sub Prime Mortgage Market in the United States of America, led the Federal Reserve Bank to slash interest rates to nearly zero percent in a bid to stimulate the economy. However, before long, the crisis was transmitted into the real economy and took on global proportions, via trade links the US maintained with the rest of the world. Asset prices fell across the board and unemployment soared.

Accordingly, the objective of this paper is to analyze the role of financial institutions and markets in causing the global financial crises and to assess whether they have contributed fairly to resolve such crises effectively, in order to ensure the mitigation of the impact of crises, going forward.

2. Causes of 2008 Global Financial Crisis

The 2008 financial crisis is considered as a worst risk management failure since the Great Depression (Earle, 2009). As stated by Marshall (2009), the announcement made by Freddie Mac, in early 2007 gave the first warning about the financial crisis. Bear Stearns, another large investment bank in America with a larger portfolio of subprime mortgages also fell into trouble soon after Freddie Mac. Mortgage loan defaults continued to rise substantially as more and more Wall Street institutions like JPMorgan Chase, Lehman Brothers, Merrill Lynch, Goldman Sachs, IndyMac and the Citi Group fell into trouble (Guillén, 2009).

The crisis did not confine to the US market. It also spread to the Europe financial sector and other major countries like Canada, Switzerland and Japan due to the contagion effect on account of interconnections that the Europe financial sector and other countries had in the US subprime mortgage market. The crisis did not stop with the banking industry. It also hit the insurance industry, stock market, gold and oil markets (Guillén, 2009). Many stock markets around the world including London Stock Exchange experienced their biggest drop. AIG, the biggest insurance company in the US also fell into trouble due to their exposure to banks' bad assets through credit default swaps. AIG recorded the biggest loss made by a corporate company in the US amounting to USD 61.7 billion (Guillén, 2009).

Crotty (2009) and Lastra & Wood (2010) have identified several factors that caused the 2008 financial crisis as summarised below.

(i) Shift towards deregulation through integration of financial innovation with less stringent regulations

After the Great Depression, countries had implemented stringent regulations for financial institutions and markets. However, in time to come, institutions and markets forced the regulators to push towards deregulation and the formation of "New Financial Architecture" (Crotty, 2009, p. 564) that is integrating the financial innovation with less stringent regulations. Even though, 2008 financial crisis was trigged by issues in the subprime mortgage market in the US, deregulation and the formation of "New Financial Architecture" was considered the root for the crisis.

(i) Excessive securitisation

The "causa proxima" (Lastra & Wood, 2010, p. 16) of the crisis is excessive growth in the securitisation market which created the securitisation bubble and caused the crisis. The excessive growth in securitisation was encouraged by financial innovation, fair value accounting standards, Basel II capital standards, government policies that encouraged home ownership by subprime borrowers and negligence by rating agencies in rating mortgaged back securities.

(ii) Complex and non-transparent Financial instruments

The New Financial Architecture, opened up a lucrative avenue for profits in financial institutions through complex and non-transparent financial instruments. Crotty (2009) had criticised the comment made by Charles Goodhart, former member of the Monetary Policy Committee of Bank of England, who stated that investors can always obtain funds from short-term wholesale market, interbank market and asset-backed commercial paper market to hold and sell assets. However, it was clearly evident that once the crisis unfolded none of these instruments could have been sold in the market without incurring huge losses.

(iii) Alarming leverage levels in financial institutions

In 2004, due to external pressure to ease monetary policy, the US Securities and Exchange Commission was compelled to increase the minimum leverage ratio to 40 times of capital. Compliance were relaxed from compulsory to voluntary basis. Many banks in Europe had over 50 percent leverage. Banks were permitted to leverage their balance sheets by holding assets and securities as off-balance sheet items through special purpose vehicles, which required less or no capital charge in terms of the Basel framework. This induced banks to keep collateralised debt obligations and mortgage backed securities in the trading book, despite the fact that these securities lacked liquidity and were subject to heavy losses during a crisis. Due to these factors the banks appeared to be holding adequate capital, but they were in fact over leveraged.

(iv) Lucrative bonus structures for high risk taking

The dealers and structure of financial derivatives in banks, investment banks, insurance companies and mutual funds were paid high to take high risks. Dealers in the Wall Street received around USD 50 million bonus in 2006/2007. A good example for paying irrational incentives was found in AIG which paid a total bonus of USD 20 million to 377 staff members, despite recording a loss of USD 40.5 billion in 2007/08.

(v) Rating agencies offered higher ratings to illiquid, non-transparent, structured financial products and therefore, financial institutions held less capital

Rating agencies assigned better ratings to institutions and instruments so that financial institutions can hold less capital against risk weighted assets under the Basel II framework. Crotty (2009) argues that the "global financial … crisis might not have occurred if perverse incentives had not induced credit rating agencies to give absurdly high ratings to illiquid, non-transparent, structured financial products" (p. 556).

(vi) Lack of knowledge and capacity on the part of the financial sector regulators

Financial innovation and reengineering had outclassed the supervisory knowledge and capacity of the financial sector regulators. Regulators did not have the capacity to understand and develop prudent regulations for complex financial instruments which lead to the crisis.

(vii) Weak macro-economic policies and market conditions in the US

Negligent monetary policy leading to subprime credit boom, ignorance of inflation and house price factors which formed the asset price bubble, large and persistent macro-economic imbalances due to trade liberalisation between US and China, ignorance of transaction and information cost in economic policy-making were identified as key factors that caused the crisis.

3. Effectiveness of measures taken to resolve the 2008 global financial crisis

As any financial crisis would result in significant socio-economic costs, fiscal costs and resolution cost to all stakeholders in the economy, the sub-topics discussed below seek to illustrate how various stakeholders acted to resolve the 2008 global financial crisis and the effectiveness of such responses, in-order to identify how to effectively mitigate such costs all stakeholders in the economy.

(i) Provision of liquidity facility by Central banks

As a first step to address the initial shocks of the crisis, the Fed Reserve and the European Central Bank introduced various liquidity packages to provide liquidity facilities to problem banks. Fed Reserve, for the first time, arranged a liquidity support package in collaboration with the top five central banks in the world. However, these packages did not provide sufficient long term liquidity.

Despite the provision of liquidity by Fed Reserve, there was a significant drop in GDP and consumption. House prices started to collapse and the quality of mortgage backed securities started to fall (Acharya et al, 2009). These developments indicated that the liquidity provision by the central banks were insufficient and ineffective to resolve the crisis. On the other hand, Wall Street paid bonuses in millions to their top traders, in the midst of the crisis. The above moral hazard pay structures created a conflict between achieving the interest of managers and that of shareholders/ other stakeholders and made the liquidity provisions by central banks ineffective in resolving the crisis.

(ii) Bailout packages from the governments

As the liquidity support program failed to fix the crisis, the US and the EU governments stepped in to bail out the failing institutions. Acharya et al (2009) have stated that the US Treasury proposed the Troubled Assets Relief Program and the Emergency Economic Stabilization Act which was approved after some controversy. No plan has been implemented to resolve housing crisis despite the housing price bubble was the core of the crisis. Further, the bail out packages of Fed were designed on ad-hoc basis rather than a principle based pre planed response to the crisis. Bailout packages focused on resolving issues with illiquid assets but ignored issues with defaulted mortgages and foreclosures (Acharya et al, 2009). Use of tax payers' money without a considerable return for bailing out institutions sparked public unrest in the US. As stated by Acharya et al (2009), between USD 13 to USD 70 billion of taxpayers' money was used for the purpose of bail out packages for financial institutions, at a flat return of 75 basis points per annum.

Overall, the bail out packages introduced by the Fed Reserve were ineffective. According to Acharya et al (2009), the Fed Reserve failed to come up with a credible long term solution to protect feasible banks and to promptly resolve the bankrupt institutions, to restore investor confidence in the system and on the policy makers. On the other hand, bail out plans of UK were reasonably priced, more voluntary in nature, relied on maket information and appropriate for smooth transition over a period in the market (Acharya et al, 2009).

(iii) The Dodd-Frank Wall Street Reform and Consumer Protection Act

Dodd-Frank Act provides a comprehensive set of financial sector reforms, since the Great Depression. As mentioned by Scholes (2010), he Act required the formation of a Systemic Risk Council to identify and regulate systemic risk, proposed to move away from the concept of too-big-to-fail and required to implement an orderly liquidation procedure for institutions without using tax payers' money. The Act limited the emergency funding assistance to individual institutions. The Volker rule ring fenced the business of bank holding companies and limited proprietary trading business. It also provided regulations for complex derivative products and required to set up the central clearing system for derivatives. Further, the Act introduced a number of reforms with regard to mortgage lending, hedge funds, operations of rating agencies, securitisation market, money market funds, corporate governance and consumer protection.

However, the Act failed to address some of the key concerns that caused the crisis. Scholes (2010) stated that the Act did not address the excessive risk taking and moral hazard behaviour, as safety nets and government guarantees continue to provide subsidised financing to institutions facing liquidity and solvency issues, which may induce them to take on higher risks and propagate moral hazard behaviours. Although the Act deals with orderly liquidation of large institutions with their own funds, however, it fails to address the socio-economic and systemic costs arising from the failure of such institutions. The Act has also been criticised for not implementing adequate regulations on the shadow banking system, which was one of the main causes of the crisis.

(iv) Introduction of Basel III standards

In the aftermath of the financial crisis, policymakers globally worked together to renew the rules which govern financial institutions and markets. The Basel Committee on Banking Supervision, has introduced the Basel III framework with an international timeline for compliance. The framework includes (i) risk based capital standards focusing more on quality of capital to withstand losses under stress, (ii) a non-risk based leverage standards and (iii) liquidity standards viz., Liquidity Coverage Ratio and Net Stable Funding Ratio.

The capital standards introduced:

(a) Common Equity Tier 1 ratio of 4.5% strengthen the going concern capital in banks to absorb losses during crisis,

(b) Capital Conservation Buffer of 2.5% of risk weighted assets to help banks to absorb losses during crises,

(c) Counter Cyclical Buffer of 2.5% of risk weighted assets to curtail excessive credit growth, which is a key cause in many financial crises in the past,

(d) Capital Buffer of 1.5% of risk weighted assets for Globally Systemically Important Banks to avoid a systemic and contagion risks which propagates a global level financial crisis.

(e) Tightening calculation of risk weights assets particularly on market risk, securitisation and counterparty credit risk. This would require banks to have additional capital to absorb losses arising from such risks.

The liquidity standards include (i) Liquidity Coverage Ratio and (ii) Net Stable Funding Ratio. The former requires banks to maintain adequate level of high quality liquid assets to meet their net cash outflow within the next 30 days under liquidity stress situation and the latter requires banks to keep stable funding sources in proportion to on and off balance sheet assets.

Leverage standards require banks to have a non-risk based Leverage Ratio of 3 per cent to restrict accumulation of excessive on and off balance sheet leverage in banks and to avoid any destabilizing or deleveraging processes in the system.

Even though, Basel III is a comprehensive framework, many financial institutions and markets have already started to put pressure on regulators by requesting for regulatory forbearances and deferments of implementation of capital buffers stipulated by the Basel III framework. Stefan Ingves, the Chairman of Basel Committee on Banking Supervision in his speech at the Goethe University of Frankfurt, stated that "it is concerning to see ongoing lobbying efforts by some banks and other stakeholders to dilute aspects of the agreed Basel standards in some jurisdictions. The unsound expedient of adopting standards that fall below the Basel Committee's minimums can only lead to regulatory fragmentation, and in a bad scenario a potential race to the bottom" (Ingves, 2018, p. 3).

(v) Shift towards macro-prudential regulations and inter regulatory/ cross border cooperation and coordination

The 2008 global financial crisis, especially the subprime lending crisis in the US and liquidity crisis in the UK, led the regulatory world to concentrate more on macro-prudential surveillance to address the system-wide risk. Many Micro-prudentialists argued that the banking or financial sector regulators mostly focused on the micro-prudential elements to ensure the stability of individual banks while neglecting the macro-prudential component which mitigates the systemic crisis. Regulators neglecting the macro-prudential component in addressing the system-wide risk was one of the reasons for the global financial crisis. Subsequent to the 2007–2008 global financial crisis, the significance of strengthening macro-prudential regulations appear to have been well understood by regulators. Accordingly, the shift in policy paradigm towards acceptance of the macro-prudential regulatory concept was considered a game changer. Macro-prudential regulations take into account the interconnectedness of macro-financial links between financial institutions, financial sector and the real economy (Siregar, 2011). Conducting consolidated surveillance of systematically important financial institutions including banks, leasing and finance companies, investment banks and insurance companies, is an example of macro-prudential regulation.

2008 global financial crisis showed that stress in one institution/ sector spread quickly to interconnected institutions, across sectors and across jurisdictions, forming a systemic crisis. The crisis proved that micro-prudential supervision was not enough to sustain the stability of the financial system. Accordingly, regulators all over the world recognized the importance of a more comprehensive macro-prudential approach to consider a wide range of market and economic factors beyond the level of individual institutions, that could have a material impact on the overall financial system stability of the country. According to Siregar (2011), the macro-prudential tools adopted by various regulators include:

(i) Macro-prudential policies to mitigate the buildup and propagation of systemic risks.

(ii) Macro-prudential surveillance to improve the capacity to identify systemic risks on a timely basis.

(iii) Information sharing among inter-regulatory and cross-border agencies to strengthen inter-agency cooperation and coordination for sharing and assessing information on systemic risks.

(iv) Review individual mandates of agencies to ensure macro prudential considerations have been given appropriate weight.

(v) Strengthen analysis of interactions among different parts of the financial system E.g.: (i) network effects from counter party risks and common exposures, (ii) systemic effects from distressed asset sales and (iii) feedback effects between financial and real sectors.

(vi) Further development of specialized tools. E.g.: adding more behavioral features to simulation models of household indebtedness

(vii) Top-down and bottom-up stress testing to identify systemic risk.

On the other hand, efforts have been taken to strengthen the apparatus related to inter-regulatory and cross-border cooperation and coordination. This includes:

(i) Establishment of a formal mechanism to share the regulatory information among and between inter-regulatory and cross-border regulatory agencies to provide an opportunity for the prudential supervisor to hear views of other authorities with regard to potential exposures to systemic risks.

(ii) Enhancement of cross-boarder banking resolution tools for crisis management, cross boarder bank resolution and deposit insurance.

4. Conclusion

Financial crisis cannot be eliminated as the financial system continues to evolve over time, generating a host of new products and services to cater to the needs of the market that vary from time to time. These products and services are also affected by the changes in the business cycles. FinTech and other forms of digital access to finance not only increased the level of threats in certain existing risks, but also brought in new risks to the financial system. Due to the dynamic nature of financial institutions and markets, policy makers and regulators find it difficult to anticipate potential crises and assess the levels of risks. However, it is important to take proactive measures to mitigate the risk of crises by the early detection of potential signals of crisis, conducting crisis simulation exercises and preparing to face the crisis to contain the damages. Although financial markets and institutions played a key role in causing the Global Financial Crisis of 2008, via deregulation, excessive securitation, propagation of complex and non-transparnent financial instruments, alarming leverage levels, lucrative bonus structures for higher risk taking, convoluted ratings, etc, the multipronged approach to reolve the crisis also involved the financial markets and institutions; namely, loose monetary policy, fiscal stimulus, bank restructuring and the introduction of capital standards. Thus, regulators should shift their focus towards macroprudential regulations, cross border cooperation and coordination amongst instituions to minimize the negative consequences of future financial crises.

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Deposit Insurance in Sri Lanka and Regional Experiences

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1. What is Deposit Insurance

Financial institutions play an important role in the circulation of money in an economy. Banks are engaged in the task of borrowing from surplus sources and lending to sources with deficits, or in other words, taking deposits from customers and lending to those who need funds. Finance companies are permitted to take deposits and they are able to invest these deposits in investment projects or other investment ventures as a means of generating an income. Both banks and finance companies are obliged to pay back their depositors when such deposits become due or matured. A crisis occurs when they are unable to pay back such deposits at the correct time.

Deposit insurance is a measure implemented in many countries to protect depositors of banks and financial institutions, in the event that a bank or financial institution becomes unable to pay customer deposits when they become due. A well implemented deposit insurance scheme would also ensure the depositor confidence through the provision of prompt pay-outs which would in-turn contributes to the stability of the financial system in a country by acting as a safety net in the event that a bank or a financial institution fails to meet depositor obligations. Therefore, deposit insurance schemes have a significant impact on the lives of individuals, especially depositors of failed financial institutions, by acting as a safety net mechanism to provide compensation for their deposits. This also ensures the stability of the financial system and non-disruption of economic activities. Examples for other safety net mechanisms includes, prudential regulation and supervision, lender of last resort facility and emergency liquidity assistance.

History of Deposit Insurance

As per the historical records, it appears that the first country to operate a deposit insurance scheme was Czechoslovakia. Deposit insurance systems have also operated in different states of America as early as the 1920s. However, a successful deposit insurance mechanism was introduced as a result of the "Great Depression" which started in 1929 and lasted till late 1930s in the United States. The Great Depression caused huge losses in the US banking and financial system, and many depositors incurred heavy losses as well. This situation affected many economies in the world and resulted in the failure of many banks across the globe. This led to the establishment of Federal Deposit Insurance Corporation (FDIC) in the United States in 1933 and covered the entire deposit taking financial institutions sector in America. Subsequently, the Deposit Insurance and Credit Guarantee Corporation of India was established in 1962.

Deposit Insurance in the Modern Context

The global financial crisis in 2008 reiterated the importance of deposit insurance in promoting financial system stability and its role as an overall financial safety net for banks and financial institutions. Accordingly, many countries introduced new deposit insurance schemes or extended the scope and the coverage of existing schemes to restore depositor confidence and to protect banking sector from potential contagious bank runs.

International Association of Deposit Insurers (IADI) was established in 2002 with the objective of enhancing effectiveness of deposit insurance systems by providing guidance and promoting international cooperation among deposit insurers. IADI is providing opportunities for deposit insurers around the world to streamline their deposit insurance mandates, governing structures, funding structures and to enhance their operating mechanisms. IADI and Basel committee have jointly issued core principles for effective deposit insurance system, which acts as principles/best practices applicable in the execution of an effective deposit insurance mechanism. According to the statistics of IADI, 146 countries are operating deposit insurance systems at present, out of which some countries are maintaining multiple deposit insurance systems.

Generally, Deposit Insurance Systems (DIS) are designed to protect less sophisticated depositors in the event of a failure of a bank or financial institution. Based on the Core Principles for Effective Deposit Insurance Systems a DIS is not intended to deal, by itself, with systematically significant bank failure or a systemic crisis. All financial system safety net participants are jointly responsible for systemic crisis and must work together effectively. The cost of dealing with a system-wide or systemic failure should not be borne solely by a DIS. Generally, institutions such as the Central Bank, Ministry of Finance, Financial Supervisory agencies and DIS are jointly responsible for dealing with systemic issues thus, DIS with Pay box mandate do not deal with systemic crisis.

Mandates and structures of deposit insurance are ever evolving and basic structure of pay-box mandate has improved to mandates of pay-box plus, loss minimizer and risk minimizer mandates, which will be discussed in the latter part of this article.

2. Sri Lanka Deposit Insurance and Liquidity Support Scheme (SLDILSS)

DIS for Sri Lanka was established by the Central Bank of Sri Lanka (CBSL) under the Sri Lanka Deposit Insurance Scheme Regulations No. 1 of 2010 dated 28.09.2010. The Scheme was established with the objective of preserving financial system stability of the country and it has initially outlined a mechanism to protect small depositors from failure of financial institutions, thereby promoting the stability of financial institutions by maintaining small-depositor-confidence.

Provisions enabling the establishment of Sri Lanka Deposit Insurance and Liquidity Support Scheme (SLDILSS) were, Section 32A to 32E of the Monetary Law Act, Sections 46(I) and 76 J of the Banking Act and Section 27 to 29 of the Finance Companies Act. The SLDILSS is governed based on the Directions/Regulations and policies approved by the Monetary Board of CBSL. Deposit Insurance Unit is currently established within the Resolution and Enforcement Department of CBSL and Director, Resolution and Enforcement Department is responsible for the operational and administrative arrangements of the scheme.

SLDILSS is a mandatory deposit insurance scheme and all licenced commercial banks, licensed specialised banks and licenced finance companies of Sri Lanka shall be members of the Scheme.

Deposits insured under SLDILSS are demand, time and savings deposits. A demand deposit is money which is deposited into a bank account to be withdrawn on-demand by the depositor at any given time. A time deposit is deposited in an account to be held for a fixed amount of time, upon the lapse of which, interest for the deposit can be received in full by the depositor. A savings deposit is money deposited in a savings account.

Borrowing instruments such as promissory notes, debentures etc., are excluded from being insured. Further, the following deposit liabilities are excluded from the Scheme and shall not be considered as insured deposits:

a. Deposit liabilities to member institutions of SLDILSS

b. Deposit liabilities to the Government of Sri Lanka

c. Deposit liabilities to directors, key management personnel and other related parties excluding shareholders as defined in Banking Act Directions and Finance Business Act Directions

d. Deposit liabilities held as collateral against any accommodation granted

e. Deposits falling within the meaning of abandoned property in terms of the Banking Act and dormant deposits in terms of the Finance Business Act, funds of which have been transferred to the Central Bank of Sri Lanka in terms of the relevant directions issued by the Monetary Board.

The SLDILSS comprises a fund titled Sri Lanka Deposit Insurance and Liquidity Support Fund (SLDILSF), and it is being operated and managed by the Monetary Board of the Central Bank of Sri Lanka. SLDILSS and SLDILSF were established in the year 2010. Initial capital for the fund was derived from Abandoned Property Fund of CBSL amounting to Rs.1 bn and from Voluntary Deposit Insurance Scheme Fund amounting to Rs. 0.3 bn, which was in operation prior to year 2010 and ceased to be in operation with the establishment of mandatory deposit insurance scheme of SLDILSS in year 2010.

Sri Lanka Deposit Insurance and Liquidity Support Fund receives regular funding as premiums from the member institutions. All the member institutions shall pay premiums based on the eligible deposit balances as at end of month/quarter as may be determined by the Monetary Board time to time. Currently, licenced banks which maintained capital adequacy ratio of 14% or above shall pay premium at a rate of 0.10 per centum per annum and all other licenced banks shall pay a premium quarterly at a rate of 0.125 per centum per annum based on total amount of eligible deposits as at end of each quarter. All licenced finance companies shall pay monthly premium at a rate of 0.15 per centum per annum.

Funds of the Sri Lanka Deposit Insurance and Liquidity Support Fund are invested in Government securities, including Treasury Bills, Treasury Bonds and other marketable securities issued by the Government of Sri Lanka. Further, funds can be invested in secured loans or advances to any member institution in the instance of severe liquidity crisis in such member institution and if the Monetary Board is in the opinion that such loan/ advance will help to avoid an imminent financial panic in the member institution or in the financial system as a whole.

SLDILSS is providing an insurance coverage for all the insured depositors. Accordingly, at present, in the case of cancellation of the licence or suspension of the business of a member institution (licenced bank or licence finance company) compensation subject to a maximum of Rs.1,100,000/= or its equivalent in the case of foreign currency, shall be paid to all insured depositors of such member institutions by SLDILSS. Further, the maximum coverage is measured per depositor per institution basis and in the case of joint deposits each joint holder is considered as separate depositor.

Mandate of SLDILSS is to compensate insured depositors of the member institution in the case of cancellation of the licence/suspension of the business of such member institution, and thereby promoting the stability of financial system of the country and therefore, SLDILSS is operating with a pay-box mandate.

3. Deposit Insurance System of Sri Lanka in comparison with Deposit Insurance Systems in the regions of South Asia, East Asia and South-East Asia.

There are many conventional and unconventional DISs operated within the regions of South Asia, East Asia and South-East Asia. Conventional DISs can be defined as DIS with pay-box mandates and unconventional DISs as having mandates of resolution-plus, loss minimizer and risk minimizer mandates. As there are similarities in the issues face by Asian regions and similarities in the financial structures in the countries belongs to such regions it is worthwhile to compare the features of SLDILSS with DIS in the Asian regions. Differences can be seen in terms of the Governing and Legal Structure, Funding Structure (type of funds), System Mandate and Resolution methods/ tools available for resolution.

As indicated earlier, India was the pioneers in establishing a DIS in Asia by introducing this system as early as 1962. Further, the Philippines has established deposit insurance corporation in the subsequent year i.e., in 1963. Deposit Insurance Corporation of Japan was formed in 1971. Countries such as Bangladesh, Taiwan, Korea and Vietnam have established DIS in the late nineties. Further, countries such as Nepal, Malaysia, Singapore, Indonesia, Thailand, Hong Kong and Sri Lanka have established DIS in early twenties.

Governing and Legal Structure

Governing structure is about the legislation and administration of DIS. Accordingly, in some jurisdictions DISs are legislated and administered by the government where as in some cases they are legislated by the government but administered by a private party. Further, in some jurisdictions DIS is administered by the Central Bank. Further, there are instances where DIS is privately established and administered.

Further, legal structure analyses the legal personality for DIS whether it is independent or not. In terms of Core Principles for Effective Deposit Insurance Systems, DIS should be operationally independent and it should be able to use its powers without interference from external parties to fulfil its mandate.

The above analysis indicates that majority of DISs in East, South East and South Asian regions are legislated and administered by the Government. However, DISs of Sri Lanka & Bangladesh are administered by the Central Bank.

Further, in terms of the legal personality, it appears that except Vietnam and Sri Lanka, rest of the countries examined for the purpose of this article,

Table 01-Governing and Legal Structure

Jurisdictions / Governing and Legal structure	East Asia				South East Asia						South Asia			
	Japan	Korea	Hong Kong	Taiwan	Malaysia	Philippines	Singapore	Indonesia	Thailand	Vietnam	India	Nepal	Bangladesh	Sri Lanka
1. Government legislated and administered		*	*	*	*	*		*	*	*	*	*		
2. Government legislated and privately administered							*							
3. Privately established and administered														
4. Central Bank administered													*	*
5. Other	*[1]													
6. Independent legal structure	*	*	*	*	*	*	*	*	*		*[2]	*[3]	*	
7. Legal powers within the Central Bank										*				*

Notes

[1] - Government legislated. The Deposit Insurance Corporation of Japan (DICJ) is an authorized corporation. (Authorized corporations are corporations that are incorporated under Special Acts, with an approval from administrative agencies.)

[2] - Statutory body set up as wholly owned subsidiary of the Central Bank.

3 - Legally independent but to a large extent is impacted by the Ministry of Finance.

Source: 2019 Annual Survey of International Association for Deposit Insurers (IADI) (as of year-end 2018)

have an independent legal personality. In Sri Lanka, policy decisions with respect to SLDILSS are taken by the Central Bank. Further, it does not have the power to enter into any service contracts, by its own without the involvement of the Central Bank.

Funding Structure (type of funds)

Two main types of funding structures maintain for deposit insurance schemes. That is Ex ante funding and Ex post funding. Accordingly, DIS in different jurisdictions maintains funds as Ex ante, Ex post or both.

Ex ante funding

The regular collection of premiums, with the aim of accumulating a fund to meet future obligations and cover the operational and related costs of deposit insurer. Further, in the case of Ex ante funding, it is required to setup a Target Fund size, typically measured as a proportion of the assessment base (e.g. total or insured deposits), sufficient to meet the expected future obligations and cover the operational and related costs of the Deposit Insurer.

Ex post funding

A system in which, funds to cover deposit insurance obligations are only collected from surviving member institutions after a failure of one-member institution.

Based on the 2019 annual Survey data of IADI, deposit insurance schemes in East Asia,

South East Asia and South Asia regions are having Ex-ante funds. Further, some countries, apart from Ex-ante funding provisions are there are to maintain Ex-post funding if necessary. As an example, Malaysia Deposit Insurance Corporation can impose Ex-post funding if required other than Ex-ante funding. Further, Philippine deposit insurance charter authorize to collect special assessment from banks to maintain the target level of the deposit insurance fund.

Further, within the above mentioned two types of funding systems, DIS systems in some countries maintains multiple Fund accounts. Eg. DIS in Japan maintains nine (09) fund accounts out of which four (04) accounts relate to resolution.

Sources of Funds

Sources of funds for DIS generally comprise of initial capital, premium collections, earnings on investments, funds recovered after liquidation and outside funding and bond issuance as alternative source of funding. Different jurisdictions charge general premiums as well as extra ordinary premiums during different periods and situations.

In terms of the core principles for effective deposit insurance, emergency funding arrangements including prearranged and assured sources of liquidity funding are explicitly set out in laws and regulations. Sources may include funding agreements with the Government, the Central Bank or market borrowings.

Alternative funding sources widely used by South Asia, East Asia and South-East Asia Region can be summarised as in the following table. This can be either borrowing from the Government (Ministry of Finance), Central Bank or other financial market or funds raised through bond issuance.

The above analysis indicates all the DISs analysed within East, South East and South Asian regions are maintaining Ex ante funds including Sri Lanka. In Japan both Ex ante and Ex post funds are available. Further, in Sri Lanka one fund account is maintained where as in some other countries multiple fund accounts have been created in different periods for different purposes within DIS mandate. Further, premiums are the main source of funding while some jurisdictions have charged extra ordinary premiums. Further, funding sources such as Government funding, Central Bank Funding, issuance of bonds in the market and borrowing from private financial institutions are been used as additional and back-up funding sources by many jurisdictions. However, no back-up funding arrangements are available for Sri Lanka yet, though the SLDILSS Regulations permits borrowings.

System Mandate

DIS in different jurisdictions have mandates

Table 02 – Alternative funding sources for DIS

Jurisdictions / Sources of Funds	East Asia				South East Asia						South Asia		
	Japan	Korea	Hong Kong	Taiwan	Malaysia	Philippines	Singapore	Indonesia	Thailand	Vietnam	India	Bangladesh	Sri Lanka
1.Government		*	*		*		*	*	-	*[4]		*	-
2.Central Bank	*[1]	*[2]	*	*[3]		*			-	*	*		-
3.Other Financial Market#	*	*	*	*	-	*[5]	*	-	*	*	-	-	-
4. Bond Issuance	*[6]	*[7]	-	-	*[8]	*	*[9]	-	*[10]	*	-	-	-

Notes

Other financial markets exclude member institutions but include internal and external financial markets as well as international financial institutions.

[1] –The government act as the guarantor.

[2] – For the finance provided by the Central Bank, the government act as the guarantor.

[3] – The government and Central Deposit Insurance Corporation Taiwan, act as guarantor.

[4] –Special lending or financial support is from the government.

[5] –Banks designated as depository or fiscal agents of the Philippine government.

[6] –Government guaranteed Deposit Insurance Fund bonds.

[7] –Government guaranteed and Deposit Insurance Fund bonds and Bond Redemption Fund bonds.

[8] –Any Debt Instruments with the government guarantee.

[9] –Any Debt Instruments.

[10] –Deposit Insurance Bonds, Bills or other financial instruments according to rules procedures and conditions as prescribed by the Board and approved by the Ministry of Finance.

Source*: Research Subcommittee of Asia-Pacific Regional Committee, (2011) Funding Mechanisms of Deposit Insurance Systems in the Asia-Pacific Region, Research Paper, International Association of Deposit Insurers*

extending from narrow systems ("pay-box") to those with broader powers and responsibilities such as risk or loss minimization with variety of combinations in between.

Types of system mandates in brief

Pay-box – a mandate where the deposit insurer is only responsible for the reimbursement of insured deposits.

Pay-box Plus – a mandate where the deposit insurer has additional responsibilities such as limited/certain resolution functions, e.g. financial support.

Loss Minimizer – a mandate in which deposit insurer actively engages in a selection from a range of least cost strategies such as purchase and assumption, bridge bank.

Risk Minimizer – a mandate in which a deposit insurer has comprehensive risk minimisation functions, including risk assessment/management, a full suite of early intervention and resolution powers, and in some instances, prudential supervision and oversight responsibilities.

Conclusion

SLDILSS has been established after the global financial crisis happened during 2007-2008 as an initiative to promote system stability of the country. Analysis of core principles and best practices in the region indicates, SLDILSS is in need of number of structural improvements to be done. There is an urgent requirement to strengthen the legal and governance structure of SLDILSS. Effectively, it should have a legal personality to operate the Scheme independently, though it is housed within the Central Bank of Sri Lanka. Therefore, it is vital to have powers enacted through an Act incorporated in the Parliament.

Table 03 – DIS Mandates

Jurisdictions / System mandate	East Asia				South East Asia						South Asia			
	Japan	Korea	Hong Kong	Taiwan	Malaysia	Philippines	Singapore	Indonesia	Thailand	Vietnam	India	Nepal	Bangladesh	Sri Lanka
1. Pay-box			*								*	*	*	*
2. Pay-box Plus							*		*	*				
Loss Minimizer	*					*		*						
Risk Minimizer		*		*	*									

Source: 2019 Annual Survey of IADI (as of year-end 2018)

The above analysis indicates that all the selected South Asian Countries and Hong Kong have pay-box mandate. Further, South East Asian countries such as Singapore, Thailand and Vietnam are having Pay Box plus mandates. Countries like Singapore and Thailand have moved from Pay-Box framework to Pay-Box plus mandates subsequently. Japan, Philippines and Indonesia possesses loss minimiser mandate. Further, countries like Korea, Malaysia and Taiwan hold risk minimiser mandates.

Further, in the event of shortage of funds available in the scheme, it is essential to have emergency/ contingency funding arrangements, to serve the objectives of establishing the deposit insurance Scheme. In terms of the best practices, it is required to set emergency funding arrangements in the DIS law. Further, operational arrangements must be made to ensure availability of such funding arrangements as and when required. Therefore, it is appropriate for SLDILSS to enter into back up funding arrangements with the government/ Ministry of Finance as the system liability responsibilities could ultimately be rest with the government. Ability to charge extra ordinary premiums under the special circumstances can be provided in the law to be utilised under special circumstances.

SLDILSS is currently operates with pay-box mandate. However, DISs around the world are moving from pay-box mandates to pay-box plus, loss minimiser and risk minimiser mandates. Therefore, for Sri Lanka it may appropriate to move from existing pay-box mandate to pay-box plus/loss minimiser mandates, thereby enabling to use least cost resolution tools such as purchase and assumption/vesting of part or entire business and bridge banking concept, etc.

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