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BOND MARKET DEVELOPMENT IN MYANMAR

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BOND MARKET DEVELOPMENT IN MYANMAR

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ABSTRACT

The subject of this paper discuss about bond market development in Myanmar by evaluation the experiences of Cambodia, Laos and Vietnam. The objectives of the study are (1) to identify the current situations of bond market development in CLMV countries and (2) to examine the requirements for bond market development in Myanmar. Myanmar Government finances the budget deficit by selling bonds so that a study is made on the bond market of Myanmar to learn the extent of coverage of bonds to budget deficit. And then, using online survey questionnaires, research the what kinds of challenges Myanmar face and what Myanmar should do immediately to development the bond market. All those studies are related with key determinants of bond market development of the emerging economies. Myanmar could issue and trade only government treasury bonds and has not yet issued municipal bonds and corporate bonds. In Myanmar bond market, 97.61% of outstanding bonds are in the hands of private investors, especially private banks. Using survey method with describing perceived key factors in all ranking, the overall result indicates that political risk, legal enforcement, legal risk and market risk have been given the largest number of respondents on agree and strongly agree to enhance the bond market in Myanmar. Like other developing economies, government bonds influence as debt instrument in the Myanmar financial sector at the moment. Hence, development of government bond market is the priority issue of Myanmar's bond market. Based on the finding from analysis of secondary data of bond market in CLMV and results from survey also gives some relevant suggestion for development of bond market in the future. To build an efficient and systematic government bond market the necessary infrastructure of a bond market such as regulatory frameworks, efficient regulatory body, auction method, two-way price quoting system by the primary dealers for bond trading market should be introduced. Moreover, if necessary, it is recommended that Myanmar should seek technical assistance from ASEAN and other multilateral organizations. As suggestion for policy advocacy, to be a successful bond market in Myanmar, those should be considered that to upgrade primary bond market as fully active secondary market, to enhance the liquidity in the secondary market for Government Bonds, to expand investor base in bond market apart from local private and state-owned banks, to be compatible government budget deficit and bond issue plan and to improve awareness of financial knowledge and capital market literature for the general public.

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ABBREVIATIONS

ABMI	Asian Bond Market Initiatives
AD	Aggregate Demand
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
BOL	Bank of Laos
BOT	Bank of Thailand
CBM	Central Bank of Myanmar
CAMNICO	Cambodia National Insurance Company
CLMV	Cambodia, Laos, Myanmar and Vietnam countries
CMDC	Capital Market Development Committee
CPI	Consumer Price Index
CSO	Central Statistical Organization
CSX	Cambodia Stock Exchange
DIR	Daiwa Institute of Research
DVP	Delivery versus Payment
FY	Fiscal Year
FIE	Fixed Income Exchange
FRTNs	Floating Rate Treasury Notes
FTB	Foreign Trade Bank
GDP	Gross Domestic Products
HASTC	Hanoi Securities Trading Center
HOSTC	Ho Chi Minh Securities Trading Center
HNX	Hanoi Stock Exchange
IMF	International Monetary Fund
IOU	I Owe You (Written Record of Debt)
LCY	Local Currency
LSX	Lao Securities Exchange
MEB	Myanmar Economic Bank
MEF	Ministry of Economic and Finance
MNPED	Ministry of National Planning and Economic Development
MOF	Ministry of Finance and Revenue

MSEC	Myanmar Securities Exchange Centre
NAS	National Accounting System
NBC	National Bank of Cambodia
NCDs	Negotiable Certificates of Deposit
ODA	Oversea Development Assistant
OTC	Over the Counter
PAPRD	Project Appraisal and Progress Reporting Department
SECM	Securities and Exchange Commission of Myanmar
SFA	State Fund Account
SOEs	State Owned Enterprises
SDR	Special Drawing Rights
STRIPS	Separate Trading of Registered Interest and Principal Security
T bills	Treasury Bills
TSE	Thai Stock Exchange
SEC	Thai Securities Exchange Commission
VBSP	Vietnam Bank for Social Policy
VDB	Vietnam Development Bank
VEC	Vietnam Expressway Corporation
VSD	Vietnam Securities Depository
YSX	Yangon Stock Exchange

CHAPTER 1
INTRODUCTION

According to Eli-2010 the role of budgeting in a developing country is much different from that of developed country. He adds that budgets are used in developing countries as an integral part of development planning owing to the un-cyclical and chronic nature of unemployment in developing countries that reflect structural bottlenecks of developing economies. Today just like in the past, deficit budget policy has reminded a famous instrument of fiscal policy used to increase the rate of economic growth. The most popular model of deficit finance is borrowing which done through issuance of government bonds.

Bond markets provide the means to fulfill mid-and long-term funding needs. They contribute to reduce the financial risk of the overall economy, provide the government with a non-inflationary source of finance, create a well-balanced financial environment and promote economic growth. Capital for development schemes can be easily obtained from deficit financing.

Deficit budgeting is common characteristic of almost all budget in today's world. Deficit financing means the government is spending in excess of revenue and the deficit is being met by drawing money from the Central Bank of the country. This lead to creation of money a move that can be helpful in initiating the process of development where a large volume of unemployed resources exists. It will bring about not only an expansion of the monetized sector but also provides an easy way of obtaining capital for development schemes.

The main danger from deficit financing, according to Kosimbei-2003 is inflation. Kosimbei explains that the economy may have to face inflationary pressure if the excess propensity to consume does not correspondingly lead to as increase that level of output due to some bottle-necks of economic system. He further reiterates that there is the possibility of price levels rather that the output levels increase as a result of deficit financing creating more problems than it has solved.

He advises that for deficit financing to be successful, there should be correct forecasting about the possible development in future in the field of production and consumption. Kaplanoglou and Rapanos (2013) note that if forecasting is correctly done and price level does not materially increase, the deficit financing will become a blessing for economic development.

Bond markets enable the performance of key activities that are crucial to economic growth and also play a pivotal role in the development of stable and efficient financial markets. Due to the importance of these markets to the entire economy, it is necessary that governments lead the process of developing bond markets by creating a domestic government securities market.

1.1 Rationale of the Study

All government's budget deficits need to be financed. Government can finance its budget in three ways. All the ways of financing have impacts, positive and negative on economy of the country. It can be raised revenue through tax rates and expand tax base, such as personal and corporate income and commercial taxes. Second, it also can be financed with printing money; raising the revenue by creation of new money in the currency circulation, known as seignior age. Third, it can borrow from public by issuing government treasury bonds.

Financing by raising tax polices encourage investment can raise the growth rate and level of utility. Inflation reduces growth by reducing investment and productivity, budget deficits also reduce both capital accumulation and productivity growth. However, while running chronic budget deficits would have to create more money and issue more bonds to finance its spending gaps.

A bond market also provides a basic infrastructure for the development of financial system and the overall economy. Therefore, Myanmar has been endeavoring for the development of government bond market. Government has been issuing treasury bills and bonds since 1993. Moreover, Myanmar has to participate in the ASEAN Bond Market Initiatives as one of the ASEAN member countries. That's why authorities concerned must be pay attention for the development of government bond market.

A change of government in 2010, Myanmar new government takes reform measures in many areas. Regarding this, the financial sector reforms play a critical role to develop the nation's economy. Financial sector in Myanmar has comprised banking channel and non-banking channel, and banking business is a dominance part of the financial sector in Myanmar. Since there is a lack of different types of financial instruments, banks are the major source of funds for borrowers who need to raise their funds. On the other hand, investors also have very limited options to invest their money. Mostly are interested to invest in the real estate sector with speculative motive rather than the financial products in Myanmar.

Even thought, Yangon Stock Exchange (YSX) was established in 2015 March, most of investors are unwilling to invest in stock because of the lack of knowledge regarding the Stock and Share. They are willing to invest rather in short-term profitable one than longer one as usual as historical practices.

On the other hand, borrowers particularly firms have to rely heavily on bank loans for raising their funds. Currently, borrowing funds from banks in Myanmar has existed with some constraints. When a company needs money to expand its business and company also does not have sufficient amount of company's asset as collateral, directors have to give their personal asset as additional collateral. Otherwise, they could not borrow from banks. This is a similar scenario in developing economies to boost their economy. As a borrower's perspective, it is difficult to find for raising funds with limited channel of source of funds within the country. Borrowing money from bank is not possible without any immovable properties as collateral in many cases in Myanmar. For all these reasons, bond market is needed for improving to extend the scope of the financial sector.

In line with the market-oriented system, Myanmar government has been implementing infrastructure projects for the economic development. Government debt has been consistently increasing due to the substantial need to invest in basic economic and social infrastructure sectors. There are various interpretations of the concept of government debt. In a broad sense, government debt represents the whole national debt including such implied indebtedness as the effective borrowing through deposits at public institutions and the implied indebtedness involved in keeping government employees on the payroll. On the other hand, in a narrow sense, it is monetary debt in this sense, includes government bonds, long-term borrowing, short-term borrowings and so on. Although government bonds are classified into several types according to their purpose of issuance, in this presentation, Government Bonds are used to finance government expenditure. Therefore, Myanmar government has been financing for those sectors' projects by issuing government treasury bills and bonds instead of printing money.

1.2 Objective of Study

The specific objectives of the study are as follows:

(1) To identify the current situations of bond market development in CLMV countries and

(2) To analyse the challenges of bond market development in Myanmar.

1.3 Scope and Method of the Study

Descriptive analysis and comparative analysis are used with both primary and secondary data in this study. In this study, to identify the perceived impact of some crucial factors on development of bond markets in Myanmar by using survey questionnaires. The required secondary information and data are collected and gathered from the Central Bank of Myanmar's quarterly financial statistics bullets, proper official reports, related books and papers, seminar materials and internet websites.

This study evaluates the current government bond markets situation in CLMV countries and examine the requirements of bond market development in Myanmar by using online survey questionnaires. One country, Vietnam market for government bond and corporate bonds have been developed.

1.4 Organization of Study

The paper is divided into five chapters. Chapter one explains objectives, method and scope of the study. In chapter two expresses theoretical background including concept of budget and government bond, role of bond market, factors for bond market development, and measuring the development of local currency bond market. Chapter three describes the overviews on government bond markets in CLMV, includes government bonds history and background in CLMV, government securities issues, bond market in CLMV countries and current situation of CLV bond markets. In Chapter four expresses current situation of bond market in Myanmar, holding position of bond outstanding structure in Myanmar, evaluation on bond issuance in Myanmar and examine on survey questionnaires results regarding the requirements for Myanmar Bond Market. Chapter five presents findings and recommendations for Myanmar bond market development.

CHAPTER II

THEORETICAL BACKGROUND

This chapter includes four parts. The first part presents concept of budget, fiscal and monetary policy, and financing deficit budget. In the second part mention basic terminology of bond market. The third part of this chapter presents the role of government bond in the economy and measuring the development of local currency bond market. The last part of this chapter describes the factors of bond market development and domestic bond market development in emerging economies.

2.1 Concept of Budget and Government Bond

2.1.1 Definition of Government Budget

Government budget, forecast by a government of its expenditures and revenues for a specific period of time. In national finance, the period covered by a budget is usually a year, known as a financial or fiscal year. Budget needs to be passed by the legislature or the Finance Minister to the nation. As the government budget is a very broad concept. This comprise of -

(i) Revenue budget; The revenue budget shows the current receipts of the government and the expenditure that can be met from these receipts.

(ii) Capital budget; Capital budget shows the requirement of the government and the pattern of their financing. It consists of capital receipts and capital expenditure of the government.

The budget plays a significant role in the implementation of the economic policy and contributes to efficient tackling of economic targets of various sectors of an economy. It is also one of the most important mechanisms allowing to perform economic activities to be achieved complying with policy objectives. In the case of the government, revenues are derived primarily from taxes. Government expenses include spending on current goods and services, which economists call government consumption or expenditures; government investment expenditures such as infrastructure investment, R&D expenditure; and transfer payments like unemployment payment and retirement benefits.

The government budget also expresses the government's fiscal policy. In theory, the resulting deficits would be paid for by an expanded economy during the boom that would follow. Budget position may be three statements; balanced budget, surplus budget, and deficit budget. Generally speaking, the aim of most government fiscal policies is to target the total level of spending, the total composition of spending, or both in an economy. The two most widely used means of affecting fiscal policy are changes in government spending policies or in government tax policies.

If a government believes there is not enough business activity in an economy, it can increase the amount of money it spends, often referred to as "stimulus" spending. If there are not enough tax receipts to pay for the spending increases, governments borrow money by issuing debt securities such as government bonds and, in the process, accumulate debt; this is referred to as deficit spending.

A budget deficit is happened when government spending more money than it is receiving. A deficit is the difference between government spending and revenues. If government attempted to solve the budget deficit by increasing the rate of taxes and cut spending in order to reduce the budget deficit in the future, this may cause reduced incentives to work due to higher taxes.

The accumulation of budget deficits over time is the total public debt. Deficit finance allows governments to smooth tax burdens over time, and gives governments an important fiscal policy tool. As financing of budget deficit, if government sells more bonds that is likely to cause interest rates to increase. This is because of bond's coupon rate will have to be more than real interest rates in order to attract investors to buy the extra debt of bond. If government coupon rates increase, this will push up other interest rates as well. In extreme circumstances the government may increase the money supply to pay the debt, this will also cause inflation.

If there are requirements in investment for the economic sectors such as under provision of education or public transport, the government should increase spending on these public services. In the short run this may cause a deficit however if they increase productivity then in the future there will be a higher rate of economic growth and more tax revenues.

2.1.2 Financing for Government Budget

Government budget or government revenue can be financed primarily in three ways:

(i) Government revenue includes taxes, non-tax revenue such as revenue from government-owned corporations, sovereign wealth funds, and sales of assets.

(ii) Government borrowing or Debt

(iii) Printing of Money

The choice of government to finance its revenues for expenditures of development and administrative activities can have effects on the distribution of income and wealth and on the efficiency of markets.

The Budget performs following five key functions in a county -

(i) Allocation function: The Budget guides the development process in the County through resource allocation.

(ii) Distribution function: The Budget ensures balanced distribution of the County’s resources and that wealth is realised through identification of sectors that need renewed focus and affirmative action.

(iii) Stabilization function: The Budget helps to attain and maintain a desired level of economic performance in the County. There are some desired levels of stability that citizens require.

(iv) Fiscal transparency: The Budget ensures transparency, especially in the manner in which public expenditure is managed. Public information provides a clear reflection of the Government’s expenditure priorities. It, therefore, forms a basis through which citizens can challenge the County Executive over its stated policies and public announcements.

(v) Control function: Budgets are useful because they provide a basis for evaluating performance. Performance evaluation is carried out by comparing actual performance with planned or budgeted performance.

Government borrowing can take place when a government's tax revenues are insufficient for its spending. The Government then must borrow to make up the expenditure revenue gap, this is a budget deficit. Government's policy makers often consider in what means they employ to finance the defici1s. Regards to borrowing, Governments or any other agencies, can take out loans, issue bonds and bills to make financing the deficits. Borrowing becomes government debt (also known as public debt or national debt) that is money (or credit) owed by any level of government. It can be seen as an indirect debt of the taxpayers.

Regarding to printing of money, many modem economies actually prohibit direct "money creation". It is common practices of government given consideration the policy of using new money creation to finance budget deficits. When faces a budget constraint, policy adopted to be financed by "money creation". It is supposed that the last option through central bank-which could buy the government's bonds, and hence finance deficit spending by "printing money".

Budget deficit or more spending than revenues of the government needs to be financed through some other means of financing. Many countries have the added benefit of being able to print their own currency. This does lower the value of the currency as more money supply is available.

There are direct connections between budget deficits and macroeconomic instability. The emergence of any macroeconomic instability depends on the way, how budget deficits are financed. These several options of the budget deficit financing are government bonds selling, borrowing from abroad, monetization and selling of state assets.

Government bonds in financing budget- deficits are issuance of Treasury bills, notes and bonds as resource mobilization of public. Bond financing is a type of long- term borrowing that governments frequently use to raise money, primarily for long- lived infrastructure assets. In exchange, the government promises to repay this money, with interest, according to specified schedules. The interest the state has to pay investors on the bonds which issues for public infrastructure is exempt from income taxes.

The bond selling at the domestic financial market leads to increase in demand for private funds in the economy. The more funds the government deficit demands the less money will remain for the private investments. The excess demand for money will invoke rise in interest rates. Higher interest rates, according to the theory, stimulate private sector and households to increase savings and shift some investments towards the future. By such a case, public expenditures (deficits) can be crowding out private investments.

Government's printing money is an alternative means of financing. Actually, it is creating more credit denominated in that country's currency. In financing the budget deficit by selling bonds, it requires interest payments in the future to repay the bonds. As bills come due, it needs to simply create more credit and paid it off. The main disadvantage of financing the budget deficit in this way is that the government must pay interest on loans. The main advantage of the budget deficit is that the government can carry out large projects that help its citizens. However, debt financing has the same effect that can lower the value of country's currency.

2.1.3 Bond Market

"Bond Market" is a mechanism providing funds for public and private which required money for doing their business. It is one part of the capital market. In bond market, participants can issue new debt as a primary stage and they also can buy and sell these debts as a secondary market. There are two types of bond market named as primary market or issuing market and secondary market or trading market.

(a) Primary Market (Issuing Market)

The primary market is the part of the capital markets that deals with the issuance of new securities. A market is primary if the proceeds of sales go to the issuer of the securities sold. The term also applies to government securities auctions. Government or public or private sector institutions can obtain funding through the sale of a new stock or bond issue. This is typically done through a syndicate of securities dealers. The process of selling new issues to investors is called underwriting. In the case of a new stock issue, this sale is an initial public offering (IPO). Dealers earn a commission that is built into the price of the security offering; through it can be found in the prospectus. Features of primary market are: -

(i) This is the market for new long term capital. The primary market is the market IPO the securities are sold for the first time. Therefore, it is also called New Issue Market (NIM).

(ii) In a primary issue, the securities are issued by the issuer directly to the investors.

(iii) Primary issues are used by companies or issuers for the purpose of setting up new business or for expanding or modernizing the existing business.

(iv) The primary market performs the crucial function of facilitating capital formation in the economy.

(v) The new issue market does not include certain other sources of new long term external finance, such as loans from financial institutions. Borrowers in the new issue market may be raising capital for converting private capital into public capital; this is known as 'going public’. (http://en.wikipedia.org/wiki/Primary_ market)

The selection of the method of sale of government securities means determining the number of participants in the auctions of government securities, opportunity to expand the investor base, the costs for financing budget deficit, transparency of sale, etc... The auction theory determines four basic methods of auction, those being the following: multiple price method, uniform price method, ascending price method and descending price method.

(b) Secondary Market (Trading Market)

The secondary market is the financial market for trading of securities that have already been issued in an initial private or public offering. Alternatively, secondary market can refer to the market for any kind of used goods. Once a newly issued stock is listed on a stock exchange, investors and speculators can easily trade on the exchange, as market makers provide bids and offers in the new stock. In the secondary market, securities are sold by and transferred from one investor or speculator to another. It is therefore important that the secondary market be highly liquid. Secondary marketing is vital to an efficient and modem capital market. (http://en. wikiepdia.org/wiki/ Secondary_ market)

(c) Stock Exchange

A stock exchange, share market or bourse is a corporation or mutual organization which provides facilities for stock brokers and traders, to trade company stocks and other securities. The securities traded on a stock exchange include: shares issued by companies, unit trusts and other pooled investment products and bonds. To be able to trade a security on a certain stock exchange, it has to be listed there. Usually there is a central location at least for recordkeeping, but trade is less and less linked to such a physical place, as modem markets are electronic networks, which gives them advantages of speed and cost of transactions.

Trade on an exchange is by members only. The initial offering of stocks and bonds to investors is by definition done in the primary market and subsequent trading is done in the secondary market. A stock exchange is often the most important component of a stock market. Increasingly, stock exchanges are part of a global market for securities. (http://en. Wikipedia .org/wiki/Stock exchange, accessed on 15th October, 2015)

(d) Over-the-Counter (OTC)

Over-the-counter (OTC) trading is to trade securities that are not listed and traded on an organized exchange. Over-the-counter (OTC) market is the market in which securities transactions are conducted through a telephone and computer network connecting dealers in stocks and bonds, rather than on the floor of an exchange. Over-the-counter stocks are traditionally those of smaller companies that do not meet the listing requirements of exchange. Most of bond trading are done in the Over-the-counter (OTC) market.

2.1.4 Types of Bond

Treasury notes and bonds are issued by treasury to finance the national debt and to redeem bonds at maturities for other government expenditures. T-Notes and T- Bills are backed by the full faith and credit of the government. They are default risk free instruments and pay relatively low interest rates to investors. However, they are not completely risk free. Given longer maturity, these instrument experiences widen price fluctuations than money market instruments as interest rate change. Many of older bonds and notes (off run issues) may be less liquid then newly issued bonds and notes (on the run issues), in which case they may be an additional premium for liquidity risk. In general, most of the central bank issues two type of notes and bonds: fixed principal and inflation indexed while both types pay interest twice a year, the principal value used to determine the percentage interest payment (coupon) on inflation- indexed bonds is adjusted to reflect inflation (measured by CPI). Thus semiannual coupon payments and the final principal payment are based on the inflation adjusted principal value of the security.

(a) Government Bonds

All governments issue bonds in the domestic 'bond markets to finance national schemes and major development programs. Government bonds are the most important elements of the bond markets. Government bonds are usually referred to as risk-free bonds, because the government can raise taxes or simply print more money to redeem the bond at maturity.

Government bonds are issued through agencies that are part of the government's treasury department, for example;

- Gilts are bonds issued by the UK Debt Management Office and are denominated in sterling
- US Treasuries are issued by the Bureau of the Public Debt
- Government bill and bond are issued by Central Bank of Myanamr

(b) Municipal Bonds

A municipal bond (or muni) is a bond issued by a state, city or other local government, or their agencies. Potential issuers of municipal bonds include cities, counties, redevelopment agencies, school districts, publicly owned airports and seaports, and any other governmental entity (or group of governments) below the state level. Municipal bonds may be general obligations of the issuer or secured by specified revenues.

(c) Corporate Bonds

Corporations raise money using both the domestic and international bond markets. Within this element international banks and financial institutions now account for a considerable amount of issued debt. A company can issue bonds just as it can issue stock. Generally, a short-term corporate bond is less than five years, intermediate is five to twelve years, and long term is over twelve years.

Corporate bonds are characterized by higher yields because there is a higher risk of a company defaulting than a government. The upside is that they can also be the most rewarding fixed-income investments because of the risk the investor must take on. The company's credit quality is very important. The higher the quality, the lower the interest rate the investor receives.

Other variations on corporate bonds include convertible bonds, which the holder can convert into stock, and callable bonds, which allow the company to redeem an issue prior to maturity.

(d) STRIPS

Separate Trading of Registered Interest and Principal Security, (STRIPS) is a Treasury Security in which period coupon interest payments can be separated from each other and from the final principal payment. A STRIP can effectively create two set of securities; one set is semi-annual interest payment and other set is the final principal payment. Each of the components of the STRIPS is often referred to as Treasury Zero bonds or Treasury Zero coupon bonds.

Treasury Inflation Protection Securities (TIPS) which provide returns ties to the inflation rate. The principal value of a TIPS bond can increase or decrease by the amount of inflation or deflation as measured by the percentage in CPI.

2.2 The Role of Government Bonds in the Economy

The government bond sector forms as a backbone of a modern securities market. It is the sector that contributes most to transforming savings into investment, disseminating information, managing risk, and supporting activity in other securities. Government bonds serve to implement the most important transfer of savings in an economy. The yield curve of government securities provides the paramount guide to the future behavior of inflation and interest rates. Moreover, it establishes the benchmark for the valuation of all other fixed-income securities. Government bonds mitigate domestic financial risks, allowing firms to concentrate on their advantages in production. Their superior liquidity and absence of credit risk makes government bonds an efficient proxy for trade in other securities. Superior liquidity and absence of credit risk. They are therefore excellent surrogate instruments to hedge, speculate, or arbitrage interest rates. (The Role of Government Bonds in the Economy; by Sue-Lynn Carty; Updated July 27, 2017)

This flexibility helps to increase liquidity in other securities. Government bonds also act as a catalyst that accelerates the development of new financial products and techniques. For these reasons, government bonds increase financial efficiency and thus the competitiveness of the economy.

The benefits of government bonds accrue to all economic agents, but especially to the government and the central bank. Public enterprises and local governments, financial institutions, businesses, and households also benefit from government securities. With these benefits come additional responsibilities. For example, if the government does not implement sustainable economic policies, bond markets will warn the public and help exercise control. Government bonds— and financial innovations in general— may in some instances reinforce the actions of the central bank, but they create a more challenging environment for the conduct of monetary policy. When the government issues bonds, it is essentially taking out a loan from the people who buy them. The money from bond purchases can be used to pay for government operations and projects. Bonds are available to citizens and businesses and foreign investors and governments. The most of the central bank of the countries are used the government bond as tool to achieve their monetary policy.

Monetary policy is the macroeconomic policy laid down by the monetary authority of a country, typically the central bank. It involves management of money supply and interest rate and is the demand side economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption, growth and liquidity. Monetary policy is the process by the central bank or currency board, controls either the cost of very short-term borrowing or the monetary base, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency.

Monetary policy is how a country controls its money supply. If things aren't going well—unemployment is high, growth is low—then more money flowing around the economy makes it easier for people to get loans to make big investments, which helps the economy get going again. This is called expansionary, or loose monetary policy.

But when things are going really well, there can sometimes be a problem of inflation, where prices for everything steadily increase. In these situations, the central bank may want to pull some money out of the system. The idea is that with less money in the economy, each unit is more valuable. So by decreasing the money supply, a central bank can prop up the value of its money and stop inflation.

The main way central banks control money supply is buying and selling government debt in the form of short term government bonds. Economists call this ‘open market operations’, because the central bank is selling bonds on the open market. Central banks usually own a big portion of their county’s debt. When they want to shrink the money supply, they can sell some that debt to banks or investors. People hand over money to buy the debt, and money is taken out of the economy, as money that used to be floating from person to person disappears into the central bank. When the central bank wants to add more money to the economy it can buy debt, taking government debt out of the economy and replacing it with new money.

The amount of money circulating in the national economy is the economic money supply. When this supply is too high, there is too much money in the economy this may create upward price pressure on goods and services and a steady rise in inflation, decreasing the value of domestic currency. The central bank can decrease money supply by selling bonds it already owns. By doing so, it attempts to decrease upward price pressure, curb inflation and increase the value of the domestic currency.

When the economy is growing too slowly, or is in a recession, the economic money supply is too low. This leads to an imbalance in the supply and demand for goods and services; supply is too high and demand too low. This can have a negative impact on the economy, causing job losses and wage reductions. In the case of slow economic growth or recession, the central bank buys government bonds from public to increase the economic money supply. By doing so, it attempts to increase demand for goods and services, avoid job losses and prevent the economy from slowing even further.

When the central bank decreases money supply by selling bonds, it raises interest rates. This increases the amount of money that banks are required to keep on hand in reserve requirements to cover their liabilities. Increased reserve requirements leave banks with less money to lend to consumers. This discourages borrowing and slows an economy that is growing too rapidly. When the central bank increases the money supply by purchasing government bonds, it decreases interest rates, which lowers the reserve requirements for banks. This leaves banks with more money to lend to consumers, encouraging borrowing and stimulating economic growth.

2.3 Factors of Bond Market Development

There have some factors which are influence to develop the bond market including, macroeconomic, financial system, laws and institutions, and issuers and investors. (Policy Research Institute, Ministry of Finance, Japan, Public Policy Review, Vol.14, No.5, September 2018)

2.3.1 Macroeconomic Factor

The first group is macroeconomic factors. The first factor is Economy Size. It is easier for bond markets to develop because fixed costs are necessary for constructing market infrastructure, and because it is easier for larger markets to become liquid. In the Previous Studies mentioned that Economy Size has negative impact on expansion of government bond markets, and has positive impact on that of corporate bond markets. Therefore, the impact on total bond markets (total of government and corporate bonds) is insignificant.

The second factor is Economic Development. Low development entails various impediments to bond market development, such as poor investment environments, government interventions in commercial activities, and immature laws and institutions (creditors' rights, transparency, corporate governance, etc.).

The third factor is macroeconomic stability. Particularly, Volatility of Inflation Rate and Foreign Exchange Rate is important. Low and stable inflation rate stabilizes the value of cash flows, and is indispensable for expanding long-term bond markets. Also, stable foreign exchange rate decreases exchange rate risk and increases investment from abroad.

2.3.2 Financial System

Financial system development seems to promote bond market expansion. The explanatory variables related to financial system development firstly include Bank Size. Banks play important roles as issuers, investors and intermediaries. Therefore, it seems that bank size and bond market size have positive relationship. On the other hand, bank loans and bond issues are alternative procurement tools with each other, and in the financial system in which banks have developed early, banks sometimes depress bond market expansion.

This kind of activity by market dominant banks is assumed, and Concentration of the Banking System is adopted as the second variable. Also, Stock Market Size (market capitalization) is adopted as the third variable. The results of the analysis show that in the case of total (government and corporate) bond markets, market expansion has positive relationship with Bank Size, and negative relationship with Concentration of the Banking System and Stock Market Size.

However, government bond market expansion has significant relationship only with Stock Market Size, and in the case of corporate bond market, there is no significant relationship. Its dependent variables are GDP ratios of bond market size, and its explanatory variables are Economy Size (GDP), Economic Development (per capita GDP), Financial Sector Development (Bank Size and Stock Market Size), Volatility of Inflation Rate and Foreign Exchange Rate, and Institutional Factors (Strength of Legal Rights, Depth of Credit Information).

However, as both bond markets and stock markets are capital markets and they need market institutions, issuers and investors, it seems possible that bond market expansion and stock market size have positive relationship.

2.3.3 Laws and Institutions

Establishment of laws and institutions plays an important role in expanding financial systems. The explanatory variables are Institutionalized Democracy, Strength of Legal Rights, and Depth of Credit Information. The following points are also important regarding laws and institutions.

i) Market-related laws and regulations: Securities and exchange law, corporate law, bankruptcy law, etc. Capital account regulations may be included. For bond markets, it is particularly important to develop bankruptcy law, and clarify creditors' rights and responsibility of debtors.

ii) Corporate information disclosure including credit ratings: Development on this point causes heightened investment incentives and leads to market expansion and improvement of liquidity. It may also become possible that companies with relatively high credit risk can issue bonds.

iii) Accountants, securities analysts, credit rating agencies, and courts.

iv) Reforms of taxes that impede bond investment, such as withholding tax for non-residents: If the tax system is a heavier burden for bond markets than for other financial tools, it becomes an impediment of bond market development.

2.3.4 Issuers and Investors

As components of bond markets, issuers and investors are of the utmost importance. Market participants must have enough participation incentives such as economic profits and capacity of participation. In the case of issuers, they must have large demand for long-term funds caused, for example, by facility investments, and it is necessary that bond issuing costs are lower than interest rates for bank borrowings.

Market participation can be promoted through various developments of issuing environments. Most Asian companies are small and medium-sized corporations, and very few companies have enough size and credibility for bond issuance. The following possible methods exist for conquering this restriction. First, corporations can improve credibility through operational restructuring or better governance. Second, by developing market infrastructure, such as simplification of issuing regulations, development of information disclosure, and development of bankruptcy laws, issuing costs and information asymmetry can be decreased.

Third, issuance by non-residents such as international institutions and multi-national corporations can be increased. For this, the level of market infrastructure must be improved by adopting international standards. Fourth, small and medium-sized companies can issue bonds by utilizing tools such as securitization and credit guarantees. In this case, issuers' moral hazard must be avoided. Fifth, companies of low credibility can become issuers of high-yield bonds by expanding investment targets of investors.

Institutional investors, individual investors, and foreign investors must be expanded. Institutional investors are expected to bring bond market expansion, improvement of liquidity, progress of financial technology, and improvement of corporate governance. To realize active transactions by institutional investors, easing restrictions on investment targets; such as compulsory ownership of government bonds, lowest credit ratings regulations, etc.; promoting adoption of market-price accounting, and assisting improvement of asset management and risk management skills are necessary.

State and local governments also issue bonds, called municipal bonds. The proceeds from the sale of these bonds fund statewide and local projects, such as the maintenance and repair of public utility infrastructures. By funding these projects through the sale of bonds, state and local governments can avoid raising income, sales or property taxes to pay for project costs. Increased taxes can be potentially damaging to state and local economies as they may induce residents to move to an area with lower taxes. Higher taxes also discourage new business growth with business owners choosing to operate in areas with lower taxes.

2.3.5 Market Infrastructure

As a one of the major factors to develop the bond market is market structure. In this market structure, six main basic components are consisted as follow:

1) Government bond and short-term money markets: Government bond markets provide benchmark interest rates and promote growth of intermediaries. Short-term money markets are necessary for constructing short-term interest rate structure, and their development is related to expansion of transactions such as repos and interest rate and currency swaps.

2) Trading platforms such as securities exchanges.

3) Information infrastructure of market prices and transaction situations: Transparency of market prices increases reliability of transactions and assists market-price valuation of investment portfolios.

4) Derivatives and repo markets: Derivatives transactions enable hedging of market and credit risks, and improve transparency and correctness of market prices, which leads to higher market liquidity and lower volatility.

5) Bond transaction and settlement systems.

6) Foreign exchange markets: Foreign exchange trades are very important for cross-border transactions.

2.4 Measuring the Development of Local Currency Bond Market

In general, the development of local currency bond particularly government bond market has been mainly measured by four variables: a) macroeconomic performance such as growth rate, inflation rate and fiscal debt, b) market deepening with investors vs. issuers, c) public debt management, and d) payment and settlement system. (IMF working paper, 2013)

(a) Macroeconomic performance: A stable macroeconomic condition can persuade to improve the both sides of the bond market. It means that institutional as well as individual investors are interested in this market while the bond issuers can raise their financial needs with fairly inflation rate of a nation. It also encourages the domestic savings and borrowing itself. In addition, a good macroeconomic situation should cover the tools of monetary policy using by the monetary authorities. In order to maintain the money supply of the country, most of the monetary authorities in developing economies use direct monetary tools such as regulatory requirement rather than the indirect monetary tools such as open market operations. One main reason could be that their bond market is still underdeveloped.

(b) Market deepening with investors vs. issuers*:* Bond issuers can roughly be divided into (3) categories such as government, financial institutions and corporations. Capability of participation for size of each category in the market will be considered as one crucial factor for improving the domestic bond market. On the other hand, formulating and implementing the policy for transparency, understanding the Asset and Liability Management of the particular institutions can attract to have not only the individual investors but also the institutional investors.

(c) Public debt management: Well-designed public debt management can be improved bond market into market based. In order to assess the actual situation of the market, issuance of government bonds need to be pronounced with the legislation aspect. Moreover, format of issuance, the accountability of financial obligations are also critical issues for bond market development with the operational aspect. For instance, preparing auction calendar could be an issuance of bond format. Hence, the cooperation of monetary and fiscal authorities is important and thereby moving towards the market based debt management program in the future.

(d) Payment and settlement system*:* It is also vital to facilitate the bond market development. In particular, lower cost, adequate capitalization with efficient oversight agency could support for the safeguard of the payment and settlement system in bond market.

CHAPTER III

GOVERNMENT BOND MARKETS IN CAMBODIA, LAOS, MYANMAR AND VIETNAM FROM

This chapter includes history and background of government bonds, types of government bond and government bond markets in Cambodia, Laos, Myanmar and Vietnam. Among, the ASEAN countries the bond markets in these three, CLM countries are in an infant stage.

3.1 Study on History and Background of Government Bond in CLMV

There are history and background of government bonds in Cambodia, Laos, Myanmar and Vietnam. In the early 1990s Laos started to issue treasury bills and short-term treasury certificate. In 2003 triangle bonds, a type of treasury certificate, were started to issue. In Cambodia Ministry of Economic and Finance issued recapitalization bonds in 2002 and treasury bills in 2003. In Myanmar treasury bills and treasury bonds began to be issued in 1993. In these three countries the issuance of treasury bills and treasury bonds started in 1990s and in the early 2000s.

Cambodia

The Ministry of Economy and Finance (MEF), through the National Bank of Cambodia (NBC), has thus far issued treasury bills in 2003.The debt market, however, has been inactive, partly due to the absence of additional subordinating regulations to enforce the 2007 Securities Law which paved the way for corporations to issue both debt and equity securities to the public and contributed to steady progress in the Cambodia equity market, with the country’s first initial public offering in 2012. And a total of three state-owned enterprises and two corporations currently listed on the Cambodia Securities Exchange (CSX), the sole securities market operator in Cambodia. Without a robust securities market, Cambodian businesses had to resort to the more costly conventional financing options offered by commercial banks.

The number of potential bond issuers in Cambodia was limited. The Company Act will be adopted to allow for business incorporation. State-owned companies and local infrastructure projects can be used for bond issuance. However, bond was critical for the development of life insurance industry in Cambodia. Without financial instruments life insurance companies will not be able to invest in long term financial assets that meet their financial obligations.

In 2012, Cambodia published a Financial Sector Development Strategy (FSDS) for the period 2011–2020. Among the long-term development objectives contained in the strategy that were targeted for implementation between 2017 and 2020 was a focus on developing the government securities market and the issuance of government bonds by the Government Debt Management Office of the National Treasury. As an initial milestone of this development plan, the Cambodia Securities Exchange (CSX) had previously been established in 2010. The National Bank of Cambodia began issuing negotiable certificates of deposit (NCDs) in 2013, effectively creating an interbank money market.

There is not an exact launch date for the government bonds, Deputy Director General of the General department of Financial Industry said that they should hit the market by 2022 or 2023, once the Public Debt Strategy for 2019-2023 is ready (Sok Chan /Khmer Times newspaper 28.9.2018).

At present, no real-time gross settlement (RTGS) system exists and payments are typically made via cheque. However, the National Bank of Cambodia (NBC) has introduced the Online Banking System for cheque payments among commercial banks that are members of the Online Bank System. The policy bodies and regulatory authorities recognize the need for capacity building across the nascent industry.

Laos

Government securities were initially issued in the Lao PDR in 1990 to control rising inflation and absorb excess liquidity in the economy. The first government securities issued in June 1990 were Treasury certificates amounting to LAK2 billion, with a 3- month (renewable) maturity priced at 48% per annum. In November of the same year, inflation gradually decreased. As a result, the government reduced interest rates for Treasury certificates issued from November 1990 to October 1991 to 42% per annum. By July 1992, the MOF had sold another LAK2 billion worth of 3-month Treasury certificates to state-owned banks. The MOF’s objectives for the issuance of government securities were deemed to have been met, and with this the government allowed the BOL to develop its own monetary instrument amounting to LAK1.5 billion.

In November 1991, the first BOL bills—amounting to LAK200 million and with a 6-month maturity at 20% per annum—were issued. Through November 1993, seven more BOL bills were issued with amounts ranging from LAK200 million to LAK400 million, all of which were to mature after 6 months and priced at 20% per annum. They continued to be issued through 1993, with interest rates ranging from 20 to 24 percent depending on the level of inflation. A last batch was priced at 15% per annum.

In view of the fact that the issuance of government securities was an effective monetary policy for the Lao PDR and that the MOF was agreeable to issuing debt instruments to mobilize funds domestically, the central bank pushed for a Treasury bill auction process in 1994. This has been the issuance practice ever since.

The bond market of the Lao PDR was constituted in 1994 when the Government of the Lao PDR issued Treasury bills for the first time to help finance the annual budget deficit. The issuance of Treasury bills continues on a regular basis with the primary objectives of financing the budget deficit and repaying public debt. Treasury bills have been issued into the primary market through an auction channel and through the so-called "over-the-counter method,". The primary participants are commercial banks.

BOL bills and bonds are sold to central bank constituents, such as commercial banks and other financial institutions, and may be bought and sold in the secondary market among constituents. In addition, BOL conducts open market operations through its Banking Operations Department on a manual basis, using written contracts for three types of transactions: (i) repurchase (repo) agreement, (ii) discount, and (iii) collateralized lending.

Tenders have been held biweekly since the first offering in May of 1994. In 1996, amid renewed concern about inflation, the central bank issued BOL bills in an attempt to absorb liquidity. In 1997, the Asian currency crisis caused the value of the kip to plummet, pushing Laos into a period of hyper-inflation. By February 1998 the government was finding it difficult to issue treasury certificates.

In 2003, the MOF issued a type of treasury certificate called the "triangle bond." The purpose of these bonds was to help dispose of bad debt deriving from local government shortfalls. A local 'government might initiate a road project, for example, but not have enough in its budget to pay the contractors when the work was done. A state- owned commercial bank would step into the picture, providing the contractors with the funds they were owed - and which should properly have been paid by the government -but in the form of relief loans. Having expended funds on materials and wages, the contractors would be unable to repay the funds, which would linger on the books as non-- performing loans. Triangle bonds provided a means of converting that debt into low- interest government securities. The bonds are issued in a maximum denomination of 360 billion kip; maturity was set at one to three years, and interest at 11 percent.

In the context of the objectives of the 6th Five-Year National Socio-Economic Development Plan, 2006–2010 –which were to promote economic development- the Lao Securities Exchange (LSX) was formally established on 10 October 2010 and launched on 11 January 2011. The launching of the LSX was a historic milestone for the capital market in the Lao PDR.

As for the legislative and regulatory framework, the Law on Securities was approved by the National Assembly in 2012 and introduced into the market in 2013. Pursuant to the Law on Securities, other decrees and subsidiary regulations were improved or created. With regard to the bond market, the Lao Securities Commission (LSC) introduced the Corporate Bond Regulation in 2014 and subsequently issued the Decision on Issuance of Corporate Bonds Abroad in 2016. For government bonds, the Ministry of Finance, Lao PDR (MOF) led the drafting of the Decree on Government Bonds, which was released in March 2017; these new government bonds will be listed on and traded at the LSX. Correspondingly, the LSX is developing a dedicated bond listing and trading platform, and will be amending the existing Regulation on Bond Listing after enactment of the new decree.

Myanmar

Myanmar has adopted the market oriented economic system since 1988. The government debt was largely due to the substantial need to invest in basic economic and social infrastructure works such as dams, roads and bridges, electric power utilities, transport and communication facilities, schools and hospitals with a view to promote private sector activities. Accordingly, these efforts have caused substantial increase in government expenditures during these years which put strains on the economy.

Until 1993, government issued 3-month Treasury Bill with 4 % interest rate and the Central Bank of Myanmar (CBM) solely financed to the government. Since December1993, the past practice of financing the government debt from the CBM was partially replaced by the issuance of government treasury bonds sold to the general public. The Central Bank of Myanmar, on behalf of government, issued Government Treasury Bonds since December, 1993.

Consequently, in December 1993 the Central Bank of Myanmar (CBM) reactivated and issued K 10,000, K 100,000 Treasury Bonds carrying interest rates of 10.0% for 3-year Treasury bond and 10.5% for 5-year Treasury bond. Interests are payable twice a year, in the mid of March and September. Interest rates for 3 years and 5-year Treasury bonds were raised to 13.5% and 14% respectively in April1996 and three-year government treasury bond in denomination of kyats one million has been issued at the same date. Then five-year government treasury bond of that denomination has been issued in 1st January 1997.

Furthermore, starting from 1st January 2010, two-year government treasury bond in denominations of kyats ten thousand, one hundred thousand, one million and ten million have been extensively issued to public. The current interest rates for government treasury bond are 8.75% for two-year, 9% for three-year and 9.5 percent for five-year respectively.

The total issue amount of treasury bond was limited in the yearly budget. Both institutional and individual investors can purchase the government treasury bonds directly from the CBM or through the Myanmar Securities Exchange Centre Co., Ltd who have been appointed as underwriters for government bonds since 2010.

In 2015, the Ministry of Finance (MOF) issued Treasury Bills with a maturity of 3 months to finance short-term budget. Central Bank of Myanmar (CBM) sells it as an agent of the MOF. CBM sells T-bills with bidding auction method, paid-fixed discount rate of 4% per annum and defined the maturity term is three months. The buyers of T-bills are only private and state-owned banks. Investing banks have to keep T-bills up to maturity date for liquidity and reserve requirement.

Government Treasury Bills had been sold with request based method and paid fired discount rate up to before 28th January, 2015. The auctioning and market discount rate has been used for selling bills were started at 28th January, 2015. Now, Ministry of Finance and Central Bank of Myanmar cooperates and holds bill auction one time per two weeks frequently.

The CBM is endeavoring to establish domestic bond market to be active, one operation is that forming up of T-bills issued by bidding price (required interest) of auction system. In this system of auction, the transactions are scrip less issuance of securities, electronic bid registration of electronic trading, and electronic delivery versus payment (DVP) settlement being developed.

Vietnam

In March.1991, short-term treasury bill (3-month maturity) was launched in pilot firstly in Hai Phong city then 6 and 12-month term treasury bill were issued in Hanoi and Ho Chi Minh City. From the end of 1992 until now, the issuing has been expanded overall the country. Besides the issuing of short term treasury bill to balance the national budget, the government and the Ministry of Finance had piloted some medium term bonds to mobilize capital for investment in some key projects of central and local regions.

From middle of 1995, in combination with issuing bonds under agencies through state treasury system, Ministry of Finance had coordinated with State Treasury to operationalize treasury bill auction which marked a new step forward of model a technical of issuing bond according to international practice. In 2000 the government promulgated new Decree on regulations for issuing government bond. According to the new Decree, in parallel with the bond issued directly through State Treasury and maintain bond issuing under the auction through State Bank, government bond can be issued through auction at Ho Chi Minh Securities Trading Centre and underwritten at State Bank. In 2003 the decrees were issued for the development of issuance and trading of government bonds.

In November 2006, groups of local and international commercial banks, securities companies, fund management companies, and insurance companies formed the Vietnam Bond Market Forum (VNBF) that intended to promote bond trading through disseminating and sharing market information, and standardizing commercial activities in the bond market in Vietnam. The Forum was directed by an executive board that was active in the Vietnam Bond Market.

Before 2006, government bonds were issued via auction at both the Hanoi Securities Trading Center (HASTC) and the Ho Chi Minh Securities Trading Center (HOSTC); the former changed its name to Hanoi Stock Exchange (HNX) in 2009. Since 2006, in accordance with Decision of the Ministry of Finance (MOF) on the centralization of government bonds bidding, all government bond issuance via auction has been exclusively conducted by HASTC/HNX. Prior to 2009, government bonds were allowed to be listed and traded on both HOSE and HNX. In September 2009, government bonds are exclusively listed and traded on HNX. This change was made in accordance with the approval of the "Plan on Building a Specialized Government Bond Market," wherein HNX was assigned as the only organizer of the secondary market for government bonds of Viet Nam.

In addition to auction, government bonds are also issued via underwriting conducted by issuers themselves. Before 2010, government bonds are issued by two agencies, namely the State Treasury and the Vietnam Development Bank (VDB). However, from 2010 onwards, only the State Treasury is authorized by the government to carry out government bond issuance. In addition, the Vietnam Development Bank (VDB) and two other institutions, namely the Vietnam Bank for Social Policy (VBSP) and the Vietnam Expressway Corporation (VEC) are significant issuers of quasi-government bonds, or government-guaranteed bonds.

In September 2009, HNX established an electronic bond-trading system for government bonds. The new trading platform releases basic bond-related information such as issuers, members, prices, schedules, and settlement. It allows the identification of repurchased (repo) trades for the first time. This helped enhance transparency and increase liquidity in the bond market. Under the new system, the Treasury gives the exchange early notice on plans for capital mobilization, and releases, quarterly and annual reports. Securities companies and commercial banks are also able to trade directly on the new platform, with bonds being deposited at the Vietnam Securities Depository (VSD).

In recent years, Viet Nam's bond market has improved significantly as the government continues to initiate reforms and pass enabling legislation. Local government bonds both in Viet Nam dong and US dollar—are issued in large lots while streamlined procedures continue to ease corporate bond issuance.

Government bonds are commonly issued with tenors of 3 and 5 years. Other maturities such as 1, 2, 7, 15 years are available but each accounts for a small percentage in the whole government bond portfolio. Convertible bonds, all of which are corporate bonds, have also been introduced.

Bonds are typically purchased at initial auctions by insurance companies, banks, and individuals, and are held until maturity. In the absence of mutual funds and pension funds, banks play the role of market participants. Government bonds are issued through both auction and underwriting. In September 2003, the State Securities Commission (SSC) issued the "Capital Market Roadmap" with the development of the bond market as one of its key aims. There are three phases to the roadmap.

All government bonds, government-guaranteed bonds and municipal bonds are listed on the HNX only, with an average size of equivalent to USD20 million. Approximately 90% of all bonds issued in Viet Nam are government bonds and are scripless.

Viet Nam successfully launched its maiden sovereign bond issue (denominated in US dollar) in October 2005, and USD1 billion sovereign-bond proceeds were used to finance key refinery, power, and cargo ship projects in September 2007. In February 2009, the government issued the first US dollar-denominated government bonds to domestic investors.

The number of market participants has been increasing as well. On the opening date on 24 September 2009, there were only 30 trading members. Two years later, the market has 93 members for both primary and secondary markets. Commercial banks have played an important role in creating secondary-market liquidity with their involvement in both the capital and monetary markets; commercial banks are building a bridge between these two markets.

3.2 Government Securities Issued by CLMV

Generally, there are two types of government securities namely treasury bills and treasury bonds. Types of bond in Cambodia, Laos, Myanmar and Vietnam are mentioned in this section.

Cambodia

Since November 2003, the Ministry of Economy and Finance (MEF) issued Riel-denominated Treasury Bills with maturity of less than 91 days. The state-owned Foreign Trade Bank and Rural Development Banks purchase T-Bills. However, T-Bills cannot be recognized as a reserve asset. The MEF also issued recapitalization bonds in 2002 to recapitalize the Foreign Trade Bank (FTB) (40 billion CRs), Cambodian National Insurance Company (CAMINCO) (23 billion CRs), and the Cambodia National Reinsurance Company (Cambodia Re) (28 billion CRs), but such bonds are not transferable.

According to interbank market project, National Bank of Cambodia (NBC) issued the Prakas (ministerial regulation) of issuance of tradable securities by NCB on October 2010. After 3-year preparation timeframe, the NBC commenced issuance of Negotiable Certificates of Deposit (NCDs) on September 2013. An NCD is a short-term, interest bearing debt instrument issued by NBC. The minimum denomination for investment is KHR 200 million or USD 50,000/. The maturities of KHR-denominated NCDs range from 2 weeks to 1 year, and the maturities of USD-denominated NCDs range from 2 weeks to 6 months. The interest rate of an NCD is determined by the NBC daily according to market conditions.

An NCD can be traded in the interbank market or used as collateral for the credit facility provided to banks by the NBC, used for credit purposes among banks or repurchased by the NBC at a discount before maturity.

Laos

There have been two types of bonds issued by the government since mid of 1990s. The treasury bill issued on regular basis for financing the budget deficit. The amount of each issue was limited to 50-60 billion Kip (equivalent to US$ 5-6 million) with the maturity up to 1 year, with a coupon rate (on the average) of 15 percent. The arrears clearance bond was issued on non-regular basis for clearing the government debt to the state-owned enterprises.

The amount of each issue was limited to 25 billion Kip (equivalent to US$ 2.5 million) with annual interest rate of 16 percent with the maturity up to 3 years.

Following a directive passed in 1994, the MOF started issuing Treasury bills to meet the Lao PDR's fiscal deficits. Treasury bills are issued on a regular basis and in accordance with the annual budgetary plan approved by the National Assembly. The BOL's Banking Operations Department facilitates the auction.

Treasury bills are issued as physical certificates. Currently, Treasury bills have maturities ranging from 3 months to 1 year. Treasury bills were priced at 5% per annum for a 1-year maturity, while current account deposits with banks do not yield any interest, regardless of the principal and/or tenor.

Investors may be reluctant to use Treasury bills as part of their investment portfolio because Treasury bills, by practice in the Lao PDR, are not demandable at once; rather, their tenor may be extendable by negotiation with holders, subject to the budget and liquidity status of the MOF. At the same time, extended and renewed Treasury bills are given a relatively higher coupon rate relative to their initial interest rate.

By end of 2005, the MOF had issued a maximum of LAK200 billions of recapitalization bonds (recap bonds) on behalf of two state-owned commercial banks, BCEL and LDB. The government bonds had a maturity period of 5 years at a fixed per annum rate of inflation (approximately 7%–10%) plus 1%. The issuance of recap bonds not only aimed to restructure and recapitalize the state-owned commercial banks, but this activity also positively resulted in the stabilization of money supply in the economy.

In addition, in September 2005, the Agricultural Promotion Bank's capital restructuring via recap bonds was evaluated and was the subject of further discussion between the MOF and the bank's management. Arrears clearance bonds are issued on an as-needed basis and priced according to market conditions at the time of issuance. The legislation for corporate bonds was issued by the LSCO in December 2014. However, corporate bonds are not yet evident in the market.

Myanmar

In order to encourage domestic savings further and to lay the foundation work in establishing the securities market, the CBM for the first time issued three and five-year government bonds in December, 1993. On behalf of the government, the Central Bank of Myanmar (CBM) has issued three types of treasury bond, two-year treasury bond, three-year treasury bond and 5-year treasury bond. At present, interest rates for those bonds are 8.75% for two-year bond, 9% for 3-year treasury bond and 9.5% for 5-year treasury bond.

When the government needs to finance for its expenditures, government may issue government securities. Government treasury bill issues have to be estimated in each year budget. The CBM was allowed to directly purchase 3 - month treasury bills.

Vietnam

There are four types of bond in Vietnam namely treasury bond, government bonds, government-guaranteed municipal bonds and central bank bonds. Government bonds are issued by State Treasury and Vietnam Development Bank. Municipal bonds are currently issued by three local governments namely Hanoi, Ho Chi Minh City and Dong Nai. Portions of different types of bond are 67% by State Treasury, 19% by Vietnam Development Bank, 7% by Municipalities and 7% by corporations.

Government bonds can be categorized into six namely, treasury bills, treasury bonds, centrally-run works' bonds, investment bonds, foreign currency bonds and national construction bonds. The government bond market was restructured with the aim of boosting liquidity and transparency in order to attract investors and ensure funding in an economy growing by 8 percent a year. Treasury bonds are issued to offset state budget deficit. Under the Prime Minister's decisions centrally-run works' bonds are issued for projects which are invested with central budget, have been included in plans but not yet provided with budget in the year. Investment bonds are issued for investment according to the Government's policies. Foreign currency bonds are issued for the objectives designated by the Prime Minister. National construction bonds are issued for investment in the construction of national important work and other essential works.

3.3 Bond Markets in CLMV counties

Regarding the bond markets in Cambodia, Laos, Myanmar and Vietnam bond markets in three countries are now in infant stage. Recapitalization bonds are not transferable in Cambodia. Therefore, there was no secondary market in Cambodia and Laos. In Myanmar there was very thin trading market.

Cambodia

At Cambodia bond market is in a state of preparation. The GDNT of the MEF is looking into issuing government bonds in the near future and has begun the necessary organizational and legislative preparations toward that goal.

With the CSX operating since 2012 and the NBC trading NCDs with its bank constituents in an interbank money market since 2013, some of the typical market's securities trading infrastructure already exists and could be utilized for the trading of bonds once their issuance commences.

The CSX was incorporated in 2010, received its licensed to operate in 2011, and began trading operations in April 2012. The CSX is a joint venture between the Government of Cambodia and Korea Exchange, with capital holdings of 55% and 45% respectively. The CSX holds licenses for the operation of a securities market as well as clearing and settlement and depository functions.

To develop the legal infrastructure for capital markets, The Ministry of Economy and Finance prepared a draft law and sub-decree on Government securities and has taken the first step to make a Diagnostic and Policy Review for the establishment of a securities market. For the efficient development of the capital market, it was very important to start with government securities first. This assists in gaining the public investor's confidence and gets them into the habit of dealing with securities. To promote government securities, it may be necessary to set up some special incentives to attract investors.

In Cambodia investor base was still very much limited and intermediaries are underdeveloped, both of which are necessary to establish healthy and active bond market. Therefore, development of institutional and individual investor base as well as intermediaries simultaneously, while accumulating experiences of government bond assurances, which can be done through applying the existing infrastructures, would be practical way to enhance trust on government bond from the market participants.

Laos

The domestic offering of government bonds and bills can be done directly to investors, via auction at the BOL, or through the LSX to primary dealers. The MOF plans and gets government approval for the annual bond issuance volume using these methods, as described below;

(i) Direct Offering to Investors; the MOF announces the decision of such a bond issuance. Investors then transfer the requisite amount for their purchase to the account of the National Treasury with the BOL. Within 7 days from receipt of the purchase amount, the

MOF issues a bond certificate to each investor, or issues a global certificate (in scripless form) to register the same, as well as the individual amounts purchased by investors, with the depository center at the LSX.

(ii) Offering via Auction at the BOL***;*** The BOL acts as the central agent of the government for the domestic offering of government securities via auction, typically in the form of Treasury bills.

(iii) Offering through LSX*;* The MOF announces the issuance of government securities and selects its primary dealers. The primary dealers must nominate a correspondent bank (commercial bank) as cash settlement agent. Primary dealers instructed their correspondent banks to transfer the money received from the sale of government bonds to the account of the National Treasury with the BOL.

(iv) Renewal (Rollover) of Treasury Bills; Prior to the maturity of a Treasury bill, the BOL notifies the MOF when the issue is going to be due. Bond market in Laos was in the infant stage and there are factors inhibiting the growth of the bond market in Lao PDR.A number of factors exist which restrict the development of a market for short-term bonds issued by the Laos government and central bank.

Lao PDR is aiming to remove itself from the list of least developed countries (LDC) by 2020 and eradicate mass poverty by 2010.

Myanmar

Bond market in Myanmar was also in the beginning stage. It was necessary to build a systematic and efficient bond market like other countries. In Myanmar the trading market of treasury bonds was still very thin.

When, the government needs to finance for its expenditures, government may issue government securities. Government treasury bill issues have to be estimated in each year budget. Since December 1, 1993, the CBM, on behalf of the government, has issued government treasury bonds.

As an investor’s perspective, either households or firms are difficult to seek the place where for putting their money. However, people’s saving has increased four consecutive years from time to time (Selected Monthly Economic Indicators Appendix B). In this sense, banks become vital role as financial intermediaries in case of the developing countries. However, only bank dominant financial system could expose risks such as efficiency losses and systemic risk.

It could create not only better climate for investors, but also extend another alternative for borrowers. Actually, Myanmar government is now endeavoring to enhance the financial sector by measuring financial reforms. The following performances are significantly changes for Myanmar financial sector:

a) Enacting the new Central Bank Law (2013) & Restructuring the CBM's Organization

b) Enacting the new Foreign Exchange Management Law (2012)

c) Enacting the Securities Exchange Law

d) Unifying the Exchange Rate (2012)

e) Allowing the private banks to engage in international banking business (2012)

f) Some foreign bank branches are allowed to do limited banking services (2014)

New Central Bank of Myanmar Law has been enacted since 11th July 2013 with the approval of the Parliament. As CBM new law, CBM becomes an autonomous body with the operational purpose. In previous time, CBM was under the umbrella of the Ministry of Finance as one of its departments. This is the most critical change of new government.

With the help of the Japanese Daiwa Institute of Research (DIR) and Tokyo Stock Exchange (TSE), Myanmar is trying to set up the capital market within the country. Furthermore, The Securities and Exchange Law has been drawn up with the assistance of Thai Stock Exchange (TSE) and Thai Securities Exchange Commission (SEC). In order to have comments and suggestions from the public, the Securities Exchange Bill has been pronounced since August 2012. Eventually, the Law has been enacted on 31st July 2013. At present, there is a joint venture called Myanmar Securities Exchange Center Co. Ltd. (MSEC) which established by the Ministry of Finance and DIR since 1996. Currently, CBM appoints MSEC and MEB as its underwriters for government treasury bonds.

Moreover, the following key milestones were changed to development of Government Securities;

1. 28 January 2015 First 3-months Treasury Bill Auction
2. 30 November 2015 Paper based issuance of Treasury Bonds ceased
3. 5 January 2016 Treasury Bonds converted to Scripless
4. 5 January 2016 Public Debt Management Law was enacted
5. 4 May 2016 First 6-months Treasury Bill Auction
6. 15 June 2016 First 12-months Treasury Bill Auction
7. 19 August 2016 Medium Term Debt Strategy for 2016 approved by Parliament
8. 20 September 2016 First Treasury Bond Auction

9. 2 November 2016 Foreign Banks began participating in the Treasury Bill Auctions
10. 17 January 2017 Securities Companies began participating in the Treasury Bond Auctions
11. 21 February 2017 Foreign Banks began participating in the Treasury Bond Auctions
12. 1 June 2017` Government Annual Debt Report for 2015-2016 approved by Parliament

Vietnam

`Vietnam government issued decree on issuance of government bonds, government-guaranteed bonds and local administration's bonds to provide primary market of securities in 2003. Besides, State Bank of Vietnam (SBV) has also enacted a set of Decision and Circular on bidding of T-bill and foreign currency bonds, among six products of government bonds. For the secondary market Vietnam government also issued decree on securities and securities markets to broadly provide for listing and trading of government securities.

There are four types of issuance modes (channels) for government bonds, namely bidding (auction), underwriting, issuance agents and retail. Eligible channels are designated for each type of government securities. Bidding (auction) was conducted either at SBV or Securities Trading Centers, and was applied to treasury bills and foreign currency bonds (at SBV), treasury bonds, centrally-run works' bonds and investment bonds (at HCMC and/or Hanoi STCs). In bidding, interest rate was determined uniformly at the highest bid-winning interest rate.

The 43 percent of total issuance of government bonds are done at auction through the State Bank of Vietnam, 5 percent are done at the auction through Securities Trading Centre. 27 percent are done in issuance channel "underwriting" and 25 percent are done in issuance channel "retail".

Ministry of Finance has steadily increased yearly issuance volumes of government bonds since 2000, reaching VND 28185 billion for government bonds in 2005. The issuance of government bonds in 2005, VND 28185 billion, was over 5 times of the issuance in 2000, VND 5453 billion.

There was no trading of bonds in 2000. The trading values of bonds were VND 63 billion in 2001, VND 117 billion in 2002, and VND 2492 billion in 2003, VND 17878 billion in 2004 and VND 21486 billion in 2005. Trading of bonds at HCMC STC has seen rapid growth since year 2004.

Trading of listed securities was to be conducted through trading members via trading system of Hochiminh Securities Trading Centre (HCMC STC). Currently, trading members of HCMC STC are limited to securities companies. Therefore, all transactions of listed bonds are done through the brokerage by securities firms, including inter-bank transactions and buy/sell-backs (repos).

There are two trading methods applied in HCMC STC: one was order-matching transaction, and the other was negotiable transaction (or put-through method). The latter method was allowed and introduced since August 16, 2004, and has quickly spread as a trading method for bonds, as this method matches the product characteristics of bonds. (Final Report of Technical Assistance on Primary Dealership for Government Bonds in Vietnam, p.15.)

The Prime Minister has approved a strategy for the development of the bond market for the 2017-2020 period with a vision to 2030. The strategy aims to develop a stable bond market, a complete and synchronous structure on supply-demand factors; expand the investor's foundation, increase the scale and quality of operations, diversify products, ensure an efficient market; actively integrate into the international market, and a step by step approach with international practices. According to the strategy, outstanding debt in Vietnam's bond market is targeted at 45 percent of total GDP in 2020 and about 65 percent of GDP in 2030.

3.4 Current Situation of the CLV Bond Market

In Cambodia, recent major developments are considered those that have been announced in the market since the first publication of ASEAN+3 Bond Market Guide for selected economies in 2012;

(a) Introduction of Corporate Bond Regulatory Framework

(b) Establishment of a Professional Investor Concept

(c) Introduction of Negotiable Certificates of Deposit

At present, the Cambodia bond market is in a state of preparation. Even though the market is still under develop, in August 2017, the bond markets regulatory landscape has quickly developed, with the Security Exchange Commission of Cambodia. The governmental agency tasked with regulating the securities sector, issued a series of ministerial regulations (Prakas) including;

(a) Prakas 009, Public Offering Debt Securities (August, 17, 2017)

(b) Prakas 010, Accreditation of Bondholder Representatives (August, 17, 2017)

(c) Prakas 011, Accreditation of Credit Rating Agency (August, 17, 2017)

(d) Prakas 016, Implementation of Listing Rules of Debt Securities of CSX (December, 26, 2017)

(e) Prakas 017, Implementation of Market Operating Rules of CSX (December, 26, 2017)

According to the Prakas 009, three simple debt securities were introduced as follow;

(a) Plain Bond; A bond that has a fixed coupon rate and specific maturity date. A plain bond does not have enhancement, additional calls, or put options and is not secured or guaranteed.

(b) Secured Bond; A bond that is secured with an asset, excluding assets backed securities.

(c) Guaranteed Bond; A bond with interest and principal payments guaranteed by a third party.

Prakas 010 & 011, set accreditation procedures for bondholder representative and credit rating agencies, and impose requirements and obligations on them. The GDNT of the MEF is looking into issuing government bonds in the near future and has begun the necessary organizational and legislative preparations toward that goal.

Cambodia government expected that the government bond market likely commencing operation in 2019 and the imminent commencement of the corporate bond market following the introduction of the necessary regulatory framework, number of investor types already present in the Cambodia market, (banks, non-bank financial institutions, insurance companies, pension funds, foreign institutional investors) are envisaged to participate.

In the Implementation and Financing Plan section in Laos, the 8th NSEDP identifies capital requirements of LAK232 trillion for developments during the 2016–2020 period, of which

(i) public investment accounts for 24%–28%, investment from the state budget accounts for 9%–11%, and investment from grants and loans accounts for 15%–17% of the total envisaged investment;

(ii) private domestic and foreign investments account for 55%–57% of the total envisaged investment; and

(iii) money market (bank credit) and capital market investments account for 17%–19% of the total envisaged investment.

Foreign investors are principally able to enter, participate in, and exit the Lao PDR bond market freely, subject to investor registration. At present, nonresident issuers are not yet able to access the Lao PDR bond market, in the absence of specific regulations. The LSCO is planning to review this matter in detail for future consideration. At present, local issuers can raise funds in overseas markets, subject to LSCO approval, while specific regulations on domestic issuance by nonresidents are to be issued in the near future.

The LSX was established in 2010 with technical and financial support from South Korea. The Korea Exchange has a 49 percent stake in LSX. Thailand provided technical advice to help build the exchange and it became operational on the 11th of January, 2011.

According to an IMF report, Laos first issued Thai baht-denominated bonds in Thailand in May 2013, followed by three more issuances in December 2013, October 2014 and June 2015.During these years, demands have been increasing in these countries for raising funds for improvement of infrastructures and development of industries, and the public debt outstanding has been on a rising trend. Especially in Lao P.D.R., the share of public debts in GDP has been increasing year after year.

Lao PDR utilizes the funds borrowed from foreign countries to promote the development of hydro power generation and mining. Mainly helped by these developments, the economy has realized high growth, gaining per capita GDP higher than in Cambodia and Myanmar.

Since 2014, EDL-GENERATION PUBLIC COMPANY, a state-managed power company, has been regularly issuing corporate bonds denominated in baht and dollars in Thailand, and also in 2017 Nam Ngum 2 Power（NN2PC), an independent power generation company, issued a project bond denominated in baht. The share of bonds of the government and state-owned companies of Lao P.D.R. has been rising in the Thai market, and there is a concern over the possible effect of foreign exchange rates on them at a time of their redemption.

However, as most of these government bonds and corporate bonds have been issued to finance hydro power generation projects which are one of the means to acquire foreign currencies, the government seems to think that there will be no foreign exchange risks on them because their redemption resources will be covered by the export of electricity generated by the borrowing.

Laos has successfully completed its largest and lengthiest bond issue, with a 14 billion baht ($419 million) six-tranche offering in the Thai debt capital markets. Not only did the sovereign offering surpass the 12-billion-baht issue Laos completed in 2015, it also pushed out its curve from 12 to 15 years, and printed the largest tranche at the longest tenor, demonstrating to Thai investors' positive long-term view on the credit. The bonds are rated BBB+ by Thailand-based TRIS Rating (at the same level as most of Thailand's leading listed companies), so the deal also marked the first time that an issuer with that rating had sold 15-year bonds in the Thai market.

The 2.7913 billion baht three-year, 1.0198 billion baht five-year, 340.9 million baht seven-year, 2.967 billion baht 10-year, 1.5055 billion baht 12-year and 5.3755 billion baht 15-year tranches priced at par to yield 3.65 percent, 4.00 percent, 4.60 percent, 5.20 percent, 5.40 percent and 6.05 percent, respectively (October 10, 2017) mentioned in Table (3.1).

Table 3.1 Sovereign Bond Issuance of Laos in the Thai Market

	2013			2014			2015					2016					
Issue date	30-May	4-Dec	4-Dec	10-Oct	10-Oct	10-Oct	25-Jun	25-Jun	25-Jun	8-Dec	8-Dec	April	June	June	Oct	Oct	Dec
Maturity (years)	3	3	5	3	5	7	3	5	10	10	12	3	5	7	10	12	15
Volume (million Thai bath)	1,500	434	2,566	1,794	1,830	1,466	1,000	5,000	6,000	5,813	718	2,791	1,020	0.341	2,967	1,505	5,376
Volume (US$ million equivalent)	50	13	80	55	56	45	30	148	178	162	20	82	39	10	87	44	158
Yield to maturity (%)	4.5	4.7	5.2	4.76	5.2	5.5	3.56	4.32	5	6 month libor + 3.38	6 month libor + 3.48	3.65	4	4.6	5.2	5.4	6.05

Sources: Laos Authority, and IMF & World Bank staff papers

During 2018 July, the Lao government has announced that it will issue domestic bonds in LAK (kip) – instead of foreign currencies - with a two-pronged objective aimed at avoiding risks linked to the exchange rate and strengthening the domestic capital market. According to the Ministry of Finance, under this scheme, the payment of interest will be made to internal bond holders, which is expected to make capital circulate within the domestic economy.

The government has issued bonds of 3,300 billion kip (approximately US$392 million) through the national treasury to finance its budget deficit. Bonds to pay for public investment projects amounted to about 2,500 billion kip (approximately US$296 million) and triangle-debt-diversion bonds have been valued at about 7,800 billion kip (approximately US$924 million).

A majority of government bonds are held by commercial banks. Combining all these figures, it stands at 14 percent to 15 percent of the credit to economy (55,000 billion kip – approximately US$6.5 billion). Ninety percent of these bonds are set to mature within one year and are very difficult to manage, according to the Ministry of Finance.

To support sustainable economic development in the country, and capital market development in particular, the Government of the Lao PDR has approved the Strategic Plan on the Lao Capital Market Development, 2016–2025 that focuses on eight objectives:

1. create all necessary and favorable conditions for enterprises to raise funds through the capital market to increase the quality and quantity of products and services.

2. have market instruments and mechanisms ready to support the reform of enterprises;

3. have a comprehensive regulatory framework in compliance with the Lao PDR's current conditions and international standards;

4. ensure that the exchange, central securities depository (CSD), and securities intermediaries are operated smoothly with limited risks, and that they can integrate with regional and global markets;

5. ensure that information and communications technology development is suitable for the size of capital market expansion and up-to-date;

6. increase public participation, the investor base, and the balance between individual and institutional investor involvement;

7. have adequate capital market regulators, experts, and professionals in terms of both quality and quantity; and

8. enable the Lao PDR capital market to integrate with regional and global markets.

In the Vietnam bond market, the State Treasury raise VND 15,700 billion out of the VND 24,800 billion offered-

(i) In the corporate bond market, PAN group successfully issued VND1,135 billion worth of bonds. VIB also raised VND2,800 bn through issuing 5 years' bond.

(ii) Total bond trading volume in September was VND 150,956 billion, of which VND 68,966 billion was outright and the other VND 81,990 billion was repo. The daily average trading volume this month was VND 7,547 billion/day.

(iii) As of the end of September 2018, total outstanding value of Government bond, Government-guaranteed bond and municipal bond was VND 1,084,426 billion. The market shares of Government bonds in total bond outstanding value was 84.89% or VND 920,629 billion dong, came next was Government-guaranteed bond with 13,22% or VND 143,333 billion and the remaining 1.89% or VND 20,464 billion was municipal bond.

(iv) According to the VBMA MM chat room, bond yields at the beginning of September suddenly reversed and fell sharply. After that, yields continued to increase slightly and moved sideways in all tenor from 1year-15year. By the end of September, yields are gradually returning to the rates at the end of August.

Current bonds outstanding are mentioned in Table 3.2, & 3.3.

Table 3.2 Government Bond Issuance with Local Currency

					(VND Billion)
Year	Treasury Bonds	Central Bank Bonds	Government-Guaranteed Bonds and Municipal Bonds	Government Bonds	Total
2016	8,304,993	664,617	2,284,229	11,253,839	22,507,678
2017	9,446,570	234,599	2,267,070	11,948,240	23,896,479
2018 (Sept)	7,696,895	563,938	1,645,451	9,906,284	19,812,568
	25,448,458	1,463,154	6,196,750	33,108,363	

Source; Bond Market Guidance 2018

State Treasury Lowers Bond Issuance Plan for 2018 In October, the State Treasury lowered its bond issuance plan for 2018 to VND175 trillion from VND200 trillion as originally planned. The breakdown of issuance volume for each maturity is as follows: (i) 5-year bonds at VND31 trillion, (ii) 7-year bonds at VND11 trillion, (iii) 10-year bonds at VND64 trillion, (iv) 15-year bonds at VND51 trillion, (v) 20-year bonds at VND9 trillion, and (vi) 30-year bonds at VND9 trillion.

Table 3.3 Government Bond Issuance with Foreign Curency

					(USD Billion)
Year	Treasury Bonds	Central Bank Bonds	Government-Guaranteed Bonds and Municipal Bonds	Government Bonds	Total
2016	371.16	29.76	102.11	503.03	1,006.06
2017	451.81	10.32	99.80	525.93	1,051.86
2018 (Sept)	298.80	24.59	71.68	431.44	862.86
	1,121.77	64.67	273.59	1,460.40	

Source; Bond Market Guidance 2018

The outstanding debt of the Government bond, Government-guaranteed bond and municipal bond market is aimed at about 38 percent of total GDP in 2020 and 45 percent in 2030. The corporate bond market's outstanding debt is hoped to reach some 7 percent of GDP in 2020. In addition, the average maturity of government bond issuance in the period 2017-2020 is expected to stand at 6-7 years and 7-8 years for the period of 2021-2030. Meanwhile, the density of government bonds by insurance companies, social insurance companies, pension funds, investment funds and non-bank financial institutions will increase to 50% by 2020 and 60% by 2030. To that end, Vietnam is set to complete its policy framework for the bond market, develop the primary and secondary markets, diversify investors, and facilitate intermediary institutions and market services.

Domestic bond markets are less developed in Cambodia, Laos, and Myanmar. In fact, the Cambodia government has yet to issues bonds, though it is putting motion legislation that will allow bond issues in the future. Plans had been made to being the process of issuing bonds as early as 1997, however the economic and political disturbances in Cambodia, as well as in the region as a whole, put this project on hold. As one of its medium-term goals under the FSDS (updated for the 2016–2025 period), the Government of Cambodia is pursuing the development of the MEF's capacity to issue government securities. At the same time, the regulatory framework for corporate bonds (nongovernment debt securities) put in place by the SECC in August 2017 is expected to lead to the issuance, listing, and trading of debt securities in the next 12–18 months.

The bond market in the Lao PDR is still at a nascent stage of development. In the context of the objectives of the 6th Five-Year National Socio-Economic Development Plan, 2006–2010, the Lao Securities Exchange (LSX) was formally established on 10 October 2010 and launched on 11 January 2011. For government bonds, the Ministry of Finance, Lao

PDR (MOF) led the drafting of the Decree on Government Bonds, which was released in March 2017; these new government bonds will be listed on and traded at the LSX.

Among the CLM countries, it is difficult to develop the domestic bond markets and to participation in regional bond-market. It appears that the CLM banking systems are relatively less stable than the rest of ASEAN members. - Cambodia, Lao PDR, and Myanmar essentially the key is to improve banking system and focus more on providing greater access to financial services.

Lao P.D.R first issued baht-denominated bonds in Thailand in May 2013, followed by three more issuances in December 2013, October 2014, and June 2015. In December 2015, Lao P.D.R. also issued its first US dollar denominated floating-rate bonds, amounting to US$182 million. The bond proceeds have financed the budget deficit as well as the government's share in power projects.

When the Vietnam securities market started in 2000, government bonds were the only major products to be listed for trading on the market. Vietnam's bond market has improved significantly as the government continuous to initiate reforms and pass enabling legislation. The government's first international bond issuance in October 2015 was a resounding success. Local government bonds both VND and USD were issued in large lots while streamlined producers continue to ease corporate bond issuance. Maturities very from less than 1 year to 15 years. Convertible bonds have also been introduced. Bonds are typically purchased at initial auctions by insurance companies, banks, and individuals and held until maturity. A number of listened securities companies are authorized to provide a full range of securities services including underwriting, brokerage, advisory, portfolio management, and trading.

Based on the fact that, banking system of Laos and Vietnam is stronger than Myanmar. Because they handling the foreign currency risk for their USD bond yields. That is one basic lesson for Myanmar to improve the banking system especially in foreign currency SWAP, FORWARD etc…

The Vietnamese dong has depreciated only 0.3% against the USD year-to-date. The stability of the dong is being supported by a healthy balance of payments, high growth of investment inflows, due to an improved investment climate, and the continuous buildup of foreign reserves by State Bank of Vietnam. These factors have also contributed to rising investor confidence in the Vietnamese market. The strong growth is mainly driven by the surge in the issuance of central bank bonds that resulted in outstanding central bank bond increasing more than threefold.

The outstanding bonded debt at end-2015 was US$838 million, accounting for 12.8 percent of total external debt. The authorities have indicated that they intend to continue to issue bonds in the Thai market after 2016. According to the strategy for the development of the bond market which was approved by Prime Ministry, the outstanding debt of the government bond, government-guaranteed bond and municipal bond market is aimed at about 38% of total GDP in 2020 and 45% in 2030. (Source: G-bond market hits new records, Lan Nhi-6.3.2018 HANOI)

Central Bank of Myanmar also should be tried to stable of domestic currency against with foreign currencies especially with USD to attract more invest in government bonds. Then Myanmar should be favorable landscape for foreign investment to increase the foreign reserve to build up investors' confidence. Myanmar is requiring lots of infrastructure development in many areas. According to the Laos's experiences, Myanmar government should be introducing the infrastructure project bonds which is guaranteed by government instead of the government budget allocation.

CHAPTER IV
EVALUATION ON THE SITUTATION OF BOND MARKET IN CLMV

This chapter includes the evaluation on the current situation of bond market in CLV and examine the bond market situation of Myanmar. There was also expressed examination on survey result regarding the requirements of bond market development in Myanmar.

4.1 Current Situation of Bond Market in Myanmar

In the beginning of 1993, the Central Bank of Myanmar (CBM) began to explore the possibility of reactivating and issuance of government Treasury bond with a view to lessen the rate of inflation and to mobilize the financial resources of the private sector. Other intentions of government Treasury Bonds and Bills are to finance the government budget deficit; its debt has been largely due to the substantial need to invest in basic economic and social infrastructure works. For financing the budget deficit, CBM on behalf of Government issues bonds with three types based on maturity terms 5 year, 3 years, and 2 years.

In 1993, bonds with denominations of Kyat ten thousand, Kyat hundred thousand, and Kyat one million. Treasury Bonds carrying interest rates of 10.0% for 3-year Treasury bond and 10.5% for 5-year Treasury bond are issued by paying interests twice a year, in the mid of March and September. The issues of bonds are means of financing to budget deficit. However, the amount of bonds invested by public and private are relatively lower than amount of budget deficit. Although investment in bond is risk free, there are so many reasons for dearth of investment in bond issuance of CBM.

At the moment, there are two mainly government securities in Myanmar: government treasury bonds and government treasury bills. As the Central Bank of Myanmar's prudential regulation, banks can treat treasury bonds as their cash balance with liquidity purpose. When there is a liquidity shortfall, banks can obtain short-term credit from CBM. Therefore, banks are the major investors with approximately 90% of government treasury bonds rather than the public. Government treasury bonds deposited by banks in the CBM are treated as cash balance in calculating the reserve requirement. This is one main reason why banks are major investors of the treasury bonds in Myanmar.

However, government treasury bills could not attract even domestic investors in Myanmar with low rate of return. According to the yearly Budget Law, government partly used treasury bills for public debt financing. In addition, borrowers and investors have to rely heavily on the banking sector in Myanmar. To improve the bond market in Myanmar, key factors those could impact on the Myanmar's bond market should be considered.

This issuance of government Treasury bond with a view is to lessen the rate of inflation and to mobilize the financial resources of the private sector. According to Appendix II, total outstanding amount of 3-years bond were increasing regularly until 2008-2009 FY. In 2009-2010, outstanding amount sharply increased to756.6 billion Kyat and the level sustained for three periods. Total value of 3-year maturity bond outstanding has been decreased year after year since 2011- 2012. The outstanding of government treasury three year bonds' value were Kyat 768.287 billion in 2010-2011 FY, and decrease in 2014-2015 FY up to Kyat 569.525billion. Regarding to amount of bond holding for three year bonds, only (3.17%) are at the hand of public investors in 2016-2017, Appendix II.

From this finding, it can make conclusion the proportion of individual investors of public is still so-small compared to private sector especially investment of private banks. For bond market development, it needs to widely participate by individual investors of public.

Table 4.1 Public and Private Holding Structure of Bond Outstanding at the End of FY 2016-17

Type of Bond	Public Holding (%)	Private Holding (%)
5-year	1.73	98.27
3-year	3.17	96.73
2-year	4.35	95.65

Source: Selected Monthly Economic Indicators (June-2018)

The Central Bank of Myanmar has issued 5 year bonds since 1993. According to Table (4.2), issuance of five-year bond and total amount of outstanding for the FY from 1993-1994 to 2016-2017 can be learned. Total of 5-year treasury bond outstanding were dramatically increasing year by year since 2009-2010. The treasury bond outstanding were Kyat 31.448 billion in 2005-2006 FY and dramatically increased in 2014-2015 FY, up to Kyat 1814.685billion. Regarding to amount of bond holding for five year bonds, only 1.73% of total outstanding of five years are at the hand of public investors in 2016-2017, Appendix II. From this finding, it can make conclusion the individual investors of public could not invest in long terms investment compared to other types of bonds.

Moreover, the Central Bank of Myanmar has issued two-years treasury bonds since 1st January 2010. The data of two-year bond outstanding are shown in Appendix II. According to the outstanding of two-year government bond were Kyat 52.723 billion in 2010-2011 FY, and dramatically increase in 2014-2015 FY, up to ten times. In this regards of two Year bond and three Year bond of outstanding decreasing in total amount, there are other alternatives sources of investments. When compare the interest rates of those bonds and saving deposit account, called deposit account, and fixed deposit account, term deposit, gains bonds are fixed and lower than the gains from latter sources of investment. Gain from saving deposit account is compound interest rate. And then, interest rates of term deposit account and fixed deposit account are higher than bond coupon rates, thus gains from bond are less attractive for individual investors and households.

Regarding to investment with government bond, real interest rate is very critical factor in buying bond for long· term. Since there is no secondary market, investors are reluctant because of lack of liquidity of bond assets. And then there is a temptation to lean on central banks to money creation of financing budget deficits and makes real interest rates very low. Respect to this context, invest in bond or T-bills is limited and there are other alternatives of more returns.

The CBM has issued Two-Year Government Treasury Bonds started from 1st January 2010, the rate is 10.5 %. The currently coupon rates are fixed at 8.75% for 2- years bonds, 9% for 3 year bonds, 9.5% for 5 years bonds respectively. The denominations of bond are10 thousand, 100 thousand, 1 million and 10 million kyats.

According to Key Indicators for Asia and the Pacific 2018 Report, inflation rates are 7.7% in 2010, 5.0% in 2011, 1.5% in 2012, 8.9% in 2013, and 5.0% in 2014, 9.5% in 2015, 6.9% in 2016 and 4.6% in 2017 respectively. When compared and adjusted to the interest rates, the real interest rate was not attractive to investors. Interest rate structure and current interest rate comparison are mentioned in Table (4.2).

Table 4.2 Changes of CBM Interest Rate / Treasury Bond Interest Rate and Commercial Bank Rates

Year	CBM Rate (%)	Inflation	Treasury Bond			Commercial Bank IR on Saving		
			2-Year (%)	3-Year (%)	5-Year (%)	One Year Fixed Depsit	Two Year Fixed Depsit	Three Year Fixed Depsit
1993	11.00	-	-	10.00	10.50	9.50	-	-
1995	12.50	-	-	10.00	10.50	10.50	-	-
1996	15.00	-	-	13.50	14.00	12.50	-	-
1999	12.00	-	-	10.50	11.00	10.50	-	-
2000	10.00	-0.20	-	8.50	9.00	9.75	-	-
2006	12.00	20.00	-	10.50	11.00	12.00	-	-
2010	12.00	7.70	10.50	11.00	11.50	12.00	-	-
2011	12.00	5.00	10.50	11.00	11.50	12.00	-	-
2012	10.00	1.50	8.75	9.00	9.50	8.75	-	-
2013	10.00	8.90	8.75	9.00	9.50	8.75	-	-
2014	10.00	5.00	8.75	9.00	9.50	8.75	-	-
2015	10.00	9.50	8.75	9.00	9.50	8.75	-	-
2016	10.00	6.90	8.75	9.00	9.50	8.75	-	-
2017	10.00	4.60	8.75	9.00	9.50	8.75	-	-
2018	10.00	5.50	8.75	9.00	9.50	**10.0** (Yoma)	**10.0** (KBZ)	**10.75** (KBZ)

Sources; CBM, Myanmar Key Indicators & Commercial Banks

In order to develop efficient market infrastructure and secondary market of the government bonds, Myanma Economic Banks (MEB) and Myanmar Securities Exchange Center (MSEC). However, Myanmar bond market is still infant compared with other countries in South East Asia region even Vietnam emerging bond market. Now, Myanmar issues and trades only government treasury bonds and has not yet issued municipal bonds and corporate bonds. Bond market links between issuers who long-term financing needs and investors who willing to place funds in long term. It not only can reduce the risks of financial sector but also can be treated the inflation as a tool by using partially bond trading operation.

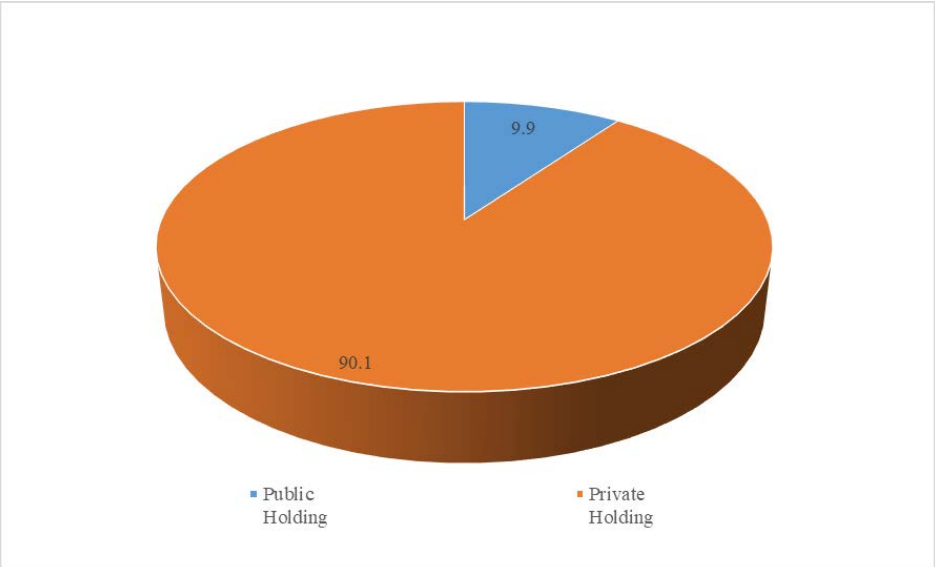
The processes of new auctioning system of T-Bills are undertaken by the cooperation of Ministry of Planning and Finance and the Central Bank of Myanmar and began at 28 January 2015. The role of Ministry of Planning and Finance is as an issuer on behalf of Union of Myanmar and the role of Central Bank of Myanmar is the taking all of back and front office work for issuance, auctions, settlement, registry, transactions and maturity of the securities.

4.2 Public and Private Holding of Bond Outstanding Structure in Myanmar

Government bond issues increased since 2008-09. Originally, the bonds are used to finance the budget deficits. However, it also has implications to stimulate and to channel private investment toward productive sectors. In this regards, although it is not a high consumption society, but Myanmar people have good saving potential. It can be predicted that large sums of saving have not been with the banks but with the private hands.

The facts from Figure (4.1) and Table (4.1), provide some ground evidences to believe that adequate investable funds exist in private sector for the functioning of a capital market. In Myanmar bond market, more than 90% of outstanding bonds are in the hands of private investors especially private banks. Thus, private sector especially private banks have invested nearly 100% of investment opportunities of bond market with risk associated basis.

Figure 4.1 Average of public and private holding the bond outstanding structure at the end of FY 2016-17



Source: Selected Monthly Economic Indicators (June-2018)

The increasing interest rate of bond can attract private investors. However, there are some limitations to participate in investment in bonds. Government should be encouraging to public institutions such pension funds, social security funds and insurance companies are very promising to invest because these institutions have surplus funds. With respect to incentives of investment in bonds, there are needed to control the negative effects of inflation on bond prices and bond yields. Only primary market of issuance bond is not able to persuade the resources from public and private sector for bond market. It should make some policy for public institutions to invest in bond.

4.3 Evaluation on Bond Issuance in Myanmar

Theoretical validity of the "monetarist hypothesis": that a constant, positive government budget deficit can be maintained permanently and without inflation if it is financed by the issuance of bonds rather than creation of money. However, it will increase national debt as a percent of GDP increase, if the budget deficit is above a certain level. This may lead to a higher percent of national income being spent on debt interest payments. The policy implications of bond financing are to reduce the amount of new money in the circulation and to direct the saving in to productive investment. Thus, it needs to cover the magnitude of budget deficit. Economic policy makers have not identified yet a specific debt-to-GDP ratio as being ideal, and instead they focus on the sustainability of certain debt levels.

More coverage for budget deficit by bond financing can cause stable inflation. How budget deficits being financed are sometime proved as direct connections between budget deficits and macroeconomic instability. Budget deficits can be a source of inflation if they are accommodated by monetary policy-that is, if the authority responses to higher deficits by increasing the growth of money. Thus, budget deficits lead to greater money base growth, which can create inflationary pressure.

With regards the budget deficit-to-GDP ratio, it was 4.7% total budget in 2010-2011, amounting to Kyat 1813.56 billion. In this regards, only 24.59% total budget deficits could cover by bond financing in 2010-2011. In further year of 2012- 2013, it could cover 85.42% of budget deficits by bond financing. In 2013-14 again, the proportion of outstanding bond to budget deficit had sharply increased to 137.3%, the highest coverage of bond financing to budget deficit. However, before and after this year the ratio of coverage of bond to deficit was low.

Total of all kinds of treasury bonds outstanding values were dramatically increasing year by year, mentioned at Appendix II. The treasury bond outstanding value were Kyat 117 billion in 2006-2007 FY, and the outstanding amount increased further to reach Kyat 2900.47 billion in 2014-2015 FY. This issuance of treasury bonds of the government with a view is to lessen the rate of inflation and to mobilize the financial resources of the private sector. Other intentions of government Treasury Bonds and Bills are to finance the government, its debt has been largely due to the substantial need to invest in basic economic and social infrastructure works such as dams, roads and bridges, electric power utilities, transport and communication facilities, schools and hospitals with a view to promote private sector activities.

When compare among the three types of bond based on maturity period, five year bonds have more coverage on the budget deficit than two and three-year maturity bonds. Regarding as bond coverage to budget deficit, proportion of five year bonds issuance is 10.68% to budget deficit in 2014-2015. After 2009, in 2012-2013, 85.42% of budget deficits could be covered by all types of bond financing. Total bond outstanding ratio to GDP of Myanmar is lower than other emerging market of ASEAN countries like Vietnam.

4.4 Examine on Bond Market Development in Myanmar

4.4.1 Research Design

To collect the required information, the relevant concerning the participants are required to select as a sample size which should represents for the size of population (market). In this study, (62) respondents have been chosen for conducting online survey. The respondents can be classified by (2) groups; Master of Banking Students and those who are working private commercial banks. At that point, the another reason for that why didn't include the participants from state-owned, Central Bank of Myanmar as a monetary authority, Ministry of Planning and Finance, MSEC, all of them are major developers of bond market in Myanmar. If they participate in this survey, the most of results will be ranking number 5, strongly agree with questions.

4.4.2 Respondents Perception on Bond Market Development in Myanmar

In this section express overall results of all respondents. As a simple calculation, number of response on each rank has been divided by (32) and changed into percentage for every key factor. Responses of all ranks can be realized immediately by comparing the more/less percentage each other. One thing has to be noted that most of the perceived key factors have mainly focused on agree, rank 4, table (4-3) to table (4.7).

Table (4.3) Challenges of the Macroeconomic Factor

No.	Statement	Mean
1	Tax policy relating with interest income on bond should be attracted the public.	3.6
2	Political risk should be considered.	4.0
	Overall Mean	3.8

Source: Survey Data 2018

Two questionnaires were designed to obtain the respondent's perception on the requirements of macroeconomic factor. The overall mean is 3.8 which achieve high perception by the respondents. The low mean is 3.6 on 'tax policy' meaning that respondents are not family with effectiveness of tax policy in development of bond market. The high mean is 4.0 on 'political risk' which is effectiveness on historical experiences.

Table (4.4) The Country Financial System

No.	Statement	Mean
1	Facilities on payment and settlement system must be improved.	3.8
2	It also need the external technical assistance.	3.7
3	Role of domestic rating agencies should be reliable.	3.8
	Overall Mean	**3.8**

Source: Survey Data 2018

Three questionnaires were designed to obtain the respondent's perception on the requirements of financial system factor. The overall mean is 3.8 which achieve high perception by the respondents. The low mean is 3.7 on 'need the external technical assistance' meaning that respondents are confidence in local capacity to participate in bond market development. The high mean is 3.8 on rest of two questionnaires which are expressed respondents believe that facilities on payment & settlement system and credit rating agencies should be developed.

Table (4.5) Challenges on the Laws & Institutions

No.	Statement	Mean
1	Legal enforcement is essentially need.	3.9
2	Regulatory framework should be perfect.	3.9
3	Legal risk should be considered.	3.9
	Overall Mean	**3.9**

Source: Survey Data 2018

Three questionnaires were designed to obtain the respondent's perception on the requirements of laws and institutions factor. The mean for each statement and overall mean are 3.9 which achieve high perception by the respondents. All respondents are known that without 'legal enforcement and regulatory framework', 'legal risk' may high barrier to develop the bond market, because of it mean that weak to protect the issuers and investors.

Table (4.6) Challenges on the Bond Issuers & Investors

No.	Statement	Mean
1	Corporate bond issuing is as important as government bond issuing for raising to funds of business organizations & government.	3.6
2	Requirement of resource persons is one of the challenges.	3.7
3	Operational risk should be considered.	3.6
	Overall Mean	**3.6**

Source: Survey Data 2018

Three questionnaires were designed to obtain the respondent's perception on the issuers and investors factor. The overall mean is 3.6 which achieve high perception by the respondents. The low means are 3.6 on 'corporate bond issuing is as importance as government bond issuing' and 'operational risk' mean that to develop the bond market, there should be develop in both of bonds, government and corporates. Moreover, bond market operation should be considered to become proper process to avoid the fraud on it. The high mean is 3.7 on 'requirement of resource persons is one of the challenges' which mean that to develop and to operate the bond market functioning, capacity of resource persons who are working in issuer and investor organizations must be high.

Table (4.7) Requirement of the Market Infrastructure

No.	Statement	Mean
1	Government involvement for building the bond market infrastructure is required the improve bond market.	3.6
2	Government involvement for public debt financing is essentially need.	3.5
3	Availability of accurate and timely market information are required.	3.8
4	Market risk should be considered.	3.8
	Overall Mean	**3.7**

Source: Survey Data 2018

Four questionnaires were designed to obtain the respondent's perception on the requirements of market infrastructure factor. The overall mean is 3.7 which achieve high perception by the respondents. The low mean is 3.5 on 'government involvement for public debt financing is essentially need' which meaning that respondents may understanding regarding the bond market, however they didn't understand the role of government in debt financing of nation. The high mean is 3.8 on both 'availability of accurate and timely market information' and 'market risk' which mean that respondents really understand the important of information. Without accurate and timely market information, its sure that both of issuers and investor may face with market risk.

CHAPTER V

CONCLUSION

This chapter is conclusion of the study based on finding from analysis of secondary data of bond market in CLMV and results from survey also gives some relevant suggestion for development of bond market in the future.

Among the ASEAN countries Thailand started to issue bonds in 1933, Singapore, Malaysia, Philippine and Indonesia began issuing bonds between 1950s and 1980s and the issuance of bonds in Vietnam, Myanmar, Cambodia and Laos started after 1990. For the issuing market of bonds, the primary dealer system is applied in most countries, but Vietnam is planning to adopt this system, it has not been implemented in Cambodia, Laos and Myanmar yet. Regarding trading market of bonds most bond trading is done over- the-counter (OTC) via scripless trading.

5.1 Key Findings

In CLMV countries the bond markets are not in the same position, Vietnam markets is developed and the rest are emerging. CLM markets are in their infant stage. Regarding the issuance of government bonds, most of the countries issue bonds to raise funds needed to pay off maturing debt and finance their operations and development expenditure. Most of government bonds are issued in scripless form.

Most of the government bonds are issued according to the issuance calendar using auction through primary dealers (or) principal dealer. Participants from primary market auction are financial institutions, institutional investors such as mutual funds, provident funds, and insurance companies.

The Central Banks has the option to participate Government Securities auctions with the purpose of obtaining securities for its market operations. Provident funds, financial institutions and insurance funds are major investors in most countries.

Most of bond trading is done in the Over-the-Counter (OTC) market in many countries. In Vietnam the introduction of Primary Dealers System was in process. Primary dealer system can also greatly assist liquidity provided the dealers are committed to making continuous two-way prices and the existing bonds are sufficiently large. The ease with which a liquid bond market can be developed depends greatly on economic conditions.

Among the CLMV countries, except Vietnam there are no trading markets of government bonds in Cambodia, Laos, and Myanmar, however in Myanmar there was very thin trading and but not active.

The financial policy of Myanmar exercises as government spending is generally financed through a combination of taxes, foreign grants and loans, money creation, and bond sales. Thus, deficit budget is usual policy in Myanmar economy. The major reason for budget deficit can be attributable to capital investment in basic infrastructure. There are some proven records that policy of budget deficit or more spending than revenues can stimulate higher economic growth by regular growth rates of GDP. Growth in Myanmar's gross domestic product (GDP) is estimated at 7.2% in 2018 (April-September) and 7.6% in Fiscal Year 2018-19, reflecting strong expansion in investment for manufacturing and services.

However, Myanmar Bond Market is still infant compared with other countries in South East Asia region even Vietnam emerging bond market. Now, Myanmar could issue and trade only government treasury bonds and has not yet issued municipal bonds and corporate bonds. No secondary bond markets can be reluctant to investors in case of required quick liquidity for their securities. There must be strong and sound rules and regulations for linkages between issuers who long-term financing needs and investors who willing to place funds in long term for the utmost returns for investment. Basic infrastructures for bond market development are perquisites by which not only risks can be reduced but also bond trading operation can be made smoothly.

5.2 Recommendations

In ASEAN countries Governments enacted the laws for the development of primary and secondary markets of government securities. Therefore, for the development of government bond market in Myanmar the laws concerned should be enacted.

Regarding the issuance of government bonds, the issuance calendar for government securities is announced aiming to enhance the continuity, predictability and transparency of bond issuance and Primary Dealer System which plays a critical role in the growth and development of bond market, is adopted in most ASEAN countries. Treasury Bonds in Myanmar are available at any time and can be bought at the Central Bank of Myanmar (or) through Myanmar Securities exchange Centre (MSEC). Therefore, the issuance calendar should be announced and the Primary Dealer System should be adopted to pursue a common strategy in support of the functioning and development of primary and secondary markets for government bonds.

With regard to the maturity of government bonds the maturities of government bonds are between two to over twenty years in most ASEAN countries. In Myanmar there are only three types of treasury bond, 2-year, 3-year and 5-year treasury bonds. As the maturities of treasury bonds are only three types, the different maturities of treasury bonds and different types of bond should be issued.

For the purpose of participation in market operation the central banks have to subscribe some portion of total issue of government securities in some ASEAN countries. Moreover, financial institutions, provident funds, pension funds, insurance companies and other funds are required to invest a prescribed part of their funds in government securities. For the development of government bond market, the authority concerned should prescribe some portion of total issue amount of government securities for the central bank to participate market operation and encourage financial institutions and insurance fund and other funds to invest a prescribed part of their funds in government securities and initiate to issue government bonds in scripless form like some ASEAN countries.

Regarding the trading market of government bonds there was very thin market and not very active. Most of the bond investors are institutional investors. Over 90 % of outstanding treasury bonds are held by institutional investors especially private banks. Due to negative interest rate and inherent risk, a few individual investors are interested in investing bonds. Therefore, interest rate should be attractive and individual investor base should be extended through private banks and their branches.

Among the banks there was no trading market because the Central Bank opens a discount window for banks. When the banks need money, they can pledge treasury bonds at the Central Bank and can borrow money from the Central Bank.

To build an efficient and systematic government bond market the necessary infrastructure of a bond market such as regulatory frameworks, efficient regulatory body, auction method, two-way price quoting system by the primary dealers for bond trading market should be introduced. Moreover, if necessary, it is recommended that Myanmar should seek technical assistance from ASEAN and other multilateral organizations for the proper development of bond markets.

The sluggish growth of the bond market in Myanmar has been recognized due to a number of constraints on development of bond market. The macroeconomic stability, fiscal discipline, improved legal, accounting and regulatory systems for the financial sector, and a sound tax system are necessary requirements of bond market development in Myanmar. Moreover, Sound monetary and fiscal policy, Stable and credible government, Safe, sound, and smooth settlement procedure, efficient tax system, legal and regulatory procedure and liberalized financial system are also required to establish efficient and affective bond market in Myanmar.

As suggestion for policy advocacy, to be a successful bond market in Myanmar, those should be considered that to upgrade primary bond market as fully active secondary market, to enhance the liquidity in the secondary market for Government Bonds, to expand investor base in bond market apart from local private and state-owned banks, to be compatible government Budget deficit and bond issue plan and to improve awareness of financial knowledge and capital market literature for the general public. Since Myanmar has only government bonds, thus it should introduce the corporate bonds and these are needed to improve the infrastructure including secondary market and appropriate Law, Rules and Regulations, central depository system, tax system and accounting standard developed and practiced.

Finally, the most important point is that the investor base has to be extended in parallel with a suitable investor education in term of level. Recommended measures must be undertaken for developing the bond market.

According to the evaluation on the results and key findings, the following relevant policies would be recommended for way forward to develop the bond market in Myanmar:

(i) Upcoming rules, regulations and guidelines relating with Securities and Exchange Law in Myanmar need to be sure for effective, efficient and flexibility.

(ii) Considering government involvement for public debt financing, Ministry of Finance and CBM need to work together for financing the debt by using appropriate tools.

(iii) Government bonds are currently dominated as major debt securities in Myanmar's bond market. So, existing government bonds are required to improve during the initial period. As a next step, issuing corporate bond needs to be considered. Regarding this, role of rating agencies becomes crucial for the market.

(iv) In order to have the accurate and timely information for market assessment, regulatory body needs to be efficient. For example, reporting to the financial authorities for outlook the market with different views, issuing regular publications (i.e. monthly, quarterly, bi-annually issues).

(v) Responses show that the resource persons are also important for Myanmar's bond market. Regarding this, in-house trainings and further study in abroad are required for competence in bond market development.

(vi) When bond market developing, risk factors will become critical in the market. In this sense, the other risks relating with bonds are needed to be extend such as liquidity risk, interest rate risk, etc. in future. Due to the historical events, most of people weak in confidence to invest in government concern.

(vii) Conducting tax reform should take into account for interest income on bond. By reducing the income tax rate from (25%) to a certain lower rate might be helpful for bond market improving in Myanmar.

(viii) By reviewing different perceptions of bond buyers and bond suppliers, market can be developed more.

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APPENDIX A

QUESTIONNAIRE ON BOND MARKET DEVELOPMENT IN MYANMAR

Objectives

This project is conducted as part of a requirement of the Masters in Banking and Finance programme in Yangon Institute of Economics (YUE). The primary objective of this project is to identify the perceived impact of some key factors on development of bond market in Myanmar.

I. Could you tell me in which of these age groups you belong to? *(Tick where appropriate)*

No.	Age Range	Tick
1	21-29	
2	30-39	
3	40-49	
4	50-59	
5	60+	

II. Gender *(Tick where appropriate)*

No.	Gender	Tick
1	MALE	
2	FEMALE	

III. What is your highest level of education you attained? *(Tick where appropriate)*

No.	Level of Education	Tick
1	Primary	
2	Diploma	
3	Bachelor’s University Degree	
4	Master’s University Degree	
5	Doctorate	
6	Other	

IV. Employment Status *(Tick where appropriate)*

No.	Employment Status	Tick
1	Self employed	
2	Full-time employee	
3	Part-time employee	
4	Unemployed	
5	Other	

V. Have you ever heard or do you know the following words/ statement/phases?

	I have ever heard of the word or phrase but do not know what it means	I have ever heard of the word or phrase and know what it means	I have never heard of the word or phrase
Shares			
Corporate Bonds			
Government Bonds			
Treasury Bills			
Broker/Dealer			
Dividends			
Dividends Yield			
Yield to Maturity			
Price to Earning Ration			

VI. Please mark your responses on a scale of 1 to 5 (1: Strongly Disagree; 5: Strongly Agree)

Please choose how the following factors ***are more or less important for bond market development in Myanmar.***

No.	Description	1	2	3	4	5
i	Legal enforcement is essentially need.					
ii	Regulatory framework should be perfect.					
iii	Tax policy relating with interest income on bond should be attracted the public.					
iv	Government involvement for building the bond market infrastructure is required the improve bond market.					
v	Government involvement for public debt financing is essentially need.					
vi	Corporate bond issuing is as important as government bond issuing for raising to funds of business organizations & government.					
vii	Facilities on payment and settlement system must be improved.					
viii	Requirement of resource persons is one of the challenges.					
ix	It also need the external technical assistance.					
x	Availability of accurate and timely market information are required.					
xi	Role of domestic rating agencies should be reliable.					
xii	Political risk should be considered.					
xiii	Legal risk should be considered.					
xiv	Market risk should be considered.					
xv	Operational risk should be considered.					

VII. What was your source of knowledge of capital (Bonds/ Securities) markets?

No.		Tick
1	Personal Study	
2	Learnt in school/ university	
3	Internet	
4	Newspapers	
5	Radio	
6	Television	
7	Seminars/ Talks/ Presentation by related organization	
8	Brochures/ Pamphlets of related authority	
9	Broker/ Dealers	
10	Friends	
11	Family members	
12	Any other	

2. If you have additional comments on development of bond market in Myanmar, please leave in this space.

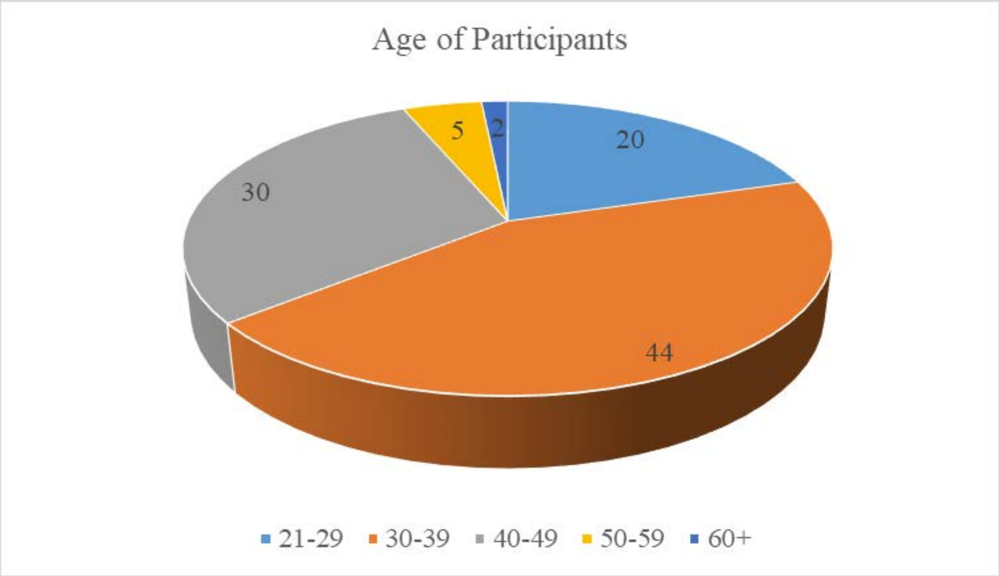
3. Please write down the **name of your organization and your current designation**. **(Writing your name is an optional).**

APPENDIX B

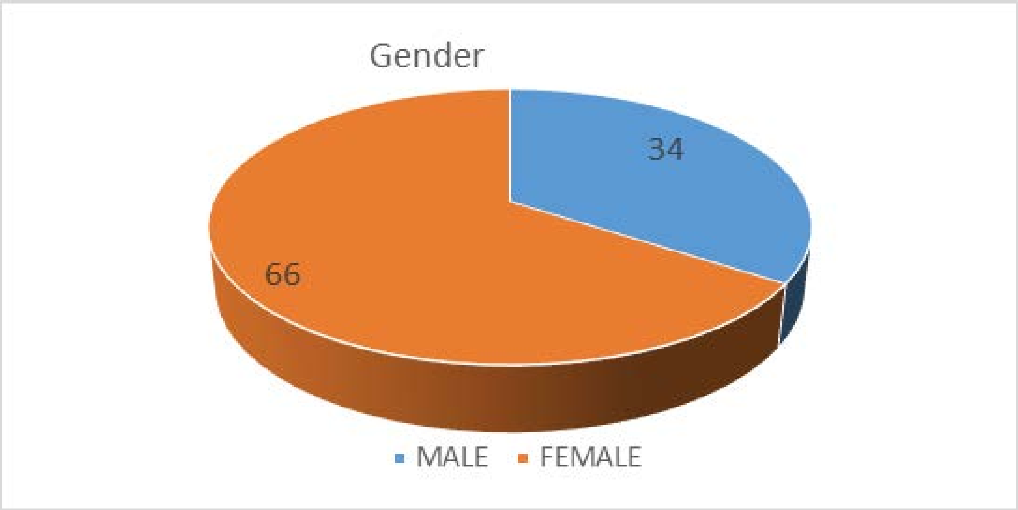
Related Tables and Figures of Online Survey

Survey Related Tables and Figures

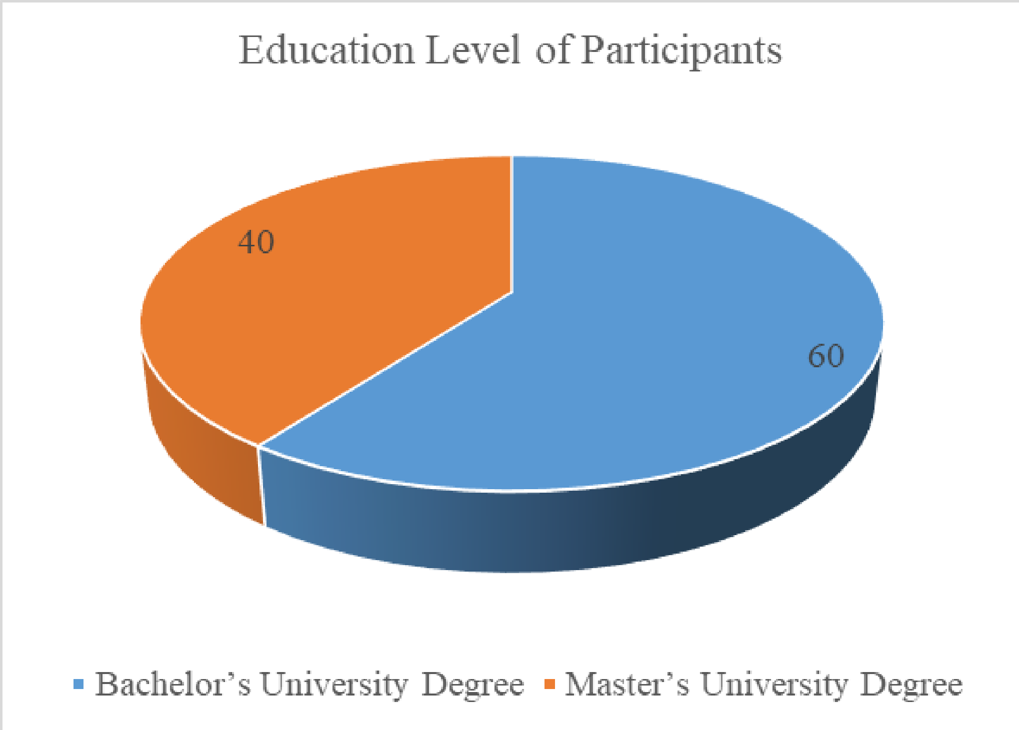
I. Age Group



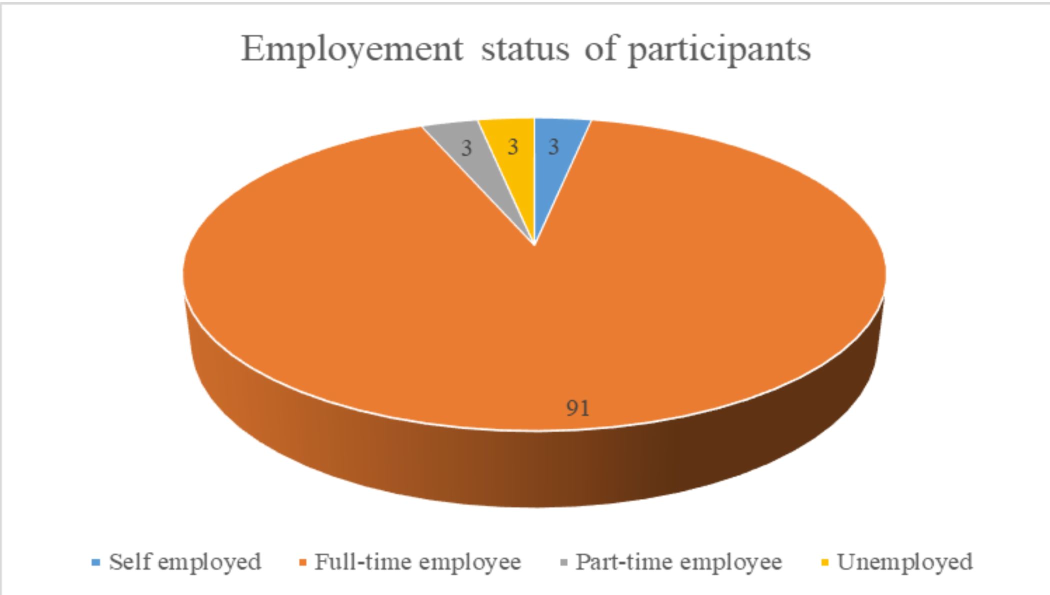
II. Gender



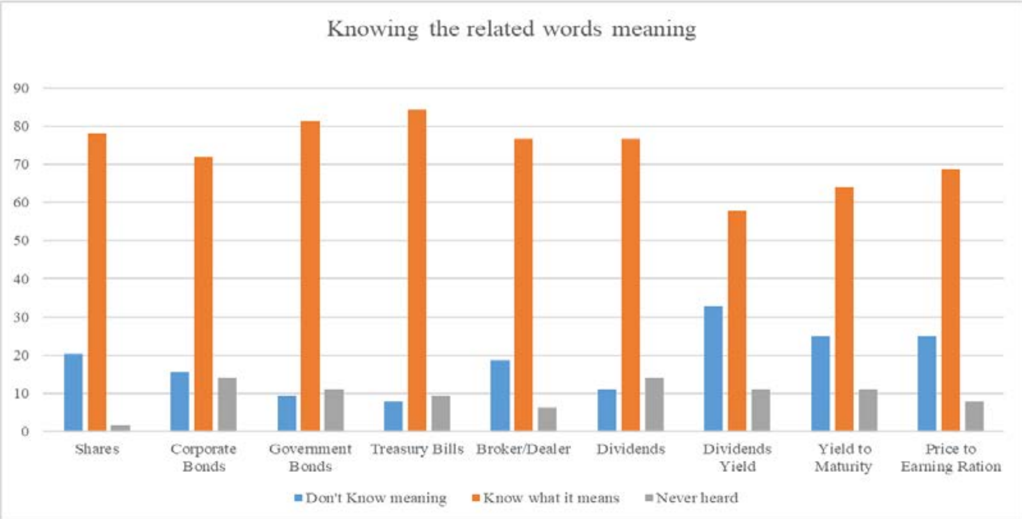
III. Level of Education



IV. Employement Status



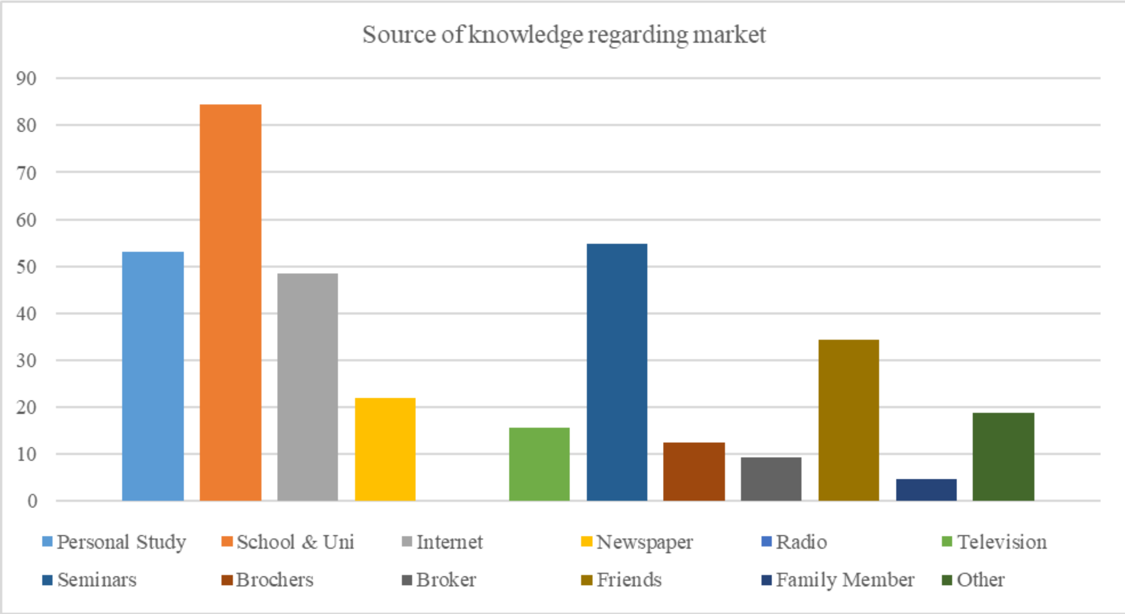
V. Knowing Related Words



VI. Responses' Results

	Overall Results of response on questions 6										
No.	**Particular question**	***1***	***2***	***3***	***4***	***5***	**% of R1**	**% of R2**	**% of R4**	**% of R5**	**R4+R5**
1	Legal enforcement	0	10	0	41	13	0	16	64	20	84
2	Regulatory framework	2	10	0	34	18	3	16	53	28	81
3	Tax policy relating with interest income on bond	3	13	0	38	10	5	20	59	16	75
4	Government involvement for building the bond market infrastructure	2	14	0	37	11	3	22	58	17	75
5	Government involvement for public debt financing	4	15	0	35	10	6	23	55	16	70
6	Corporate bond issuing is as important as government bond issuing for raising the funds of business organizations & government	1	14	0	43	6	2	22	67	9	77
7	Facilities on payment and settlement system	2	10	0	42	10	3	16	66	16	81
8	Requirement of resource persons	2	13		39	10	3	20	61	16	77
9	Needed for external technical assistance	4	8	0	43	9	6	13	67	14	81
10	Availability of accurate and timely market information	3	9	0	39	13	5	14	61	20	81
11	Role of domestic rating agencies	2	8	0	43	11	3	13	67	17	84
12	Political risk	2	3	0	44	15	3	5	69	23	92
13	Legal risk	4	6	0	35	19	6	9	55	30	84
14	Market risk	4	7	0	37	16	6	11	58	25	83
15	Operational risk	6	9	0	36	13	9	14	56	20	77
	(1=Strongly Disagree/2=Disagree/3=Neutral/4=Agree/5=Strongly Agree)										

VII. Sources of Knowledge


Source of knowledge regarding market
90
80
70
60
50
40
30
20
10
0
Personal Study
School & Uni
Internet
Newspaper
Radio
Television
Seminars
Brochers
Broker
Friends
Family Member
Other

MBF Students

No.		*1*	*2*	*3*	*4*	*5*	*% of 1*	*% of 2*	*% of 4*	*% of 5*
i	Legal enforcement is essentially need	0	6	0	16	10	0	19	50	31
ii	Regulatory framework should be perfect	0	5	0	14	13	0	16	44	41
iii	Tax policy relating with interest income on bond should be attracted the public.	1	8	0	16	7	3	25	50	22
iv	Government involvement for building the bond market infrastructure is required the improve bond market.	1	10	0	12	9	3	31	38	28
v	Government involvement for public debt financing is essentially need.	0	10	0	15	8	0	31	47	25
vi	Corporate bond issuing is as important as government bond issuing for raising to funds of business organizations & government.	0	10	0	16	4	0	31	50	13
vii	Facilities on payment and settlement system must be improved	0	7	0	17	7	0	22	53	22
viii	Requirement of resource persons is one of the challenges	0	8	0	16	7	0	25	50	22
ix	It also need the external technical assistance.	1	5	0	18	6	3	16	56	19
x	Availability of accurate and timely market information are required.	1	10	0	10	10	3	31	31	31
xi	Role of domestic rating agencies should be reliable.	0	5	0	16	9	0	16	50	28
xii	Political risk should be considered.	0	2	0	18	11	0	6	56	34
xiii	Legal risk should be considered.	2	4	0	12	14	6	13	38	44
xiv	Market risk should be considered.	1	4	0	12	14	3	13	38	44
xv	Operational risk should be considered.	2	6	0	13	10	6	19	41	31

Bank Staff

No.		*1*	*2*	*3*	*4*	*5*	*% of 1*	*% of 2*	*% of 4*	*% of 5*
i	Legal enforcement is essentially need	0	4	0	25	3	0	13	78	9
ii	Regulatory framework should be perfect	2	5	0	20	5	6	16	63	16
iii	Tax policy relating with interest income on bond should be attracted the public.	2	5	0	22	3	6	16	69	9
iv	Government involvement for building the bond market infrastructure is required the improve bond market.	1	4	0	25	2	3	13	78	6
v	Government involvement for public debt financing is essentially need.	3	5	0	20	4	9	16	63	13
vi	Corporate bond issuing is as important as government bond issuing for raising to funds of business organizations & government.	1	4	0	25	2	3	13	78	6
vii	Facilities on payment and settlement system must be improved	2	4	0	23	3	6	13	72	9
viii	Requirement of resource persons is one of the challenges	2	5	0	22	3	6	16	69	9
ix	It also need the external technical assistance.	3	3	0	23	3	9	9	72	9
x	Availability of accurate and timely market information are required.	2	3	0	24	3	6	9	75	9
xi	Role of domestic rating agencies should be reliable.	2	3	0	25	2	6	9	78	6
xii	Political risk should be considered.	2	1	0	25	4	6	3	78	13
xiii	Legal risk should be considered.	2	2	0	23	5	6	6	72	16
xiv	Market risk should be considered.	3	3	0	24	2	9	9	75	6
xv	Operational risk should be considered.	4	3	0	22	3	13	9	69	9

APPENDIX C

Related Tables and Figures of Myanmar Bond Issuance, Outstanding Structure

Saving Deposit form 2011-12 to 2016-17

Sources: Quarterly Financial Statistics Bulletin 2018 V1

Table 1 Two Year Government Treasury Bond Outstanding

Year	Two Year Treasury Bond (Million Kyat)				Amount held by (Kyat Million)	
	Issued	Interest Rate (%)	Discharged	Outstanding	Public	Private
2010-11	51,322.73	10.5	---	52,723.81	1,373.81	51,350.00
2011-12	541,117.46	10.5	251,401.08	342,440.19	51,740.19	290,700.00
2012-13	172,685.55	8.75	51,322.73	463,803.01	68,503.01	395,300.00
2013-14	436,487.60	8.75	291,117.46	609,173.15	78,573.15	530,600.00
2014-15	79,557.50	8.75	172,685.55	516,263.10	85,613.10	430,650.00
2015-16	285,814.69	8.75	436,487.60	365,590.19	38,940.19	326,650.00
2016-17	N/A	8.75	24,775.50	340,814.69	14,814.69	326,000.00

Source: Statistical Year Book (various issues), Ministry of NPED and Central Bank of Myanmar

Table 2 Three Year Government Treasury Bond Outstanding

Fiscal Year	Three Yeat Treasury Bond (Million Kyat)				Amount held by (Kyat Million)	
	Issued	Interest Rate (%)	Discharged	Outstanding	Public	Private
1993-94	36.01	10	---	36.01	26.01	10.00
1994-95	46.97	10	---	82.98	72.98	10.00
1995-96	824.27	10	---	907.25	90.25	817.00
1996-97	1,898.36	13.5	35.06	2,770.55	167.55	2,603.00
1997-98	2,422.95	13.5	47.21	5,146.29	101.83	5,045.70
1998-99	10,684.20	13.5	821.17	15,009.32	141.26	14,860.70
1990-00	5,340.25	10.5	1,898.36	18,451.21	136.25	18,307.70
2000-01	15,735.74	8.5	2,425.30	31,761.65	144.39	31,610.00
2001-02	6,512.04	8.5	10,678.20	27,595.49	133.23	17,455.00
2002-03	1,759.47	8.5	5,340.45	24,014.51	137.25	23,870.00
2003-04	7,230.56	8.5	15,735.74	15,509.33	132.07	15,370.00
2004-05	27,637.83	8.5	6,512.04	36,635.12	102.86	36,525.00
2005-06	12,038.23	8.5	1,759.47	46,913.88	56.62	46,850.00
2006-07	39,254.80	10.5	7,230.56	78,938.12	30.86	78,900.00
2007-08	70,346.32	10.5	27,637.63	121,646.81	581.65	121,057.70
2008-09	87,780.30	10.5	12,038.23	197,388.88	573.72	196,807.70
2009-10	598,470.66	10.5	39,254.80	756,604.74	699.28	755,898.00
2010-11	82,028.62	11	70,346.32	768,287.04	464.28	767,815.30
2011-12	56,412.39	11	87,780.30	736,920.67	2,680.37	734,240.30
2012-13	574,138.51	9	798,470.66	485,588.52	5,088.52	480,500.00
2013-14	154,224.92	9	82,028.66	557,784.00	104,435.00	453,350.00
2014-15	68,161.64	9	56,421.39	569,525.07	109,475.07	460,050.50
2015-16	310,912.80	9	347138.51	533,299.36	111,649.36	421,650.00
2016-17	N/A	9	143274.92	390,024.44	12,374.44	377,650.00

Source: Selected Monthly Economic Indicators (June-2018)

Table 3 Five Year Government Treasury Bond Outstanding

Fiscal Year	Five Year Treasury Bond (Million Kyat)				Amount held by (Kyat Million)	
	Issued	Interest Rate (%)	Discharged	Outstanding	Public	Private
1993-94	6.81	10.5	---	6.81	6.81	
1994-95	7.73	10.5	---	14.54	14.54	
1995-96	48.64	10.5	---	63.18	23.18	40.00
1996-97	491.64	14	---	554.82	54.82	500.00
1997-98	1,787.23	14	---	2,342.05	452.45	1,889.60
1998-99	14,969.66	14	6.81	17,304.90	237.09	17,067.81
1990-00	36,254.70	11	7.33	53,552.27	326.50	53,225.77
2000-01	44,559.91	9	48.64	98,063.54	360.07	97,703.47
2001-02	6,151.73	9	492.04	103,723.23	429.76	103,293.47
2002-03	6,346.64	9	1,788.23	108,281.64	407.17	107,874.47
2003-04	1,260.43	9	14,974.85	94,567.22	327.75	94,194.47
2004-05	16,680.91	9	36,855.04	74,393.09	359.62	74,033.47
2005-06	4,864.88	9	47,809.91	31,448.06	326.29	31,085.77
2006-07	11,831.41	11	5,202.23	38,077.24	821.42	37,255.82
2007-08	23,550.22	11	4,096.64	57,530.82	5,295.05	52,842.30
2008-09	43,094.02	11	1,252.03	99,372.81	6,932.04	93,074.30
2009-10	99,305.42	11	16,638.81	182,039.42	11,843.95	170,802.00
2010-11	312,678.15	11.5	4,864.88	489,852.69	13,197.22	477,262.00
2011-12	283,856.93	11.5	15,591.43	758,724.72	11,812.72	746,912.00
2012-13	348,838.70	9.5	23,550.22	1,084,031.20	14,901.20	1,069,112.00
2013-14	594,027.79	9.5	41,452.66	1,636,588.33	21,011.33	1,615,577.00
2014-15	276,625.67	9.5	98,529.25	1,814,684.75	25,154.75	1,789,530.00
2015-16	212,489.55	9.5	311,335.66	1,715,838.64	30,488.64	1,685,350.00
2016-17	N/A	9.5	262,356.93	1,453,481.71	25,131.71	1,428,350.00

Source: Selected Monthly Economic Indicators (June-2018)

Table 4 Public and Private Holding of Bond Outstanding Structure

Year	Public Sector (Kyat Million)	Private Sector (Kyat Million)	Total (Kyat Million)	Public Holding (%)	Private Holding(%)
1993-94	32.8	10.0	42.8	76.64	23.36
1994-95	87.5	10.0	97.5	89.74	10.26
1995-96	113.5	857.0	970.5	11.70	88.30
1996-97	222.4	3,103.0	3,325.4	6.69	93.31
1997-98	554.3	6,935.3	7,489.6	7.40	92.60
1998-99	378.4	31,928.5	32,306.9	1.17	98.83
1990-00	462.8	71,533.5	71,996.3	0.64	99.36
2000-01	504.5	129,313.5	129,818.0	0.39	99.61
2001-02	563.0	120,748.5	121,311.5	0.46	99.54
2002-03	544.5	131,744.5	132,289.0	0.41	99.59
2003-04	504.8	109,564.5	110,069.3	0.46	99.54
2004-05	462.5	110,558.5	111,021.0	0.42	99.58
2005-06	418.9	77,935.8	78,354.7	0.53	99.47
2006-07	852.3	116,155.8	117,008.1	0.73	99.27
2007-08	5,876.7	173,900.0	179,776.7	3.27	96.73
2008-09	7,505.8	289,882.0	297,387.8	2.52	97.48
2009-10	12,543.2	926,700.0	939,243.2	1.34	98.66
2010-11	15,035.3	1,296,427.3	1,311,462.6	1.15	98.85
2011-12	66,233.3	1,771,852.3	1,838,085.6	3.60	96.40
2012-13	88,492.7	1,944,912.0	2,033,404.7	4.35	95.65
2013-14	204,019.3	2,599,527.0	2,803,546.3	7.28	92.72
2014-15	220,242.9	2,680,230.5	2,900,473.4	7.59	92.41
2015-16	181,078.19	2,433,650.00	2,614,728.19	6.92	9308.00%
2016-17	52,320.84	2,132,000.00	2,184,320.84	2.39	9761.00%

Source: Central Bank of Myanmar (2017), Selected Monthly Economic Indicators (June-2018)

Table 5 Proportions of Annual Bond Issued to Annual Budget Deficit

Year	5 Year Bond (Kyat Million)	3 Year Bond (Kyat Million)	2 Year Bond (Kyat Million)	Total Bond Issues (Kyat Million)	Budget (Deficit/Surplus) (Kyat Million)	(%)Bond issued to Budget Deficit
1993-1994	6.81	36.01	---	42.82	-15,517	0.28
1994-1995	7.73	46.97	---	54.70	-29,647	0.18
1995-1996	48.64	824.27	---	872.91	-38,819	2.25
1996-1997	491.64	1,898.36	---	2,390.00	-51,739	4.62
1997-1998	1,787.23	2,422.95	---	4,210.18	-57,241	7.36
1998-1999	14,969.66	10,684.20	---	25,653.86	-91,875	27.92
1990-2000	36,254.70	5,340.25	---	41,594.95	-130,069	31.98
2000-2001	44,559.91	15,735.74	---	60,295.65	-214,805	28.07
2001-2002	6,151.73	6,512.04	---	12,663.77	-208,594	6.07
2002-2003	6,346.64	1,759.47	---	8,106.11	-203,905	3.98
2003-2004	1,260.43	7,230.56	---	8,490.99	-357,543	2.37
2004-2005	16,680.91	27,637.83	---	44,318.74	-426,951	10.38
2005-2006	4,864.88	12,038.23	---	16,903.11	-407,217	4.15
2006-2007	11,831.41	39,254.80	---	51,086.21	-721,222	7.08
2007-2008	23,550.22	70,346.32	---	93,896.54	-893,548	10.51
2008-2009	43,094.02	87,780.30	---	130,874.32	-677,677	19.31
2009-2010	99,305.42	598,470.66	---	697,776.08	-1,545,046	45.16
2010-2011	312,678.15	82,028.62	51,322.73	446,029.50	-1,813,560	24.59
2011-2012	283,856.93	56,412.39	541,117.46	881,385.95	-1,780,584	49.50
2012-2013	348,838.70	574,138.51	172,685.55	1,068,662.76	-1,251,000	85.42
2013-2014	594,027.79	154,224.92	436,487.60	1,184,740.31	-862,906	137.30
2014-2015	276,625.67	68,161.64	79,557.50	424,562.81	-2,551,811	16.64
2015-2016	212,489.55	310,912.80	285,814.69	809,217.04	-3,659,000	22.12

Source: Central Bank of Myanmar (2017), Selected Monthly Economic Indicators (June-2018)

APPENDIX D

Examination of online Survey Results and Challenges for Myanmar Bond Market

No.	Particular question	*1*	*2*	*3*	*4*	*5*	% of R1	% of R2	% of R4	% of R5	R4+R5
1	Legal enforcement is essentially need.	0	10	0	41	13	0	16	64	20	84
2	Regulatory framework should be perfect.	2	10	0	34	18	3	16	53	28	81
3	Tax policy relating with interest income on bond should be attracted the public.	3	13	0	38	10	5	20	59	16	75
4	Government involvement for building the bond market infrastructure is required the improve bond market.	2	14	0	37	11	3	22	58	17	75
5	Government involvement for public debt financing is essentially need.	4	15	0	35	10	6	23	55	16	70
6	Corporate bond issuing is as important as government bond issuing for raising to funds of business organizations & government.	1	14	0	43	6	2	22	67	9	77
7	Facilities on payment and settlement system must be improved.	2	10	0	42	10	3	16	66	16	81
8	Requirement of resource persons is one of the challenges.	2	13		39	10	3	20	61	16	77
9	It also need the external technical assistance.	4	8	0	43	9	6	13	67	14	81
10	Availability of accurate and timely market information are required.	3	9	0	39	13	5	14	61	20	81
11	Role of domestic rating agencies should be reliable.	2	8	0	43	11	3	13	67	17	84
12	Political risk should be considered.	2	3	0	44	15	3	5	69	23	92
13	Legal risk should be considered.	4	6	0	35	19	6	9	55	30	84
14	Market risk should be considered.	4	7	0	37	16	6	11	58	25	83
15	Operational risk should be considered.	6	9	0	36	13	9	14	56	20	77

(1) Legal enforcement is essentially need: (41) responses which equivalent to (64%) of total participants is selected agree on this factor. At the same time, strongly agree (rank 5) and partially disagree have been given (20%) and (16%) respectively. There is no response in strongly disagree (rank 1). As a group wide, bank staff have given agree (rank 4) up to 78% and MBF students have given 50% in agree respectively. MBF students responded 31% in strongly agree and no responded in neutral.

(2) Regulatory framework should be perfect. The same result for agree with (53%) and strongly agree (rank 5) has been given (28%). The response of agree has been chosen by bank staff group up to (63%). MBF students responded (44%) in agree, (41%) in strongly agree and no responded in neutral.

(3) Tax policy relating with interest income on bond should be attracted the public. According the result of responses, 59% are agree (rank 4) and (41%), (20 %) in disagree and

(16%) in strongly agree with this question. The response of bank staff group has been chosen (69%) in agree and (16%) in disagree. The MBF students group responded (22%) in strongly agree, (25%) in disagree and (3%) in strongly disagree with question.

(4) Government involvement for building the bond market infrastructure is required to improve bond market: (78%) of agree has been given by bank staff group response. (13%) of disagree and (6%) in strongly agree. However, the MBF student group has been responded agree in (38%), disagree in (31%), and (28%) in strongly agree.

(5) Government involvement for public debt financing is essentially need: (55%) at agree has been given by the total participants. The respondent of bank staff group and MBF students group are (63%) and (47%) has been responded in agree respectively. MBF students no responded in strongly agree and (25%) response in strongly agree,

(6) Corporate bond issuing is as important as government bond issuing for raising the funds of business organizations & government: (67%) at agree has been given by the total participants. The respondent of bank staff group and MBF students group are (78%) and (50%) has been responded in agree respectively. The MBF students no responded in strongly disagree and (13%) response in strongly agree.

(7) Facilities on payment and settlement system must be improved: The agree in (66%) chosen by total participants. The respondent of bank staff group and MBF students group are (72%) and (53%) has been responded in agree respectively. The MBF students no responded in strongly disagree and (22%) response in strongly agree.

(8) Requirement of resource persons is one of the challenges: This factor has also been concentrated on agree with (61%) of total participants. The respondent of bank staff group and MBF students group are (69%) and (50%) has been responded in agree respectively. The MBF students no responded in strongly disagree and (22%) response in strongly agree.

(9) It also need the external technical assistance: The agree has been selected with (67%) by total participants. The respondent of bank staff group and MBF students group are (72%) and (56%) has been responded in agree respectively. The strongly agree has been selected with (14%) by total participants.

(10) Availability of accurate and timely market information are required: The agree with (61%) came from total participants. The respondent of bank staff group and MBF students group are (75%) and (31%) has been responded in agree respectively. The MBF students (3%) responded in disagree and (31%) response in strongly agree.

(11) Role of domestic rating agencies should be reliable: Responses of this factor is also followed by the other key perceived factors. The agree with (67%) came from total participants. The respondent of bank staff group and MBF students group are (78%) and (50%) has been responded in agree respectively. The MBF students no responded in strongly disagree and (28%) response in strongly agree.

(12) Political risk should be considered: Responses of agree with (69%), strongly agree with (23%), disagree with (5%) and strongly disagree with (3%). The respondent of bank staff group and MBF students group are (78%) and (56%) has been responded in agree respectively. The MBF students no responded in disagree and (34%) response in strongly agree.

(13) Legal risk should be considered: Responses of agree with (55%), strongly agree with (30%), disagree with (9%) and strongly disagree with (6%). The respondent of bank staff group and MBF students group are (72%) and (38%) has been responded in agree respectively. The MBF students responded (6%) in strongly disagree and (44%) response in strongly agree.

(14) Market risk should be considered: Responses of agree with (58%), strongly agree with (25%), disagree with (11%) and strongly disagree with (6%). The respondent of bank staff group and MBF students group are (75%) and (38%) has been responded in agree respectively. The MBF students responded (3%) in strongly disagree and (44%) response in strongly agree.

(15) Operational risk should be considered: Responses of agree with (56%), strongly agree with (20%), disagree with (14%) and strongly disagree with (9%). The respondent of bank staff group and MBF students group are (69%) and (41%) has been responded in agree respectively. The MBF students responded (6%) in strongly disagree and (31%) response in strongly agree.

Examine on Respondents Perception [1]

This section will be observed more or less scale agree of perceived key factors on bond market development in Myanmar.

The maximum percentage of (92%) which is total percent of agree and strongly agree is Political Risk. It very related with the historical events. Second maximum percentage of (84%) are included legal enforcement, role of domestic rating agencies, and legal risk. It also very reflected the weakness and insufficient of Myanmar legal system. Third maximum

1 **Tables and figures regarding the survey results are attached in appendixes.**

percentage of (83%) is market risk mean that to develop the bond market in Myanmar, market risk must be considered as one of important risk factors.

The fourth maximum percentage of (81%) are included regulatory framework, facilities of payment & settlement, needed for external technical assistance, and availability of accurate & timely market information. It represented for lack of regulatory frame work, payment system, insufficient resources especially human resource and information resources to develop bond market in Myanmar.

The results of the rest of questionnaires are corporate bond issuing, requirement of resource persons & operation risk in (77%), tax policy and government involvement for building bond market infrastructure in (75%). Government involvement for public debt financing is strangely in lowest position in (70%). It clearly expression that most of the people didn't know what the government has been implementing regarding public financing.

Based on the group response, the bank staff are responded in average (82 %) in agree and strongly agree with the questionnaires. The MBF students group responded in average (75%) in agree and strongly agree.

According to the results of survey questionnaire number 5, the respondent of bank staff group and MBF students group are (59%) and (89%) has been responded that they have heard of the word & phrase and know what it means. This represented that bank staff are weaker that MBF student to know the meaning of market related words & phrase. This result mean that public awareness program regarding with the bond market is still weaker in average.

The another survey results of questionnaires 7, the source of knowledge of capital (Bond/Share) market, most (84%) of the participants, learnt in school or universities, second maximum percentage of (55%) are learnt in seminars/talks and presentation by related organization. The third largest group of participants (53%) are studied personally. Some of participants (48%) are learnt by using internet and (34%) of participants are learnt from their friends.

A few participants are learnt from newspaper is (22%), from television is (16%), from brochures is (13%), from broker is (9%), from family member is (5%), and from other way is (19%). None of participate learnt form radio. Those results are also highlighted the public awareness is essentially required.

One of the participants wrote the additional comment like as follow;

Stock market must up in running and generate the process like a normal stock market then the bond market must step in for my knowledge. The government must review the real problem with the stock market and must increase the process of stock exchange market which much more need to develop and functional.

According to the above comment, regulator should be evaluated the following matters;

(i) Even insurance of bonds system changed to scripless to in line with international standard, public don't like the new system which is don't provide the physical document regarding them possess. That is the result of historical events and public are lack in awareness in paperless system. To achieve this system, regulator should be aware the public to change their mind set to accept scripless system.

(ii) During recent year, CBM allowed to accept the term deposit and based on that, some commercial banks are trying to accept the term deposit more than one year with about 10 % interest rate. Those interest rates should be compare with government bond rates. The interest rate of government bonds is weak to attract the public to investment in government bonds.

Challenges for Myanmar Bond Market

The bond market development is particularly influenced by investors, issuers and financial intermediaries. In Myanmar, only bond issuer is CBM on behalf of government. The most significant determinant of the development of bond market is the level of general economic development, particularly so for the private segment of investor is major market participants. Macroeconomic volatility of prevalence interest rates and inflation are also determinants of the development of bond market. The rules and regulations for property rights between contracting parties also major factors for development of bond markets.

The current and practical issues of bond market development are infrastructure, disclosure requirements, information providers, derivatives, Central Bank liquidity management and market development and taxation. As new regulation, private banks need to deposit with cash their reserve money to the Central Bank of Myanmar (CBM) instead buying government bonds as new financial rules to private banks. That is also a factor to lessen the amount of bond issuance.

The efficient bond market can provide stability of financial system. Thus, Myanmar government has tried to develop bond market. Moreover, Myanmar has participated in Asian Bond Market Initiatives (ABMI) as a one member of ASEAN. In addition, borrowers and investors have to rely heavily on the banking sector in Myanmar. It is required to improve the bond market that needs to find what factors should be considered and to explore the policy adopted and procedures to be implemented for Myanmar bond market.

In general, all private investors' strategy is based on maximizing risk-adjusted returns. The goal is not to invest in the highest returning asset, but rather to invest in well-compensated risks. As risk free investments, bonds must be a means of preserving capital and earning a predictable return. Bond investments will have to create steady streams of income from investment payments prior to maturity.

According to the observations to securities markets developed in the CLMV country, there are some noticeable points for bond market sluggish in Myanmar. These points_ are discussed below and they should be positively fulfilled and changed into a standard circumstance for being workable capital market environment.

(i) ***Limited number of investor***; Only limited number of investors compared to total population is interested in investing in bond or stock market. At that point, awareness to those who are involving in treasury concern of organization like as insurance companies, heads of administration department and treasurer of famous pagodas.

(ii) ***Alternative sources of debt financing for companies***: Other sources of debt financing, especially borrowings from commercial bank are widely used by business organizations in Myanmar. There are weak in compliance for regulation to issue corporate bond. Apart from private organizations, the Regional Government should be think about to issue the municipal bonds for their regional development projects and some projects like as highway express also should be issue the government-guaranteed project bonds to public instead of budget allocate from Central Government.

(iii) ***Limited private management of pension fund***: In Myanmar, private management of long-term pension fund is very limited. State owned agencies and government organizations do not raise fund through issue of debt instrument. Nowadays, most of the big local companies are collecting the saving from their staffs to provide the gratuity when the staff is retired. However, nobody know how companies invest these saving. It’s most interesting one to consider to pursuit to invest in bonds markets.

(iv) ***Weak regulations and market infrastructure;*** Laws and regulations regarding governance of bond market have not been practically applied yet. Risk free investors just prefer government bonds; however, there are not substantial investors for government bond market. Lack of market professionals such brokerage and underwriters, and dealers for secondary market is major requirements. Stock exchange and Over- the- counter (OTC) market has not yet operated.

(v) ***Underdeveloped tax system***; Tax system in Myanmar is not properly developed. So, tax incentive for investing bonds is not very high which 'causes underdeveloped government bond market.

(vi) ***No secondary market;*** No secondary market of government debt securities makes constraints on determining proper pricing of the treasury bonds in the primary market. Thus, it should upgrade primary bond market as fully active secondary market and should enhance the liquidity in the secondary market for government Bonds.

(vii) ***High interest rate***: Individual savings are attracted by national saving scheme due to its high nominal interest rates given banks to saving account. National saving accounts are risk free and tax free though its interest rate is high; consequently, other saving products are crowded out from the market. Government should be introduced the inflation premium rate for bond yield like as Laos to attract the investors.

(viii) ***Inexperienced investor***; In Myanmar most of the investors have no experiences of portfolio investment. They are familiar with only treasury bonds.

(ix) ***High inflation***; Comparatively high inflation has been prevailing since last three decades, which has made potential investors introverted to invest in other sources of investment such as buying real estate and gold bullion.

Since Myanmar has no secondary market, liquidity is very important factor for being active of capital market. There are no rights for foreigners and international investors to invest in portfolio investment.

The consequences of alternative combinations of bond and money financing of budget deficits on interest rates, growth, inflation, debt/GDP ratio and measures of the interest burden, has affected Myanmar economy. The simulations are based upon a behavioral model that is monetarist in some crucial ways, with the central bank unable to influence real variables in the long run.