1. Background of the study

Various efforts are done by Asian nation to promote debt market after the financial crisis in asian region. Governments or other corporation issues fixed income security which is called bond (Karki, 2018). Bond fair value is determined by primary market, in initial issue, and secondary market, for further trading (Greenwood, 2004). Bond market is important source for firms and governments seeking the long term debt in terms of local currency and tends to reduce currency mismatch which raises by foreign currency bond (Dickie & Fan, 2005). Such that investors can benefit from that trend by forming the portfolio of both bond and stock (Dharmalingam et al., 2016). Dickie & Fan (2005) supports that banking industry in developed nations is compliment to bond market and overall development for each other sector's sectors. Sharma (2000) suggests that corporate and banking must be reformed in order to develop the bond market. Developing economies have realized the value of bond market and banking industry importance of relation for development (Aman et al.). Well developed bond market is seen as co-integrated part in financial system. Nations with larger bond market tend to have larger bond market (Warnock et al., 2015).

By studying the 10 Asian countries from 1990 to 2016, necessity of bond market development is imminent for development of economy of a country. And policy market should provide more attention to bond market in order to increment the growth of the economy (Hue & Tram, 2019). And further more Japan, Finland & Italy have interdependence of bond market capitalization and economic growth (Fink et al., 2003). There is a relationship between economic growth and bond market capitalization (Kapingura & Makhetha, 2014). Said (2012) found that the public and private debt, which is related to bond market, significantly contribute to the economic growth of the region. It is recommended to monetary policy can enhanced by pursuing suitable economic policy. Ultimately, leads to growth of bond market (Malkiel, 1962). Bond market contribute to the gross domestic (GDP) market even in underdeveloped countries. So, growth of economic is vital for development of bond market in Kenya (Wanjiru, 2015).

Zhu (2013) emphasis that to promote the development of bond market, credit rating plays a important role by diversifying and efficiency in disclosing the risk. Credit rating consider

financial and business risk for credit rating of firm or institution. Government bonds are subject only to interest rate risk while corporate bonds are subjected to credit risk in addition to interest rate risk (Varma & Rghunathan, 2000). Zulkiply & Miras (2016) found that changes in ratings significantly influence the bond market and credit rating act as spillover effect.

Burger et al. (2015) suggests that high inflation volatility form a serious obstacle to development of bond market. And evidences show that local currency bond perform better than foreign currency bond in terms of performance by including the inflation factor. Longei & Ali (2017) concluded that when the rate of inflation decreases the value of bond increases which means favorable for bond market. Bond holders are exposed to losses due to inflation and potential anti inflationary force (Rose & Spiegel, 2015).

Falling in the interest rate is suitable for bond market financial instrument because consequently it increases the value of bond (Longei & Ali, 2017). Consistent decrease in interest rate continues to attract the number of tourists in the corporate bond market (International organization of securities commissions(IOSCO), 2019). Varma & Rgunathan (2000) found that clear imperial evidence of long-range and multifractality by sample including almost all the interest rates in China bond market. Real interest rate is major factor in yield of the bond (Campbell, 1991).

Greenwood (2004) provides the reasons for bond market development are local investment by Asian countries, assistance to corporate debt restructuring, fostering of world economy and proposals on bond market development. Bond market is still under developed is still under developed and yet to significant contribute to GDP Comparatively with other economic determinants such as inters rates and exchange rates (Wanjiru, 2015). In recent years, Chinese government emphasizes the development of macro economy which ultimately develop the bond market (Zhu, 2013).

Bhattarai (2013) found that lower economic growth, slow economic growth and higher inflation rate result in unfavorable for debt market in the context of Nepalese environment. His Majesty Government (HMG) introduced the Company Act in1964, and issue the first government bond whose coupon rate was 6 percent and five-year maturity (Gurung, 2004).

Most important financial instrument, debenture, has not been able to attract the market in Nepal. And concluded that the positive effect on the economy (Shah, 2018). Nepal stock is the only trading floor for bond market. Lots of works needs to form to develop bond market in Nepal. Involvement of government in trading encourages public to invest (Karki, 2018).

This study is based on development of bond market in Nepal by determining the variables which will influence. The determining variables which will be considered are bond market, inflation, interest rate, banking industry, credit rating and economic growth.

2. Problem statement and research questions

Banks are key factor in development of corporate bond market and corporate bond can be viewed as a loan substitute. And highly concentrated banking industrys can result in depriving bonds market development (Dickie & Fan, 2005). High inflation volatility is obstacle to bond market development (Warmock et al., 2015). In order to development the bond market in China, official must pay more attention to credit rating (Zhu, 2013). Bond holders are affected by inflation and potential inflationary force (Rose & Spiegel). Bond Market is still under developed in the underdeveloped countries and yet to contribute significantly in market (Wanjiru, 2015)

After the Asian region crisis in 1997/98, different agencies have been promoting debt market. Even though, it seems high amount contribution in the market but rather it is relatively insufficient in compared to advanced countries. During economic richness and recession period, bond market and stock market moves in same direction. During recovery period market moves opposite direction (Patoda & Jain, 2012). Development of bond market is influence by the amount of debt which is referring to the economic growth (Said, 2012).

The low growth of economy, high inflation rate and high interest rate is unfavorable to Debt market in Nepal (Bhattarai, 2013). Nepalese bond market is comparatively small in size and does not have effective work in the security market for years. NEPSE is sole trading floor and relatively low numbers of development bonds in the country. There is proactive involvement of government in Nepal, which means, government reacts after

something happens (Karki, 2018).

Above evidences show the problem related with bond market development in international market and Nepalese market. For deeper understanding in the context of Nepalese market, the following issues are studies for this study:

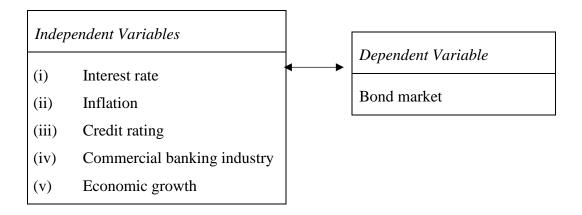
- (i) Does interest rate volatility affect the bond market capitalization in Nepal?
- (ii) What is the relationship of bond market capitalization with inflation and credit rating in context of Nepal?
- (iii) How commercial banking industry influence the movement of bond market capitalization in Nepal?
- (iv) What is the relationship between economic growth and bond market in Nepal?

3. Objectives of the study

The specific objectives of this study are as hereunder as follows:

- (i) To examine the affect of interest rate volatility in the bond market capitalization of Nepal.
- (ii) To determine the relationship of bond market capitalization with inflation and credit rating in context of Nepal.
- (iii) To analyze the influence of commercial banking industry in bond market capitalization.
- (iv) To assess the relationship between economic growth and bond market in Nepal.

4. Conceptual framework



5. Significance of the study

The significance of this research are as follows

- (i) In Nepal, Bond market does not have sufficient rules and regulation. It is still in early stage comparatively to other part of the world. This research will assist the law makers of the government to amend and rectify.
- (ii) This research will help the government about future probabilities of issue of debt instruments, based on that they can project the future economy needs and make proactive planning.
- (iii) Moreover, it highlights the importance of bond market to business organization as well as public also. Both borrower and lender plays a vital role in development of bond market, and without the existence of each party it is not possible. So, this research acts as the information to persuade for involvement in the bond market.
- (iv) This research identifies the different variables that impact the bond market. They are interest rate, inflation, term structure, warrant and convertible debt, and psychological affect of investors.
- (v) More importantly, this research identifies the value to the development of overall economy of the country and for borrower point of view, debt instrument is another alternative to raise the fund for long time.

6. Limitations of the study

The limitations of this research are as follows.

- (i) The data available in published annual reports have been assumed to be correct and true for secondary data analysis.
- (ii) Real gross domestic product and listed value of bond were collected from time period 2001/02 to 2017/18.
- (iii) Primary data are collected by only using five-point Likert scale questionnaire.
- (iv) This study used linear regression and neglected non-linear regression approac independent variables are used in this study.
- (v) Only five independent variable are used in this study.
- (vi) This study consists of the respondents from within one geographical which is Kathmandu valley.
- (vii) Primary data are analyzed by using quantitative data analysis method.

7. Literature review

The literature review for the study are as follows

Dickie & Fan (2005) provides the evidence that banks are oppose to the development of bond market and more likely to resist its development due to competition of providing alternative source of debt. The debt can be in form of long term bond and short term commercial paper debt. Even-though banks are essential institution for development of bond market, but bank keep unfavorable attitude due to completion of providing external financing.

Hue & Tram (2019) investigate ten countries from 1990 to 2016 in order to find the impact of bond market in relation to stock market. *The study find economic growth boost the development of bond market*. Furthermore, study reveals the stock market development and bank development to promote the economic growth.

Burger et al. (2015) suggested presence of higher inflation volatility is obstacle to bond market development in smaller developing countries. There are positive externalities to economic growth in relation to bond markets. The study shows evidence that better

inflation containment by countries are dominated by local currency bond in comparison to foreign currency bond. Moreover, countries which have larger bond market tend to have larger banking industry.

Zhu (2013) shows the important bond market in China where reforms in banking industry and national economy is needed. China still heavy relies on bank for financing whereas bond market provides alternative source of financing. Such that Credit rating plays a vital role for stimulating the investors to develop bond market.

Longei & Ali (2017) studied the determinants of the bond index at the NSE (Nairobi Securities Exchange). *The study concluded that there is negative correlation of inflation and interest rate with bond market index* which means they are inversely related. Falling in the rate of interest and inflation leads to increase the value of bond price.

Nargaret & Njufuan (2016) analyze the effect of economic growth on bond pricing. *The study shows that there is positive relationship between the bond price and GDP*. And recommended that investors should consider government policies before investing in bond market

(Subedi, 2006). Concerned with the bonds investment in total securities market along with the trend analysis of government bond.

(Kafle, 2003). Due to over supply of deposits by customers commercial banks do not issue debt securities.

(Mainali, 2002). Nepalese debentures market is still in initial stage and growth direction.

8. Methodology

Methodology is segmented into five sections which are research design, population and sample, source of data, data collection and processing procedure and data analysis tools and technique.

8.1 Research Design

The research design used for this study are descriptive research design and comparative

research design. Descriptive research design describes the different variables with the bond market.

8.2 Population and sample

As of 2018-2019, there are 222 companies listed in NEPSE. Number of listed companies and all the general public are placed in the category of population for this study. Some of listed companies have issued debenture/bond while other are the potential companies to issue in future.

Sampling method used for this research is stratified random sampling method which is probability sampling.

8.3 Sources of Data

The sources of data which will be used for this research are both primary and secondary sources.

8.4 Data Collection and Processing Procedure

The primary data will be collected by structured questionnaire from 100 respondents. The scale which will be used for questionnaire is 5-likert scale.

The secondary sources of data will be collected from SEBON and NRB from the time of 2001 to 2018.

Both primary and secondary data are processed into computer program like SPSS program and Microsoft tools as required. And the are presented in different figures and tables.

8.5 Data Analysis Tools and Technique

Statistical tools which will be used in this study is

Linear regression

Karl Pearson's correlation coefficient

Test of hypothesis

Mean

Standard Deviation

8.6 Chapter Plan

The chapter plan for this study are as follows

Chapter 1: Introduction

Chapter 2: Literature review

Chapter 3: Methodology

Chapter 4: Results

Chapter 5: Conclusions

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