Evaluating crowding out effects of borrowing by SOEs on private sector borrowing from Financial Institutions in Bhutan (2014-2018)

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CHAPTER ONE: INTRODUCTION

1.1 Introduction and background of the problem

1.1.1The economic issue

As a fallout of the market-failure debate in economic theory, particularly from the mid twentieth century, high expectations were placed on state enterprises especially in the Third World to stimulate economic growth and to promote industrialization. This contributed to a remarkable expansion of large state-owned enterprises (SOEs) in many sectors of the economy and the public sector came to dominate many of the less developed and developing countries (Nunnenkamp, 2000). However, international experience showed over time that extensive government involvement in investment, enterprises, finance, and infrastructure provision may, in fact, constrain economic development. Historically it has also resulted in lower productivity, resource inefficiency, poor service delivery and corrupt practices (Onodugo et. al. 2014). As a result, there is now an effort by most developing countries to shift away from public-sector-based centrally planned economy to a market driven private sector based economy. To achieve this, these countries are encouraging the development of small and medium scale enterprises (SME) along with large-scale industries.

There is a growing recognition of the need for governments to privatize the provision of infrastructure services, and restructure the regulations, laws, and fiscal incentives so as to encourage the private sector. At the same time, the growth of the private sector in certain small sized developing countries like Bhutan is seen to be constrained by many factors like skills shortage, small size of the domestic market, limited access to foreign markets, and lack of competition (Bhutan Development Report, 2019).

Access to finance is one of the most frequently cited challenges voiced by the private sector. Private-sector firms often face a paucity of bank credit and they seem to be getting crowded out of the formal sources of finance by the SOEs. The creditworthiness of SOEs are guaranteed by the state. This obviously means that they have a much lower chance of bankruptcy than private ones. Even if such a firm goes bankrupt, it will still have less probability of default due to likelihood of government compensation (Wang 2016). So, it is certainly safer for banks to lend money to these firms. Less access to formal sources of finance is limiting the contribution of private sector firms to the growth of the country.

1.1.2 Background of the problem in Bhutan

As per the World Bank report 'Bhutan Development Report; a path to inclusive and sustainable development; macroeconomics, trade, and investment global practice,' the existence of large SOEs in commercial sectors with a preferential access to policy makers distorts the market in Bhutan. The "SOEs have actually hindered the economy significantly as per the interim government's report," Opposition Leader (OL), Dr Pema Jamtsho (PhD) has said (Dem P, 2019). In addition, the government should not venture into activities which the private sector is actually doing said the Opposition Leader.

As per the World Bank report, lack of competition in the market prevailed due to greater state dominance in the economy. The commercial sectors such as manufacturing, energy, natural resources, financial, communication, aviation, trading, and real estate sectors are operated by SOEs. The growth has been driven mainly by the public sector particularly through hydropower development. State dominance is also reflected in the existence of a large number of state-owned enterprises, which along with the government accounts for the largest share of GDP. However, the excessive dependence on hydropower, which is largely state owned, has resulted in a weak private sector and also created macroeconomic vulnerabilities arising out of a dependence on a single industry (World Bank Group, 2019). The robust links that exist between policy makers and SOEs may discourage private investment. The large size of some SOEs and the extent to which affiliates of such enterprises enjoy access to policy makers potentially discourages private investments and thereby limits competition (Dorji, 2019).

The Bhutan Chamber of Commerce & Industry (BCCI) was established in 1980 as a non-profit organization comprising members of the business community in the country, and is the apex body of the private sector in Bhutan with the motto of developing and being responsible for private sector development (BCCI, 2019). Private sector development in Bhutan is one of the key objectives of the Royal Government of Bhutan. However, apart from the aforementioned policy challenges, lack of skilled labour, the small size of the domestic market, limited access to foreign market, dearth of technological advancement, inadequate domestic competition and limited sources of funding have emerged as major factors that constrain private sector growth in Bhutan (Dem P, 2019). The private sector has not been able to compete with the government in doing business, as the government emphasizes more on SOEs, which is contradicting with the national policy of providing opportunities to the private sector (Nima, 2018).

A 2013 diagnostic report on Bhutan's critical development constraints noted that limited access to and the high cost of finance continue to be key obstacles to private investment, especially for micro, small, and medium-sized enterprises (MSMEs) (Asian Development Bank, 2013). A study by the Asian Development Bank (ADB) on private small and medium firms found out that over 30 percent of them had constraints related to business development because of a lack of access to finance. According to a study by the Bhutan Chamber of Commerce and Industry, only 6.4 percent of the total credit from the financial institutions was made available to the private sector. Further, collateral requirements also impede the growth of small and medium enterprises (Dorji, 2015). More importantly, source of finance for the private sector have narrowed down mainly because financial institutions give more preference to lending to SOEs in the commercial sector (Dem P, 2019).

Against this background, this research aims at studying whether borrowing by the big SOEs from Financial Institution crowds out private investment through its dampening effect on private credit.

1.2 Problem Statement

The more recent study done by Manda, (2019) on the effect of government borrowing on the private sector credit in Zimbabwe found that there was no significant inverse relationship between credit to government and credit to the private sector, indicating that borrowing by the government might not have crowded-out private credit. This is because of high liquidity levels in the banking sector even after lending to government as well as risk aversion in light of the high rate of non-performing loans extended to the private sector.

Majumder, (2007) in his study on "Does Public Borrowing Crowd-out Private Investment?" concluded that there is no crowding-out effect in Bangladesh, rather the crowding-in effect is evident due to presence of such factors as excess liquidity in the banking system, imperceptible government competition with the private sector, relatively sustainable public debt scenario, government expenditure for transfer payment program, significant development expenditure for producing those goods and services which has the potential to discharge positive externalities. On contrary to the studies done by Manda (2019) & Majumder (2007), a study by Sen and Kaya, (2014), examining the effects of government spending on private investment to assess whether there was a crowding-out/-in effect, in Turkey stated that the government current transfer spending, government current spending, and government interest spending except capital spending, crowded out private investment in the case of Turkey. Further, a study conducted on financial crowding out of Ghanaian Private Sector Corporations by Kwablah, (2018) found that the Government of Ghana's policy of borrowing from the domestic market to offset some of the budget deficit crowded out the private sector from the loan market.

Borrowing by state owned enterprises in the domestic market is a common phenomenon both in developed and developing counties. In the context of Bhutan, development of private sector has been constrained by many a factor of which access to finance is one of the major challenges faced by the private sector (Dem P, 2019). Moreover, as per World Bank Group 2017 in their report "Investment Climate Assessment of Bhutan" stated that while the credit to the private sector as a share of GDP increased rapidly between 2006 and 2010, it has been constant since 2010 and is progressively dominated by housing and personal loans. It also suggests that in sectors such as small-scale mining, woodcraft, and construction, where potential profitability is relatively high, private investments have been deterred by SOEs. Further, the activities of state support entities have discouraged private investment in agribusiness by setting up several state-owned enterprises which led to a diminished presence of the rural private sector. For e.g. Bhutan Agro Industries Limited, a state-owned company distributes and market value added (processed) agricultural goods and in so doing, potentially crowds out private investment in food processing.

Notwithstanding larger public sector investment, because of properly managed fiscal deficit situation, the financial requirements from both domestic and external sources fell accounting 13.2 percent of the total credit flow (Nu.16.24 billion). Apart from improved fiscal deficit, timely disbursement of external grants resulted in lower dependence on treasury bills for financing short term cash deficit. This limited crowding out effect on private sector supporting quick recovery of private sector consumption and investment demand during financial year 2017/18 (RMA, 2018).

Notwithstanding the importance of the study of crowding out/in impacts of the public-sector borrowings on availability of private credit, not much research on this subject has been attempted before in the country. Thus, this research project would help create original literature in this field. This study addresses the following specific research problem:

Evaluating the crowding out/in impact of borrowing by SOEs from financial institutions on private sector credit in Bhutan.

1.3 Objectives of the Study

The objectives of this project are to:

1. Investigate the evidence of crowding out of private credit by SOEs borrowing in Bhutan over the past five years (2014 – 2018).
2. Examine the present level of factors affecting credit limit for private sector (benchmark with SOEs).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

From the crowding-out perspective public expenditure and public borrowing are two sides of the same coin as borrowing by public sector is mainly undertaken for financing the expenditures (Khan & Gill, 2009). According to Economics Dictionary crowding-out effect means "A theoritical condition that occurs when governments borrow, and thereby limit the amount of loan-able funds on the market for any other purposes. This ocuurs because of the higher interest rates that follow from the shortage of money, which makes it more expensive for private firms to borrow capital for expansion projects. A similar effect ocuurs when public spending prevents private firms from functioning; an example of which would be how public spending on public health services can crowd out private firm providing the same service." 'Crowds-out' is an economic concept where increased public sector spending replaces, or drives down, private sector spending. Crowding out refers to when government must finance its spending with taxes and/or with deficit spending, leaving businesses with less money and effectively 'crowding them out' (Department of foreign affairs and trade, 2014).

2.2 Theoretical Review

The ***Ricardian*** theory explained that households' response to the government's demand for credit to finance the budget deficit is to increase their level of savings in anticipation of future tax increases. There will be an increase in savings that will increase the quantity of credit available to borrowers due to presence of government debt. Banks do not have to increase the savings interest rates to attract these extra savings.

Therefore, the cost of credit available to firms will remain unaffected, and private investment will also remain unchanged. In sum, the Ricardian theory does not support the crowding out effect (Barro, 1989).

The ***Keynesian*** theory argues a complementary relation between credit supply and government spending (Mahmoudzadeh, Sadeghi, & Sadeghi, 2013). The theory states that public expenditure indicates positive economic environment to the private sector, which responds with higher investments. Therefore, government spending will have a crowd-in effect on the private sector's investment. On the other hand, as per Balcerzak and Rogalska (2014), and Mahmoudzadeh et al. (2013), analyzed data from different countries using the Keynesian IS-LM framework, they found that the theory generated different results depending on the type of government spending. Expenditure on capital formation led to crowd-in effect for all countries, while consumption spending led to crowding out in developed economies but a crowd–in in developing countries.
The ***Neoclassical*** theory argue that increased consumption implies a decrease in saving. Interest rates must rise to bring equilibrium to capital markets. High interest rates, in turn, result in a decline in private investment. Thus, budget deficits could "***crowd-out***" private investment (Abdullatif, 2006).

2.3 Review of Literature

Mwakima, (2017) notes that domestic government borrowing was negatively related to private sector credit in Kenya, which were analyzed using secondary data that was obtained from Central Bank of Kenya covering a period of nine years (2008 - 2016). The researcher has used correlation analysis, regression analysis and descriptive statistics for analyzing the data. As per this research it says that when a country borrows more to invest in capital projects it is more likely to impact negatively on private sector credit of a country in the long-run. The study further concluded that treasury bills, bonds and central bank overdraft contributed negatively to private sector credit, this implied that an increase in borrowing led to decrease in private sector credit.
Al-Majali, (2018) examined the presence of crowding-out effect of public borrowing on credit to private sector in Jordan. A long-run relationship has been estimated and analyzed by performing unit-root test, cointegration test and error correction model (VECM). The main findings of the study confirmed with statistical significance that there is empirical evidence negative impact of government borrowing on private credit and the crowding out is more than one to one. This effect implies that government borrow from banks is not only reason behind crowding out private credit. The increase in banks treasury bills and bonds also reflect banks preference to invest excess liquidity in a low risk high return investment.

There is another literature on whether government borrowing crowded out private sector credit in Pakistan. In a study by Zaheer, Khaliq & Rafiq, (2017) investigated the impact of government from the scheduled banks on the credit to private sector in Pakistan, using monthly data from 1998-2015. They followed a variant of theoretical model by Ehrmann (2001) in which equilibrium private sector credit equation is derived from loan demand and loan supply equation. Here volume of government borrowing is taken for the same purpose. The main findings of the study state that government borrowings lead to crowding out private sector credit due to reduced availability of the loan-able funds.
Ahmed & Miller, (1999) had explored the effects of disaggregated government expenditure on investment employing fixed- and random-effect methods by taking some developed and developing countries. Their findings was that government expenditure on transport and communication brought crowding-in effect in developing countries whereas expenditure on social security and welfare reduced private investment in both developed and developing countries. Cruz & Teixira, (1999) studied a temporal framework with Brazilian data for 1947-1990 and found that though the crowding-out effect occurred due to public investment in the short-run, in the long-run the impact of public investment found to be positive. Its main conclusions are that private investment is indeed crowded out by public investment in the short term, but in the long term the cointegration vector coefficients indicate that these two variables complement each other.
In context to the Indian experience Servin, (1996) examined and discussed the impacts of public capital for both the infrastructure and non-infrastructure on private capital and found that public capital for non-infrastructure crowded-out private capital in both short and long-run but public capital for infrastructure crowded-out in private investment in both the short-run and the long-run. The researcher examined this issue empirically by implementing a simple analytical model encompassing two types of public capital. The

empirical results showed that in the long run capital for public expenditure projects crowds in private capital – other types of public capital have the opposite effect.

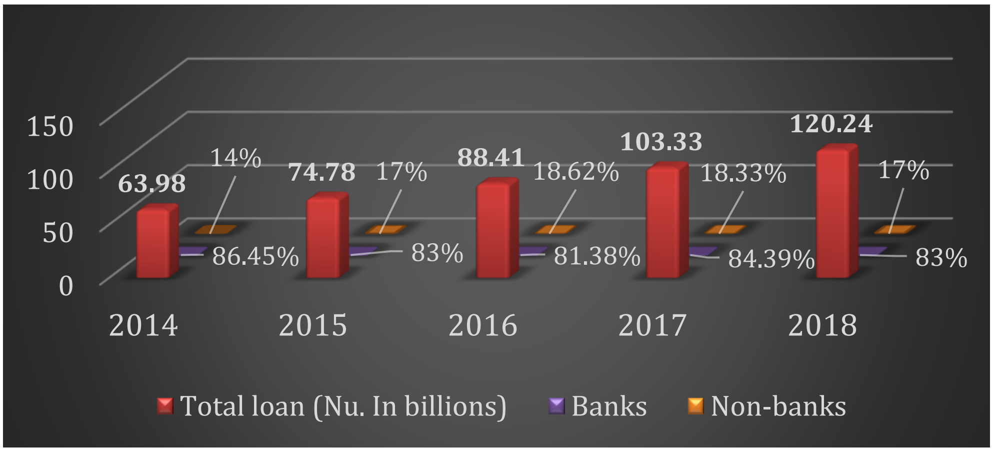
This study proposes to do a detailed review of the available literature in the course of its research. As described in the section above, there are numerous studies and literature on the crowding-out effect of government expenditure on private investment that have been conducted in many countries across the world. While a research paper based on our economy that is directly related to private sector being crowded out due to borrowing by the big state-owned enterprises (SOE) from financial institutions is not available, there are many studies related to different aspects of this problem some of which have already been mentioned in the introductory section of this proposal. The problem of crowding-out effect is becoming more popular in many academic discussions and has been explored in a number of research papers. The relationship between government borrowing and private credit is usually thought of as a negative one in the policy discussions and financial media.

While there is significant volume of literature on the overall crowding-out effect of government expenditure on private investment, there is little or no systematic evidence on the crowding out effect of government borrowing from the banking sector specifically on availability of private credit from the banking sector (Emran and Farazi, 2009). When government borrows one dollar more from the domestic banking sector, how much does it reduce the credit to private sector in a developing country? Or does it lead to more private credit (crowding in)?

2.4 Bhutan Credit Portfolio

In Bhutan, the bank based financial system credit plays an important role in an economic growth. The economy has been relying heavily on credit from banks and non-banks to finance domestic investment. The banking sector credit alone constituted around 64 percent of credit to GDP, concentrating mainly in construction and service sectors. And almost 90 percent of credit were allocated to the private sector (RMA, 2018).

The figure below shows financial sector's total loans to the economy for past five years (2014 – 2018). The total loan comprises of loan provided by banking and non-banking sectors to various sectors like housing, services & tourism, loan against share, personal loan, trade & commerce, agriculture & animal, production & manufacturing and others.



Source: RMA, Financial Sector Performance Review Reports

2.5 Factors affecting credit to private sector

2.5.1 Interest Rate

A study was conducted by Kader, (2006) to examine the extent of credit decline to the private sector in Egypt and whether it is due to supply factors, demand factors, or other factors (crowding out). The study finds that noninterest lending criteria have been tightened and that interest rates are no longer the decisive factors in lending decisions. Further, Bounader (2016) investigates the crowding out effect in Morocco through investing the relationship between the interest rate and the level of government spending. The results from the impulse response analysis of vector autoregression (VAR) model show the absence of such an effect.

However as per Asian Development Bank (2013), study a diagnostic report on Bhutan's critical development constraints noted that limited access to and the high cost of finance continue to be key obstacles to private investment, especially for micro, small, and medium-sized enterprises (MSMEs).

2.5.2 Creditworthiness

Access to finance is one of the repeated challenges voiced by the private sector. Private-sector firms often face a paucity of bank credit and they seem to be getting crowded out of the formal sources of finance by the SOEs. The creditworthiness of SOEs are guaranteed by the state. This obviously means that they have a much lower chance of bankruptcy than private ones. Even if such a firm goes bankrupt, it will still have less probability of default due to likelihood of government compensation (Wang 2016). Many banks prefer to allocate their resources to large enterprises rather than to SMEs. The reason is that large enterprises have a lower risk of default and their financial statements are clear. By contrast SMEs are riskier from the point of view of lenders and they do not have clear accounting information (Yoshino & Hesary, 2016).

2.5.3 Size

A World Bank Support Completion Mission in May 2008 found that given the small size of the economy, the dominance of the public sector, and the nascence of the private sector, growth of the private sector in Bhutan has been much slower than hoped (Billetoft, 2010). In Bhutan, the large size of some SOEs and the extent to which affiliates of such enterprises enjoy access to policy makers potentially discourages private investments and thereby limits competition (Dorji, 2019).

2.5.4 Collateral

SMEs being important to Asian national economies, it is vital to find ways to provide them with stable finance. However, SMEs usually have severe difficulties raising money. The under supply of credit to SMEs is mainly because of the irregular information, high default risk, and lack of collateral (Yoshino & Hesary, 2016).

Restrictive requirements limit the ability of potential borrowers to collateralize assets. One of the key complaints from Bhutan's private sector is the excessive amount of collateral required to obtain credit. Although average collateral requirement, as measured by collateral- to-principal ratios, has dropped from 283 percent in 2009 to 178 percent in 2015, it is still seen to be high. In addition to the high levels of collateral required, prevailing practices only allow for the collateralization of fixed assets. Most of the firms find it difficult to collateralize moveable assets such as vehicles, inventory and agricultural products (Bearth, Tran, & Santini, 2017).

2.5.5 Formalities

Bhutan is ranked 89 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings. The rank of Bhutan deteriorated to 89 in 2019 from 81 in 2018 (Trading Economics, 2020). According to World Bank Group (2020) in their report Doing Business 2020, Bhutan's ranking at 103 to start a business is a big hurdles as it takes twelve days and eight procedures to register a business entity in Bhutan.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter describes the study design and study methodology used in the study. This is organized in sections under subheadings containing study design, target population, sample for the study, data collection and data analysis.

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with research purpose. It also refers to the blueprint that helps the researchers to collect data, measure and analyze the data (Kothari, 2004). The study adopted descriptive research design.

Descriptive design are those which are concerned with describing the characteristics of a particular individual, or group (Kothari, 2004).

3.3 Population

From a statistical point of view, the term ‘population’ refers to the total of items about which information is desired (Kothari, 2004).The population of the study comprises 9186 private sector firms listed with BCCI as their members. They comprised 10 sectors namely hotel & restaurant, construction, handicraft, cable operator, wood based industries, tour operators, industries, exporters, film association and automobile sectors. Each sector consist of members varying sizes (in numbers). The listed member formed the data set for our study of the private sector firms operating in Bhutan.

3.4 Sampling

To determine the sample size of the study, simple non-proportionate sampling technique was used. This study has taken a fixed number of sample (10 numbers) from each sectors irrespective of their population and geographical location based on convenient of the researchers.

3.5 Data Collection

Data collection is the process of gathering and measuring information on variable of interest in an established systematic fashion that enables one to answer stated research questions, test hypothesis and evaluate outcomes (Marlene, Craddick, Crawford, & Redican, 2003).

Both primary and secondary data has been collected in order to analyze the objectives. The data was taken from secondary source particularly RMA taking yearly data for the period 2014- 2018. The primary data was collected using the structured questionnaire method where a set of questions was developed based thematic areas identified from the background and review of the literature. The questionnaire consisted of 5 anchors- namely collateral, interest, creditworthiness, firm size, and formalities and responses were sort on a 1-5 likert rating scale where 5 meant strongly agreeing while 1 meant strongly disagreeing.

3.6 Data Analysis

The data collected was analyzed using a computer programme called “Statistical Package for Social Science” (SPSS) version 22. The data gathered through questionnaires was analyzed by using descriptive statistics such as frequency counts, mean and standard deviation. The combined means of each factors were used to see the impact of each element (or anchor) on private credit.

Since most of the macroeconomic time series are non-stationary, the regression results might suffer from spurious regression problem. Appropriate statistical tests were performed on the data to ensure that the results that we derived were free of errors.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the major findings, which were analyzed using secondary data that was obtained from Royal Monetary Authority of Bhutan (the central bank of Bhutan). The secondary data covered a period of five years (2014 – 2018). The analysis includes simple regression analysis. This was done in line with the objective of this study, which was to investigate the evidence of crowding out of private credit by SOEs borrowing in Bhutan over the past five years. And to examine the factors affecting credit limit for private sector (benchmark with SOEs). The primary data was collected from private sector firms belonging to ten associations registered with the BCCI in Bhutan and analyzed using descriptive statistics.

4.2 Sample Description

A total of 100 respondents belonging to ten associations registered with BCCI participated in this study. 76 respondents were male and the balance 24 female (gender) wise. In terms of designation/position, there were 71 proprietors, 10 film producers, 8 managing director, 3 CEOs and general managers, 2 directors and 1 senior manager and finance manager each. Sectorally, each of the 10 sectors studied were equally represented by 10 member each. The Figure 1, 2 and 3 represents the number of respondents by gender, designations and sector wise.

Figure 1

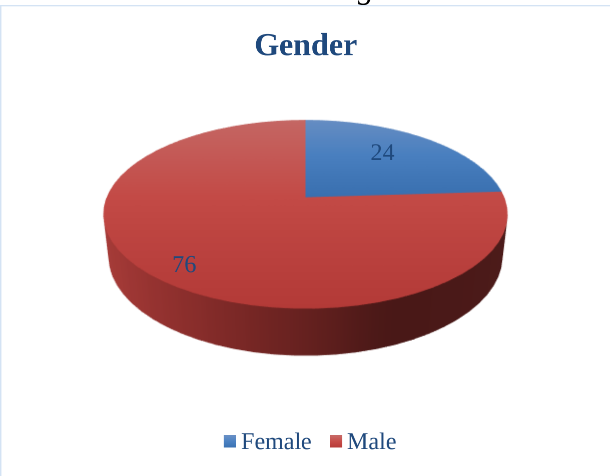
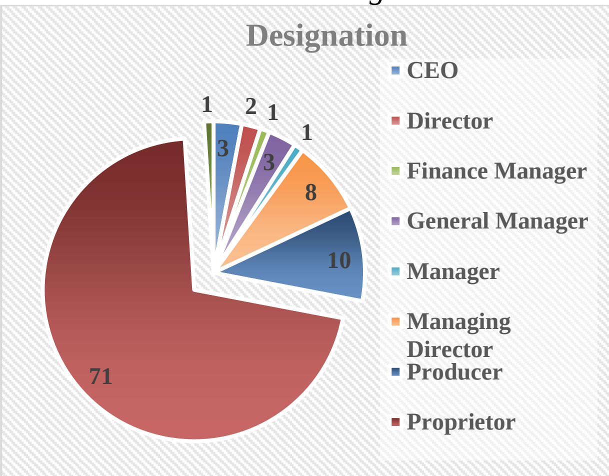


Figure 2



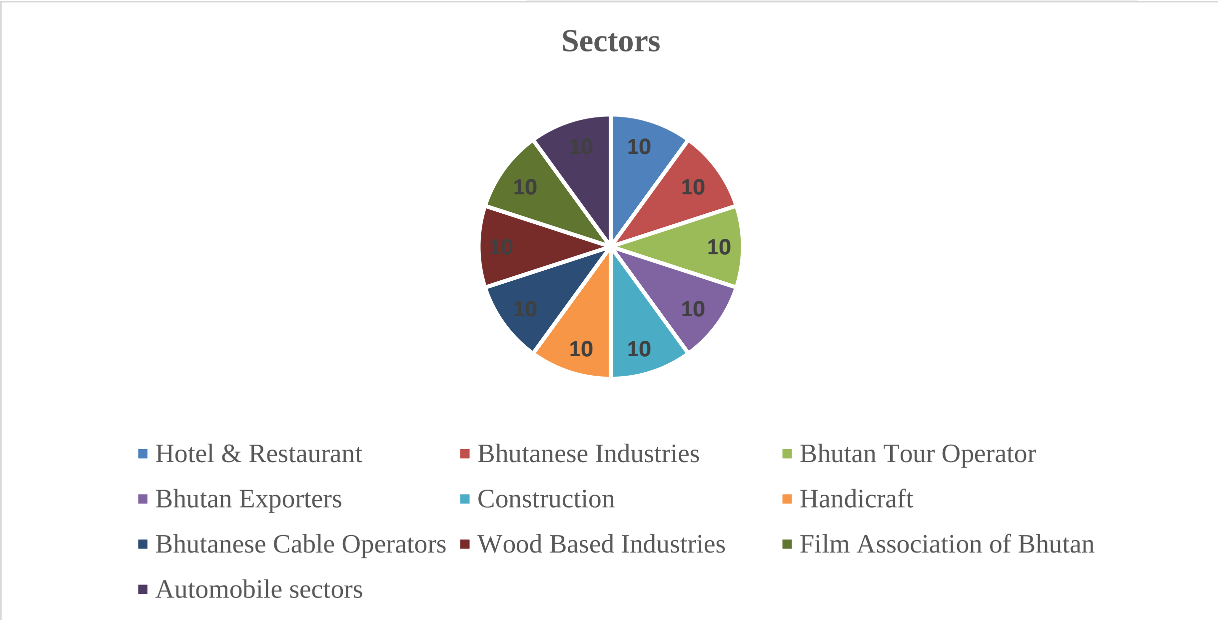


Figure 3

4.3 Frequency Analysis

4.3.1 Collateral

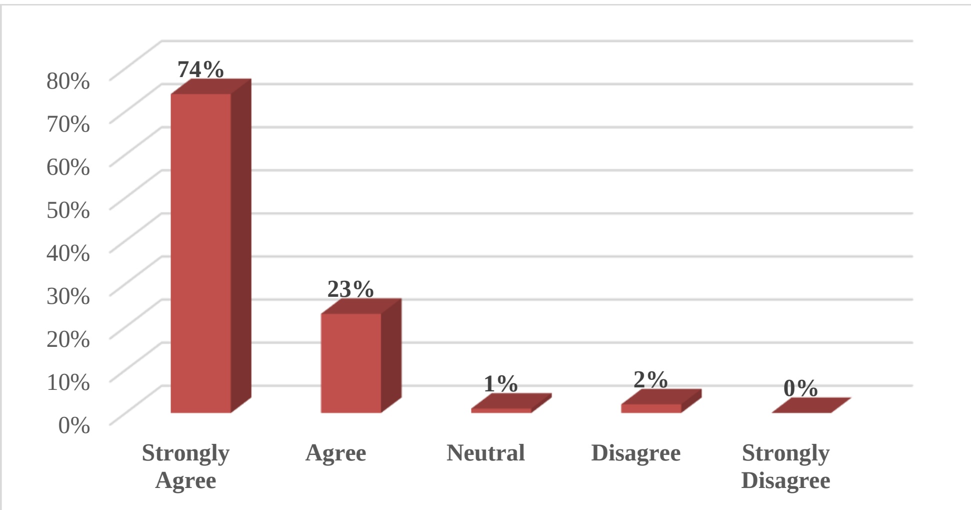


Figure 4

From the Figure 4, it appears that 97% of the respondents agreed that the collateral requirement is one of the factors limiting credit availability for the private sector. Only 2% of the respondents-1 each from the tour operator and the exporters segments disagreed.

4.3.2 Creditworthiness

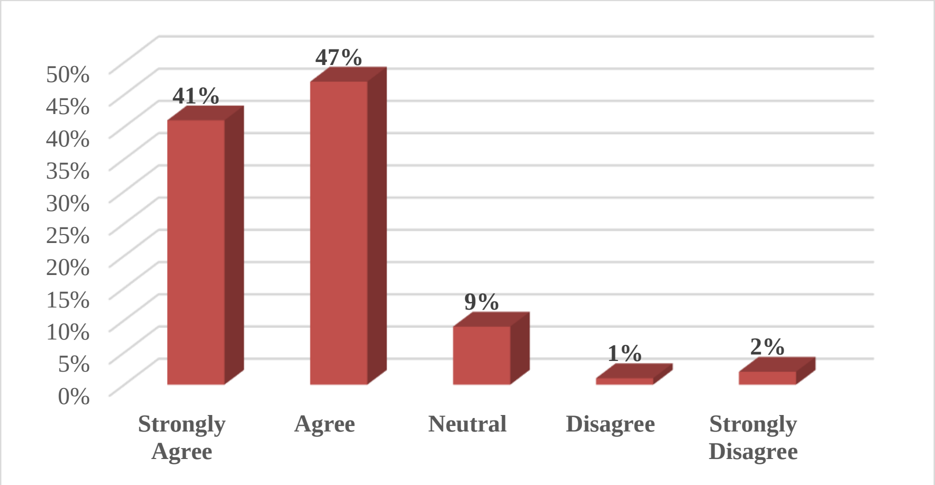


Figure 5

The Figure 5 indicates that 88% of the respondents agreed that SOEs have better creditworthiness as compared to private sector, and that this is one of the obstacles to avail credit from banks. 9% of the respondents were unaware whether the creditworthiness determines the credit limit for private sector, while only 3% of the respondents disagreed.

4.3.3 Size

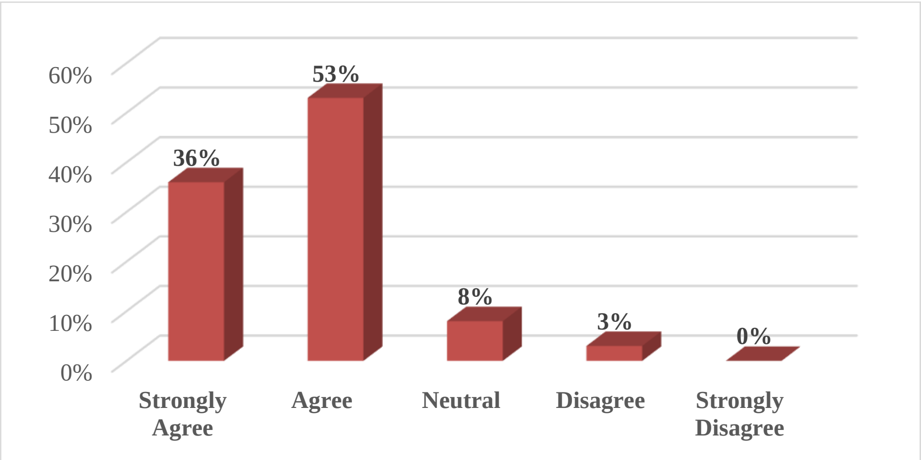


Figure 6

The Figure 6 shows that 89% of the respondents believed that size of the firm has a direct impact on the ability to avail loans from the banks. 8% responded neutrally while only 3% of the respondents disagreed.

4.3.4 Formalities

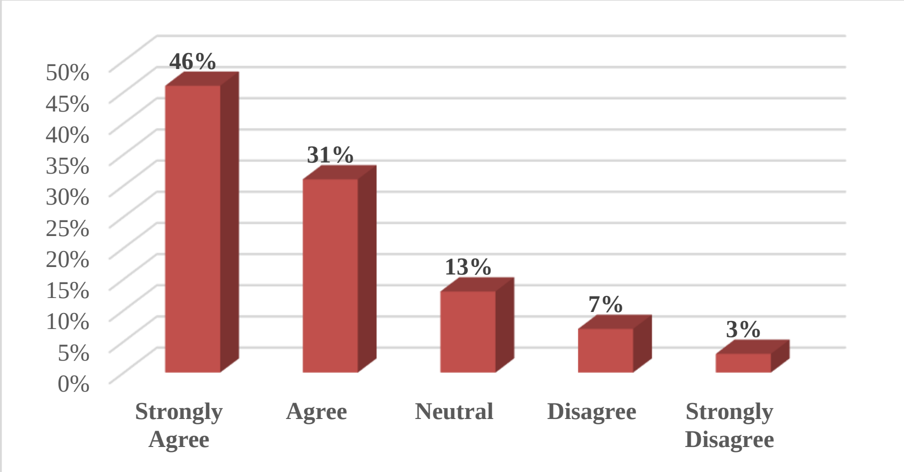


Figure 7

The Figure 7 reveals that 77% of the respondents felt that there existed a stringent formalities while availing loans from financial institutions as compared to SOEs. 13% of the respondents were not sure whether the formalities requirement affected the credit limit for the private sector, while only 3% of the respondents felt that formalities required were not unduly stringent.

4.3.5 Interest rate

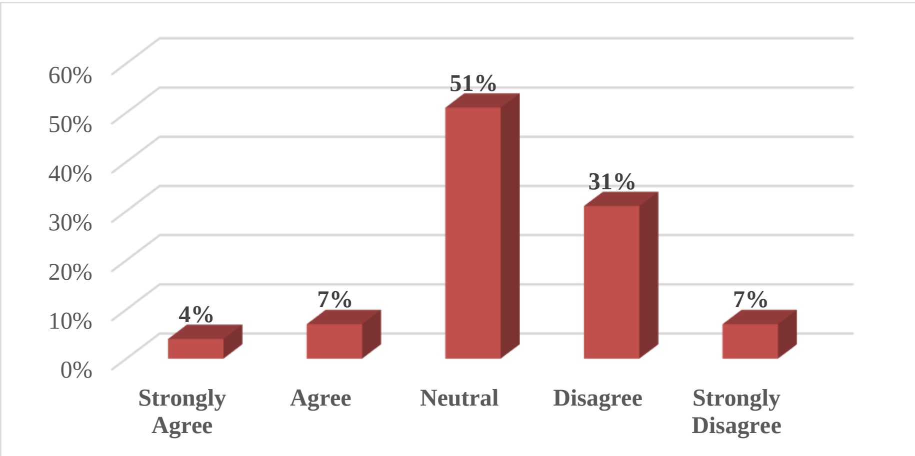


Figure 8

The Figure 8 shows that by and larger interest rate was not a factor affecting the credit limit for private sector with 51% of the sample being indifferent to the idea while 38% actually disagreeing that interest rates impacted credit limit. Merely 11% of the respondents agreed that interest rate has a proportional relation with the credit limit.

4.4 Descriptive Statistics

Descriptive statistics has been used to give a summary of the results in form of mean, minimum and maximum values in the period of study (2014-2018). The findings have are presented below:

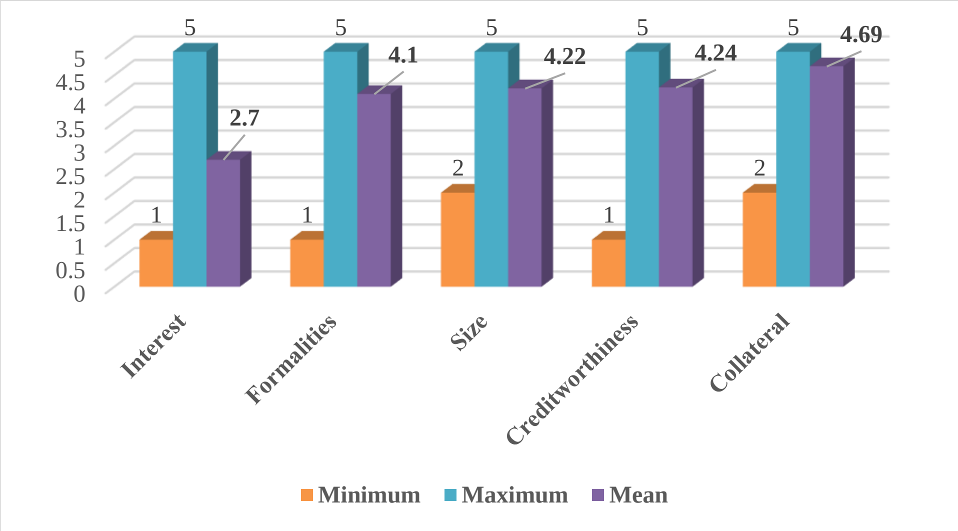


Figure 9

The Figure 9 indicates that four factors namely collateral requirements, creditworthiness, size of the firm and ability to comply with stringent formalities are all almost equally important in determining the credit limit for private sector. The respondents however opined that there is no significant interest rate differential charged to the private sector.

4.5 Comparative Analysis
4.5.1 Gender

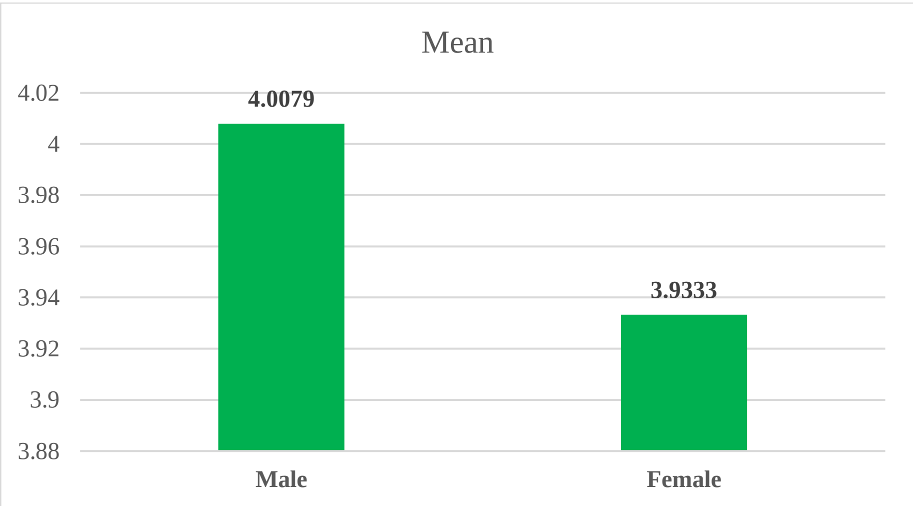


Figure 10

Figure 10 indicates that both male and female have almost similar perception towards factors affecting credit limit for private sector, with the mean of 4.00 and 3.93 respectively.

4.5.2 Designation

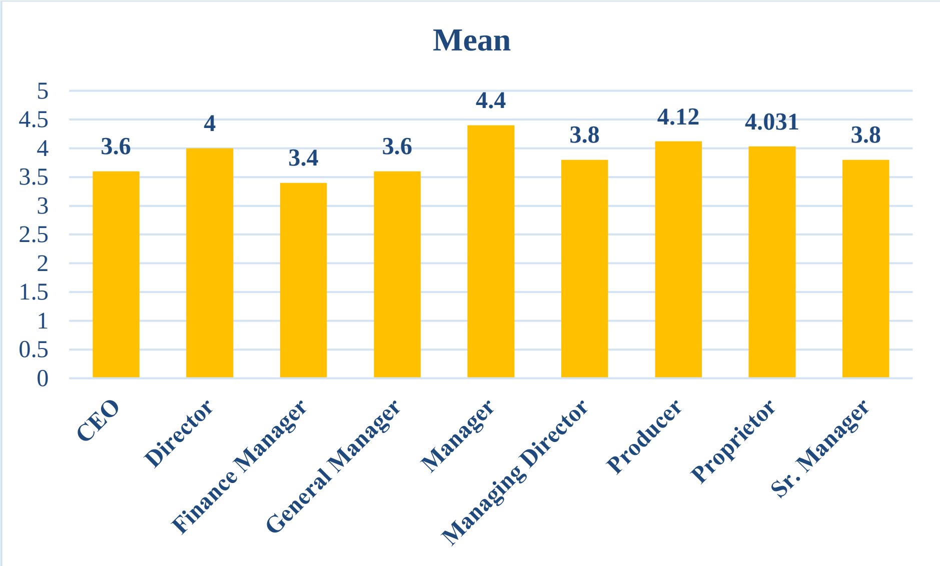


Figure 11

The Figure 11 shows that among the 9 types of designations evaluated- managers, producers and proprietors (with mean scores of 4.4, 4.12 and 4.03 respectively) found that factors like collateral, creditworthiness, size and stringent formalities had a strong bearing in determining the credit limit.

4.5.3 Associations

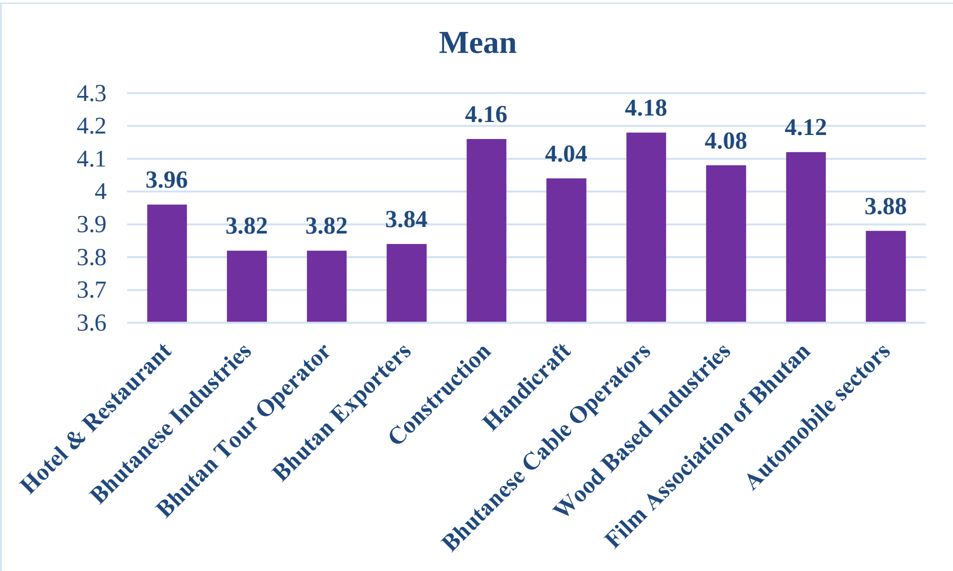


Figure 12

Figure 12 indicates that among the 10 sectors construction, handicraft, cable operators, wood based industries and film association has found that factors such as collateral, creditworthiness, size and stringent formalities were relevant in determining credit limit for private sector. With the mean close to 4 the remaining sectors also found that the aforementioned factors are appropriate in determining the credit limit.

4.6 Comparative Analysis for Financial Institutions

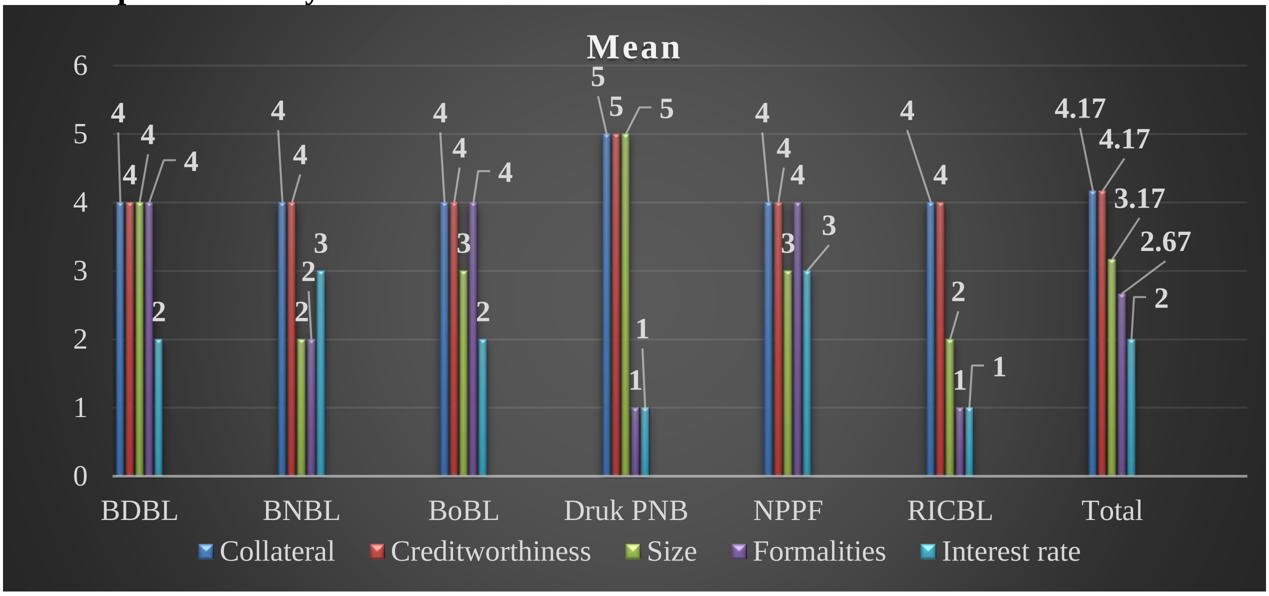


Figure 13

The figure 13 shows that as per financial institutions of Bhutan, factors such as collateral requirement and creditworthiness are almost equally important in determining the credit limit for private sector as compared to SOEs. The size and formalities factors also affects the private sector credit up to some extent.

4.7 Regression Analysis

It is used to show the significant level between dependent variable and the predictor.

4.7.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.700[a]	.491	.321	9809.31844

a. Predictors: (Constant), SOEs

4.7.2 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	278045375.269	1	278045375.269	2.890	.188[b]
	Residual	288668185.012	3	96222728.337		
	Total	566713560.281	4			

a. Dependent Variable: Private sector Credit

b. Predictors: (Constant), SOEs

4.7.3 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-56.511	16724.032		-.003	.998
	SOEs	20.109	11.829	.700	1.700	.188

a. Dependent Variable: Private sector Credit b. Predictors: (Constant) SOEs

The above finding shows that there is no significant relation between private sector and SOEs as it's significant value is more than 0.5 which indicates that SOEs borrowings has no impact on private sector credit.

Overall, SOEs borrowings have impact of 49.1 % on private sector credit but relationship between SOEs borrowings and private sector credit is statistically found insignificant .188 ($p>0.05$). SOEs borrowings has an effect of 20.109% on private sector credit however, it is found statistically insignificant .188 (p>0.05). From the regression model, it can be deduce that there is no crowding out of a private sector credit.

4.8 Proportion Analysis

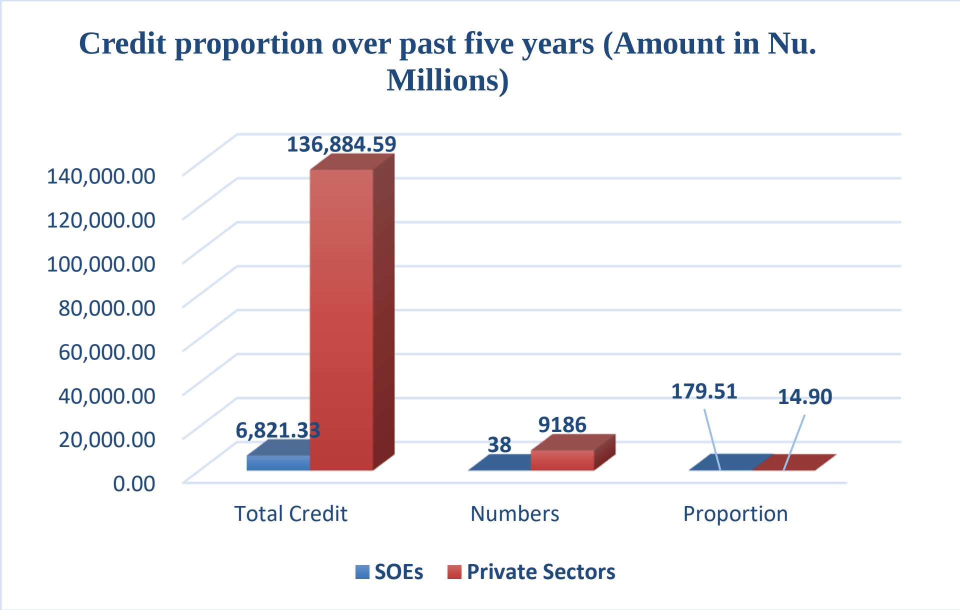


Figure 14

The Figure 14 represent that proportion of credit disbursement to SOEs and private sector over the past five years. The total credit sanctioned to private sector and SOEs were Nu. 136,884.59M and Nu. 6821.33M respectively, which indicates that there is no crowding out of private sector. However, from proportionate perspective private sector has been found **crowded out** by SOEs borrowing over the past five years. On an average each private sector receives only 14.90M whereas SOEs are privileged to receive 12.05 times more than the private sector.

4.8.1 Ratio of SOE to Private sector

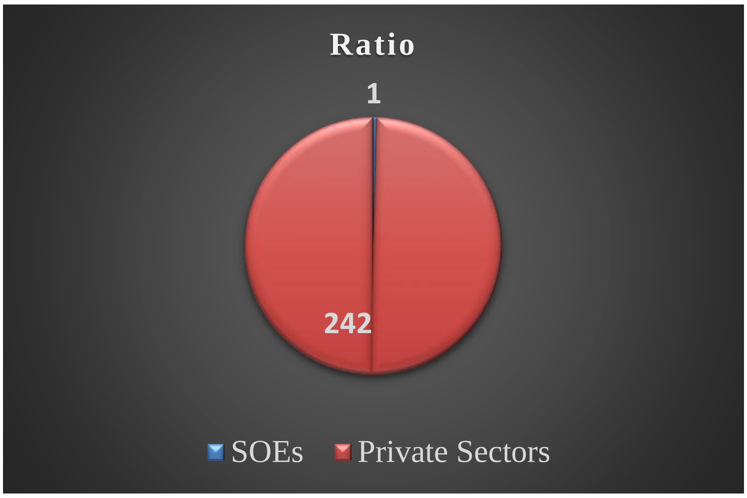


Figure 15

The above figure 15 represent the ratio of SOEs to private sector in the country that is 1:242, meaning 1 SOEs is equivalent to 242 private sector.

CHAPTER FIVE: FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter comprises of major summary of findings that were drawn from chapter four of this study. It also consist of conclusion, recommendations, limitations and suggestions for future research.

5.2 Findings

- The four factors namely collateral requirements, creditworthiness, size of the firm and ability to comply with stringent formalities are all almost equally important in determining the credit limit thereby impeding the growth of private sector.
- The analysis of data from responds in all the ten sectors have found that all the factors have direct influence in determining credit limit for private sector. In terms of designation, managers, producers and proprietors showed the highest propensity to conclude that all the aforesaid factors were a factor in limiting private sector growth.
- From proportionate perspective, SOEs are privileged to receive credit 12.05 times more than the private sector over the past five years which could have crowded out private sector. Moreover, the ratio-wise figure depicts that for every one SOE, there are two hundred and forty two private sector in Bhutan.

5.3 Conclusion

The study concluded that factors such as collateral requirement, creditworthiness, size and stringent formalities have direct impact on the private sector credit limit indicating the crowding out effect in all the sectors.

The study further concluded that in terms of credit proportion SOEs borrowing from financial institutions crowded out private sector over the past five years.

5.4 Recommendation

- Since the collateral requirement is one of the biggest hurdles for private sector in availing credit, we recommend financial institutions and concerned policy makers to revise collateral requirements especially with regards to property valuation while determining collateral values. For instance, difference in land valuation in rural and urban areas should be properly accounted.
- The study recommends to review existing formalities requirement and make them these procedures more convenient in availing credit especially for micro businesses like handicrafts, cable operators, wood based industries and automobile as most of these sectors face challenge in availing credit. As per World Bank Group (2020) in their report, Doing Business 2020, Bhutan ranks at 103 to start a business which takes twelve days and eight procedures to register a business entity in Bhutan and the country ranks at 94 in getting credit.
- Most of the private sector' proposal gets disqualified in availing credit from financial institutions due to poor creditworthiness. Therefore, the study recommend to reframe creditworthiness policy for the private sector especially micro businesses.
- The study recommends financial institutions to extend the repayment period for the loan as many private sector are not in the position to repay the loan immediately right after the inception of their businesses.
- More importantly, the study recommend that more participation is required from BCCI in policy making decision with relevant stakeholders for the growth of the private sector in the country. The Executive Directors from ten associations shared that there is less involvement of BCCI in policy making with the relevant government agencies.

5.5 Limitations

The study is confined itself to a period of five years only which is short to investigate the crowding out effects of borrowing by SOEs on private sector borrowing from financial institution in Bhutan. This is because the effect of this relationship could vary fundamentally depending on period. The study is also limited to itself to five variables which are collateral requirement, creditworthiness, size, formalities and interest rate. The sample size for the study is limited to 100 out of 9186 population which is very less.

5.6 Suggestions for Future Research

The study would have been appropriate to conduct for a period more than five years in order to obtain more detailed and conclusive results. Since private sector credit is affected by numerous factors other than the ones discussed in the study, future researchers can incorporate other variables like robust linkage between financial institutions and firm (SOEs and private sector), prioritization to SOEs and performance of private sector.

Further, future researchers can focus on more than 100 samples to provide more accurate and reliable results. Moreover, there is wider scope to carryout study from business point of view rather than considering only financial perspective.

References

1. Abdullatif, E. M. (2006). Crowding-out and Crowding-in Effects of Government Bonds Market on Private Sector Investment (Japanese Case Study). *INSTITUTE OF DEVELOPING ECONOMIES*. Retrieved from https://www.researchgate.net/publication/5141242
2. Ahmed, H., & Miller, M. S. (1999). Crowding-Out and Crowding-InEffects of the Components of Government Expenditure. *Economics Working Paper*, 1-6.
3. Al-Majali, A. A. (2018). Crowding Out Effect of Public Borrowing: The Case of Jordan. *International Review of Management and Marketing, 8* (1), 119-125. Retrieved from http: www.econjournals.com
4. Asian Development Bank. (2013). Bhutan Critical Development Constraints. *Country Diagnostic Studies*, 130.
5. Balcerzak, A. P., & Rogalska, E. (2014). Crowding out and crowding in within Keynesian framework. Do we need any new empirical research concerning them? *Economics & Sociology, 7*(2), 80-93. doi:10.14254/2071-789X.2014/7-2/7
6. Barro, R. J. (1989). The Ricardian approach to budget deficits. *The Journal of Economic Perspectives, 3*(2), 37-54. Retrieved from http://www.jstor.org
7. BCCI. (2019). Retrieved from http://www.bcci.org.bt/about-us/
8. Bearth, A., Tran, T. T., & Santini, M. (2017). *Investment Climate Assessment of Bhutan; Removing Constraints to Private Sector Development to Enable the Creation of More and Better Jobs.* Washington, DC : World Bank Groups.
9. Billetoft, J. (2010). *Thematic Paper on Private Sector Potential, Joint Evaluation of Danish-Bhutanese Country Programme 2000-09.*
10. Blanchard. O. J (2008). "Crowding out," The New Palgrave Dictionary of Economics, 2nd Edition.
11. Bounader, L. (2016), Is There a Crowding-Out Effect in the Moroccan Context? Evidence from Structural VAR Analysis.
12. Cruz, O. B., & Teixira, R. J. (1999). The impact of public investment on private investment in Brazil, 1947-1990. *CEPAL REVIEW 67*, 75-84.
13. Dem, P. (2019). *Private Sector Beset with Challenges*. Retrieved from Business Bhutan: https;//www.businessbhutan.bt/2019/02/05/private-sector-beset-with-challenges/
14. Department of foreign affairs and trade. (2014). *The role of the private sector in promoting economic growth and reducing poverty in the Indo-Pacific region.*
15. Djankov, S., McLiesh, C., and Shleifer, A., (2007). Private Credit in 129 Countries, Journal of Financial Economics, Vol. 84, Iss. 2, pp. 299-329.
16. Dorji, T. (2015). Private sector's funding problems. *Kuenselonline*. Retrieved from https://kuenselonline.com/private-sectors-funding-problems/
17. Dorji, T. (2019). State dominated economy hinders private sector: World Bank. *Kuenselonline*. Retrieved from https://Kuenselonline.com/state-dominated-economy-hinders-private-sectors-world-bank/
18. Eckel; et al. (2005). "An experimental test of the crowding-out hypothesis". Journal of Public Economics. 89 (8): 1543–1560. DOI: 10.1016/j. jpubeco. 2004.05.012.
19. Emran, M. S., & Farazi, S. (2009). Lazy banks? Government borrowing and private credit in developing countries. *Institute for International Economic Policy Working Paper, 9.*
20. Fayed, M. E. (2013). Crowding Out Effcet of Public Borrowing: The Case of Egypt. *International Research Journal of Finance and Economics* (107). ISSN 1450-2887.
21. Hart, Oliver (2017). "Incomplete Contracts and Control". American Economic Review. 107 (7): 1731–1752. doi:10.1257/aer.107.7.1731. ISSN 0002-8282.
22. Hoppe, Eva I.; Schmitz, Patrick W. (2010). "Public versus private ownership: Quantity contracts and the allocation of investment tasks." Journal of Public Economics. 94 (3–4): 258–268. doi: 10.1016/j. jpubeco. 2009.11.009.

23. Hudson M (2011), “How economic theory came to ignore the role of debt,” real-world economics review, 57, 2–24
24. Kader, K. A. (2006). Private Sector Access To Credit In Egypt: Evidence From Survey Data. *The Egyptian Center for Economic Studies*.
25. Khan, R. E., & Gill, A. R. (2009). Crowding Out Effect of Public Borrowing: A Case of Pakistan. *National Research Conference on Management and Computer Sciences*. Retrieved from https://www.researchgate.net/publication/46446438
26. Kothari, C. R. (2004). *Research Methodology; Methods and Techniques.* New Age International Pvt Ltd. Retrieved from www.newagepublishers.com
27. Kwablah, A. (2018). Financial Crowding Out of Ghanaian Private Sector Corporations. Retrieved from https://scholarworks.waldenu.edu/dessertations
28. Mahmoudzadeh, M., Sadeghi, S., & Sadeghi, S. (2013). Fiscal spending and crowding out effect: A comparison between developed and developing countries. *Institutions and Economies*, *5*(1), 31-40. Retrieved from http://www.repository.um.edu.my
29. Majumder, M. A. (2007). Does Public Borrowing Crowd-out Private Investment? *Policy Analysis Unit (PAU)*. Retrieved from www.bangladeshbank.org.bd]
30. Manda, S. (2019). Does Government Borrowing Crowd Out Private Sector Investment in Zimbabwe? *Asian Journal of Economics, Business and Accounting, 12*(1), 1-9. doi:10.9734/AJEBA/2019/v12i130142
31. Marlene, M. M., Craddick, S., Crawford, S., & Redican, S. (2003). Dietary quality assurance processes of the DASH-Sodium Controlled diet study. *American Dieting Association*.
32. Mwakima, M. S. (2017, 12). The Impact of Government Borrowing on Private Sector Credit in Kenya. 1-50.
33. Nima. (2018). Private sector development was prioritised says government. *Kuenselonline*. Retrieved from https://kuenselonline.com/private-sector-development-was-prioritised-says-govt/
34. Nunnenkamp, P. (2000). State Enterprises in Developing Countries', Intereconomics, 21 (4), July/August, 186-93. *International Library of Critical Writings in Economics*, *120*, 660-667.
35. Onodugo, V. A., Anowor, O. F., Ukweni, N. O., & Ibiam, F. O. (2014). Bank credit and private sector investment: Evidence from Nigeria. *International Journal of Management*, *3*(2), 82-92.
36. Planning Commission. (1999). Bhutan 2020: A Vision for Peace, Prosperity and Happiness, Part II.
37. RMA. (2018). *Annual Report, Royal Monetary Authority of Bhutan.*
38. RMA. (2014, 15, 16, 17, 18). *Financial Sector Performance Review Reports.*
39. Sen, H., & Kaya, A. (2014). Crowding-Out or Crowding-In? Analyzing the Effects of Government Spending on Private Investment in Turkey. *Original scientific paper*, 631-651. doi:DOI: 10.2298/PAN1406631S
40. Shleifer, Andrei, and Robert W. Vishny (1997). "A survey of corporate governance". The Quarterly Journal of Economics. 109 (4): 995–1025. doi: 10.2307/2118354.
41. Servin, L. (1996). Does Public Capital Crowed Out Private Capital? Evidence from India. *Policy Research Working Paper*.
42. Trading Economics. (2020). *Ease of Doing Business in Bhutan2008-2019 Data*. Retrieved from https://tradingeconomics.com/bhutan/ease-of-doing-business
43. Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries?–An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, *16*(3), 167-176.
44. World Bank Group. (2019). A Path to Inclusive and Sustainable Development. *Bhutan Development Report*. Retrieved from https://doi.org/10.1596/31236
45. World Bank Group. (2020). *Doing Business 2020.* Retrieved from https://www.doingbusiness.org/content/dam/doingBusiness/country/b/bhutan/BTN.pdf
46. Yoshino, N., & Hesary, F. T. (2016). Major Challenges Facing Small and Medium-sized Enterprises in Asia and Solutions for Mitigating Them. *Asian Development Bank Institute Working Paper Series*.
47. Zaheer, S., Khaliq, F., & Rafiq, M. (2017). Does Government Borrowing Crowd out Private Sector Credit in Pakistan. *SBP Working Paper Series*. Retrieved from http://www.sbp.org.pk