INDIA GROWTH STORY AND FINANCIAL MARKETS

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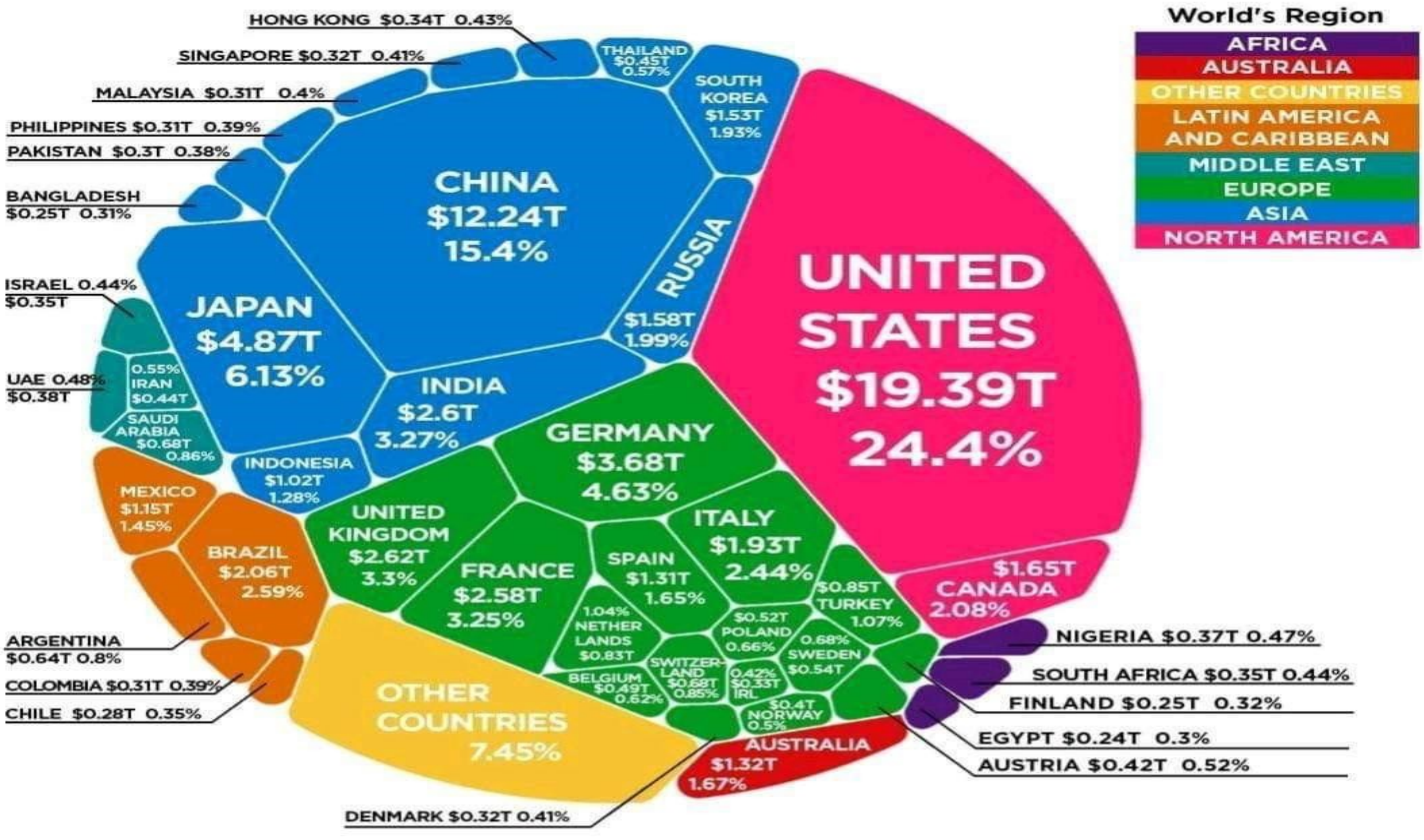
80 Trillion Dollar $ 😳

World Economy in a Single Chart 👇



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Indian Population Highlights

- Second most populated country in the world – has about 17.74% of the world's population.
  - According to the 2017 revision of the World Population Prospects population stood at 1,324,171,354.
- During 1975–2010, the population doubled to 1.2 billion.
- The Indian population reached the billion mark in 1998. India is projected to be the world's most populous country by 2024, surpassing the population of China.
- It is expected to become the first political entity in history to be home to more than 1.5 billion people by 2030, and its population is set to reach 1.7 billion by 2050. Its population growth rate is 1.13%, ranking 112th in the world in 2017.
- India has more than 50% of its population below the age of 25 and more than 65% below the age of 35. It is expected that, in 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan; and, by 2030, India's dependency ratio should be just over 0.4.
- The sex ratio is 944 females for 1000 males (2016). This ratio has been showing an upwards trend for the last two decades after a continuous decline in the last century.

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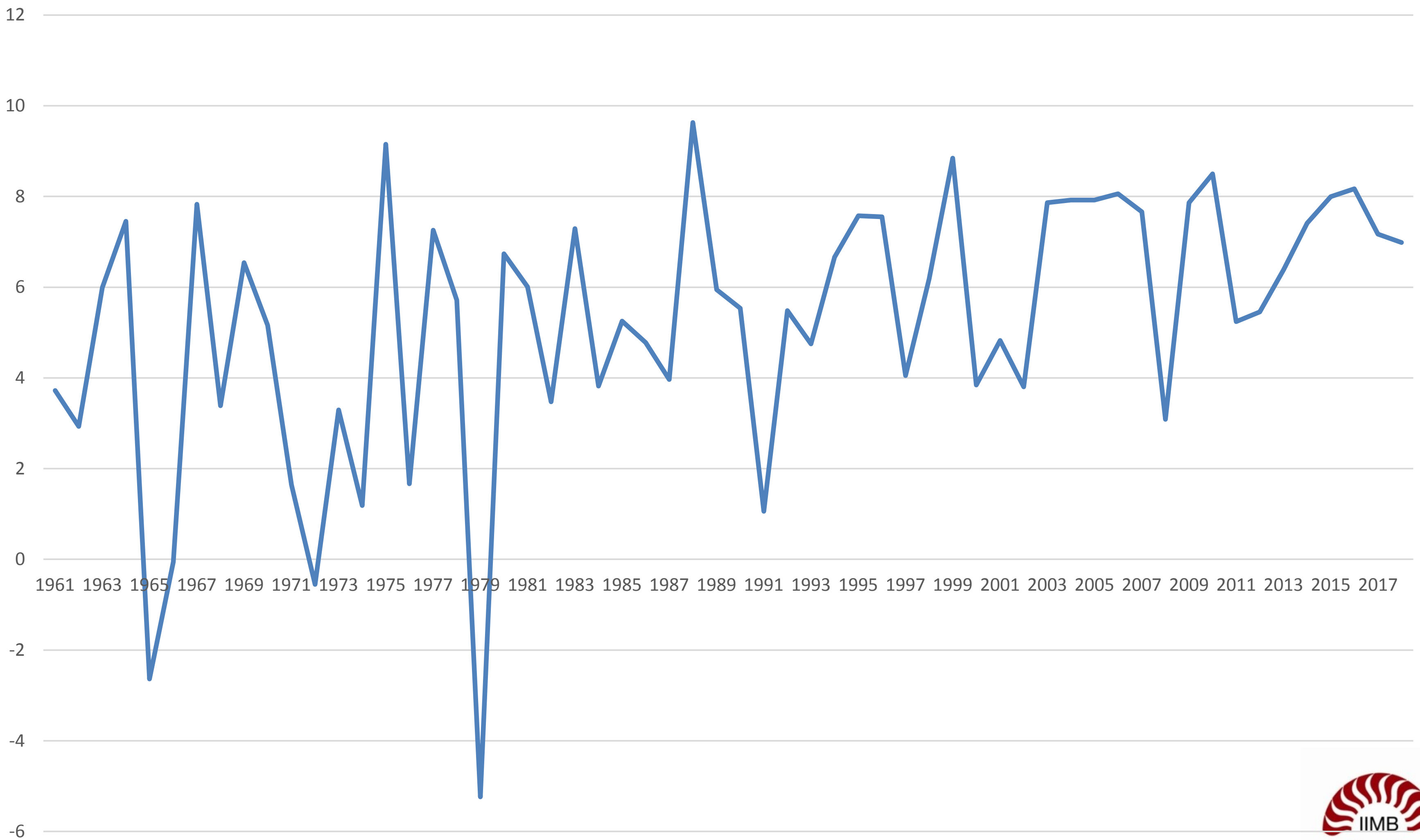
Indian GDP Growth Rate (in %)



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Financial Sector in India

- The Indian Financial Sector comprises of
  - Banks
  - Non Banking Financial Services
  - Equity Markets
  - Commodity Markets
  - Insurance Services
  - Pension Services

Financial Regulators in India

- Reserve Bank of India (RBI) – Banks, NBFCs
- Securities Exchange Board of India (SEBI) – Equity markets and Commodity Markets
- Insurance Regulatory Development Authority (IRDA) – Insurance Sector
- Pension Fund Regulatory Development Authority (PFRDA) – Pension Sector

Financial Literacy in India

- Interesting divide
  - Urban India generally highly financially literate
  - Issues of financial literacy in rural India
- Matter of priority for the government and the regulators
  - Active efforts are being made to significantly enhance the financial literacy levels across al segments of the population
  - Increased access to financial services, particularly in rural India, is being targeted to enhance financial literacy

Issues with respect to the Global Economy – 1

- Banking Sector
  - Strong regulatory barrier to starting of new banks
  - Bureaucratic approach to operations
  - Types of products allowed
    - Need better clarity on some products, particularly derivative products
  - Broader issue of full convertibility of the currency
  - Strong adherence to AML norms – hence funds flow from some geographies difficult
- Equity Sector
  - Generally most interlinked with the global markets
  - Some issues in terms of sources of investments, particularly from overseas investors in terms declaration of sources of funds – adherence to the AML provisions

Issues with respect to the Global Economy – 2

- Insurance Sector
  - Ownership issues
  - Capital adequacy issues
  - Product type and related investment issues
- Pension Sector
  - Still a developing sector and hence not a very large one as yet

Issues with respect to the Global Economy – 3

- Commodity Markets
  - Transparency issues
  - Access issues
  - Potential intervention by the government, particularly in the agri commodity sector
  - Lack of advanced and specialized derivative contracts
- NBFC sector
  - One of the largest segments in the financial sector
  - Some issues of regulation, particularly for the unorganized sector
  - Need increased adherence to regulation, particularly in the light of less bureaucratic approach

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Final Comments .....

- Indian markets reasonably well developed
  - Politically stable environment as well as a reasonably conservative regulatory regime
- Over the last 15 years, have become fairly integrated with the global markets
- Some improvements and clarifications necessary to ensure even smoother integration
- Financial Literacy needs to be strengthened
  - Increased and easy access to financial services to rural India will be a game changer

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Some recent developments ……

- Demonetization of high value currency notes – midnight November 8, 2016

- Insolvency and Bankruptcy Code, 2016

- Unified indirect taxation: Goods and Services Tax (GST) – effective July 1, 2017

Thank You!

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Bank lending to the private sector: Implications from nonperforming Loans in Lao PDR

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Abstract

This is the first empirical study on commercial bank loans in Lao PDR. In 2014, the country has its nonperforming loan ratio reaching 13%. This paper analyzes 992 bank loans originated by three state-owned commercial banks, in which around half are nonperforming loans. Our regression analysis shows that male as the borrower, agricultural production, longer tenor, higher frequency of collection and loan monitoring, and borrowing from multiple sources are positively associated with nonperforming loans. The results provide insights on lending to agricultural societies.

Keywords
Bank lending, nonperforming loan, regression model, Laos

Introduction

Having been classified as one of the least developed economies in the world for several decades, Lao PDR (Lao People's Democratic Republic) achieves rapid economic development in 2006-2014. Its nominal GDP growth rate (measured in US$) is around 16.8% per year on geometric average in the same period, while its inflation rate ranges between -2.932% and 10.805%. Like other socialist economies, state-owned commercial banks in Lao PDR are dominant in the market of bank lending. However, there is one interesting observation that state-owned banks in Lao PDR are very aggressive in lending to private sector, while foreign banks mainly lend to state-owned enterprises.

Lending to private sector is generally risky in emerging economies. Arellano (2008) even argues that sovereign borrowers in emerging economies are likely to default in economic downturns because of high volatility in their business cycles and high frequency of economic crises. Borrowers from private sector are always riskier than sovereign borrowers in these economies, being more sensitive to fluctuating economic environments. As a small emerging economy with population at around 7 million, Lao PDR experiences high level of nonperforming loans (NPL) in 2014, with estimated NPL ratio at around 13% in state-owned commercial banks. The original intention of this paper is to find out how to predict NPL. Through our data analysis, we find out more interesting facts on the behavior of state-owned banks in Lao PDR and the determinants on NPL. This paper analyzes a total of 992 bank loans provided by three state-owned commercial banks, in which around half are nonperforming loans. All the borrowers are in private sector. Most loans are collateralized with lands and homes. Around 30% loans are associated with forest and agricultural production. Our

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regression analysis shows that male as the borrower, lower interest rate (associated with loans for agricultural production), loans of longer tenor, higher frequency of collection, and borrowing from multiple sources are positively associated with nonperforming loans. Also, it finds that the state-owned banks in Lao PDR have done internally a quality job in predicting credit quality of their borrowers. Foreign banks may not easily achieve the same degree of predictive accuracy. As a result, they simply focus on lending to state-owned enterprises. The case of Lao PDR shows a simple formula to effectively attractive international capitals to an emerging economy. Foreign investors tend to look for safer assets in an emerging economy. Its government should thus enable and facilitate state-owned enterprises and governmental organizations to get funds directly from the foreign investors. With better knowledge about local business and political environments, state-owned banks should place more emphasis on loans to private sector. This paper proceeds as follows. Section 2 introduces the economic and banking environments of Lao PDR. Section 3 summarizes the data and the variables to be used. Section 4 discusses the statistical methodology and empirical results. Section 5 concludes the paper.

Economic and Banking Environments of Lao PDR

Lao PDR begins to switch from a centrally-planned economy to a market-oriented economy in 1986. Such new policy is seriously challenged during the Asian financial crisis of 1997 and 1998. At that time, its local currency (Kip) against the US Dollar depreciates by more than 70%. Its inflation jumps to around 150% in early 1999. Macroeconomic environments of Lao PDR get more stabilized in the first half of the 2000s. Table 1 shows the GDP (measured in current US$), real GDP growth and inflation rate in 2006-2013. Real GDP growth ranges consistently between 7.5% and 8.7% in this period. Its inflation rate normally stays above 8% but suddenly drops to -2.932% in 2009 shortly after the global financial crisis in 2008.

In Lao PDR, bank loans mainly support corporate financing in private sector in addition to owners' equity. Although state-owned commercial banks of the country are dominant, both joint-venture banks and foreign banks have gradually increased their shares for the past several years. Table 2 shows the shares of state-owned commercial banks in the bank loan market in 2008-2013. State-owned commercial banks account for around 58%-70% share of all loans in this period. Table 3 displays the loans by bank types and loan types in Q2 2013. From the "%" next to the column "Total", the shares of state-owned commercial banks, joint-venture banks and foreign banks are 64.95%, 24.90% and 10.15% respectively. As shown in the columns for both "claims on SOE" and "claims on private sector", foreign banks lend more proactively to state-owned enterprises (SOE) than to private enterprises. They own around 38% share in claims on SOE but less than 8.50% share in claims on private enterprises. This suggests that the foreign banks in Lao PDR are very risk-averse in this economy.

There are four state-owned commercial banks in Lao PDR. Table 4 shows their size of operation. The first three banks, namely Banque pour le Commerce Extrieur Lao, Lao Development Bank and Agricultural Promotion Bank, are larger in market share than the last one in terms of number of branches, number of money changers and number of ATM machines. The sample of this paper mainly comes from these three larger banks. Table 5 summarizes the distribution of nonperforming loans (NPL) among the three banks and others banks in 2011-2014. Obviously their shares on the NPL fluctuate remarkably in this period and demonstrate no clear pattern.

Lao PDR establishes its stock exchange, with only two firms listed at the very beginning. The number of listed firms grows to 5 at the end of 2015. With such a small scale of stock market, bank lending is the primary source of capitals to support private sector.

How much interest rate do borrowers pay in Lao PDR? Table 6 shows the interest rate charged to three groups of borrowers, namely Grade A customers, Grade B customers and Grade C customers. The grades are the credit quality measures, with Grade A is the best. State-owned commercial banks adopt an 8-grade system to classify internally the credit quality of borrowers. In 2006-2013, Grade A customers pay an interest charge for short-term loans at 12.65%-17.50%. Grade B and C customers pay higher interest charges in 2011-2013. However, their interest charges are lower than those for Grade A customers in 2006-2010. One reason is the policy in Lao PDR to encourage banks providing affordable loans to borrowers in forest and agricultural sector. The borrowers in this sector are risky but get lower interest charge. The interest charges for long-term loans (3-6 years) reach the level of around 20.20%. From Table 6, we observe no strong association between interest rate and credit grades. However, interest rates always go higher with longer loan tenor. Comparing the inflation rates in Table 1 and the interest rates in Table 6, we note real interest rate reaching the maximum at 19.34% in 2009. Most real interest rates stay between 6% and 13%. It is obvious that there is no strong association between interest rate charges and inflation rates.

Table 1 GDP and Inflation of Lao PDR in 2006-2013

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP (at current price of US$ bln)	3.453	4.223	5.444	5.833	7.181	8.283	9.359	11.192	11.997
Annual Real GDP growth (%)	8.619%	7.597%	7.825%	7.502%	8.527%	8.039%	8.024%	8.471%	7.515%
Annual Inflation (%)	10.805%	7.438%	8.863%	-2.932%	10.018%	3.803%	4.306%	8.216%	-0.304%

Source: World Bank Database

Table 2 Share of Loans Provided by State-owned Commercial Banks in Lao PDR in 2008-2013

	Year					
Type of Banks	2008	2009	2010	2011	2012	2013
State-owned Commercial Banks	69.28%	62.98%	60.46%	64.15%	58.63%	62.56%
Others	30.72%	37.02%	39.54%	35.85%	41.37%	37.44%

Source: Bank of Lao PDR

Table 3 Claims by Bank Types and Loan Types in the Banking System of Lao PDR at the end of Q2 2013

NB: All claims are in bln of Kip	Claims on SOE	%	Claims on private sector	%	Total	%
State-owned commercial banks + Specialized banks	0.990	55.23%	18.686	65.56%	19.676	64.95%
Joint-venture banks + Private banks	0.120	6.70%	7.423	26.04%	7.543	24.90%
Foreign Branches + Affiliated banks	0.683	38.08%	2.392	8.39%	3.074	10.15%
Total	1.793	100.00%	28.501	100.00%	30.293	100.00%

Source: Bank of Lao PDR

Table 4 Operational Size of State-owned Commercial Banks in Lao PDR (Q2 2013)

Name	Number of Branches	Number of Services Units	Number of Money Changer	Number of ATM
Banque pour le Commerce Extrieur Lao	18	46	11	222

Lao Development Bank	18	64	22	144
Agricultural Promotion Bank	17	77	2	22
Nayoby Bank	10	62	0	0

Source: Bank of Lao PDR

Table 5 Shares of Nonperforming Loans in Lao PDR (2011-2014)

	Year			
Bank Name	**2011**	**2012**	**2013**	**2014**
Lao Development Bank (LDB)	80.61%	8.12%	0%	44.23%
Agriculture Promotion Bank (APB)	0.00%	0%	0%	39.26%
Banque Pour Le Commerce Exterieur Lao (BCEL)	8.23%	3.32%	0%	2.21%
Other banks	11.17%	88.56%	100%	14.30%

NB: The first 3 banks are state-owned commercial banks in Laos. Source: Bank of Lao PDR

Table 6: Interest Rate of Bank Loans of State-owned Commercial Banks in Lao PDR

	Year							
Interest Rate of Bank Loans	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Kip Accounts (A)	**Grade A Customers**							
Short-term (1 year) (%)	17.5	18.17	17.5	15.49	14.09	12.65	13.07	12.82
Medium term (1-3 years) (%)	17.5	18.44	18.39	15.75	14.4	13.51	13.44	13.16
Long-term (3-6 years) (%)	20.5	21.08	20.16	16.41	14.98	14.2	14.01	13.76
Kip Accounts (B)	**Grade B Customers**							
Short-term (1 year) (%)	15.35	13.17	13.48	13.01	13.27	13.63	13.02	13.04
Medium term (1-3 years) (%)	16.31	14.73	14.54	14.14	14.47	14.8	14.35	14.33
Long-term (3-6 years) (%)	16.31	15.33	15.6	14.67	15.15	15.33	14.79	14.75
Kip Accounts (C)	**Grade C Customers**							
Short-term (1 year) (%)	15.58	10.63	14.78	14.08	14.33	14.73	14.05	14.17
Medium term (1-3 years) (%)	16.73	11.42	15.89	15.25	15.33	15.66	15.24	15.27
Long-term (3-6 years) (%)	17.38	12.21	17.5	16.03	16.17	16.35	15.72	15.79

NB: "Kip" is the name of the currency in Lao PDR. "Kip Accounts" means local currency accounts. Source: Bank of Lao PDR

The Data and The Model

After an introduction to macro environments on capital sources in Lao PDR, this section begins to look at the firm-level information of the borrowers in private sector. We collect data from three state-owned commercial banks in Lao PDR via their data files kept by Bank of Lao (BOL), the central bank of Lao PDR, and our survey conducted in July-November of 2014. The sample includes a total of 992 business loans for the private sector, in which 512 are nonperforming loans. We define nonperforming loans (NPL) as those loans classified as Grade C or worse in the loan grading system in Lao PDR. These nonperforming loans include loans with past dues and defaults. Table 7 shows the breakdowns of the sample. This study mainly considers firm-level information and ignores macroeconomic dynamics4 because of limited data on NPL. The

[4] Lao PDR does not have long data history on both macroeconomic variables and NPL. Thus, we cannot easily evaluate both firm-level information and macroeconomic dynamics like what Bonfim (2009) analyzes data in Portugal. However, many credit risk models and credit scoring models tend to have their risk ranking robust over time. This means, actual default rate may fluctuate over time in an economic cycle, while high-risk borrowers remain to be high risk throughout the cycle.

effect of macroeconomic conditions is generally clear: During economic downturns, borrowers of poor credit quality become vulnerable.

Table 7 The Sample of Preforming and Nonperforming Loans Collected in July-November of 2014

Source	Number of Sample
Lao Development Bank (LDB)	500
Agriculture Promotion Bank (APB)	296
Banque Pour Le Commerce Exterieur Lao (BCEL)	196
Total	992
Loan Status	**Number of Sample**
Performing Loans (Covering Grade A & B in the loan classification system)	480
Nonperforming Loans (Covering Grade C, D and E in the loan classification system)	512
Total	992

Our sample echoes the press release of IMF on February 26, 2015 regarding Lao PDR's nonperforming loans in state-owned commercial banks in 2014. According to IMF states, state-owned commercial banks in Lao PDR have their average NPL increasing from 2% to 8%. All these nonperforming loans come from loans to private sector. In Q2 of 2013, Bank of Laos (BOL) reports that around 61% of all claims in state-owned commercial banks are claims on private sector. With 8% NPL reported by IMF and 61% claims on private sector reported by BOL, we estimate that state-owned commercial banks have their NPL ratio at around 13% for the portfolio of loans to private sector. So far Bank of Lao PDR releases no official statistic on NPL ratio in the banking system.

<u>Determinants on Nonperforming Loans</u>

To examine determinants leading to nonperforming loans, we identify a long list of independent variables to be studied. A total of 56 variables are grouped into four major categories:

- FOBC: Borrower Characteristics (a total of 10 variables)
- FOFC: Borrower Financial and Credit Risk (a total of 32 variables)
- FOBR: Relationship between a customer's loan with approved credit (a total of 6 variables)
- OFS: Other factors (a total of 8 variables)

Table 8 displays all the variables, including their definitions and measurement methods. Only a small number of accounting variables are included in our analysis because bank lending in Lao PDR is almost collateral-based. Quality of accounting information in emerging markets tends to be doubtful. It is unreliable and unrealistic to apply accounting-based models, such as those mentioned in Altman (1968) and Altman and Saunders (1998), to predict borrowers' risk in Lao PDR. In general, collateral-based lending is prevalent in emerging economies because of uncertain business environments, rapidly-changing government policies and short business history of borrowers. Menkoff, Neuberger and Suwanaporn (2006) studies loans in Thailand and argues that collateral-based lending is important in emerging economies because of its improving credit availability in opaque information environments. Most of the variables chosen are categorical variables, which are easy to observe and measure. Many of the variables in our analysis are similar to the variables considered in Dinh and Kleimeier (2007) on modelling retail credit risk in Vietnam, a neighbor country of Lao PDR. The first variable in Table 8 is BLC (Business Loan Classification), the label for nonperforming loan (NPL) status. We conduct correlation analysis on all the independent variables. Almost all the numeric variables measured in local currency Kip, such as income, expenditure, collateral value, loan balance and etc., are highly correlated with total value of assets (TVA). This group of variables can be regarded as a factor of firm size. Other variables tend to be less correlated, with correlations between 0.05 and 0.30. Credit rating grade (CRG) is slightly associated with three variables, Enterprises form as private enterprise (EPE), Times of running business (TRB) and Times of collection (TOC). We are not clear how the state-owned banks do their credit assessment. These banks normally do not publicly disclose their methods.

Table 8 Independent Variables on Nonperforming Loans: Definitions and Expected Impacts

Variable Labels	**Definition of Variables**	**Measurement**
BLC	Bank Loan Classification	1 = NPL; 0 = otherwise
Factors of Borrower Characteristics: FOBC		
EJV	Enterprise form as joint-venture	1 = yes; 0 = otherwise
ECO	Enterprise form as co-operations	1 = yes; 0 = otherwise
EPE	Enterprise form as private enterprise	1 = yes; 0 = otherwise
EFE	Enterprise form as foreign enterprise	1 = yes; 0 = otherwise
EID	Enterprise form as individual	1 = yes; 0 = otherwise
AOC	Age of borrower	Year
GOC	Gender of borrower	1 = male; 0 = otherwise
NEDU	Education level of borrower (number of year)	Year
CUS	Borrowers marital status	1 = Married; 0 = otherwise
NFM	Number of family members	Person
Factors of Borrower Financial and Credit Risks: FOFC		
TRB	Time of running business	Year
LIR	Loan interest rate	Percent (%)
TVA	Total value of assets	Lao Kip
CLA	Collaterals as luxury assets (diamonds, gold)	1 = yes; 0 = otherwise
CFB	Collaterals as financial bill of exchange	1 = yes; 0 = otherwise
CIW	Collaterals as inventory in the warehouse	1 = yes; 0 = otherwise
CRC	Collaterals as receivable	1 = yes; 0 = otherwise
CAU	Collaterals as authorization (concession)	1 = yes; 0 = otherwise
CGU	Collaterals as guarantors	1 = yes; 0 = otherwise
CLV	Collaterals as light vehicles	1 = yes; 0 = otherwise
CHV	Collaterals as heavy vehicles	1 = yes; 0 = otherwise
CLD	Collaterals as lands	1 = yes; 0 = otherwise
CHO	Collaterals as home	1 = yes; 0 = otherwise
CBU	Collaterals as buildings	1 = yes; 0 = otherwise
CFA	Collaterals as factories	1 = yes; 0 = otherwise
CMA	Collaterals as machineries	1 = yes; 0 = otherwise
CCO	Collaterals of owner	1 = yes; 0 = otherwise
CCS	Collaterals of shareholder	1 = yes; 0 = otherwise
CCF	Collaterals of family	1 = yes; 0 = otherwise
CCA	Collaterals of another one	1 = yes; 0 = otherwise
AVCB	Amount of value collaterals of borrowers	Lao Kip
FIC	Firm's internal income	Lao Kip

FEC	Firm's external income	Lao Kip
FIE	Firm's internal expenditures	Lao Kip
FEE	Firm's external expenditures	Lao Kip
TNE	Total numbers of employees	Number of Person
ALA	Amount of loan approved	Lao Kip
OSB	Outstanding balance	Lao Kip
OWE	Owner's equity	Lao Kip
TVL	Total value of liability	Lao Kip
NPB	Net profit of business	Lao Kip
OTD	Other debts (debt from other sources)	Lao Kip
Factors of Borrower relationship: FOBR		
BOP	Borrowing periods	Month
TOC	Times of collection	Time per Year
CRG	Credit rating grade	Rating (1 Worst to 8 Best)
BFS	Borrowing from other sources	1 = yes; 0 = otherwise
UCG	Loan purpose	1 = Investment; 0 = other
NBE	Number of business that borrower establishes	Number
Other factors: OFS		
PSL	Place of support loan	1 = Vientiane (the capital); 0 = other
BHI	Business sector form as handicraft-industry sectors	1 = yes; 0 = otherwise
BSC	Business sector form as constructions	1 = yes; 0 = otherwise
BAT	Business sector form as assembly-technical sectors	1 = yes; 0 = otherwise
BFA	Business sector form as forest and agricultural sectors	1 = yes; 0 = otherwise
BST	Business sector form as trade	1 = yes; 0 = otherwise
BTP	Business sector form as transportation-post sectors	1 = yes; 0 = otherwise
BFSA	Business sector form as services	1 = yes; 0 = otherwise

Empirical Results and Discussions

We firstly compile summary statistics on all the variables and divide the results into three columns: performing loans (PL), nonperforming loans (NPL) and all (Total). Also, we apply t-test to evaluate difference between PL group and NPL group in their means. Table 9 exhibits the means and the test results.

Table 9 Differences between Performing Loans and Nonperforming Loans in the Independent Variables

This table shows the statistics of three groups: Performing loan (PL), Nonperforming loan (NPL) and Total and test whether PL and NPL groups are different in their mean statistics. "***" means being significant at 1% level. Those categorical variables with mean ratio at 0.20 or lower in "Total" are excluded from this significance testing because they are less represented in this sample.

Variable Label	Variable Description	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max	Diff
		Performing Loans				Nonperforming Loans				Total				
BLC	Bank Loan Classification	0	0	0	0	1	0	1	1	0.48	0.5	0	1	
EJV	Enterprise form as joint-venture	0	0.06	0	1	0	0.04	0	1	0	0.05	0	1	
ECO	Enterprise form as co-operations	0	0	0	0	0.1	0.29	0	1	0.05	0.22	0	1	
EPE	Enterprise form as private enterprise	0.61	0.49	0	1	0.37	0.48	0	1	0.48	0.5	0	1	***
EFE	Enterprise form as foreign enterprise	0	0	0	0	0	0.04	0	1	0	0.03	0	1	
EID	Enterprise form as individual	0.39	0.49	0	1	0.53	0.5	0	1	0.46	0.5	0	1	***
AOC	Age of borrower	44.03	8.57	24	78	42.79	9.12	20	69	43.39	8.88	20	78	***
GOC	Gender of borrower	0.69	0.46	0	1	0.66	0.47	0	1	0.68	0.47	0	1	
NEDU	Education level of borrower (number of year)	12.31	3.18	5	18	10.56	4.02	5	18	11.41	3.74	5	18	***
CUS	Borrowers marital status	0.03	0.17	0	1	0.02	0.13	0	1	0.02	0.15	0	1	
NFM	Number of family members	5.15	1.8	1	20	4.82	1.55	1	14	4.98	1.68	1	20	***
TRB	Time of running business	9.3	7.18	1	55	6.47	5.32	1	33	7.84	6.44	1	55	***
LIR	Loan interest rate	13.19	2.11	4	16	12.91	2.29	8	18	13.04	2.21	4	18	***
TVA	Total value of assets	25,100	88,200	45	695,000	6,210	24,600	20	365,000	15,400	64,500	20	695,000	***
CLA	Collaterals as luxury assets (diamonds, gold)	0	0.05	0	1	0.06	0.23	0	1	0.03	0.17	0	1	
CFB	Collaterals as financial bill of exchange	0.01	0.12	0	1	0.01	0.08	0	1	0.01	0.1	0	1	
CIW	Collaterals as inventory in the warehouse	0.05	0.22	0	1	0	0.04	0	1	0.03	0.16	0	1	
CRC	Collaterals as receivable	0.04	0.2	0	1	0.02	0.13	0	1	0.03	0.17	0	1	
CAU	Collaterals as authorization (concession)	0.04	0.2	0	1	0	0	0	0	0.02	0.14	0	1	
CGU	Collaterals as guarantors	0	0.05	0	1	0.01	0.08	0	1	0	0.06	0	1	
CLV	Collaterals as light vehicles	0.05	0.21	0	1	0.08	0.27	0	1	0.07	0.25	0	1	
CHV	Collaterals as heavy vehicles	0.02	0.14	0	1	0.01	0.09	0	1	0.01	0.11	0	1	
CLD	Collaterals as lands	0.97	0.18	0	1	0.82	0.39	0	1	0.89	0.31	0	1	***
CHO	Collaterals as home	0.8	0.4	0	1	0.72	0.45	0	1	0.76	0.43	0	1	***
CBU	Collaterals as buildings	0.04	0.19	0	1	0	0.06	0	1	0.02	0.14	0	1	
CFA	Collaterals as factories	0.04	0.2	0	1	0.02	0.13	0	1	0.03	0.17	0	1	
CMA	Collaterals as machineries	0.02	0.14	0	1	0.02	0.13	0	1	0.02	0.14	0	1	
CCO	Collaterals of owner	0.74	0.44	0	1	0.6	0.49	0	1	0.67	0.47	0	1	***
CCS	Collaterals of shareholder	0.02	0.14	0	1	0.02	0.13	0	1	0.02	0.14	0	1	
CCF	Collaterals of family	0.4	0.49	0	1	0.36	0.48	0	1	0.38	0.49	0	1	
CCA	Collaterals of another one	0.04	0.2	0	1	0.06	0.24	0	1	0.05	0.22	0	1	
AVCB	Amount of value collaterals of borrowers	6,350	25,200	8	283,000	2,690	9,520	2	122,000	4,460	18,900	2	283,000	***

FIC	Firm's internal income	10,900	58,000	6	1,020,000	3,510	13,500	1	200,000	7,070	41,600	1	1,020,000	***
FEC	Firm's external income	1,350	19,000	5	350,000	92	920	2	18,000	699	13,200	2	350,000	***
FIE	Firm's internal expenditures	10,500	56,800	5	963,000	2,200	8,390	1	110,000	6,210	40,100	1	963,000	***
FEE	Firm's external expenditures	1,150	15,200	1	280,000	124	1,520	1	33,100	619	10,700	1	280,000	***
TNE	Total numbers of employees	12.06	38.28	1	668	9.54	22.44	1	350	10.76	31.14	1	668	***
ALA	Amount of loan approved	2,790	12,200	20	200,000	1,610	6,310	2	100,000	2,180	9,630	2	200,000	***
OSB	Outstanding balance	1,930	10,700	1	200,000	1,040	5,360	0.25	100,000	1,470	8,380	0.25	200,000	***
OWE	Owner's equity	5,310	31,500	3	440,000	1,190	5,420	1	90,000	3,180	22,300	1	440,000	***
TVL	Total value of liability	19,800	71,900	16	540,000	5,030	21,600	4	315,000	12,200	52,900	4	540,000	***
NPB	Net profit of business	1,180	32,000	-302,000	540,000	1,050	3,730	-19	33,500	1,110	22,400	-302,000	540,000	
OTD	Other debts (debt from other sources)	1,580	11,400	0	146,000	182	2,050	0	40,500	858	8,070	0	146,000	***
BOP	Borrowing periods	20.77	32.66	1	510	20.66	14.83	2	95	20.71	25.08	1	510	
TOC	Times of collection	2.29	3.53	1	12	4.63	4.87	1	24	3.5	4.43	1	24	***
CRG	Credit rating grade	5.19	1.16	3	8	2.17	0.95	1	7	3.63	1.84	1	8	***
BFS	Borrowing from other sources	0.04	0.2	0	1	0.02	0.13	0	1	0.03	0.17	0	1	
PSL	Place of support loan	0.4	0.49	0	1	0.19	0.39	0	1	0.29	0.45	0	1	***
BHI	Business sector form as handicraft-industry sectors	0.08	0.27	0	1	0.04	0.2	0	1	0.06	0.24	0	1	
BSC	Business sector form as constructions	0.13	0.33	0	1	0.15	0.36	0	1	0.14	0.34	0	1	
BAT	Business sector form as assembly-technical sectors	0.03	0.18	0	1	0.03	0.16	0	1	0.03	0.17	0	1	
BFA	Business sector form as forest and agricultural sectors	0.17	0.37	0	1	0.39	0.49	0	1	0.28	0.45	0	1	***
BST	Business sector form as trade	0.34	0.47	0	1	0.27	0.44	0	1	0.3	0.46	0	1	***
BTP	Business sector form as transportation-post sectors	0.05	0.21	0	1	0.02	0.15	0	1	0.04	0.18	0	1	
BFSA	Business sector form as services	0.18	0.39	0	1	0.08	0.27	0	1	0.13	0.34	0	1	
UCG	Loan purpose	0.56	0.5	0	1	0.78	0.42	0	1	0.67	0.47	0	1	***
NBE	Number of business that borrower establishes	1.21	1.16	0	20	1.07	0.91	0	10	1.14	1.04	0	20	***

The statistics under "Total" reveal the following interesting facts. 48% are loans to private enterprises (indicated in EPE) and 46% are loans to individual business owners (indicated in EID). The remaining 6% loans are provided to joint-ventures, co-operations and foreign enterprises. This sample is truly a sample of loans offered to the private sector. 68% borrowers are males or represented by males (indicated in GOC). This suggests that females in Lao PDR are given high opportunity and recognition on getting access to bank loans and/or managing private enterprises. 89% collateral is linked with lands (CLD). 76% collateral linked with home (CHO). 67% collateral is linked with machineries (CMA). 7% collateral is linked with on light vehicles. Other types of collaterals account for less than 5% in the sample. 29% loans are arranged in Vientiane, the capital city and the business center of Lao PDR (indicated in PSL). 30% loans are offered to business for trading (indicated in BST). 28% loans are offered to business for forest and agricultural sector (indicated in BFA). 13% loans are offered to business for services (indicated in BSFA).

The column "Diff" in Table 9 shows "***", which means "significant at 1% level" for the difference in mean. The variables include both categorical and numeric variables. For ease of analysis, the "***" excludes those categorical variables with mean ratio at 0.20 or lower. The excluded categorical variables are the categories less represented in the sample (less than 20% of the total observations). From the "***" in the table, we find that nonperforming loans are associated with the following determinants, including EID: Individual as the borrower, TOC: High frequency of loan collection and monitoring, BFA: A business for agricultural production, and UCG: Loans for investment purpose.

Performing loans are associated with the following determinants, including EPE: A private enterprise as the borrower, AOC: High in age of the borrower, NEDU: High education level of the borrower, NFM: High in the number of family members, TRB: Long business history, LIR: High loan interest rate, TVA: High in total value of assets, CLD: Using lands as collateral, CHO: Using home as collateral, CCO: Using own assets as collateral, AVCB: High in collateral value, FIC: High in internal income, FEC: High in external income, FIE: High in internal expenditures, FEE: High in external expenditures, TNE: High in total numbers of employees, ALA: High in amount of loan approved, OSB: High in outstanding loan balance, OWE: High in owner's equity, TVL: High in total value of liability, OTD: Having other debts, CRG: High in credit rating grade, PSL: Loan arranged in the capital city, BST: Business sector form as trade, and NBE: High in number of business established.

Many determinants on performing loans are actual proxies on firm size, such as income amount, expenditures amount and number of employees. It is generally true that larger firms tend to be safer.

Logistic Regression on Nonperforming Loans

We further develop a logistic regression model to include all the independent variables into one single equation, which is written as follows:

$$\ln\left(\frac{p}{1-p}\right) = a_0 + \sum_1^n a_i Variable_i + error \qquad (1)$$

where $p = 1$ *if BLC =1 (i.e. nonperforming loan)*

$p = 0$ *if BLC = 0 (i.e. performing loan).*

This equation is able to capture correlation effects among the variables and identify the most important determinants on nonperforming loans. As some variables are highly correlated, there may be multicollinearity problem in coefficient estimation. We believe that this problem should be limited to those independent variables measured in Kip. Table 10 shows the coefficients.

Table 10 Coefficients of Logistic Regression on Nonperforming Loans

This table shows the coefficients of the logistic regression with nonperforming loans as the dummy dependent variables. The TVA is strongly correlated with numeric variables measured in Kip. However, the regression results demonstrate that TVA is the only "Kip" variables with significant effect on nonperforming loans. "***" & "**" mean being significant at 1% and 5% respectively.

Nonperforming Loan as the Independent variables				
		Coeff.		z
EPE	Enterprise form as private enterprise	-0.0841		-0.17
AOC	Age of borrower	-0.0197		-0.72
GOC	Gender of borrower	1.5784	***	2.82
NEDU	Education level of borrower (Number of Year)	-0.1371		-1.74
CUS	Borrowers marital status	-0.4408		-0.36
NFM	Number of family members	-0.2142		-1.46
TRB	Time of running business	-0.0082		-0.20
LIR	Loan interest rate	-0.4529	***	-3.47
TVA	Total value of assets (million Kip)	-0.0000	***	-2.75
CLA	Collaterals as luxury assets (diamonds, gold)	6.6613		0.74
CFB	Collaterals as financial bill of exchange	-4.3497		-1.52
CIW	Collaterals as inventory in the warehouse	-0.9379		-0.53
CRC	Collaterals as receivable	-0.9021		-0.57
CGU	Collaterals as guarantors	1.7384		0.00
CLV	Collaterals as light vehicles	0.0695		0.05
CHV	Collaterals as heavy vehicles	0.0096		0.00
CLD	Collaterals as lands	-2.3136		-1.28
CHO	Collaterals as home	0.4709		0.79
CBU	Collaterals as buildings	-2.2551		-0.61
CFA	Collaterals as factories	2.0066		0.76
CMA	Collaterals as machineries	0.8267		0.21
CCO	Collaterals of owner	0.1380		0.22
CCS	Collaterals of shareholder	-1.2418		-1.06
CCF	Collaterals of family	-0.0342		-0.06
CCA	Collaterals of another one	-1.4457		-1.56
AVCB	Amount of value collaterals of borrowers (million Kip)	0.0000		-0.87
FIC	Firm's internal income (million Kip)	0.0000		-0.20
FEC	Firm's external income (million Kip)	0.0000		-0.17
TNE	Total numbers of employees	0.0077		0.71
ALA	Amount of loan approved (million Kip)	0.0000		0.73
OSB	Outstanding balance (million Kip)	0.0000		0.35
OWE	Owner's equity (million Kip)	0.0000		1.56
NPB	Net profit of business (million Kip)	0.0000		0.92
OTD	Other debts (debt from other sources) (million Kip)	0.0000		-0.51
BOP	Borrowing periods	0.0215	***	2.69
TOC	Times of collection	0.1788	***	3.21
CRG	Credit rating grade	-4.3518	***	-9.99
BFS	Borrowing from other sources	6.1919	**	2.46
PSL	Place of support loan	-0.6652		-1.09
BHI	Business sector form as handicraft-industry sectors	-0.8377		-0.40
BSC	Business sector form as constructions	-0.1487		-0.07
BAT	Business sector form as assembly-technical sectors	-0.9710		-0.42
BFA	Business sector form as forest and agricultural sectors	-1.4017		-0.70
BST	Business sector form as trade	-1.1400		-0.59
BTP	Business sector form as transportation-post sectors	-1.6517		-0.78
BFSA	Business sector form as services	-1.4765		-0.74

UCG	Loan purpose	-0.0594		-0.12
NBE	Number of business that borrower establishes	0.3601		2.21
Constant		25.9469		5.86
Number of obs		992		
LR chi(40)		1178.86		
Prob > chi2		0.00000		
Pseudo R2		0.8579		

The table indicates that gender (GOC), loan interest rate (LIR), total value of the assets (TVA), borrowing periods (BOP), times of collection (TOC), credit rating grade (CRG) and borrowing from other sources (BFS) are critical factors on the credit risk. Male borrowers (GOC =1) are strongly associated with higher credit risk. This means that female borrowers in Lao PDR tend to be safer. This echoes many research results that female borrowers are less risky and female managers are conservative to run businesses (see, for instance, Palvia, Vähämaa and Vähämaa [2015]).

The regression results show that good credit ratings grade (GOC) is strongly related to lower credit risk. It seems that the three state-owned commercial banks in Lao PDR have internally done a quality job in assessing the credit quality of borrowers. Some argue that bank lending of state-owned banks in an emerging economy is manipulated by its government to achieve desired political agendas (see, for instance, Carvalho 2014). However, Lazzarini et. al. (2014) argues that state-owned banks in emerging economies do not systematically lend to underperforming firms. Our results seem to suggest that state-owned commercial banks in emerging economies do own the capability in differentiating credit risk but their lending may be politically manipulated. In general, state-owned banks in emerging economies are better than foreign banks in analyzing hidden risk factors, such as borrowers' political connections and matches between borrowers' business strategies and government policies. These hidden factors are very fundamental in making lending decisions in emerging economies, especially socialist economies. Statistical models for risk scoring prevalently used by foreign banks find it hard to measure and incorporate these hidden risk factors because of limited information available5. As shown in Table 3 and discussed in Section 2, foreign banks in Lao PDR are keen on lending to state-owned enterprises. It is consistent with many previous findings that that foreign banks are selective in choosing their clients in emerging markets (see, for instance, Beck, Soledad and Peria [2010]; Degryse, Havrylchyk, Jurzyk, and Kozak [2012]; and Gormley [2010]). Foreign banks even offer relatively lower interest rates for safer borrowers in foreign countries, such as state-owned enterprises and governmental organizations.

Table 10 also indicates that both "borrowing periods (BPO)" and "times of collection (TOC)" have positive association with nonperforming loans. These two variables are generally associated with either loans of larger amount or loans for long-term investment or both. When the economic conditions change over time, some borrowers of these loans tend to have liquidity issues and loan repayment problems. As mentioned before, Total value of asset value (TVA) is strongly correlated with other numeric variables measured in Kip. In our regression analysis, TVA is the only "Kip" variable having significant effect on performing loans. It is an effect of firm size on nonperforming loans. That is, larger firms are safer. "Borrowing from other sources (BFS)" is positively associated with nonperforming loans. This BFS can reflect a situation of over-borrowing. Some borrowers escalate their debts by borrowing new funds to settle loan repayment of other funding sources. On the other hand, if a private enterprise

[5] Given the loan size of the loans in the sample, the loans are similar to retail credits in developed economies. As pointed out by Allen, DeLong and Saunders (2003), it is not easy to model the credit risk of retail business loans and other retail loans because they have limited information from historical credit databases.

borrows from a foreign bank in addition to a state-owned bank, the foreign bank may apply tougher loan covenants and make the private enterprise easy to deviate from the loan covenants. There is one interesting finding in the table that “loan interest rate (LIR)” is negatively associated with nonperforming loans. Generally, higher loan interest rate should be positively associated with either high credit risk or less bargaining power of borrowers or both. In Lao PDR, the government always encourages affordable loans offered borrowers for agricultural production. These borrowers tend to be risky and they are charged at lower interest rates. We find from our sample data that LIR (loan interest rate) and BFA (business sector form as forest and agricultural sectors) are correlated at around -0.30. We believe that the negative effect of LIR is an effect of the risk associated with loans for agricultural production.

Conclusions

This paper has summarized the macroeconomic environments for financing private enterprises and businesses in Lao PDR and identified determinants on nonperforming loans. Male borrowers, lower interest rate associated with forest and agricultural sector, loans of longer tenor, more frequent loan collection, and borrowing from multiple sources are factors leading to higher probability of nonperforming loans. It is obvious that foreign banks in Laos PDR are keen on lending to state-owned enterprises. State-owned commercial banks in Lao PDR take a key role in lending to private sector. The case of Lao PDR provides a formula to effectively attractive international capitals. Foreign investors entering an emerging market are generally less risk-averse but still inclined to look safer investment opportunities in that market. Lending to state-owned enterprises and governmental organizations can easily match their risk appetite. If state-owned commercial banks do not take care of borrowers from the private sector, it will be hard to believe that foreign banks provide them the loans.

Our regression results reveal that state-owned commercial banks in Lao PDR do have an ability to discriminate good borrowers from bad borrowers in private sector. Foreign banks may find it hard to achieve it given opaque information on new borrowers from this new market. In an emerging economy, state-owned commercial banks generally have better knowledge than foreign banks on their potential borrowers. If this emerging economy wants to solicit capital inflows to support development of their private sector, state-owned commercial banks should be able to play a key role. For instance, they can offer credit insurance on parts of the loans offered by foreign lenders[6]. This not only reduces the credit risk of the foreign lenders but also motivates them to participate further in this economy because of improved knowledge about its economic settings. The credit insurance can also be in the form of insured bonds to support long-term financing of local enterprises of the economy.

[6] Some governments in developed economies offer loan guarantees to risky loans, such as loans to an emerging business sector and/or loans to small-and-medium-size enterprises. They allow commercial banks to screen out potential borrowers and provide guarantee (i.e. credit insurance) on parts of loan amount. Credit assessment is primarily done by the banks because government officers generally have limited knowledge on credit analysis. These arrangements motivate private funds to support chosen high-risk sectors because their risk is partially shared.

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Investment Behavior of Woman Business Owners in Myanmar

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ABSTRACT

Individuals invest in different types of investment based on their preference and risk taking behavior. Depending on their financial knowledge and awareness, tax and social factors, the personal factors, their investment decisions are different. The study was aimed to identify the investment behavior of woman business owners in Yangon, to examine factors influencing their investment behavior and to analyze the relationship between the influencing factors and the behavior. The population was about 2000 woman business owners, members of Myanmar Women Entrepreneur Association (MWEA) and the sample was selected by using random sampling method with the sample size of 120 respondents. The result shows that respondents mostly invest in the traditional assets such as bank deposit, gold and real estate rather than modern financial assets bonds, stocks and insurance. They mostly used the traditional off-line trading method for the investment except the securities trading with on-line. The regression results show that there is a positive and significant effect of financial attitude, tax factors and the working sectors of the women owners on their behaviors. Financial attitude has the highest contribution followed by tax factors and the women' working sectors.

Keywords: Investment Behavior, Risk, Attitude, Financial Literacy, Influencing Factors

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Introduction

Investment is an outgrowth of economic development and the maturation of modern capitalism. Saving and investment are key ingredients to long run economic growth: when a country saves a large portion of its GDP, more resources are available for investment in capital, and higher capital raises a country's productivity and living standard. It is important to look out the status of the government budget for the country economy. When a government budget deficit crowds out investment, it reduces the growth of productivity and GDP (Mankiw, 2010). For the economy as a whole, from macro-economic point of view, aggregate investment sanctioned in the current period is a major factor in determining aggregate demand and, hence, the level of employment (Narayanna. B, 2012). Savings or investments are powerful tools in the alleviation of poverty.

Investment is important not only for the country as a whole but also for the business and individuals. Businesses need to make the most out of their profits and savings by putting money into investments that will give extra return year by year. Businesses tend to invest in the real estate, government bonds, gold etc. to ensure the money is secure and growing. Normally, people tend to invest if they have money in hand with the purpose of creating wealth and financial security although there is no guarantee that they will make money from their investments, and they may lose value.

There are many different types of investments depending on investors' risk taking behavior. Therefore, investment can be low risk portfolio, moderate risk portfolio and high risk portfolio. Each type of investment has its own advantages and disadvantages. If the investor has enough financial knowledge and awareness, the right financial decision can be made easily and it helps to have an appropriate investment portfolio. Unless the investors have the basic knowledge of portfolio management like "Don't Put All Your Eggs in One Basket", they may face investment failure. There are various factors that affect investors' portfolio: annual income, government policy, natural calamities, economical changes, etc.

In the past, in Myanmar, a common savings mechanism is accumulating tangible assets such as cash, gold and rice at home. Women often purchase gold as a form of savings, knowing that its price is stable since international markets— not local politics or domestic fiscal and monetary policies—dictate gold prices. Peer savings groups are another popular informal financial tool in Myanmar. There are generally only four avenues for investment: gems, gold, cars and property. When investing, the poor often turn to land, livestock, mechanization, education, transportation and migration (Proximity Designs & Studio D Radiodurans, 2014).

However, with the emergence of Yangon Stock Exchange in 2015 and new financial institutions, people started to invest in modern financial products such as insurance, stock, bonds, and Forex trading. Ministry of planning and finance has permitted the foreign insurers to operate the insurance business in the country since January 2019. Because of the liberalization of insurance sector in Myanmar, there are about 24 insurance companies including foreign-owned.

According to the United Nations Capital Development Fund (2018), in the five years since 2013, the number of formal and informal savers has risen from 30 % to 50% and informal savings including non-cash assets, jewelry or cash on hand are the main channels for savings. Myanmar is drafting a National Savings Mobilization Strategy to encourage citizens to save in order to support continued economic growth to reach parity with its regional neighbors. Normally, people consign their savings to investments with the hope to increase their future wealth as investment benefits both economy and society. Their investment behaviors can be different based on their investment motives.

Understanding the factors influencing the investment behavior is important for both the investors itself and financial institutions. In order to find out investors' investment behavior, woman business owners in Myanmar are selected to conduct the survey. Nowadays, the status of women in social and economic sphere has been growing over the past few decades as women started to participate in the labor force, politics and other sectors. To raise the role of women in the economy, the government has drawn up a National Strategic Plan for the Advancement of Women (2013-2022) under which it aims to eliminate all forms of discrimination against women (Myanmar Times, 2017).

Despite the importance of women segment for financial products and services in Myanmar, research on their investment behaviors is very limited. This study will be helpful to find out the ideal investment options for business owners. These findings could be useful to financial institutions to devise appropriate strategies and to market appropriate financial products or offer new financial products to investors in order to satisfy their needs.

The main objectives of the study are as follows:

1. To identify the investment behavior of woman business owners in Yangon
2. To analyze the relationship between the influencing factors and investment behavior of woman business owners

Literature Review

The Effect of Financial Literacy on Investment Behavior

Financial literacy plays an important part in our daily life, such as managing personal finance, investment, etc. Danes & Haberman (2007) defined financial literacy as an individual ability to obtain, understand, and evaluate information which is relevant to the decision making by understanding of the financial consequence that occur as the effect of the development in the complexity of the global finance. Bushan (2014) conducted survey on the relationship between financial literacy and investment behavior which showed that financial literacy level affects awareness regarding financial products as well as investment preferences towards financial products. Also respondents having low financial literacy primarily invest in traditional and safe financial products and do not invest much in those financial products which are comparatively more risky and can give higher returns. This result is in line with the finding of Van Rooij, M.C.J. (2012)which shows that individuals with lower financial literacy are much less likely to invest in stocks which is a modern financial instrument.

The Effect of Financial Attitude on Investment Behavior

In making investment decision, it is important to consider financial attitude as an influencing factor. Financial attitude is defined as a state of mind, opinion, judgment about finance (Pankow, 2003).Theory of Planned Behavior presented by Ajzen (1991) provides model that can predict an individual's intention to engage in a behavior at a specific time and place. The theory was intended to explain all behaviors over which people have the ability to exert self-control. The key component to this model is behavioral intent; behavioral intentions are influenced by the attitude about the likelihood that the behavior will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome. Attitudes refer to the degree to which a person has a favorable or unfavorable evaluation of the behavior of interest. It entails a consideration of the outcomes of performing the behavior (Wayne,W 2018). Sondari &

Sudarsono (2015) tested the applicability of the theory of planned behavior in predicting intention to invest resulting attitudes toward investment and subjective norms have significantly influenced the intention to invest.

The Effect of Social Factors on Investment Behavior

The most popular and essential theory that is needed to be considered is Behavioral Finance Theory. Behavioral finance is the study of the influence of psychology on the behavior of investors or financial analysts. It also includes the subsequent effects on the markets. It focuses on the fact that investors are not always rational, have limits to their self-control, and are influenced by their own biases. Behavioral Finance Theory described that investors make cognitive errors that can lead to wrong decisions. There are some decision making biases and errors in Behavioral Finance such as self-deception, heuristic simplification, social influence and emotion (Corporate Finance Institute, 2019).

Social influence can make the investor to behave irrationally. Venkateshraj, V. (2015) studied the investment pattern of employed women which covers factors influencing the investment pattern, financial literacy level and risk profiling of financial products and the type of financial products preferred by employed women. The study discovered that Internet has replaced newspapers and magazines as preferred source of investment information. It was found that friends and relatives continue to be an important source for investment information. This finding is aligned with the research of Shanmugham & Ramya(2012) .

The Effect of Tax Factors on Investment Behavior

Tax factor and tax efficacy are essential to maximizing investment returns. It is important that the investors understand how to manage their portfolio to minimize the tax burden. Singh & Vanita (2002) studied on mutual fund investor's perception and preference and found that tax exemption significantly affected investor behavior. Venkateshraj, V. (2015) also stated that respondents were aware about the tax benefits available for certain investment products. Majority preferred to invest in provident fund and life insurance product to claim the tax benefit.

The Effect of Demographic Factors on Investment Behavior

There are many studies that proved that demographic profile of investors is an influencing factor among others. Sadiq, M.N. & Ishaq, H. M (2014) analyzed the effect of demographic factors on the behavior of investors during the choice of investment. . It was found that there is an association between demographic characteristics and investors level of risk tolerance. Result showed that demographic factors like investor's age, academic qualification, income level, investment knowledge, and investment experience have significant effect on the behavior of investors. There is positive correlation between investor's academic qualification, income level, and investment knowledge and investment experience with their level of risk tolerance during the choice of investments. Those findings are in line with Venkateshraj, V. (2015) research paper.

Investment Behavior

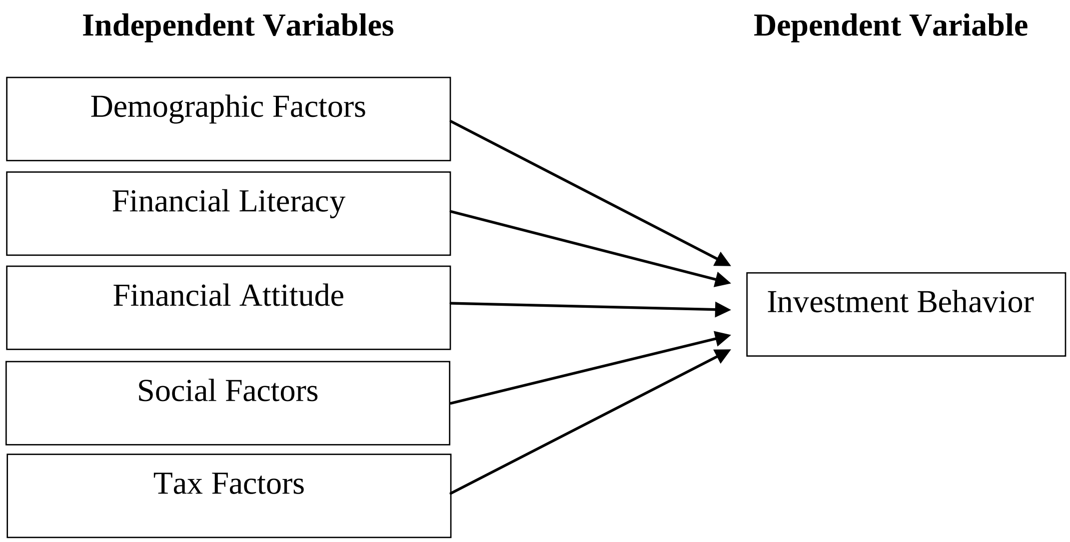
Investment can be viewed as deferred consumption, that is, income earned but not consumed and kept for future consumption. The concept refers to the immediate commitment of resources, money or otherwise, in the expectation of reaping future benefits irrespective of the form it takes, its key attribute is the sacrificing of something of value now for future benefit later (Bodie, Kane and Marcus, 2001).

An investment refers to any money or income not consumed but kept aside, either in financial institution or invested in the capital market, real estate or any other production activity with a view to generating higher future income and/or increasing its innate value in the future (Investment Finance Essay, 2013). Investment behavior is crucial to an investor's future and the decision is dependent on many factors (Ansari & Moid, 2013). Most of the researchers have based on the risk taking behavior of the investors and they mainly focused on the relationship between the risk taking behavior and demographic factors, financial literacy and tax benefits.

Research Methods

As seen in the previous research, variables such as demographic factors, financial literacy, tax benefits and socio economic status were used to analyze the investment behavior of the respondents. This study used both dependent and independent variables as illustrated in

Figure.1. The five variables which are demographic factors, financial literacy, financial attitude, social factors and tax factors are operationalized as independent variables and the dependent variable is investment behavior. This study evaluates how the independent variables influence on investment behavior.



Source: Own Compilation

Figure 1 Conceptual Framework

For demographic factors, age, marital status, education, occupation, working experience, working sector, monthly income and family size were considered in the model. The dummy variables were used for measuring the qualitative variables in the regression analysis. The other variables of financial literacy, financial attitude, social factors, tax factors and investment behavior were measured by the level of agreement on a five-point Likert scale.

Woman financial literacy covered the dimensions of bond, interest rate, stock share, portfolio management and purchasing power. Financial attitude towards investment as regards the respondents' preference on the investment, confidence to take risk etc. are identified. Social factors covering consultation with family members, friends, and financial adviser etc. for the investment decision are covered in the statement.

Tax factors were used to find out the respondents' perception of tax on investment. It covered the tax benefits and tax saving investments. Finally the level of woman investment behavior, the dependent variable was identified with the risk perception on investment while taking investment decision.

Based on the findings of the previous studies in the literature, the following Hypotheses are adopted.

Hypothesis 1: Demographic factors of the women owners are likely to influence investment behavior

Hypothesis 2 : Financial literacy of the women owners is likely to influence the risk-taking Investment behavior

Hypothesis 3: Financial attitude of the women owners are likely to influence the risk-taking investment behavior

Hypothesis 4 : Social factors are likely to influence the risk-taking investment behavior

Hypothesis 5 : Tax factors are likely to influence the risk-taking investment behavior

Population and Sample

This study focuses on woman business owners working in different sectors in Yangon Region. Members from Myanmar Women Entrepreneurs Association are selected to conduct the survey. Myanmar Women Entrepreneurs Association was founded in 1995 which is a non-Government, non-profit association. Its aim is to unite and bring into focus the role and capabilities of Myanmar women entrepreneurs. There is a total of about 2,000 active members who are women entrepreneurs and managers in the manufacturing, trading and service businesses. 42 women from the association, who have achieved success in the economic and social sectors, have already received ASEAN awards. About 200 members were targeted to collect the primary data.

Data Collection and Analysis

This study used both primary and secondary data. Primary data was collected from woman business owners in Yangon by using well-structured questionnaires. The questionnaires were adopted from the study of Venkateshraj, V. (2015). Secondary data were collected from website, journals and previous literatures.

To collect the primary data, the researcher conducted personal interviews with the members by attending the association meeting. While attending the meeting, the structured questionnaires were distributed to the members directly. Then, face-to-face interview was conducted after finishing the meeting. About 150 members were asked and 120 members (5% of total members) completely responded the questions. Simple random sampling was used for drawing samples. Before making the personal interview, a pilot study was conducted by contacting 20 woman business owners in order to test the effectiveness of the questionnaires.

The descriptive statistics method and multi-linear regression were used for the analysis. Descriptive statistics gives a picture about the demographic profile, the level of financial literacy, financial attitude, social factors, tax factors and investment behavior which can be seen in terms of mean, standard deviation, and frequency. Multi-linear regression analysis provides the data on the effect of financial literacy, financial attitude, social factors, and tax factors on the investment behavior of woman business owners.

Results and Discussion

The data collected from the survey are summarized by tables and charts and analyzed by using descriptive statistics method and multi-linear regression.

Table 1 Demographic Profile of Respondents

No	Variables	Categories	Number	Percent %
1.	Age	Below 30 years	18	15
		31 – 40	29	24.2
		41 – 50	44	36.7
		51 – 60	23	19.2
		Above 60 years	6	5
2.	Marital Status	Single	40	33.3
		Married	80	66.7
3	Dependent People	< 3	86	71.7
		3 – 6	16	20.7
		7 – 9	9	7.4
4.	Number of Children	≤ 2	113	94.2
		3 – 4	7	5.8
5.	Family Size	1 - 3	26	21.7
		4 - 6	44	38.3
		>6	48	40

6.	Highest Education	Under Graduate	7	5.8
		Graduate	75	62.5
		Post-Graduate and above	38	31.7
7.	Nature of Job	Manufacturing	22	18.3
		Trading / Service	98	81.7
8.	Years of working experience	<5 years	19	15.8
		5 – 10 years	25	20.8
		11 – 15 years	30	25
		16 – 20 years	13	10.8
		>20 years	33	27.5
9.	Monthly income (Kyats)	<30 Lakhs	66	55
		31 – 50 Lakhs	25	20.8
		> 50 Lakhs	29	24.2

Source: Survey Data, 2019

Table 1 shows the summary of demographic profiles of respondents. The majority of respondents (36.7%) were from the age group of 41 – 50 years, followed by those who were from the age group of 51 – 60 years. It was found that the majority of women are married (66.7%). The majority the respondents has the family size of more than six (40%), followed by the family size of four to six (38.3%). It can also be seen that most of the respondents are graduate (62.5%) followed by those who are post graduate and above (31.7%). Majority of respondents (81.7%) are working in the trading and service sector and most of the respondents have over 20 years working experience (27.5%). It can be observed that 55% of the respondents have the monthly income of less the 30 lakhs MMK followed by the income range of above 50 lakhs (24.2%).

Investment Practices of Respondents

In order to find out the respondents' investment behavior, the investment awareness, risk perception on investment, actual investment held, trading method, and investment purpose have been asked and analyzed by using descriptive statistic method.

Table 2 Investment Awareness and Investment Held by Respondents

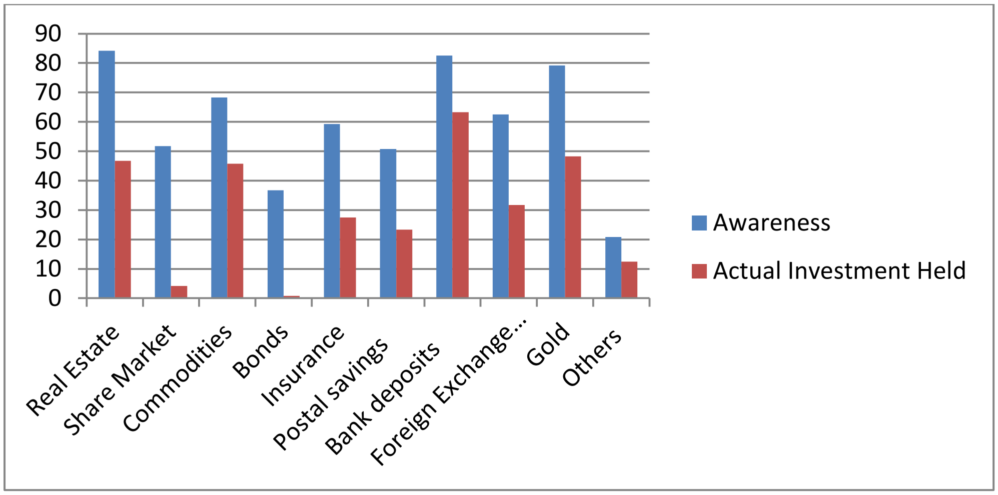
Types of Investment	Awareness		Investments Held	
	Number	Percent (%)	Number	Percent (%)
Real Estate	101	84.2	56	46.7
Bank deposits	99	82.5	76	63.3
Gold	95	79.2	58	48.3
Commodities	82	68.3	55	45.8
Foreign Exchange Market	75	62.5	38	31.7
Insurance	71	59.2	33	27.5
Share Market	62	51.7	5	4.2
Postal savings	61	50.8	28	23.3
Bonds	44	36.7	1	0.8
Others	25	20.8	15	12.5

Source: Survey Data, 2019

It can be seen from the Table 2 that the majority of respondents are aware about real estate (84.2%), followed by bank deposit (82.5%) and gold (79.5%) respectively. Awareness about postal savings and share market is moderate (around 50%) and awareness about bonds is low as can be seen in Figure 2.

Although people aware about most of the investment avenues, it does not directly lead to the actual investment. Although the awareness about real estate is highest, actual investment in real estate is only at moderate level of 46.7%. It can be assumed that people lost interest in the real estate market in Myanmar although the real estate market was active before 2010. Investment in share market (4.2%) is quite low compared to the moderate awareness level of share market.

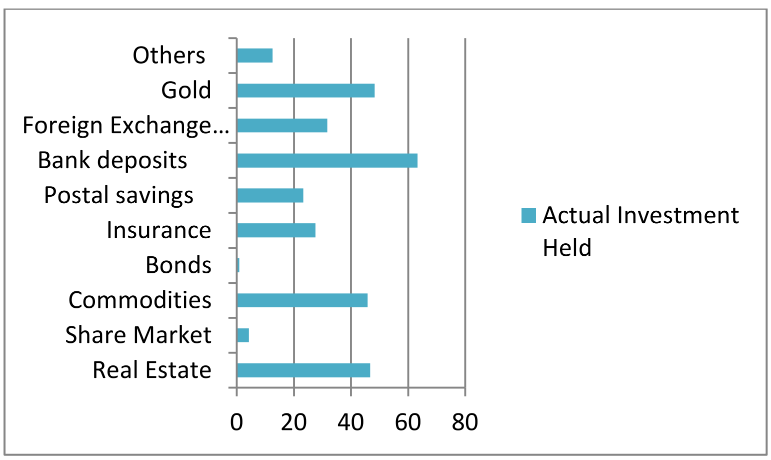
Figure 2 Comparisons of Investment Awareness and Actual Investment Held



Source: Survey Data, 2019

Figure 3 shows that the actual investment held by the respondents. Bank deposit (63.3%) is the most preferred investment held by the women, as the bank deposit is a comparatively risk-free asset followed by Gold (48.3%), Real Estate (46.7%) and Commodities (45.8%). It can also be seen that gold is one of the most preferred investment by women; they buy gold not only for investment but also for fashion. Myanmar women like to wear gold as jewelry in special occasions according to the tradition.

Figure 3 Actual Investment Held by Respondents



Source: Survey Data, 2019

Investments held in the form of insurance and foreign exchange currency are in the range of 27% to 32%. It is followed by postal saving with 23%.The least preferred types of investment are bonds (0.8%) and share (4.2%) respectively. On overall, it indicates that women are interested to invest in traditional investment avenues rather than the modern financial instruments due to the fact that the financial instruments were introduced to Myanmar people in 2010s and people are still unfamiliar with those avenues.

Table 3 Portfolio Diversification Behavior

No. of Portfolio	Number	Percent (%)
1	22	18.3
2	35	29.2
3	31	25.8
4 and above	32	26.7
Total	120	100

Source: Survey Data, 2019

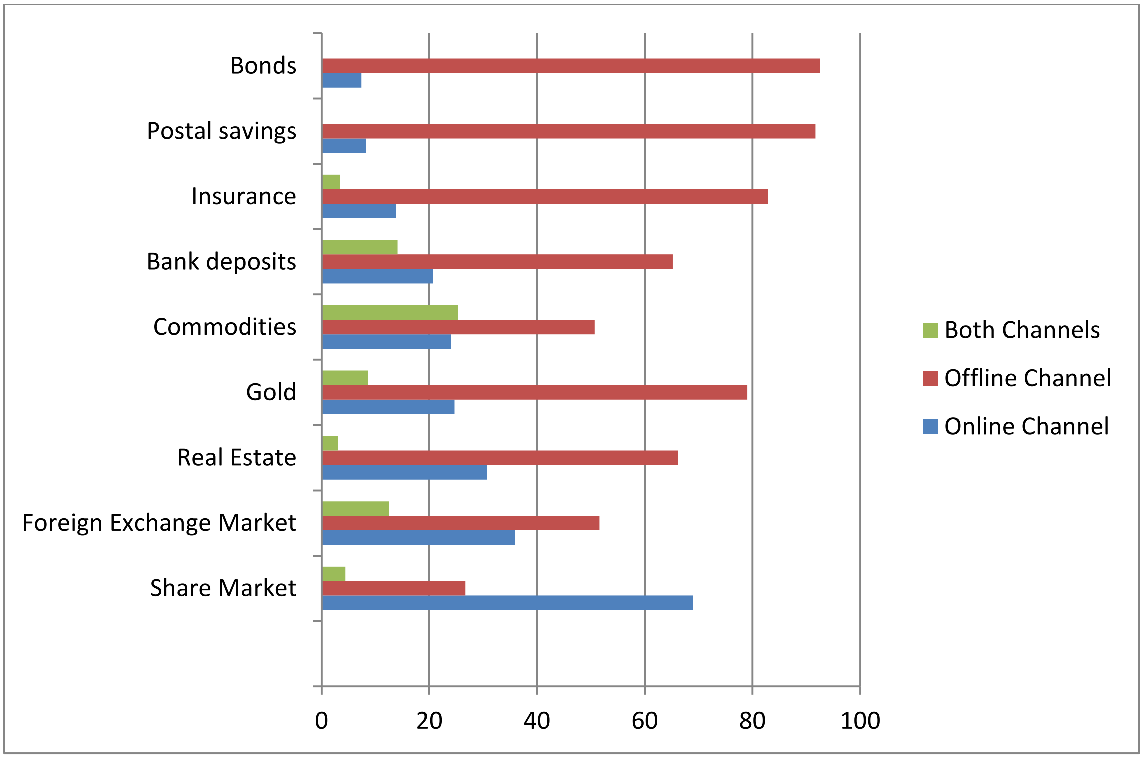
It can be observed from Table 3 that the majority of respondents (29.2%) are investing in at least two assets. Investments in four and above assets are 26.7% followed by investment in three assets (25.8%). Investment in one asset is in low state. It can be considered that Myanmar women are good at diversifying the investment portfolio by investing in more than one investment avenue in order to avoid investment failure.

Table 4 Trading Method used by Women

Type of Investment	Online Channel		Traditional Offline Channel		Both	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Share Market	31	68.9	12	26.7	2	4.4
FE Market	23	35.9	33	51.6	8	12.5
Real Estate	20	30.7	43	66.15	2	3.07
Gold	20	24.7	54	79.0	7	8.6
Commodities	18	24.0	38	50.7	19	25.3
Bank deposits	19	20.7	60	65.2	13	14.1
Insurance	8	13.8	48	82.8	2	3.4
Postal savings	4	8.3	44	91.7	0	0
Bonds	2	7.4	25	92.6	0	0

Source: Survey Data, 2019

Figure 4 Trading Method used by Women



Source: Survey Data, 2019

Table 4 describes the trading methods used by the participants. The participants prefer traditional offline channel to trade all investment avenues except in share market investment. The respondents mainly used online trading channel for share market (69%). It indicates that women adopted online trading channel as the technology has advanced in Myanmar which are depicted in Figure 4.

Table 5 describes the purpose of investment of the respondents. Women seem to consider regular earning return as the main purpose of investment (50.8%) followed by the purpose of getting high return (35.8%) and just for safety (31.7%). The participants also consider that their children education is one of the main purposes of investment. It thus can be assumed that women mainly consider financial purpose as the major purpose for investment rather than non-financial purpose. Moreover, it can be drawn that for the financial purpose, the regular earning return is the majority concerned by the respondents among others.

Table 5 Main Purpose of Investment

Purpose	Number	Percent (%)
High Return	43	35.8
Regular Earning Return	61	50.8
Just for Safety	38	31.7
For Marriage	7	5.8
For Children Education	34	28.3
Retirement Plan	16	13.3

Source: Survey Data, 2019

To understand the first consideration in decision making of the women, the results of the survey are shown in Table 6. Table 6 indicates that the majority of participants consider firstly safety of capital (40.8%) rather the high return and liquidity needs. 23.4% of the participants think fulfilling personal needs (post retirement need, children education, marriage etc.) as first priority.

Table 6 First Consideration of Respondents in Investment Decision

Factors	Number	Percent (%)
Liquidity	19	15.8
Safety of capital	49	40.8
High return	15	12.5
Convenience to purchase	2	1.7
Trends in financial market	7	5.8
Personal Needs	28	23.4
Total	120	100

Source: Survey Data, 2019

Table 7displays that majority of participants 37.5% held their investment more than one year before earning yield followed by 36.7% of the respondents held their investment less than one year,and25.8% of the respondents state one-year, thus indicating that the investment duration is varied by their type of investment and their urgency.

Table 7 Duration of Investment Period

Investment Period	Number	Percent (%)
Less than one year	44	36.7
One year	31	25.8
More than one year	45	37.5
Total	120	100

Source: Survey Data, 2019

Table 8 Frequency of Investment Review

Frequency	Number	Percent (%)
Occasionally	18	15.0
Monthly	58	48.3
Quarterly	17	14.2
Yearly	18	15.0
Rarely	9	7.5

Source: Survey Data, 2019

Table 8 shows that the frequency of investment reviews by the participants. The majority of respondents review their investment monthly (48.3%) followed by the review period of occasionally and yearly by 15% each respectively. It indicates that Myanmar women tend to check their investment situation in the short period of time as policies and investment conditions can change anytime.

Antecedent Factors influencing Investment Behavior

To analyze the factors influencing the investment behaviors of the respondents, women were asked by their agreement on the statements related to independent factors of financial literacy, financial attitude, social factors and tax factors. Also the woman investment behavior was asked and measured using the statements on their risk taking behavior. The respondents were requested to indicate their agreement with the various statements regarding these variables.

A five point Likert scale was used to interpret the responses whereby the scores of “Strongly disagree” and “Disagree” were represented by mean score, equivalent to 1 to 2.5 on Likert scale (1≤ disagree≥2.5). The scores of ‘Neutral’ were equivalent to 2.6 to 3.5 on the Likert scale(2.6≤Neutral≥3.5). The scores of “Agree” and “Strongly agree” were equivalent to 3.6 to 5 on the Likert scale (3.6≤Agree≥5). Table 9 shows the summary of respondents’ risk taking behavior and antecedents factors influencing on investment behavior. The detail response can be seen in the appendix.

Table 9 Investment Behavior and Antecedent Factors

Description	Mean
Risk Taking Behavior on Investment	3.36
Financial Literacy	3.05
Financial Attitude	4.07
Social Factors	3.39
Tax Factors	3.26

Source: Survey Data, 2019

The results indicate that the respondents are risk-adverse with the average mean score of 3.36 and the respondents are neither literate nor illiterate from the financial aspect with the mean score of 3.05. In addition, the respondents’ financial attitude is appropriate for investment by the average mean score of 4.07. It can also be seen that the respondents are neither dependent nor independent on the social factors while taking investment decision by the average mean score of 3.39 and tax factors play neither important nor unimportant roles while they taking investment decision by the average mean score of 3.26.

Relationship between Dependent and Independent Variables

Table 10 states correlation results that there are moderately positive relationship between income level, financial attitude, financial literacy, tax factor and the investment behavior of women at the 1% significant level whereas tax factors and household size have a weak positive relationship with the investment behavior at the 5% significant level and 10% significant level respectively.

Table 10 Correlation Coefficients of the Factors

Variables	Pearson Correlation	Sig. (2 tailed)
Years of Work Experience	.131	.154
Monthly Income	.498***	.000
Household size	.163	.074
Marital Status	-.073	.429
Working Sector	-.044	.631
Social Factor	.032	.729
Financial Attitude	.569***	.000
Financial Literacy	.565***	.000
Tax Factor	.213**	.019

Dependent Variable: Investment Behavior

Level of significance: * = 10%, ** = 5%, *** = 1%

Source: SPSS output

The multiple linear regression method was used to analyze the relationship between the influencing factors and investment behavior of woman business owners. Due to the effect of multi-collinearity between financial literacy and financial attitude, financial literacy variable which is lower coefficient was removed in the linear regression model. Then the next computed results are described as follows.

Table 11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622[a]	.387	.343	.40889

a. Predictors: (Constant), Nature of Work, Monthly Income, Tax Factor, Social Factor, Household size, Marital Status, Years of Experience, Financial Attitude

b. Dependent Variable: Investment Behavior

Table 11 shows that there is 34% variation in the dependent variable due to the contribution of the independent variables which are working sector, monthly income, tax factor, social factor, household size, marital status, years of experience and financial attitude on investment behavior

Table 12 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.709	8	1.464	8.754	.000[b]
	Residual	18.558	111	.167		
	Total	30.267	119			

a. Dependent Variable: Investment Behavior

b. Predictors: (Constant), Working Sector, Monthly Income, Tax Factor, Social Factor, Household size, Marital Status, Years of Experience, Financial Attitude

Table 12 is an ANOVA table showing that the independent variables have a significant effect on investment behavior as shown from the value of Sig. 0.000 < α = 0.05. The computed results of the analysis on the independent variables of the investment behavior are shown in Table 13.

Multiple-Linear Regression Model is shown as follows

Investment Behavior = $ß0$+ $ß_1$ Financial Attitude + $ß_2$ Tax Factor + $ß_3$ Working Sector + E_i

Table 13 Coefficient Value for the Investment Behavior of The Women

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.060	.539		.111	.912		
	Years of Experience	.006	.005	.100	1.221	.225	.817	1.223
	Monthly Income	.009	.007	.145	1.288	.200	.434	2.303
	Household size	022	.016	.106	1.377	.171	.935	1.069
	Social Factor	.023	.074	.024	.314	.754	.922	1.084
	Financial Attitude	.603***	.161	.429	3.753	.000	.423	2.361
	Tax Factor	.115*	.067	.132	1.736	.085	.959	1.043
	Marital Status	-.054	.086	-.051	-.632	.529	.851	1.175
	Working Sector	-.216**	.106	-.166	-2.035	.044	.826	1.210

a. Dependent Variable: Investment Behavior

Level of significance: * = 10%, ** = 5%, *** = 1%

Source: SPSS output

Based on Table 13, it can be seen that financial attitude, tax factor and working sector of business women have significant effect on the women owners' investment behavior. Financial attitude has a positive at 1% significant level. It indicates that if the financial attitude increases 1 point, then the women's risk adverse behavior will also increase 0.603 point. The improvement of financial attitude is the way to improve life quality. Thus, the women set more rightful attitude about the concept of finance and investment, they will be able to make better investment decisions. Tax factor has also a positive at 10% level implying that the 1% increase in the tax factor will increase the women risk adverse behavior by 0.115 points.

Finally, the working sector of the women also has a negative and significant effect on their investment behavior at 5% significant level. It indicates that if the number of women working in manufacturing sector increases 1 point, the risk taking behavior will rise to 0.216 point. It thus can be concluded that the women working in manufacturing sector dare to take more risk rather than the women working in trading and service sectors. Other factors such as monthly income, household size, tax factor, social factor, marital status have no effect on the investment behavior of the women.

Conclusion

The objective of the study was to investigate investment behavior of the MWEA members and the factors influencing their investment behavior. The behavior of the respondents is measured by their degree of risk taking by five point Likert scale.

On the basis of the results and discussion above, it can be concluded that Myanmar women usually prefer to invest in the traditional investment avenues like bank deposits, real estate and gold. They are still unfamiliar with modern investment avenues such as share market and bonds. The respondents also invest in more than one investment i.e., investment portfolio in order to avoid taking risk and they mainly use traditional offline channel for their investment. The women consider getting financial purpose rather than non-financial purpose.

Majority prefer regular earning return than the high return since they first consider safety of investment. Hence, the woman business owners are in likelihood of moderate risk taking in the investment. These results thus, are very supportive for the banks and non-bank organizations to create the innovative but less-risky financial product portfolio or services which could give the regular earning returns from their investment.

The survey results on the financial literacy and attitude of the women indicate that the owners have the moderate level of the financial literacy but with high level of financial attitude. The correlation results describes that both of the variables are moderately and positively related with the investment behavior of the woman owners.

Then, the finding on the regression result shows that the financial attitude and tax factor has the positive and significant relationship with their investment behavior and working sector has the negative and significant relationship with investment behavior. According to these findings, the hypothesis about the high financial attitude of women owners influencing the risk-taking behavior is accepted and also the hypothesis about tax factor affecting the risk-taking behavior is accepted. Although all demographic factors were not significantly related to the investment behavior, their working sector is significantly related. Thus, the hypothesis is not totally rejected.

The study found that there is a positive effect of financial attitude on the investment behavior which supports the earlier researches that attitude toward investment have significantly influenced the intention to invest (Sondari & Sudarsono, 2015). Also the tax factor has the positive effect on the behavior followed by the study of Venkateshraj, V. (2015) stated that tax exemption significantly affected investor behavior. This implies that the policy makers should consider the tax policy of the trading investment. The last variable of the working sector of business has effect on the behavior which agreed with the results of the previous studies presenting that demographic factors also influence the behavior (Ansari & Moid, 2013, Sadiq, M.N. & Ishaq, H. M ,2014, Venkateshraj, V,2015).

Based on these results of the study, the most selected options of the woman business owners are the assets giving financial return without much risk. Thus, this is the opportunity for the investment organization to sell the financial products like fixed deposit and postal saving services and also life and non-life insurance with the new and creative form of return from the insurance policy. On the other hand, there is a little interest of the owner on stock exchange market of Myanmar, thus the stock exchange commission of Myanmar should try to enhance the awareness of the potential group. Finally, the financial attitude and financial literacy/ knowledge are very important in making investment decision of the women, so, the seminars or workshops concerning the financial sector should be held by the financial institutions.

There are some limitations of the study. First, the study only focused the investment behavior of women from the MWEA Association. The data about other business owners who haven't been the members would be very useful to identify their behavior concerning investment and the influential factors. Another constraint is the extent of the effect of the behavior on their income level were not analyzed, otherwise the effect of the behavior can be examined. Third, the cross-sectional data exploring the investment behavior by the demographic characteristics such as the age level, the educational level, the marital status etc., thus causal relationship can be identified. Finally, further research could investigate the additional influencing variable as macro-economic variables like government policy changes and market rate changes as well as how the demographic variables of women (eg. Income level, work experience) moderate the relationship between the financial literacy and the behavior among the women members.

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The CFPB and Prudential Regulation: Unresolved Conflicts

August 20, 2019

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Regulatory Structure: Basic Approaches

The term regulatory structure describes the organization of the agencies that regulate a particular policy sphere.

- Institutional approach: legal entity driven
  - banking, securities, insurance
- Consolidated or integrated approach
- **The Regulation By Objectives (Twin Peaks) approach :**
  - One Agency: prudential regulation
  - Other Agency: consumer protection
- Hybrids: The “exception”

- after the 2008 crisis: CFPB, FSOC

Regulatory Architecture Debate

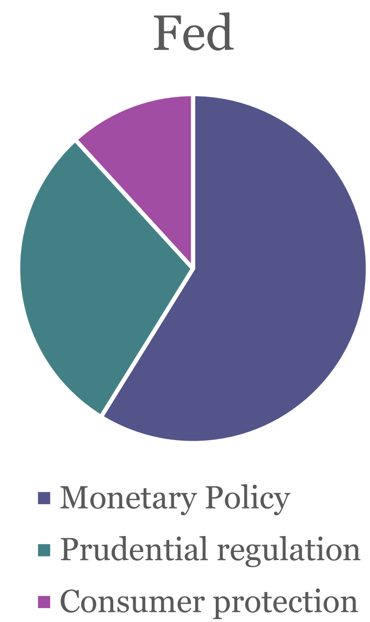
Should Consumer protection functions be separated from prudential regulators?

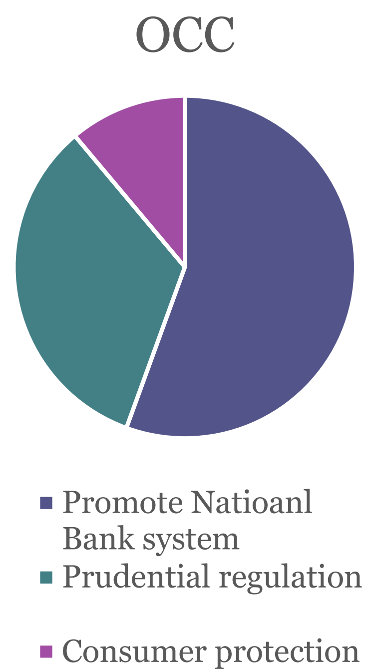
- Consolidated Model
  - efficiency, economies of scale and scope, improves quality and lowers cost of supervision, single point of supervisory contact, avoid duplication and inconsistency, deals with financial conglomerates

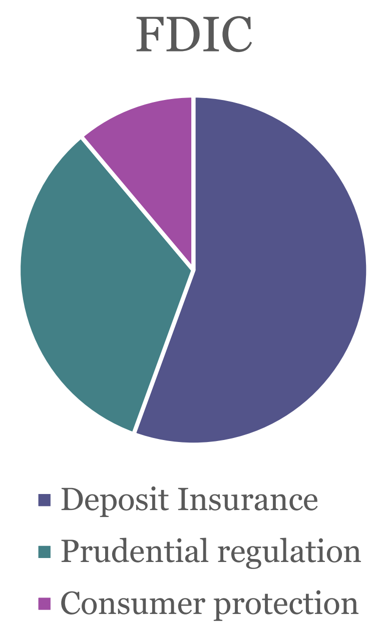
- Regulation by Objectives/Twin Peaks
- Pros:
  - Each agency has a focus on a single clear objective
  - Different strategies and skills are required for each objective
- Cons:
  - underlap, overlap, cost of coordination and communication

Case Studies: US and UK made separate consumer protection agencies after 2008 crisis

- United States: Before and After Reorganization
- Before:







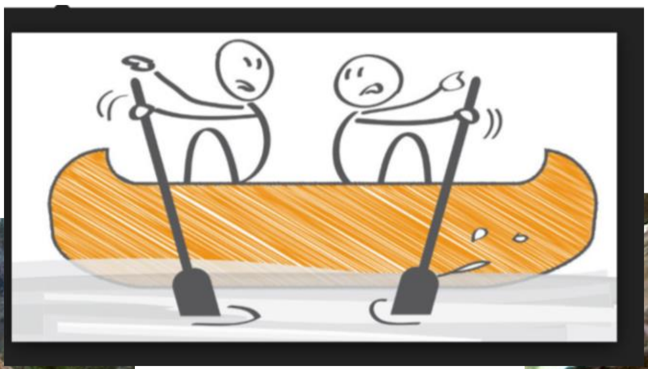
- After

Differences between Prudential Regulation and Consumer Protection

	Prudential Regulation	Consumer Protection
Rationale	Single-minded Keeping banks safe and sound	Neo-classical/Behavioral Social Goals: Really different
Methodology Styles	Bank examination Cooperative, amicable	Enforcement, Education, Complaint Compilation, Public affairs “Tough Cop”

"Type 1 Conflict" Goal Conflict

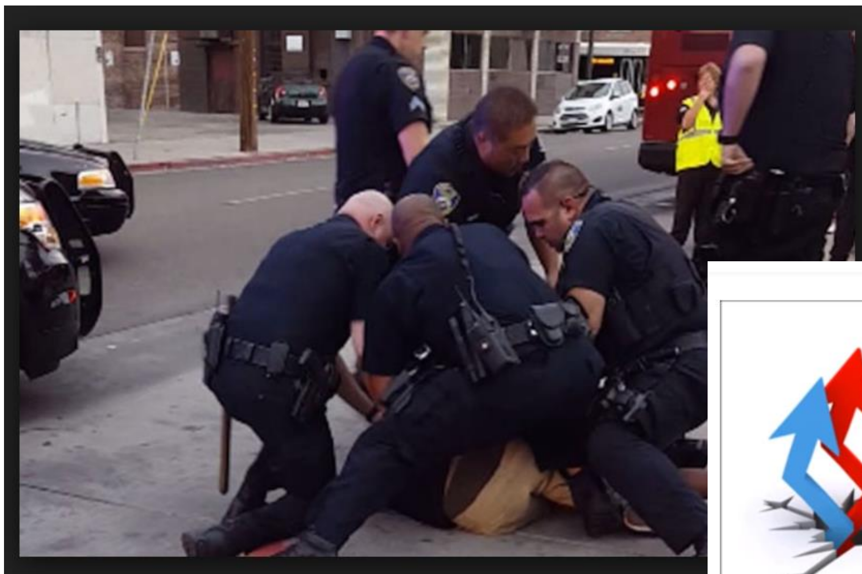
- Conceptual or theoretical conflicts that are related to goals, mission, or incentives of the regulator
- Conflicting goals are perceived to be inversely related: increase one goal leads to deterioration of another
- Forest Service: timber production vs. protect wildlife

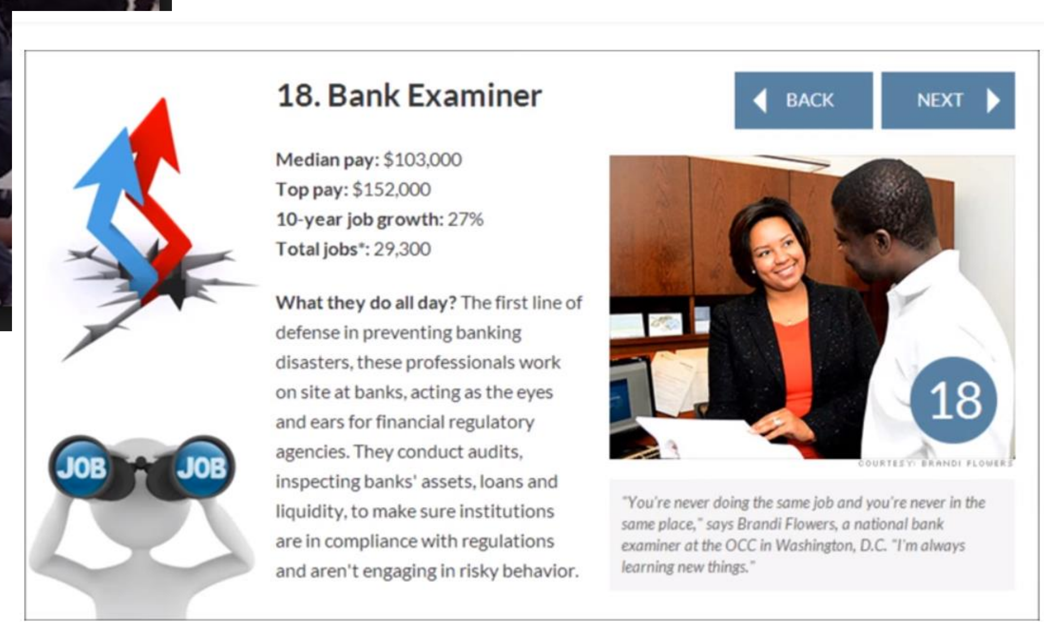


Northern Spotted Owl (*Strix occidentalis caurina*) at the Oregon Zoo, 2006

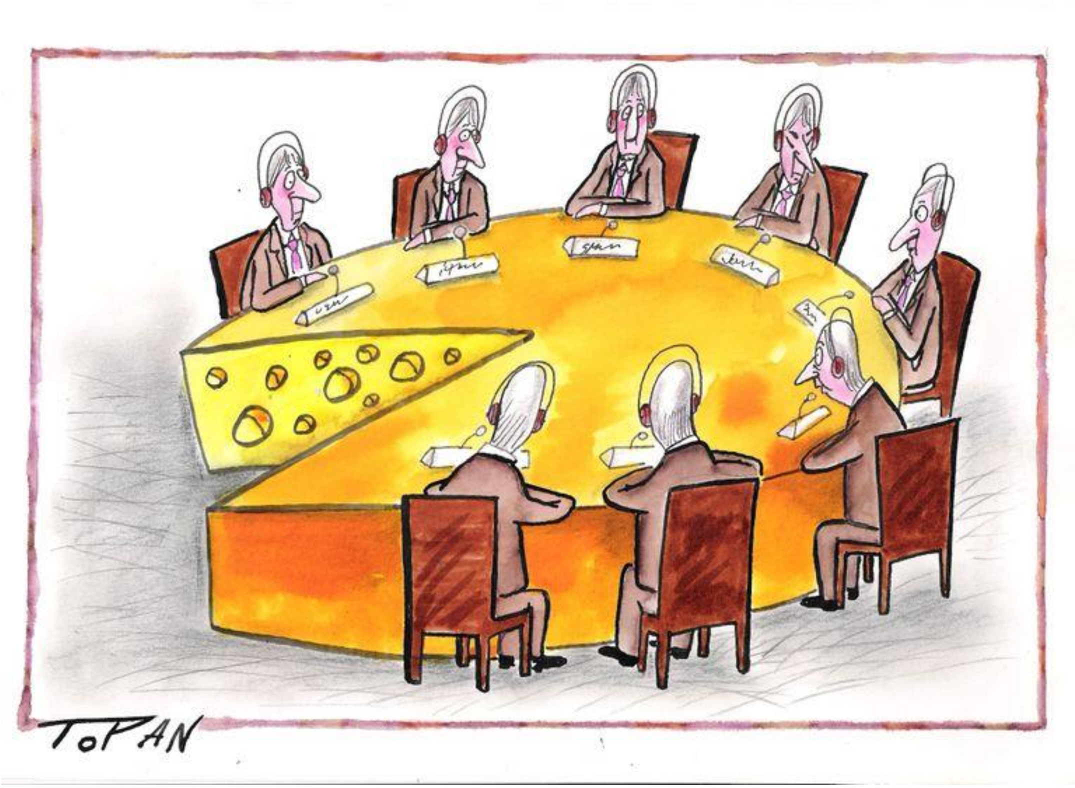
"Type 2 Conflict"

Procedural, Technical, or Methodological Conflicts





“Type 3 Conflict” Resource Conflict



- Resource allocation
- smaller, budget-strained agencies show sharper conflict

- Did the creation of the CFPB reduce conflict between the objectives of financial regulation; or did the reform just ‘alter the dimension’ of the conflict?

Supervision and Enforcement

Statutory Framework: Authority, Coordination and Information Sharing Requirements

-
  - This section investigates statutory framework and agency coordination requirements and arrangements in place between the CFPB and the Prudential Regulators
  - i.e., Dodd Frank Act coordination requirements, Memoranda of Understanding (MOUs) to organize and coordinate affairs between CFPB and the Prudential Regulators

Case Study 1: Clash of Cultures: Supervision vs. Enforcement

- CFPB's jurisdiction is broader when compared to Prudential Regulators (i.e., includes non-banks and non-financial institutions such as payday lenders and auto dealers, etc.)
- The traditional approach to supervision (bank examination) does not work at the CFPB (i.e., consumer-risk based approach, not institution-based approach)
- The CFPB inherited staff from the FTC and the Prudential Regulators- this caused a culture clash within the agency

  - Steven Antonakes, *Prepared Remarks of CFPB Deputy Director Steven Antonakes at The Exchequer Club,* Feb. 18 2015, http://www.consumerfinance.gov/newsroom/prepared-remarks-of-cfpb-deputy-director-steven-antonakes-at-the-exchequer-club/
  - Ronald L. Rubin,*The Identity Crisis at the Consumer Financial Protection Bureau,* Bloomberg, 2013; See also the Office of Inspector General , *The CFPB Should Reassess Its Approach to Integrating Enforcement Attorneys Into Examinations and Enhance Associated Safeguards*, 2013-AE-C-021 December 16, 2013 at 5 ("Many of the CFPB's early hires within the supervision and enforcement functions previously worked at the federal banking agencies of other regulatory agencies. These early hires brought a variety of viewpoints on how supervision and enforcement functions work together in executing the agency's supervision and enforcement mandates.")

Case Study 2: Enforcement: "Tough Cop on the Beat" Mantra

- The first cases of enforcement show an aggressive pattern.
- Agencies that are geared toward retail consumers or retail investor protection will tend to adopt a strategy to lean more heavily on enforcement(i.e., the FTC, the SEC)
- Number and amount of enforcement actions increased in earlier years through 2017 (declined in 2nd quarter of 2017)
- In the earlier stages (during the Obama presidency), the Prudential Regulators do not seem to attack CFPB's enforcement tactics as being too aggressive, but rather, seem to take part in enforcement actions. This might change in Trump presidency.
- Meanwhile, enforcement actions halt in 2018 when Republican appointee takes (interim) office at the CFPB
  - Jon Eisenberg, *We've Only Just Begun- Lessons From the CFPB's First 35 Enforcement Cases* (Mar. 5, 2014).
  - https://www.housingwire.com/articles/36010-cfpb-nearly-doubled-enforcement-actions-in-2015; https://www.enforcementwatch.com/2017/06/12/cfpb-enforcement-continues-to-rise-in-q1-2017-as-other-federal-and-state-enforcement-trend-downwards/ ; https://www.bna.com/cfpb-enforcement-actions-n73014461969/
  - https://www.cbsnews.com/news/consumer-financial-protection-bureau-enforcement-actions-halt-under-mulvaney/

Rulemaking: Lack of Collaboration and Externalized Conflict

- **Statutory Framework: Rulemaking Authority, Mandatory Consultation & the FSOC Veto**
  - This section investigates legislative framework and agency coordination requirements and arrangements in place between the CFPB and the Prudential Regulators
  - CFPB's rulemaking authority and consultation requirements
    - 12 U.S.C. § 5512(a) (Supp.V 2011), 12 U.S.C. § 5531(d); § 5536(a)(1)(B), 12 U.S.C. § 5481(12); 12 U.S.C. § 5481 (6). 12 U.S.C. § 5512 (b) (2) (B).

Case Study 3: The Murky Case of Overdraft Rules

- In 2013-14 the CFPB initiated work for new rules on overdraft programs
- The rules faced stiff resistance from the financial industry
- Seemed to be in dissonance with OCC in a brief misstep in 2015
- Unclear if CFPB did enough coordination with Prudential Regulator
- No indication the rules will move forward (dropped from agenda since Mulvaney)
  - CFPB Study of Overdraft Programs: A White Paper of Initial Findings (June 2013)
  - Financial Services Roundtable, Statement of the Financial Services Roundtable on the Impact of Dodd-Frank, For Submission to the Committee on Financial Services, U.S.House of Representatives, Jul. 19, 2012. At 5.(Available at http://financialservices.house.gov/uploadedfiles/hhrg-112-ba15-wstate-roundtable-20120628.pdf)
  - Rachel Witkowski, *OCC Mistake Sparks Three-Week Panic on Overdraft Rules,* March 13, 2015, American Banker.
  - https://www.cutimes.com/2018/05/11/cfpb-moves-overdraft-rules-to-back-burner/?slreturn=20180906005714

Case Study 4: The OCC's Opposition to the Arbitration Rules

- OCC Comptroller Keith A. Noreika's open dissent to CFPB's arbitration rules
- CFPB concluded that it did not find any statistically significant evidence of increases in the cost of consumer credit associated with banning arbitration clauses in credit card contracts. (Arbitration Rules)
- However, the OCC, reviewing the same data, found "a strong probability of a significant increase in the cost of credit cards as a result of eliminating mandatory arbitration clauses."
    - https://occ.gov/news-issuances/news-releases/2017/nr-occ-2017-86.html;
    - https://www.consumerfinancemonitor.com/2017/09/29/in-a-stunning-rebuke-to-cfpb-occ-finds-arbitration-rule-will-significantly-increase-cost-of-consumer-credit/

Budget and Independence Case Study 5: Budget Cuts and Demotion of the Agency

- The CFPB was designed to be independent, (housed in the Fed, budget from the Fed and not from Congressional appropriations)
- However, the political appointee can diminish independence in terms of funding and political status of the agency

  - https://www.politico.com/story/2018/01/18/mulvaney-funding-consumer-bureau-cordray-345495

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Conclusion

- The case studies demonstrate how the different types of conflicts between prudential regulation and consumer protection failed resolve even after the creation of the CFPB
- The conflicts were either externalized (open dissent from the OCC) or were embedded within the culture of the CFPB
- External politics will continue to influence how conflicts are resolved

Questions & Comments
Thank you.

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