Financial Inclusion Model
For Indonesia Export Import Bank
(LPEI)

David Syam Budi Bakroh

May 2016

Financial Inclusion Model For

Indonesia Eximbank

(LPEI)

a Thesis Submitted
to the Graduate School of Public Policy,
The University of Tokyo
in partial fulfillment of the requirements
for the Degree

Masters of Public Policy

By

David Syam Budi Bakroh

Adviser: Professor Kenichi Ueda

May 2016

SUMMARY

Export Import (Exim) Bank had been concerned since a long time ago. Debate about the existence, cost, and benefit of Exim Bank was spread more than 85 years ago or even more. It remains unclear whether Exim Bank do raise employment, provide lending facilities when private market loans are not available, or directly increased exports volume. On contrary, when Exim Bank finance an export, the physical nature of the loan has not changed. It retains high-risk business. Also, by giving provision to export credit, private market rate will be reduced as a consequence of crowding out effects on the Exim Bank's borrowing to finance the export credit.

In case of Indonesia, the weakening of Indonesian exports is caused by weak demand for export from Major trading partners and weak prices for export commodities. As a response, current President Joko Widodo just gave a special assignment to Indonesia Exim Bank (LPEI) to boost export. Consequently, in 2015 LPEI obtain additional capital injections amounting to 1 Trillion IDR. When the Government inject the money, public start debate about the importance of LPEI.

At first, LPEI established as a special financial institution with primary functions to support the advancement of Indonesian exports through National Export Financing. LPEI has uniqueness compared to commercial banks or financial institutions generally. For instance, it may provide buyer's credit, collaborate in foreign project financing, and funding sub bankable project which considered as national priority.

It is much easier to conduct a good empirical analysis on United States compare to Indonesia case because all the data is there. Before 2009, the data about LPEI kind a black box. Almost not enough document telling the story to what has been done by LPEI before 2009. Moreover, since this is part of banking institution, all related micro data is confidential and protected by law. As a result, as far as I know, there was no single academic paper explain more about LPEI in Indonesia. Then, it gives me a motivation to write more about financial inclusion in case of LPEI.

My literature study plays an important role in defining research variable and supporting alternative research hypothesis. The provision of export credit as part of public goods was introduced by (E. Bumsteinas, 2012). (Khan, 2012) The World Bank guidance in measuring financial inclusion index also important to set amount of credit available as proxy to measure that index. Furthermore, (Daniel Paravisini, 2011) amplify the effect of credit supply on trade.

He argues that credit shocks (working capital) will reduce export volume because sunk entry costs and relatively increases in variable cost of export. (Poncet, 2010) through his paper Export Performance and Credit Constraints, said that if financial institution is efficient then it economic growth will improve and export will increase. However, In Soh Young in 2004 raise a question, do export credit agencies benefit the economy. He said that having an ECA raises export but this positive effect does not last in the long run. He also emphasizes that ECA credit crowds out private lending in domestic financial markets. Thus it is not associated with higher economic growth and employment. Last, (Rudolfs Bems, 2012) in his paper The Collapse of Global Trade, said that the main drivers of global trade collapse are lack of aggregate expenditure and shock on trade-intensive durable goods. He also, showed that in many incidents the changes in trade policy has no significant effect in boosting trade.

Analytical part provide analysis both from qualitative and quantitative aspects. In qualitative analysis, there are a lots of critiques to LPEI. For instance, there might be potential misuse of the sovereign right attached to LPEI. LPEI should be cautious and required to apply precautionary principle. LPEI might overlap with other financing institutions that already exist and have been going well. Last, it should be inclusive but remains selective and prioritize MSMEs. In quantitative analysis, first we compare LPEI with other commercial banks (Domestic) and other ECA's (Foreign). From many aspects, indeed LPEI is a profitable institution. Second, the regression part proves that LPEI's credit is not significant in boosting sectoral economic growth. It also not significant in boosting Export Value of Each Major Trading Commodity. Adding more data on commercial bank credit is not useful in improving the model because there is high correlation among explanatory variable. Luckily, we have a good news that having LPEI at the same time with other commercial banks in Indonesian is good. It has positive impact on improving a financial inclusion condition

Keywords : Financial Inclusion, Export Credit Agency, Export Guarantee, Export Insurance, Financing

ACKNOWLEDGEMENTS

Alhamdulillah, praise and gratitude to God almighty, Allah Subhanahu wa Ta'ala, because of His blessings and mercy, my thesis entitled "Financial Inclusion Model for Indonesia Export Import Bank (LPEI)" can be finished.

I would like to express my gratitude to Professor Kenichi Ueda who supervised my research from the very beginning. Patiently, he has been providing insight and deep knowledge to me. He solved my problem when I had no idea to move on. Inspired me with numerous econometrical method. He always smiles to me, even when I had a bad day during my thesis preparation.

I further extend my most sincere thanks to my examiner, Professor …………………… and Professor Rudolf Bems. Professor Rudolf Bems gave me a strong reference that support my result. He provided comment and critics so that I can improve my writing and how I explained all the regression in a nice way.

In addition, I should be thankful to Professor Takasaki Yoshito. He gave me a lot of comment, critics, and advise so that encourage me to finish my thesis. He taught me that writing thesis is not an instant and easy way. He explained the importance for working with a good data, building a good literature research, and flourishing my writing in a nice way.

My heartfelt appreciation goes out to friends, colleagues, and classmates, who support me every time. I also want to say thank you to my family for their unwavering support and encouragement.

Lastly, I would like to send best hugs for my beloved wife, Amellia Wijayanti. She gave me strength when I am weak, spirit in my despair, nice food when I hungry, and peace every time I back home. Thank you for your love. For my lovely children, Hafizh, Afifah, and Asma, I really grateful to have you in my live. You always sit beside me while I am working with my laptop. You all keep smile, play, jump, and make the color of my day. Thank you for calling me father.

Adachi-ku, May 17th, 2016

David Syam Budi Bakroh

TABLE OF CONTENTS

SUMMARY iii
ACKNOWLEDGEMENTS v
TABLE OF CONTENTS vi
LIST OF FIGURES viii
LIST OF TABLES ix
CHAPTER I: INTRODUCTION 1
A. Background 1
1. Financial Inclusion 1
2. Export Credit Agency (ECA) 1
3. Indonesia Exim Bank (LPEI) 3
B. Explanation of Purpose 6
1. Benefit from Exim Bank operation 7
a. Are there Benefits From Raising Employment? 7
b. Are there Benefits From Lending Where Private Market Loans Are Not Available? 7
c. Are there Benefits Directly Arising From the Increased Exports? 8
2. Cost from Exim Bank operation 8
3. Do we need Exim Bank in Indonesia? 9
C. Research Scope 10
D. Research Contribution 11
E. Questions research 12
F. Thesis Outline 12
CHAPTER II: THEORETICAL FRAMEWORK 14
A. Financial Inclusion as Public Goods 14
B. Measuring financial inclusion 15
C. The Effect of Credit Supply on Trade 15
D. Export Performance and Credit Constraints 17
E. Do Export Credit Agencies Benefit the Economy? 20
F. Export Credit Guarantees, Moral Hazard and Exports Quality 21
G. The Collapse of Global Trade 24
CHAPTER III: METHODOLOGY 27
A. Research Variable 27
B. Research Variable 27
C. Research Technique 27
D. Hypothesis 30
CHAPTER IV: DATA AND ANALYSIS 31
A. LPEI at a Glance 31
1. Establishment 31
2. Line of Business 33
3. Bond rating 39
B. Qualitative analysis 42
1. Comparison with Other Commercial Banks (Domestic) 42
2. Comparison with Other ECA's (Foreign) 44
a. Age of the ECAs 44
b. Ownership 45
c. Financial Comparison of Export Import Banks: 45

d. Resources and Profitability: 47
i. Assets and Capital Size 47
ii. Resources 47
iii. Profitability: 48
3. Critique to LPEI 51
a. Potential Misuse of the Sovereign Right 51
b. Being Inclusive but Remains Selective 53
c. Prioritizing MSMEs 55
C. Quantitative Analysis 55
1. Descriptive Statistics 55
2. Regression 60
a. Regression 1 60
b. Regression 2 61
c. Regression 3 62
d. Regression 4 63
e. Regression 5 65
CHAPTER IV: CONCLUSION AND RECOMMENDATIONS 66
A. Conclusion 66
B. Policy Recommendations 66
REFERENCES 68
ANNEXES 71
A. LPEI's Branch Office 71
B. Indonesia's Financial Inclusion Indicator from World Bank 72
C. LPEI's Balance Sheet From 2009-2015 (million IDR) 73
D. LPEI's Income Statement From 2009-2015 (million IDR) 75
E. Public Offering of LPEI's Bond 77
F. Regression Data Sets 79
1. Data Sets 1 79
2. Data Sets 2 80
3. Data Sets 3 82
4. Data Sets 4 84
5. Data Sets 5 85

LIST OF FIGURES

Figure 1 Can We Categorized Financial Inclusion as Public Good? 14
Figure 2 Financial Inclusion Index Criteria 15
Figure 3 Relationship between Credit Shocks and Export Volume 16
Figure 4 Relationship between Credit Shocks and Variable Cost of Exporting 17
Figure 5 Relationship between Efficiency of Financial Sectors and Export Performance ... 18
Figure 6 Relationship between Credit Market, Government Intervention, and Financial Friction 19
Figure 7 The Impact of Having ECA in Our Country 20
Figure 8 The Government Should Balance in Giving Guarantee 21
Figure 9 The Collapse of Global Trace 25
Figure 10 Research Variable Map 27
Figure 11 Steps in Doing a Panel Data Analysis 29
Figure 12 Indonesia's ECA over time 31
Figure 13 Distinction between LPEI and Commercial Bank Market Share 34
Figure 14 BEI/LPEI Line of Business 36
Figure 15 Co-movement LPEI Bond's Yield with Treasury Bond 40
Figure 16 Comparison LPEI Financing Through Issuing Bond (Million IDR) 41
Figure 17 LPEI's Contractual Interest Rate (Lending) 42
Figure 18 Asset Growth (%) 42
Figure 19 Financing and Direct Financing Growth (%) 43
Figure 20 Growth of Guarantee (%) 43
Figure 21 Capital Adequacy Ratio (CAR) (%) 44
Figure 22 Return on Asset (ROA) and Net Interest Margin (NIM) (%) 44
Figure 23 The Movement of Major Trading Commodity Export with LPEI's Credit 64

LIST OF TABLES

Table 1 ECA's Protection Against the Various Risks in International Trade 22
Table 2 Qualitative Comparison of ECA Insurance Cover 23
Table 3 Age of Export Credit Agencies 45
Table 4 ECAs, Their Share of Disbursements in National Exports 45
Table 5 ECAs: Total Assets 46
Table 6 ECAs: Total Loans 46
Table 7 Ratio of Loans to Total Assets 46
Table 8 ECAs- Issued and Paid-up Capital 47
Table 9 ECAs- Share of Borrowings in Total Liabilities (%) 47
Table 10 ECAs- Paid-up Capital, Reserves and Total of Paid-up Capital and Reserves 48
Table 11 ECAs- Borrowings 48
Table 12 ECAs- Profit after Tax 49
Table 13 ECAs: Profit to Assets Ratio (%) 49
Table 14 ECAs: Ratio of Profits to Reserves 50
Table 15 ECAs: Ratio of Profits to Paid up Capital 50
Table 16 ECAs: Ratio of Profits to Paid-up Capital + Reserves 50
Table 17 Descriptive Statistics Sectoral Economic Growth (%) and LPEI's Credit (Million IDR) 55
Table 18 Descriptive Statistics Sectoral Economic Growth (%) and LPEI's Credit in term of Local and Foreign Currency (Million IDR) 56
Table 19 Descriptive Statistics Nominal GDP (Constant Price) on LPEI's and Commercial Bank's Credit (Million IDR) 58
Table 20 Correlation Matrix Between LPEI and Other Commercial Bank 59
Table 21 Descriptive Statistics Sectoral Economic Growth (%) on LPEI's Share, Commercial Bank's Share, and Its Interaction 59
Table 22 Regress Sectoral Economic Growth (%) on Total LPEI's Credit (Million IDR) ... 60
Table 23 Regress Sectoral Economic Growth (%) on LPEI's Credit in Term of Local Currency and Foreign Currency (Million IDR) 61
Table 24 Regress Economic Growth (%) on LPEI's and Commercial Bank's Credit (Million IDR) 62
Table 25 Regress Export Value of Each Major Trading Commodity on LPEI's Credit 63
Table 26 Regress Sectoral Economic Growth (%) on LPEI's Share, Commercial Bank's Share, and Its Interaction 65

CHAPTER I: INTRODUCTION

A. Background

1. Financial Inclusion

Indonesia is one of the largest economies in Asia whose population spread throughout archipelago. This in itself is a challenge when attempting to create a more inclusive financial services industry affordable to all societal strata. There are tens of millions of citizens within the country who lack access to financial services due to disproportionate formal financial services institution network, a dispersed population and geographic structure, a paucity of collateral and low financial literacy. Consequently, there is a dire need for a more effective and efficient financial inclusion program

A lack of access to funding is considered the main constraint in improving public prosperity and equity. Therefore, a variety of micro and small credit schemes was offered to families as well as micro, small and medium enterprises (MSMEs) to broaden access to financing in order to alleviate poverty and reduce unemployment.

A number of formal financial institutions, such as the Micro Units of commercial banks, Village Credit Unions, Cooperatives, Pawnbrokers and Village Credit Institutions along with non-formal financial institutions, like Baitul Mal Wat Tamwil, and non-governmental organizations have begun operating and expanding the MSME credit sector, however the lack of financial access remains a significant constraint. The existing range of microfinance programs proved to be suboptimal in terms of broadening public financial access, which is evidenced by the low Financial Inclusion Index of Indonesia at around just 20%.

2. Export Credit Agency (ECA)

Many people or legal entities sell goods abroad to gain economic benefit. These activities are called exports, and the persons or entities that do so named exporters. Of course, the purpose was to benefit exporters. With the export, the government earn revenue in the form of foreign exchange. The more export the more foreign exchange earned by home countries.

Export activities may also bring many benefits to the community such as market share development, increase output, and creates job. For example, batik clothing, one of Indonesian heritage, began to b breadth of the market for Indonesian products, the production activities in the country will increase. More and more workers are needed so that employment expanded.

Also, export transactions can increase revenue of the country. Thus, the country's wealth increased because foreign exchange is one source of state revenue. Indeed, export will boost the economy aggregately.

Many factors can influence the development of a country's exports, one of that factors is the government policy in the field of foreign trade. If the government provide facilities to exporters, it will encourage exporters to increase exports. This easiness includes simplification of export procedures, removal of export fee, provision of production facilities for export goods, availability of export credit, export guarantee/ insurance, and the provision of export.

In order to encourage export, the government usually provides some facilities so that the country can develop export activity. It is usually in terms of financing. For example, export credit facility provided by the government with low interest, compared with ordinary credit.

In Indonesia, export credit is categorized as working capital loans which provided either by commercial bank or the government to finance some exporters. These facilities are targeting some activities such as;

- Collect goods for export until it is ready to export.
- Produce goods intended for export.
- As a working capital during the grace period between the dates of shipment to the time of good’s acceptance or when full payment has received from foreign buyers.

The Bank has some primary consideration in giving an export credit when some exporters submit loan application, such as;

- Collecting Inventories for export.
- Irrevocable Letter of Credit from foreign buyer (importer).
- Purchase Agreement with foreign buyer that cannot be canceled unilaterally.
- The production plan to produce export goods or materials to be processed into export goods, supported by irrevocable Letter of Credit and or purchase agreements that have been owned by other exporters or export goods production plans for the consignment.

Other than export credit, the government also provide insurance or insurance programs to export goods. This could be in form of export credit guarantee or export insurance. Export credit guarantees in essence guarantees repayment of loans if exporters undergoing difficulties. Meanwhile, export insurance essentially guarantees that the exporter will receive payment when foreign buyer deny payment or if payment by foreign buyer are not transferred to Indonesia.

Based on experience in other countries, investment financing export industry cannot be fully relied to commercial banks. The majority source of commercial bank's fund comes from short-term deposits either from customers or firms. Typically, commercial bank will focus on financing for retail services or corporate activities.

These limitations could be burdensome to project financing and export industry. It requires cooperation and participation of some bank or financial institution to be approved. To encourage and facilitate financing, we need a supportive institutions which not only specializes in industrial and export trade, but also has the ability to support and help the banks overcome difficulties in providing necessary financing, especially medium loans and long term loans.

Export Credit Agency (ECA) is one solution to provide export facilities. This support needs to be provided through financial assistance facility, refinancing, co-financing or club-deal syndication, subordinated loans, guarantees/ insurance, and consulting services (including study and assessment projects export industry). Because its importance, ECA has established in many countries, including in developing countries such as Indonesia, India, China, Korea, Thailand, etc. Later, this research will make a comparison between Indonesia's ECA with ECA in those countries.

From other point of view, we can see ECA as instrument in supporting investment and boosting world trade. It can be seen from funding size provided by ECA with an average of about 500 Billion USD per year through some activities related with world trade and investment. When the financial crisis hit Asia, ECA from developed countries play an active role in recovering Asian economies in the form of guarantees and short-term financing to Indonesia, Korea, and Thailand. These "aid" was approximated 15 Billion USD.

ECAs are now the world's biggest class of public finance institutions operating internationally. Collectively they exceed the size of the entire World Bank Group and fund more private-sector projects in the developing world than any other class of finance institution. Most industrialized nations have at least one ECA

3. Indonesia Exim Bank (LPEI)

The establishment of LPEI as a special financial institution with primary functions to support the advancement of Indonesian exports through National Export Financing, which has uniqueness compared to commercial banks or financial institutions generally. The scope of its business in providing Financing facilities, Guarantees, Insurance and Consultancy Services specifically designed to maximally support the production development which generates export of goods and services and/or other export supporting activities. This is a distinct advantage for LPEI, to provide funding to regions that banks or commercial financial institutions reluctant to enter (fill the market gap) or for those who experience lack of financial competitiveness capability as well as the ability to absorb risk. Through these activities, Indonesia Eximbank have played an important role in supporting the performance of the national Economy. Later on we will talk a bit about LPEI's current issue for the last three years based on some recent news.

(Finance Roll, 2015) For fiscal year 2015, LPEI targets the financing of 60.5 Trillion IDR, or an 9.64% increase compared to 2014's financing of 55.1 Trillion IDR. Finance Director LPEI, Basuki Setyadjid, said that in line with this target, the company also wants financing for small business unit and medium enterprises (SMEs) by 2015. SMEs financing may grow to around 6 Trillion IDR. LPEI want to raise SME sector, the percentage is still 10 percent of the total realization, but in term of nominal value it grows.

According to Basuki, the distribution of financing still dominated by medium and large-scale corporations. Industry segment still the biggest customer for financing distribution, especially with the government commitment to intensify the maritime and manufacturing industry. Based on LPEI briefing document to the House of People's Representatives Commission XI, LPEI net profit in 2014 amounted to 1.18 Trillion IDR. The company wants to lift net profit to 1.20 Trillion IDR in 2015.

Correspondingly, Director of LPEI, Ngalim Sawega said that Indonesia's export performance in 2015 relative quite prospective. Also, targeted customer segments by LPEI, majority still untouched by credit lines from banks. These customers should be helped to be able to anticipate global economic slowdown impacting the export target countries, such as China and Japan. Some customers have been diversifying its export product and penetrates target countries of export. LPEI will also give a special attention to finance the export of value-added goods. Some large LPEI's customer for example are PT. Pindad and PT. Dirgantara Indonesia. Both of them are State Owned Enterprise which focus on military and aerospace.

Based on the data until the end of 2014, most of the financing were channeled to the industrial sector (44.6%), mining sector (13.6%), agricultural sector (11.6%) and transportation sector (8.18%).

LPEI also care about its healthiness. The capital adequacy ratio (CAR) was at 15.03%, while the ratio of non-performing loans were at 0.68%. The total assets of the company in 2014 reached 60.5 Trillion IDR.

(Sukiwan, 2015) Although the global economy is sluggish in 2015, LPEI can still show its teeth. In the first quarter of 2015, Indonesia Eximbank finance portfolio increased by 47% yoy). Between Januarys to March 2015, LPEI export financing recorded at 61.3 Trillion IDR compare to 41.5 Trillion IDR in 2014. From the financing scheme, 45% are given in form of investment credit and 55% in the form of working capital credit.

(Mahadi, 2016) LPEI optimistic that exports will increase this year than in 2015. As a result, the performance of LPEI can come up. Now, target distribution of funding institutions for 2016 grew by 10.6%. In 2015 then, LPEI financing reached 75 Trillion IDR and this year they target of 83 Trillion IDR.

Despite of good financial performance, LPEI still must be cautious in lending. Therefore, the net non-performing loan (NPL) in March 2015 is 0.7% compare to 2014 about 0.68%. LPEI still trying to reduce NPL below 1% each year. To make it prudent, the ratio of bad loans will not exceed the target, because LPEI have sufficient policies and strict supervision in giving credit.

Almost all of outstanding loans disbursed to corporate customers. In 2015 it is 92.16% or 56.5 Trillion IDR. The credit value grew 40.7% compared to the first quarter 2014. Meanwhile, export credit to small and medium enterprises (SMEs) are still small which is 7.84% or around 4.8 Trillion IDR compare to first quarter in 2014 around 3 Trillion IDR. Although the portion is slightly increase, financing growth in SME sector is higher than the corporation which is almost 60%. However, the share of SME financing is expected to increase to 10% at the end of this 2015. That is, if the targets set by LPEI 70 Trillion in 2015, SME financing will penetrate up to 7 Trillion IDR.

LPEI will seek customers from among micro, small, and medium enterprises (SMEs). They take this strategy because the Financial Services Authority (OJK) requires LPEI channel financing to SMEs. Rules and regulations contained in the OJK Regulation No. 40 of 2015. It’s mandated that since 2015 LPEI must have a new SME’s financing portfolio amounted to 5% of the total financing. Even though in 2015, LPEI conform to the provisions of the OJK which is 5% portion for SME around 3.75 Trillion IDR. In 2016, it will rise, to 4.15 Trillion IDR, following the increase financing in LPEI.

Fund distribution SME sector is full of challenges. LPEI should have a broad range to be able to pick up small businesses. Therefore, LPEI plans to continue strengthening its network in some areas. Especially in areas that have commodity export-oriented industries.

One strategy to boost SME financing LPEI is boosting marketing teams in each of the company's network to be more active and aggressive in lending export credit to SME. Among LPEI’s branch office, Surabaya and Jakarta are the largest export financing contributor to SMEs. Currently, LPEI have a headquarters in Jakarta and four network of offices in Surabaya, Solo, Medan and Makassar.

To hoist finance portfolio this year, LPEI already prepared a number of strategy. One of them, they will co-finance projects aimed at export processing facilities. This in line with government programs that support the downstream business. LPEI also will fund projects supporting infrastructure for export. For example, the construction of ports and access roads into the export of goods.

Although LPEI will have a quite aggressive financing in 2016, LPEI claims remain vigilant. As ruled by OJK, LPEI should maintain a minimum funding ratio of 75% of the total assets they owned. The current ratio of financing to asset LPEI already higher than the provision. Until November 2015, LPEI has a total financing receivables amounting to 73.5 Trillion IDR. Average assets stood at 6.2 Trillion IDR. Thus, the ratio of financing of the assets amounted to 85.2%. In 2016, LPEI required to boost their assets. The move is in line with the increase target of financing to 10% amounted 83 Trillion IDR. This means that, during 2016 LPEI must have assets of at least 110.67 Trillion IDR.

B. Explanation of Purpose

If we talk about financial inclusion, for sure everyone will say it is public goods. Non-excludable and non-rivalries are characteristics of public goods. Everyone should have an access to financial related activities. If we consider LPEI as a public institution which provide a public good named financial inclusion for exporters, then the Government should take responsibility on it. Usually, all activities related with provision of public goods is not a profitable area. Contradictively, LPEI recorded a good profit every year since it was established in 2009, and the profit dramatically increase overtime. Then if it is so profitable it become a question, should the Government take care on LPEI rather leave it to private sector to provide this service. In this paper I will focus more on financial inclusion as public goods and narrow it down to be specific on export credit, export insurance, and export guarantee area.

Debate about the existence of Export Import Bank was spread more than 85 years ago or even more. From the document published by (Congressional Budget Office of United States, 1981), it showed that Exim Bank had been concerned since a long time ago. In 1981, the congress proposed cuts in the budget of the Export-Import Bank of the United States represent a substantial change in a program that has been a feature of public policy for nearly fifty years. It means topics related with Exim Bank was an important discussion even among Member of Parliament.

Of course we cannot compare Vis a Vis United States Exim Bank with LPEI. A lot of dissimilarities between United States Exim Bank and LPEI. Despite of that fact, both of them are doing similar business pattern which is providing export facilities such as export credit, guarantee, and insurance.

Then let's wrap up some related potential problem that might arise from establishment of LPEI compare to what happened in United States a few decades ago.

1. Benefit from Exim Bank operation

a. Are there Benefits From Raising Employment?

When there is general unemployment, subsidizing export credit could increase total employment. But the subsidy will increase some exports relative both to other exports and to other economic activities, while monetary and fiscal policies would have more neutral expansionary effects. When the economy at full employment, subsidized loans to exporters will increase employment in export industries, but this increase will occur at the expense of non-subsidized industries. Finally, Eximbank loans are made at all levels of aggregate business activity, so while some loans might reduce unemployment, others are made at times when they will probably aggravate inflation.

b. Are there Benefits From Lending Where Private Market Loans Are Not Available?

Sometimes imperfect capital markets prevent the granting of loans that would be desirable on economic grounds; at other times, non-economic objectives make subsidies necessary for the private market to lend a socially desirable amount.

But the mere absence of a loan offer from the private market at terms desired by the borrower does not prove that capital markets are imperfect. Many borrowers are too risky or too small to finance their credit needs in bond markets and must instead go to banks; some borrowers are so risky that even banks will not lend them the amounts they desire. When Eximbank makes a loan that private lenders will not make for these reasons, it grants a subsidy equal to the difference between the rate it charges and the rate the private borrower would have paid in the private market. Where the risk is so great that the loan would not have been made at all, the subsidy rises to include the expected loss on the loan from the chance of default.

c. Are there Benefits Directly Arising From the Increased Exports?

Exports can increase because of a rise in productivity, but a subsidized increase in exports will not itself raise productivity. Similarly, a rise in the savings rate can increase net exports; a subsidized rise in net exports, however, will typically not produce an increase in savings, but rather will channel savings into foreign investment at the expense of domestic investment.

2. Cost from Exim Bank operation

When Eximbank finances an export, the physical nature of the loan has not changed; it retains the high-risk, custom-tailored properties it had before the subsidized loan was made. But the amount of private credit available at the private market rate will be reduced as a consequence of the federal borrowing to finance the export loan. Either the total volume of domestic credit remains unchanged, in which case all domestic rates rise and some private investors are crowded out until resources are freed to provide the' funds for the government loan, or domestic rates remain unchanged, forcing some domestic investors to obtain higher-cost loans from foreigners. In that case, Eximbank serves as an intermediary between the subsidized exporter and the world credit market; it lends to the exporter but takes an action that ultimately results in some U.S. citizen borrowing at the market interest rate.

A simple example may illustrate this more clearly. Suppose Eximbank extends a $1 million loan to a foreign importer, charging a rate of 7 percent when the market rate is 14 percent. Eximbank borrows the $1 million from the Federal Financing Bank, which, in turn, borrows $1 million by selling a Treasury instrument in the capital market. Since an additional $1 million in government bonds have been sold, some private market borrower will not receive the funds he would have received prior to the Eximbank transaction. One possible outcome is that, since demand for credit exceeds supply at the old interest rate of 14 percent, the interest rate will rise until credit demand has fallen by $1 million. Or, the private market borrowers may go into the international money market and borrow $1 million from a foreign lender at 14 percent. In either case, the United States, collectively, gives up 14 percent in order to extend the loan at 7 percent.

3. Do we need Exim Bank in Indonesia?

(Handoko, 2015) Global economic turmoil that began with the global financial crisis in 2008-2009 and continues with the European debt crisis in 2010-2013 has led to the external imbalances in some countries, including Indonesia which is a consequence of the small open economy.

The weakening of Indonesian exports are caused by weak demand for export from Major trading partners and weak prices for export commodities. The impact of the European debt crisis can be seen in the portion of Indonesia's exports to Europe in 2010 amounted 10.9% of total exports which then decreased to 9.2% of total exports in 2013 (Ministry of Finance, 2015).

As a response to weakening export, President Joko Widodo just gave a special assignment to LPEI to boost export. Consequently, in 2015 LPEI obtain additional capital injections amounting to 1 Trillion IDR. As a legal umbrella, President Joko Widodo has signed President Regulation No. 67 Year 2015 regarding the Capital Investment on LPEI. This is done by consider LPEI as a program to support national exports. This regulation comes on the date of its promulgation by the Minister of Law and Human Rights Yasonna H. Laoly which is dated August 21, 2015. Earlier, Minister of Finance also set the Minister of Finance Ordinance (PMK) Number 134 / PMK.08 / 2015 on Special Assignment to LPEI. Based on that regulation, LPEI have a legal basis to provide assistance financing, guarantees and insurance on certain products. In other words, the leading commodity could be given a priority financing.

(Ministry of Finance, 2015) While giving a speech in the MSME Export Fair, on Tuesday (25/08) at the SMESCO, Current Minister of Finance, Bambang P.S. Brodjonegoro said that more exports should be encouraged in order to balance imports. One sector that could be improved is from MSMEs. According to him, any economic shocks, the SME sector remains strong and flexible in dealing with it. Indeed, MSME sector needs greater impetus to be export-oriented so that they are ready to compete in the international market and because of that they need more financing. To that end, PMK 134 is important because it is driving LPEI to continuously improve its performance, in support of exports, especially for MSME's entrepreneurs.

As a summary, Indonesia has a problem with weakening export and low commodity price. Because of that President Joko Widodo want to give LPEI more authority and capacity to boost export. Then, a lot of people start debate whether this policy is good or bad since he used public money on it consider the cost and benefit the enactment of LPEI.

The topic about Exim Bank has been debated among economist, politicians, bureaucrats, etc. since 50 years ago. Indonesia should learn something from what has done by others developed countries such as United States. Of course we cannot 100% take it for granted, there are pro and cons on this matters. There was a lot of references talk about Exim Bank, Export Credit Agency "qualitatively", unfortunately almost no "quantitative" reference. They just debated and argued on it.

It is much easier to conduct a good empirical analysis on United States, because all the data is there compare to developing countries such Indonesia. Before 2009, the data about LPEI kind a black box. Almost not enough document telling the story what has been done by LPEI/BEI before 2009. Moreover, since this is part of banking institution, all related micro data is confidential and protected by law. As a result, as far as I know, there was no single academic paper explain more about LPEI in Indonesia. Then, it gives me a motivation to write more about financial inclusion in case of LPEI.

C. Research Scope

Consider the time availability and budget constraints, I will limit my research on some criteria, which is;

- The research object will be Lembaga Pembiayaan Ekspor Impor Indonesia (LPEI) or internationally we call it Indonesia Exim Bank.
- The time analysis period will be between 2002 until 2015.
- I cannot compare the effectiveness of LPEI before and after 2009 empirically because no data before 2009. Then, I will focus to what has been done by LPEI from 2009 onward.
- Since micro level data if strictly confidential, I will use some macroeconomics indicators as proxy to measure and conduct empirical analysis.
- I will use "short and narrow" panel data. Because deficiency on my data, some economist will argue that it is not enough to conduct an empirical analysis. It is true but I have done as best as I can do from limited resources. To support the weakness of data, I will show you some data, chart, figure, or opinion to justify what I want to say.
- Of course there will be potential bias in some section where I will explore the problem quantitatively. This is due to lack of academic references related with LPEI. In that case, I will use some argument from Indonesian economist, politician, bureaucrats, etc. I will try to balance the pro and cons in each aspect and let the reader choose.
- The data mostly comes from LPEI's Annual Report and Notes to Financial Statement.

D. Research Contribution

- For Academic Literature

Since there is no academic reference on LPEI, what I am writing will be a contribution. Despite the final results will be significant or not, I hope this will be a basic foundation in building more advanced research specifically on LPEI.

- For Ministry of Finance

As a ministry who owned LPEI, Ministry of Finance through Fiscal Policy Agency (BKF) should know more about LPEI before making a good policy. Some practical issue might be solved because of my research, for example:

- ✓ Should the Government inject more or less money on LPEI?
- ✓ Should the Government shut down LPEI, giving LPEI's mandate to private sector, or continue as it is?
- ✓ Should the Government take a full control on LPEI by directly appoint LPEI's Director or leave it to an independent process?
- ✓ By having LPEI and others commercial bank together, is the economy getting better off or worsen off?

- For LPEI

In doing day to day business operation, LPEI face a lot of macroeconomic problem. They should engage more in export activities but there is no guidance how to do that. Of course they already have long term and short term goals. As a complement to their objective, my research could justify some of their movement such as:

- ✓ Does LPEI have a significant role in boosting export?
- ✓ Does LPEI steal commercial bank's market share?
- ✓ Has LPEI done enough supervision on giving credit?
- ✓ What economic sector should be prioritized in giving export credit?
- ✓ By giving credit to regional sector, do they create more jobs?
- ✓ Do they follow some prudent management like Know Your Customer, Good Corporate Governance, or Risk Management?

E. Questions research

To summarize, there will be four basic question research which is:

Q1 : Does LPEI such a profitable institution?

Q2 : For each economic sector what kind of economic model best describe LPEI's role on economic activities?

Q3 : Does LPEI took over market share from other banking institutions?

Q4 : Do we get any premium by having LPEI and other commercial banks together?

F. Thesis Outline

- Chapter I: Introduction

  Provide a background information about Export Credit Agency (ECA). It will give you a basic knowledge what is ECA, how its work, how its benefit the economy, etc. Moreover, this chapter will provide current issue about what happened in LPEI in the last 3 years. Also, it introduces the cost and benefit of ECA and ended by an open question Do we need Exim Bank in Indonesia? To be complete, this chapter limit the research scope, defining its contribution, clearly states question research, and summarize it in thesis outline.

- Chapter II: Theoretical Framework

  Basically it explores all theory related to ECA including general and more specific theory. There are at least two major paper which have more influence. The first one is Export Performance and Credit Constraints and the second one is Export Credit Guarantees, Moral Hazard and Exports Quality. Some literature review from valid academic references will also summarized in this chapter.

- Chapter III: Methodology

  Briefly, it defines all the operational variable which used in the research. In addition, it explores possible research technique to answer the research questions, stated hypothesis, and explain some econometric model as an empirical way to analyze.

- Chapter IV: Data and Analysis

  This chapter separate in two groups, the data and the analysis itself. The data part is kind a story telling. It will tell you the history of LPEI, what they business, why the

Government establish LPEI, including LPEI bond's rating. The analytical part will describe descriptive statistics about LPEI and shows the hypothesis testing result from Eviews. The most important section is the interpretation of some technical result and how I explore it to answer all the research questions.

The second part will be full of argument, pro and cons, and critiques to LPEI. It will compare LPEI with international best practices ECA either coming from developed or developing countries. This section will be analyze not only from economics but also law perspective. I will quote some law related comments from Kamar Dagang Indonesia (KADIN) to LPEI. It will include some recommendation why LPEI should selective in giving credit, why they should focus more on MSME, etc.

- Chapter V: Conclusion and Recommendations

It will summarize all key points and the answer for all research questions. Moreover, it will wrap up wih possible policy recommendation not only for the Government but also for LPEI itself.

- References and Annexes

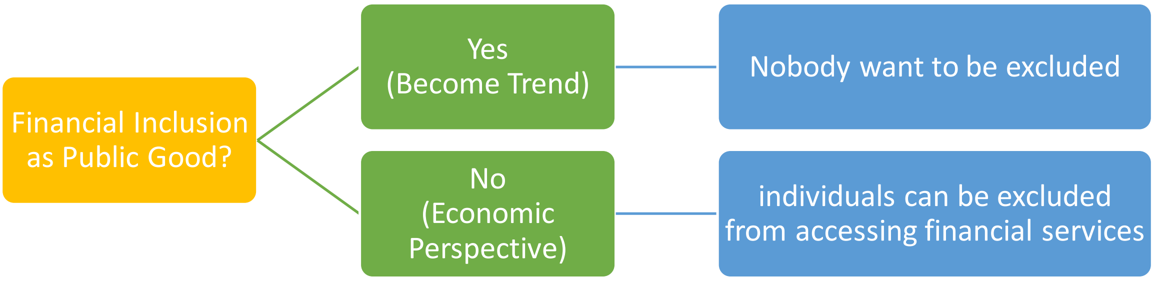
CHAPTER II: THEORETICAL FRAMEWORK

A. Financial Inclusion as Public Goods

(E.Bumsteinas, 2012) In his speech, Bumsteinas explained financial inclusion in three different part which is at the level of consumers, intermediary, and funding side. (Since, my research focus on export credit and guarantee, then I will focus on funding side only).

In economics, a public good is a good that is both non-excludable and non-rivalries in that individuals cannot be effectively excluded from use and where use by one individual does not reduce availability to others. Examples of public goods include fresh air, knowledge, lighthouses, national defense, flood control systems and street lighting. Some of the goods, such as primary education and basic healthcare, might not be public goods in the economic sense, but are treated as public goods since exclusion from such goods might no longer considered as acceptable in most societies.

Figure 1 Can We Categorized Financial Inclusion as Public Good?



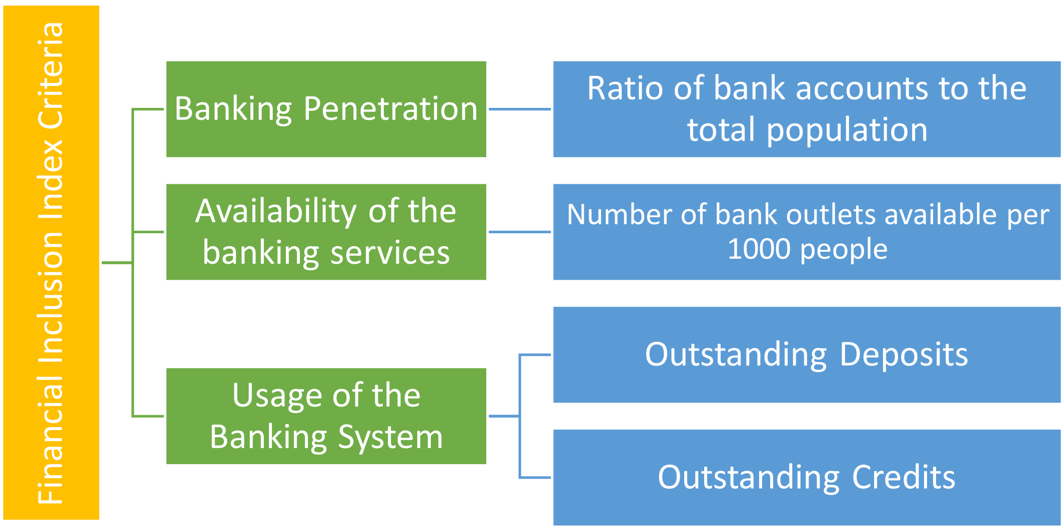
According to the economic theory, public goods provide a very important example of market failure, in which market-like behavior of individual gain-seeking does not produce efficient results. The production of public goods results in positive externalities which are not remunerated. If private organizations don't reap all the benefits of a public good which they have produced, their incentives to produce it voluntarily might be insufficient. Consumers can take advantage of public goods without contributing sufficiently to their creation. If too many consumers decide to 'free-ride', private costs exceed private benefits and the incentive to provide the good or service through the market disappears. The market thus fails to provide a good or service for which there is a need.

Then, one might ask to what extent financial inclusion can be considered as a public good. From an economic perspective, it is not a public good since individuals can be excluded from accessing financial services. However, just like with primary education and basic healthcare, financial inclusion is increasingly seen as public good, in the sense that exclusion is neither desirable nor justified, especially for basic services (e.g. savings). Moreover, when financial services are provided, the importance of public goods is manifested in a number of ways.

B. Measuring financial inclusion

(Khan, 2012) One of the measures of the level of financial inclusion is the Financial Inclusion Index. This index is based on three basic dimensions of an inclusive financial system which is; 1) banking penetration, 2) availability of the banking services and 3) usage of the banking system. Banking penetration is definitely the most critical parameter for measuring the depth financial inclusion and is measured as a ratio of bank accounts to the total population. The second parameter, availability of banking services provides an indication to the number of bank outlets available per 1000 people to deliver financial services. The bank outlets may include the brick and mortar branches, ATMs, business correspondents, etc. The third parameter seeks to determine the usage of banking services going beyond mere opening of accounts. Therefore, this is evaluated on the basis of outstanding deposits and credits. Accordingly, the volume of outstanding deposit and credit as proportion on the net district domestic product is used for measuring this dimension.

Figure 2 Financial Inclusion Index Criteria

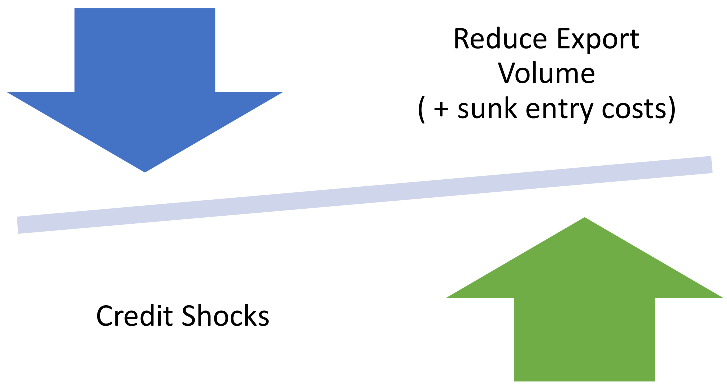


C. The Effect of Credit Supply on Trade

(Daniel Paravisini, 2011) The role of banks in the amplification of real economic fluctuations has been debated by policymakers and academics since the Great Depression (Friedman, 1963), (Bernanke, 1983). The basic premise is that funding shocks to banks during economic downturns increase the real cost of financial intermediation and reduce borrowers' access to credit and output. Through this channel, international commercial banks have been shown to represent an important source of contagion during periods of international capital reversals. Although there is now a large body of evidence suggesting that negative bank credit shocks may affect economic activity, the magnitude of the sensitivity of output to bank funding shocks is unknown, and the underlying economic mechanisms behind this sensitivity are less understood

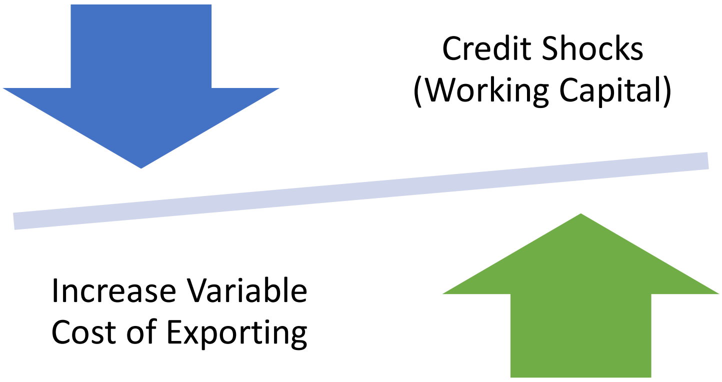
In his paper, he studied the effect of bank credit shocks on the export behavior of Peruvian firms during the 2008 financial crisis (I took this paper as references because Peru has many similarities with Indonesia as a small open economy). The reversal of capital flows during the crisis negatively affected the foreign funding of banks operating in Peru. Using this funding shortage as a source of variation for credit supply, he showed that banks that relied heavily on foreign funding before the financial crisis significantly reduced the supply of credit when capital flows reversed in 2008. Then, he exploited the disaggregated nature of the export data to compare the export growth of the same product and to the same destination across firms that borrowed from banks that were differentially affected by funding shocks. Comparing exports within narrowly defined markets is key to overcoming concerns that unobserved export demand and input market shocks might be correlated with the credit supply shock.

Figure 3 Relationship between Credit Shocks and Export Volume



The main result of this paper is that negative shocks to credit reduce the volume of exports for firms that continue exporting to a given product-destination market (i.e., the intensive margin) and has no impact on the probability that a firm exits or enters new product and destination markets. This result provides new insights into the relationship between exporters' production function and their use of credit. He gave argument through a model of trade with sunk entry costs. In such a framework, a negative credit shock affects the entry margin, but once the initial investment is paid, credit fluctuations do not affect the intensive margin of exports. Yet, he found positive elasticity on the intensive margin, suggesting that credit shocks affect the variable cost of exporting. This would be the case, for example, if banks financed exporters' working capital, as in (Feenstra, 2014), (Manova K. W.-J., 2014). By increasing the unit cost of production, adverse credit conditions reduce the equilibrium size and profitability of exports.

Figure 4 Relationship between Credit Shocks and Variable Cost of Exporting

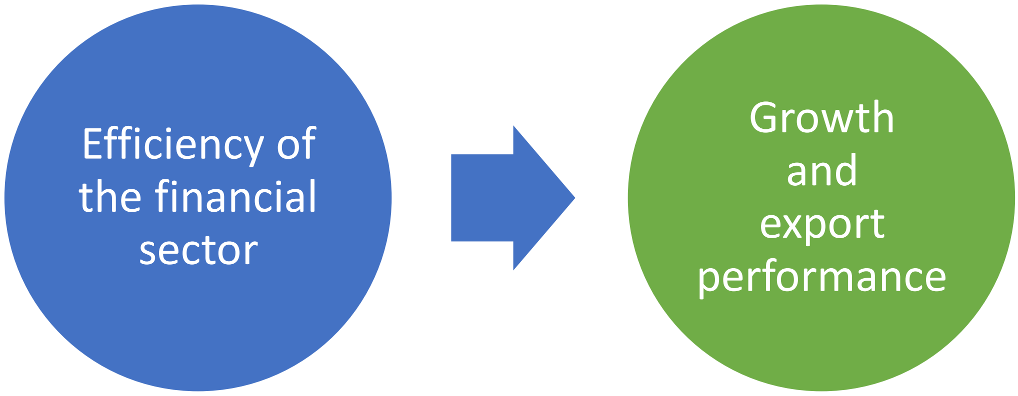


D. Export Performance and Credit Constraints

(Poncet, 2010) In this paper, he investigated how the export performance of firms in China is influenced by credit constraints. In China's movement of rapid development and successful transition from a planned system to a market-driven economy over the past 30 years. Its financial system has been widely viewed as lagging behind. Abundant research has shown it to be deficient and ineffective in its role of allocating capital across the economy. Among the dysfunctions diagnosed is the remaining state control over most of the banking sector, which may lead to distortions in the allocation of bank credit; and the underdevelopment of financial markets, which fails to provide firms with alternative sources of finance. Yet the country has achieved remarkable growth rates (close to 10% yearly) and its export sector has grown at an even faster rate (around 25% yearly) over the past 15 years. China's case thus appears to challenge the widely accepted view, confirmed by recent advances in theoretical modeling and empirical studies, that a well-functioning financial sector is a necessary and inextricable component of the growth process in general, and of export development in particular (Manova K. , 2008).

He relied on recent developments in the theory and empirics of the finance and trade interactions to analyze the China's finance-trade conundrum. Theoretical modeling predicts that the efficiency of the financial sector has a higher impact on growth and export performance in industries intrinsically more dependent on external finance. This heterogeneity in sector-level dependence on finance provides a robust methodology to detect credit constraints and measure their evolution, as first proposed by (Rajan, 1998)

Figure 5 Relationship between Efficiency of Financial Sectors and Export Performance



Recent trade models allowing for credit constraints predict that if financial development promotes a growth biased toward financially vulnerable industries, then this impact should be even more apparent on export growth, because access to export markets is more demanding in terms of external finance, due to the presence of fixed costs of entry. Improved financial system should affect the export structure, with the most dependent sectors being disadvantaged in environments with high distortions, but benefiting relatively more from improvements in financial system efficiency.

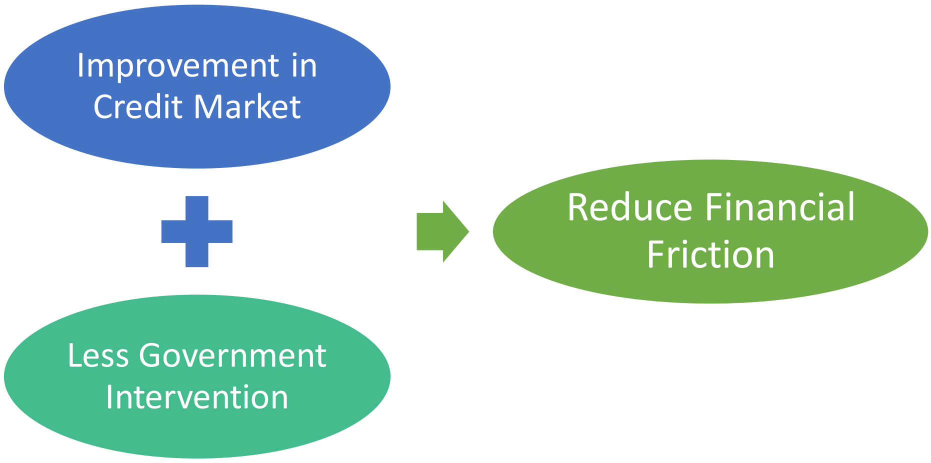
He applied this methodology to the export patterns of Chinese provinces, using a panel of bilateral exports at the province level for 191 countries and 27 2-digit ISIC sectors in 1997-2007 by firm type in China. His dataset hence allows him to estimate the magnitude of credit constraints and how they are mitigated by financial development separately for private, state and foreign-owned firms.

He found that the foreign-owned firms have better export performance than private domestic firms, and that this advantage is systematically greater in sectors at higher levels of financial dependence. This suggests that financial system imperfections severely restrict private firms' ability to engage in international trade while boosting that of foreign firms as they can tap internal funding from their parent company to circumvent the problem.

His analysis further provides three kinds of results. First, looking at the evolution over time, he found evidence that the gap between firm types in access to credit has significantly shrunk over the 10-year period, a sign of improved credit market conditions faced by private firms.

Second, he used proxies of financial development in the context of China to investigate whether the reduction of state interventionism in the banking sector can explain this evolution. Hence, he directly estimate the impact of the reduction of financial distortions on export patterns separately by firm type. he build on the empirical literature relating finance development and trade in a cross-country performance and credit constraints in China setting which show that financially developed economies export relatively more in financially dependent sectors. He asked whether the disadvantage suffered by private firms has decreased systematically more in provinces characterized with a lower level of state interventionism in finance. He confirmed that the reduction of state interventionism in finance has contributed importantly to the decline of the constraining role of private firms' export participation played by financial frictions.

Figure 6 Relationship between Credit Market, Government Intervention, and Financial Friction



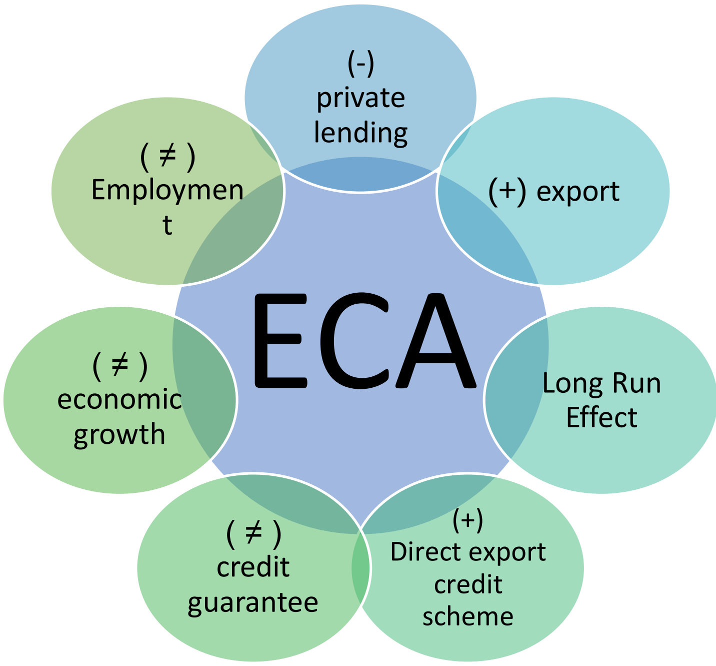
Third, he moved from firm-type export flows to aggregate flows to estimate how financial distortions have affected China's aggregate export performance. It is indeed conceivable that financial distortions' magnification of foreign affiliate's exports (advantaged in sectors at higher levels of financial dependence) fully compensate for the restrictions on private firms. He showed that over his sample period FDI did not compensate for domestic financial system imperfections. He found that the over-performance in exports by non-constrained firms -foreign and joint-venture firms - did not compensate for the constraints on domestic firms. Hence, FDI was no substitute for financial development to solve the impeding impact of credit constraints on China's export.

He investigated how the export performance of Chinese firms in China is influenced by credit constraints. Using panel data from Chinese customs for 1997-2007, he showed that credit constraints restrict international trade flows and affect the sectorial composition of firms' activity. He confirmed that credit constraints provide an advantage to Foreign-owned firms and joint ventures over private domestic firms as their export performance is systematically greater in sectors with higher levels of financial vulnerability measured in a variety of ways. He however found that these distortions were lessened but not reverted over the period in conjunction with improved functioning of the financial sector.

When looking at the aggregate level, he found that the over-performance in exports by non-constrained firms foreign and joint venture firms did not compensate the underperformance of constrained domestic firms. Hence, FDI was no substitute for financial liberalization to solve the impeding impact of credit constraints on China's export.

E. Do Export Credit Agencies Benefit the Economy?

Figure 7 the Impact of Having ECA in Our Country



(In, 2014) In Soh Young in his paper empirically evaluates the effectiveness of Export Credit Agencies (ECAs) on export and other key macroeconomic variables such as real GDP growth, employment, and domestic lending activities. Based on a panel data of 15 countries, which have established the official ECAs during 1972-2010, he use the differences-in-differences method for estimation by utilizing the staggering timing of ECA establishments in those countries. He found that: (1) having an ECA raises export, (2) this positive effect does not last in the long run, (3) this positive effect comes from direct export credit scheme, not from credit guarantee scheme, (4) ECA credit crowds out private lending in domestic financial markets, and (5) having an ECA is not associated with higher economic growth and employment.

F. Export Credit Guarantees, Moral Hazard and Exports Quality

(Paul Levine, 2004) In his paper, Paul Levine and his team analyzed the role played by Export Credit Guarantees (ECGs) to encourage exports to developing countries. The existence of moral hazard on the side of the firm is introduced. He showed that the inability of the exporter's government to verify the actual quality of the product will limit its ability to encourage trade through ECGs, once the coverage provided goes beyond a certain threshold. This result provides a rationale behind the limited coverage on ECGs.

Figure 8 The Government Should Balance in Giving Guarantee

Many developed countries also use Export Credits to facilitate trade to developing countries, often alongside offset agreements. A common characteristic of these two methods is that they allow the importer country to pay for the product (whether this payment is in cash or through the export of a different good) after it has been delivered.

In order to protect themselves from the risk of default payment, exporter firms can take what is called an Export Credit Guarantee (ECG). ECGs can cover both Foreign Direct Investment and exports. More specifically, they cover 'cash' or near-cash contracts for contract frustration risks or non-payment of amounts due for capital goods and services. Recent reports published by the Export Credits Guarantee Department (ECGD) give breakdown figures of guarantees given and exposure by sector and by country.

It is important to stress that the ECGD provides cover for both commercial and political risk. Commercial risks include the possibility of insolvency of the purchaser and failure to meet contractual obligations. Political risks include actions on the part of the exporter government (introduction of export licensing and embargoes that would mainly apply to defense) and at the importer end of the deal, restrictions on the transfer of money due under the contract, moratorium on external debt and other actions that affect contract performance. It also includes wars, civil disturbances and natural disasters that frustrate the contract or lead to non-payment.

Table 1 ECA's Protection Against the Various Risks in International Trade

A. Risk Category					
Economic (Commercial) Risk Related to Trading Partner	Exchange Rate Risk	Transportation Risk	Political Risk		
			Foreign Policy	Domestic Policy	Economic Policy
Description of Risk (Examples)					
Importer is not wiling Or unable to pay	Floating exchange rates: variations in exchange rates	Damage	War	Revolt	Prohibition to transfer foreign exchange
Importer does not accept merchandise	Fixed exchange rates: risk	Loss of goods	Embargo	Civil War	Currency declared non-convertible
Exporter does not deliver on time or products agreed	Devaluation		Restriction		
B. Options for protection and insurance provider					
Private insurance or public export credit agencies Letter of credit Bank guarantees	Bank provide hedging facilities public exchange risk insurance	Private Insurance	Export Credit Agencies or Export Insurance		

Source: (Allen, 2014)

Over 50 countries have ECAs that provide similar products to EXIG. All ECAs are required to meet the WTO objective to “break even in the long term”. Although countries could compete for firms by lowering premiums, this is now less likely to happen with the recent establishment of a harmonized country risk assessment and pricing approach system at the Organization for Economic Cooperation and Development (OECD) level that stipulates a Minimum Premium Benchmarks for seven country risk categories.

All ECAs, which have signed the Arrangement on Guidelines for Officially Supported Export Credits, are committed to set premiums above these benchmarks (exemptions exist for certain categories of business, such as military exports). Although in heavy losses during the past 20 years, the ECGD seems to be reaching break-even point following a more rigorous financial objective introduced in 1991 by the government, probably reinforced by the World Trade Organization (WTO) prohibition.

However, (Estrin, 2000) argue that there is still an implicit subsidy by the government based on the fact that there is no provision for making a rate of return on the notional capital required to meet claims. It is also interesting to mention that although ECAs tend not to cover 100% of the contract value, sometimes private sector insurers become involved in this market by providing cover for contract value that is not covered by ECA guarantee. Table 2 shows the maximum percentage insurance coverage of several ECAs. As can be seen, coverage is usually below 100% and lower for commercial risks than for political risks.

Table 2 Qualitative Comparison of ECA Insurance Cover

Country/ECA	Maximum percentage	
	Political risk	Commercial risk
CESDE (Spain)	99	94
COFACE (France)	90	85/90
ECGD (UK)	95	95
EDC (Canada)	90	90
EKN (Sweden)	100	90
EXIM BANK (USA)	100	100
GERLING NCM (Netherlands)	95	95
HERMES (Germany)	95	85
NEXI (Japan)	97,5	90
SACE (Italy)	95	95

(Source: ECGD International Comparison Survey, October 2002)

One might think of subsidized premium and good coverage for an exporter firm as a direct encouragement to trade, actually, in a recent report the ECGD refers to the degree of coverage as a sign on competitiveness relative to other ECAs.

However, in that paper he argue that higher insurance coverage does not always encourage trade. The presence of asymmetric information between the different parties involved in a trade agreement covered by and EXIG can make the ECGD's task of increasing the scope for trade with developing nations more demanding.

The ECA will then play a crucial role in helping or preventing trade. He showed that a minimum coverage is needed in order to encourage a risk averse firm to export to a country which might default payment due to political reasons; however, excessive coverage needs to be avoided in order to give incentives to the firm to invest in high quality and therefore, the commitment power to convince the importer government that it is safe to sign an imports agreement with that firm.

In the paper, Levine claimed that contract frustration or non-payment can arise for two different reasons: political default owing to a change in the priorities of the importer government or commercial default owing to the importer country being unhappy with the quality of the product, once this is delivered. In deciding whether to import or not a product a government must assess the incentives that the firm has to produce a high quality good. It will be crucial to observe the terms of the contract provided by the ECA to the domestic firm. This provides an additional tool for ensuring that high quality products are delivered to developing countries.

Based on Levine's results, he suggested that ECGs can improve the scope for trade by encouraging risk averse firms to trade with countries which might engage in political default but, it may also reduce the scope for trade by increasing the incentive of firms to export low quality.

This suggests that an excessive level of coverage will have a negative impact on trade. The reason being that high level of coverage will decrease the expected losses of the firm if it decided to deliver low quality and therefore, it will discourage the importer country from signing an exports deal with the firm. A standard high degree of coverage might make it difficult to ensure that the firm has sufficient incentive to deliver. Such risk will be lower for exporters supplying goods on which they have a track record or whether the technology which is being exported is well established, the technical expertise of the buyer is also important in assessing the need and quality of the project. Obviously, tailor made projects rather than "production-line" projects are at more risk.

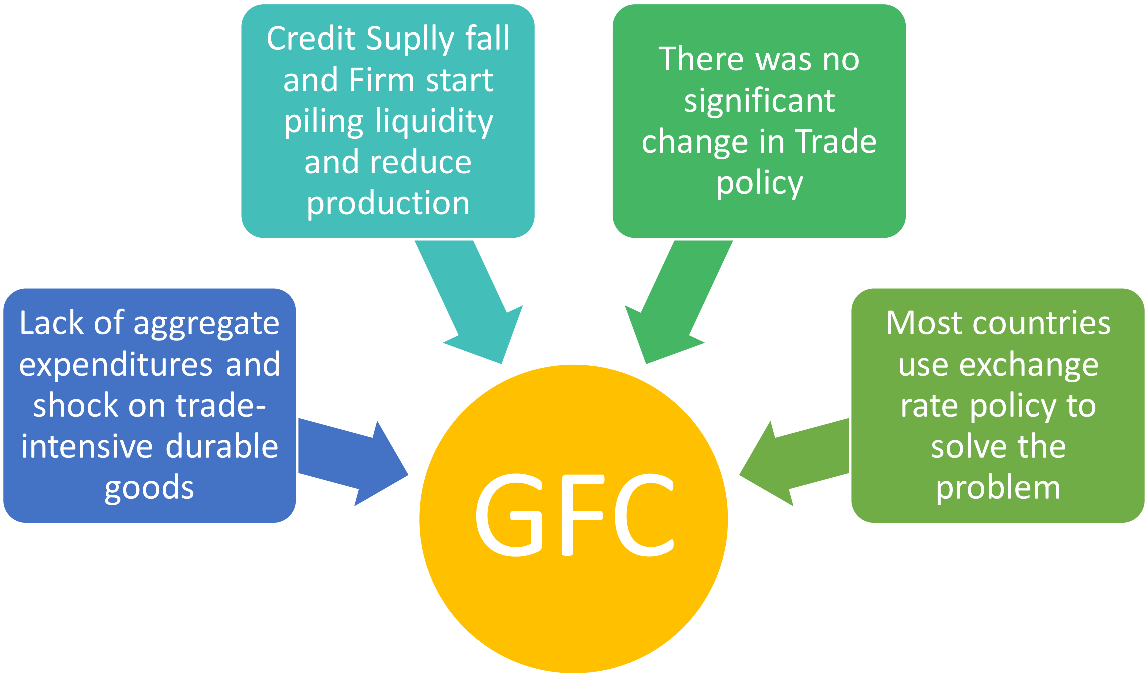
G. The Collapse of Global Trade

(Rudolfs Bems, 2012) Publisher in NBER working paper series, Rudolf Bems et all studied recent literature on the cause of the collapse in international trade during 2008-2009. In his abstract, he said that the main drivers of global trade collapse are lack of aggregate expenditure and shock on trade-intensive durable goods. He also, showed that in many incidents the changes in trade policy has no significant effect in boosting trade.

In section 5, Financial Shocks and Export, he elaborated the effect of financial crisis and credit shocks. He argued that the crisis will be a barrier for firm to be productive. Because of that they had lower level of production so as export. This occurred because, most of the firm rely heavily on external credit to finance production. This effect could be damaged for countries which are vulnerable to cross country, cross-sectors, and cross firm changes in trade. The second reason proposed by him, the crisis disrupted financing in financial transactions.

Relatively, domestic trade is less dependent to financing, so that international trade will be affected more since the entry cost remains there but the variable cost keep increasing during crisis period.

Figure 9 The Collapse of Global Trace



On his explanation, he set a simultaneous equation for supply and demand of goods. Production is the function of demand and amount of credit available. And the amount of credit depends on supply of credit and firms demand of credit. Since micro level data at firm level was not available, he used external finance dependence as a proxy of how much credit use by the form to finance its production. From the supply side, he used Bank's healthiness as instrument variable. Using these two variable he measured financial vulnerability before and after the crisis hit.

He supported the argument with two empirical evidence, which are financial vulnerability at firm level and sector-level and individual firms matched data to the banks that supply them with credit. Based on his literature, he made a hypothesis that there would be a reduction both in production and exports for firm that face credit constraint. Still, there was a debate whether financial crisis cause exports to fall more than production at the firm or sector level.

Thus, he extended the study into international trade finance topic. Through his literature study, he said 20-40% of international trade is financed via bank and the remainder of it via non-banks methods. During financial crisis, the intermediary banks will be more expensive in providing credit, so that the firm will piling more liquidity, thus reduce production and export.

As a response to crisis, he also elaborated the effectiveness of trade policy. He found that there was no significant shift toward protectionism during trade collapse. He examined two things which are tariff and non-tariff policies. There was little evidence that tariff systematically increased during the crisis. During 2008-2009, he found that on average tariff remains unchanged or actually fell for 125 of the 135 countries. On contrary, non-tariff policies increased and more prevalent. From World Bank's database, it showed the increase of temporary trade barriers by 25% in most countries and almost 40% for emerging countries. These non-tariff barriers seemed to be exaggerated for some reasons. It was applying to relatively small number of categories that account for small shares of total trade. Before the crisis hit, the increase in non-tariff trade barriers already in increasing trends.

The fact that there was no strong protectionism lead to a question, why was protectionism contained? There were three possible answers. First, WTO and some regional agreement may have served to manage protectionism pressures. Second, the trade policy has changed by increase in FDI and supply chain fragmentation. Last, most countries have the capability to use exchange rate policy to boost export rather than conventionally use trade policy.

CHAPTER III: METHODOLOGY

A. Research Variable

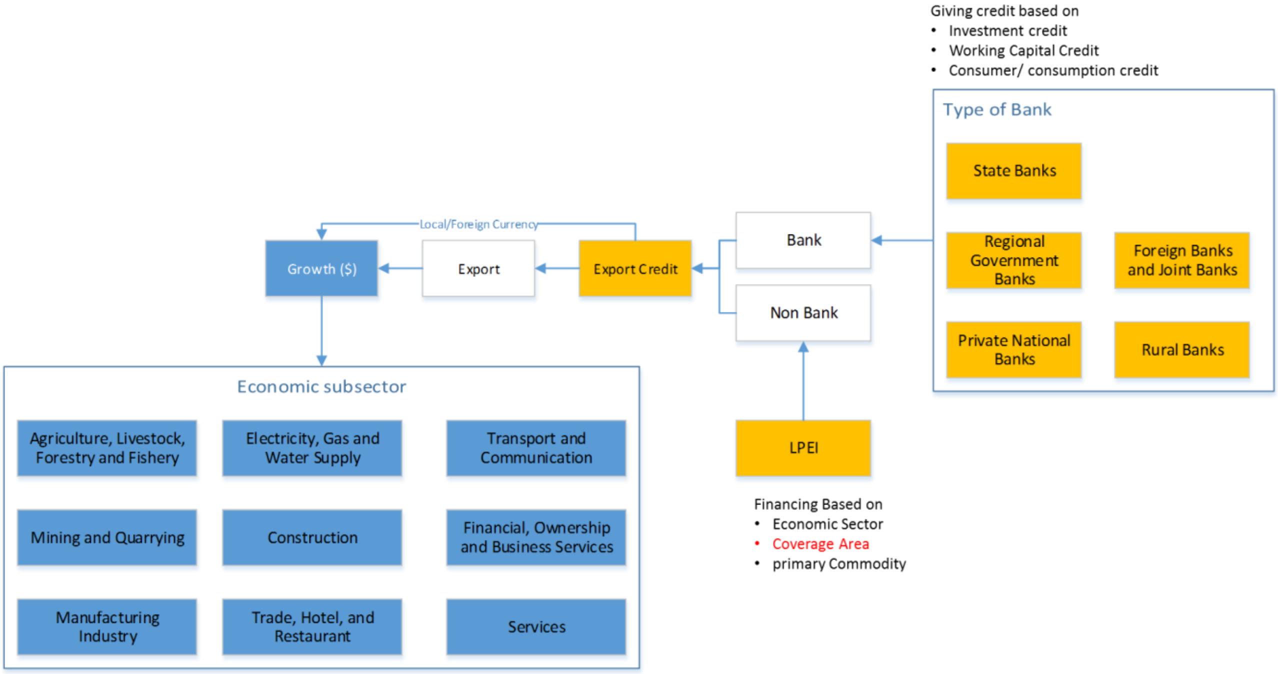
Based on literature framework in Chapter II, I will use these variable for my regression.

$$y_{it} = \alpha + \alpha_i + \delta_t + \beta X'_{it} + \varepsilon_{it}$$

Where: $i = (1, \dots \dots, N)$ and $t = (1, \dots \dots, T)$

B. Research Variable

Figure 10 Research Variable Map



C. Research Technique

The regression analysis with the panel data structure is called panel data regression. Generally, the parameter estimation in the regression analysis with cross section data is done using the least squares estimation method or the so-called ordinary least squares (OLS).

Panel data regression is a combination of cross section data and time series data, where the unit of the same cross section measured at different times. So in other words, panel data is the same data from several individuals were observed within a certain time. If we have a period of time T (t = 1,2, ..., T) and N number of individuals (i = 1,2, ..., N), then the panel data we will have a total of as much as NT observation unit. If the same amount of time units for each individual, then the data is called balanced panel. Otherwise, the number of units of time is different for each individual, it is called unbalanced panel. The other types of data are time series and cross-section data. At the time series data, one or more variables will be observed in the observation unit within a certain time. While the cross-section data are observations from several observation units within one point of time.

There are two kinds of panel data regression which is One Way Model and Two Way Model. One Way Model is a model in one direction, because it only considers the individual effects (α_i) in the model. The equation is;

$$y_{it} = \alpha + \alpha_i + \beta X'_{it} + \varepsilon_{it}$$

Where:

α : Constant

β : P x 1 vector measuring a parameter estimation results

X_{it} : Observe it all from the P variables

α_i : Effect of the individual that is different for each individual to i

ε_{it} : The regression error as in the classical regression model.

Two Way Model is a model that considers the effects of time or entering a time variable. Following equation:

$$y_{it} = \alpha + \alpha_i + \delta_t + \beta X'_{it} + \varepsilon_{it}$$

The above equation shows where there are additional effects of time symbolized by delta (δ) which can be either fixed or random inter-annually.

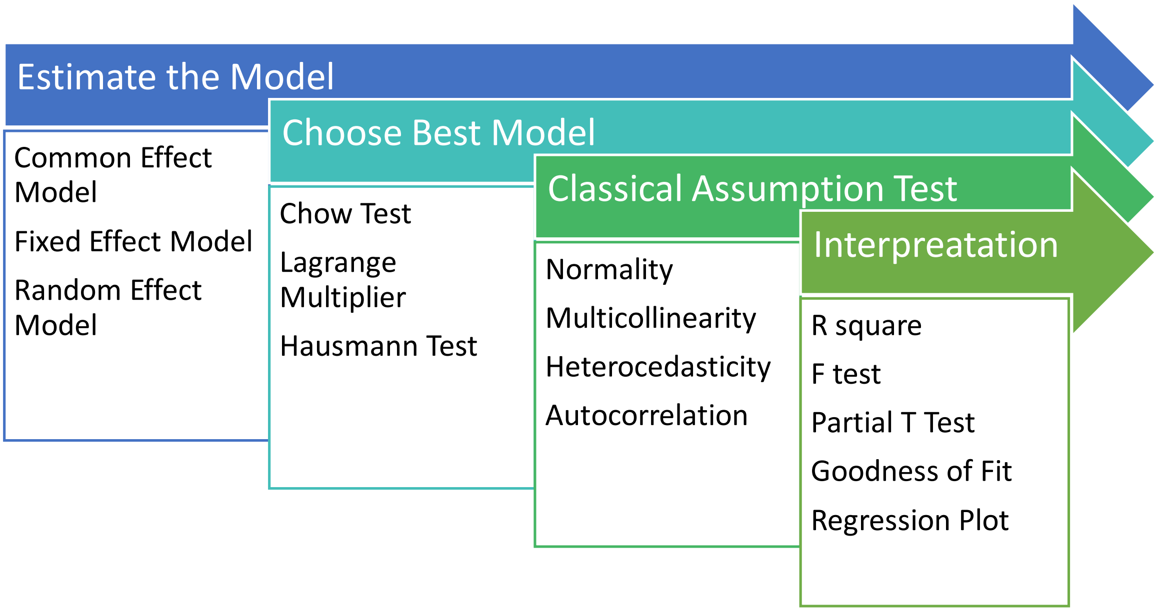
Panel Data Regression method will give predictions results that are Best Linear Unbiased Estimation (BLUE) if all assumptions are met Gauss Markov and no autocorrelation. Fullfillness of autocorrelation is difficult when we do analysis on the data panel. So that parameter estimation is no longer BLUE. If the panel data analyzed by the approach time series models such as the transfer function, then there is a diversity of information from the unit cross section which ignored in modeling. One of the advantages of panel data regression analysis is to consider the variety that occurred in the unit cross section.

The advantages of doing regression panel data among others are:

- It can give researchers a large number of observations, increasing the degree of freedom if the data has a great variability and reduce collinearity between explanatory variables, which can produce an efficient econometric estimation.

- Panel data can provide more information that cannot be given only by the cross section or time series only.
- Panel data can provide a better solution than the dynamic changes in the inference cross section data.
- Unlike the usual regression, panel data regression models go through the stages of determining a precise estimate.

Figure 11 Steps in Doing a Panel Data Analysis



In the estimate the regression model using panel data, it can be performed through three approaches, which is:

- Common Effect Model or Pooled Least Square (PLS)

  An approach to panel data model is the simplest because it combines data time series and cross section. In this model neglected dimension of time as well as individuals, so it is assumed that the behavior of the data the same company in different periods. This method can use the approach Ordinary Least Square (OLS) or a least squares technique to estimate the panel data model.

- Fixed Effect Model (FE)

  This model assumes that differences between individuals can be accommodated on the difference intercept. To estimate the Fixed Effects panel data models using the technique of dummy variables to capture the difference between the company's intercept, the intercept differences may occur because of differences in the work culture, managerial, and incentives. However, slopnya equally between the companies. The estimated model is often called the technique of Least Squares Dummy Variable (lSDV).

- Random Effects Model (RE)

  This model will estimate the panel data where disturbance variables may be interconnected across time and between individuals. Random Effect on the model intercept differences are accommodated by the error terms of each company. Advantages of using the Random Effect models that eliminate heteroscedasticity. This model is also called the Error Component Model (ECM) or technique Generalized Least Square (GLS).

To select the most appropriate model, there are several tests that can be done.

- Chow Test

  Chow test is a test to determine the model Fixed or Random Effect Effect most appropriately used in estimating panel data. If the results: H0: Select PLS, H1: Select FE

- Hausman Test

  Hausman test is a statistical test to choose whether or models Fixed Effect Random Effect is most appropriately used.

D. Hypothesis

Regression 1, H_0: LPEI's Credit (Total) is not significant in boosting Sectoral Economic Growth

Regression 2, H_0: LPEI's Credit (in term of local and foreign currency) is not significant in boosting Sectoral Economic Growth

Regression 3, H_0: LPEI's and Commercial Bank's Credit is not significant in boosting Sectoral Economic Growth

Regression 4, H_0: LPEI's Credit is not significant in boosting Export Value of Each Major Trading Commodity

Regression 5, H_0: Having LPEI at the same time with others commercial bank has no significant and positive effect in economic growth

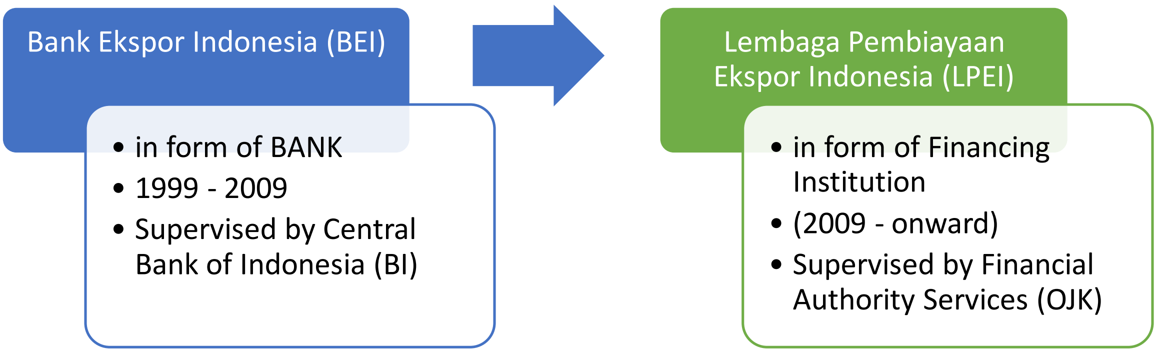
CHAPTER IV: DATA AND ANALYSIS

A. LPEI at a Glance

1. Establishment

(KSEI) The history of modern mankind has been the story of international trade. So prevalent is international trade on a global scale that it is one of the most influential activities that define modern civilization, today. The ability to secure a significant share of the global trade market is crucial to any nation. Simply because exports represent the key indicator of national economic growth. To date, the export market share of Indonesia is only 0.98% of the global export market. Compared to other developing nations in Asia, we are still lagging behind. Currently, India commands a 1.2% share of the market, whereas Thailand also holds more than 1.0% market share.

Figure 12 Indonesia's ECA over time



Increasing Indonesia's penetration of the world 's export markets is not as easy as turning one's palm. The market situation of global trade today is highly competitive. While Indonesia's role and activities in international trade still depends largely on the exporters themselves. In many nations throughout the world, efforts to increase industrial strengths and dominate world markets are undertaken, among other things by establishing the so-called sovereign financial institution with the aim of helping exporters penetrate global markets. Hence, US businesses enjoy the full support of the U.S. Eximbank. In Germany there is the Kreditanstalt ffur Wiederaufbau (KfW). In Japan, the Japan Bank for International Cooperation (JBIC) and virtually every major trading nation has similar institutions, including in China, India, Korea and Thailand.

In Indonesia, the initiative to form such institution has been in progress since a decade ago. PT Bank Ekspor Indonesia (BEI) that was formed based on Government Regulation No. 37 of 1999 is the embryo of a sovereign financial institution under the name of the Indonesia Eximbank or Lembaga Pembiayaan Ekspor Indonesia (LPEI). On the basis of Presidential Decree No. 6 of 2007, the President of the Republic of Indonesia has declared that export is to be developed through LPEI.

(Lembaga Pembiayaan Ekspor Indonesia, 2015) PT Bank Ekspor Indonesia (Persero) ("Bank" or "BEI") was established based on Government Regulation No. 37 of 1999 dated May 25, 1999, regarding the State Capital Participation of the Government of the Republic of Indonesia in the Establishment of a Limited Liability Company (Persero) in the Banking Sector. The establishment of the Bank was notarized under deed No. 49 dated June 25, 1999 of notary Siti Pertiwi Henny Singgih, S.H. The deed of establishment was approved by the Minister of Justice of the Republic of Indonesia in its Decision Letter No. C-13130.HT.01.01-TH.99 dated July 19, 1999 and was published in Supplement No. 6652 dated October 8, 1999 of the State Gazette No. 81 of the Republic of Indonesia.

According to article 3 of the Bank's Articles of Association, the Bank's objectives and scope are to execute and provide assistance to the government in the implementation of its policies and programs in the economic sector and in the national development in general, particularly in export and import trade financing through the disbursement/financing of trade financing and providing guarantees/insurance as well as providing consultations on foreign trade financing, the disbursement of two-step financing from the government, including collecting third-parties funds in the form of demand deposits, time deposits or other forms, obtaining borrowings and issuing securities in the local or foreign markets, and conducting sharia banking activities.

The Bank which was formed according to the Government Regulations (PP) No. 37 year 1999 was developed as sovereign financial institution, named Lembaga Pembiayaan Ekspor Indonesia (LPEI). In compliance to the President Instruction No. 6 Year 2007, the President of Republic of Indonesia had confirmed the development of export through the formation of LPEI. The formation of LPEI based on the Law No. 2 Year 2009 regarding Lembaga Pembiayaan Ekspor Indonesia (LPEI) which was signed by the President of Republic Indonesia on January 12, 2009.

Later, the Governor of Bank Indonesia decided to revoke the PT Bank Ekspor Indonesia (Persero)'s business license as pursuant to the Law No. 2 Year 2009 dated January 12, 2009 and accordingly transferred all legal assets, liabilities, rights and obligations of PT Bank Export Indonesia (Persero) to Lembaga Pembiayaan Ekspor Indonesia (LPEI) as provided in the Law No. 2 Year 2009 dated January 12, 2009 regarding LPEI.

LPEI will be more focused on running the business activities of financing, guarantees, insurance, and consulting services in order to export. The presence of LPEI also will provide warranty for a variety of risk that has not been granted by commercial banks. Foreign parties will have more confidence in LPEI because LPEI is part of the Government and was formed based on law. LPEI can also set the prudential norm of his own. In addition, the structure of LPEI use One Board System would be effective for decision making.

LPEI as a sovereign institution is able to obtain wholesale long-term funding, at more competitive rates, from inter-governmental departments, multilateral institutions and others. LPEI can also issue securities and receive grants. It is also engaged in providing Exporters with facilities, such as: financing, guarantee, advisory services and insurance coverage. When required, LPEI can also provide financing to buyers overseas in the form a Buyer's Credit. LPEI provides insurance coverage in four trade-related areas which is:

- Export risk Insurance
- Payment risk Insurance
- Overseas investment risk Insurance for overseas Indonesian companies; and/or
- Political risk Insurance in the export destination country

The initial capital of LPEI amounts to at least 4 Trillion IDR that is derived from the equity of BEI, and has been set aside from state asset management.

2. Line of Business

In the long journey of BEI, which then metamorphoses into the institution that holds a special mandate, with its special characteristics that are defined in the vet Law of its inception, has provided LPEI with the unique features that characterize its activities, products and services.

One important factor that influences the range of products and services of LPEI, today and its continuing innovation in the future, is the characteristics of its market that are different from that of the commercial bank. The main criteria as the target market of LPEI is that the customers should be engaged in export or export related activities. Also, the government has identified priority sectors for LPEI to target. Nine are in commodities crude palm oil, coffee, rubber, fishery, shrimps, textiles, food processing, cocoa and footwear, and one in services, that is overseas construction.

Since this market segment is also served by the commercial banks, LPEI will aim its services in areas where the commercial bank lacks the capacity to serve. This concept is known as filling the Market Gap. In addition, to compete for the bankable market share, LPEI also serves potential markets that are is categorized as sub bankable business (feasible but not bankable) as well as non-commercially viable markets that are however strategic to the national interest.

More important, the bank's function is designed not to compete or overlap with those of the commercial banks so that it will be able to serve its purpose for the foreseeable future. For example, it offers buyer's credit and provides financing to non-residents. These are areas in which the commercial banks are not permitted to engage.

This is what will be the differentiator between commercial banking products with products of LPEI. On the asset side, the frameworks of products and services offered by LPEI, in line with its development stages.

Figure 13 Distinction between LPEI and Commercial Bank Market Share

Today, the products and services portfolio of LPEI can be classified into two groups. The first group is products and services that are provided to serve the needs of banks (Banking Risk. The second group is products and services that are provided to serve the needs of exporters or export-oriented companies directly (Corporate Risk). Since these products and services are also provided by commercial banks, LPEI differentiates itself by setting a different target market altogether from that of commercial banks.

The main features of the first group's products and services are:

- Support the capacity of banks to provide export financing for its customers.

  This is generally intended for a bank that has a portfolio of financing to exporters or the exports supporting company but has limited capacity (particularly the appropriate liquidity) to support the financing sustainability.

- Distributed cost efficiency (especially interest costs) to customers.

  Implementation mechanism of these products is done by providing a more efficient liquidity for banks which have a portfolio of corporate financing to exporters or export support. It is possible, especially for financing the liquidity character is not/hard to find in the market (long tenor financing, for example). LPEI can provide liquidity that is needed with more cost-efficient, with respect to its capacity to obtain funds from the programs of multilateral institutions or foreign bilateral.

- Absorb/minimize the risks faced by banks in providing finance to exporter's activity or export supporting company.

  In connection with its mission to support export development, LPEI is designed to absorb more risk than commercial banking. Based on this, LPEI could become an alternative for the banks if the banks need a partner to absorb the risks that are not able to absorb the activities of corporate financing to exporters or export support.

  There are quite a lot of variants of this product, including those that are noncash. Some of them are:

  - ✓ Refinancing Loans

    Facility provided to banks based on the underlying bank loans to exporters or export-oriented customers. The underlying loans that can be delivered is the Working Capital Loan or Investment Loan

  - ✓ Refinancing of Import Letter of Credit (L/C)

    Facility given to the L/C issuing bank to finance tenor of issuance from L/C issued or L/C maturity.

  - ✓ Refinancing of Export Bill Discounting

    Facility given to finance the bank that took over the customer export bill. Claims that can be refinanced can be a bill that emerged from transactions with Non L/C and L/C instruments

From the second group, there are more various products. Some products and services have been utilized by the exporter are:

- Export Working Capital Loan (EWCL)

  Financing facility provided by the LPEI based on working capital needs of exporters in the framework of activities of exports of goods and services. Export Working Capital Loans (EWCL) can be given in the form:

  ✓ Transactional EWCL

  EWCL is provided in accordance with the needs of working capital in one trade cycle

  ✓ Annual EWCL

  EWCL is provided in accordance with the working capital requirements based on historical data on export sales and export projections for 1 (one) year ahead, taking into account the relevant industry trade cycle.

Figure 14 BEI/LPEI Line of Business

Continuation of BEI's Products	Financing to domestic companies	KMKE, KIE, Discounting, Forfaiting
	Financing to domestic banks	Refinancing KMKE, KIE, Discounting, L/C financing
	Guarantee and other export facility	Pre-shipment export financing, Guarantee, Import L/C guarantee, Issuing L/C, SKBDN, BD, SB L/C
New products (Financial)	Financing to overseas company	Buyers credit, project finance
	Financing in order of overseas investment	Overseas investment credit, overseas project financing
	Export insurance	Export credit insurance under L/C, Export credit insurance under D/P, D/A, O/A, Political Risk Guarantee/insurance
	Guarantee and other export facility	L/C confirmation facility, financial guarantee, project related guarantee
New products A(Non-Financial)	Advisory and consulting	Information and Data, Training, Technical Assistance

Source: LPEI's annual report on 2009

- Export Investment Credit

  Financing facility provided by the LPEI to exporters to finance investments made in connection with the creation and/or increase production capacity.

- Financing of L/C Import or Domestic Letter of Credit (SKBDN)

  Financing facility provided by LPEI on L/C obligations of payment or SKBDN in order to purchase raw materials or spare parts (including engines) for the export of goods or Services
- Warehouse Receipt Financing (WRF) Facility

  Working capital financing facilities provided by LPEI to exporters related with the value of goods/commodities owned by exporters in the warehouse which is managed by the Warehouse Manager.
- Export Bills Discounting Facility or Export Related Receivables

  Financing facility provided by LPEI in the form of acquisition of goods and services of export bills through discount. In addition, LPEI also provides financing under the schemes of Project Finance, L/C Opening facilities, Bank Guarantee, and others.

  These products above have been offered, and more exploited by exporters and export-oriented companies during periods of BEI. Such products and equipment will be offered continuously even going to continue to be developed in accordance with the capacity and character of LPEI.

Referring to the Act No.2 Year 2009, there are several categories of products or new products that could be provided by LPEI, such as:

- Financing with Buyer's Credit/Export Credit Schemes

  Group of products where LPEI provided financing to the overseas buyer for purchasing products/services from Indonesia.

  Products with this scheme are commonly found in the ECA from other countries. The idea behind it is that besides financing the supply side of international trade transaction there is also a potency to finance the demand side. This could be due to the limited ability of buyers to provide cash to pay its import transactions, or the limited ability of the supplier, (Indonesian exporters) to provide credit terms to its buyers (including the effect of the high risk of payment from the buyer country).

  Because such schemes generally have a relatively high complexity, then the financing will be provided in the form of structured finance, which will involve a variety of products and various parties with their respective specialty. LPEI will arrange and coordinate the complexities of these and offer to exporters and buyers in the form of a package of Export Credits/Buyer's Credit.

- Financing with National Interest

  Account schemes Product group whose financing is provided as part of the assignment by the Government and the LPEI implement its management functions.

  The products in this group related to government programs in order to encourage exports. One example of the transaction with National Interest Account scheme is found in Thailand where the Thai Eximbank finances a government program called "Kitchen of the World." Within the framework of the program, the Thai government, through the Thai Eximbank provides financing to Thai entrepreneurs overseas who want to open Thai restaurants in their country of domicile. For this, each Non-Performing Loans that arise from the financing within the framework of the program would be charged to the government.

  LPEI has the authority to manage the National Interest Account (NIA) scheme based on Act No.2 Year 2009.

- Guarantee

  Facility in the form of guarantees issued by LPEI for the failure of certain performance from guarantees recipient counterparts. Guarantees forms in the Act No.2 Year 2009 stipulated in Article 7 as follows:

  ✓ Guarantee for Indonesian exporters upon payments received from overseas buyers of goods and/or services

  ✓ Guarantee for Indonesian goods and services importers in overseas upon the payment that has been made or will be made to Indonesian exporters for the export contracts against the sale of goods and/or services, or the completion of work or services that is made by any Indonesian company

  ✓ Guarantee for any bank that extends export financing facility to Indonesian exporters

  ✓ Guarantee for tender purposes in the relation with project that is fully or partially supporting export.

- Insurance

  The provision of insurance by LPEI for losses incurred by insurance holders. Act No.2 Year 2009 specifies that insurance is as follows:

  ✓ Insurance of export performance risk is an insurance to protect Banks or other parties from any losses because of export failure by exporters.

- ✓ Insurance of non-payment risk is the insurance to protect exporters from any losses whenever the buyers of goods/services fail to meet their obligation to pay in compliance with the agreement.
- ✓ Insurance of overseas investment risk from Indonesian companies is the insurance to protect Indonesian investors from any investment losses in overseas.
- ✓ Insurance for political risk in the export destination country, in the insurance to protect exporters from any losses caused by political risk in a country, such as nationalization, currency inconvertibility, exchange transfer restricted, and contract repudiation

To finance its activities, LPEI can obtain funds derived from

- Issuance of securities.
- Short-term, medium-term, and/or long-term Indonesia government, foreign governments, multilateral institutions, banks and financial institutions and finance loans, both at domestic and abroad.
- Donation.
- Placement of funds by Bank Indonesia.

3. Bond rating

Moody's Investors Service has assigned the several ratings related to LPEI, as follows.

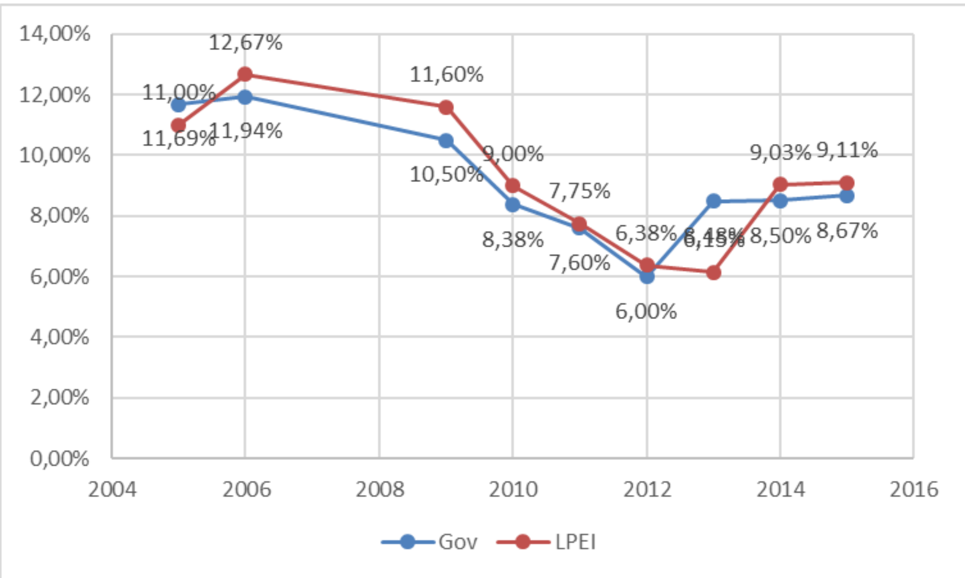
- Local and foreign currency issuer rating of Baa3 with stable outlook (Moody's Investor Service, 2014)
- Foreign currency senior unsecured Euro Medium Term Note (EMTN) program rating of (P)Baa3/(P)Prime-3 with stable outlook (Moody's Investor Service, 2014). At the same time, Moody's has raised LPEI baseline credit assessment (BCA) to ba3 from b1
- SGD senior notes issuer rating of Baa3 with stable outlook c (Moody's Investor Service, 2015)

LPEI's Baa3 rating is in line with the Baa3 rating for the government of Indonesia. LPEI's rating is underpinned by the bank's strong relationship with the government, including its establishment under a law designating its quasi-sovereign status, ownership structure and clear policy role as an export credit agency. Furthermore, the law shows strong support language.

The rating also considers LPEI's standalone credit profile of 14 (on a scale of 1-21, where 1 represents the lowest level of risk). The standalone credit profile vis-à-vis rated Indonesian commercial banks, reflects the bank's poor asset quality and lower level of profitability due to its policy role. LPEI's standalone credit profile also incorporates the bank's reliance on short-term wholesale funding and therefore, its modest liquidity. On the other hand, these factors are partly offset by the high capital position it shows for its rating band, although Moody's expects the level to be managed down over time.

LPEI's weaker intrinsic financial strength vis-à-vis its issuer rating is similar to the circumstances for other government-related issuers. Its standalone credit profile includes ordinary and ongoing support from the government, but does not incorporate any form of external extraordinary support which it may receive. It also indicates Moody's opinion on the likelihood of the bank requiring extraordinary support in times of stress.

Figure 15 Co-movement LPEI Bond's Yield with Treasury Bond



Source: Data generated from LPEI's Annual Report and www.djppr.kemenkeu.go.id

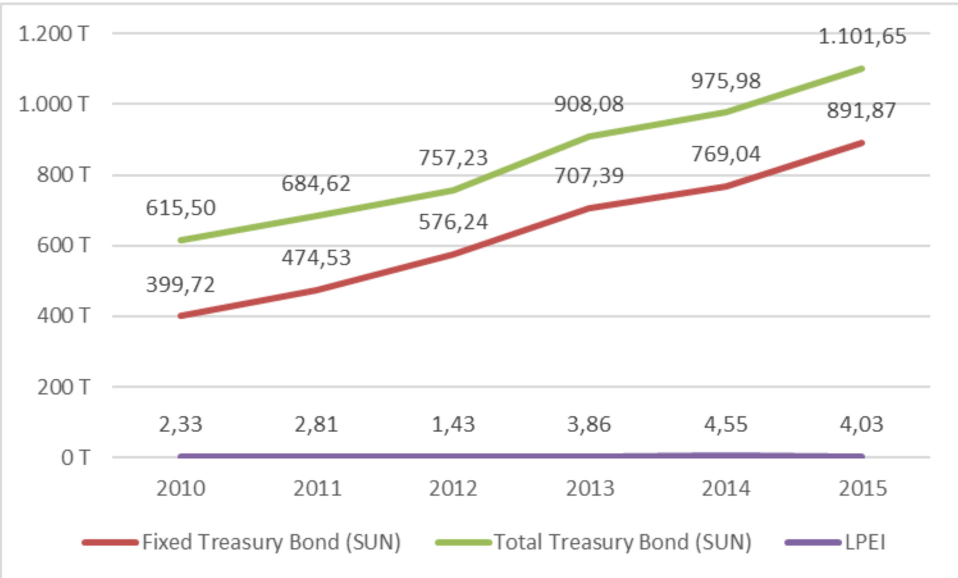
Apart from the reestablishment by law of its position as a sovereign entity, there is other evidence of LPEI's strong ties to the government: its ownership structure, its board of directors is appointed by the Minister of Finance, and various legal acts provide support to the bank, including capital, liquidity and funding. The government, through the Ministry of Finance, owns 100% of LPEI and views LPEI's capital as part of the state's treasury. As a result, LPEI's capital is not divided into shares.

The three forms of government support include:

- Capital - When LPEI's capital falls below IDR4 trillion, the government will inject any shortfall from the state budget (Article 19 paragraph 3 of Act No.2/2009). The government injected IDR3 trillion into BEI in 1999 and IDR2 trillion into LPEI on 22 December 2010. The next capital injection is projected in 2015.
- Liquidity -- The Ministry of Finance is the lender of last resort and will provide unsecured loans to LPEI (Article 25 paragraph 1 of Government Regulation No. 9/2011).
- Funding -- LPEI can obtain direct or two-step loans from the government. To date, there has been one two-step loan provided as a funding source. However, there have been no direct loans from the government.

Finally, the bank has a clear policy role to promote and provide financing for Indonesian exports. Its key activities include financing on a conventional and Sharia-compliant basis; providing guarantees, insurance and coaching & advisory services; and supporting the National Interest Account (the national export program) on behalf of the government.

Figure 16 Comparison LPEI Financing Through Issuing Bond (Million IDR)



Source: Data generated from LPEI’s Annual Report and www.djppr.kemenkeu.go.id

LPEI's supported foreign currency issuer rating is aligned with that of the sovereign due to its quasi-sovereign status and policy role. Therefore, its rating will move in line with any changes in the sovereign rating. However, any signs of weakening links to the government or diminishing policy importance could adversely affect the foreign currency issuer rating. For the standalone credit profile, it could move up if the bank adopted a commercial business model that would improve its profitability and asset quality metrics, although such a development could imply a reduced policy role. This could also adversely affect its foreign currency issuer rating.

Figure 17 LPEI's Contractual Interest Rate (Lending)

Type	2015		2014	
	Min	Max	Min	Max
Contractual interest rate				
1. Rupiah	0,00%	15.00%	1,00%	15.00%
2. United States Dollars	0,00%	10.75%	1,00%	10.75%
3. Singapore Dollars	6.75%	6.75%	0.00%	0.00%
4. Japanese Yen	4.50%	4.50%	0.00%	0.00%
Effective interest rate				
1. Rupiah	1,91%	17.89%	1,44%	17.52%
2. United States Dollars	1,00%	14.76%	0,50%	14.25%
3. Singapore Dollars	7.18%	7.18%	0.00%	0.00%
4. Japanese Yen	4.59%	4.59%	0.00%	0.00%

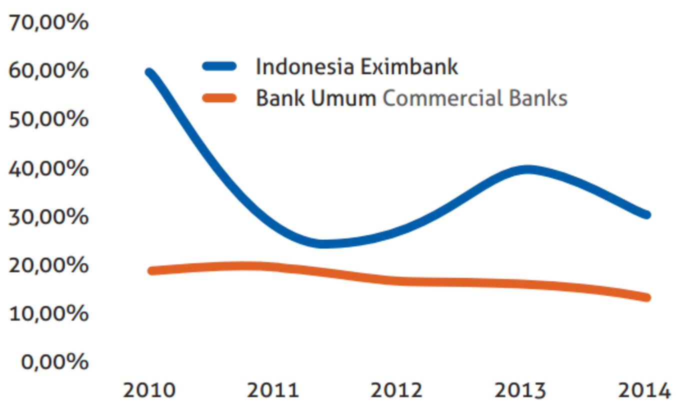
Source: Data generated from LPEI's Annual Report

B. Qualitative analysis

1. Comparison with Other Commercial Banks (Domestic)

Assets growth of commercial banks in 2014 grew by 13.34% (yoy) from Rp4,954.46 trillion in 2013 to Rp5,615.15 trillion in 2014.

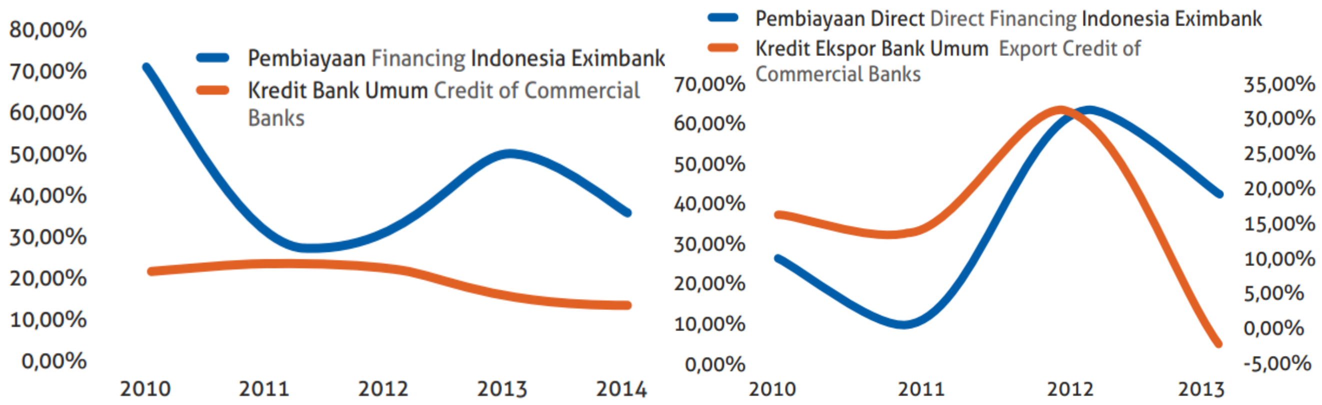
Figure 18 Asset Growth (%)



Source: LPEI's Annual Report on 2014

Credit growth of commercial banks in 2014 grew by 11.58% (yoy) from Rp3,292.87 trillion in 2013 to Rp3,674.30 trillion in 2014. While export credit of commercial banks in 2014 negative growth at the level of 2.41% (yoy) from Rp62.52 trillion to Rp61.01 trillion in 2014.

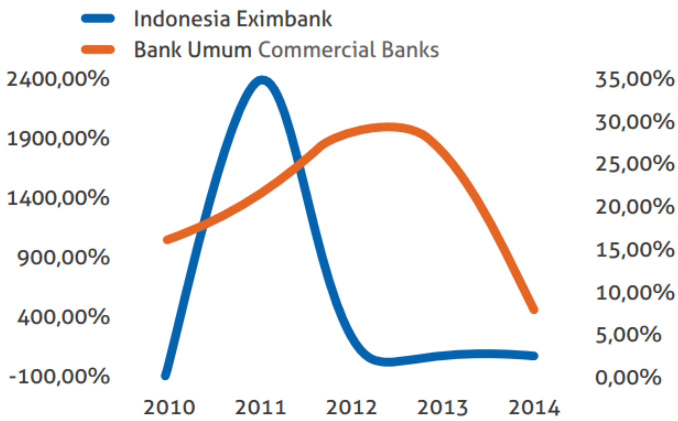
Figure 19 Financing and Direct Financing Growth (%)



Source: LPEI's Annual Report on 2014

In 2004, bank guarantee of commercial banks grew by 8.19% (yoy) from Rp229.09 trillion in 2013 to Rp247.85 trillion in 2014.

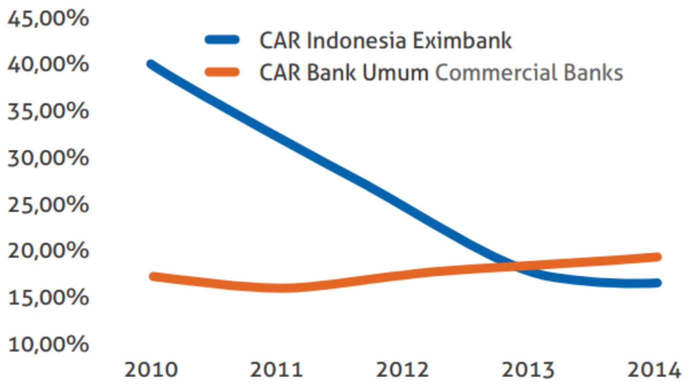
Figure 20 Growth of Guarantee (%)



Source: LPEI's Annual Report on 2014

The main purpose of LPEI's policy on capital management policies is to ensure that LPEI has strong capital to support expansive business strategy and to comply with provisions from the regulator. The Capital Adequacy Ratio (CAR) is the ratio of capital to asset based on its risk (ATMR). he CAR calculation of LPEI as of December 31, 2015 and 2014, are based on Minister of Finance Regulation No. 140/PMK/010/2009 Article 58, wherein LPEI is required to maintain the capital adequacy ratio of at least 8.00%. In 2014, the CAR of commercial banks amounted to 19.57%, a slight increase from the previous year which was 18.13%.

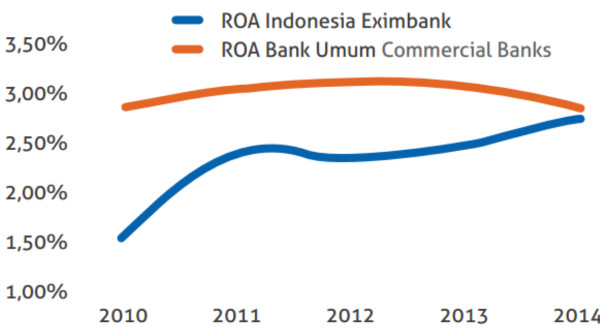
Figure 21 Capital Adequacy Ratio (CAR) (%)

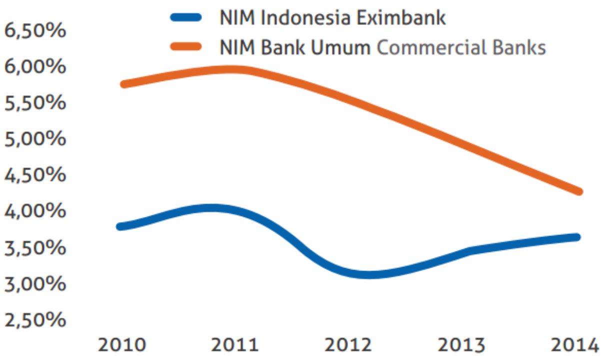


Source: LPEI's Annual Report on 2014

The ROA of the commercial banks slightly decreased from 3.08% in 2013 to 2.85% in 2014. In 2014, the NIM of commercial banks decreased namely at 4.23%, while the previous year NIM stood at 4.89%.

Figure 22 Return on Asset (ROA) and Net Interest Margin (NIM) (%)





Source: LPEI's Annual Report on 2014

2. Comparison with Other ECA's (Foreign)

a. Age of the ECAs

The oldest ECA is Export-Import Bank of USA and the youngest is Export-Import Bank of China and LPEI from Indonesia, but it is the most aggressive one. Export-Import Bank of China gives the maximum push to its national exports as measured by disbursements to national exports. On contrary LPEI is not as aggressive as Export-Import Bank of China since it shares disbursement is the worst among others. There are two possible explanations, first LPEI is new in the market so that its market shares still small compare to market size (total export) or intentionally LPEI limit or force to limit its credit expansion by FSA.

Table 3 Age of Export Credit Agencies

No	Country Export Credit Agency (ECA)	Established (Year)	Age (Years)
1	USA Export-Import Bank of the United States	1934	82
2	India Export-Import Bank of India	1982	34
3	Australia Export Finance & Insurance Corporation	1991	25
4	Russia Export-Import Bank of Russia	1993	23
5	South Africa Export Credit Insurance Corporation	1993	23
6	China Export-Import Bank of China	1994	22
7	Indonesia-LPEI	1999	17

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

b. Ownership

All the six ECAs are fully owned by their Governments.

c. Financial Comparison of Export Import Banks:

(Balraj, 2014) There are distinctly two categories one category led by China India and the USA and another comprising South Africa, Australia, Russia, and Indonesia. ECAs in the first category really push the exports of their respective countries. ECAs in the second category do not make a formidable difference to the exports of their countries.

Table 4 shows that China has the highest share of disbursements in national exports at 5.06% followed by India at 2.33% and USA at 2.32% Indonesia is the last significant ECA compare to the others. Based on this data, we can conclude that Export-Import Bank of China gives the best push for the exports despite having substantially large amount of exports. India and USA Export Import. Banks give less than 50% push as compared to China Export Import Bank. Rest other three ECAs have less than 1% share.

Table 4 ECAs, Their Share of Disbursements in National Exports

Country	Disbursements (in USD Billion)	National Exports (in USD Billion)	Disbursements/ Exports (%)
China	103.720	2049.000	5.06
India	6.760	290.000	2.33
USA	35.800	1546.000	2.32
South Africa	0.645	87.000	0.74
Australia	0.510	256.000	0.20
Russia	0.157	525.000	0.03
Indonesia	3.327	149.918	0.02

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Table 5 ECAs: Total Assets

Country	Total Assets (USD Billion)
China	250.221
USA	13.669
India	12.665
Indonesia	3.818
Australia	3.115
South Africa	0.537
Russia	0.309

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Table 6 ECAs: Total Loans

Country	Loans (USD Billion)
China	189.886
USA	10.865
India	10.707
Indonesia	3.136
Australia	2.075
Russia	0.214
South Africa	0.060

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Export-Import Bank of China has assets worth 250 Billion USD which is approximately 65 times more than LPEI (Table 5). It can be seen in Table 7 that ratio of loans to total assets are highest (84%) for Export-Import Bank of India followed by that of Indonesia (82.15%,) USA (79%) and China (76%). This means that these ECAs, including LPEI, do not have much cash or other deposits or investments but believe in giving loans to the exporters so as to the have more and more exports from that country

Table 7 Ratio of Loans to Total Assets

Country	Loans/ Total Assets (%)
India	84.54
Indonesia	82.15
USA	79.49
China	75.89
Russia	69.26
Australia	66.61
South Africa	11.17

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

d. Resources and Profitability:

i. Assets and Capital Size

ECAs of China, Indonesia, and India have the highest capital (Issued and Paid up) as compared to other countries (Table 8). Rest of the four countries come nowhere close to the capital infused by China, Indonesia, and India in their ECAs. This means that these three ECAs are provided greater support by their Governments as compared to the other ECAs. Export-Import Bank of the United States is an exception. Its capital is negative but it provides lot of support through lending by the Government.

As discussed above, ECAs of China, and India have highest capitalization; hence their borrowings as percentage of total liabilities are only 21% and 19%. Indonesia is slight different because in term of nominal (0,519 Billion USD) it is comparable with China and India. On contrary, LPEI fund its financing (98.15) mostly through borrowing or by issuing bond rather than borrowing directly to the Government.

Table 8 ECAs- Issued and Paid-up Capital

Country	Issued & Paid up Capital (USD Billion)
China	0,807
Indonesia	0,519
India	0,509
Russia	0,061
South Africa	0,034
Australia	0,005
USA	-0,763

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Table 9 ECAs- Share of Borrowings in Total Liabilities (%)

Country	Borrowings/ Total Liabilities (%)
Indonesia	98.15
USA	83.02
Russia	78.00
Australia	64.24
India	21.41
China	18.67
South Africa	0.00

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

ii. Resources

The major sources of the funds for ECAs are paid-up capital, reserves and the borrowings. As shown in Table 10, Export-Import Bank of China has the highest total of Paid-up Capital and Reserves followed by that of Indonesia, India, South Africa, Australia and

Russia. Export-Import Bank of USA has negative Paid-up Capital and no Reserves. LPEI has no requirement to provide some reserve since its conversion from "Banking" form into "Financing Institution" form in 2009. Then if we compare LPEI considering reserve amount from others ECA, LPEI is not at the top three anymore.

Table 10 ECAs- Paid-up Capital, Reserves and Total of Paid-up Capital and Reserves

Country	Issued & Paid-up Capital (USD Billion)	Reserves (USD Billion)	Issued & Paid-up Capital* Reserves (USD Billion)
China	0,807	2,413	3,220
Indonesia	0,519	0,000	0,519
India	0,509	0,695	1,204
South Africa	0,034	0,313	0,347
Australia	0,005	0,190	0,195
Russia	0,061	0,000	0,061
USA	-0,763	0,000	-0,763

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

As can be seen from Table 11, China has the highest borrowing despite having the highest paid-up capital and reserves. This becomes essential for ECA of China as it provides a huge push to its national exports. The loans given by Export-Import Bank of China to its customers are approximately 15 times more than those provided by LPEI.

Table 11 ECAs- Borrowings

Country	Borrowings (in USD Billion)
China	46.725
USA	11.348
Indonesia	3.078
India	2.712
Australia	2.001
Russia	0.244
South Africa	0

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

iii. Profitability:

The issue of profitability of ECAs is a complex one as these operate under various constraints and sometimes have to provide loans on considerations other than the commercial ones. As these are Government owned, the other considerations like diplomacy come into play. Interest rates and repayment terms for some loans might not be in control of ECAs.

Notwithstanding this, the ECAs must work on financial prudent norms and must not be loss making.

Table 12 ECAs- Profit after Tax

Country	Profit After Tax (USD '000)
China	608,000
India	123,000
Indonesia	63,907
Australia	20,000
South Africa	6,700
Russia	-2,500
USA	-1,975,000

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

In terms of the gross amount, ECA of China has the highest profit, followed by that of India, and Indonesia. ECAs of Russia and USA are making losses (Table 12).

Table 13 ECAs: Profit to Assets Ratio (%)

Country	Net Profit/ Total Assets (%)
Indonesia	1.673
South Africa	1.25
India	0.97
Australia	0.64
China	0.24
Russia	-0.81
USA	-14.45

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

As per Table 13, the profit / assets ratio is highest (1.67%) for LPEI followed by that of South Africa (1.25%), India (0.97%), Australia (0.64%) and China (0.24%). This indicates that most productive use of its assets is being made by the LPEI followed by that of South Africa, India, Australia and China

Table 12 shows that there is a huge difference between the ECAs when comparison is made on the basis of ratio of profits to paid-up capital. Maximum is for the ECA of Australia (370%) followed by that of China (75%), India (24%) and South Africa (20%). It seems that the Australian ECA is making the best and most efficient use of the Paid-up Capital. This might be true. But when we consider other related parameters like gross amount of reserves and ratio of profits to Paid-up Capital along with Reserves, the situation changes drastically. The amount of reserves with ECA of China is more than 12 times and that with ECA of India are more than 3 times than that of Australia. China makes the best use of Paid-up Capital along with Reserves

While comparing the ratio of profits to the reserves capital, we find that this is highest for the ECA of China (25%) followed by that of India (18%), Australia (11%) and so on as given in Table 14. Taking into account ratio of profits to paid-up capital along with reserves, we find that the figure is highest for the ECA of China (19%) followed by that of Australia (10.26%), India (10.22%), South Africa (19.71%), and Indonesia (12.30%) as shown in Table 15.

Table 14 ECAs: Ratio of Profits to Reserves

Country	Net Profits / Reserves (%)
China	25.20
India	17.70
Australia	10.53
South Africa	2.14
Russia	0.00
USA	0.00
Indonesia	0.00

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Table 15 ECAs: Ratio of Profits to Paid up Capital

Country	Net Profits/ Paid up Capital (%)
Australia	370.37
China	75.34
India	24.17
South Africa	19.71
Indonesia	12.30
Russia	-4.10
USA	-258.85

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

Table 16 ECAs: Ratio of Profits to Paid-up Capital + Reserves

Country	Net Profits/ Paid-up Capital + Reserves (%)
China	18,88
Indonesia	12.30
Australia	10,26
India	10,22
South Africa	1,93
Russia	-4,10
USA	258,85

Source: (Balraj, 2014). Indonesia data comes from LPEI's Annual Report in 2013

3. Critique to LPEI

a. Potential Misuse of the Sovereign Right

The establishment of LPEI in 2009 was the answer made by the Government though the failure of BEI to boost Indonesia' export optimally. KADIN argued these problems come from many reason:

- BEI is less known in his duties and not much known by the exporters, especially exporters which categorized as Micro, Small, and Medium Enterprises (MSMEs).
- BEI is not in the centers or in sources of exports and just being in Jakarta, Medan and Makassar.
- Less financing approach to exporters, like has been done by the other banks, such as BNI Bank, Mandiri Bank, and other foreign banks which aggressively looking for customers (exporters).
- BEI just published a periodical publication which is only some news from printed newspaper which are already known by the exporters and they do not carry out tasks that are more useful such as market deepening.

(Kamar Dagang Indonesia, 2008) LPEI according (Law No 2 of 2009) is unique in that financial institutions are not subject to the laws and regulations in the fields of banking, insurance business, financial institutions or finance companies, state-owned and bankruptcy. This law was design to become *lex specialis* of the legislation on SOEs, Financial Institution or Company Financing, Insurance Business and Banking. But still in actual operation, LPEI should follow all regulation related to financing, guarantees and insurance, as stipulated in the Civil Code of borrowing and debt underwriting, as well as the Code of Commerce provisions with regard to insurance Thus, there is needy much deeper and thorough assessment in granting this right to export financing such LPEI. LPEI as *sui generic* (subject to the legislation itself), would be a financial institution which has very broad authority cannot be bankrupted in the normal way unless dissolved by the legislation, which would cause various legal issues drag on.

Based on the experience of others ECA, most of them experienced large claims payments. Usually it comes from those who finance or guarantee a large-scale investments project with medium or long maturities. These investment projects are usually vulnerable to regional crises and/ or a local crisis in the host country so that the ECA must pay compensation to ECA's investors from origin country.

In other part of (Law No 2 of 2009), it says that funding can be made directly to the exporter (businesses) or in cooperation with foreign banks / institutions other financing. It is obvious that the government at the expense of the state budget has a contingency liability to the reduction of capital caused by the huge losses that can be experienced by LPEI. If LPEI experience a shortage of capital, the Government will provide additional funds or equity participation. For that, there must be a guarantee from the government to bear LPEI's loss because these funds will come from the state budget. Then, it became another question, how to allocate this loss in the state budget each fiscal year.

In giving credit, LPEI should be cautious and required to apply precautionary principle which includes the principles of good corporate governance, risk management, and the principle of Know Your Customer. A Reduction on paid up capital will lead the government to compensate it through the state budget. For that, the Government should keep an eye to LPEI and make strict rules regarding its business activities. This should be done to avoid burdens to state budget later

Another effect of LPEI's sovereignty, its board of director, although its only one Head of Director, was appointed by Ministry of Finance. We know that Ministry of Finance has many strong and capable candidates, but KADIN as representative of many exporters was expect the director comes from professionals and know the ins and outs of export and appointed through fit and proper test which is done by member's House of Representatives. In KADIN's point of view, current board of directors were lack of checks and balances in order to carry out the corporate governance principles. One positive thing is even tough LPEI has run under one Board System, the Head of Director has no voting right in board of directors meeting to avoid dominant voice by the Head of Director.

After studying the substance of the LPEI's regulation, there might be potential problem in which LPEI might overlap with other financing institutions that already exist and have been going well, especially in the export of mineral and coal. Besides, it may cause bureaucratic burden that is a disincentive (because of his position and authority LPEI very special) and should not be contrary to the spirit of the reform and the principle of good governance. For the sake of legal certainty (avoiding overlapping authority of each sector) and certainty (to attract investors) done for the greater prosperity of the people. Related to (Law No 2 of 2009) article 3 (1), 13 and 17, paragraph (1) LPEI need to consider the existence, role and task PT. Export Insurance Indonesia (ASEI) as an SOE in insurance and export guarantee. It is because since

1991, ASEI has been a permanent member of the International Union of Credit and Investment Insurers (Berne Union) which is composed of 52 institutions from 43 countries ECA.

LPEI status as a legal entity must be formulated in right legal form. If LPEI was State Owned Legal Entity (BHMN), then it needs to be clarified whether LPEI running a business for profit or not. As a State-owned legal entity, LPEI inconsistent with the provisions of Article 18 paragraph (2) (Law No 2 of 2009) where if there are excess reserves it will be given to the non-tax state revenue even though it is not obligatory. In my opinion it is still in grey area.

In accordance with the system adopted by the 1945 Constitution, position of the Minister as the Vice President is a government apparatus. Beside the fact that LPEI has sovereignty, it is not as a "super body” which means located outside the Government. Indeed, the Government through Minister of Finance set directions to control LPEI. The independent nature of LPEI business and functions are inherent. So it should be independent from government control.

It should be clarified more about what the parameter or indicator for a transaction or project that is commercially considered as sub bankable but feasible or categorized as National Interest Account. This is important because each exporter has agreed differences in the magnitude of the costs required to export activities. With clear indicator, then there is a clarity with regard to what kind of exporters should be funded by LPEI.

Last, Director for Legal Affairs KADIN, Mr. Miftahul said that referred to (Law No 2 of 2009) LPEI has official name “Indonesia Eximbank". The name "Indonesia Eximbank" does not reflect the actual status of LPEI, which is a financial institution and not a bank. Although it mentioned in the explanation to align themselves with existing similar institutions abroad, the name "Indonesia Eximbank" remain inappropriate. For instance, Australia used the word "Export Finance and Insurance Corporation (EFIC)", Canada used the word "Export Development Canada (EDC)"; and in the UK used the word "Export Credits Guarantee Department (ECGD)".

b. Being Inclusive but Remains Selective

Based on (Kementerian Perdagangan, 2009), it was said that in majority LPEI has given more credit to manufacturing sector. Around 70% of exporters which recorded in the database of LPEI were dominated by the industrial manufacturing sector. This was conveyed by the Executive Director of LPEI, Mahendra Siregar. He explained that industrial manufacturing sector is considered good, because its products traded cross country and it has a value-added and processed in Indonesia. Manufacturing here include processing industry commodities, such as cocoa and others. This data on 2009 informed us that during its first operation, LPEI was focus more on industrial manufacturing sectors.

(Indonesia Finance Today, 2015) Myrdal Gunarto, an economist at International Indonesia of Indonesia (BII), said that future commodity prices expected to go up. Then, he said financing is good for companies that want to export. Moreover, he pointed the importance to build a good financing portfolio policy to support exports. The reason behind this was Non-Performing Loans / NPL) is quite high. Therefore, the recipient must be selected in a fair way, that will not increase the bad debts borne by the state. Recipient company must show a good performance. Its market share is clear with a good track record. The policy should not intend merely pursuing economic growth, but left the precautionary principle. According to Myrdal, the role of commodity exports is still quite large. While manufacturing exports, although not yet show high growth, but for some products its growth above the target, such as exports of machinery.

Previous Director General of Finance and Risk Management, Ministry of Finance, Robert Pakpahan, said that for export financing in 2016, the Government had allocated 2 Trillion IDR. The funds are granted to export financing through the mechanism of the State Capital Injection (PMN). While for this year (2016) the government has not allocated budget for LPEI, the finance minister instructed to provide export financing facility.

Central Statistics Agency data showed Indonesia's exports in January-June 2015 totaled 78.29 Billion USD, decrease 11.86% over the same period last year amounted 88.82 Billion USD, while imports during the same period in 2015 reached 73.99 Billion USD, decrease 89.95% compared to the first half of last year.

Meanwhile, Director of Risk Management of State Finance, Directorate General Financing and Risk, Ministry of Finance Brahmantio Isdijoso, said the LPEI’s assignment to export financing was given to help the performance of the export sector, especially for potential products, which is commercially not eligible to receive assistance in the funding of banking sector. The details about what kind of products categorized as priority will be decided in a special committee, consist of Ministry of Finance, Ministry of Commerce, Ministry of Industry and the relevant ministries. According to Isdijoso, the institution will deal with financing, guarantees and insurance for specific commodities with the provision under the commercial rate. The priority later decided by Minister of Finance Ordinance and after that the institution will open up opportunities for export on this particular assignment.

c. Prioritizing MSMEs

(Wikanto, 2010) Commission XI, the House of Representatives asked LPEI to increase export financing for micro, small, and medium enterprises (MSMEs). In fact, politicians require financing for MSME's export at least 10% of total financing in the next two years. This request is the conclusion of a hearing with the House Commission XI and LPEI directors. Therefore, House of Representatives commented during 2010, LPEI less concern about small businesses. In fact, since the beginning of its establishment, LPEI intended to help MSME to export their products, said Vice Chairman of Commission XI, Harry Azhar Azis.

Data show that between 2009-2010, LPEI still less prioritized MSME's export financing. in 2009 yesterday, of the total financing of 9.28 Trillion IDR, not even a penny flowed to MSMEs. Then, for 2010, of the total financing of 12.32 Trillion IDR, only 280 Billion flowed to MSMEs. Meanwhile, in the future LPEI need to improve financing for MSMEs.

C. Quantitative Analysis

1. Descriptive Statistics

Table 17 Descriptive Statistics Sectoral Economic Growth (%) and LPEI's Credit (Million IDR)

	Sectoral Economic Growth	LPEI's credit
Mean	5.74%	3,375,425
Median	5.78%	1,484,065
Maximum	15.85%	35,312,096
Minimum	-5.08%	0
Std. Dev.	0.032848	6022757
Skewness	0.221773	3.377131
Kurtosis	5.365993	16.14164
Jarque-Bera	15.21097	573.097
Probability	0.000498	0
Sum	3.613638	213000000
Sum Sq. Dev.	0.066899	2.25E+15
Observations	63	63
Cross sections	9	9
Period	2009-2015 (Yearly Data)	

Table 17 shows the descriptive statistics for Regression 1 which regress Economic Growth (%) on LPEI's Credit Disbursement. Over period between 2009 to 2015, using common sample, the average sectoral growth is 5.74%, while in good condition may reach more than 15%, and in bad times could negative as minus 5%. Standard deviation quite big more or less 3%. The skewness is positive, even it is small, means the distribution has a long right tail. Kurtosis less than 6, means the distribution curve I almost normal, neither peak or flat. The panel data for sectoral economic growth is not normally distributed by the low value of jarque bera probability, which is less than confidence level 5%.

For LPEI's credit disbursement data over 7 years, on average LPEI spends around 3,3 Trillion IDR to finance export credit. The median is less and far from its mean. Indeed, LPEI has spent so much credit lately. The maximum financing provided by LPEI is more than 25 Trillion IDR, which is in 2005. This financing facility tend to increase more in the upcoming years. The distribution curve for LPEI's credit is leptokurtic which distributed near the mean. The data itself also not normal showing by jarque bera probability value.

Table 18 Descriptive Statistics Sectoral Economic Growth (%) and LPEI's Credit in term of Local and Foreign Currency (Million IDR)

Criteria	Sectoral Growth	LPEI's Credit (Local Currency)	LPEI's Credit (Foreign Currency)
Mean	5.34%	1,884,360	2,334,746
Median	5.67%	578,871	882,218
Maximum	15.85%	16,022,405	19,289,691
Minimum	-5.08%	0	0
Std. Dev.	0.034431	3349822	4139472
Skewness	-0.196347	2.888033	2.742854
Kurtosis	5.51379	11.63286	10.60261
Jarque-Bera	16.99255	283.2094	230.7181
Probability	0.000204	0	0
Sum	3.36468	119000000	147000000
Sum Sq. Dev.	0.073501	6.96E+14	1.06E+15
Observations	63	63	63
Cross sections	9	9	9
Period	2009-2015 (Yearly Data)		

In actual, LPEI did separate its currency when providing credit. Sometimes they spend in term of local currency (Rupiah) and the other times they give it in foreign currency (US

Dollar). I made a cross check why LPEI distinguish between local and foreign. They said that there was no specific policy on currency separation, simply because it depends on export conditionality. For example, suppose they giving credit to foreign buyers, then the credit will be in foreign currency rather than local currency. From this explanation, I would like to assume that there is no correlation between explanatory variable which is credit disbursement in local or foreign currency.

Unfortunately, using panel data there is no menu to check correlation among explanatory variable using Eviews. If I modify the data as a group and unbalanced sample, I found no significant correlation between giving either credit in rupiah or US Dollar. The common correlation value for each independent variable ranged between 0.1 – 0.3, then it makes a stronger assumption that there is no correlation among independent variable.

By comparing these two explanatory variable, it shows that LPEI spend more on foreign currency credit rather than local currency. On average, LPEI spend more than 1.8 Trillion IDR and 2.3 Trillion IDR in export credit. The maximum amount, which is also in 2015, is 16 Trillion IDR for local currency credit and more than 19 Trillion IDR for foreign currency credit.

Table 19 Descriptive Statistics Nominal GDP (Constant Price) on LPEI's and Commercial Bank's Credit (Million IDR)

	GDP	LPEI	State Bank	Regional Bank	Private Bank	Foreign Bank	Rural Bank
Mean	190,831	1,600	423,149	43,993	542,070	183,348	18,421
Median	186,887	1,054	363,498	39,203	413,484	155,336	15,418
Maximum	248,384	4,486	918,995	96,211	1,219,775	389,459	38,548
Minimum	142,204	507	151,803	13,136	157,979	62,681	7,301
Std.Dev.	31,593	1,270	228,482	25,785	319,178	96,917	8,803
Skewness	0.200331	1.220256	0.650226	0.544637	0.64436	0.789572	0.746097
Kurtosis	1.815168	3.210877	2.209805	2.002729	2.110109	2.406603	2.509538
Jarque-Bera	7.821782	30.00283	11.57793	10.90534	12.26352	14.22907	12.33597
Probability	0.020023	0	0.003061	0.004285	0.002173	0.000813	0.002095
Sum	22899767	191975.1	50777850	5279185	65048358	22001700	2210577
SumSq.Dev.	1.19E+11	1.92E+08	6.21E+12	7.91E+10	1.21E+13	1.12E+12	9.22E+09
Observations	120	120	120	120	120	120	120
Period	2002-2014 (Monthly Data)						

Table 19 will be useful for the third regression which is regress Nominal GDP at Constant Price on LPEI's and Commercial Bank's Credit. Even though LPEI is not categorized as a Bank, but in its business, LPEI doing a banking Business. Because of that, it is reasonable to compare between LPEI and other commercial bank such as State Bank, Regional Bank, Private Bank, Foreign Bank, Rural Bank. Just by looking to the number, LPEI only spend 1,6 Trillion on average each year if its compared with other commercial bank. For example, the combinations of all Bank which categorized as Private Bank, spend more than 500 Trillion IDR followed by State Bank more or less 400 Trillion IDR and Foreign Bank around 1800 Trillion IDR. The average lending capacity of Regional and Rural Bank is small compare the big three, which is around 40 Trillion IDR for Regional Bank and 18 Trillion IDR from Rural Bank. Of course if we compare LPEI individually with these Banking Syndication, LPEI is far from giving any significance in Indonesian credit market.

Since it is ordinary time series regression, it is mandatory to check correlation among explanatory variable. From Table 20, it shows that among explanatory variable they are highly correlated. Intuitively, I thought LPEI is “price taker” rather than price setter. It is make sense since LPEI share on National credit is very small, then LPEI will follow what has been done by other commercial banking institutions. As a summary it is not good idea to include other commercial bank together with LPEI credit disbursement in regression model.

Table 20 Correlation Matrix Between LPEI and Other Commercial Bank

Bank	GDP	LPEI	State	Regional	Private	Foreign	Rural
GDP	1.00						
LPEI	0.91	1.00					
State	0.98	0.96	1.00				
Regional	0.98	0.94	1.00	1.00			
Private	0.98	0.96	1.00	0.99	1.00		
Foreign	0.96	0.96	0.99	0.98	0.99	1.00	
Rural	0.98	0.97	0.99	0.99	0.99	0.99	1.00

Table 21 Descriptive Statistics Sectoral Economic Growth (%) on LPEI’s Share, Commercial Bank’s Share, and Its Interaction

	GDP	LPEI	Commercial Banks	LPEI multiply with Commercial Banks
Mean	0.057359	3375.425	216980.7	1.35E+09
Median	0.057768	1484.065	149991.5	1.83E+08
Maximum	0.158484	35312.10	892528.1	2.64E+10
Minimum	-0.050800	0.000000	16580.00	0.000000
Std. Dev.	0.032848	6022.757	200954.7	4.04E+09
Skewness	0.221773	3.377131	1.793044	4.840789
Kurtosis	5.365993	16.14164	5.540211	27.67008
Jarque-Bera	15.21097	573.0970	50.69582	1843.657
Probability	0.000498	0.000000	0.000000	0.000000
Sum	3.613638	212651.8	13669786	8.48E+10
Sum Sq. Dev.	0.066899	2.25E+09	2.50E+12	1.01E+21
Observations	63	63	63	63
Cross sections	9	9	9	9

Table 21 shows the descriptive statistics for the last regression, which is measure the interaction between LPEI and others commercial bank syndication. Except the interaction variable, it is similar with Table 19.

2. Regression

a. Regression 1

Table 22 Regress Sectoral Economic Growth (%) on Total LPEI's Credit (Million IDR)

	PLS		FEM		REM	
Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
Intercept	0.061784	0.000000	0.060749	0.000000	0.060976	0.000000
(SE)	0.004652		0.003831		0.009296	
LPEI's_Credit	0.000000	0.057800	0.000000	0.189600	0.000000	0.133400
(SE)	6.78E-10		7.56E-10		7.04E-10	
Economic Sector Fixed Effects (Cross)						
AGRICULTURE			-0.020418		-0.018302	
BUSINESS			0.005781		0.005093	
CONSTRUCTION			0.008055		0.007112	
ELECTRICITY			0.001466		0.001150	
MANUFACTURING			0.003104		0.003548	
MINING			-0.046016		-0.041332	
SOCIAL			0.000385		0.000149	
TRADING			-0.002245		-0.002172	
TRANSPORTATION			0.049888		0.044755	
R-squared	5.776%		59.226%		3.710%	
Adjusted R-squared	4.232%		52.302%		2.131%	
F-statistic	3.739648		8.553932		2.350231	
Prob(F-statistic)	0.057779		0.000000		0.130435	
Test cross-section fixed effects						
Effects Test	Statistic	d.f.	Prob.			
Cross-section F	8.684608	(8,53)	0.000000			
Cross-section Chi-square	52.770703	8.000000	0.000000			
Test cross-section random effects	Statistic	d.f.	Prob.			
Cross-section random	0.060189	1.000000	0.806200			

From Table 22, I regress Sectoral Economic Growth (%) on Total LPEI's Credit (Million IDR). Using panel data, we can test it whether it follows Pool Effect, Fixed Effect, or Random Effect, and the result its follows fixed effect model. The coefficient for LPEI's credit is not significant with probability 0,18 (greater than 5%), it means we accept null hypothesis that LPEI's credit is not significant in boosting sectoral economic growth. The coefficient for industrial fixed effect explain that some sectors run faster than others, from fastest to slowest they are Transportation (0.049888), Construction (0.008055), Business (0.005781), Manufacturing (0.003104), Electricity (0.001466), Social (0.000385), Trading (-0.002245), Agriculture (-0.020418), and Mining (-0.046016).

b. Regression 2

Table 23 Regress Sectoral Economic Growth (%) on LPEI's Credit in Term of Local Currency and Foreign Currency (Million IDR)

	PLS		FEM		REM	
Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
Intercept	0.057636	0.000000	0.056020	0.000000	0.057636	0.000000
(SE)	0.004541		0.004839		0.00473	
LPEI's_Credit_Local	0.000000	0.004300	0.000000	0.007400	0.000000	0.006000
(SE)	2.19E-09		2.3E-09		2.28E-09	
LPEI's_Credit_Foreign	0.000000	0.000200	0.000000	0.001800	0.000000	0.000300
(SE)	1.77E-09		1.91E-09		1.85E-09	
Economic Sector Fixed Effects (Cross)						
AGRICULTURE			0.006257		0.000000	
BUSINESS			0.005324		0.000000	
SERVICES			-0.014099		0.000000	
CONSTRUCTION			0.004789		0.000000	
ELECTRICITY			0.004774		0.000000	
MANUFACTURING			0.006454		0.000000	
MINING			0.003074		0.000000	
SOCIAL			-0.002475		0.000000	
SERVICES			-0.014099		0.000000	
R-squared	21.440%		26.136%		21.440%	
Adjusted R-squared	18.821%		11.932%		18.821%	
F-statistic	8.187110		1.839981		8.187110	
Prob(F-statistic)	0.000718		0.076316		0.000718	
Test cross-section fixed effects						
Effects Test	Statistic	d.f.	Prob.			
Cross-section F	0.413308	(8,52)	0.9078			
Cross-section Chi-square	3.883707	8	0.8675			
Test cross-section random effects	Statistic	d.f.	Prob.			
Cross-section random	2.560153	2	0.278			

The regression model in Table 23 is similar with Table 22, but the result is completely different. From Table 23, it doesn't follow either Fixed or Random Effect, instead of just simple OLS. It neglects the difference for each economic sector. It is coherence with preliminary assumption that LPEI has no specific policy in giving credit either in local or foreign currency. The coefficients itself are significant both for LPEI's credit in local currency (0.004) and foreign currency (0.0002). Even though the coefficient is statistically significant but it is not economically significant with the value 2.19E-09 (local) and 1.7E09 (foreign).

c. Regression 3

Table 24 Regress Economic Growth (%) on LPEI's and Commercial Bank's Credit (Million IDR)

Variable	Coefficient	Std. Error	Prob.
Intercept	9.233717	0.158208	-
LPEI's Credit	0.009812	0.008247	0.237
Foreign Bank's Credit	0.001817	0.026694	0.946
Private Bank's Credit	0.162066	0.034319	0.000
Regional Bank's Credit	0.140941	0.036206	0.000
Rural Bank's Credit	0.067464	0.037551	0.075
State Bank's Credit	(0.111368)	0.049849	0.027
R-squared	99.17%		
Adjusted R-squared	99.13%		
F-statistic	2263.296		
Prob(F-statistic)	0		

From Table 20 Correlation Matrix Between LPEI and Other Commercial Bank using monthly data from 2002 to 2014, we cannot use all the results come from Table 24 Regress Economic Growth (%) on LPEI's and Commercial Bank's Credit (Million IDR) because they are high correlation among explanatory variable. The R square is high almost 99%, so that including more explanatory variable to avoid omitted variable bias is not a good idea. Is typical in common time series regression that they will have serial correlation simply because it is time series data.

The correlation matrix shows us that the most significant bank in support economic growth is State Bank, Private Bank, and Foreign Bank. On contrary, the coefficient for Foreign Bank is not significant in Table 24 (0.001 with probability 0.94 > 5%). The interpretation result for Foreign Bank is not consistent either we analyze it from correlation matrix or from time series regression. In addition, LPEI is not significant in the regression. It strengthens the conclusion that LPEI has no significance in boosting economic growth.

In summary, using more banking credits variable will not improve the model rather than make it worse by multi collinearity problem. Since LPEI is small in term of credit size, it will follow the movement of other commercial bank, if they spend more so as LPEI.

The model which compare credit and economic growth might be bias since other bank has no special assignment on what economic sector they should disbursed its credit. Also, they don't have a mandate in providing export credit. It is a bit misleading, but still we can use other bank as a proxy to predict economic growth. But to compare directly other commercial banks with LPEI, it is not a good strategy.

d. Regression 4

Table 25 Regress Export Value of Each Major Trading Commodity on LPEI's Credit

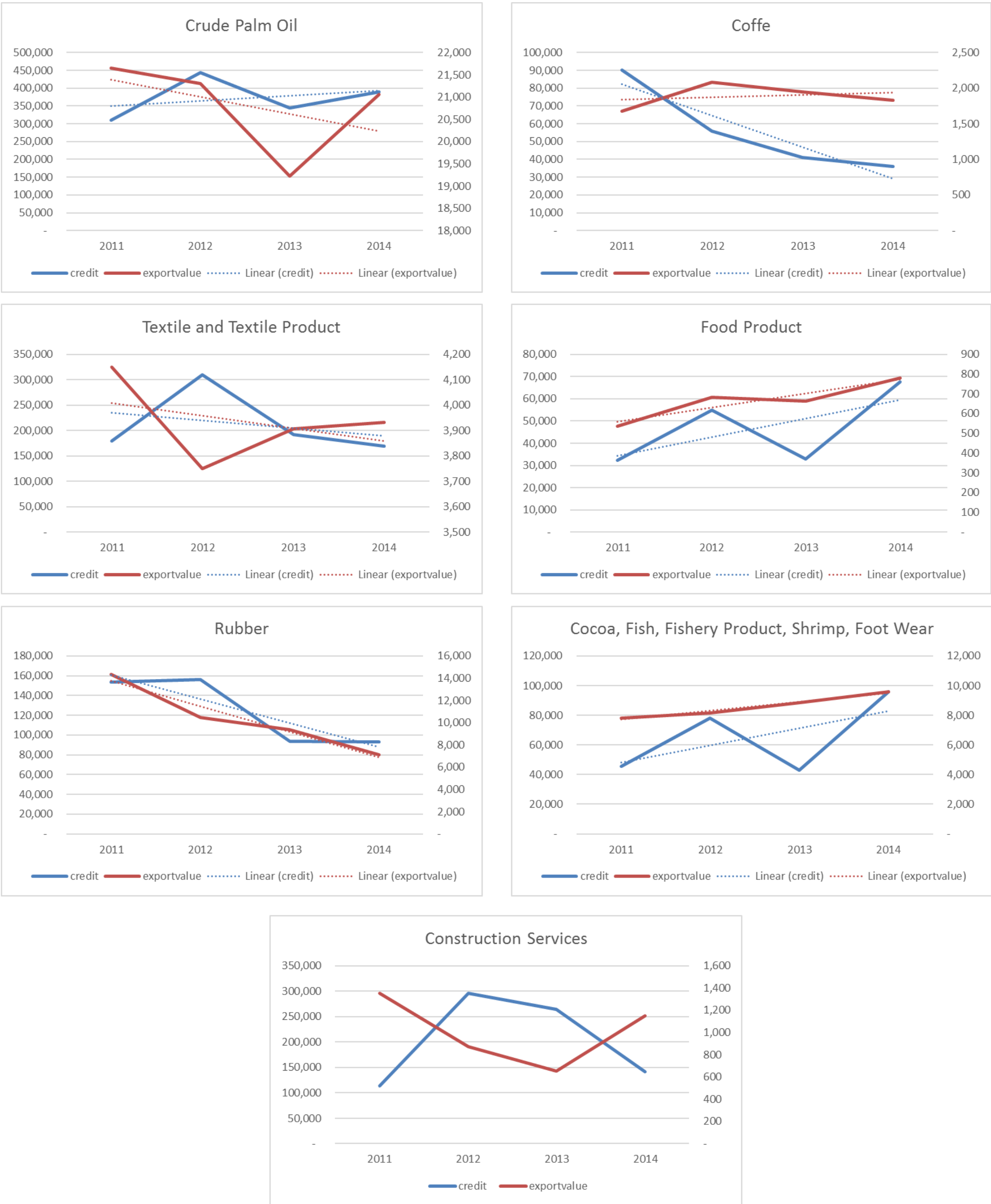
	PLS		FEM		REM	
Variable	oefficient	Prob.	Coefficient	Prob.	Coefficier	Prob.
Intercept	0.295692	0.923600	8.531490	0.000000	8.209438	0.000000
(SE)	3.053926		1.34882		1.403659	
LPEI's_Credit	0.678845	0.015400	-0.028532	0.807900	-0.000870	0.994000
(SE)	0.261684		0.115811		0.113857	
Economic Sector Fixed Effects (Cross)						
Crude Palm Oil			1.776337		1.733656	
Textile and Textile Product			0.094372		0.077519	
Rubber			1.013258		1.005863	
Coffe			-0.682268		-0.656877	
Food Product			-1.735517		-1.699622	
Cocoa, Fish, Fishery Product, Shrimp, Foot Wear			0.841364		0.853274	
Construction Services			-1.307545		-1.313813	
R-squared	20.561%		98.276%		0.000%	
Adjusted R-squared	17.506%		97.672%		-3.846%	
F-statistic	6.729579		162.819200		0.000057	
Prob(F-statistic)	0.015375		0.000000		0.994038	

Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	150.2133	(6,20)	0
Cross-section Chi-square	107.2409	6	0

Test cross-section random effects	Statistic	d.f.	Prob.
Cross-section random	1.704484	1	0.1917

From Table 25, I regress Export Value of Each Major Trading Commodity on LPEI's Credit. Using panel data, we can test it whether it follows Pool Effect, Fixed Effect, or Random Effect, and the result its follows fixed effect model. The coefficient for LPEI's credit is not significant with probability 0,8 (greater than 5%), it means we accept null hypothesis that LPEI's credit is not significant in boosting Export Value of Each Major Trading Commodity. The coefficient for Major Trading Commodity fixed effect explain that some commodity export more than others, from largest to lowest they are Crude Palm Oil (1.776337), Textile and Textile Product (0.094372), Rubber (1.013258), Coffee (-0.682268), Food Product (-1.735517), Cocoa, Fish, Fishery Product, Shrimp, Foot Wear (0.841364), Construction Services (-1.307545).

Figure 23 The Movement of Major Trading Commodity Export with LPEI's Credit



We cannot fully rely on the result from Table 25, it simply because includes only 28 observations. We will face a lot of test and assumption problem if we stick on Table 25. Rather than analyze it using regression then just compare it using simple graph in Figure 1. For textile, rubber, and food product it seems that there is positive trend (co-movement) between LPEI's credit and export size. Also, the declining trend on LPEI's credit has no significant effect on Crude Palm Oil and Coffee. On contrary, if the construction services grow, LPEI tend to reduce its involvement and vice versa.

e. Regression 5

Table 26 Regress Sectoral Economic Growth (%) on LPEI's Share, Commercial Bank's Share, and Its Interaction

Variable	PLS Coefficient	PLS Prob.	FEM Coefficient	FEM Prob.	REM Coefficient	REM Prob.
Intercept	0.072161	0.000000	0.071943	0.000000	0.071401	0.000000
(SE)	0.006565		0.007188		0.010724	
LPEI's_Credit	-0.000007	0.000400	-0.000006	0.010600	-0.000006	0.003700
(SE)	0.00000201		0.00000207		0.00000193	
All Commercial Bank's_Credit	0.000000	0.534000	0.000000	0.483100	0.000000	0.516800
(SE)	0.000000023		3.53E-08		3.03E-08	
LPEI x ALL Commercial Bank's_Credit	0.000000	0.001800	0.000000	0.010100	0.000000	0.005300
(SE)	3.09E-12		2.61E-12		2.54E-12	
Economic Sector Fixed Effects (Cross)						
AGRICULTURE			-0.014705		-0.012633	
BUSINESS			0.004395		0.003739	
CONSTRUCTION			0.003829		0.003776	
ELECTRICITY			-0.005909		-0.004988	
MANUFACTURING			0.011006		0.009729	
MINING			-0.040661		-0.035843	
SOCIAL			-0.007028		-0.006493	
TRADING			0.000792		-0.001439	
TRANSPORTATION			0.048281		0.044153	
R-squared	20.279%		64.490%		16.260%	
Adjusted R-squared	16.226%		56.831%		12.002%	
F-statistic	5.002798		8.420133		3.818585	
Prob(F-statistic)	0.003702		0.000000		0.014385	

Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.937002	(8,51)	0
Cross-section Chi-square	50.949008	8	0

Test cross-section random effects	Statistic	d.f.	Prob.
Cross-section random	1.168702	3	0.7605

From Table 26, we test the alternative hypothesis that having LPEI and other commercial banking institution are significant and have positive effect on economy. The results show that the model follow fixed effect model. The coefficient for LPEI's credit interaction with other commercial bank is significant (0.0101) and positive (6.97E-12). It concludes that having LPEI in Indonesian economy is good and have positive impact on improving a financial inclusion condition.

CHAPTER IV: CONCLUSION AND RECOMMENDATIONS

A. Conclusion

From qualitative analysis I conclude that:

- To compare LPEI either with domestic commercial bank or foreign ECA, indeed LPEI is a profitable institution.
- There were some critiques to LPEI, for example; in giving credit it should be cautious and required to apply precautionary principle, it might overlap with other financing institutions that already exist and have been going well, its status as a legal entity must be formulated in right legal form (BHMN or not), it should clearly define parameter or indicator for a transaction or project that is commercially considered as sub bankable but feasible or categorized as National Interest Account, and it should be inclusive but remains selective and prioritize MSMEs.

Also, from quantitative analysis I would say that:

- LPEI's credit is not significant in boosting sectoral economic growth.
- From industrial fixed effects, some economic sector run faster than other. From fastest to slowest they are Transportation, Construction, Business, Manufacturing, Electricity, Social, Agriculture, and Mining.
- It's not useful to include more variable come from others commercial banks credit into the model because it is highly correlated with LPEI's credit.
- LPEI's credit is not significant in boosting export value of each major trading commodity.
- Having LPEI in Indonesian economy is good and have positive impact on improving a financial inclusion condition

B. Policy Recommendations

- Since LPEI considered as profitable institution, it is better to reduce government involvement in LPEI and give higher portion to private. For example, the Government can reduce its capital contribution to LPEI each year.

- The Government as the owner of LPEI should response to various critiques, solve it, and give adequate information to public to avoid misperception about LPEI.
- Because LPEI is not significant in boosting export, it doesn't mean that LPEI should be closed. Probably because LPEI has small shares compare to National Export. The Government should find a way to increase the lending capacity of LPEI so that it can play more in the export credit market.
- If the Government want to boost the economy as fast as possible, then they should focus more on some sectors, not all. From the industrial fixed effect, the three fastest growing sectors are Transportation, Construction, Business Services.
- Despite the debate whether LPEI should be given to private or remains in the Government, the function of LPEI as export credit agency should be maintained. Because, having LPEI together with other commercial bank are beneficial for the economic inclusiveness.

C. Suggestions for further research:

- It is better to work on micro level data at firm level. The problem that it is confidential may be tackle by doing persuasion to LPEI through the Government, for example through Fiscal Agency Board (BKF).
- Conduct more robust quantitative analysis, for example doing Randomized Controlled Trial to potential exporters using probit (choice model).

REFERENCES

Allen, R. (2014, February 4). *The Export-Import Bank's Relevancy Today.* Retrieved from https://www.nyu.edu: https://www.nyu.edu/brademas/pdf/RobertAllen.pdf

Balraj. (2014). Financial Comparison of Export Credit Agencies (ECAs) / Export Import Banks of India, China, USA, Russia, South Africa And Australia. *Journal of Indian Research No. 2 Vol. 3*, 73-83.

Bernanke, B. (1983). Non Monetary Effects of the Financial Crisis in the Propagation of the Great Depression. *The American Economic Review*, 257-276.

Congressional Budget Office of United States. (1981). *Cost and Benefit of Export Import Bank Loan Subsidy Program.* Congressional Budget Office of United States.

Daniel Paravisini, V. R. (2011). Dissecting The Effect of Credit Supply on Trade: Evidence From Matched Credit-Export Data. *National Bureau of Economic Research*.

E.Bumsteinas. (2012). Public goods approach to innovation in financial inclusion. *European Microfinance Week, Luxemburg.*

Estrin, S. e. (2000). *The Economic Rationale for the Public Provision of Export Credit Insurance by ECGD.* Retrieved from NERA-National Economic Research Associates: http://www.ecgd.gov.uk/

Feenstra, R. L. (2014). Exports and Credit Constraint under Incomplete Information: Theory and Evidence from China. *The Review of Economics and Satistics*.

Finance Roll. (2015, January 22). *2015, LPEI Proyeksikan Pembiayaan Tumbuh Hingga 9,64 %*. Retrieved from http://financeroll.co.id: http://financeroll.co.id/news/2015-lpei-proyeksikan-pembiayaan-tumbuh-hingga-964/

Friedman, M. a. (1963). Monetary History of the United States. *Princeton University Press*.

Handoko, R. (2015). The Determinants of Current Account Balance in Indonesia. *Kajian Ekonomi dan Keuangan, BKF*, 140.

Head of Securities Exchange Audit Agency Ordinance No. 2. (2011). Indonesia.

In, S. Y. (2014). Do Export Credit Agencies Benefit the Economy? *Stanford International Policy Review. Stanford University*.

Indonesia Finance Today. (2015, August 4). *Pembiayaan Ekspor dari LPEI harus Selektif*. Retrieved from http://www.ift.co.id: http://www.ift.co.id/news/makro/indonesia/pembiayaan-ekspor-dari-lpei-harus-selektif

Kamar Dagang Indonesia. (2008, April 30). Retrieved from www.kadin-indonesia.or.id: http://www.kadin-indonesia.or.id/enm/images/dokumen/KADIN-107-2594-05032008.pdf

Kementerian Perdagangan. (2009, November 15). *Eximbank: Sektor Manufaktur Dominasi Data Eksportir*. Retrieved from http://www.kemenperin.go.id: http://www.kemenperin.go.id/artikel/1493/Eximbank:-Sektor-Manufaktur-Dominasi-Data-Eksportir

Khan, H. R. (2012). Issues and challenges in financial inclusion – policies,partnerships, processes & products. *Financial inclusion in Indian Economy.*

KSEI. (n.d.). *Profile Issuer of Lembaga Pembiayaan Ekspor Indonesia (Indonesia Eximbank).* Retrieved from https://akses.ksei.co.id: https://akses.ksei.co.id/companies/profile/lembaga-pembiayaan-ekspor-indonesia-indonesia-eximbank

Laffont, J. J. (1995). Regulation, Moral Hazard and Insurance of Environmental Risk. *Journal of Public Economics 58*, 319-336.

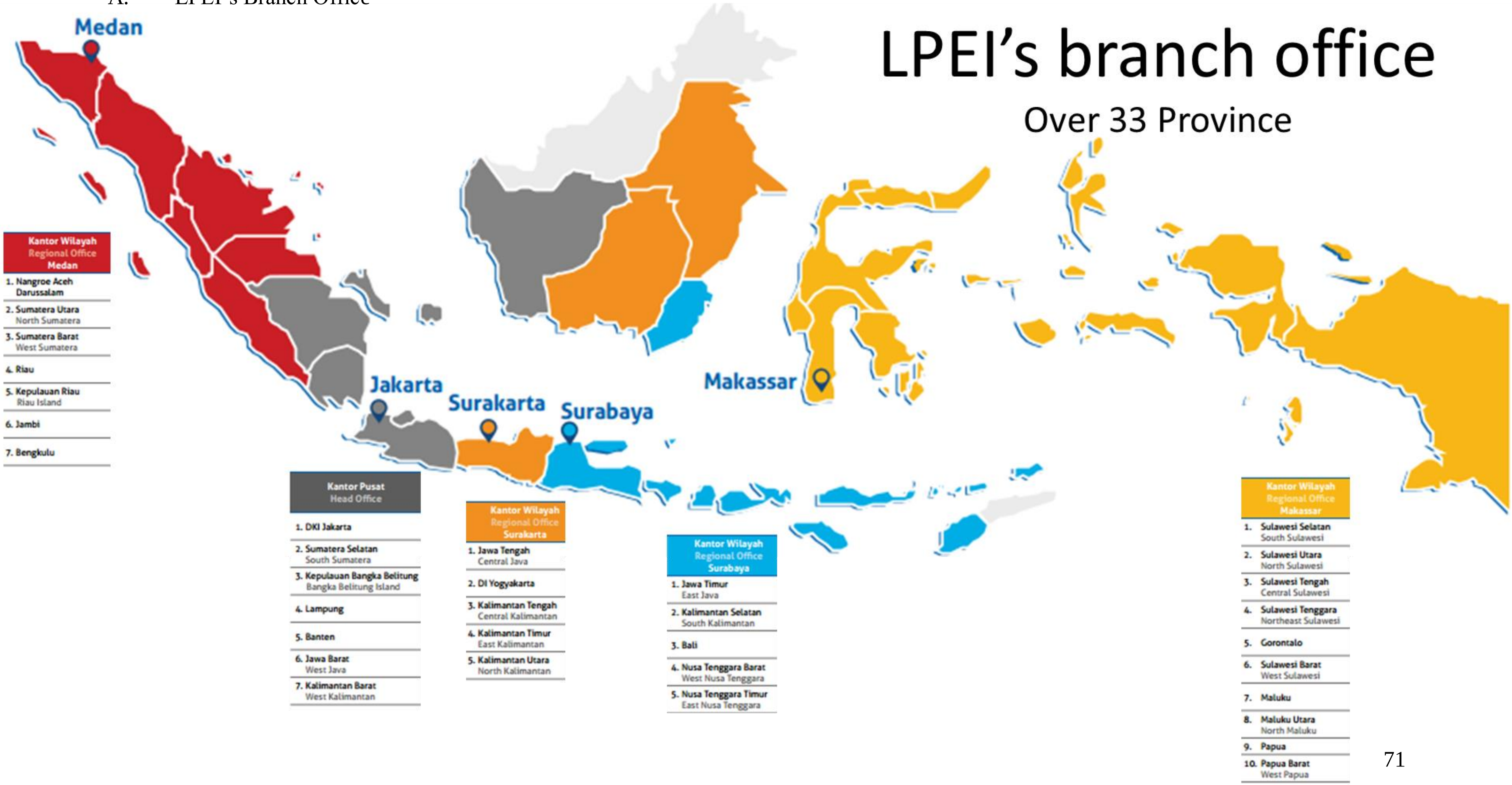
Law No 2 of 2009. (n.d.). Lembaga Pembiayaan Ekspor Impor Indonesia. *2009*. Indonesia.
Lembaga Pembiayaan Ekspor Indonesia. (2015). *FInancial Statement.* Jakarta: LPEI.
Mahadi, T. (2016, January 25). *LPEI pasang target pembiayaan Rp 83 triliun.* Retrieved from http://keuangan.kontan.co.id: http://keuangan.kontan.co.id/news/lpei-pasang-target-pembiayaan-rp-83-triliun
Manova, K. (2008). Credit Constraints, Equity Market Liberalizations and International Trade. *Journal of International Economics,* 33-47.
Manova, K. W.-J. (2014). Firm Exports and Multinational Activity under Credit Constraints. *Review of Economics and Statistics*.
Marin, D. a. (1998). Economic Incentives and International Trade. *European Economic Review 42*, 705-716.
Marin, D. a. (2002). The Economic Institution of International Barter. *The Economic Journal 112*, 293-316.
Minister of Finance Ordinance No. 106. (2009). Tata Cara Pengusulan, Pengangkatan dan Pemberhentian Dewan Direktur Lembaga Pembiayaan Ekspor Indonesia. Indonesia.
Minister of Finance Ordinance No. 139. (2009). Tata Cara Penyusunan, Penyampaian, dan Pengubahan Rencana Jangka Panjang Serta Rencana Kerja dan Anggaran Tahunan Lembaga Pembiayaan Ekspor Indonesia. Indonesia.
Minister of Finance Ordinance No. 140. (2009). Pembinaan dan Pengawasan Lembaga Pembiayaan Ekspor dan Impor Indonesia. Indonesia.
Minister of Finance Ordinance No. 141. (2009). Good Corporate Governance Lembaga Pembiayaan Ekspor Impor Indonesia. Indonesia.
Minister of Finance Ordinance No. 142. (2009). Manajemen Risiko Lembaga Pembiayaan Ekspor Impor Indonesia. Indonesia.
Minister of Finance Ordinance No. 143. (2009). Prinsip Mengenal Nasabah Lembaga Pembiayaan Ekspor Impor Indonesia. Indonesia.
Ministry of Finance. (2015, September 16). *LPEI Dapat Tambahan Modal Rp1 Triliun*. Retrieved from http://www.kemenkeu.go.id/: http://www.kemenkeu.go.id/Berita/lpei-dapat-tambahan-modal-rp1-triliun
Ministry of Finance. (2015, August 25). *Menkeu Tugaskan LPEI Dukung UMKM Berorientasi Ekspor*. Retrieved from http://www.kemenkeu.go.id: http://www.kemenkeu.go.id/Berita/menkeu-tugaskan-lpei-dukung-umkm-berorientasi-ekspor
Moody's Investor Service. (2014, December 17). *Moody's affirms Indonesia Eximbank's ratings; raises BCA to ba3 from b1.* Retrieved from https://www.moodys.com: https://www.moodys.com/research/Moodys-affirms-Indonesia-Eximbanks-ratings-raises-BCA-to-ba3-from--PR_314810
Moody's Investor Service. (2015, October 28). *Moody's assigns Baa3 rating to Indonesia Eximbank's SGD senior notes.* Retrieved from https://www.moodys.com: https://www.moodys.com/research/Moodys-assigns-Baa3-rating-to-Indonesia-Eximbanks-SGD-senior-notes--PR_336597
Paul Levine, A. M. (2004). Export Credit Guarantees, Moral Hazard, and Export Quality.
Poncet, J. J. (2010). Export performance and Credit Constraints in China. *Centre d'Etudes Prospectives et d'Informations,* 33.
Rajan, R. a. (1998). Financial Dependence and Growth. *American Economic Review 88,* 559-586.
Rudolfs Bems, R. C.-M. (2012). the Great Trade Collapse. *NBER Working Paper Series,* 18632.

Sukiwan, M. Q. (2015, May 19). *Pembiayaan ekspor LPEI tumbuh 47%*. Retrieved from http://keuangan.kontan.co.id: http://keuangan.kontan.co.id/news/pembiayaan-ekspor-lpei-tumbuh-47

Wikanto, A. (2010, August 27). *LPEI harus alokasi 10% pembiayaan ke UMKM*. Retrieved from http://nasional.kontan.co.id: http://nasional.kontan.co.id/news/lpei-harus-alokasi-10-pembiayaan-ke-umkm-1

ANNEXES

A. LPEI's Branch Office



B. Indonesia's Financial Inclusion Indicator from World Bank

Indonesia

East Asia & Pacific			Lower middle income
Population, age 15+ (millions)	177.7	GNI per capita ($)	3,580

	Country data	East Asia & Pacific	Lower middle income
Account (% age 15+)			
All adults	36.1	69.0	42.7
Women	37.5	67.0	36.3
Adults belonging to the poorest 40%	22.2	60.9	33.2
Young adults (% ages 15–24)	35.2	60.7	34.7
Adults living in rural areas	28.7	64.5	40.0
Financial Institution Account (% age 15+)			
All adults	35.9	68.8	41.8
All adults, 2011	19.6	55.1	28.7
Mobile Account (% age 15+)			
All adults	0.4	0.4	2.5
Access to Financial Institution Account (% age 15+)			
Has debit card	25.9	42.9	21.2
Has debit card, 2011	10.5	34.7	10.1
ATM is the main mode of withdrawal (% with an account)	70.9	53.3	42.4
ATM is the main mode of withdrawal (% with an account), 2011	51.1	37.0	28.1
Use of Account in the Past Year (% age 15+)			
Used an account to receive wages	6.6	15.1	5.6
Used an account to receive government transfers	3.0	8.1	3.3
Used a financial institution account to pay utility bills	2.9	11.8	3.1
Other Digital Payments in the Past Year (% age 15+)			
Used a debit card to make payments	8.5	14.8	9.6
Used a credit card to make payments	1.1	10.8	2.8
Used the Internet to pay bills or make purchases	5.1	15.6	2.6
Domestic Remittances in the Past Year (% age 15+)			
Sent remittances	17.9	16.6	14.2
Sent remittances via a financial institution (% senders)	52.4	36.9	30.9
Sent remittances via a mobile phone (% senders)	3.6	8.7	7.7
Sent remittances via a money transfer operator (% senders)	8.7	18.5	18.3
Received remittances	31.0	20.6	17.8
Received remittances via a financial institution (% recipients)	36.3	29.0	26.0
Received remittances via a mobile phone (% recipients)	0.2	4.9	5.7
Received remittances via a money transfer operator (% recipients)	7.9	15.8	16.6
Savings in the Past Year (% age 15+)			
Saved at a financial institution	26.6	36.5	14.8
Saved at a financial institution, 2011	15.3	28.5	11.1
Saved using a savings club or person outside the family	25.2	6.0	12.4
Saved any money	69.3	71.0	45.6
Saved for old age	27.1	36.5	12.6
Saved for a farm or business	22.6	21.3	11.8
Saved for education or school fees	33.3	30.7	20.0
Credit in the Past Year (% age 15+)			
Borrowed from a financial institution	13.1	11.0	7.5
Borrowed from a financial institution, 2011	8.5	8.6	7.3
Borrowed from family or friends	41.5	28.3	33.1
Borrowed from a private informal lender	2.9	2.5	8.5
Borrowed any money	56.6	41.2	47.4
Borrowed for a farm or business	11.7	8.3	9.2
Borrowed for education or school fees	12.2	7.1	10.1
Outstanding mortgage at a financial institution	5.5	8.0	4.7

C. LPEI’s Balance Sheet From 2009-2015 (million IDR)

Account	2009	2010	2011	2012	2013	2014	2015
Cash	210	505	342	333	323	540	464
Current accounts with Bank Indonesia	1.659	17.033	22.323	24.923	5.199	6.861	181.422
Current accounts with banks	75.926	112.698	66.108	57.694	76.718	159.580	148.595
Placements with banks	2.453.803	4.855.515	5.853.038	6.528.038	6.277.199	5.400.995	7.278.113
Securities	1.328.564	489.212	337.685	360.027	368.136	422.282	647.310
Allowance for impairment losses	(9.724)	(50.000)	(50.000)	(50.000)	(50.000)	(50.000)	-
	1.318.840	439.212	287.685	310.027	318.136	372.282	647.310
Reverse repos	-	-	-	-	-	-	1.494.569
Derivatives receivable	5.792	673	5.176	-	-	507	517
Financing and receivables	9.092.126	14.720.791	18.777.964	24.428.804	35.795.061	46.970.384	63.583.440
Allowance for impairment losses	(546.027)	(810.630)	(894.283)	(930.542)	(1.163.364)	(1.310.655)	(1.655.093)
	8.546.099	13.910.161	17.883.681	23.498.262	34.631.697	45.659.729	61.928.347
Sharia financing and receivables	186.996	1.016.033	1.763.120	2.625.409	4.696.577	8.232.702	11.245.775
Allowance for doubtful accounts	(1.870)	(10.160)	(17.631)	(26.254)	(46.966)	(54.952)	(181.440)
	185.126	1.005.873	1.745.489	2.599.155	4.649.611	8.177.750	11.064.335
Total financing and receivables - net	8.731.225	14.916.034	19.629.170	26.097.417	39.281.308	53.837.479	72.992.682
Claims for tax refund	-	159.412	202.101	184.144	150.648	150.648	-
Prepaid expenses		15.802	3.662	32.695	40.457	46.362	57.539
Insurance receivables	-	-	58	62	167	258	244
Reinsurance assets	-	-	-	129	179	293	5.160
Acceptances receivable	241.675	71.447	174.440	28.667	219.701	333.461	1.336.931
Premises and equipment	-	-	-	-	-	-	-
Cost	20.156	30.737	58.731	69.117	79.425	194.522	777.062
Accumulated depreciation	(13.346)	(16.180)	(21.486)	(27.510)	(33.654)	(46.553)	(65.743)
	6.810	14.557	37.245	41.607	45.771	147.969	711.319
Deferred tax assets - net	21.536	9.414	14.322	-	29.048	16.099	63.588
Other assets	114.960	26.300	25.851	27.015	29.406	30.068	52.783
TOTAL ASSETS	12.972.436	20.638.602	26.321.521	33.332.751	46.474.260	60.503.402	84.971.236
LIABILITIES AND EQUITY	-	-	-	-	-	-	-
LIABILITIES	-	-	-	-	-	-	-
Current liabilities	5.837	11.171	13.352	13.331	11.190	10.224	17.299

Account	2009	2010	2011	2012	2013	2014	2015
Acceptances payable	244.116	72.169	176.202	28.667	219.701	333.461	1.336.931
Taxes payable	42.516	13.631	21.480	45.195	91.839	148.109	33.569
Debt securities issued	3.169.157	5.341.000	7.191.000	13.952.750	17.220.000	21.804.500	28.959.447
Unamortized bond issuance cost	-	(9.695)	(13.430)	(26.662)	(24.931)	(27.259)	(25.068)
Unamortized bond discount	-	-	-	(28.424)	(28.200)	(20.511)	(13.358)
	3.169.157	5.331.305	7.177.570	13.897.664	17.166.869	21.756.730	28.921.021
Liability related to reverse repos	-	-	-	-	-	-	1.494.569
Derivatives payable	-	-	4.894	-	-	503	3.553
Fund borrowings	4.948.707	8.474.818	11.561.021	11.361.585	20.072.996	26.952.488	39.044.798
Insurance payable	-	-	-	294	418	149	860
Guarantee payable	-	-	11	328	183	357	1.501
Insurances liabilities	-	-	-	184	291	418	7.371
Estimated guarantee claim	44.281	884	5.771	-	-	-	4.638
Liability for employee benefits	-	32.970	62.267	47.100	63.724	88.138	108.520
Other liabilities	161.076	199.826	335.009	379.805	551.018	775.485	1.634.380
Deferred tax liability	-	-	-	8.551	-	-	-
TOTAL LIABILITIES	8.615.690	14.136.774	19.357.577	25.782.704	38.178.229	50.066.062	72.609.010
EQUITY	-	-	-	-	-	-	-
Government capital contribution	4.321.586	6.321.586	6.321.586	6.321.586	6.321.586	7.375.956	9.728.588
Unrealized loss on available-for-sale securities, net of deferred tax	-	(473)	4.909	3.206	(40.644)	(29.460)	(48.056)
Remeasurement of defined benefit obligation, net of deferred tax	-	-	-	-	(4.109)	(11.377)	(12.059)
Retained earnings	35.160	-	-	-	-	-	-
Appropriated: General reserve	-	-	170.130	532.049	893.764	1.515.723	367.580
Appropriated: Specific reserve	-	-	41.120	93.780	259.125	304.122	712.817
	-	-	211.250	625.829	1.152.889	1.819.845	1.080.397
Unappropriated	-	180.715	426.199	599.426	866.309	1.282.376	1.613.356
TOTAL EQUITY	4.356.746	6.501.828	6.963.944	7.550.047	8.296.031	10.437.340	12.362.226
TOTAL LIABILITIES AND EQUITY	12.972.436	20.638.602	26.321.521	33.332.751	46.474.260	60.503.402	84.971.236

D. LPEI's Income Statement From 2009-2015 (million IDR)

Account	2009	2010	2011	2012	2013	2014	2015
INCOME AND EXPENSES FROM OPERATIONS Interest income and sharia profit sharing							
Interest	333.311	1.176.550	1.572.494	1.915.052	2.538.520	3.438.674	4.647.790
Sharia profit sharing	9.413	57.974	94.390	195.686	286.092	521.810	770.791
Total interest income and sharia profit sharing	342.724	1.234.524	1.666.884	2.110.738	2.824.612	3.960.484	5.418.581
Interest expense	(173.522)	(616.402)	(737.140)	(1.158.693)	(1.543.640)	(2.082.396)	(3.112.986)
INTEREST INCOME AND INCOME FROM PROFIT SHARING - NET	169.202	618.122	929.744	952.045	1.280.972	1.878.088	2.305.595
OTHER OPERATING INCOME							
Income from insurance-net			4	136	267	481	853
Income from guarantee			-	175	348	352	999
Increase in reinsurance assets			-	129	50	114	4.844
Decrease/(increase) in insurance liabilities			-	(184)	(107)	(127)	(6.910)
Gain on foreign exchange transactions - net	11.004	(11.243)	6.852	19.980	103.357	3.004	143.034
Non financing and receivables related fees and commission	3.250	10.282	6.344	17.941	134.058	148.930	217.957
Gain on sale of securities	-	5.099	6.240	12.224	1.493	1.939	8.617
Unrealized gain (loss) on changes in fair value of securities - net			-	(24)	(9.320)	2.941	(1.857)
Others	(126)	4.203	4.524	8.821	22.165	32.308	26.936
TOTAL OTHER OPERATING INCOME	14.128	8.341	23.964	59.198	252.311	189.942	394.473
Provision for impairment losses on financial assets	(82.197)	(219.837)	(148.301)	(71.426)	(205.384)	(120.677)	(386.415)
Provision for impairment losses on estimated guarantee claim	(4.510)	41.965	(6.304)	5.985	-	-	(4.638)
OTHER OPERATING EXPENSES							
Salaries and benefits	(24.400)	(100.753)	(166.746)	(166.976)	(204.810)	(297.006)	(330.820)
General and administrative	(21.386)	(89.385)	(90.569)	(98.173)	(123.658)	(159.665)	(184.489)
Others	(537)	(11.190)	(539)	(1.836)	(1.173)	(1.645)	(4.155)
TOTAL OTHER OPERATING EXPENSES	(46.323)	(201.328)	(257.854)	(266.985)	(329.641)	(458.316)	(519.464)
INCOME FROM OPERATIONS	50.300	247.263	541.249	678.817	998.258	1.489.037	1.789.551
NON-OPERATING INCOME - NET	-	(1.191)	2.511	33.820	(1.150)	4.535	10.890

Account	2009	2010	2011	2012	2013	2014	2015
INCOME BEFORE TAX EXPENSE	50.300	246.072	543.760	712.637	997.108	1.493.572	1.800.441
TAX EXPENSE	(15.138)	(50.426)	(83.116)	(127.014)	(175.498)	(311.111)	(372.887)
INCOME FOR THE YEAR	35.162	195.646	460.644	585.623	821.610	1.182.461	1.427.554
OTHER COMPREHENSIVE INCOME:							
OTHER COMPREHENSIVE INCOME TO BE RECLASSIFIED TO PROFIT OR LOSS							
Impact of SFAS 110			-	(2.183)	-	-	-
Net changes in fair value of available-for-sale securities			6.920	2.835	(57.596)	15.323	(23.573)
Amounts transferred to profit or loss related to sale of available-for-sale securities			255	(2.922)	(871)	(411)	(1.222)
Taxes relating to components of other comprehensive income			(1.793)	567	14.617	(3.728)	6.199
	-	-	5.382	(1.703)	(43.850)	11.184	(18.596)
OTHER COMPREHENSIVE INCOME NOT TO BE RECLASSIFIED TO PROFIT OR LOSS							
Remeasurement of defined benefit obligation			-	-	-	(9.691)	(909)
Taxes relating to components of other comprehensive income			-	-	-	2.423	227
	-	-	-	-	-	(7.268)	(682)
OTHER COMPREHENSIVE LOSS - NET OF TAX	-	-	5.382	(1.703)	(43.850)	3.916	(19.278)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	35.162	195.646	466.026	583.920	777.760	1.186.377	1.408.276

E. Public Offering of LPEI’s Bond

Year Issuance	Term	Interest Rate p.a.	Year Maturity	Bond Name	Nominal	Currency
2003	5	13,00%	2008	BEI Bonds I - 2003	300.000	Million IDR
2005	1	9,50%	2006	BEI Bonds II Series A - 2005	285.000	Million IDR
2005	5	12,50%	2010	BEI Bonds II Series B - 2005	200.000	Million IDR
2006	3	12,50%	2009	BEI Bonds III Series A - 2006	150.000	Million IDR
2006	4	12,70%	2010	BEI Bonds III Series B - 2006	200.000	Million IDR
2006	5	12,80%	2011	BEI Bonds III Series C - 2006	150.000	Million IDR
2009	1	10,00%	2010	BEI Bonds IV Series A - 2009	309.000	Million IDR
2009	3	11,63%	2012	BEI Bonds IV Series B - 2009	157.000	Million IDR
2009	5	12,00%	2014	BEI Bonds IV Series C - 2009	607.000	Million IDR
2009	7	12,75%	2016	BEI Bonds IV Series D - 2009	1.427.000	Million IDR
2010	1	7,55%	2011	IEB Bonds I Series A - 2010	1.250.000	Million IDR
2010	3	8,85%	2013	IEB Bonds I Series B - 2010	425	Million IDR
2010	5	9,60%	2015	IEB Bonds I Series C - 2010	250	Million IDR
2010	7	10,00%	2017	IEB Bonds I Series D - 2010	1.075.000	Million IDR
2011	3	7,00%	2014	IEB Phase I Shelf Registration Offering Bonds I Series A - 2011	202	Million IDR
2011	5	7,75%	2016	IEB Phase I Shelf Registration Offering Bonds I Series B - 2011	243	Million IDR
2011	7	8,50%	2018	IEB Phase I Shelf Registration Offering Bonds I Series C - 2011	2.805.000	Million IDR
2012	1	6,25%	2013	IEB Phase II Shelf Registration Offering Bonds I Series A - 2012	1.434.000	Million IDR
2012	3	6,50%	2015	IEB Phase II Shelf Registration Offering Bonds I Series B - 2012	666	Million IDR
2013	1	6,15%	2014	IEB Phase II Shelf Registration Offering Bonds I Series A - 2013	1.920.000	Million IDR
2013	3	6,14%	2016	IEB Phase II Shelf Registration Offering Bonds I Series B - 2013	1.940.000	Million IDR
2014	1	8,25%	2015	IEB Phase II Shelf Registration Offering Bonds I Series A - 2014	803	Million IDR
2014	2	8,50%	2016	IEB Phase II Shelf Registration Offering Bonds I Series B - 2014	134	Million IDR
2014	3	9,25%	2017	IEB Phase II Shelf Registration Offering Bonds I Series C - 2014	1.594.000	Million IDR
2014	5	9,75%	2019	IEB Phase II Shelf Registration Offering Bonds I Series D - 2014	1.469.000	Million IDR
2014	3	9,25%	2017	IEB Phase II Shelf Registration Offering Bonds II - 2014	500	Million IDR

Year Issuance	Term	Interest Rate p.a.	Year Maturity	Bond Name	Nominal	Currency
2014	1	8,25%	2015	IEB Phase II Shelf Registration Offering Bonds III Series A - 2014	393	Million IDR
2014	3	9,25%	2017	IEB Phase II Shelf Registration Offering Bonds III Series B - 2014	1.485.000	Million IDR
2014	5	9,75%	2019	IEB Phase II Shelf Registration Offering Bonds III Series C - 2014	828	Million IDR
2015	3	9,25%	2018	IEB Phase II Shelf Registration Offering Bonds IV Series A - 2015	800	Million IDR
2015	5	9,75%	2020	IEB Phase II Shelf Registration Offering Bonds IV Series B - 2015	700	Million IDR
2015	1	8,25%	2016	IEB Phase II Shelf Registration Offering Bonds V Series A - 2015	575	Million IDR
2015	3	9,00%	2018	IEB Phase II Shelf Registration Offering Bonds V Series B - 2015	1.298.000	Million IDR
2015	5	9,50%	2020	IEB Phase II Shelf Registration Offering Bonds V Series C - 2015	2.727.000	Million IDR
2015	1	8,40%	2016	IEB Phase II Shelf Registration Offering Bonds VI Series A - 2015	757	Million IDR
2015	3	9,20%	2018	IEB Phase II Shelf Registration Offering Bonds VI Series B - 2015	309	Million IDR
2015	5	9,50%	2020	IEB Phase II Shelf Registration Offering Bonds VI Series C - 2015	913	Million IDR
2012	5	3,75%	2017	IEB EMTN Program (full amount) - 2012	500.000.000	USD
2015	5	4,14%	2020	IEB Medium Term Note (EMTN) Program (full amount) - 2015	50.000.000	SGD

F. Regression Data Sets

1. Data Sets 1

Regress Sectoral Economic Growth (%) on Total LPEI's Credit (Million IDR)

	2009	2010	2011	2012	2013	2014	2015
GROWTHAGRICULTURE	3.96%	3.01%	3.37%	4.20%	3.44%	3.29%	4.02%
GROWTHBUSINESS	5.21%	5.67%	6.84%	7.14%	7.57%	5.96%	7.01%
GROWTHCONSTRUCTION	7.07%	6.95%	6.07%	7.39%	6.57%	6.58%	6.65%
GROWTHELECTRICITY	14.29%	5.33%	4.71%	6.32%	5.78%	5.50%	1.21%
GROWTHMANUFACTURING	2.21%	4.74%	6.14%	5.74%	5.56%	4.86%	4.25%
GROWTHMINING	4.47%	3.86%	1.60%	1.58%	1.41%	-0.22%	-5.08%
GROWTHSOCIAL	6.42%	6.04%	6.80%	5.22%	5.47%	5.92%	6.84%
GROWTHTRADING	1.28%	8.69%	9.24%	8.16%	5.89%	4.64%	2.47%
GROWTHTRANSPORTATION	15.85%	13.41%	10.70%	9.98%	9.80%	9.31%	7.03%
LPEIAGRICULTURE	1,033,178	1,603,695	2,313,182	3,633,056	4,377,239	6,105,218	10,360,412
LPEIBUSINESS	-	-	-	3,333,423	1,036	3,632,609	4,711,629
LPEICONSTRUCTION	-	-	-	909	2,388,943	2,903,916	3,515,529
LPEIELECTRICITY	-	-	-	-	680	2,009,132	2,191,647
LPEIMANUFACTURING	4,982,000	7,904,636	8,745,404	12,959,862	16,861,732	24,670,273	35,312,096
LPEIMINING	770,678	1,722,748	2,142,310	1,484,065	4,276,130	7,551,226	9,027,639
LPEISOCIAL	-	-	-	-	238	279,212	484,395
LPEITRADING	743,593	16,206	758,829	1,328,363	811	971,376	2,012,952
LPEITRANSPORTATION	-	-	-	1,743,862	2,610,495	4,515,389	4,659,810

2. Data Sets 2

Regress Sectoral Economic Growth (%) on LPEI's Credit in Term of Local and Foreign Currency (Million IDR)

	2009	2010	2011	2012	2013	2014	2015
GROWTH_AGRICULTURE	3.96%	3.01%	3.37%	4.20%	3.44%	3.29%	4.02%
GROWTH_BUSINESSSERVICES	5.21%	5.67%	6.84%	7.14%	7.57%	5.96%	7.01%
GROWTH_CONSTRUCTION	7.07%	6.95%	6.07%	7.39%	6.57%	6.58%	6.65%
GROWTH_ELECTRICITY	14.29%	5.33%	4.71%	6.32%	5.78%	5.50%	1.21%
GROWTH_MANUFACTURING	2.21%	4.74%	6.14%	5.74%	5.56%	4.86%	4.25%
GROWTH_MINING	4.47%	3.86%	1.60%	1.58%	1.41%	-0.22%	-5.08%
GROWTH_SOCIAL	6.42%	6.04%	6.80%	5.22%	5.47%	5.92%	6.84%
GROWTH_TRADING	1.28%	8.69%	9.24%	8.16%	5.89%	4.64%	2.47%
GROWTH_TRANSPORTATION	15.85%	13.41%	10.70%	9.98%	9.80%	9.31%	7.03%
RUPIAH_AGRICULTURE	655,476	1,234,521	1,541,371	3,632,915	3,111,002	4,188,796	7,926,210
RUPIAH_BUSINESSSERVICES	-	-	-	1,654,895	858	2,503,515	2,884,116
RUPIAH_CONSTRUCTION	-	-	-	530	1,158,597	2,021,698	2,926,963
RUPIAH_ELECTRICITY	-	-	-	-	218	715,780	863,488
RUPIAH_MANUFACTURING	2,676,545	3,252,618	3,825,818	5,685,544	7,716,674	10,814,828	16,022,405
RUPIAH_MINING	48,850	107	24,450	118	262	242,936	578,871
RUPIAH_SOCIAL	-	-	-	-	232	273,031	477,514
RUPIAH_TRADING	501,265	685	728,113	1,327,890	425	485,402	796,280
RUPIAH_TRANSPORTATION	-	-	-	899	778	2,133,107	1,977,373
USD_AGRICULTURE	377,702	369,174	771,811	141	1,266,237	1,916,422	2,434,202
USD_BUSINESSSERVICES	-	-	-	1,678,528	178	1,129,094	1,827,513
USD_CONSTRUCTION	-	-	-	379	1,230,346	882,218	588,566

USD_ELECTRICITY	-	-	-	-	462	1,293,352	1,328,159
USD_MANUFACTURING	2,305,455	4,652,018	4,919,586	7,274,318	9,145,058	13,855,445	19,289,691
USD_MINING	721,828	1,722,641	2,117,860	1,483,947	4,275,868	7,308,290	8,448,768
USD_SOCIAL	-	-	-	-	6	6,181	6,881
USD_TRADING	242,328	15,521	30,716	473	386	485,974	1,216,672
USD_TRANSPORTATION	-	-	-	1,742,963	2,609,717	2,382,282	2,682,437

3. Data Sets 3

Regress Economic Growth (%) on LPEI's and Commercial Bank's Credit (Million IDR)

	LN_PDB	LN_LPEI	LN_PRIV	LN_REG	LN_RUR	LN_STA
2005M01	11.87	6.23	11.97	9.48	8.90	11.93
2005M02	11.87	6.23	11.99	9.49	8.91	11.95
2005M03	11.87	6.23	12.02	9.52	8.94	11.97
2005M04	11.89	6.23	12.04	9.54	8.96	11.98
2005M05	11.89	6.23	12.07	9.56	9.04	12.00
2005M06	11.89	6.23	12.10	9.58	9.07	12.01
2005M07	11.92	6.23	12.11	9.60	9.08	12.01
2005M08	11.92	6.23	12.15	9.63	9.10	12.04
2005M09	11.92	6.23	12.18	9.65	9.12	12.04
2005M10	11.89	6.23	12.19	9.66	9.14	12.05
2005M11	11.89	6.23	12.19	9.66	9.14	12.06
2005M12	11.89	6.23	12.22	9.63	9.14	12.07
2006M01	11.92	6.53	12.20	9.61	9.17	12.05
2006M02	11.92	6.53	12.20	9.63	9.18	12.06
2006M03	11.92	6.53	12.21	9.66	9.10	12.07
2006M04	11.94	6.53	12.22	9.67	8.98	12.07
2006M05	11.94	6.53	12.24	9.70	9.12	12.08
2006M06	11.94	6.53	12.26	9.74	9.16	12.11
2006M07	11.97	6.53	12.27	9.75	9.16	12.09
2006M08	11.97	6.53	12.28	9.78	9.18	12.11
2006M09	11.97	6.53	12.30	9.81	9.20	12.14
2006M10	11.95	6.53	12.31	9.82	9.20	12.15
2006M11	11.95	6.53	12.33	9.83	9.19	12.17
2006M12	11.95	6.53	12.38	9.78	9.19	12.23
2007M01	11.97	6.28	12.35	9.75	9.19	12.18
2007M02	11.97	6.28	12.36	9.75	9.21	12.19
2007M03	11.97	6.28	12.38	9.78	9.23	12.23
2007M04	12.00	6.28	12.41	9.83	9.14	12.20
2007M05	12.00	6.28	12.43	9.83	9.17	12.19
2007M06	12.00	6.28	12.47	9.86	9.20	12.27
2007M07	12.04	6.28	12.48	9.89	9.28	12.27
2007M08	12.04	6.28	12.51	9.94	9.32	12.30
2007M09	12.04	6.28	12.54	9.99	9.35	12.31

	LN_PDB	LN_LPEI	LN_PRIV	LN_REG	LN_RUR	LN_STA
2007M10	12.01	6.28	12.56	10.01	9.28	12.33
2007M11	12.01	6.28	12.60	10.04	9.35	12.36
2007M12	12.01	6.28	12.65	9.97	9.34	12.43
2008M01	12.03	6.68	12.63	9.92	9.37	12.37
2008M02	12.03	6.68	12.64	9.95	9.38	12.37
2008M03	12.03	6.68	12.69	9.99	9.39	12.41
2008M04	12.06	6.68	12.71	10.04	9.43	12.43
2008M05	12.06	6.68	12.73	10.08	9.47	12.47
2008M06	12.06	6.68	12.78	10.16	9.50	12.53
2008M07	12.10	6.68	12.80	10.20	9.52	12.54
2008M08	12.10	6.68	12.82	10.26	9.55	12.58
2008M09	12.10	6.68	12.85	10.29	9.58	12.63
2008M10	12.06	6.68	12.88	10.33	9.57	12.68
2008M11	12.06	6.68	12.88	10.34	9.57	12.71
2008M12	12.06	6.68	12.89	10.29	9.56	12.71
2009M01	12.08	6.65	12.86	10.26	9.56	12.69
2009M02	12.08	6.65	12.86	10.28	9.58	12.71
2009M03	12.08	6.65	12.86	10.31	9.54	12.73
2009M04	12.10	6.65	12.84	10.36	9.56	12.73
2009M05	12.10	6.65	12.84	10.40	9.57	12.73
2009M06	12.10	6.65	12.85	10.44	9.59	12.78
2009M07	12.14	6.65	12.85	10.49	9.60	12.78
2009M08	12.14	6.65	12.87	10.54	9.63	12.80
2009M09	12.14	6.65	12.88	10.57	9.62	12.79
2009M10	12.12	6.65	12.89	10.60	9.63	12.80
2009M11	12.12	6.65	12.91	10.61	9.64	12.81
2009M12	12.12	6.65	12.96	10.56	9.64	12.84
2010M01	12.14	7.18	12.92	10.49	9.65	12.79
2010M02	12.14	7.18	12.94	10.53	9.67	12.80
2010M03	12.14	7.18	12.96	10.58	9.69	12.83
2010M04	12.16	7.18	12.99	10.59	9.71	12.84
2010M05	12.16	7.18	13.03	10.63	9.73	12.85
2010M06	12.16	7.18	13.10	10.66	9.76	12.90

	LN_PDB	LN_LPEI	LN_PRIV	LN_REG	LN_RUR	LN_STA
2010M07	12.20	7.18	13.11	10.68	9.78	12.89
2010M08	12.20	7.18	13.14	10.77	9.80	12.92
2010M09	12.20	7.18	13.16	10.73	9.80	12.92
2010M10	12.18	7.18	13.16	10.74	9.85	12.92
2010M11	12.18	7.18	13.19	10.77	9.86	12.95
2010M12	12.18	7.18	13.24	10.75	9.83	12.98
2011M01	12.20	7.36	13.21	10.71	9.84	12.93
2011M02	12.20	7.36	13.24	10.73	9.86	12.95
2011M03	12.20	7.36	13.26	10.76	9.89	12.99
2011M04	12.23	7.36	13.28	10.79	9.90	12.99
2011M05	12.23	7.36	13.31	10.80	9.93	13.03
2011M06	12.23	7.36	13.34	10.85	9.95	13.08
2011M07	12.26	7.36	13.35	10.88	9.97	13.09
2011M08	12.26	7.36	13.38	10.90	9.99	13.12
2011M09	12.26	7.36	13.41	10.92	9.97	13.14
2011M10	12.24	7.36	13.42	10.96	9.97	13.14
2011M11	12.24	7.36	13.44	10.98	9.98	13.15
2011M12	12.24	7.36	13.49	10.94	9.99	13.18
2012M01	12.26	7.62	13.48	10.90	9.99	13.15
2012M02	12.26	7.62	13.49	10.93	10.03	13.17
2012M03	12.26	7.62	13.52	10.96	10.07	13.19
2012M04	12.29	7.62	13.55	10.98	10.08	13.21
2012M05	12.29	7.62	13.57	11.03	10.09	13.26
2012M06	12.29	7.62	13.60	11.08	10.11	13.30
2012M07	12.32	7.62	13.61	11.11	10.14	13.29
2012M08	12.32	7.62	13.62	11.13	10.16	13.28
2012M09	12.32	7.62	13.64	11.14	10.15	13.31
2012M10	12.30	7.62	13.65	11.16	10.15	13.32
2012M11	12.30	7.62	13.66	11.18	10.16	13.35
2012M12	12.30	7.62	13.69	11.16	10.17	13.40
2013M01	12.32	8.10	13.69	11.13	10.18	13.37
2013M02	12.32	8.10	13.70	11.15	10.19	13.40
2013M03	12.32	8.10	13.72	11.18	10.21	13.42
2013M04	12.34	8.10	13.73	11.22	10.19	13.45
2013M05	12.34	8.10	13.75	11.25	10.26	13.48
2013M06	12.34	8.10	13.77	11.29	10.27	13.53

	LN_PDB	LN_LPEI	LN_PRIV	LN_REG	LN_RUR	LN_STA
2013M07	12.37	8.10	13.79	11.31	10.29	13.53
2013M08	12.37	8.10	13.80	11.32	10.30	13.54
2013M09	12.37	8.10	13.83	11.35	10.31	13.58
2013M10	12.36	8.10	13.84	11.38	10.34	13.57
2013M11	12.36	8.10	13.85	11.39	10.30	13.59
2013M12	12.36	8.10	13.90	11.37	10.31	13.63
2014M01	12.37	8.41	13.87	11.30	10.40	13.60
2014M02	12.37	8.41	13.88	11.32	10.43	13.60
2014M03	12.37	8.41	13.92	11.34	10.46	13.62
2014M04	12.39	8.41	13.94	11.37	10.47	13.63
2014M05	12.39	8.41	13.94	11.40	10.50	13.64
2014M06	12.39	8.41	13.96	11.42	10.52	13.66
2014M07	12.42	8.41	13.96	11.43	10.53	13.67
2014M08	12.42	8.41	13.96	11.44	10.53	13.68
2014M09	12.42	8.41	13.98	11.46	10.54	13.70
2014M10	12.41	8.41	13.98	11.47	10.54	13.68
2014M11	12.41	8.41	13.99	11.47	10.55	13.70
2014M12	12.41	8.41	14.01	11.44	10.56	13.73

4. Data Sets 4

Regress Export Value of Each Major Trading Commodity on LPEI's Credit

commodity	year	credit	Export value
c1-CrudePalmOil	2011	309,758	21,655
	2012	443,415	21,299
	2013	345,164	19,224
	2014	390,540	21,059
c2-TextileandTextileProduct	2011	179,528	4,149
	2012	309,227	3,749
	2013	192,104	3,906
	2014	168,820	3,932
c3-Rubber	2011	153,441	14,352
	2012	155,831	10,475
	2013	93,456	9,394
	2014	93,380	7,100
c4-Coffe	2011	90,175	1,676
	2012	56,002	2,087
	2013	40,913	1,948
	2014	36,110	1,835
c5-FoodProduct	2011	32,249	535
	2012	54,920	681
	2013	33,021	664
	2014	67,620	779
c6-Cocoa,Fish,FisheryProduct,Shrimp,FootWear	2011	45,396	7,830
	2012	78,186	8,172
	2013	42,782	8,856
	2014	95,910	9,599
c7-ConstructionServices	2011	114,413	1,352
	2012	295,971	875
	2013	264,169	652
	2014	141,680	1,148

5. Data Sets 5

Regress Sectoral Economic Growth (%) on LPEI's Share, Commercial Bank's Share, and Its Interaction

Sectors / LPEI Credit	2009	2010	2011	2012	2013	2014	2015
GROWTHAGRICULTURE	3.96%	3.01%	3.37%	4.20%	3.44%	3.29%	4.02%
GROWTHBUSINESS	5.21%	5.67%	6.84%	7.14%	7.57%	5.96%	7.01%
GROWTHCONSTRUCTION	7.07%	6.95%	6.07%	7.39%	6.57%	6.58%	6.65%
GROWTHELECTRICITY	14.29%	5.33%	4.71%	6.32%	5.78%	5.50%	1.21%
GROWTHMANUFACTURING	2.21%	4.74%	6.14%	5.74%	5.56%	4.86%	4.25%
GROWTHMINING	4.47%	3.86%	1.60%	1.58%	1.41%	-0.22%	-5.08%
GROWTHSOCIAL	6.42%	6.04%	6.80%	5.22%	5.47%	5.92%	6.85%
GROWTHTRADING	1.28%	8.69%	9.24%	8.16%	5.89%	4.64%	2.47%
GROWTHTRANSPORTATION	15.85%	13.41%	10.70%	9.98%	9.80%	9.31%	7.03%
LPEIAGRICULTURE	1,033.18	1,603.70	2,313.18	3,633.06	4,377.24	6,105.22	10,360.41
LPEIBUSINESS	-	-	-	3,333.42	1.04	3,632.61	4,711.63
LPEICONSTRUCTION	-	-	-	0.91	2,388.94	2,903.92	3,515.53
LPEIELECTRICITY	-	-	-	-	0.68	2,009.13	2,191.65
LPEIMANUFACTURING	4,982.00	7,904.64	8,745.40	12,959.86	16,861.73	24,670.27	35,312.10
LPEIMINING	770.68	1,722.75	2,142.31	1,484.06	4,276.13	7,551.23	9,027.64
LPEISOCIAL	-	-	-	-	0.24	279.21	484.40
LPEITRADING	743.59	16.21	758.83	1,328.36	0.81	971.38	2,012.95
LPEITRANSPORTATION	-	-	-	1,743.86	2,610.50	4,515.39	4,659.81
ALLAGRICULTURE	77,394.00	92,524.56	116,210.01	150,399.08	186,276.21	221,902.90	265,875.95
ALLBUSINESS	152,061.00	136,582.07	180,418.33	222,393.09	271,343.34	305,274.96	319,173.98
ALLCONSTRUCTION	63,765.00	63,425.51	75,510.01	96,089.02	116,965.08	148,542.37	174,672.64
ALLELECTRICITY	23,894.00	33,624.94	45,537.82	58,837.63	79,327.34	80,610.86	99,239.19
ALLMANUFACTURING	246,188.00	274,330.41	343,002.01	444,148.79	574,386.16	655,018.57	748,672.06
ALLMINING	41,559.00	60,495.03	85,532.24	101,668.67	124,886.21	139,469.20	128,377.63

Sectors / LPEI Credit	2009	2010	2011	2012	2013	2014	2015
ALLSOCIAL	16,580.00	149,991.51	182,191.07	167,963.28	160,479.70	139,533.46	137,600.81
ALLTRADING	301,883.00	346,226.32	414,509.27	554,802.07	713,042.95	804,034.96	892,528.11
ALLTRANSPORTATION	73,002.00	75,487.83	95,486.24	120,141.56	159,852.85	165,584.90	173,258.91
INTAGRICULTURE	79,961,778.13	148,381,174.25	268,814,903.35	546,408,309.02	815,375,491.18	1,354,765,579.33	2,754,584,382.89
INTBUSINESS	-	-	-	741,330,241.25	281,081.58	1,108,944,567.17	1,503,829,380.21
INTCONSTRUCTION	-	-	-	87,338.58	279,422,909.11	431,354,564.92	614,066,731.43
INTELECTRICITY	-	-	-	-	53,932.52	161,957,858.37	217,497,273.05
INTMANUFACTURING	1,226,508,616.00	2,168,482,034.78	2,999,691,150.26	5,756,107,025.87	9,685,145,494.43	16,159,486,941.97	26,437,179,655.24
INTMINING	32,028,607.00	104,217,688.55	183,236,573.07	150,882,883.12	534,029,621.59	1,053,163,449.24	1,158,946,899.32
INTSOCIAL	-	-	-	-	38,160.63	38,959,416.43	66,653,144.36
INTTRADING	224,478,085.62	5,610,892.85	314,541,654.84	736,978,412.84	578,259.29	781,020,263.30	1,796,616,244.08
INTTRANSPORTATION	-	-	-	209,510,285.25	417,295,134.72	747,680,236.03	807,353,601.41