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FINANCIAL DEPTH AND FINANCIAL ACCESS IN INDONESIA

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ABSTRACT

This study is intended to analyse the current levels of financial depth and financial access in Indonesia and to analyse the factors affecting them. The analysis method used was a combination of descriptive quantitative, benchmarking, and literature reviews.

The conclusion is that the financial depth in Indonesia has not shown a satisfactory level since it was the lowest, or the second lowest ranked country among the sampled countries. Meanwhile, the financial access in Indonesia is relatively better than its financial depth, especially for financial markets, in which Indonesia ranks in the lower average group. From literature reviews, it can be inferred that the main factor driving the poor financial depth in Indonesia is non-competitiveness of the institutions; whereas the driving force of poor financial access in Indonesia are geographical constraints, poverty, a high income gap, and a less than effective national financial development policy.

Keywords: *financial sector, banking, capital markets, economic planning*

JEL Codes : *E60, F36, F63, G28, O16*

INTRODUCTION

1. Background

The financial sector serves as one of the 'backbone sectors' in the economy because of its vital role in supporting economic activities. The financial sector (both formal and informal) serves as the 'vein' of an economy, which functions to flow and circulate all the nutrients and necessary substances to the various economic sectors, which in normal times make an economy keep growing. Therefore, the financial sector's development can be perceived as a strategic element in the national development policy framework. With the financial sector's development, it is hoped that the functions of the financial intermediaries (by means of the financial institutions and financial market) are able to develop optimally.

The argument above is supported by Levine (2005) who concluded that financial intermediaries were important for economic growth. The reverse causality economic growth is important to financial intermediaries does happen as well, yet the second causality is not a stimulus for the first causality. Moreover, Levine (2005) added that a theoretically and empirically well-developed financial system diminished the constraints facing companies in acquiring external financing. It describes how financial development works in a way to influence economic growth.

How successful financial development is in a country can be measured with specific indicators reflecting the most important characteristics of its financial development i.e. financial depth (financial size) and financial access (financial inclusion). The financial depth is important because of its effect on fiscal policy. A country with a high level of financial depth can implement a broader 'expansionary fiscal policy' and a bigger debt accumulation during downturns. Therefore, developed countries which generally have high levels of financial depth are better positioned to provide a counter cyclical fiscal stimulus during a crisis compared with the emerging countries which commonly have a low level of financial depth (Caballero and Krishnamurthy, 2004).

Financial access becomes an important issue because of its contribution to income inequality reduction and increased economic growth (see Beck, Demirguc-Kunt & Levine, 2007; Demirguc-Kunt & Klapper, 2012). Income inequality reduction is especially beneficial to the poor and other disadvantaged groups since it can create new and broader opportunities for them to invest in education. With greater financial access, they can finance their investment in education to pursue more promising growth opportunities.

Indonesia, like other developing countries, has a great deal of interest in its domestic financial development. In order to set realistic financial development goals and the strategies to achieve the set targets, it is essential that the current level of financial development in Indonesia and the factors behind it are analysed and comprehended.

In that regard, researchers and policymakers have lacked the focused, deep but also comprehensive literature covering these issues thus far. Several international institutions' studies have indeed elaborated on financial development issues, yet the studies so far have only covered the developing countries. The other concern is that those studies do not show benchmarking results which may help inform the Indonesian government of where they are, and what is still required to achieve a sustainable national economic development agenda. Such conditions may lead to biasedly formulated policy recommendations for the Indonesian government, either for domestic policy actions or those related with international economic cooperation, which may create unsustainable national economic development.

With relevance to the background described above, this study is intended to reach two objectives. The first objective is to analyse the current level of financial depth and the financial access in Indonesia in comparison with other relevant countries or country groups; and the second one is to analyse the factors affecting the current level of financial depth and financial access in Indonesia. As the research's limitation, this study will not cover recommended solutions for the financial depth and financial access problems in Indonesia, and thus will leave these to further research. It is hoped that the picture of Indonesia's financial depth and financial access resulting from this study can contribute to such further research.

2. Data and Methodology

The data employed in the study were sourced from a unique World Bank dataset, namely the *Global Financial Development Database* (GFDD).

There are two financial system characteristics measured in this study. The first characteristic is the financial depth (financial size), defined as a measure describing how big the financial sector of a particular country is, if compared relative to its economic size (World Bank, 2014). Meanwhile, the second one is the financial access (financial inclusion), defined as a measure reflecting the extent to which the public can have access to financial services (Čihák, *et al.*, 2012).

This study used several indicators to measure the financial depth and the financial access from either the financial institutions' or the financial markets' perspectives. These adopted indicators refer to a 4 x 2 Matrix, a Framework for Financial System Benchmarking which was developed by Čihák, *et al.* (2012). Other than those indicators, one other indicator was added to the financial depth which covers both the financial institutions and the financial market. The latter indicator named private financing - was simply the combined private credit from the financial institutions, the domestic stock capitalization and the private debt securities from the financial markets. A brief but more detailed explanation is shown in Table 1.

The obtained value of the indicators for Indonesia was subsequently benchmarked with that of the selected sample countries and relevant country groups. The selected sample countries comprised of the ASEAN main member countries (Singapore, Malaysia, Thailand, the Philippines, Vietnam, Cambodia); the main emerging countries in the BRICS block (Brazil, Russia, India, China, South Africa); the main ASEAN+6 member countries (China, South Korea, Japan,

Table 1. Indicators and Source of Data

Nr.	Characteristics and Indicators	Source of Data
1.	*Financial Depth/Size*	*Global Financial Development Database* (GFDD) – *World Bank (2013)*
	a. Financial Institutions	
	i) Private Credit (banking and capital market) (% GDP)	
	ii) Assets of financial institutions (% GDP)	
	b. Private financing (banking, non-banking financing, capital market, bond market, in % GDP)	
	c. Financial market	
	i) Domestic stock capitalization and private debt securities (% GDP)	
	ii) Stock trading value (% GDP)	
2.	*Financial Access*	*Global Financial Development Database* (GFDD) – *World Bank (2013)*
	a. Financial Institutions	
	i) Bank branches per 100,000 people	
	ii) ATMs per 100,000 people	
	iii) Percentage of people with a formal account	
	b. Financial Market	
	i) Percentage of market capitalization outside of top 10 largest companies	
	ii) Percentage of value traded outside of top 10 traded companies.	

Australia, India); some big democratic countries which are also the main promoters of financial services liberalization and the world's financial centers (the USA, the United Kingdom, and Germany). By taking the country samples above, several other countries which serve as Asian financial centers (China/Shanghai, Japan/Tokyo, and Singapore) are definitely covered.

Outside of the 18 sample countries, the average indicator values of relevant country groups were also incorporated into the analysis in order to provide a more comprehensive picture of the benchmarking. Those country groups were 1) *Lower Middle Income Countries* (LMCs), 2) *Developing East Asia Pacific Countries* (Dev. EAPs), and 3) the *World*.

The calculation which was used in the analysis section II.1 (Financial Depth Private Financing from All Financial Sectors) is as below.

$$cpf_{INA} \cdot (1+g_{INA})^n = cpf_{COC} \cdot (1+g_{COC})^n \quad (1)$$

the following decimal logarithm characteristic is used

$$\log(a \cdot b^n) = \log a + n \cdot \log b \quad (2)$$

where

cpf_{INA} = current private financing of Indonesia (2011)

cpf_{COC} = current private financing of Indonesia's competing country (2011)

g_{INA} = the growth rate of Indonesia's private financing

g_{COC} = the growth rate of private financing in Indonesia's competing country

n = number of years for Indonesia to begin overtaking the target value of a competing country

In the last part of the analysis section, some analysis work was prepared based on literature reviews to investigate the factors behind the current financial depth and financial access conditions in Indonesia.

RESULT AND ANALYSIS

As described earlier in the data and methodology section (Table 1), the financial sector development indicators analysed in this research covered indicators for the financial institutions and the financial markets respectively, and private financing indicators of the financial depth which covered both the financial institutions and the financial markets.

1. Financial Depth

Based on literature reviews, the financial depth level is positively linked to economic growth (Čihák, *et al.*, 2012). In this relationship, the main indicator used to measure the financial depth of the financial institutions in a particular country was private credit. Čihák, *et al.* (2012) concluded that the higher the ratio of private credit to GDP a particular country has, the higher the financial depth of the financial institutions in that country will be. The banking sector is the financial institution which has generally dominated the channeling of private credit.

Three proxies of financial depth were employed in Čihák, *et al.* (2012) and King and Levine (1993), and all those proxies reflected private credit: (1) current liabilities to GDP ratio; (2) domestic commercial bank credit to total domestic credit (commercial bank + central bank) ratio; (3) gross private claim to GDP ratio.

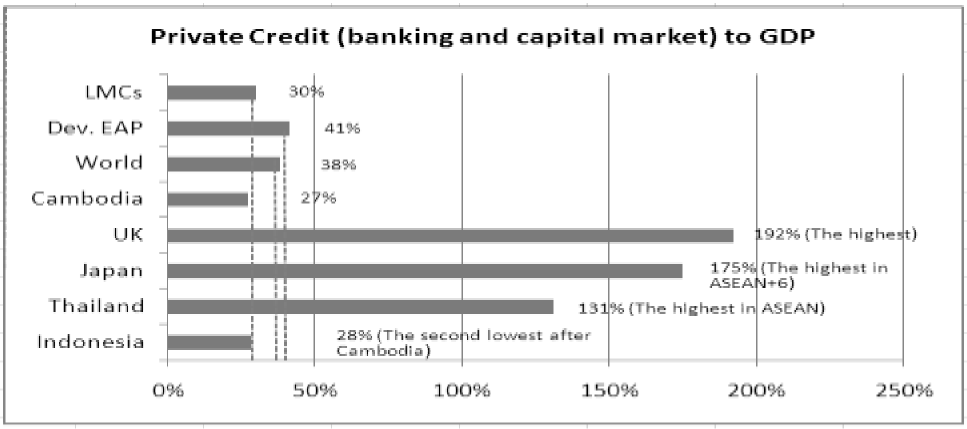
As mentioned earlier, this study analysed the financial depth characteristics based on various indicators. From four selected indicators, the first two ratios (private credit to GDP and assets of financial institutions to GDP) were chosen for the financial institutions; while the other two (domestic stock capitalization and private debt securities to GDP ratio; and stock trading value to GDP) were selected for the financial markets. There is one more indicator for financial debt which measures financing for the private sector both from financial institutions and the financial markets, which is private financing to GDP ratio. The higher the ratios, the deeper or the larger a particular country's financial sector is which shows a positive signal.

1.1. Financial Institutions

There are two main indicators of financial depth for the financial institutions; those are 1) private credit to GDP; and 2) assets of financial institutions to GDP.

Developed countries i.e. the United Kingdom, the United States, and Japan have been dominating the list of the top three countries having very high private credit to GDP ratios (Figure 1). Their ratios are within 175% to 200% of their respective GDP, six times deeper than Indonesia and the LMCs. Although these countries suffered from an economic crisis during 2008 and 2009, it did not change their positions in the top three.

Emerging countries such as South Africa, China, Singapore, and developing countries such



Source of data: GFDD, *World Bank* (2013)

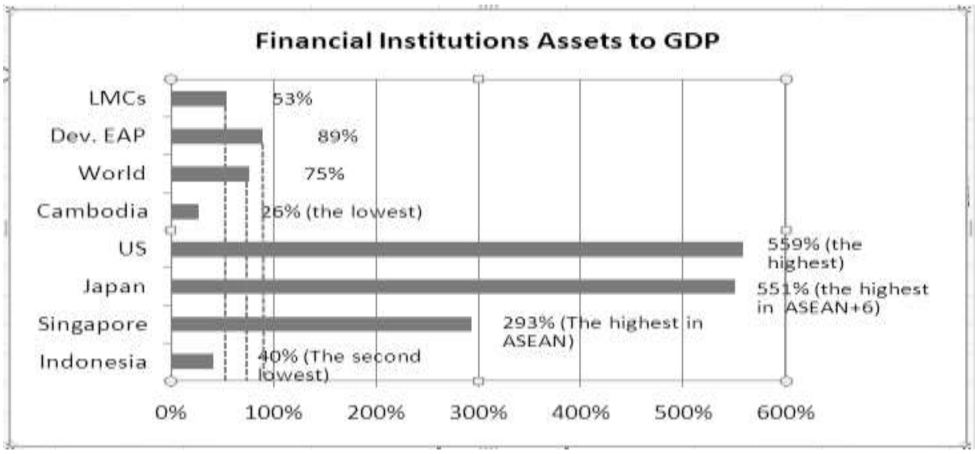
Figure 1. Private Credit (banking and capital market) to GDP.

as Thailand, Malaysia, and Vietnam have high private credit to GDP ratios, within the range of 100% - 150% of their GDP. Indonesia still lags behind and ranks the second lowest after Cambodia. Indonesia's position is below the world average and the Low Middle Income Countries/LMCs average.

Another important ratio for financial depth is the assets of financial institutions to GDP (Figure 2). The United States and Japan rank as the top two and have been showing their very large capacities, in comparison with other countries, to accumulate financial institution assets in the world, ten times deeper than the LMCs average.

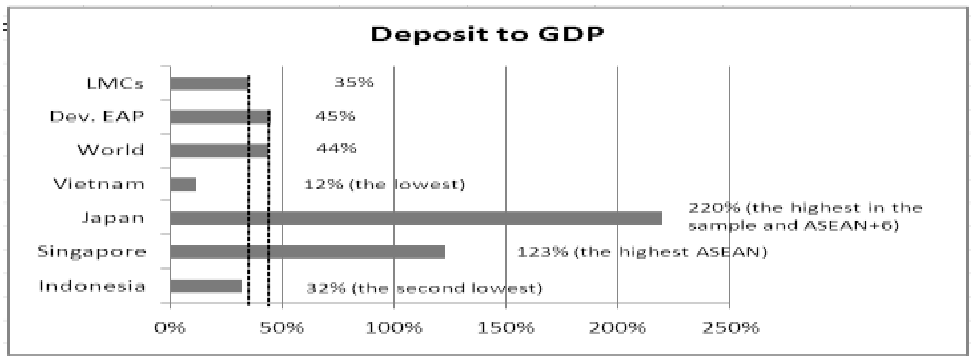
Consistently, Singapore, as the financial hub in Southeast Asia has the highest ratio, outranking Malaysia, Thailand, the Philippines and even outperforming the ASEAN+6 partner countries like Australia, South Korea, China, and India. Indonesia cannot compete with the main ASEAN countries or the ASEAN+6 partner countries.

Indonesia is no better than the average of the developing East Asia Pacific countries (Dev. EAPs), the world, or the LMCs. Indonesia is still below Vietnam, and only superior to Cambodia, which ranks as the lowest among the benchmarked countries. The low deposit to GDP ratio is the rationale for this fact. Along with Cambodia, Indonesia (32% of GDP) has recorded a very low deposit to GDP ratio (Figure 3). Despite having a better credit to deposit ratio than the other five benchmarked countries, this fact does not help much (Figure 4).



Source of data: GFDD, *World Bank* (2013

Figure 2. Financial Institutions Assets to GDP



Source of data: GFDD, *World Bank* (2013)

Figure 3. Deposit to GDP (% GDP)

The higher credit to deposit ratio in Indonesia (82%) may indicate that Indonesian financial institutions experience a tighter liquidity[1] they face more fierce competition to acquire funding in comparison with other countries. This is in contrast to other facts. Amidst the cries for funding from the Indonesian domestic banks, there are a number of extremely rich Indonesian people who have deposits overseas, mainly in neighboring Singapore. It is believed that there is more than Rp 1,600 trillion of their money which is deposited in Singapore for various reasons.[2] Such beliefs confirm why Indonesia has recorded a very low deposit to GDP ratio.

1.2. Financial Market

The main financial depth indicators for the financial markets are domestic stock capitalization and private debt securities to GDP ratio, and the stock trading value to GDP ratio. The essence of the financial market's ratios is similar to the ratios of financial institutions; the higher the ratios, the deeper or the larger the financial market that a particular country has. Thus, in general the higher ratio is, the better it is.

With reference to Figure 5, there is an emerging country one from the BRICS block, South Africa (251%) which has demonstrated a tremendous increase in the value of its domestic stock capitalization and private debt securities to GDP ratio since 2002. South Africa is currently in the top position, even above the United States with its state-of-the-art Wall Street, the United Kingdom, and Japan.

Such a very deep financial market, as in South Africa, is not something which is commonly found in a developing country, and it may indicate an economic bubble is happening there. Forbes (2014) claimed that it is due in a large part to South Africa's emerging markets' bond bubble that has boosted foreign demand for the country's bonds. South Africa also has a total of US$ 60.6 billion or 43% of its total debt denominated in foreign currencies, and therefore it incurs a foreign currency risk. Malaysia may well be a similar story to South Africa.

The current figures for South Africa's and Malaysia's external debt are 40% of GDP and 68% of GDP respectively (2013), much higher than five years ago (30% GDP and 46% of GDP respectively); compared with Indonesia's ratio which has been preserved at the secure and stable level of 30% of GDP (2013) and 31% of GDP in 2008. However, Indonesia (at 46%) still cannot compete, and remains in the lowest position. The good news is that Indonesia still goes far beyond the LMCs.

The other main indicator is stock traded value to GDP ratio (Figure 6), where the US shows its superiority over South Korea and the UK. Singapore has, as expected, outranked the other ASEAN members and is slightly above China. The benchmarking placed Indonesia (16%) in the bottom-but-one position, above Vietnam. However, Indonesia is still far better than the world average and the LMCs average.

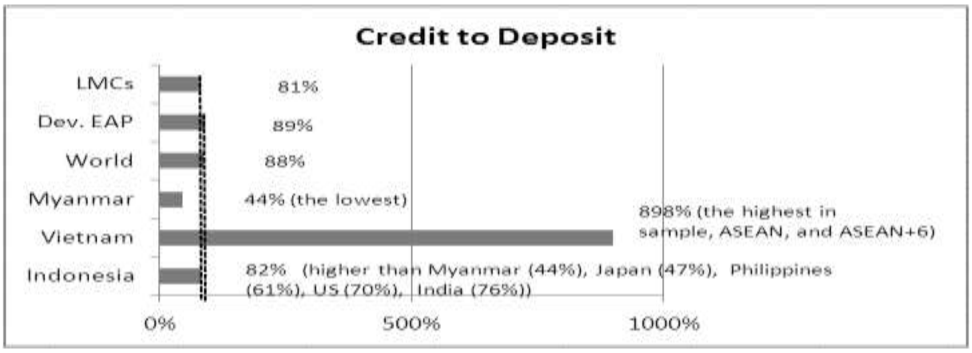
1.3. Private Financing from All Financial Sectors

Financing for the private sector to activate the economy does not solely depend on loans from banks, but can also be provided by other financial institutions, such as credit companies, leasing and financing companies, and factoring companies. Aside from those non-banking institutions, the private sector can also rely on the financial markets, like equities and bonds. Developed countries with high incomes can expect to accumulate huge amounts of funds for their financial sectors to stimulate their economies, while developing countries are not that fortunate. Measuring the total funds accumulated for the private sector can reflect more completely the financial depth a country has.

The result of benchmarking private financing from all the other financial sectors has demonstrated that (aside from investment) Indonesia

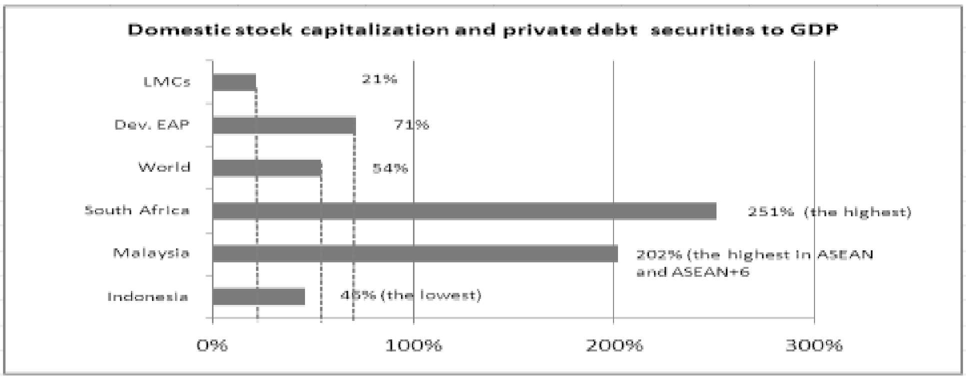
[1] Standard Chartered. (2014)

[2] http://www.tempo.co/read/news/2013/08/13/087503965/Buka-Cabang-di-Singapura-Mandiri-Incar-Rp-1600-T and http://finance.detik.com/read/2013/11/27/140923/2425135/4/pemerintah-kesulitan-tarik-dana-orang-kaya-ri-rp-1600-triliun-di-singapura. Downloaded on December 10, 2013.



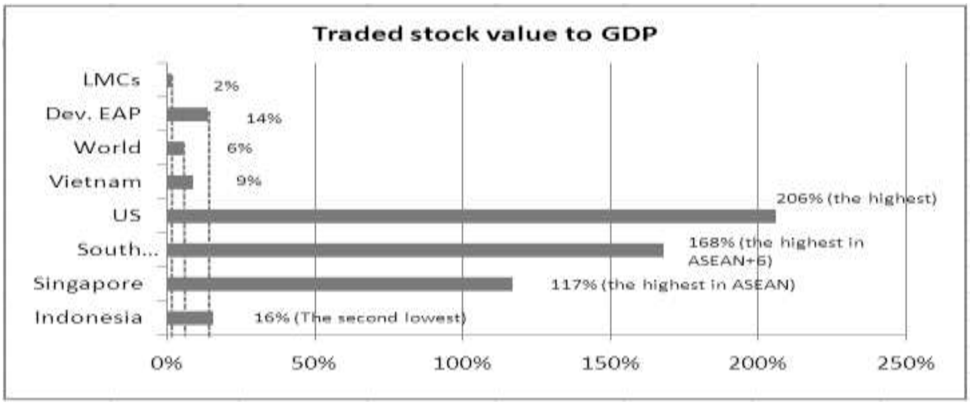
Source of data: GFDD, *World Bank* (2013)

Figure 4. Credit to Deposit



Source of data: GFDD, *World Bank* (2013)

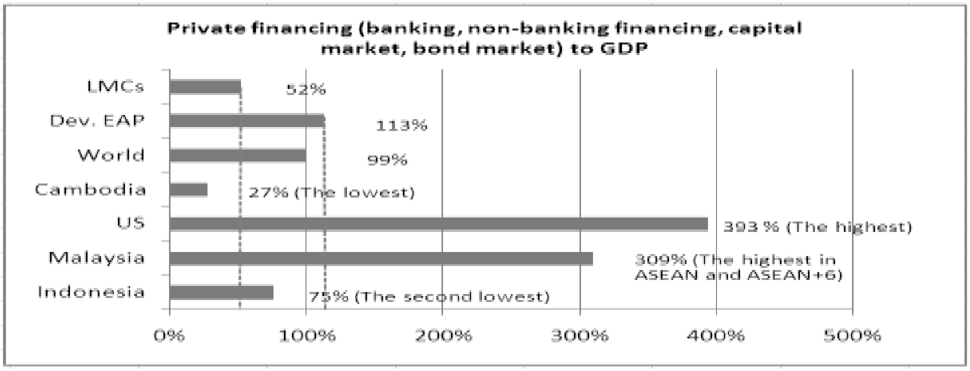
Figure 5. Domestic stock capitalization and private debt securities to GDP



Source of data: GFDD, *World Bank* (2013)

Figure 6. Traded stock value to GDP

has a weak capability to accumulate financing for its private sector (Figure 7). Indonesia cannot exceed Malaysia, the Philippines, Singapore, or Thailand. Indonesia, unsurprisingly, outranks the Least Developed Countries/LDCs in ASEAN like Cambodia, the Lao PDR, and Myanmar but not Vietnam (108% GDP). Indonesia still lags behind the ASEAN+6 partner countries, the BRICS countries group, and mostly behind the developed countries which have renowned financial centers such as the US, the UK, and Germany; yet Indonesia (at 75% GDP) still manages to go beyond the LMCs.



Source of data: GFDD, *World Bank* (2013)

Figure 7. Private Financing (Banking, Non-Banking, Capital Market, and Bond Market) to GDP

However, Indonesia has the potential to increase its private financing sources because, as a number of analysts say, the number of people who are classed as belonging to the middle class keeps increasing, some 8 to 9 million people will enter the middle class each year up to either 2020 or 2030, and this confers a great demographic advantage on Indonesia.[3]

In the context of this demographic advantage until 2030, this situation raises a question on how long it will take Indonesia to catch up to, and overtake, other benchmarked countries while benefiting from this advantage. In making a comparison, I selected comparable countries such as the Philippines, Thailand, and Malaysia. The next countries would be Singapore, as the financial hub in South East Asia, then India and China.

With reference to Table 2 and taking the trend of the increasing numbers of the middle class into consideration, we can assume a constant growth percentage for all the private financing sources. By using the projection approach and a logarithm computation characteristic, we can find out that Indonesia may have a total value of private financing which will go beyond the Philippines in 14 years (i.e. in 2025), Singapore in 23 years (i.e. in 2034; assuming Singapore's private financing growth rate is zero), Malaysia in 27 years (i.e. in 2038), China in 42 years (i.e. in 2053), and Thailand in 48 years (i.e. in 2059). Based on the bigger initial amounts and the higher growth rate of private financing that India had in 2011, by using a future projection it is impossible for Indonesia to catch up with India in the future. Thus, it is only the Philippines' private financing that Indonesia can overtake before its demographic bonus ends in 2030.

2. Financial Access

Five indicators were adopted to undertake the benchmarking analysis on financial access, three indicators for the financial institutions (bank branches per 100,000 people; ATMs per 100,000 people; and the percentage of people with a formal account) and two indicators for the financial market (percentage of market capitalization outside of the top 10 largest companies; and percentage of the value traded outside of the top 10 traded companies).

2.1. Financial Institutions

The financial access was measured here by adopting indicators related to branches, ATMs, and formal accounts. Branches and ATMs ease financial access for depositors. Formal accounts owned by depositors also facilitate them to benefit from financial services provided by the financial institutions, not just the basic ones such as savings, withdrawals, transfers and borrowing. All in all, the higher these three indicators are, the more the public can access various kinds of financial services provided by the financial institutions.

[3] See Boston Consulting Group (2013), Reuters (2012), and World Bank (2009)

Table 2. Sources of private financing, Indonesia and benchmarking countries (% GDP)

Countries	Banking Loan		Growth (%)	Non-banking Loan		Growth (%)	Stock capitalization		Growth (%)	Private bond market capitalization		Growth (%)	Total		Growth (%)
	2000	2011		2000	2011		2000	2011		2000	2011		2000	2011	
Indonesia	17.6	25.4	4.0	0	2.9	26.4	1.3	1.4	0.7	26.5	45.1	6.4	45.4	74.8	5.9
Philippines	35.0	29.8	-1.4	4.1	0	-9.1	0.2	1.0	36.4	38.1	73.9	8.5	77.4	104.7	3.2
Thailand	116.6	101.9	-1.1	1.0	30.1	264.5	11.5	12.7	0.9	34.6	81.7	12.4	163.7	226.4	3.5
Malaysia	122.8	106.4	-1.2	0.6	0.5	-1.5	32.8	58.1	7.0	139.7	144.1	0.3	295.9	309.1	0.4
Singapore	95.1	104.2	0.9	11.8	6.0	-4.5	16.5	10.0	-3.6	182.0	148.1	-1.7	305.4	268.3	-1.1
China	107.2	121.5	1.2	0	4.9	44.5	7.1	23.1	20.5	38.3	58.8	4.9	152.6	208.3	3.3
India	26.5	47.1	7.1	0.1	0.2	9.1	0.4	4.9	102.3	34.3	70.0	9.5	61.3	122.2	9.0

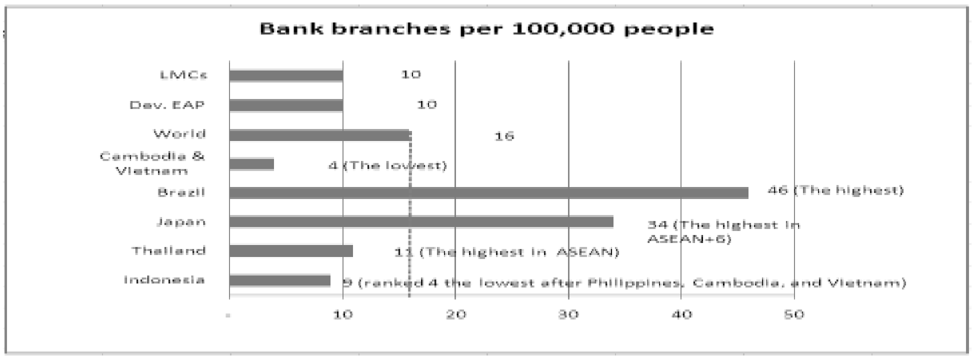
Source of data: GFDD, World Bank (2013), calculated. The figures in 2000 and 2011 are previously rounded from raw data.

The existence of a large number of branches in either the developed countries (the United States, Japan, and Australia) or developing countries (Brazil and Russia) demonstrates that a direct interaction with their bank is something that is necessary for a bank's customers. Despite this fact, Indonesia has only a relatively small number of bank branches (see Figure 8), yet it is placed higher than the Philippines, Cambodia, and Vietnam.

Nowadays financial services are closely related with state-of-the-art facilities, one of which is the Automated Teller Machine (ATM). These ATMs' functions are vital to the public in their efforts to have quick access to financial services. Unfortunately, as shown in Figure 9, Indonesia has a very limited number of ATMs compared with its population size; almost similar to the Philippines, which is another archipelagic country like Indonesia. India and Cambodia have slightly less ATMs' per head of population than Indonesia. Indonesia is exactly the same as the LMCs' average and slightly below the Dev. EAPs' one, but nonetheless still far behind the world average. Indonesia cannot compete with the other main ASEAN countries (except Cambodia). Similarly this condition is also true in terms of the comparison of Indonesia with other benchmarked countries.

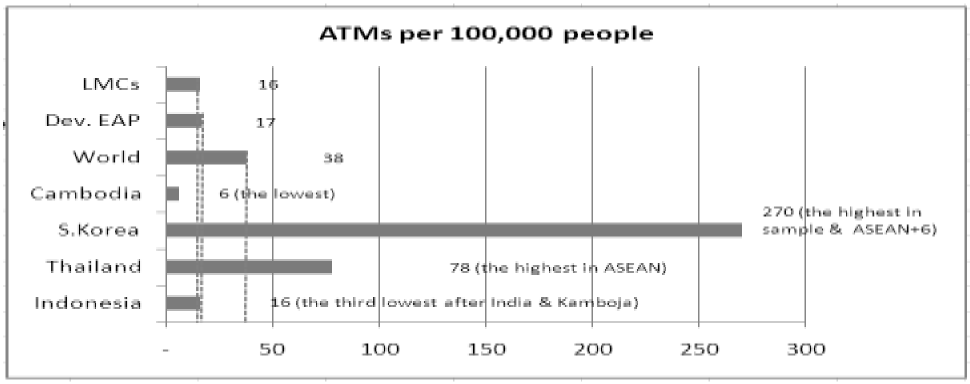
Developed countries such as the US and Australia still rely heavily on ATMs, despite the existence of the currently fast-growing e-banking technology. Nonetheless, it is South Korea, an Asian emerging country which provides the greatest financial access through ATMs.

Financial access also means financial inclusion, a renowned issue much raised by multilateral development banks such as the World Bank and international forums such as the G20. One widely used measure for financial inclusion is the percentage of people with a formal (bank) account (Figure 10).



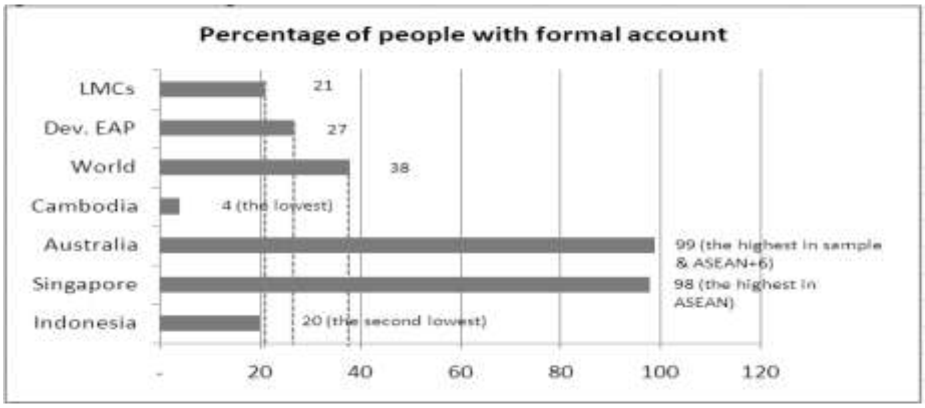
Source of data: GFDD, *World Bank* (2013)

Figure 8. Bank branches per 100,000 people



Source of data: GFDD, *World Bank* (2013)

Figure 9. ATMs per 100,000 people



Source of data: GFDD, *World Bank* (2013)

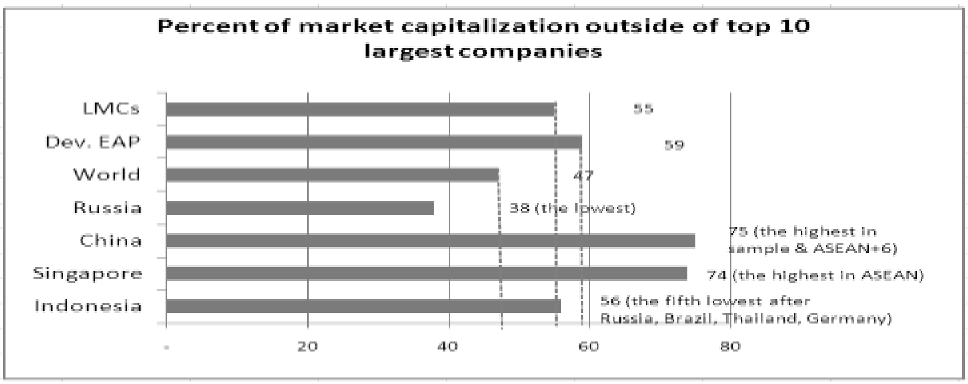
Figure 10. Percentage of people with formal account

The benchmarking analysis places Indonesia (at 20%) as the second lowest, far better than Cambodia, which ranked the lowest among all the benchmark countries. Indonesia was far behind the other main ASEAN countries except the Philippines. India was the only ASEAN+6 partner country having a similar value to Indonesia's. Singapore, as expected, ranked the best among the ASEAN countries, placing the financial hub equal to the other developed countries such as Australia, Japan, and the United Kingdom. In comparison with the country group average, Indonesia was almost similar to the LMCs, but still significantly below the average of the Dev. EAPs and the world.

2.2. Financial Market

As explained earlier, two indicators were selected to assess financial access to the financial markets. The first was the percentage of the markets' capitalization outside of the top 10 largest companies, and the second was the percentage of the value traded outside of the top 10 traded companies. These indicators indicate how well distributed the opportunities for all companies are - no matter the size of the public company to have financial access to the financial markets. The higher the indicator value, the more well distributed the financial access is; not only for the largest public companies, but also for smaller public companies.

For the first indicator as shown in Figure 11, the benchmark result shows the country having the least opportunities for small public companies is Russia (38%), and it is followed by another BRICS country, Brazil. The value for Russia means that only 38% of the capital in Russian financial markets can benefit the smaller companies outside of Russia's ten largest companies. In other words, 62% of the available capital in the Russian financial market is distributed to Russia's ten largest companies.



Source of data: GFDD, *World Bank* (2013)

Figure 11. Percent of market capitalization outside of top 10 largest companies

The good thing is that Indonesia (56%) is in the middle range, together with Australia. Indonesia is slightly better than Russia, Brazil, Thailand, and Germany (55%). Indonesia is also better than the world average (47%), and not significantly different from the average of the LMCs (55%) and Dev. EAPs (59%). Only in ASEAN and the ASEAN+6 groups, does Indonesia still lag behind. The relatively high figure for Indonesia shows that its middle class is growing and they can grab the financing opportunities which are available from the capital market to expand their small and medium sized companies.

Singapore (74%) is in the top range, together with China and South Africa, outperforming developed countries on the list such as Japan, the UK, and the USA, and the ASEAN+6 partner countries as well.

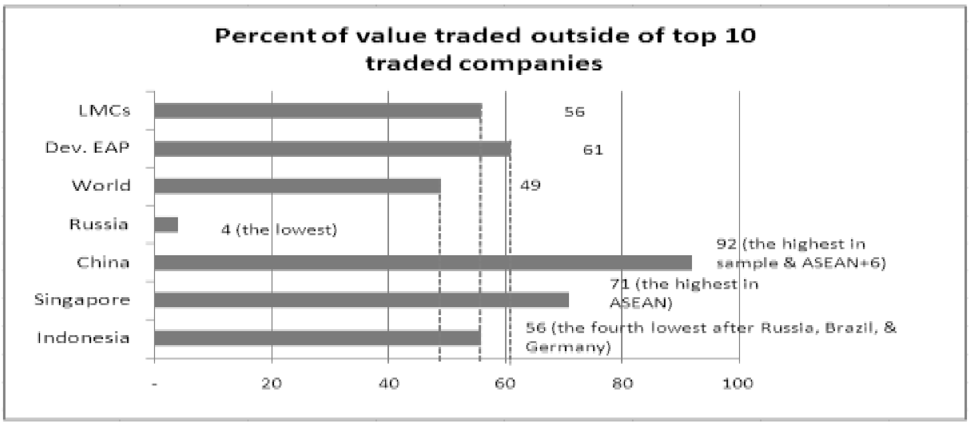
The benchmark result for the second indicator, as shown in Figure 12, shows a relatively similar result. Russia is placed in the lowest rank, while China and South Africa are in the highest rank. Singapore - claimed to be the region's financial hub–is still the best in Southeast Asia and it exceeds the US. South Korea and India also perform better than the US.

Indonesia (56%) shares a similar indicator value together with the Philippines and the average LMCs. Indonesia performs better than two of the BRICS countries: Russia and Brazil, a developed country (Germany), and also the world average. In comparison with other ASEAN countries and the ASEAN+6 countries, Indonesia can still not yet compete with them.

From the last two indicators of financial access to the financial markets, China and Singapore have persistently shown themselves to be the best at providing broad access to finance for their growing middle-sized companies. This indicates the effectiveness of their programs to enhance companies' productivity, starting with their SMEs. The Government of Singapore, for example, has successfully provided a variety of schemes for SMEs, varying from tax cuts to loans and grants to help finance the costs of productivity improvements in areas such as R&D, automation, and capacity building.[4] Indonesia can learn a lesson from these two countries to increase their own SMEs' productivity and provide broad access to finance for the SMEs.

3. Determinants Affecting Financial Depth and Financial Access in Indonesia

From the benchmark analysis undertaken in the previous section, it is obvious that the overall financial depth in Indonesia is not competitive yet, when compared with the other seventeen benchmarked countries and three country groups. Especially for financial depth, as measured in the financial institutions, Indonesia ranks



Source of data: GFDD, *World Bank* (2013)

Figure 12. Percent of value traded outside of top 10 traded companies.

[4] OECD (2013).

the lowest or second lowest of all the benchmarked countries and shows a poor performance compared with the three country groups. This situation also applies among the ASEAN main countries. A better picture emerges for the financial depth of the financial markets which indicates that Indonesian stock trading value, as a percentage of GDP, has exceeded all the three country groups.

From the overall benchmarked analysis, the financial access in Indonesia still shows poor performance, with the financial markets outperforming the financial institutions. Yet, Indonesia's financial access is significantly better than its financial depth. Indonesia is placed in the lower median and positioned at a similar level with Australia and Germany, although it is still below the ASEAN main countries' performance. The position also places Indonesia equal with all the three country groups.

The arguments behind the poor financial depth and financial access condition in Indonesia can be explained by reviewing some of the literature available. In terms of financial depth, to find out what factor(s) have created such poor performance we need to investigate what variable(s) have a close link with financial depth. Huang (2010) concluded that conducive institutional qualities for business and investment played the most significant role in improving the financial depth in developing countries, the country group which Indonesia belongs to.

Another study by Cull, Senbet, and Sorge (2002) found that in the countries which adopted explicit deposit insurance systems - Indonesia did this by establishing LPS, a national deposit insurance institution - the presence of a strong regulatory environment and banking sector stability exerted a strong influence on their financial depth levels. Those determinant factors a strong regulatory system and banking sector stability can certainly be established if a good quality institutional framework is present. Their study complemented previous research by Cull (1998) which concluded that the deposit insurance institution system of a country which acquired good environment support–that is a credible government and well-functioning institutions would be able to improve its financial depth levels.

Having similar findings with the above are two other studies, i.e. Ahokpossi, *et al.* (2013) and Anayiotos & Toroyan (2009) which concluded that institutional factors exerted an influence on the financial depth. Thus, those studies encouraged the need for institutional reform to enhance the financial depth and financial development. Besides, Anayiotos and Toroyan (2009) also found that in comparison with asset quality[5] and profitability[6], the institutional factor played a bigger role in improving the financial depth. The more detailed factors were specified by Chinn and Ito (2005), who concluded that among emerging market countries (which Indonesia belongs to), a higher level of bureaucratic quality and law and order, as well as lower levels of corruption, increased the effect of financial openings in fostering the development of equity markets.

Of all the findings results above, one general determinant factor obviously affecting the level of financial depth can be concluded, i.e. the institutional quality issues. In more detail, poor institutional quality in developing countries, including Indonesia, generally exists due to the lack of effectiveness, efficiency, and transparency in the government's bureaucracy, weak law enforcement and high corruption. Respect for contracts and copyrights are also areas weak in law enforcement. In short, we can build a hypothesis: the low or poor financial depth in Indonesia happens due to the low or poor institutional quality. This paper argues that Indonesia similar to other developing countries or emerging countries as analysed in the above studies suffers from institutional quality problems as well.

To provide solid arguments to prove that the hypothesis is true, this paper used secondary data from relevant surveys conducted and released by the World Bank, the International Finance Corporation (IFC), the World Economic Forum (WEF), and Transparency International.

[5] measured by Non-Performing Loans
[6] measured by Return on Earnings

The first two international institutions were undertaking an "Ease of Doing Business Survey", while the WEF published the Global Competitiveness Report, and Transparency International published the Open Budget Index, and the Corruption Perception Index.

The uncompetitiveness of the institutional quality in Indonesia is shown in 2014s comprehensive "Ease of Doing Business" survey. The survey places Singapore in the highest rank (1st) - as the economy having the strongest institutions with the lowest transaction costs. Indonesia itself is placed 120th out of 189 countries; four lower than the previous year when it was 116th. Indonesia lags behind other ASEAN countries like Malaysia (6th), and Thailand (18th), even Vietnam (99th), and the Philippines (108th). China (96th) outperformes Indonesia, but Indonesia is still better than India (134th) and Cambodia (137th).

This survey disclosed that bureaucratic inefficiency and ineffectiveness in Indonesia were obviously noticed, mainly from the obstacles facing businesspeople i.e. to them starting a business, acquiring electricity supplies, copyright registration, tax payments, contract enforcement, and the resolution of debt and liabilities problems. Yet, other aspects i.e. loans or access to credit, investor protection, and cross border trade have performed as expected.

From the government's transparency perspective, according to the last Open Budget Index survey released in 2010 by Transparency International, Indonesia received a score of 51. The score ranges from 0 (absolutely not transparent) to 100 (absolutely open or transparent). The score implied Indonesia has partly disclosed its budgetary information to the public. It may indicate that the intensive and continuous government campaigns for bureaucratic reform which started in the Reform Era (1999 up to now) have shown some progress.

From the judicial institution's independence perspective, referring to in the Global Competitiveness Report 2013-2014, Indonesia is perceived as being moderate,[7] and ranked 74th out of 148 countries. New Zealand was the country with the most independent judicial system, while Venezuela, a socialist country, had become the country with the least independent judicial system.

The high levels of corruption in Indonesia were still reflected in the Corruption Perception Index. According to Transparency International's 2013 survey, Indonesia ranks 114th out of 177 observed countries. New Zealand, together with Denmark were declared the cleanest countries, corruption-wise. Afghanistan and Somalia - two countries shattered by endless armed conflicts - together with North Korea, an isolated authoritarian country, were declared the most corrupt countries.

In terms of financial access, as a further analysis of the causes of low financial access in Indonesia, this study adopted some findings from previous relevant literature which could be related to the Indonesian context. The first two relevant studies were Demirguc-Kunt & Kappler (2012) and Allen *et al.* (2012), which both used the World Bank's Global Findex survey data covering 148 countries. According to their studies, the main cause of poor financial access was because of "Not having adequate money"; the option chosen by 66% of respondents in their survey. The respondents' perceptions got stronger in the following respondents' conditions: (1) belonging to lower middle income group, (2) living in a family of many children, (3) being jobless.

Djankov, *et al.* (2008) with a case study of Mexico, found that 89% of people with no access to the financial system claim "Not having adequate money" as the reason. Another study by Martinez, Hidalgo, & Tuesta (2013) which also used Mexico as a case study found that the main constraint of respondents for not having financial access was "Lack of income earned". Aside from the above constraint, the next majority constraint was grouped into "Other reasons," such as "Personal reasons". The examples of

[7] scored 3.6 of 7 (1 means dependent, 7 means really independent)

"Personal reasons" could be "Lack of trust" and "Being afraid of financial institutions".

In the case of Indonesia, the uniquely geographical constraint of it being an archipelagic country may cause additional problems. The cable network infrastructure to connect islands in Indonesia which would be necessary for the expansion of the banking network is more difficult to build in deep seas. This challenge may lead to a creative substitute technological solution, such as satellite technology, which has just been adopted by Bank Rakyat Indonesia (BRI).

Aside from that constraint, the main reason for the poor financial access should be more or less similar to that in Mexico, since basically both have a similar background as a developing lower middle income country (see Table 3), having the same development concerns related to poverty, the income gap, and poor levels of education. Thus, the main possible reason for the poor financial access in Mexico is just as relevant for Indonesia, that is "Not having adequate money" or "Lack of income earned". The assumption is reinforced by Demirguc-Kunt & Kappler (2012) and Allen *et al.* (2012), whose studies of 148 countries found similar reasons for poor financial access.

The reason "Not having adequate money" is simply rooted in the classical problems of poverty and the high income gap in developing countries. Indonesia's economy has been growing, yet the poverty rate is still relatively high. According to the most current national statistics agency (Central Statistics Bureau) data from September 2013, by adopting an average poverty line of about Rp 275,000 per capita per month, there are currently around 28 million poor people, out of about 246 million people living in Indonesia. It means that for every 100 people in Indonesia, more than 11 of them live in poverty.

Table 3. The World Biggest Economy

Rank	Countries	GDP 2011, PPP (US$ billion)	GDP 2011, current (US$ billion)	Countries	Rank
1	United States	15,534	15,534	United States	1
2	China	13,496	7,322	China	2
3	India	5,758	5,897	Japan	3
4	Japan	4,380	3,628	Germany	4
5	Germany	3,352	2,782	France	5
6	Russia	3,217	2,477	Brazil	6
7	Brazil	2,816	2,462	United Kingdom	7
8	France	2,370	2,197	Italy	8
9	United Kingdom	2,201	1,901	Russia	9
10	**Indonesia**	**2,058**	1,864	India	10
11	Italy	2,057	1,778	Canada	11
12	**Mexico**	**1,895**	1,490	Australia	12
13	Republic of Korea	1,445	**1,170**	**Mexico**	**13**
14	Canada	1,416	1,114	Republic of Korea	14
15	Saudi Arabia	1,367	**846**	**Indonesia**	**15**
16	Turkey	1,315	772	Turkey	16
17	Australia	956	670	Saudi Arabia	17
18	South Africa	611	402	South Africa	18

Note: Minus Argentina (GDP 2011 - Current amounted US$ 446 billion) which has not participated in the PPP-ICP program yet. If the European Union were inserted in the list, then Indonesia's rank would decline one lower to 11^{th} (GDP 2011 PPP) and 16^{th} (GDP 2011 Current).

Source of data: ICP, World Bank

Other data also shows that the benefits of Indonesia's economic growth have not been evenly distributed, and more of the growing pie went to the upper middle class. As the World Bank's Gini index[8] score shows, Indonesia's Gini index increased from 29.0 (1999) to 34.1 (2008) and the latest was 38.1 (2011).[9] While a Gini index of 0 represents perfect equality and an index of 100 implies perfect inequality, Indonesia's growing index score shows that the distribution of income or consumption expenditure among individuals or households in Indonesia is getting more and more unequal.

The second main reason found in Mexico, which may also reflect the situation in Indonesia was "Personal reasons" such as "Lack of trust" and "Being afraid of financial institutions".

Such conditions (i.e. "Lack of trust" and "Being afraid of financial institutions") among Indonesian people may occur due to the mushrooming practice of loan sharking[10] in the cities, suburban and rural areas. These illegal practices are carried out by a person or micro financial institution, without official licenses from the government authorities to conduct any credit or lending activities. The forms of micro financial institutions operating the loan shark practices can be, but are not limited to, cooperatives or Bank Perkreditan Rakyat (BPR).[11]

Loan shark lending practices are commonly marked by excessively high rates of interest, some of them may charge their borrowers 10% interest per month, a few of them may demand 20% interest per month, while some others can set daily interest rates.

If the debtors cannot meet the terms of their loan, a few loan sharks practice tricks on their borrowers in default, by finding them another loan shark to borrow from. The first loan shark acts as if he/she has facilitated a solution for the debtors, but in fact it is for the sake of the first loan shark only and the debtors now are trapped in a never ending cycle of debt. The 'victims' may lose all their belongings and possibly become the target of vicious and brutal debt collectors (see Usman, *et al.* (2004), Batubara, *et al.* (2010), and news in local and national media).[12]

Such cases have been of concern to the relevant supervisory government agency (i.e. *Otoritas Jasa Keuangan*). Nonetheless, the policy measures from the agency are still in the discussion stage; and thus will not be enacted in the near future. The agency is planning to design a special interest mechanism for the micro finance institutions, a mechanism intended to resolve the excessively high rates of interest they charge their borrowers/debtors.

The poor financial access in Indonesia may also be caused in part by the less than effective national finance development policy, amidst the high foreign presence in the Indonesian banking structure. As indicated in Figure 13, based on the benchmark analysis, the percentage of foreign ownership of Indonesian banks' asset is 32%, which is the second highest after Cambodia. Meanwhile, the percentage of foreign banks in Indonesia's banking structure is 52%[13], which is the third highest after the UK and Singapore (see Figure 14). With such high foreign ownership, Indonesia's financial sector policies are possibly not able to create enough support from the national banking industry to optimize the contributions to promote financial access or financial inclusion in Indonesia.

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[8] The Gini index/ratio/coefficient was developed by the Italian statistician and sociologist Corrado Gini and published in his 1912 paper "Variability and Mutability". It is a measure of statistical dispersion intended to represent the income distribution of a nation's residents. It has become the most commonly used measure of inequality.

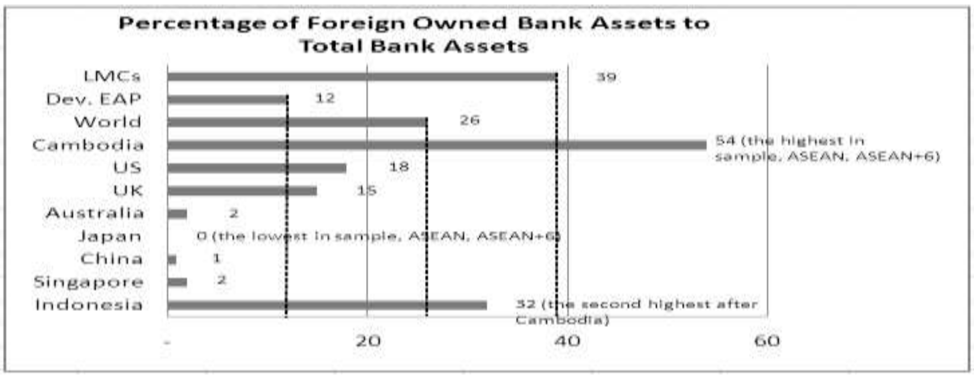
[9] http://data.worldbank.org/indicator/SI.POV.GINI

[10] a person or an illegal financial institution who lends money at excessively high rates of interest

[11] a small regional bank operating in the suburban areas, local cities and rural areas

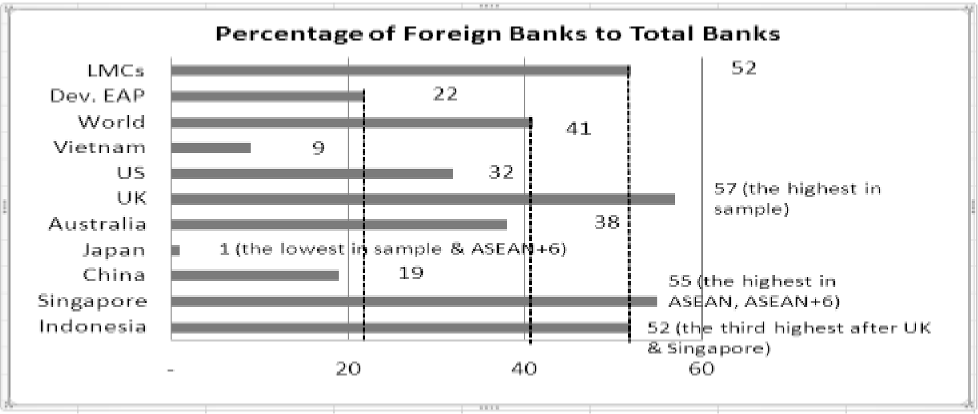
[12] some news for illustrations, see http://www.timorexpress.com/flores-raya/lima-koperasi-dinilai-lintah-darat; http://www.lensaindonesia.com/2015/06/06/rentenir-merajalela-bupati-bogor-malah-tutup-mata.html; http://finansial.bisnis.com/read/20150611/89/442504/suku-bunga-lkm-10-tahun-ke-depan-praktik-rentenir-berkurang; http://petahmelayu.com/kacau-banyak-lintah-darat-berkedok-koperasi.html; http://www.hidayatullah.com/berita/nasional/read/2015/02/03/38026/ulah-lintah-darat-pinjam-6-juta-bayar-40-juta.html; http://www.kapurnews.com/2015/05/28/waspada-banyak-lintah-darat-berkedok-koperasi-di-meranti

[13] foreign bank is defined as a bank with more than 51% of shares owned by foreign parties.



Source of data: GFDD, *World Bank* (2013)

Figure 13. Percentage of Foreign Owned Bank Assets to Total Bank Assets



Source of data: GFDD, *World Bank* (2013)

Figure 14. Percentage of Foreign Banks to Total Banks

The above argument gains strong support from Dymski (2005) and Hamada (2013). Dymski (2005) found that financial globalization created financial exclusion, which was caused by multinational financial corporate strategies focused on the most profitable credit markets. Hamada (2013) subsequently provided evidence that the foreign owned banks in Indonesia tended to reduce their credit to Small and Medium Enterprises (SMEs). That is factual, since even locally owned banks are often geared to wealthier customers, which demotivates lower socio-economic groups from applying for banking services.

The Government of Indonesia (GoI) has implicitly acknowledged the less than effective current national policy to address the financial inclusion issues. The GoI has mapped nine identified financial inclusion policy issues (see Table 4), as documented in an official government document related to the national strategy for financial inclusion[14]. In general, the problems are still basically fundamental and therefore in need of GoI's persistent, consistent and serious attention.

Such openness in Indonesia's financial sector which originated with the strong need for foreign capital injections into troubled local banks in 1998 with its poor financial inclusion level is contradictory to the picture from neighbouring countries such as Malaysia and the Philippines, which have much less open financial sectors but have significantly higher levels of financial inclusion (see Table 5). The challenge for promoting financial inclusion in Indonesia is relatively higher in the rural areas, since the financial inclusion level there is significantly lower than in the urban areas.

[14] Vice President Secretariat Republic of Indonesia (2012), "National Strategy for Financial Inclusion Fostering Economic Growth and Accelerating Poverty Reduction"

Table 4. Financial Inclusion Policy Issues in Indonesia

Nr.	Issues
1.	Many poorer people or small entrepreneurs are not able to satisfy the banks' strict requirements.
2.	Most of the large financial institutions have no or little interest in dealing with many small scale clients since it is not very profitable.
3.	The financial services products do not conform to the requirements of specific groups in the population.
4.	There is no adequate regulatory environment to facilitate innovative financial services
5.	Demand-side barriers: lack of a formal identification system, low levels of financial literacy, inability to track personal financial history, and the absence of appropriate consumer protection mechanisms
6.	Low income groups perceive dealing with financial institutions to be a difficult process.
7.	Banks are more interested in dealing with wealthier customers, which discourages poorer people from accessing banking services
8.	The need for mobile banking to be developed since it is quick, reliable, safe and a low cost solution for transferring funds. According to the IFC Report, 22 % of 114 million mobile phone subscribers have shown an interest in using mobile phones to conduct banking transactions.
9.	For particular groups of customers, their socio-cultural backgrounds may make it difficult to ask for financial services.

Table 5. Financial Inclusion Comparison

Nr.	Level	LMCs Average	Indonesia	Malaysia	The Philippines
1.	Urban	33.8%	28.9%	77.6%	37.1%
2.	Rural *Pedesaan*	26%	16.2%	51.8%	19.5%
3.	National	28.4%	19.6%	66.2%	26.6%

Source of data: Demirguc-Kunt & Klapper (2012).

CONCLUSION

Five indicators were adopted to measure and benchmark the financial depth, those were (1) private credit (banking and capital market) to GDP; (2) assets of financial institutions to GDP; (3) private financing (banking, non-banking financing, capital market, bond market) to GDP; (4) domestic stock capitalization and private debt securities to GDP; (5) stock trading value to GDP. The first two indicators were adopted for the financial institutions, the last two were for the financial markets, and the third one was for the combined financial institutions and financial markets. In general, the higher the indicator value was, the deeper the financial depth or the bigger the financial size of a particular country was.

To reflect financial access or financial inclusion characteristics, five indicators were adopted, those were: (1) bank branches per 100,000 people; (2) ATMs per 100,000 people; (3) percentage of people with a formal account; (4) percent of market capitalization outside of the top 10 largest companies; and (5) percent of value traded outside of the top 10 traded companies. In general, the higher the indicator value, the more access the public had or the more inclusive the public were in their country's financial system.

With reference to the benchmark analysis of the financial depth of Indonesia with the benchmark countries (in ASEAN, ASEAN+3, BRICS, and financial centers in the world and Asia) and the benchmark group of countries (Lower Middle Income Countries (LMCs), Developing East Asia Pacific Countries (Dev. EAPs), and the World), all in all Indonesia's financial depth does not indicate a satisfactory result, since its rank was usually the lowest or the second lowest. Besides, Indonesia cannot compete with

ASEAN or the ASEAN+3 levels. In comparison with the country group average, for the financial institutions, Indonesia was still below the three benchmarked group countries. Yet, for the financial markets one indicator (i.e. stock trading value to GDP) showed Indonesia was already above the three benchmarked group countries, and another one (domestic stock capitalization and private debt securities to GDP) showed Indonesia was above the LMCs.

Benchmarked analysis of the financial access results in a better picture for Indonesia, especially for the financial markets. Despite its low average position, Indonesia was able to compete with Australia and Germany and still be within the average range of the three benchmarked group countries.

As it is generally found in developing countries, and with support from strong evidence taken from a number of international organizations' surveys, it can be inferred that the main factor driving the poor financial depth in Indonesia is the non-competitiveness of the institutions. Meanwhile, the driving force of poor financial access in Indonesia are the geographical constraints, poverty, a high income gap, and less than effective national financial development policies amidst the high foreign presence in the Indonesian banking structure.

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