The Balance of the Deposit Market and Credit Markets

Sugiyanto¹ (<u>sugiyanto@esaunggul.ac.id</u>) SaptoJumono¹ (<u>sapto.jumono@esaunggul.ac.id</u>) ¹⁾ Faculty of Economic and Business EsaUnggul University, Jakarta.

Abstract

The Balance of the deposit market and credit markets in the Indonesia banking industry (Sugiyanto and Sapto Jumono Faculty of Economic and Business Esa Unggul University, Jakarta.) The aims of the research is to determine of credit markets and deposits market in Indonesia banking industry. The effectiveness of the performance of the national banking industry can be seen in its ability to mobilize and develop funding distribute to those who lack of funds in the economic system. The higher level of effective management of the national banking system, the national investment would be growth and supporting the national economic system. The importance of research on the development of credit and deposit volumes as closely interrelated and very important in the growth of national economy. This research is causality-explanatory. using secondary data with cross section - time series with observation time of 2001 to 2015 The unit of analysis is the banking industry in Indonesia. Analysis of data using multiple regression panels that produce a model as a representation of the theory. The samples are six categories of commercial banks in Indonesia, n, Government Commercial Bank (BANK PESERO), national private Commercial foreign Exchange banks (BUSN Devisa), national private Commercial non foreign Exchange banks (BUSN non Devisa), private mixture commercial banks (bank campuran), Foreign commercial banks (Bank Asing), and Regional Development Bank (BPD). The results showed : First as generally the Indonesian Banking has well management it is shown by the variable ALMA(asset Liabilities Management) have significant effect to the volume of deposits (DPK/qdep), spread of interest rates borrowing and saving (spread), liquidity (LDR) capital (teta) and proportion fee based income (fbirev). Second as overall external factors have no affect the growth of bank credit in Indonesia. It show that Indonesia banking industry is quite efficient.

Keywords:

Banking Industry, Deposits Market, Credit Markets, Macroeconomic Conditions

A. Background.

In developing countries the effectiveness of the financial system in general is dominated by the banking system. Innovation management processes of the banking system that has been considered up to date-are still needed, given the impact of changes in market dynamics and global impact on the domestic market at a very fast way. The empirical evidence of this can be seen in the current world financial crisis which occurred in 1987, 1997 and 2007.

The banking sector in Indonesia has change for the impact of the crisis in 2007/2008 in Indonesia is not as severe as in 1987 and 1997. Indonesia's banking sector as the economic leading sector has shown its ability to mobilize public funds so that there remains an acceleration of investment who is able to drive real sector.Indonesian banking system is an ordinance, rules and patterns of how a banking sector (in this case the existing banks) conduct its business in accordance with the provisions of (system) created by the government (Siamat 2008). Macro banking management run by Bank Indonesia (BI) as a monetary authority looked at the importance of bank profitability and adequate capital to growth. Capital adequacy in the context of the growth of the bank will be able to support the stability of the financial system (SSK). To obtain sufficient profit as a means of developing the competition quite sharply amid banking management is required to raise public funds and provide in the form of loans and other investments. It is required to work optimally in bank funding and allocation of funds to keep the principle of financial management rules . The importance of accurate information that can answer Which are demand determinant of the amount of credit and deposit deals.

Indonesian Banking Architecture (API) is a basic framework of the Indonesian banking system that is comprehensive and provides direction, shape, and structure of the banking industry for a range of five to ten years into the future (Bank Indonesia, 2012). The policy for the banking industry in the future is encapsulated in the API is based on the vision of a healthy banking system, robust and efficient in order to create a stable financial system in order to help promote national economic growth. On the basis of the needs of national banking blue print and as a continuation of the bank restructuring program has been running since 1998, Bank Indonesia on January 9, 2004 has

launched API as an overall framework policy direction of the Indonesian banking industry development in the future.

Improvements to the API programs include include strategies that are more specific regarding the development of Islamic banking, rural bank (BPR) and Small Medium Enterprises (SME) forward so that the API is expected to have a program of activities that is more complete and comprehensive that includes the banking system as a whole related to commercial banks and rural banks, both conventional and islamic, as well as the development of SMEs.Data on the performance of the banking industry over the period 2001-2014 if the performance has developed quite rapidly. The average growth in assets, loans and deposits respectively show a positive number of 14 836%., 20 546% and 13 184%. The phenomenon of the condition of the banking market is enough to attract attention if it is associated with conditions other macro economic indicators such as growth in the market for goods and services as well as other financial markets.

Another phenomena are internal developments in Indonesia banking financial achievement. The financial condition of the banking industry conventional in Indonesia in terms of capital proxied by CAR (Capital Adequacy Ratio) or the level of capital adequacy, it appears that the capital is very strong, ranging from 16.76% to 22.4%. Bank Indonesia requires a minimum of 8 %. So in terms of capitalization of the banking industry in Indonesia is unbelievably healthy condition or very solvable.

The profitability of Indonesian banking condition showed a significant increase. It can be seen from increase of the indicators ROA during the observation, in which the ratio ranges from 1:45 to 3:03%%. ROA minimum is 1.5% as the limit. The efficiency of operating cost proxied by the ratio BO / PO is below 100%, with a downward trend, this means there is an increased efficiency in bank operation. The liquidity aspect, the Indonesian banking conditions showed a significant increase in the intermediation function. It can be seen from the increase in LDR (loan to deposit ratio), the ratio ranges from 33.01% to 78.77% in general far below 110% as a maximim limit. The intermediation function can still be improved because the largest number the largest increase only reached 78.77%, which means that there are too many people who have not been channeled funds to finance public investment.

From the above phenomenon, the aim to be achieved from this research are:

- 1. To Establish a model of determinants that affect the amount of the credit market in the banking industry in Indonesia.
- 2. Knowing factor / variable what affects the formation of the credit market in the banking industry in Indonesia.

B. LITERATURE REVIEWS.

The economy of a country can be seen from the national income. According Sukirno (2008: 36) National Income is the amount of income received by factors of production used to produce goods and services in a given year. The national income are indispensable in theory and macroeconomic policies in the face of the central issues related to economic growth, the business cycle, the relationship between economic activity and unemployment, as well as the size and the determinants of the rate of inflation. The national income accounts can be an understanding of how different parts of an economy, interact with each other, and provides a conceptual framework for explaining the relationship between the various macro-economic variables that are important such as output, income and expenditure. Data from the national income accounts can form the basis for measuring the performance of the economy, creation of economic forecasting and preparation of various macroeconomic policies

One of the important issues in macroeconomics is the demand and supply of money in the economy. The economic theory of demand for money are divided into three groups, first the theory of money demand before Keynes, the theory of money demand according to Keynes's theory, and the theory of money demand after Keynes. The theory of demand for money before keynes pioneered by Irving Fisher. The assumption is that money demand is not affected by the interest rate but the size of the money will be determined by the speed circulation of the money. Meanwhile, according to the Cambridge, represented by Marshall and Pigou, money is a store of wealth, and not as a means of payment. According to Cambridge demand for cash is affected by the interest rate, the amount of property owned, expectations of interest rates in the future, and the price level. But in the short term these factors are constant or change proportionally to income.

Keynes's Theory are generally explain : (1) The objectives of the community to ask (using money), (2) the factors that determine the interest rate, (3) the effect of changes in the money supply of the country's economic activity. Related to the community goals for the request (hold) the money, it can be classified into 3 motive, (1) transaction motive, (2) precautionary motive, (3) Speculation motive,

This motive arises because the money is used to make regular payments for the completed transaction. The amount of money demand for transaction purposes is determined by the level of income MDT = f(Y), the greater the level of income generated, the amount of money requested for transactions also increased and vice versa.

Precautionary motive, in addition to finance the transaction, the money requested also by the community for the purpose in the future that are on guard. The magnitude of the demand for money as a precaution determined by the level of income as well. The greater the income level of the demand for money as a precaution even greater. MDP = f(Y). Speculation motive, in a modern economic system-where the financial institutions of society has been progressing very rapidly encourage its citizens to use the money for speculative activities, which is stored or used to buy securities, like government bonds, stocks, or instruments more. Factors that affect the magnitude of the demand for money with this motif is the interest rate, securities dividends, or capital gains,

One of the post keynes theory proposed by Friedman. According friedman theory amount of money demanded depends on the level of national income. Differences friedman and Keynes is Friedman stated that the value of k is not something constant.whereas k is is a constant that indicates the percentage of the amount of cash held on national income. K value may change depending on changes in interest rates and other factors that can be foreseen, and Friedman does not assume that revenues always happens at the level of full employment, but it can happen at a level below full employment.

The financial markets have an important function in the transfer of resources from the surplus unit to deficit unit. The process of transferring funds from savers to borrowers called financial intermediaries (financial intermediation). Many institutions in the economy act as financial intermediaries. Only banks have the legal authority to create assets that are part of the money supply.such as checking accounts. Therefore bank is the only financial institution that directly affect the supply of money (Mankiw, 2000).

The function and role of public banks in the economy is very important and strategic. Commercial banks are very important in terms sustain the strength and smoothness of the payment system and the effectiveness of monetary policy. The functions of commercial banks as described below demonstrates the importance of commercial banks in the modern economy (1) the creation of money (2) support the smooth payment mechanism (3) fund savings (4) support the smooth international transactions. (5) storage of treasure and securities (6) the provision of other services (Manurung and Rahardja. 2004).

Bank regulation and supervision geared to optimize the Indonesian banking functions. among such: (1) the institution of public trust in relation to an institution collector and distributor of funds. (2) An implementing monetary policy. (3) An organization that contributes to economic growth and equitable distribution; in order to create a healthy banking system. Both the banking system as a whole and individually and is able to maintain the interest of the public good. A Develop naturally and benefit the national economy. To achieve these objectives the approach taken to implement the policy: (1) the policy provides flexibility attempted (deregulation). (2) the policy principles of prudential bank (prudential banking) and (3) supervision of banks has pushed the bank to consistently implement internal regulations created (self regulatory banking) in carrying out its operations with reference to the precautionary principle (Bank Indonesia. 2009).

Credit markets are equilibrium points the entire loan amount requests from the public provided by commercial banks at various price of money (interest rates) specific. The international community provides a definition and understanding of the following: Loan is an arrangement in the which a lender Gives money or property to a borrower and the borrower agrees to return the property or repay the money. Usually along with interest at some future point (s) in time. Usually there is a predetermined time for repaying a loan and Generally the lender has to bear the risk that the borrower may not repay a loan (though modern capital markets have developed many ways of managing this risk. ttp: //www.investorwords.com/2858/loan.html. Credit market is a firms / companies and the government are Able to raise funds by marketplace for the exchange of debt securities and short-term commercial paper. Allowing investors to purchase Reviews These debt securities. Activity in the credit markets is often used to gauge investor sentiment. If more bonds from the government are being purchased. This is typically a good indicator that investors are worried about the stock market. (Http://www.investopedia.com)

Deposit market can be defined as is the total number of third-party funds (DPK) of the society collected by commercial banks at various price of money (interest rates) specific. The international community defines as follows: <u>Money market deposit</u> account is a type of savings account in which the bank or brokerage firm invests funds held on deposit in short-term debt obligations. A money market deposit account often offers limited check - writing privileges and pays an interest rate that is typically higher than a regular savings account but lower than a certificate of deposit other time deposit. Also referred to as a Money Market Demand Account or simply as a Money Market Account. Compare to Money Market Fund, sumber: <u>http://www.businessdictionary.com</u>)

The structure, conduct and performance (SCP) of interacting that affect the allocation of production to the public effectively and efficiently. The market structure is an important key of the pattern of the SCP concept in the

industrial economy (Jakarta, 2001). The structure of the market can be characterized by various indicators such as the number of sellers, the number of buyers, Buyers scale and size distribution of companies. The market structure can also be determined by whether or not the barrier for new entrants, the condition of horizontal integration and vertical integration and product differentiation. The market structure will affect the behavior of the market, especially in terms of his attitude to the pricing policy, strategy and business development strategies in the product. Furthermore, the structure and behavior carried out by the company will mempengeruhi performance in perkonomian. The good performance is mainly covers the low price, efficiency, innovation and keadilan.Hubungan structure and performance, can be seen from the variable CR (consentration Ratio) or HHI (Herfindahl-Hirschman Index) compared with PCM. If the PCM has a positive relationship with the concentration, the SCP hypothesis is warranted. In a concentrated market the companies in it easy to achieve high profits, according to the theory of market power is that a high concentration of market power indicates that caused the benefits achieved will be higher as well

C. Research Methodology

This research is descriptive research .The Obyek is conventional banking industry by a group of commercial banks in Indonesia. 2001-2014 are detailed in 6 groups, namely Government Bank (Bank PESERO), Foriegn exchange national private commercial bank (BUSN Devisa), Non Foreign Exchange national private commercial bank (BUSN non Devisa). Mixed Bank. Foreign Banks. And BPD (Regional Development Bank). The data used are secondary data from information published financial statements of Indonesian companies and banking statistics, from 2001 to 2012

Variable	Operational Definition					
Credit Volume	Total demand for credit by the public throughout granted by commercial banks at various price of money (interest rates)					
Deposit Volume	The total number of third-party funds (DPK) of the society collected by commercial banks at different levels of interest					
Loan Interest Rate	The amount of interest payments (Rp) divided by total loans (Rp) per period					
Interest rates on deposits	Total interest income from deposits (Rp) divided by total loans (Rp) per period					
Central Bank Rate (BI)	Results from investments in BI certificates, per period					
Rm, BEI	Changes in Jakarta Composite Index, BEI as a result of the market average BEI					
Rm Fx(Forex)	Changes IDR / USD, the foreign exchange market as the average yield money market forex					
capitalization	CAR = Capital / ATMR					
Asset Quality	NPL- Ratio KAP = APYD / Total Productive Asset					
Earning Asset	ROA = earning before tax per year / Average of Total Asset					
Liquidity	LDR ratio = Credit / Third-party funds					
IPI	Indonesian production index is the level of performance of the real sector in Indonesia.					

The variables in this study in detail described as follows

Data analysis using regression model dynamic data panel. Regression model approach Static Data Panel. Search determinants of the development of Indonesian bank loans in terms of micro variables (internal banking) and macroeconomic variables is done by a panel regression analysis static data. In summary the results of the panel regression analysis of static. Modellineg in the analysis of static data panel using three estimation model is a model Ordinary Least Square (OLS), Fixed Effect (FE), and Random Effect (RE).

D. DATA ANALYSIS.

From the analysis of data for the model selection ordinary least square (OLS) and Fixed Effect (FE), and comparison between the methods of GLS with RE is can be seen from the table below:

		Devisa	nonDev	Campuran	Asing	BPD
Bank	Bank	Bank	Bank	Bank	Bank	Bank
FE	FE	FE	FE	FE	FE	FE
0.00000	0.00010	0.00000	0.00000	0.02320	0.00000	0.00000
RE	OLS	RE	OLS	OLS	RE	RE
0.00000	0.64060	0.00000	0.36420	0.38320	0.00000	0.00040
FE	FE	FE	FE	RE	FE	RE
0.00000	0.00020	0.00000	0.00000	0.9423	0.00000	0.81300
FE	FE	FE	FE	RE	FE	RE
ada	ada	Ada	ada	ada	ada	ada
52.0400	125.9500	65.7300	61.0600	89.0500	80.4000	57.3300
ada	Tidak	Tidak	ada	ada	ada	ada
0.0000	0.0652	0.3642	0.0000	0.0000	0.0100	0.0000
GLS	GLS	GLS	GLS	GLS	GLS	GLS
	FE 0.00000 RE 0.00000 FE 0.00000 FE ada 52.0400 ada 0.0000	FE FE 0.00000 0.00010 RE OLS 0.00000 0.64060 FE FE 0.00000 0.00020 FE FE ada ada 52.0400 125.9500 ada Tidak 0.0000 0.0652	FE FE FE FE 0.00000 0.00010 0.00000 RE OLS RE 0.00000 0.64060 0.00000 FE FE FE 0.00000 0.00020 0.00000 FE FE FE ada ada Ada 52.0400 125.9500 65.7300 ada Tidak Tidak 0.00000 0.0652 0.3642 GLS GLS GLS	FE FE FE FE FE 0.00000 0.00010 0.00000 0.00000 RE OLS RE OLS 0.00000 0.64060 0.00000 0.36420 FE FE FE FE 0.00000 0.00020 0.00000 0.00000 FE FE FE FE ada ada Ada ada 52.0400 125.9500 65.7300 61.0600 ada Tidak ada ada 0.00000 0.0652 0.3642 0.0000 GLS GLS GLS GLS	FE FE FE FE FE FE 0.00000 0.00010 0.00000 0.00000 0.02320 RE OLS RE OLS OLS 0.00000 0.64060 0.00000 0.36420 0.38320 FE FE FE FE RE 0.00000 0.00020 0.00000 0.00000 0.9423 FE FE FE FE RE 0.00000 0.00020 0.00000 0.00000 0.9423 FE FE FE FE RE ada ada Ada ada ada 52.0400 125.9500 65.7300 61.0600 89.0500 ada Tidak Tidak ada ada 0.0000 0.0652 0.3642 0.0000 0.0000 GLS GLS GLS GLS GLS GLS	FE OL0000 0.00000 0.00000 0.02320 0.00000 0.00000 RE 0.00000 0.02320 0.00000 0.00000 0.02320 0.00000 0.00000 0.02320 0.00000 0.00000 0.02320 0.00000 0.00000 0.036420 0.38320 0.00000

Source: Secondary data processed

Thus, the conclusions that can be drawn from the results of the election as a whole this static model, the model estimates the best is Fixed Effect (FE most suitable among the OLS, FE, and RE). FE is the most appropriate model to make estimatasi the credit growth in banking in Indonesia. If viewed per group of banks the best estimator is the OLS models for state-owned banking groups, non-foreign exchange and mix, while the best FE models for foreign exchange banks and foreign banks and the best RE models for BPD (regional development bank).

Discussion

1.Effect of third party funds (DPK).

DPK influence on the distribution of credit volume (qloan) showed significant positive results both in terms of the entire bank and group. In general, if there is an increase amount of 1 trillion rupiah DPK will followed by credit growth 0,855 trillion rupiahs. This means that the size of bank t credit depends on the source of its direct public deposits (DPK). Visible highest-owned banks compared with banks another These findings are consistent with the hypothesis, which means in accordance with the basic logic of banking knowledge, where the main function of banks in the financial system within the economic system is as an intermediary institution between SU (surplus units) and DU (deficit unit in society). The study's findings correspond with research Anggrahini, Soedarto (2004) and Budiawan (2008)

2. Spread Effect.

The influence spreads (interest rate spread) of the bank lending For overall significant positive effect on credit growth, but is reviewed only group owned banks are in accordance with the overall banking. Spread negative effect (not significant) occurred in the group of national private foreign excange bank (BUSN-Devisa)), national private non foreign excange bank (BUSN non-Devisa), Mixed Bank and foreign banks. While the regional development bank (BPD) effect credit significant. positive on spreads. but not Under normal conditions the relationship with the volume of credit spreads is negative, due to the higher spread means that the more expensive the price so that the quantity of money market loans declined. Determining the level of spread depends on the direction of the strategy and target market. To that end, the grouping of industrial grade and rank bank business.

Dep-Var :	All Bank	Persero Bank	BUSN devisa	BUSN nondev	Joint Bank	Foreign Bank	BPD Bank
qloan	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
qıoun	(Pr)	(Pr)	(Pr)	(Pr)	(Pr)	(Pr)	(Pr)
Qdep	0.855	0.873	0.778	0.806	0.798	0.659	0.793
	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Spread	0.239	6.423	-0.328	0.017	-0.039	-0.231	0.073
~	0.012	0.001	0.314	0.624	0.697	0.587	0.126
Ldr	0.049	0.674	0.287	0.000	0.026	0.050	0.038
	0.000	0.010	0.000	0.819	0.000	0.000	0.000
Rrgwm	0.003	0.253	-0.246	0.005	-0.121	0.403	0.004
	0.708	0.713	0.298	0.884	0.005	0.014	0.022
Teta	-0.091	0.508	-0.026	0.005	0.011	0.003	-0.020
	0.000	0.772	0.758	0.380	0.742	0.956	0.124
Nplg	0.005	0.189	0.324	-0.013	0.003	0.128	0.098
- 'P-8	0.898	0.792	0.048	0.563	0.921	0.012	0.001
Nierev	0.000	-0.839	0.013	0.001	-0.022	-0.007	0.007
	0.985	0.083	0.773	0.727	0.147	0.903	0.002
Fbirev	0.058	0.620	0.174	-0.005	0.011	0.191	-0.029
	0.000	0.311	0.036	0.383	0.493	0.000	0.003
Roe	-0.003	0.446	0.017	-0.009	0.001	-0.053	-0.006
	0.711	0.080	0.276	0.043	0.969	0.110	0.408
Loanms	-3.398	-5.340	-2.784	5.288	6.371	6.802	1.547
	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Ipi	0.148	0.423	0.093	0.040	0.186	-0.035	0.117
1	0.000	0.424	0.346	0.002	0.000	0.849	0.000
Sbi	0.259	1.935	0.582	0.121	0.198	-0.769	0.481
	0.171	0.212	0.168	0.027	0.276	0.207	0.000
ern1000	-0.039	0.118	-0.067	- <mark>0.033</mark>	-0.016	0.234	-0.097
	0.369	0.741	0.479	0.010	0.710	0.104	0.000
Inf	-0.019	0.229	-0.237	-0.039	-0.069	0.091	- <mark>0.191</mark>
	0.850	0.788	0.291	0.165	0.452	0.765	0.000
_cons	-15.414	-130.225	-23.387	-1.661	-19.471	-30.267	-7.957
Wald chi2(14)	38084.450	5986.840	7379.440	7121.550	1606.180	543.750	5684.45
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.00

Table 2: Determinants of Development Credit Bank Indonesia (Model GLS)

Source: Secondary data processed

A real comparison in order to determine the spread net credit margin. In general, banks set a spread margin of 2% - 3% of the cost of funds and loan volume. The positive impact of the spread of the credit in the banking industry in Indonesia is due to the concentration of the market by large banks (mostly from state-owned banks) so that the high spread still make big banks ruler credit markets are able to maintain and increase the amount of turnover of credit with spread thick. This finding is contrary to research Siregar (2006) stated interest rate significant negative effect on demand for loans to the government banks.

3. LDR Effect.

Influence of LDR (loan to deposit ratio) of the bank lending is a significant positive. The higher the number LDR means bank credit growth is greater than its growth in deposits, so that liquidity increased, but excess liquidity (internal liquidity) per individual banks declined. In this study proved that that was well reviewed as a whole or in groups (except BUSN non-Exchange) there is a significant positive impact on the rate of credit LDR. That is, the volume Deposits and credit volume of banking in Indonesia is moving in the same direction. The rate of flow positive stimulate bank credit management banking industry becomes increasingly aggressive to raise public

funds (DPK). So the increase in LDR means that credit flows are stronger than the current DPK has implications for the increase in the volume of banks' loan.

4. GWM (minimum reserve requirements) Effect.

The influence of the minimum reserve requirement (Giro WajibMinimum)) on bank lending in this study is shown by the size *rrgwm* that do not affect significantly (as a whole), but in group Mixed banks significant negative effect, while in the group of banks Foreign and regional development bank (BPD) significant positive effect. All insignificant-an *rrgwm* to credit (in general) means that the size of the funds that are embedded in *rrgwm* does not affect the rate of positive credit growth, this indicates that the banking industry in Indonesia have enough liquidity, but on the other hand the performance of lending does not decline, but continues to increase. This study is in line with Teniwut (2006) which states that the increase in the reserve requirement will increase in deposits, lending.

In 2004 (July) BI establishes new regulations regarding GWM. The percentage of the reserve requirement imposed on each bank is different depending on the total deposits; and BI shall pay interest on the deposits reserve requirement of 3 percent. The increase in the reserve requirement based on LDR issued again by the Bank in September 2005 in order to enhance the regulations in 2004 with the aim of expanding its main credit to the real sector. Rewards GWM current accounts of deposits also increased to 5.5 percent for the entire additional GWM rupiah over 5 percent. The existence of this provision does not affect the bank's performance decline in lending, but the empirical data shows that the rate of credit keeps rising nationwide.

5. Capital Bank Effect.

Effect of bank capital is proxied by TETA (Total equity to total assets) of the bank lending, showed that the overall terms (all banks) looks TETA significant negative effect on the rate of bank credit. The decrease proportion of funds the bank owners (of all bank assets), the amount of loans disbursed by the greater and vice versa. This means that the portion of public deposits (DPK and DP2) increasingly play a role in the increase in credit. The results of this study conflict with Rachmawati (2005) which states that in the short term lending rate and the capital asset ratio of positive and significant effect on credit supply.

6. Non Performance Loan (NPL) Effect.

Effect of non-performing loans, the NPL (non performing loans) to bank lending. The results showed no significant NPL in influencing bank credit (all banks), but if the results of the study is viewed by groups of banks shows that the positive effect on the rate of NPL loans in the group of foreign exchange banks, foreign bank and BPD (regional development bank). The size of the NPL (a downward trend) does not correlate with the rate of bank credit in Indonesia. Under normal conditions the credit relationship with the NPL is negative, this is done to reduce the risk of credit. These findings are different from the findings peneltitian Soedarto (2004), Non Performing Loan (NPL) positive and significant impact on bank credit, on the other hand Harmanta findings and Ekananda (2005) addressed the NPL significant negative effect; while finding Budiawan (2008) menunjukanNPL significant negative effect on bank credit

7. Overhead Cost Effect.

Effect of overhead cost, *NieRev* (non-interest expenses to revenue) of the bank lending has shown that the overhead expenses do not affect the loan rate, except in the BPD group (there is a small but significant effect).Effect of overhead to occur via credit lending rate or spread. The higher the spread will impact on the turnover of bank credit. That is, the rate of growth of bank credit in Indonesia has not been affected by overhead load efficiency, but more influenced by the spread. Overhead efficiency financing has not been a significant impact on the turnover of credit.

8. Fee Base Income Effect.

Effect of non-interest income, or the FBI (fee based income) proxied by *FbiRev* (Fee Based Income to Revenue) of the bank lending proved significant positive. There was a positive impact of the increase in the rate of credit, the increase of FBI will followed by increase of the credit. Here we can see there is a balancing process in the balance between the FBI and maximize the revenue Interest Income in the bank. Of course here the management intends to maximize the value of the firm.

9. Profitability Effect.

The effect of profitability, which in the proxy with the ROE (return on equity) to prove that bank lending is generally seen ROE does not affect the rate of bank credit, except in non-foreign BUSN group (significant negative effect). This means that the banking ROE should be able to increase bank capital to improve bank solvency. The increase in bank credit is not affected by the ROE of banks. The increase in credits proved not successful because the solvency of the bank, but was more influenced by the leverage of banks (especially DPK).

10. Market Share Effect.

Influence of market share proxied by *loanms* (loan market share) of the bank lending proved significant positive. Indonesia credit market developments, followed by banks responded positively to try to maintain market share reached a trigger to channel the greater amount of credit. Market share maintained or even improved, will increase the volume of loans extended by banks individually.

11. National Production Effect.

Influence IPBM (Production Index of Large & Medium Enterprises) as a proxy, IPI (Industrial Production Index) of the bank lending is a significant positive, contributing member of the banking credit to the growth of national output. Nationally, the participation of Large and Medium-absorbing national bank lending, significant. Means banking functions in financing production and investment, significant.

12. SBI, exchange rate and inflation Effect.

Effect of SBI interest rate, exchange rate (ERN) and inflation on bank lending, the overall insignificant. This means that banking in Indonesia is quite strong in the face of economic shocks originating from outside. Judging per group, SBI and exchange rate affects only the regional development bank (BPD) and Private national Commercial foreign exchange bank (BUSN-Devisa) and positive way, while inflation only affects BPD, negatively.

This finding is contrary to the findings of Sri Haryati (2009) inflation, the exchange rate has a significant positive effect on credit in Indonesia. About SBI, these findings are consistent with the findings of Arma Billy Pratt (2010), which concluded that an increase or decrease in the SBI rate during the study period did not significantly affect lending. The higher the SBI interest rate is likely to encourage lending. On the exchange rate, this finding is contrary to Mongid (2008) exchange rate has a significant negative effect on credit during the economic crisis. On inflation, the findings are consistent with Amindu and Harvey (2006), inflation does not affect the credit growth of banks in Ghana.

E. CONCLUSIONS LIMITATIONS AND IMPLICATIONS FOR RESEARCH

1. Conclusion.

Determinants of banking credit volume in terms of internal factors and internal factors are as follows:

- a. Overall external factors do not affect the growth of bank credit in Indonesia, it does show that banking in Indonesia is quite efficient. Significant external factor is the IPI (Industrial Productions Index) it is understandable because the IPI reflects the growth of the real sector which describe the absorption of funds. IPI is not significant for the bank kind of bank owned by government (SOE), Commercial Bank Foreign Exchange and Mixed Bank.
- b. In general the Indonesian Banking management has done well it is evident from ALMA significant variable is the volume of DPK (qdep), spread of interest rates to borrow and save (spread), liquidity (ldr), capital (theta) and the proportion of fee-based income (fbirev).

2. Limitations

Limitations of this study are:

- a. Approach in a highly quantitative data analysis, so the qualitative variables that affect the outcome of research tend to ignore such regulatory policies Indonesian banking architecture (API).
- b. The macro-economic variables such as information technology, increase of Human Development Index are not included.
- c. Variable sourced from non-banking as a substitute for bank credit financing has not been input

E.3. Implication of Research.

The implications of this research are:

- 1. Bank Indonesia as a regulataor should lower the rate spread to lower the lending rate so overall credit volume increased.
- 2. The decline in spreads can be done by lowering the overhead costs of the bank (non-interest exspenses) so that the cost effectiveness of banking operations to be down (operating profit margin will be increases) and the lending rate to decline.
- 3. For this type of bank pesero (government bank), Private Commercial Foreign Exchange bank (BUSN Devisa), Private Commercial non Foreign Exchange bank (BUSN Non Devisa) and mixed bank should be more creative to increase non-interest income (fee base income).

BIBLIOGRAPHY

- Adam, Smith. "An Inquiry Into The Nature and The Causes of The Wealth of Nations". 1937 dari Stephen Martin. "Industrial Economics: Economic Analysis and Public Policy". MacMillan. New York. 1988.
- Arisyi, F. Raz. Tamarind P. K. Indra. Dea K. Artikasih. and Syalinda Citra. Krisis Keuangan Global dan Pertumbuhan Ekonomi: ANALISIS DARI PEREKONOMIAN ASIA TIMUR. BEMP Volume 15 Nomor 2. Oktober 2012. Bank Sentral Republik Indonesia.
- Alistair, Armytha. 2004. Analisis Pendekatan Struktur-Perilaku-Kinerja pada Industri Tepung Terigu di Indonesia. Pasca Penghapusan Monopoli Bulog [skripsi]. Fakultas Ekonomi dan Manajemen, Institut Pertanian Bogor, Bogor.
- Antonio, M. Syafi'i. Bank Syariah Dari Teori Ke Praktik, Jakarta: Gema Insani Press, 2001, Tazkia Cendikia
- Amalia, Fitri dan Nasution. Mustafa Edwin. 2007. Perbandingan Profitabilitas Industri Perbankan Syariah dan Industri Perbankan Konvensiona Imenggunakan Metode Struktur Kinerja dan Perilaku. Jurnal Ekonomi dan Pembangunan Indonesia. Vol VII. no.02.
- Ariyanto, Taufik, 2004. Profil Persaingan Usaha dalam Industri Perbankan Indonesia. Perbanas Finance and Banking Journal. Volume 6. No 2 Desember.
- Bhatti, Gulam Ali, 2010. SCP Hypothesis in Pakistani Commercial Banks (ROA Panel)
- Bikker, JA. 2002. Competition. Concentration. and Their Relationship: An Empirical at The Banking Industry. Journal of Banking and Finance. 26(11).
- Douglas, F. Greer. "Industrial Organization and Public Policy, 3rd Ed. . (New York: MacMillan. 1992). p. 175
- Derina, Ratna, and Willem A. Makaliwe. 2006. Perilaku Perbankan Indonesia: Beberapa Temuan Pattern dan Panel Data Analysis 1993-2005. Usahawan No.06 Th XXXV Juni.
- Deltuvaite, 2010. The Market Structure-Profitability Relationship in Banking: SCP Hypothesis in the OECD Countries (ROA Panel).
- Evanoff, D. D.. and Fortier. D. L. 1988. *Reevaluation of the Structure-Conduct Performance Paradigm in Banking*. Journal of Financial Services Research.1.
- Firmansyah, 2009. Model Regresi Panel Data Aplikasi dengan Eviews 6.0. Modul Workshop Alat Analisis Ekonomi. LSKE. FE-UNDIP.
- Gilbert, Alton R. B. 1984. Bank Market Structure and Competition: A Survey. Journal of Money. Credit. and Banking. November 1984
- Gujarati, Damodar N. 2003. Basic Econometrics. 4th Edition. Mc Graw-Hill. NewYork
- Hassan & Bashir. 2002. Determinants of Islamic Banking Profitabilitas. International Journal. ERF paper.
- Jatmiko, Pracoyo Budi. 2000. Paradigma Structure-Conduct-Performance versus Efficiency Hypothesis: Manakah yang Mencerminkan Industri PerbankanIndonesia?. Journal Ekonomi dan Bisnis Indonesia. Vol 15(3).
- Joe, S. bain. "Barriers to New Competition". (Cambridge. Mass Harvard Univ. Press. 1956)
- Koch. J.V. 1980. Industries organization and prices". (Prentice Hall. 1980).
- KV. Bhanu Murthy and Deb. Ashis Taru. 2008. *Thoretical Framework of Competition As Applied to Banking Industry*. Delhi University. January 2008. Available online at http://mpra.ub.uni-muenchen.de/7465.
- Lloyd-Williams, D.M. Molyneux. P. and Thornton. J.1994. "Market Structure and Performance in Spanish Banking". Journal of Banking and Finance 18(3.
- Mangasa, AS. 2007. Persoalan-persoalan Perbankan Indonesia. Gorga Media. 2007.
- Martin, Stephen. 1988. Industrial Economic Economic Analysis and Public Policy. Second Edition. Macmillan Publishing Company. New York
- Mishkin, Frederick S & Stanley G. 2000. Financial Market Institutions 4thEd.. Addison Wesley.
- Mawardi. Wisnu. 2005. Analisis faktor-faktor yang mempengaruhi kinerja keuangan bank umum di indonesia (studi kasus pada bank umum dengan total asset kurang dari 1 Trilliun). Jurnal bisnis strategi. Vol.14. No.1.
- Musonda, Anthony. 2008. Deregulatio, Market Power. and Competition: AnEmpirical Investigation of The Zambian Banking Industry. University of Oxford. United Kingdom. Maret 2008. Available online at http://ideas.repec.org/i/em html
- Nasser Katib. M. 2004. *Market Structure and Performance in the Malaysian Banking Industry: a Robust Estimation*. Universiti Utara Malaysia. Available online at <u>http://papers.ssrn.com/so/3/displayjel/cfn</u>
- Neuberger. Doris. 1997. *Structure. Conduct. and Performance in Banking Markets*. Working Paper no. 12. Universitat Rostock. Available online http://econpapers.repec.org
- Nuryakin Chaikal. Perry Warjiyo. 2006. Perilaku Penawaran Kredit Bank di Indonesia: Kasus Pasar Oligopoli Periode Januari 2001 – Juli 2005. Buletin Ekonomi Moneter dan Perbankan.
- Paul R. Ferguson. "Industry Economics: Issues and Perspectives". (MacMillan Ed. 1988).

- Putri, Ismalianti. 2004. Analisis Struktur, Perilaku, dan Kinerja Industri Rokok Kretek di Indonesia [skripsi]. Fakultas Ekonomi dan Manajemen, IPB, Bogor.
- Reder. Melvin W. "Chicago Economics: Permanence and Change". Journal of Economic Literature Vol. 20. No. 1. March. 1982.
- Sarita, Buyung, 2012. Determinants of Performance in Indonesian Banking: A Cross-Sectional & Dynamic Panel Data Analysis (Indonesia).
- Sarita. Buyung. 2006. Pengaruh Tumpuan Pasaran. Penguasaan Pasaran. dan Ancaman Moral terhadap Prestasi Bank di Indonesia. (Unpublished Dissertation. Universiti Sains Malaysia. 2006). Available online athttp://eprints.usm.my/9739/1
- Sastrosuwito and Suzuki (2012). The Determenints of Post-Crisis Indonesian Banking System Profitability (Indonesia).
- Sahoo and Mishra. 2012. Structure, Conduct and Performance of Indian Banking Sector.
- Sofyan Sofriza. 2002. Pengaruh Struktur Pasar terhadap Kinerja Perbankan di Indonesia. Media Riset Bisnis dan Manajemen. Vol 2 (3) Desember.
- Sri Yani K. dan Lyla R. 2006. Persaingan Perbankan di Indonesia. Buletin Ekonomi.4(2).
- W. Carlton. Dennis and M. Perloff. Jeffrey.. 2000. *Modern Industrial Organization*. Third Edition. Addison-Wesley. USA.
- Wihana Kirana J. 2008. Ekonomi Industri. Edisi 2. 2008. BPFE Yogyakarta.
- Wihana Kirana J. dan Nur Wanto.1998. Analisis Struktur dan Kinerja Industri Bank Swasta Nasional di Indonesia Tahun 1996. Jurnal Ekonomi dan Bisnis Indonesia