# ANALYSIS OF THE THREE PILLARS OF BASEL II TO SUPPORT THE HEALTH OF BANKS IN INDONESIA

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**Abstract**

The purpose of this paper is to determine the affect and function of Basel II with its 3 pillars in assisting the health of banks in Indonesia. This have a look at uses a qualitative descriptive approach, in which the researcher develops principles, collects records and knowledge however does not carry out hypotheses. Basel II calculates capital necessities according with the bank's threat profile, and presents incentives for best improvement in risk management practices in banking. In Basel II, the calculation of financial institution capital is contained in Pillar-1 minimum Capital Requirement in improving the high-quality of threat control so that in time it is able to optimize the incentives that can be received in calculating capital requirements, Pillar-2 Supervisory evaluation method and is known as the man or woman Capital Adequacy evaluation system ( ICAAP) so that it will be a challenge for banks and supervisors. It's far important to boom the competence and capacity of supervisors supported by means of a hard and fast of supervisory provisions so that during due route they could behavior an effective assessment of dangers apart from Pillar 1 and can even request a financial institution's willingness to boom capital if the calculation of the financial institution's capital is deemed inadequate. Furthermore, the lively function of the network in supervising banks is visible as decisive in order that from the start the network is anticipated so that you can assess the risks confronted and to recognize the level of capital adequacy owned via banks as summarized in Pillar 3-market area. The synergies in the application of the three Pillars contained in Basel II above cannot be separated in achieving a sound and stable banking industry and financial system

**Keywords**: Basel II, stable banking industry, Capital Adequacy evaluation system

**JEL Classification Codes**: E51, G24

## 1. Introduction

Banking is one of the important sectors figuring out the stability of a country's economic system. The function of banking as an intermediary group greatly determines the fitness of an financial system (Mishkin, 2010). The stableness of the banking area has a important have an effect on on financial stability and economic boom. McFarlane (1999) states that the steadiness of a rustic's financial system could be accomplished on circumstance that stability within the banking sector has been achieved. The close relationship between banking stability and the economy then requires regulators to think about and make policies to reduce crisis risk and maintain banking stability. The Central banBs of countries in the world eventually formed institutions that regulate bank risk management including bank capital issues under the direction and supervision of the Bank for International Settlements (BIS) (BIS, 2016). The background for the formation of the Basel Committee on Banking Supervision is due to the role of the banking system as an intermediary institution that is very vulnerable to risk (Amidu and Hinson, 2006; BIS, 2016).

The view of the important role of capital shape at the quality of banking has been a debate among economists. Modigliani and Miller were the first economists to give the idea of capital

structure (Modugu, 2013). Modigliani Miller's theory states that company quality can be achieved by increasing the debt ratio (Glickman, 1996; Mostafa and Boregowda, 2014; Ahmeti, 2015). This implies that the higher the level of debt owned by the company, the more the company has quality and a high level of trust. In line with this, the Trade Off theory also states that the higher the debt ratio of the company, the lower the tax burden that will be borne (Culata and Gunarsih, 2012; Serrasqueiro and Caetano, 2012; Glover and Hambusch, 2013; Canarela, et al. ., 2014; Adair and Adaskou, 2015). This condition will growth the enterprise's income, so that the organization's performance will be more cost-effective. Opposite to these two theories, the Pecking Order concept states that agency great can be fashioned through the electricity of capital from within the organization itself (Matemilola and Bany – Arifin, 2011; Abosede, 2012; Dacosta and Adusei, 2016). The purpose of this explanation is that the higher the ratio of capital owned by the company, the company will be stronger and have high quality.

The debate on capital structure on the quality of the company also occurs through the concept of moral hazard. The moral hazard theory gives the effect of the capital structure dilemma on the credit risk of the banking sector. The theory of the moral hazard hypothesis states that if a bank has a high level of capital, then the bank will have a low credit distribution incentive (Klein, 2013; Monokroussos, et all., 2016). This condition is due to the fact that when the funds obtained from third parties are mostly used for capital reserves, the amount to be distributed to debtors will be lower, so the risk that banks will face will also be lower. The opposite concept is expressed in the Too Big Too Fail hypothesis theory. The theory states that a bank that has a high capital ratio will actually tend to increase risk-taking activities, one of which is through lending activities (Monokroussoss, et al., 2016; Isaev and Masih, 2017).

The role of capital structure in the banking sector is not only subject to theoretical debate, but also empirically. The implementation of several rules regarding risk control, particularly banking capital that's packaged within the Basel Accord policy framework package, has also come to be a be counted of dialogue among economists and researchers regarding their impact on the stableness and credit score risk of the banking sector. Basel I was the first regulation issued by BCBS in 1988 to address liquidity problems in the banking sector (Ramoda, 2013). Basel I was implemented for approximately 16 years, and in the end experienced an increase in risk control standards in banking with the creation of Basel II. Basel II was announced in 2004 and fully implemented in 2006 (Ramoda, 2013). Basel II is an international banking capital standard framework that is used to align bank capital that is close to risk, so that the banking system will have the appropriate level of capital (Illing and Paulin, 2012; Phiri-Mambo, 2015). Capital level adjustments are very useful for banks as part of risk management, especially credit risk which often occurs in the banking sector (Rose, 2016).

The application of the Basel II Accord policy framework in numerous advanced and developing countries increases many empirical questions regarding the effectiveness of the Basel Accord framework in maintaining banking liquidation balance (Powell, 2004). Much has been finished to answer empirical questions and show the effectiveness of the application

of the Basel Accord. Theoretical and empirical studies have been carried out by Mosko and Bozdo (2016) and state that both theoretical and empirical literature have shown positive results on the relationship between Capital Requirements and financial stability and economic growth. The study concludes that the banking sector with high capital requirements will reduce the supply of credit and be accompanied by a decline in credit demand, which will hamper economic performance. On the other hand, an increase in capital in the banking sector indicates good capital management, so that it will have an impact on the consistency of credit distribution and improve the stability of the financial system and the economy. Berger and Bouwman (2013) also show a tremendous impact related to the implementation of the Basel II framework in the banking sector at some point of the crisis. The results show that the capital degree beneath the most fulfilling Basel II framework is able to increase the probability of survival of small banks and improve the overall performance of medium and huge sized banks for the duration of times of disaster. In line with this, Cornford (2006) has tried to test the effectiveness of the capital standards coverage framework in Basel II in developing countries. Cornford (2006) confirmed enormous effects concerning the effect of capital at the overall performance opportunities of foreign banks in developing nations. The implication of these outcomes is that global fashionable banks soak up the effect of Basel II implementation faster than domestic banks. In line with these results, banks which might be capable of meet the minimal capital adequacy ratio underneath the Basel II framework can reduce the risk of pressure on credit risk, specially in short-term loans (Chinoda, et all., 2015; Maurin and Toivanen, 2015). The results of the identical have a look at also are shown via Tanda (2015) that risks within the banking region may be dealt with with regulatory intervention. The results of research by Tanda (2015) show the significant diversity of the effect of capital regulation on risk in the banking sector, depending on time, bank characteristics, country, and type of capital. Contrasting results are shown in studies conducted through Ugwuanyi (2015) that the regulation of minimum capital adequacy within the Basel II framework has a positive impact on risk-taking behavior by banks in Nigeria. Ugwuanyi (2015) states that increasing the minimum capital adequacy owned through Nigerian banks will truely have an impact on increasing risk-taking behavior by banks, but only has an insignificant effect. Ghanem (2016) also states the same thing in the results of his research that regulations regarding minimum capital adequacy do not have a good effect on credit risk. This is because the capital adequacy ratio actually has a positive impact on credit growth, where banks extend loans and increase assets in line with the increase in the Capital Adequacy Ratio (CAR) under the Basel II policy framework.

Berrospide and Edge (2010) also agree of their studies that lending has multiplied in step with the increase within the bank's capital ratio. These results imply that the application of regulations regarding minimum capital adequacy will actually have an impact on increasing credit risk. Consistent with those results, Hasenes and Scnabel (2011) stated that the results of their research confirmed a advantageous dating among the implementation of the Basel II Capital Accord on risk-taking behavior. Increasing the standard of capital adequacy ratio could have an effect on tight opposition in the banking area. Large banks will have a competitive advantage compared to small banks, so that small banks will tend to increase risk

taking and will have an impact on increasing aggregate risk taking. In addition, there are other studies that show a positive and significant effect on capital requirements of Albanian banks theoretically and empirically (Kufo, 2015). Credit risk moves to increase simultaneously in line with the increase in capital requirements at Albanian banks. In line with these results, the risk-taking pattern of banks in Lebanon also shows a negative response to banking capital requirements (Awdeh, et all., 2011). Large banks tend to have low capital, but these banks actually have better risk management than banks with high capital.

An increasingly integrated and open global financial system requires countries in the world to apply international standards in every policy making. It aims to maintain stability and reduce global financial system risks. Integration in the financial sector has been demonstrated by the establishment or determination of risk management standards by BCBS. Indonesia as a member country, has resulted in policies in the financial sector in Indonesia having to follow the standards set by the BIS. This evidence is shown from the application of the Basel Capital Accord framework by Indonesia. Indonesia has implemented the Basel Capital Accord

framework, namely Basel I since 1988 (Bank Indonesia, 2006). In 2010 Indonesia raised the standards of the Basel I framework in accordance with the provisions of the BCBS and officially adopted the Basel II Accord framework (Bank Indonesia, 2006).

**Code number and color:** 1 = draft regulations are not published; 2 = draft regulations published; 3 = the last regulation issued; 4 = the last rule applies. Green = regulations have been adopted; Yellow = regulations are still in the process of adoption; Red = no progress.

Source: Bank for International Settlements, 2013 (processed).

The table above shows the countries that have implemented the Basel II framework as a protector of the financial sector in each country. Indonesia is listed as a country that has applied the Basel framework, specially in Pillar I and Pillar II untill 2013 (BIS, 2013). Each country has a priority in the application of each Pillar. The different conditions of the financial system of each country are the background for optimizing the application of each pillar that is adjusted to the level of needs and risks of the financial sector in each country. Credit risk is still a major problem in the banking sector in Indonesia. In addition, as a country that is part of The Group of Twenty (G20), Indonesia must also have better financial system risk management standards. So that the implementation of the Basel Pillar I and Pillar II framework becomes a priority in Indonesia.

The Basel II framework is not much different from the Basel I framework which provides for a minimum capital adequacy level of 8% (Bank Indonesia, 2006; Bis, 2006). The first quarter of 2012 was the year in which the Basel II framework was implemented in Indonesia. The regulation that requires a minimum capital adequacy level of 8% has been responded positively by the Indonesian state. This is shown by the figure in 1.1 that the minimum capital adequacy level (CAR) is above 8% and has even exceeded 15%. In 2012 and 2014 there was a decrease in the minimum capital adequacy level (CAR). On the other hand, the decline in the minimum capital adequacy level (CAR) did not occur continuously. Positive growth in CAR was shown in the period 2016 to 2017. This condition implies that the Basel II

framework in Indonesia has been applied consistently. Despite fluctuations in the minimum capital adequacy level, the minimum capital adequacy level in Indonesia is still above 8%.

The core objective of the Basel II framework is to reduce credit risk in the banking sector. the determination of capital requirements is expected to stabilize lending by banks, so that the risk of default or credit risk can be suppressed and minimized. Credit risk in the banking sector can be seen from the level of Non Performing Loans (NPL). Banks are said to have stable credit risk when the Gross NPL level is below 5% (Bank Indonesia, 2015). Figure 1.1 shows that the level of Non Performing Loans (NPL) in Indonesia is still safe. The lowest NPL level occurred in 2012 and 2013 which was below 2%. In addition, there is other evidence that based on trends, NPL in Indonesia continues to increase from year to year. This indicates that credit risk in Indonesia continues to increase. On the other hand, the NPL level is still at a safe level from 2012Q1 to 2017Q3 which is below 5%.

The health condition of the banking sector is certainly one of the most important factors for financial system stability (Elisabeth et al., 2018). The level of risk reflected in the NPL value in the banking sector will affect financial system stability. However, financial system stability is not only influenced by the level of NPL, there are other ratios that can reflect the soundness of the financial system in a country. One indicator of stability is the rate of return from banking assets (ROA). ROA reflects the level of performance of the banking sector which can also reflect the level of financial stability (Hagel, at all., 2013). Based on Bank Indonesia regulations in (2015) the minimum ROA level for the banking sector is 1.5%. The higher the ROA, the better the banking performance, on the contrary, the lower ROA reflects the poor performance of banks in managing their assets to earn a profit.

## 2. Literature Review

### 2.1. Basel II Accord Pillar

Basel is a special capital regulation for the banking sector, where the percentage of capital is regulated and adjusted to the level of risk (Neimeyer, 2016). The Basel framework is generally applied on a consolidated basis to all commercial banks and specifically to internationally active banks or foreign banks (BIS, 2005). The first capital framework or Basel was issued by the Bank for International Settlement (BIS) in 1988 called Basel I (Bank Indonesia, 2006; Siringoringo, 2012). The Basel I framework was adopted by Bank Indonesia in 1993. The Basel I framework was later upgraded by adding market risk to the weighted capital adequacy ratio (CAR). The Basel framework continues to undergo adjustments, in 2004 the Basel I framework was replaced with a new capital framework called Basel II, and was implemented in Indonesia in 2010. Currently, the Bank for International Settlement has published the latest capital framework, namely, Basel III which will be implemented in Indonesia starting in 2022 (Bank Indonesia, 2006; OJK, 2017, Ginting et al., 2020 and Ritonga et al., 2020). Basically the Basel I framework and the Basel II framework are the same. The difference between the two frameworks is in the amount of risk added to the capital adequacy ratio. The Basel II framework also has other pillars that Basel I does not

have. Basel II emphasizes that capital is one aspect of prudential regulation (Bank Indonesia, 2006).

The Basel II framework has three pillars, namely, Pillar I regarding Minimum Capital Requirements, Pillar II concerning Supervisory Review Process, Pillar III concerning Market Discipline (Bank Indonesia, 2006). These three pillars are obligations that must be implemented by conventional banking in Indonesia. The following describes the three pillars of the Basel II framework:

## 1. Pillar I: Minimum Capital Requirements

Pillar I requires banks in Indonesia to maintain sufficient capital to support risk taking activities. The first pillar is basically almost the same as the Basel I framework, only in this Basel II pillar there is an additional risk that is included in the calculation of the Capital Adequacy Ratio. Minimum Capital Requirement is a capital adequacy regulation set by the Bank for International Settlement (Bank Indonesia, 2006). Calculation of the Minimum Capital Requirement according to the following formula:

$$CAR = 8\% = \frac{\text{Capital (Tier1=Tier2+Tier3)}}{\text{ATMR}}$$

The calculation of the Capital Requirements above is basically almost the same as the capital regulations in the Basel I framework. The amount of CAR has not changed from the Basel I framework, which is 8%. The definition of capital also did not change from the Basel I framework. Risk-Weighted Assets (RWA) underwent changes and improvements from the Basel I framework. Market Risk in the Basel II RWA framework did not experience significant changes from the Basel I framework. Significant changes occurred in credit risk that is a weighting variable in RWA. an additional variable that does not exist in the Basel I framework is operational risk. Based on the number and refinement of the weighting variables in the RWA, the Basel II framework has higher prudence than the Basel II framework on assets created by commercial banks.

## 2. Second pillar of Basel II: Supervisory Review Process

Pillar I is only an approximation within the framework of Basel I, or not as a whole. Capital is a critical aspect in the process of anticipating risk, but capital is not the only factor relevant to anticipating risk. Banks must also have good risk measurement, management and monitoring procedures and processes. In this pillar there are four principles that can be applied by banks, including the following:

a) Internal Capital Adequacy Process (ICAAP) Banks are required to have a capital adequacy assessment process by always paying attention to a comprehensive risk profile. Banks must also have a strategy in maintaining the level of capital adequacy.

b) Supervisory Review and Evaluation Process (SREP) Supervisors are required to carry out a review and analysis of the bank's internal assessment and capital adequacy

strategy, as well as the bank's ability to monitor and ensure compliance with the maintenance of capital ratios.

c) Supervisors are required to have the authority to ask banks to maintain capital above the required capital requirements.

d) Supervisors must intervene (intervention) early in preventing a decrease in bank capital at the minimum required level, and determine remedial action if the bank is unable to maintain or improve the level of capital.

e) Require banks to master and be able to assess the risk of the activities carried out, as well as the ability to evaluate the adequacy of the assessment carried out by banks by supervisors.

### 3. The third pillar of Basel III: Market Discipline

Pillar III is a complement to pillar I and pillar II. This pillar requires banks to disclose all information with the aim of encouraging market mechanisms and creating a sound banking business environment, so as to be able to support the bank's supervisory function. As for the function of bank supervisors to exercise authority in requiring banks to operate in a healthy manner, this pillar requires banks to disclose all information (disclosure) related to the quality of risk management, core capital, CAR and other components. The Basel II framework only applies to commercial banks in Indonesia, as previously described. Institutions under commercial banks, such as financial companies, Rural Banks (BPR), and securities companies in Indonesia are also required to apply the Basel II Framework (Bank Indonesia, 2006).

### 2.2. Commercial Bank

### 2.2.1. Definition of Bank

Banks are known as financial institutions whose main activity is accepting deposits in the form of demand deposits, savings and time deposits. Some define a bank as a place to borrow money (credit) for people who need it. In addition, the bank is also known as a place to exchange money, transfer money or accept all forms of payment and deposits such as payment of electricity bills, telephone, water, taxes, tuition and other payments. Another definition says, a bank is an agency whose main task is as an intermediary to channel demand and supply of credit at a specified time.

According to Law no. 14 of 1967 concerning Fundamentals of Banking, the definition of a bank is a financial institution whose main business is providing credit and services in payment traffic and money circulation.

According to Law no. 7 of 1992 concerning Banking, the definition of a bank is a business entity that collects funds from the public in order to improve the standard of living of the people at large. According to Law no. 10 of 1998 concerning Amendments to Law no. 7 of 1992, banks are divided into two parts, namely commercial banks and rural credit banks. The definition of a bank according to this law is a business entity that collects funds from the

public in the form of credit and or other forms in order to improve the standard of living of the people at large. According to Stuart quoted by Suyatno, et al (1999: 1) explaining that, a bank is a business entity that aims to satisfy credit needs, either with its own means of payment or with money obtained from other people, as well as by circulating such instruments. new exchanger in the form of demand deposits.

From the above understanding it can be explained more broadly that the bank is a company engaged in the financial sector, meaning that banking activities are always related to the financial sector, so talking about banks cannot be separated from financial problems. The first banking activity is to collect funds from the wider community known as funding.

The definition of raising funds means collecting or seeking funds by buying from the wider community. The purchase of funds from the wider community is carried out by banks by installing strategies so that people want to invest their funds in the form of savings. The types of deposits that can be chosen by the public are demand deposits, savings deposits, time deposits and certificates of deposit. So that people want to save their funds in banks, the banking sector provides incentives in the form of remuneration to be given to depositors. The remuneration can be in the form of interest, profit sharing, gifts or other remuneration.

The higher the remuneration provided will increase public interest in saving their funds. Therefore, the banking sector must provide various stimuli and trust so that people are interested in saving their funds in the bank. After obtaining funds in the form of deposits from the public, the bank will return the funds or resell them to the public in the form of loans or better known as lending. In granting credit, loan services are also subject to loan services to credit recipients (debtors) in the form of interest and administrative fees. Meanwhile, for a bank based on sharia principles, it can be based on profit sharing or equity participation.

### 2.2.2. Function and Roles of Commercial Banks

According to Law no. 7 of 1992 Article 3, which was further amended by Law no. 10 of 1998 concerning Banking, explains that the function of Indonesian banking is to collect funds and distribute public funds. This means that commercial banks as part of Indonesian banking also have the same function. One of the main functions of commercial banks is its ability to create and distribute money. This is done by raising funds, providing loans, investing and collaborating with the central bank.

### 1) Functions of Commercial Banks as Fundraisers

According to Law no. 7 of 1992 Article 6 which was subsequently amended by Law no. 10 of 1998 concerning Banking, one of the businesses of commercial banks is to collect funds from the public in the form of demand deposits, time deposits, savings and/or others. Which referred to as deposits according to Law no. 7 of 1992 which was subsequently amended by Law no. 10 of 1998 Article 1 means funds entrusted by the public to banks in the form of demand deposits, time deposits and/or other equivalent forms.

**2) Functions of Commercial Banks as Credit Channels**

The funds that have been collected by commercial banks are then channeled back through the provision of credit. Based on Law no. 10 of 1998 concerning banking, credit is the provision of money or equivalent claims based on an agreement or loan agreement between a bank and another party that requires the borrower to repay the debt after a certain period of time with the amount of interest, compensation, or profit sharing. The provision of credit is carried out by commercial banks to ensure the viability of its business as a company that must work on a financial basis.

### 2.2.3. Types of Bank

1. In terms of its function, a bank consists of:

   a) Commercial bank is a bank that carries out its business activities conventionally and or based on sharia principles which in its activities provides services in payment traffic.
   b) Rural Banks (BPR) are banks that carry out their business activities conventionally or based on sharia principles which in their activities do not provide services in payment traffic.
   c) Bank Indonesia is a bank whose business activities aim to achieve and provide stability in the value of the Rupiah.

2. In terms of ownership, banks consist of:

   a) Government owned bank.
   b) National private bank.
   c) Foreign owned bank.
   d) Mixed-owned bank.

3. In terms of status, banks consist of:

   a) Foreign exchange bank is a bank that can carry out transactions abroad or related to foreign currencies as a whole.
   b) A non-foreign exchange bank is a bank that does not yet have a license to carry out transactions in foreign currency.

4. In terms of how to determine prices, banks consist of:

   a) Banks based on conventional principles.
   b) Banks based on sharia principles.

In the context of implementing Basel II, national supervisors monitor capital requirements to ensure that banks in their jurisdiction maintain a solid capital base throughout the economic cycle. The Basel Committee has established the Basel II Capital Monitoring Group which will from time to time share national experiences in monitoring capital requirements. This group is chaired by Mr. Klaus Düllmann, Head of Research Bank Supervision at the Deutsche Bundesbank (www.wikipedia.com\about Basel accessed 29 November 2010).

The New Basel Accord or Basel II itself in Pillar 2 has emphasized that the amount of bank capital must be in accordance with the risks faced by the bank so as to enable the bank to cover its risks properly.

Bank capital consists of (Loen and Sonny, 2008: 96) :

## A. Core capital

    a) Paid-up capital, namely capital that has been effectively paid up by the owner.

    b) Share premium is the difference in excess of the paid-in capital received by the bank as a result of the share price exceeding the nominal value.

    c) General reserves are reserves formed from the allowance for retained earnings which are approved by the GMS or RAT for banks that are cooperative legal entities.

    d) Purpose reserves, namely the profit after tax that is set aside for certain purposes which is approved by the GMS or RAT for banks that are cooperative legal entities.

    e) Retained profit is net profit which the GMS decided not to share.

    f) Last year's profit was 50% of the net profit of previous years and its use has not been determined by the GMS or RAT.

    g) Profit for the year is 50% of the profit earned from the current financial year after deducting the estimated tax.

    h) Share of net worth of subsidiaries.

## B. Supplementary capital

    a) Reserves for revaluation of fixed assets are reserves formed from the difference in the ratio of returns to fixed assets after obtaining approval from the Directorate General of Taxes.

    b) Reserves for asset losses are classified as reserves that are formed by burdening the current year's profit and loss.

    c) Quasi-capital is capital that is supported by instruments or scripts that have properties such as capital.

    d) Subordinated loans are loans from subsidiaries that must meet the requirements and obtain approval from Bank Indonesia.

## 3. Method

This study uses a qualitative descriptive approach, where the researcher develops concepts, collects facts and understanding but does not carry out hypotheses. A qualitative descriptive approach is used with the aim that this research can be carried out in depth so as to be able to provide answers to the formulation of the problems that have been disclosed.

## 4. Results and Discussion

## 4.1 Results

### 4.1.1. Basel II Implementation

Bank is a company that performs the intermediary function of funds received from customers. If a bank fails, the impact will broaden to affect customers and establishments that deposit

their budget or invest their capital in the bank, and will create comply with-up impacts on home and worldwide markets. Because of the significance of the role of banks in sporting out their functions, they want to be regulated properly and efficiently. This ambitions to preserve customer confidence in banking activities. One of the regulations that need to be made to regulate banking is the regulation regarding bank capital which serves as a buffer against possible losses. Given the significance of capital in banks, in 1988 BIS issued a concept of a capital framework which is higher known as the 1988 accord (Basel I). This system was created as an application of a measurement framework for credit risk, by requiring a minimum capital standard of 8%. The Basel Committee designed Basel I as a simple standard, requiring banks to separate their exposures into broader training, reflecting similar sorts of debtors. Exposures to clients of the equal kind (together with exposure to all corporate clients) may have the equal capital requirements, no matter the potential differences in credit score repayment abilties and the dangers of each individual patron. inside the banking world, BIS once more perfected the prevailing capital framework in the 1988 accord by issuing a brand new capital idea, better known as Basel II. Basel II is primarily based at the fundamental structure of the 1988 accord which affords a framework for calculating capital that is more danger sensitive and offers incentives for improving the first-rate of threat management implementation in banks. This is achieved by adjusting the capital requirements to the risk of credit loss and also by introducing changes to the capital calculation of the exposure caused by the risk of losses due to operational failures.

Basel II aims to improve the security and soundness of the financial system, with an emphasis on risk-based capital calculations, supervisory review processes, and market discipline. The Basel II framework is based on a forward-looking approach that allows for improvements and adjustments from time to time. This is to ensure that the Basel II framework can keep up with changes in the market and developments in risk management.

### 4.1.2. Maximizing the Benefits of Basel II Implementation

Basel II calculates capital necessities according with the financial institution's chance profile, and affords incentives for best development in hazard management practices in banking. Using various alternative approaches (approaches) in measuring credit risk (credit risk), market risk (market risk) and operational risk (operational risk), the result is a calculation of bank capital that is more sensitive to risk (risk sensitive capital allocation). In Basel II, the calculation of bank capital is contained in Pillar-1 Minimum Capital Requirement. Within the diverse opportunity approaches above, basically they can be grouped into 2 (two) majors groupsnamely, the standardized approach applies to all banks (standardized model) and the model developed internally in accordance with the characteristics of business activities and individual bank risk profiles (internal model) so that it is more sophisticated. Comparing the two methods above, the internal model is generally expected to produce a more precise calculation of capital requirements in accordance with the risks faced by banks. This will be an incentive for the bank. This condition is expected to be a trigger for continuous efforts to improve the quality of risk management so that in time it can optimize the incentives that can be obtained in calculating capital requirements.

In assessing the feasibility of bank capital, in addition to the capital allocation based totally on Pillar 1, the capital allocation must also be calculated to anticipate losses due to other risks such as liquidity risk, strategic risk, interest rate risk in the banking book (interest rate risk in the banking book) and other risks. The above metapproach is summarized in Pillar 2 - Supervisory Review Process and referred to as the Individual Capital Adequacy Assessment Process (ICAAP) which will be a challenge for banks and supervisors. It is necessary to increase the competence and capacity of supervisors supported by a set of supervisory provisions so that in due course they can conduct an effective assessment of risks other than Pillar 1 and can even request a bank's willingness to increase capital if the calculation of the bank's capital is deemed inadequate. Furthermore, the active role of the community in supervising the bank is seen as decisive so that from the start the community is expected to be able to also assess the risks faced and know the level of capital adequacy owned by the bank as summarized in Pillar 3 - Market Discipline. The synergies in the application of the three Pillars contained in Basel II above cannot be separated in achieving a sound and stable banking industry and financial system.

## 4.2 Discussion

Impact of Basel II implementation on banking system resilience:

### 1. Has the bank experienced a decrease in CAR to below the minimum 8%?

Bank Indonesia together with a number of banks continue to periodically conduct quantitative impact studies to see the consequences of implementing Basel II on bank capital. Therefore, the impact of Basel II on bank capital should be viewed individually and it is an obligation to conduct an early assessment and increase the effectiveness of risk management implementation in order to optimally utilize existing incentives. A decrease in CAR may occur for banks whose risk is indeed greater, but for banks whose credit is dominated by retail and mortgages, it will lead to a lower calculation of capital requirements, because retail ATMR and mortgages are lower than those currently applied.

### 2. Will Basel II be applied to all commercial banks?

The focus of Basel II implementation in Indonesia is the development and improvement of the quality of risk management by national banks in accordance with Bank Indonesia Regulation (PBI) No. 5/8/PBI/2003 dated 19 May 2003 concerning the Implementation of Risk Management for Commercial Banks. Of course, this effort does not differentiate between large and small banks because the risk management culture certainly acts as a general patron. Meanwhile, based on the results of the banking survey, it is also desirable that Basel II be applied to all banks to reduce the negative impact on the level of competition between banks due to differences in the ability and readiness of banks to implement and develop risk management and its infrastructure. The standard approach in Basel II will be applicable to all banks in Indonesia.

### 3. Could Basel II implementation hinder the intermediation process

The implementation of Basel II is not intended to hinder the intermediation process that has been carried out by banks so far. Or, in the macro scope, reducing the dominance of banks in financing the wheels of the economy. The approaches offered in Basel II as a whole are intended as an effort to reposition and redefine what banks have done with a focus on risk management. In terms of the intermediation function, Basel II is not a mechanistic framework in which there is no room for tolerance. Several national discretion clauses provide flexibility for that. If the implementation of Basel II is expected to lead to a decrease in exposure to certain sectors (for example due to the use of ratings in granting credit to corporations in the standard approach to credit risk), then on the other hand, the implementation of Basel II also encourages increased exposure for other sectors such as credit for the retail sector (eg. small business loans, individuals, etc.) and housing by reducing the credit risk weights for each of these sectors. It is realized that the transfer process will cause a shock effect for banks, debtors and the economy in general. However, this effect is not expected to last long and is only a "fine tuning" which is common in an economy.

### 5. Conclusion

Bank is a company that performs the intermediary function of funds received from customers. If a bank fails, the impact will broaden to affect customers and institutions that deposit their funds or invest their capital in the bank, and will create follow-up impacts on domestic and international markets. Because of the importance of the role of banks in carrying out their functions, they need to be regulated properly and correctly. This aims to maintain customer confidence in banking activities. One of the regulations that need to be made to regulate banking is the regulation regarding bank capital which serves as a buffer against possible losses. Given the importance of capital in banks, in 1988 BIS issued a concept of a capital framework which is better known as the 1988 accord (Basel I). This system was created as an application of a measurement framework for credit risk, by requiring a minimum capital standard of 8%. The Basel Committee designed Basel I as a simple standard, requiring banks to separate their exposures into broader classes, reflecting similar types of debtors. Exposures to customers of the same type (such as exposure to all corporate customers) will have the same capital requirements, regardless of the potential differences in credit repayment capabilities and the risks of each individual customer. in the banking world, BIS again perfected the existing capital framework in the 1988 accord by issuing a new capital concept, better known as Basel II. Basel II is based on the basic structure of the 1988 accord which provides a framework for calculating capital that is more risk sensitive and provides incentives for improving the quality of risk management implementation in banks. This is achieved by adjusting the capital requirements to the risk of credit loss and also by introducing changes to the capital calculation of the exposure caused by the risk of losses due to operational failures.

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