

The Influence of Economic Value Added On Liability Management in Commercial Banks of Indonesia

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Abstract: Research aims: (1) to observe and to analyze the influence of EVA, as reflected by economic value added of banking firms, on liability management (LM) in commercial banks of Indonesia; (2) to investigate and to analyze the influence of asset-liability management (ALM) consisting of Rate Sensitivity Asset to Rate Sensitivity Liability (RSA/RSL), Net Interest Margin (NIM), Capital Asset Ratio (CAR), Burden Ratio, Return on Asset (ROA), Loan Accepted to Asset Total, Non-Interest Income to Asset Total, and Loan to Deposit Ratio (LDR), on EVA in commercial banks of Indonesia; (3) to examine and to analyze the influence of EVA, as reflected by economic value added of banking firms, on asset-liability management (ALM) in commercial banks of Indonesia. Research type is explanatory. Data analysis is using methods developed by Ferdinand (2002)[1], Solimun (2003)[2], and Anderson, Tatham and Black (1992)[3]. Result of research indicates that: (1) The influence of EVA on LM in commercial banks of Indonesia based on information of goodness of fit index, is not showing good result on criteria evaluation because the hypothesized model is unidentified (identification problem). It means that causal line that explains causality relation between variables is not supported by the fact, and thus, information matrix is failed to present and also unable to explain causality relation between variables. (2) The influence of ALM on EVA in commercial banks of Indonesia is also showing good result on criteria evaluation because the causal line explaining causality relation between factors is supported by the facts. Its positive significant influence is proved by score 0.309 at $p=0.000$, meaning that higher significant influence of ALM will increase banking value added creation by using Economic Value Added (EVA). It implies that banking financial performance shown by ALM is the measure of banking success. If banking financial performance is good, investors will be willing to pay prices of banking stock in various times than earning per share through multiplier effect. This effect may be seen in the value added creation of commercial banks of Indonesia. ALM indicator in form of net interest margin (NIM) is the most dominant influential to EVA by score 0.997 at $p=0.000$. It means that the selection of ALM to reflect bank ability to manage fund sources into profitable asset, measured by NIM, is the best option which contributes to the increase of banking firms' value added creation by using EVA proxy of commercial banks of Indonesia; and (3) The influence of EVA on ALM in commercial banks of Indonesia, based on the information of goodness of fit index, does not show good result on criteria evaluation because the hypothesized model is unidentified (identification problem). It means that causal line that explains causality relation between variables is not supported by the fact, and thus, information matrix is failed to present and also unable to explain causality relation between variables.

Keywords: Performance, Finance, Economic Value Added, Management, Asset, Liability, Bank

I. Introduction

Recently, Indonesian banking has been greatly shocked for the first time in its banking history. Banks are dysfunctional from its function as the intermediary agency, mainly to implement the activities as exchange banks. During globalization era, exchange banks greatly support national economic because exchange activities always provide opportunities to business world to pursue for their global business. Monetary crisis from the middle of 1997 to 2000 has stressed banking into dysfunctional. Financial performance of banks decreases. The ratio of mandatory minimum capital deployment or Capital Adequacy Ratio (CAR) falls to a minus. Non-performing loan increases in number. Hereby, the author attempts to answer the problems of Indonesia banking through the concepts of asset management, liability management, asset-liability management, and value added created by commercial banks of Indonesia.

Economic Value Added, abbreviated to EVA, is a relevant measure for financial performance because it originates from value added. EVA is an economic measure produced by the firms from their managerial activity. The presence of EVA helps bank owners to give reward for value added activities (Kleinman, 1999)[4] and to dispose the activities that damage or reduce bank

value. Value added activities are separated from non-value added activities based on value added assessment (Utomo, 1999)[5]. It is expected that bank owners will support management to take actions or to choose value added strategies because these will allow banks to operate well.

EVA helps management to conduct internal goal setting such that the long-term goal is preferred than short-term implications. For investment, EVA provides guidance for the decision of accepting a project (capital budgeting decision) and evaluating regular performance of management (performance assessment). The achievement of value added activities is assisted by EVA. Besides, EVA also helps to prepare proper payroll system or incentive compensation (Grant, 1996)[6] where management can act as owner.

A measurement of performance that reflects managerial achievement is usually conducted by aims to encourage activities or strategies to improve economic value (value added activities) and to dispose those damaging the value (non-value added activities). The relevance of a bank's performance measurement rate with profitability is through EVA. Current research is motivated by journals which state that EVA is the hottest topic among firms in USA. As defined by Stern Stewart, EVA is the differential between after-tax net operation income of the firms and capital cost either for equity and debt (Stern Stewart, 1993)[7]. EVA is a new concept to assess banking financial performance and it is relevant because EVA can measure managerial performance (achievement) based on value added creation at certain period (Utomo, 1999)[5].

Above explanation have stressed upon the fact that banking financial performance in Indonesia is declining. Low banking financial performance is one indication that firms' value added is failed to create. It is caused by less optimum financial management in controlling asset and liability. This fact is an attractive phenomenon that underlines the research about asset management, liability management and asset-liability management on banking economic value added. The use of various fund sources in liability management can not only change asset management, but also change asset-liability management. It is estimated that asset management and liability management to create banking economic valued added are different from one bank to another.

Regarding to the importance of information about banking financial performance, this research attempts to relate the measurement of banking financial performance with banking firm value added to obtain more optimum information. Research problems are then formulated as follows: (1) Is EVA, as reflected by economic value added of banking firms, significantly influencing liability management (LM) in commercial banks of Indonesia? (2) Is asset-liability management (ALM) consisting of rate sensitivity asset to rate sensitivity liability (RSA/RSL), net interest margin (NIM), capital asset ratio (CAR), burden ratio, return on asset (ROA), loan accepted to asset total, non-interest income to asset total, and loan to deposit ratio (LDR), significantly influencing EVA in commercial banks of Indonesia? (3) Is EVA, as reflected by economic value added of banking firms, on asset-liability management (ALM) in commercial banks of Indonesia?

Considering these problems, the objectives of research are (1) to observe and to analyze the influence of EVA, as reflected by economic value added of banking firms, on liability management (LM) in commercial banks of Indonesia; (2) to investigate and to analyze the influence of asset-liability management (ALM) consisting of rate sensitivity asset to rate sensitivity liability (RSA/RSL), net interest margin (NIM), capital asset ratio (CAR), burden ratio, return on asset (ROA), loan accepted to asset total, non-interest income to asset total, and loan to deposit ratio (LDR), on EVA in commercial banks of Indonesia; and (3) to examine and to analyze the influence of EVA, as reflected by economic value added of banking firms, on asset-liability management (ALM) in commercial banks of Indonesia.

Research Hypotheses

By taking account problems and objectives of research, several hypotheses are proposed, such as: (1) EVA, as reflected by economic value added of banking firms, is positively influencing liability management (LM) in commercial banks of Indonesia; (2) asset-liability management (ALM) consisting of rate sensitivity asset to rate sensitivity liability (RSA/RSL), net interest margin (NIM), capital asset ratio (CAR), burden ratio, return on asset (ROA), loan accepted to asset total, non-interest income to asset total, and loan to deposit ratio (LDR), is positively influencing EVA in commercial banks of Indonesia; and (3) EVA, as reflected by economic value added of banking firms, is positively influencing on asset-liability management (ALM) in commercial banks of Indonesia.

Method of Research

Research models proposed by Dood and Chen (1997)[8] and Dodd and Johns (1999)[9] are used. Type of research is explanatory. Research design is based on Kerlinger (2000)[10]. Data analysis involves methods suggested by Ferdinand (2002)[1], Solimun (2003)[2], and Anderson, Tatham and Black (1992)[3].

II. Result And Discussion

Result

Description of Banking Characteristic

The object of research is banking industry in Indonesia with financial statement made for period 5 years, starting from 2009 to 2013. Banking characteristic is a description of the existence of banks in the research area. This research area is where commercial banks are located. These commercial banks are exchange commercial banks operated throughout Indonesia regions. The characteristic of commercial banks is elucidated as follows. Letter N denotes bank group and the observed variables include Liability Management and Asset-Liability Management, and the influence of these managements on value added creation represented by EVA.

Description of Commercial Banks Based On Bank Group The classification of respondent based on the group commercial banks is arranged in Table 1. Respondent is 64 commercial banks. The arrangement is explained as follows: 4 commercial banks (6.25 %) are Government Commercial Banks; 36 commercial banks (56.25 %) are National Private Commercial Banks; 14 commercial banks (21.88%) are Mixed Commercial Banks; and 10 commercial banks (15.62 %) are Foreign Commercial Banks.

TABLE 1: The Group of Commercial Banks as Respondent in 2013

No.	Bank Group	Number	Percentage
1	Government Commercial Banks	4	6.25%
2	National Private Commercial Banks	36	56.25%
3	Mixed Commercial Banks	14	21.88%
4	Foreign Commercial Banks	10	15.62%
	Total	64	100%

Source: Bank of Indonesia

Description of Commercial Banks Based On N-Data

N-Data are the pooling between cross-section and time-series from 64 commercial banks based on 5-years observation from 2009 to 2013. The collected pooling results in 320 N-Data. Table 2 (320 N-Data) shows that the greatest quantity of data is shown by National Private Commercial Banks with 180 N-Data or 56.25%, followed by Mixed Commercial Banks with 70 N-Data or 21.88 %, and Foreign Commercial Banks with 50 N-Data or 15.62%. The last is Government Commercial Banks with 20 N-Data or 6.25%.

TABLE 2: N-Data Pooling Based Bank Group

No.	Bank Group	N-Data	Percentage
1	Government Commercial Banks	20	6.25%
2	National Private Commercial Banks	180	56.25%
3	Mixed Commercial Banks	70	21.88%
4	Foreign Commercial Banks	50	15.62%
	Total	320	100%

Source: Bank of Indonesia

Description of Research Variables

Research attempts to examine the influence of asset management, liability management and asset-liability management on the creation of value added in commercial banks of Indonesia by using data observation period from 2009 to 2013. Independent variable includes liability management which has 10 indicators and asset-liability management which has 8 indicators, while dependent variable is banking firms' value added creation (EVA).

Research on Liability Management Variable

Liability management is the implication of financial decision to the use of bank funding sources as reflected by liability portfolios. An efficient liability portfolio is indicated by the lower weighted-average cost which will influence value added creation in banks (Sinkey, 1986)[11].

Liability portfolios include demand deposit, saving, time deposit, deposit certificate, security, loan accepted, other duty, equity, commitment-contingency payable growth, and debt to equity.

Table 3 shows liability diversification pattern in Government Commercial Banks, National Private Commercial Banks, Mixed Commercial Banks, Foreign Commercial Banks and Combined Commercial Banks.

Table 3: The Average Rate Of Indicators Of Liability Management In Commercial Banks

Liability Portfolios	Government	National Private	Mixed	Foreign	Combined
1. Demand Deposit (X _{2,1})	11.40%	16.94%	19.47%	34.28%	20.52%
2. Saving (X _{2,2})	17.57%	15.92%	1.66%	1.82%	9.24%
3. Time Deposit (X _{2,3})	39.00%	45.08%	28.74%	37.02%	37.46%
4. Deposit Certificate (X _{2,4})	0.71%	1.18%	0.00%	0.16%	0.51%
5. Security (X _{2,5})	2.69%	0.60%	0.79%	1.74%	1.45%
6. Loan Accepted (X _{2,6})	19.96%	4.83%	23.98%	3.39%	13.04%
7. Other Duty (X _{2,7})	2.79%	2.31%	2.16%	12.90%	5.04%
8. Equity (X _{2,8})	-6.26%	7.89%	12.74%	0.79%	3.78%
9. Commit-Contng Payable Growth (X _{2,9})	10.84%	5.53%	-35.62%	-31.39%	-12.66%
10. Debt To Equity (X _{2,10})	695.31%	1081.29%	498.97%	-839.16%	359.10%

Source: Published Financial Statement of The Banks, Reprocessed

Table 3 shows that of various indicators of liability management variable, diversifications strategy of liability portfolios by indicator of debt to equity has the highest average rate. The order is starting from Government Commercial Banks with 695.31 %, followed by National Private Commercial Banks with 1081.29 %, Mixed Commercial Banks with 498.97 %, Foreign Commercial Banks with -839.16 %, and Combined Commercial Banks with 359.10 %.

Liability Management Variable in Government Commercial Banks

Diversification pattern of liability management in Government Commercial Banks is concentrated upon debt to equity because it shows the highest average rate with 695.31 %, followed by indicators of time deposit with 39.00 %, loan accepted with 19.96 %, saving with 17.57 %, demand deposit with 11.40 %, commitment-contingency payable growth with 10.84%, other duty with 2.79 %, security with 2.69 %, deposit certificate with 0.71%, and equity with 6.26 %.

Liability Management Variable in National Private Commercial Banks

The diversification pattern of liability management in National Private Commercial Banks is also concentrated upon debt to equity because it has the highest average rate with 1081.29 %, followed by time deposit with 45.08 %, demand deposit with 16.94 %, saving with 15.92%, equity with 7.89%, commitment-contingency payable growth with 5.53 %, loan accepted with 4.83 %, deposit certificate with 1.18 %, and finally, security with only 0.60%.

Liability Management Variable in Mixed Commercial Banks

Diversification pattern of liability management in Mixed Commercial Banks is concentrated also upon debt to equity due to its highest average rate of 498.97 %, followed by time deposit with 28.74 %, loan accepted with 23.98 %, demand deposit with 19.47 %, equity with 12.74%, other duty with 2.16%, saving with 1.66%, security with 0.79 %, deposit certificate with 0.00%, and lastly, commitment-contingency payable growth with a minus rate, which is -35.62 %.

Liability Management Variable in Foreign Commercial Banks

The diversification pattern of liability management in Foreign Commercial Banks is concentrated upon time deposit due to its highest average rate of 37.02 %, followed by indicators of demand deposit with 34.28%, other duty with 12.90 %, loan accepted with 3.39 %, saving with 1.82 %, security with 1.74 %, equity with 0.79 %, deposit certificate with 0.16 %, commitment-contingency payable growth with -31.39 %, and finally, debt to equity with only -839.16%.

Liability Management variable in Combined Commercial Banks

The diversification pattern of liability management variable in Combined Exchange Commercial Banks is concentrated upon debt to equity due to its highest average rate with 359.10%, followed by indicators of time deposit with 37.46 %, demand deposit with 20.52 %, loan accepted with 13.04 %, saving with 9.24 %, other duty with 5.04%, equity with 3.78%, security with 1.45%, deposit certificate with 0.51%, and finally, commitment-contingency payable growth with minus,

precisely -12.66 %.

The Creation of Value Added (EVA) in Commercial Banks

Value added created by commercial banks is measured by economic value added (EVA) proxy. It is calculated from financial statement made by the banks every year (Darmodaran, 1997)[12]. Table 4 shows value added created by commercial banks in 5-year period from 2009 to 2013. Economic value added (EVA) is stated in rupiahs. It is calculated as the after-tax net operation profit minus weighted average capital cost, and the result is multiplied by banking investment capital (Stewart, 1997)[13].

**Table 4: The Average Rate Of Economic Value Added In Commercial Banks
Period: 2009 – 2013**

Economic value added in Million Rupiahs	Government Commercial Banks	National Private Commercial Banks	Mixed Commercial Banks	Foreign Commercial Banks	Combined Commercial Banks
Year 2009	(6,151,450)	(2,799,751)	(6,634)	210,865	(2,186,742)
Year 2010	(56,218,332)	(3,750,957)	(131,609)	(93,406)	(15,048,576)
Year 2011	(61,328,757)	(2,577,382)	(127,970)	(84,265)	(16,029,593)
Year 2012	(60,461,151)	(1,664,499)	(119,818)	(61,045)	(15,576,628)
Year 2013	(59,747,535)	(1,922,721)	(86,004)	(39,098)	(15,448,839)
EVA Average (Y)	(48,781,445)	(2,543,062)	(94,407)	(13,390)	(12,858,076)

Source: Published Bank Financial Statement, Reprocessed

Banking firms' value added creation phenomenon in Table 4 indicates that the average rate of economic value added (EVA) in all commercial banks is negative. It means that Government Commercial Banks, National Private Commercial Banks, Mixed Commercial Banks, and Foreign Commercial Banks, experience value decline. Government Commercial Banks have its value declined to minus Rp. 48,781,445.-. National Private Commercial Banks have its value declined to minus Rp. 2,543,062.-. Mixed Commercial Banks experience value decline to minus Rp. 94,047.-. Foreign Commercial Banks have the smallest value decline, which is minus Rp. 13,390.-. Value decline in Combined Commercial Banks is minus Rp. 12,858,076.-.

The declining or failing of value creation in Foreign Commercial Banks is showing the smallest minus because Foreign Commercial Banks are more successful in their asset and liability managements compared to other commercial banks. The success is reflected in NIM obtained by Foreign Commercial Banks which is greater than 5.74 %, while non-interest income to asset total is 5.63%.

III. Discussion

The discussion is aimed to answer research problems, which is about the influence of financial performance indicators reflected by Liability Management (LM) and Asset-Liability Management (ALM) on the creation of firm economic value added (EVA) in commercial banks of Indonesia. The discussion also considers the results of analysis with Structural Equation Modeling (SEM) as suggested by Hair et al (1998)[14] with observation period starting from 2009 to 2013. Based on the result of this analysis combined with the theory of banking finance, and the result of previous researches on banking finance field, hereby theoretical and empirical reasoning are conducted to explain the problem determined in this research.

After structural equation model is made, the interpretation is conducted to explain the causal relationship between variables of research, including the direct or indirect influences from the empirical facts in relative with theoretical base, and also to compare the current research with previous researches. It is expected that theoretical findings are revealed from explanation. Analysis and discussion about hypotheses are important to produce more realistic explanations.

The Influence of Independent Variable of AM on LM in Commercial Banks of Indonesia

Theoretically, the decision of fund allocation into the asset portfolios (asset management variable) consisting of indicators of placement in other banks, security, referred credit, other placement, asset total growth, contingency-commitment receivable growth, and fixed asset, will have positive influence on the preference of liability management in commercial banks of Indonesia

Hypothesis 1

Banking firms’ value added creation using Economic Value Added (EVA) is not influencing significantly liability management in commercial banks of Indonesia. It is tested by the analysis of Structural Equation Model (SEM) using Two-Step Approach to SEM and Two Step Analysis to develop model in period from 2009 to 2013.

Result of estimation of the developed model with constrain does not show distinctive solution. Based on information from goodness of fit index, the model is not showing good result on criteria evaluation because the hypothesized model is unidentified (identification problem). Solimun (2003)[2] has reported that identification problem comes up with model development. Symptoms related to identification problem, according to Ferdinand (2002)[1], are explained as follows. Error standard of one or some very big coefficients are implying that program cannot produce information matrix that shall be presented, odd numbers are shown up, there is negative error variance, and high correlation (> 0.9) is found between estimated result of coefficients.

Based on this explanation, it is concluded that model cannot give the expected information matrix because causal line is not supported by facts/data such that model cannot explain the causality relation between variables.

The Influence of Independent Variable of ALM on EVA in Commercial Banks of Indonesia

Theoretical explanation has stated that the decision of asset-liability management consisting of indicators such as RSA/RSL, NIM, CAR, Burden Ratio, ROA, Loan Accepted to Asset Total, Non-Interest Income to Asset Total, and LDR, may be positively influencing on banking firms’ value added creation that uses Economic Value Added (EVA) proxy in commercial banks of Indonesia.

Hypothesis 2

Indicators of asset-liability management (ALM) comprising of RSA/RSL, NIM, CAR, Burden Ratio, ROA, Loan Accepted to Asset Total, Non-Interest Income to Asset Total, and LDR, are significantly and positively influencing banking firms’ value added creation that uses Economic Value Added (EVA) proxy in commercial banks of Indonesia. It is tested by the analysis of Structural Equation Model (SEM) at period from 2009 to 2013.

The estimated model with constraints is giving unique solution, and based on the information from Goodness of Fit Index, the result of criteria evaluation is good because the constrained causal line is supported by facts such that the provided information matrix is good.

Result of hypothesis testing over the causal relationship between constructs, using structural model with Two-Step Approach to SEM, is shown in Table 5:

Table 5: Path Coefficients Between Variables [Standardized Regression] The Influence Of Asset-Liability Management On Eva

Path	Coefficient of Path	Probability (P)	Description
ASSET-LIABILITY MANAGEMENT ⇒ EVA	0.309	0.000	Significant

Source: Pompong Budi Setiadi (2014)[15]

Result of research is consistent to theory that asset-liability management has signaled Economic Value Added (EVA), as proved by its positive and significant influence by score 0.309 at p=0.000, meaning that hypothesis is accepted.

Result of research also shows that asset-liability management significantly influences banking firms’ value added creation that uses economic value added (EVA) proxy. The direction of influence is consistent to theories, meaning that good financial performance described by asset-liability management will increase banking firms’ value added creation. Poor financial performance will reduce banking firms’ value added creation. It supports Clarke et al (1990)[16] and Husnan (1994)[17]. Their findings show that financial performance of banking firms shown by asset-liability management is the success measure of firms. Good asset-liability management will persuade investors to pay the price of stocks in various times than earning per share through multiplier effect (Husnan, 1994)[17]. If asset-liability management declines, stock price also decreases.

Table 6 indicates that asset-liability management in form of RSA/RSL is significantly influential to EVA increase by score 0.343 at p=0.000. Net Interest Margin (NIM) is significantly influential to EVA increase by score 0.997 at p=0.000. Capital Asset Ratio (CAR) is significantly

influential to EVA increase by score 0.389 at p=0.000. Burden Ratio is significantly influential to EVA decline by score -0.170 at p=0.004. Return on Asset (ROA) is significantly influential to EVA increase by score 0.531 at p=0.000. Loan Accepted to Asset Total is significantly influential to EVA increase by score 0.405 at p=0.000. Non-interest income to asset total is significantly influential to EVA increase by score 0.157 at p=0.011. Loan to deposit ratio (LDR) is influencing not significantly to EVA decline by score -0.059 at p=0.0329.

Table 6: Coefficients Of Path Between Variables [Standardized Regression] The Influence Of Asset-Liability Management Indicators On Eva

Path	Coefficient of Path	Probability (P)	Description
X _{3.1} ⇒ EVA	0.343	0.000	Significant
X _{3.2} ⇒ EVA	0.997	0.000	Significant
X _{3.3} ⇒ EVA	0.389	0.000	Significant
X _{3.4} ⇒ EVA	-0.170	0.000	Significant
X _{3.5} ⇒ EVA	0.531	0.000	Significant
X _{3.6} ⇒ EVA	0.405	0.000	Significant
X _{3.7} ⇒ EVA	0.157	0.011	Significant
X _{3.8} ⇒ EVA	-0.059	0.329	Not Significant

Source: Pompong Budi Setiadi (2014)[14]

Dominant influence in asset-liability management is shown by banking financial performance on Net Interest Margin (NIM) which is the indicator of the improvement of banking firms' value added creation that uses Economic Value Added (EVA) proxy.

It implies that there is a balance in asset-liability management in improving banking firms' value added creation that uses Economic Value Added (EVA) proxy in commercial banks of Indonesia. Banking firms' value added creation that uses Economic Value Added (EVA) proxy will determine the selection of financial performance of asset-liability management because the success measure of banking management can be seen from financial performance. Indeed, successful financial performance in executing asset-liability management, which comprises of RSA/RSL, NIM, CAR, Burden Ratio, ROA, Loan Accepted to Asset Total, and Non-Interest Income to Asset Total, is directly operational to the improvement of banking firms' value added creation that uses Economic Value Added (EVA) proxy. It can be said that financial performance that measures management success in asset-liability management is the best and most effective selection to improve banking firms that uses Economic Value Added (EVA) proxy in commercial banks of Indonesia.

The Influence of Independent Variable EVA on AM in Commercial Banks of Indonesia

Theoretically, banking firms' value added creation that uses Economic Value Added (EVA) proxy is positively influencing asset-liability management in commercial banks of Indonesia.

Hypothesis 3

Banking firms' value added creation that uses economic value added (EVA) does not give significant influence on asset-liability management in commercial banks of Indonesia. It is tested by the analysis of Structural Equation Model (SEM) using Two Step Approach to SEM or Two Step Analysis at period from 2009 to 2013.

The estimation result of the developed model with certain constraints does not produce unique solution. Pursuant to the information from Goodness of Fit Index, the model is not showing good result of criteria evaluation because the hypothesized model is unidentified (identification problem). Solimun (2003)[2] asserts that identification problem comes up with model development. Symptoms related to identification problem, according to Ferdinand (2002)[1], are explained as follows. Error standard of one or some very big coefficients are implying that program cannot produce information matrix that shall be presented, odd numbers are shown up, there is negative error variance, and high correlation (> 0.9) is found between estimated result of coefficients.

Based on explanation above, it is concluded that model in Hypothesis 3 cannot give the expected information matrix because causal line is not supported by facts/data such that model cannot explain the causality relation between variables.

Moreover, some conclusions are made. Indicators in asset-liability management are significantly influencing, but in negative sign, on asset management. Asset management is significantly but negatively influencing asset-liability management. Asset management is positively

influencing banking firms' value added creation that uses Economic Value Added (EVA) proxy. Liability management does not influence Economic Value Added (EVA). Asset-liability management is significantly and positively influencing banking firms' value added creation that uses Economic Value Added (EVA) in commercial banks of Indonesia.

Research Findings

Indicators of liability management are not significantly influencing banking firms' value added creation that uses Economic Value Added (EVA) proxy. It rejects Clarke et al (1991)[16] whose finding shows that liability management is positively influencing firms' value added. Liability management (LM) which includes the selection of fund sources will consider various policies made by banking firms. Lower fund interest cost in acquiring fund sources to finance fund allocation may increase banking firms' value added creation. The banks that are able to select cheaper funding combination will have small/low weighted average costs such that smaller/lower weighted average costs, higher value added creation of firms (Darmodaran, 1997)[12]. It implies that the management of commercial banks is not consistent to policies. Fund sources of the banks in liability management are unable to be allocated to the communities in optimum way such that the income of banks cannot compensate for fund expenses. Therefore, it fails to provide banking firms' value added creation that uses Economic Value Added (EVA) proxy.

Research Limits

1. Data which are collected and processed are secondary data obtained from financial statements published by banks. The weakness of secondary data is that there is a possibility that banks' published financial statements do not one hundred percent indicate the actual condition of the banks. Banks are homogenous in presenting their data such that data will approximate the actual condition.
2. Current research does not include external factor as the variable that may influence banking firms' value added creation that uses Economic Value Added (EVA) proxy in commercial banks of Indonesia.

IV. Conclusion

Result of analytical review after testing the variables of liability management (LM) and asset-liability management (ALM) that have significant influence on banking firms' value added creation that uses economic value added (EVA) proxy of commercial banks of Indonesia, can be concluded as follows. (1) The influence of EVA on LM in commercial banks of Indonesia based on information of goodness of fit index, is not showing good result on criteria evaluation because the hypothesized model is unidentified (identification problem). It means that causal line that explains causality relation between variables is not supported by the fact, and thus, information matrix is failed to present and also unable to explain causality relation between variables. (2) The influence of ALM on EVA in commercial banks of Indonesia is also showing good result on criteria evaluation because the causal line explaining causality relation between factors is supported by the facts. Its positive significant influence is proved by score 0.308 at $p=0.000$, meaning that higher significant influence of ALM will increase banking value added creation by using Economic Value Added (EVA). It implies that banking financial performance shown by ALM is the measure of banking success. If banking financial performance is good, investors will be willing to pay prices of banking stock in various times than earning per share through multiplier effect. This effect may be seen in the value added creation of commercial banks of Indonesia. ALM indicator in form of net interest margin (NIM) is the most dominant influential to EVA by score 0.997 at $p=0.000$. It means that the selection of ALM to reflect bank ability to manage fund sources into profitable asset, measured by NIM, is the best option which contributes to the increase of banking firms' value added creation by using EVA proxy of commercial banks of Indonesia; and (3) The influence of EVA on ALM in commercial banks of Indonesia, based on the information of goodness of fit index, does not show good result on criteria evaluation because the hypothesized model is unidentified (identification problem). It means that causal line that explains causality relation between variables is not supported by the fact, and thus, information matrix is failed to present and also unable to explain causality relation between variables.

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