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ANALYSIS OF THE DETERMINANTS OF THE BANKING INDUSTRY PROFITABILITY IN INDONESIA (EMPIRICAL STUDY 2003 – 2011)

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Abstract

The purposes of this banking industry study are 1) to analyze the effect of macroeconomic conditions that represented by gross domestic product and inflation, and the effect of loan to deposit ratio on earning assets commercial bank; 2) to analyze the effect earning assets, non performing loans, interest rate of working capital loan and operational cost on profitability of commercial bank in Indonesia; 3) to explain about the growth of banking industry and their role as financial intermediary institution after monetary and economic crisis. This study use the quantitative method by multiple regression model to analyze time series data of commercial bank in Indonesia. The results of that multiple regression model indicated gross domestic product, previously earning assets and loan to deposit ratio have positive and significant effect to commercial bank earning assets. Meanwhile, inflation has not significant effect to commercial bank earning assets. Then, earning assets, previously profit and interest rate of working capital loan have positive and significant effect to commercial bank profit, but both of non performing loans and operational cost have significant inverse relationship to commercial bank profit. This results show that banking industry more concern to retain the profitability by expand their businnes than to provide cost efficiency. According to this study, in order to retain banking industry performance are developing economic growth that condusive to increase financial intermediary of banking industry, improving cost efficiency to provide competition which lower lending interest rate, and extending financial service area to reach micro and small enterprises as a part of financial inclusion strategy.

Keywords: Banking Industry, Profitability, Earning Assets, Gross Domestic Product.

A. INTRODUCTION

Industry banking have role important and strategic in support development economy national.because _ That Government and Bank Indonesia as the central bank has take series directed policy _ For push role banking the with develop institutional as well as make banking order settings national can operate in a manner healthy and thriving ok . However thus , crisis economic and monetary that hit Southeast Asian countries and also hit Indonesia in 1997-1998 , giving negative impact on the sector banking Good concerns profitability , liquidity until with solvency . because _ that , besides do recapitalization For save industry banking sector , the government also liquidated the assessed banks No healthy and not worthy Again For operate .

In recovery process economy consequence crisis, arrangement return banking is one agenda for done restructuring one effort arrangement return industry banking national by Bank Indonesia in something known blueprints with Architecture Indonesian Banking (API). those APIs is something a banking architecture that doesn't only needed for industry banking just but also sector finance whole For see description or future banking maps (Sugiarto A., 2003). In line with recovery economy national, industry banking also experienced increasingly development _ ok . With supported arrangement return in a manner structural. Indonesian banking began shows the recovery process, especially since beginning the 2000s. Entering five years post crisis , in 2003, the industry banking show development various indicator main banking the more improving . increasing amount loans disbursed and stable _ quality credit shows the recovery process function intermediation continuous banking going on . Besides that is, repair this is also visible from increasing capital and profitability. Repair performance banking the No regardless from the improvement a number of indicator economy macro like ethnic group interest, inflation and value rupiah exchange, which is supported implementation policy in framework healing and strengthening resilience system banking in a manner sustainable (Bank Indonesia, 2003).

Based on things above , it appears _ that performance finance banking influenced by factors external character _ economy macro . Besides That performance finance industry Banking is also influenced by ability management in manage quality credit as well as management operational effort . In the end matter the will impact on performance finance specifically achievement profit or profitability .

Various studies in several countries have done For study and analyze about determinant or influencing factors performance profitability in the industry banking . Research in England in the period time 1995-2002 shows that bank capital strength, efficiency in management cost and size asset influential to profitability. Likewise conditions _ economy macro , Gross Domestic Product and inflation influential to profitability with more magnitude _ small (Kosmidou K., et al , 2006). Other research in Tunisia shows that especially bank characteristics related with scale capital influential to variation level net interest margin and bank profitability. Temporary growth economy and level inflation influence No significant to bank profitability, meanwhile capitalization shares in the capital market instead influential significant (Naceur SB. 2003). Next. study about factors determinant to profitability industry Banking is also conducted in Macao (Vong API and Chan HS, 2005). Study the show that aspect capital have influence positive and significant to profitability, meanwhile quality measured assets from loss reception provision influential otherwise. Temporary variable economy influential macro _ significant and positive to profitability is level inflation . this show bank management did anticipation to inflation with raise ethnic group flower with more scale _ big . In relation with above , interesting For done studies empirical analysis about influencing factors performance profitability in the industry banking in Indonesia.

Furthermore study This aim to: 1) analyze influence condition economy the macro represented by the product domestic gross and rate inflation , as well influence loan to deposit ratio to assets productive commercial banks; 2) analyze influence assets productive , non performing loans , tribe flower credits and fees operational to performance the profitability of commercial banks in Indonesia; 3) deliver description about development industry banking in Indonesia post crisis economics and monetary as well as optimization function intermediation banking .

B. METHODS

In study This method analysis used _ is method quantitative with approach analysis regression . Temporary that is , the data used For analysis is monthly time series data from 2003 to _ with 2011 (September), while the econometric model used adopted the Koyck distributed lag model . Testing hypothesis done with application programs For econometrics E-views.

For know results testing influence product domestic gross , assets productive period before , speed inflation , and loan to deposit ratio to assets productive commercial bank regression model is used following :

Model 1

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\begin{split} LAKP_t &= \alpha_1 + \beta_0 \, LPDB_t + \lambda \, LAKP_{t\text{-}1} - \varphi \, INF_t + \gamma LDR_{t\text{-}3} + vt \\ Where: \\ LAKP &= Assets \, productive \, commercial \, bank \, (\, in \, logarithm \, ) \\ LPDB &= Product \, domestic \, gross \, (\, in \, logarithm \, ) \\ LAKPt\text{-}1 &= Assets \, productive \, commercial \, bank \, in \, the \, period \, before \, (\, in \, logarithm \, ) \\ INF &= CPI \, Inflation \end{split}
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LDR t-3 = Loan to deposit ratio of commercial banks in a quarter previously Furthermore For test influence assets productive commercial bank, profit period previously, non-performing loans, costs operational and parts flower working capital credit on commercial bank profits, estimation model 2 is used as following:

Model 2

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\begin{split} LPRO &= \alpha_0 + \beta_0 \, LAKP_t + \lambda LPRO_{t-1} - \gamma \, LBOP_t - \pi \, LNPLN_t + \varphi \, SBMK_{t-9} + v_t \\ Where: \\ &LPRO = \quad Commercial \, bank \, profit \, (\, in \, logarithm \,) \\ &LAKP = \quad Assets \, productive \, commercial \, bank \, (\, in \, logarithm \,) \\ &LPRO \, t-1 = Commercial \, bank \, profit \, period \, before \, (\, in \, logarithm \,) \\ &LBOP = \quad Cost \, operational \, (\, in \, logarithm \,) \\ &LNPLN = \quad Non-performing \, loans \, nominal \, (\, in \, logarithm \,) \\ &SBMK \, t-9 = \quad Tribe \, flower \, working \, capital \, credit \, , \, nine \, period \, previously \end{split}
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C. RESULT ANALYSIS

Model 1 Estimation Results

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 \begin{tabular}{l} LAKPt = -0.1790 + 0.1147 \ LPDBt + 0.9119 \ LAKPt-1 - 0.0019 \ INFt + 0.1243 \ LDRt-3 \\  & (0.0595) \ (0.0269) \ & (0.0015) \ & (0.0418) \\ R2 = 0.9983 \ - \\ DWStat = 2.1296 \end{tabular}
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Estimation results shows the model complies condition so that can stated good and got accepted . The LPDB coefficient is 0.1147 and prob. value 0.057 which means that product domestic gross (GDP) effect positive and significant to assets earning public bank on degrees 90% confidence or $\alpha{=}0.10.$ it _ means that exists change (increment or decrease) of GDP by 1% will cause change (increment or decrease in assets productive commercial bank by 0.11%.

LAKP(-1) coefficient is 0.9119 and prob. value 0.00, means that assets productive on period previously influential positive and significant to assets productive managed

by commercial banks . Every change (increment or decrease in assets productive on period previously by 1% will cause change (increment or decrease in assets productive commercial bank by 0.91%.

Coefficient CPI inflation was -0.0019 with a prob value of 0.1914, which means that Inflation have influence negative to assets productive commercial bank . However thereby influence inflation the No significant or No have real influence _ Because has a prob value of 0.1914 above $\alpha{=}0.10.$

LDR coefficient is 0.1243 and the prob value is 0.0037, which means that loan to deposit ratio influential positive and significant to assets productive managed by commercial banks . Every change (increment or decrease) LDR by 1% will cause change (increment or decrease in assets productive commercial bank by 0.12% in the coming quarter come Because there is lags during three month . this $_$ can understood that the LDR component consists from element distribution credit and fundraising , so industry banking need time adjustment . Every successful fund collected banking No in a manner direct can placed become assets productive .

Model 2 Estimation Results

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 \begin{tabular}{ll} LPRO $_{t} = -1.034 + 0.4797$ LAKP $_{t} + 0.634$ LPRO $_{t-1} - 0.1127$ LNPLN $_{t} - 0.0721$ LBOP $_{t}$ \\ & & & & & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & &
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LAKP coefficient is 0.4797 with a prob value of 0.00, which is significant that assets productive commercial bank influential positive and significant on commercial bank profits. Every change (increment or decrease in assets productive by 1% will cause increase or decline in commercial bank profits by 0.48%.

Coefficient LPRO($\,$ -1) is 0.6336 with a prob value of 0.00, meaning that the profits of commercial banks period previously influential positive and significant to achievement of commercial bank profits in the period moment this . Every change (increment or decrease in) profit period previously by 1% will influence achievement bank profits general by 0.63%.

LNPLN coefficient is -0.1127 with a significant prob value of 0.003 that non-performing loan (NPL) or credit problem influential negative and significant on commercial bank profits . Every a nominal NPL increase of 1% will cause decline in commercial bank profits by 0.11%. Condition on the contrary , it is decrease in nominal NPL by 1% . influence increase in profit of commercial banks by 0.11%. Coefficient relative NPL effect small it also describes that banking capable controlling NPLs _ adequate through efforts gift credit made _ in a manner prudent.

LBOP coefficient is -0.0712 with a significant prob value of 0.00 that cost operational influential negative and significant to commercial bank profit achievement . Every increase cost commercial bank operations by 1% will cause profit decrease of 0.07%. Whereas exists decline cost commercial bank operations will influence increase in profit of commercial banks at the same magnitude .

Coefficient SBMK (-9) of 0.0102 with a prob value of 0.089 shows that ethnic group flower working capital credit influential positive and significant on commercial bank profits . Every change (increment or decrease in) rate flower commercial bank working capital loans by 1% will cause change (increment or decrease) bank profits general by 0.0102%. However thereby influence change ethnic group flower the has a lag of 9 (nine) months . this _ estimated Because influence period time credits and schemes pattern installment loan to debtor as well as behavior banking in adjustment (response) to changes ethnic group flower credit No characteristic instantly .

D. DISCUSSION

In model 1, conditions economy national represented by variables economy macro GDP effect positive and significant to assets productive . as one known component main assets productive in the industry banking is amount credit. it in line with results research by Agung J. and friends (2001) found that from side request output economy or Product Domestic Gross (GDP) influence in a manner positive distribution credit. on condition economy currently experience recession or crisis happen sharp decline amount disbursed credit banking Because Power absorb sector economy to financing banking become limited and on the other hand there are worries party banking For do expansion of the situation less economy _ conducive . Enhancement credit industry banking which is component biggest from assets productive owned _ industry banking , cause every expansion credit will push enhancement assets productive (ceteris paribus). Research results are also in line with studies Kosmidou K., et al , (2006) which shows that Gross Domestic Product (GDP) growth has an effect significant to profitability in the commercial banking industry in the UK, however with magnitude relative coefficient small it can suspected Because GDP growth is not in a manner direct effect on profitability, however through enhancement or expansion credit by banks.

Temporary That is , CPI inflation has influence negative to assets earning commercial banks , however results estimate show influence No significant to assets productive . kindly theoretically , there is increase high CPI price (inflation). will cause decline Power buy public so that influence variable inflation will characteristic negative . this _ cause society and actors business will reduce request credit at once push assets productive banking . Influence no inflation _ significant the reflect that more bank management emphasize aspect performance and prospects business from debtors _ compared to impact change price (risk inflation). Besides That during period research , pace National CPI inflation is also relative under control through various efforts taken by the central bank together government . it _ No in line with results study Kosmidou , et al . that shows that inflation influential significant to profitability , while on the results study in Tunisia by Naceur SB (2003), instead show that inflation No influential to profitability industry banking .

Besides that's a find empirical other is ratio credit party funds _ third (loan to deposit ratio) commercial banks have influence positive and significant to assets productive commercial bank . this _ describe that public banking capabilities For increase assets productive influenced by their abilities in operate function intermediation . Internal banking capabilities distribution credit must supported with efforts optimizing community fundraising _ Good from side period time investment as well ethnic group interest on funds collected . Optimization party fundraising _ third

This furthermore will influential to ability expansion reflected effort _ from assets productive banking .

Whereas based on results model 2 estimates referred to , it appears that influence assets productive as source income more big from influence cost operational . this _ show that banking more emphasize aspect expansion business To use push revenue and profit earned compared to effort For control cost operational (efficiency effort) in push profit achievement . This condition is also supported by the results estimates show _ influence ethnic group flower credit (working capital) still positive to commercial bank profit achievement . Besides That is , banking internal factors that is condition relative liquidity _ adequate as well as expansion business with open various bank offices area cause enhancement burden cost operational in period short .

Study Hadad , MD et al . (2003), shows that banks tend to withhold self For do competition Because condition remaining bank liquidity Enough adequate follow become reason so that ethnic group flower credit banking are overpriced. Although there is development ethnic group flower more credit $_$ improving (downtrend) , however symptom overprice the Still Enough relevant with condition banking mature this shows the banking LDR of 81.36% and a net interest margin of 5.95%.

Management cost in framework efficiency also matters profitability also lies in the results research in other countries such as in England (Kosmidou K., et al , 2006) and Tunisia (Naceur SB, 2003). Whereas studies in Sub -Saharan Africa, aspect management represented costs $_$ cost overheads instead No influential significant to profitability .

Furthermore influence quality credit , against profitability represented by size $_$ non-performing loans influential negative to achievement profitability . In line with results this , research in Macao (Vong API and Chan HS, 2005) confirms quality influential assets $_$ negative and significant . Temporary research conducted $_$ Santoso , W. (1997) found that Banking in Indonesia is sensitive to quality assets productive , risk liquidity as well as risk efficiency and capital .

E. CONCLUSION

Product Domestic Gross (GDP), loan to deposit ratio (LDR) and assets productive period previously influential positive and significant to assets productive commercial bank. Whereas level inflation No significant influential to assets productive commercial bank. Furthermore assets productive commercial bank, profit period before, and tribe flower working capital credit with lag nine month previously influential positive and significant on commercial bank profits. On the contrary nonperforming loans or credit problem and cost operational influential negative and significant on commercial bank profits . Profits earned by commercial banks more dominant side affected originating income from management assets productive compared to influence cost operational. However thereby net interest margin banking still _ relatively large which is also reflected from tribal spreads flower credit with ethnic group flower savings resulted public more big bear burden cost flower. Next, some related suggestions results study This are: a) use guard level profitability industry needed condition conducive economy _ so that intermediation banking can walk with good; b) deep role as institution intermediation, banking should notice effort enhancement efficiency in operational his efforts so that spreads ethnic group bank interest to be more low; and c) optimality role intermediation banking will done with Good if service banking also reaches out perpetrator business micro and small in a manner more wide , as well inclusion finance should into a development strategy business sector banking .

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