

Liquidity and Asset Quality on Sustainable Growth Rate of Banking Sector

Ahmad Aziz Putra Pratama

Master of Science in Management, Department of Management, Faculty of Economics and Business, Airlangga University,
Jl. Airlangga No. 4-6, Surabaya 60286, Indonesia
Orchid ID: <https://orcid.org/0000-0001-8174-1019>

Abstract: *Bank focused how to increase profit. But, sustainability of growth is more important. This study examines the effect of liquidity and asset quality on sustainable growth rate in banking sector. Purposive sampling based on the criteria selected 23 banks in 2010-2017 period with 174 observations. Using panel data regression, the results showed that liquidity and bad asset quality had a significant negative effect on sustainable growth rate. This result showed that sustainable growth rate becomes important related to the bank's strategy to continue and grow in order to expand its business maximally while maintaining funding sources.*

Keywords: Sustainable growth rate, liquidity, asset quality, banking sector

1. Introduction

Activities business of bank aims to get the profits. The profit targeted by the bank is the profit that continues to grow. The concept of banking growth it is demanded to be sustainable so that it becomes an indicator in measuring bank performance. Banking performance is a benchmark for success in business management, which includes funding, lending, and service.

According to Ross et al. (2005) consists of two types of growth, namely the Internal Growth Rate (IGR) and the level of sustainable growth (Sustainability Growth Rate-SGR). The measurement tool is related to the rate of growth that is beneficial in the long run. Several previous studies measuring bank performance tended to be based on financial ratios, namely the concept of profitability (Fitriana, Rosyid, & Fakhriana, 2015; Gambacorta, 2017; Tarazi & Zedek, 2014; Haryanto, 2016; Thalib, 2016). Profitability is more proxied by Return on Assets (ROA), which compares the net income to bank assets. Even though banks will strive to continue to grow and develop in accordance with longterm targets.

The SGR concept developed by Higgins (1981) explains that SGR is a financial policy of each company that is different according to its growth goals. Profit growth can increase assets so that when there is an increase in assets, financial policies or financing sources are needed. The SGR concept is to find out the alignment between elements of the company's main activities reflected in sales growth and funding decision elements that are reflected in the sources of funding. The direction two elements have a difference in the assessment of financing policies.

The essence of the IGR concept means that companies only use internal funding sources. The concept of SGR is the maximum growth rate that can be achieved by companies and banks without the need for funding from equity and still maintains a constant debt to equity ratio. The internal growth rate or IGR is a concept of the maximum growth rate that can be achieved by a company in this case, banking without any external funding.

SGR is often used by bankers (Higgins, 1981) to assess a company, creditworthiness. Information about Actual Growth Rate (AGR) to SGR. If AGR is consistently greater credit SGR, management will face the problem of funding sources to deal with these conditions. Conversely, if AGR is consistently lower than SGR, bankers tend to allocate funds in the form of investments. In the end, the goal of SGR leads to the survival of the company in the long run so that there is a balance between the growth rate of assets and profitability.

Several concepts and variables emerged as determinants of SGR from some previous researchers, but rarely focused only on liquidity and asset quality. This study examines the effect of LFR and NPL on SGR for banks in Indonesia.

Measurement of asset quality proxied by non performing loan (NPL) (Mintarti, 2009; Damayanti & Chaniago, 2014; Pratiwi, 2014; Ahmad, 2015; Haryanto, 2016; Thalib, 2016). Asset quality reflects the quality of current assets in several bank assets contained in the balance sheet and cash flow. Asset quality relates to credit risk faced by banks as a result of lending and investment funds in various existing portfolios. Asset quality can be seen from the number of nonperforming loans. Problematic assets are assets that do not generate income so that a method is needed in the assessment of creditworthiness.

While, Loan to Funding Ratio (LFR) is one of the ratios for measuring bank liquidity. This ratio is used to determine the ability of banks to repay funds withdrawals made by depositors by relying on loans provided as a source of bank liquidity.

This research is expected to be useful, both theoretically and practically. Theoretical benefits provide benefits to the theories of bank health assessment as measured by SGR. In particular theories in financial management and banking management will dominate the topic of this research. The theory of SGR as a bank effort in increasing sustainable growth so that bank activities will continue to be consistent.

Volume 8 Issue 10, October 2019

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

2. Literature Review

Bank liquidity reflects the ability of banks to meet short term obligations at maturity. The source of funds originating from the bank itself consists of the capital deposits of shareholders and retained earnings. The availability of bank funding sources includes three sources, namely the bank itself, the wider community, other financial institutions (Yuliani, 2016). Sources of funds from the wider community include the growth of Third Party Funds (TPF) which can be seen in the number of deposits, savings and time deposits. Other financial institution's funding sources consist of liquidity loans from Bank Indonesia, interbank loans or call money, existing bank loans abroad and from *Surat Berharga Pasar Uang (SBPU)*. The more liquid banks indicate that the availability of funds and sources of bank funds for now and in the future do not experience problems.

Loan to Funding Ratio (LFR) is one of the ratios for measuring bank liquidity. Banking liquidity is measured by LFR referring to (Atemnkeng & Nzongang, 2006; Yuliani, 2007; Respati & Yandono, 2008; Mintarti, 2009; Amouzesh et al., 2011; Ahmad, 2015; Firdausi, 2016). The higher LDR means that banks have an increase in total credit, which is greater than the increase in deposits so that interest-based spread-based income will be higher than the interest costs given to customers in collecting deposits. This condition indicates that the higher the LFR, the SGR will show changes in the increase without using external funding. Based on the description above, the research hypothesis is:

H₁: Loan to funding ratio (LFR) influences the sustainable growth rate (SGR)

Asset quality reflects the ability of assets owned by banks in providing credit. Asset quality is important for banks because it explains credit risk. The ratio used to assess credit risk is that the NPL refers to previous research (Mintarti, 2009; Damayanti & Chaniago, 2014; Pratiwi, 2014; Ahmad, 2015; Haryanto, 2016; Thalib, 2016). Measurement of NPL by comparing the ratio of loans given is problematic with total loans disbursed. The higher the NPL, the more banks are not careful in giving credit. Healthy NPL, according to the *Otoritas Jasa Keuangan (OJK)* is <5%, meaning that from the number of loans disbursed, only a few experience problems so that they fall into the category of non performing loans.

The quality of assets in the company can be grouped with asset management (asset management). Asset management in conventional companies is a measurement of the ratio of activities that are often used is total asset turnover (Gunawan & Leonnita, 2015; Nasim & Irrama, 2015; Ekpu & Paloni, 2016). This ratio is to measure the ability of banks to effectively manage existing assets so as to minimize business risks. Banking in an effort to minimize business risk is to apply the principle of prudence in the allocation of funds in this case lending activities. The NPL measures the level of asset quality, which shows how much the bank is able to implement the bank's functions in lending activities. The smaller NPL ratio shows that SGR banks will continue to grow better. Based on the description above, the research hypothesis is:

H₂: Non performing loan (NPL) influences the sustainable growth rate (SGR)

3. Method

The research population was 23 banks. The sampling technique is purposive sampling with criteria:

- 1) Banks that publish complete annual financial reports during the study period ending on December 31.
- 2) Banks that have net income during the study period because they are related to the return on equity (ROE) data.

The unit of research analysis is panel data of 174 n observations. Data sources are the financial statements of each bank and the IDX website. The estimation of the panel data regression model used fixed effect model (FEM). This study used STATA Statistics Data Analysis 14.2 Special Edition Version as statistical tool.

Table 1: Operational definitions of variables

Variable		Operational Definition
Sustainable Growth Rate	SGR	$(ROE \times R) / (1 - (ROE \times R))$
		ROE = Return on Equity
		$R (\text{Retention Rate}) = 1 - \text{DPR}$
		DPR = Dividend Payout Ratio
Loan to Funding Ratio	LFR	Loan / Deposit
Non performing Loan	NPL	Noncurrent Loans / Total Loans

Table 2: Sample selection

Sample	Total
All observation	184
Outlayer	10
Total observation	174

The following is the regression model used in this study:

$$SGR_{i,t} = \beta_0 + \beta_1 LFR_{i,t} + \beta_2 NPL_{i,t} + \varepsilon_{i,t}$$

4. Results and Discussions

Table 3: Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Standard Deviation
SGR	174	0.75	42.61	11.12	6.83
LFR	174	50.61	108.86	85.81	10.45
NPL	174	0.21	5.71	2.32	1.22

Table 4: Correlation matrix

		1	2	3
1	SGR	-		
2	LFR	-0.25	-	
3	NPL	-0,12	0,49	-

Source: STATA Statistics Data Analysis 14.2 Special Edition Version

N = 174, **bold** indicates significant correlation at 5% level

Table 4: Regression test results

Dependent variable:	SGR
Analysis model:	FEM
Category:	All Samples
Intercept	**1.328 (0.021)
LFR (Loan to Funding Ratio)	***-0.131 (0.004)
NPL (Non Performing Loan)	***-1.593 (0.000)
Observations	174
R-Squared	0.454
F-Statistic	***11.125

Sig	(0.000)
Source: STATA Statistics Data Analysis 14.2 Special Edition Version	
***	Significant at 1% level
**	Significant at 5% level
*	Significant at 10% level

Loan to funding ratio (LFR) has a significant negative effect on sustainable growth rate (SGR)

The empirical results of the study indicate that there is an influence between LFR on SGR. The results of this study support the findings of Normaisarah et al. (2018) and Amouzesh et al (2011). The LFR concept is the ratio of loans disbursed to third parties both in rupiah and in foreign currencies to the number of third party funds (TPF), namely in the form of demand deposits, savings and time deposits. This type of credit does not include loans disbursed to other banks. LFR is a reflection of the liquidity ratio, which measures how much the bank is able to repay funds withdrawals made by depositors by relying on loans.

SGR is a reflection of the measurement of bank performance in the future. SGR value is a combination of elements of operating performance and financial performance Amouzesh et al. (2011). Operational performance in banking includes three things, namely funding, lending, and services, while financial performance includes funding sources both internally and externally. SGR value in descriptive for 10.49% can be interpreted the growth of bank sustainability in the study sample is relatively slow. Deceleration occurs because not only of internal factors, one of which is LFR but can be determined by external conditions considering the level of business competition between banks is relatively tight. In addition, the regulation of *Otoritas Jasa Keuangan (OJK)* and *Bank Indonesia (BI)* is quite firm in continuing to supervise banks. Close supervision by government regulations can be one of the controls for banks in developing strategies related to the soundness of their respective banks.

Nonperforming loans (NPL) has a significant negative on sustainable growth rate (SGR)

Based on the results of the regression test, the hypothesis that NPL has a significant effect on SGR is stated to be accepted. The regression coefficient is negative. This means that the smaller the NPL value, the higher the SGR value. This study is able to provide empirical evidence that banks in the study sample have sustainable capabilities in revenue growth.

Banks as intermediary institutions that have the main task of funding and lending, the main risk faced is a credit risk. The indication of credit risk related to the bank's prudential principles can be seen from the higher NPL. Credit risk is regulated in Bank Indonesia Regulation (PBI) No.5/8/PBI/2003, concerning Implementation of Risk Management for Commercial Banks and its implementing regulations in the form of a Bank Indonesia Circular Letter.

The findings of this study support a number of earlier studies conducted by (Ahmad, 2015; Gunawan & Leonnita, 2015; Mintarti, 2009; Thalib, 2016). In contrast, this study does not support the findings (Romadloni & Herizon, 2015) and (Cahyono & Anggraeni, 2015). The difference in the results

of this study is due to the object of research, namely in foreign exchange banks for the period 2010-2014 (Romadloni & Herizon, 2015). In addition, only three private national banks have quarterly data for 2010- 2014 (Cahyono & Anggraeni, 2015).

5. Conclusion

Liquidity proxied with Loan to Funding Ratio (LFR) was found to be significant towards the change in the Sustainable Growth Rate (SGR). The higher the LFR indicates a change in SGR, which has decreased. LFR is a reflection of the liquidity ratio, which measures how much the bank is able to repay funds withdrawals made by depositors by relying on loans. Asset quality that is proxied by NonPerforming Loans (NPL) is significantly negative towards SGR. The lower level of non-performing loans will increase bank profits so that the bank will continue to grow and continue.

Practical benefits are expected to be one of the sources of information related to SGR banking in Indonesia for OJK, which can be used as input for financial information in an effort to implement regulations as banking regulatory authorities in Indonesia. For bank managers, SGR is a measure of financial performance as an evaluation of bank activities that include funding, lending, and services. Investors, know that SGR banks go public so that they can be used as a source of information for buying and selling banking shares. For the society, monitors the bank health performance, especially from the viewpoint of interest rates so that it will be related to the decision to save and borrow funds.

Future research can examine by differentiating longer periods. The impact of these ratios tends to be meaningful for long-term periods. Future research can classify asset quality in four types based on the level of collectibility, which is smooth, sub-standard, doubtful, and stalled.

References

- [1] Ahmad, G. N. (2015). Determinan profitabilitas bank: Studi kasus pada bank pembangunan daerah. *Jurnal Ekonomi dan Perbankan*, 19(3), 431–438.
- [2] Ahmad, G. N., Indriyanti, I., & Buchdadi, A. D. (2013). Pengaruh DER, ROI, current ratio dan rata-rata kurs terhadap undepicing pada initial public offering studi kasus pada perusahaan non keuangan di Indonesia. *Jurnal Riset Manajemen Sains Indonesia*, 4(2), 151–166.
- [3] Amouzesh, N., Moenifar, Z., & Mousavi, Z. (2011). Sustainable growth rate and firm performance: Evidence from Iran Stock Exchange. *International Journal of Business and Social Science*, 2(23), 249–255.
- [4] Atemnkeng, T., & Nzongang, J. (2006). Market structure and profitability performance in the banking industry of CFA countries: The case of commercial banks in Cameroon. *Journal of Sustainable Development in Africa*, 8(2), 1–14.
- [5] Cahyono, H. S. D., & Anggraeni. (2015). Pengaruh likuiditas, kualitas aktiva, sensitivitas pasar, efisiensi dan profitabilitas terhadap CAR pada Bank devisa yang

- go public. *Journal of Business and Banking*, 5(1), 113–130. <https://doi.org/10.14414/jbb.v5i1.476>
- [6] Damayanti, D. D., & Chaniago, H. (2014). Pengaruh risiko usaha dan good corporate governance terhadap skor kesehatan bank pada bank umum swasta nasional devisa. *Journal of Business and Banking*, 4(2), 217–230. <https://doi.org/10.14414/jbb.v4i2.373>
- [7] Firdausi, I. (2016). Analisis pengaruh kinerja perbankan terhadap dana pihak ketiga bank persero. *Jurnal Keuangan dan Perbankan*, 20(3), 487–495. <https://doi.org/10.26905/jkdp.v20i3.318>
- [8] Fitriana, N., & Rosyid, A., & Fakhriana, A. (2015). Tingkat kesehatan bank BUMN Syariah dengan bank BUMN konvensional: Metode RGEC (Risk Profile, Good Corporate Governance, Earning, dan Capital). *Jurnal Ekonomi dan Bisnis*, 17(2), 1–12. <http://dx.doi.org/10.31941/jebi.v17i2.332>
- [9] Greuning, H., & Bratanovic, S. B. (2011). *Analyzing Banking Risk*. Jakarta: Salemba Empat.
- [10] Gunawan, B., & Leonnita, D. P. (2015). Pengaruh kinerja keuangan terhadap deviation actual growth rate dari sustainable growth rate. *Jurnal Riset Akuntansi & Bisnis*, 15(2), 144–155. <https://doi.org/10.30596/jrab.v15i2.1663>
- [11] Hartono, G. C., & Utami, S. R. (2016). The comparison of sustainable growth rate, firm's performance and value among the firms in Sri Kehati Index and Idx30 Index in Indonesia Stock Exchange. *International Journal of Advanced Research in Management and Social Sciences*, 5(5), 68–81.
- [12] Haryanto, S. (2016). Determinan permodalan bank melalui profitabilitas, risiko, ukuran perusahaan, efisiensi dan struktur aktiva. *Jurnal Ekonomi dan Bisnis*, 19(1), 117–138. <https://doi.org/https://doi.org/10.24914/jeb.v19i1.483>
- [13] Higgins, R. (1981). Sustainable Growth Under Inflation. *Financial Management*, 10(4), 36–40. <https://doi.org/10.2307/3665217>
- [14] Lockwood, L., & Prombutr, W. (2010). Sustainable growth and stock returns. *The Journal of Financial Research*, 33(4), 519–538. <https://doi.org/10.1111/j.1475-6803.2010.01281.x>
- [15] Manaf, N. B. A., Saad, N. B. M., Mohamad, N. E. A. B., Ali, I. B. M., & Rahim, N. B. (2018). Determinants of sustainable growth rate (SGR) By using Zakon's Model to encounter with shariah compliance requirements for shariah securities compliance firms in Malaysia. *International Journal of Industrial Management*, 4(June), 61–69.
- [16] Mintarti, S. (2009). Implikasi proses take-over bank swasta nasional go public terhadap tingkat kesehatan dan kinerja Bank. *Jurnal Keuangan dan Perbankan*, 13(2), 346–358.
- [17] Nasim, A., & Irnama, F. R. (2015). Pengaruh profit margin, asset turnover dan leverage terhadap sustainable growth rate pada perusahaan sektor jasa yang terdaftar di Bursa Efek Indonesia periode 2010-2012. *Jurnal Riset Akuntansi dan Keuangan*, 3(1), 632–648. <https://doi.org/10.17509/jrak.v3i1.6609>
- [18] Olson, G., & Pagano, M. (2005). A new application of sustainable growth: A multi-dimensional framework for evaluating the long run performance of bank mergers. *Journal of Business Finance & Accounting*, 32(6), 1995–2036. <https://doi.org/10.1111/j.0306-686X.2005.00656.x>
- [19] Pandit, M. N., & Rachanatejani, M. (2011). Sustainable growth rate of textile and apparel segment of the Indian retail sector. *Global Journal of Management and Business Research*, 11(6), 38–44.
- [20] Platt, H. D., Platt, M. B., & Chen, G. (1995). Sustainable growth rate of firms in financial distress. *Journal of Economics and Finance*, 19(2), 147–151. <https://doi.org/10.1007/BF02920515>
- [21] Pratiwi, N. (2014). Pengaruh risiko usaha terhadap skor kesehatan bank umum go public di Indonesia. *Journal of Business and Banking*, 4(2), 201–216. <https://doi.org/10.14414/jbb.v4i2.372>
- [22] Respati, H., & Yandono, P. E. (2008). Tinjauan tentang variabel-variabel CAMEL terhadap laba usaha pada bank umum swasta nasional. *Jurnal Keuangan dan Perbankan*, 12(2), 283–295.
- [23] Romadloni, R. R., & Herizon. (2015). Pengaruh likuiditas, kualitas aset, sensitivitas pasar dan efisiensi terhadap return on asset (ROA) pada bank devisa yang go public. *Journal of Business and Banking*, 5(1), 131–148. <https://doi.org/10.14414/jbb.v5i1.384>
- [24] Ross, S. A., Westerfield, R. W., & Jaffe, J. (2005). *Corporate Finance* (7th ed). New York: McGraw-Hill.
- [25] Thalib, D. (2016). Intermediasi, struktur modal, efisiensi, permodalan dan risiko terhadap profitabilitas bank. *Jurnal Keuangan dan Perbankan*, 20(1), 116–126. <https://doi.org/10.26905/jkdp.v20i1.155>
- [26] Utami, D., Sulastrri, Muthia, F., & Thamrin, K. H. (2018). Sustainable growth: Growth and Broke empirical study on manufacturing sector companies listed on the Indonesia Stock Exchange. *ICOI the International Conference on Organizational Innovation* (July, 07 – 09). Fukuoka University. Fukuoka, Japan.
- [27] Yuliani. (2007). Hubungan efisiensi operasional dengan kinerja profitabilitas pada sektor perbankan yang go publik di Bursa Efek Jakarta. *Jurnal Manajemen & Bisnis Sriwijaya*, 5(10), 13–41.
- [28] Zulkifli, S., Ali, M., & Aswan, A. (2018). Analysis of factors affecting the loan to funding ratio at commercial banks listed on Indonesia Stock Exchange year 2011-2016. *Hasanuddin Journal of Applied Business and Entrepreneurship*, 1(2), 73–86.

Author Profile



Ahmad Aziz Putra Pratama. Undergraduate of Master of Science in Management, Department of Management, Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia. Aziz is an enthusiastic trader and researcher. In his academic excellence has published 2 national and 4 international journal. He also participated in 2 national seminars and conferences and guide 3 management projects.