

**jesp**

ISSN 2086-1575  
E-ISSN 2502-7115  
Vol 11, No 2, December 2019

*Jurnal* **Ekonomi &  
Studi Pembangunan**



Jurusan Ekonomi Pembangunan  
FAKULTAS EKONOMI  
UNIVERSITAS NEGERI MALANG





HOME ABOUT LOGIN REGISTER SEARCH CURRENT ARCHIVES OLD WEBSITES ANNOUNCEMENTS

Home > About the Journal > Editorial Team

## Editorial Team

### Editor in Chief

[Assoc. Prof. Dr. Nasikh Nasikh](#), Universitas Negeri Malang (Scopus ID: 57192685029), Indonesia

### Editorial Board

[Dr. Richardson Kojo Edeme](#), Department of Economics, University of Nigeria (Scopus ID: 57196469833), Nigeria

[Assoc. Prof. Mahirah Kamaludin](#), Universiti Malaysia Terengganu (Scopus ID: 56102066600), Malaysia

[Assoc. Prof. Dr. Thanet Wattanakul](#), Khon Kaen University (Scopus ID: 56195492400), Thailand

[Dr. Sugeng Hadi Utomo](#), Faculty of Economics, Universitas Negeri Malang (Scopus ID: 57191858607), Indonesia

[Assoc. Prof. Dr Dwi Wulandari](#), Universitas Negeri Malang (Scopus ID: 57190024304), Indonesia

[Muhammad Hasyim Ibnu Abbas](#), Universitas Negeri Malang, Indonesia

[Dr. Grisvia Agustin](#), Faculty of Economics, Universitas Negeri Malang, Indonesia

[Linda Seprillina](#), Faculty of Economics, Universitas Negeri Malang, Indonesia

[Ahmad Fawaiq Suwawan](#), Faculty of Economics, Universitas Negeri Malang, Indonesia

ISSN (Print) 2086-1575

ISSN (Online) 2502-7112

[View My Stats](#)



This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

[EDITORIAL BOARD](#)

[PEER REVIEWERS](#)

[FOCUS AND SCOPE](#)

[ABSTRACTING INDEXING](#)

[PUBLICATION ETHICS](#)

[AUTHOR GUIDELINES](#)

[VISITOR STATISTICS](#)

[CONTACT](#)

### REFERENCE TOOLS



[Journal Help](#)

[OPEN JOURNAL SYSTEMS](#)

### USER

Username

Password

Remember me



HOME ABOUT LOGIN REGISTER SEARCH CURRENT ARCHIVES OLD WEBSITES ANNOUNCEMENTS

Home > About the Journal > **People**

## People

### Peer Reviewers

[Prof. Dr. Wee-Yeap Lau](#), Universitas of Malaya (Scopus ID: 55757538000), Malaysia

[Prof. Dr. Budi Eko Soetjipto](#), Universitas Negeri Malang (Scopus ID: 57188809981), Indonesia

[Prof. Dr. Dileep Kumar Mohanachandran](#), BERJAYA University College · Business School, Malaysia

[Prof. Dr. Wahjoedi Wahjoedi](#), Universitas Negeri Malang (Scopus ID: 57194274854), Indonesia

[Mitsuhiko Kataoka, Ph.D.](#), Rikkyo University (Scopus ID: 8951858400), Japan

[Dr. Agus Eko Sujianto](#), IAIN Tulungagung (Scopus ID: 57195348648), Indonesia

[Yasmin Bani, Ph.D.](#), Universiti Putra Malaysia (Scopus ID: 57195521335), Malaysia

[Dr. Mohamed Bendehiba](#), University of Khemis Miliana, Algeria

[Assoc. Prof. Dr. Chin-Hong Puah](#), Assoc. Prof. Dr. Chin-Hong Puah, Universiti Malaysia Sarawak (Scopus ID: 54790902800), Malaysia

[Dr. Wasiaturrahma Wasiaturrahma](#), Universitas Airlangga (Scopus ID: 57196419855), Indonesia

[Assoc. Prof. Imam Mukhlis](#), Universitas Negeri Malang (Scopus ID: 57198446914), Indonesia

[Sandy Arief](#), Universitas Negeri Semarang (Scopus ID: 57191519051), Indonesia

[Jairo Toro Diaz, Ph.D.](#), Universidad Autonoma De Manizales (Scopus ID: 57190865277), Colombia

[Assoc. Prof. Setyo Tri Wahyudi](#), Universitas Brawijaya (Scopus ID: 57191995110), Indonesia

ISSN (Print) 2086-1575 ISSN (Online) 2502-7112

View My Stats



This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

[EDITORIAL BOARD](#)

[PEER REVIEWERS](#)

[FOCUS AND SCOPE](#)

[ABSTRACTING INDEXING](#)

[PUBLICATION ETHICS](#)

[AUTHOR GUIDELINES](#)

[VISITOR STATISTICS](#)

[CONTACT](#)

### REFERENCE TOOLS



[Journal Help](#)

[OPEN JOURNAL SYSTEMS](#)

USER

Username

Password

Remember me

NOTIFICATIONS

- View
- Subscribe

LANGUAGE

Select Language:

English

JOURNAL CONTENT

Search

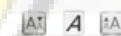
Search Scope:

All

Browse:

- By Issue
- By Author
- By Title
- Other Journals

FONT SIZE



00036501

[View My Stats](#)

### Visitors

	5,535		65
	785		51
	303		40
	107		37
	72		36



INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

## Editorial Policies

- [Focus and Scope](#)
- [Section Policies](#)
- [Peer Review Process](#)
- [Open Access Policy](#)
- [Archiving](#)
- [Screening for Plagiarism](#)
- [Publication Ethics](#)
- [Abstracting & Indexing](#)

## Focus and Scope

**Jurnal Ekonomi dan Studi Pembangunan** focuses on scientific papers related to development economics include critical analysis of economic development issues, local economic development, community economic development, economic growth, international trade and finance, fiscal and monetary policy, welfare economy, and development policy concerning the Small and Medium Enterprises.

Special consideration is given to research paper that critically studies using multi perspectives such as socio-economic, cultural-economic, political-economic, historical and geographical, and technological perspectives.

## Section Policies

### Articles

- Open Submissions     Indexed     Peer Reviewed

## Peer Review Process

**Jurnal Ekonomi dan Studi Pembangunan** uses double blind review process, where both the reviewer(s) and author(s) remains anonymous throughout the process. First, articles submitted research paper will be checked for originality by using Turnitin software. Moreover, all manuscripts submitted to this journal are evaluated by the Editor to ensure the manuscripts suitable with aims and scope of the journal. In this case some manuscripts are rejected or returned before the review process.

After initial evaluation, the manuscripts are sent to at least two reviewers which are determined by editorial board. If necessary, the number of reviewers can be increased by Editorial Board. The reviewers are chosen from reviewers list board according to their expertise. Reviewers are asked to evaluate the manuscript's originality, methodology, contribution to the literature, novelty, presentation of results and support for the conclusions, and appropriate referencing of previous relevant studies. Referees might accept the manuscript, reject the manuscript or might require a revision for style and/or content. For publication of articles, two positive reports are required. In case one referee report is negative while the other is positive, the article is forwarded to a third referee for addition evaluation. When a revision is required by the referee or referees, the author(s) are to consider the criticism and suggestions offered by the referees, and they should be sent back the revised version of manuscript in 30 days. If revised manuscript is not sent in a month, the manuscript is removed from referee evaluation process. Reviewer may request more than one revision of a manuscript. Manuscripts which are not accepted for publication are not re-sent to their author(s).

The editors then make a decision based on the reviewer's recommendation from among several possibilities: rejected, require major revision, need minor revision, or accepted. Editor in Chief has the right to decide which manuscripts submitted to the journal should be published. The accepted manuscripts for publication are placed in an issue sequence. The whole processes is assumed to be completely within 12-25 weeks.

## Open Access Policy

Jurnal Ekonomi dan Studi Pembangunan (JESP) adopts an Open Access policy complying with the definition laid out by the Budapest Open Access Initiative (BOAI). Terms and conditions of Creative Commons Attribution 4.0 International License apply to all published manuscripts. This journal is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#). This license allow authors to copy and redistribute the material in any or medium format. The journal allows the author(s) to hold the copyright without restrictions and will retain publishing rights without restrictions.

## Archiving

This journal utilizes the LOCKSS system to create a distributed archiving system among participating libraries and permits those libraries to create permanent archives of the journal for purposes of preservation and restoration. [More...](#)

## Screening for Plagiarism

The submitted manuscript would be check for plagiarism using by:



[EDITORIAL BOARD](#)

[PEER REVIEWERS](#)

[FOCUS AND SCOPE](#)

[ABSTRACTING INDEXING](#)

[PUBLICATION ETHICS](#)

[AUTHOR GUIDELINES](#)

[VISITOR STATISTICS](#)

[CONTACT](#)

REFERENCE TOOLS



[Journal Help](#)

OPEN JOURNAL SYSTEMS

USER

Username

Password

Remember me

[Login](#)

NOTIFICATIONS

- [View](#)
- [Subscribe](#)

LANGUAGE

Select Language

English

[Submit](#)

JOURNAL CONTENT

Search

Search Scope

All

[Search](#)

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)
- [Other Journals](#)

FONT SIZE

00036500

[View My Stats](#)

Visitors

	5,535		65
	785		51
	303		40
	107		37
	72		36

INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

## Publication Ethics

**Jurnal Ekonomi dan Studi Pembangunan** commits to the academic community in ensuring ethics in publication and quality of articles in publication. Plagiarism is strictly forbidden and papers found to be plagiarized will be removed or not published in Jurnal Ekonomi dan Studi Pembangunan. Thus, all received papers are checked with "Turnitin" for plagiarism before review process. While signing the publication agreement the author(s) have to warrant that the article and associated materials are original and it does not infringe the copyright of anyone. Also the authors have to warrant that there was a full consensus of all the authors and it was neither submitted nor published previously. Our publication ethics is mainly based on the Code of Conduct and Best-Practice Guidelines for Journal Editors (Committee on Publication Ethics, 2011).

### **Publication Decision**

The editor is responsible for deciding which of the papers submitted to the journal will be published. The decision will be based on the paper's importance, originality and clarity, and the study's validity and its relevance to the journal's scope. Current legal requirements regarding libel, copyright infringement, and plagiarism should also be considered.

### **Confidentiality**

The editor and any editorial staff must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher, as appropriate.

### **Disclosure and conflicts of interest**

Unpublished materials disclosed in a submitted paper will not be used by the editor or the members of the editorial board for their own research purposes without the author's explicit written consent.

### **Reviewers Duties**

#### ***Contribution to Editorial Decisions***

The peer-reviewing process assists the editor and the editorial board in making editorial decisions and may also serve the author in improving the paper.

#### ***Confidentiality***

Any manuscripts received for review must be treated as confidential documents. They must not be disclosed to or discussed with others except as authorized by the editor.

#### ***Standards of Objectivity***

Reviews should be conducted objectively. Personal criticism of the author is inappropriate. Referees should express their views clearly with supporting arguments.

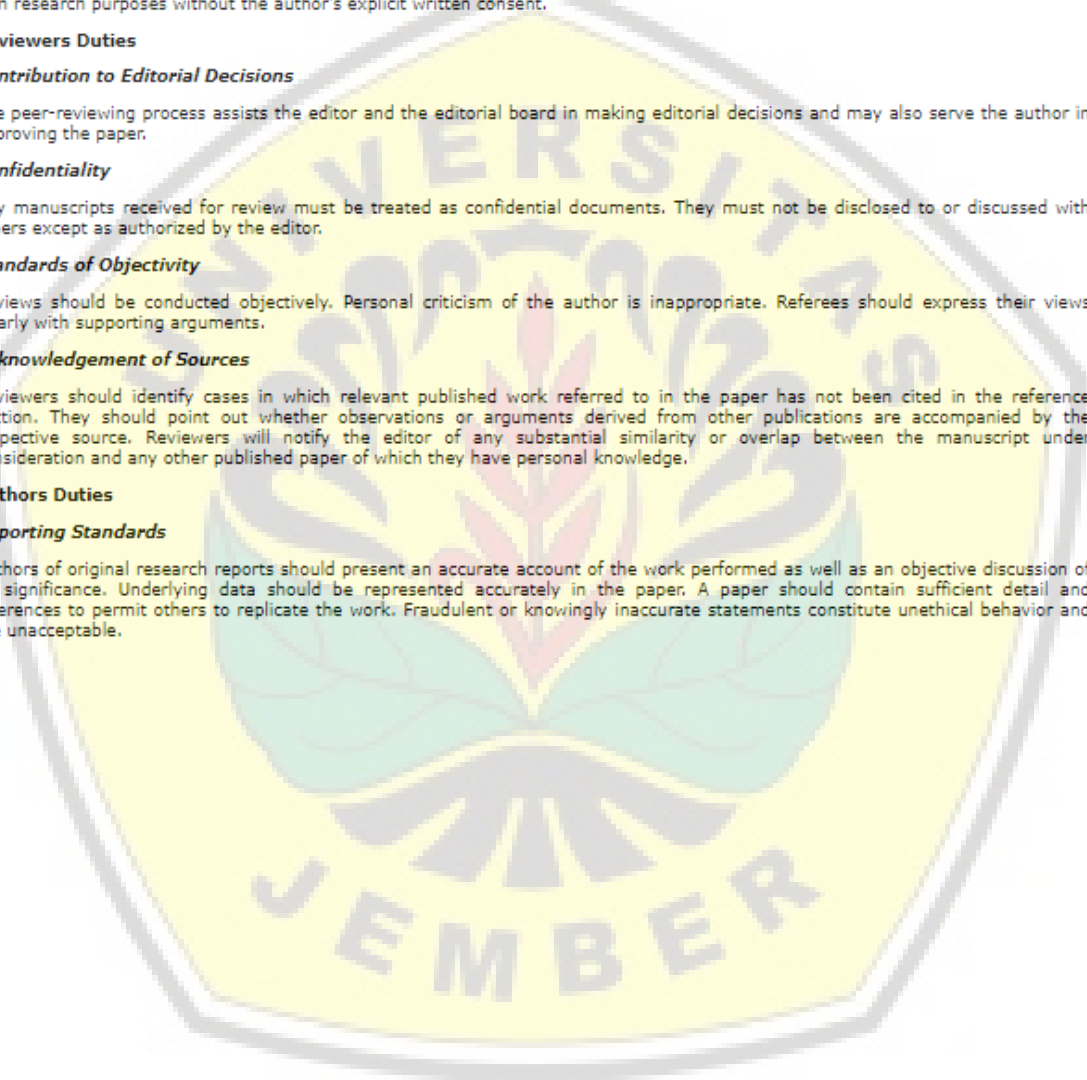
#### ***Acknowledgement of Sources***

Reviewers should identify cases in which relevant published work referred to in the paper has not been cited in the reference section. They should point out whether observations or arguments derived from other publications are accompanied by the respective source. Reviewers will notify the editor of any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

### **Authors Duties**

#### ***Reporting Standards***

Authors of original research reports should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the paper. A paper should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable.



# Digital Repository Universitas Jember

## **Data Access and Retention**

Authors could be asked to provide the raw data of their study together with the paper for editorial review and should be prepared to make the data publicly available if practicable. In any event, authors should ensure accessibility of such data to other competent professionals for at least ten years after publication (preferably via an institutional or subject-based data repository or other data center), provided that the confidentiality of the participants can be protected and legal rights concerning proprietary data do not preclude their release.

## **Originality, Plagiarism, and Acknowledgement of Sources**

Authors will submit only entirely original works, and will appropriately cite or quote the work and/or words of others. Publications that have been influential in determining the nature of the reported work should also be cited.

## **Multiple, Redundant or Concurrent Publication**

In general, papers describing essentially the same research should not be published in more than one journal. Submitting the same paper to more than one journal constitutes unethical publishing behavior and is unacceptable.

## **Authorship of the Paper**

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. The corresponding author ensures that all contributing co-authors and no uninvolved persons are included in the author list. The corresponding author will also verify that all co-authors have approved the final version of the paper and have agreed to its submission for publication.

## **Disclosure and Conflicts of Interest**

All authors should include a statement disclosing any financial or other substantive conflicts of interest that may be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed. **Fundamental Errors in Published Works** When an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the journal editor or publisher and to cooperate with the editor to retract or correct the paper in form of an erratum.

## **Withdrawal of Manuscripts**

Author is not allowed to withdraw submitted manuscripts, because the withdrawal is waste of valuable resources that editors and referees spent a great deal of time processing submitted manuscript, money and works invested by the publisher. The withdrawal of manuscript after the manuscript is accepted for publication, author will be punished by paying US\$300 per manuscript. Withdrawal of manuscript is only allowed after withdrawal penalty has been fully paid to the Publisher. If author don't agree to pay the penalty, the author and his/her affiliation will be blacklisted for publication in this journal. Even, his/her previously published articles will be removed from our online system.

## **References**

Committee on Publication Ethics (COPE). (2011, March 7). *Code of Conduct and Best-Practice Guidelines for Journal Editors*. retrieved from [http://publicationethics.org/files/Code\\_of\\_conduct\\_for\\_journal\\_editors\\_Mar11.pdf](http://publicationethics.org/files/Code_of_conduct_for_journal_editors_Mar11.pdf)

## **Abstracting & Indexing**

Jurnal Ekonomi dan Studi Pembangunan is internationally indexed and abstracted by:

- [Directory of Open Access Journal \(DOAJ\)](#)
- [Science and Technology Index \(SINTA\)](#)
- [EBSCO-Open Science Directory](#)
- [Garba Rujukan Digital \(GARUDA\)](#)
- [Google Scholar](#)
- [Directory of Open Access Scholarly Resources \(ROAD\)](#)
- [One Search ID by Perpusnas](#)
- [Moraref](#)
- [Index Copernicus](#)
- [Crossref DOI](#)
- [Sherpa/Romeo](#)

ISSN (Print) 2086-1575    ISSN (Online) 2502-7112

[View My Stats](#)



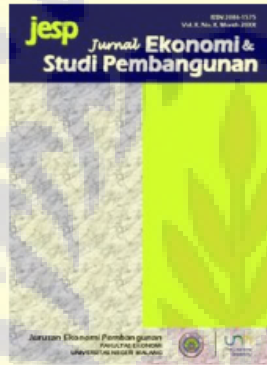
This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

### Jurnal Ekonomi dan Studi Pembangunan

**Jurnal Ekonomi dan Studi Pembangunan (JESP)** with registered ISSN [2502-7115](#) (Online) ISSN [2086-1575](#) (Print) is published twice a year in continuity by Universitas Negeri Malang (State University of Malang) under the management of Department of Economic Development, Faculty of Economics. It covers the ideas of philosophical, conceptual, theoretical, critical review, and research in the field of development economics and economic development. This journal has registered in crossref system with Digital Object Identifier (DOI) Prefix 10.17977.

JESP has internationally indexed and abstracted in DOAJ, SINTA, EBSCO, Sherpa Romeo, Index Copernicus, Google Scholar, Universal Impact Factor, Directory of Abstract Indexing for Journal, BASE-Bielefeld Academic Research Engine, Scholarsteer, Indonesia Publication Index (IPI), Directory of Research Journal Index, Cite Factor, JurnalTOCs, JIFACTOR, Directory of Open Access Scholarly Resources (ROAD), One Search Id, Journal Seek, UNSW Library, Worldcat OCLC, NIU University Libraries, Boston University Libraries, Harvard Library, Western Theological Seminary, University of Saskatchewan Library, Moraref, Academic Resources Index, International Scientific Indexing (ISI), JurnalFactor, Scientific Journal Impact Factor, International Innovative Journal Impact Factor (IIJIF), Open Academic Journal Index (OAJI), Cosmos Impact Factor.

Jurnal Ekonomi dan Studi Pembangunan is **Nationally Accredited Grade II** based on the Decree of the Minister of Research, Technology and Higher Education No. 14/E/KPT/2019, May 10th, 2019.



Vol 11, No 2 (2019)

#### Table of Contents

##### Articles

<a href="#">Determinant of Regional Economic Growth in East Java, Indonesia</a>	PDF
Muchlas Manduli Gengaji, Sasongko Sasongko, Rachmat K Sakti	104-115
<a href="#">Deficit of Health Social Security Fund in National Health Insurance Program: A Case Study of BPJS Kesehatan</a>	PDF
Dinil Asyrofi, I Gede Agus Ariutama	116-130
<a href="#">Do Monetary Variables Affect to Cryptocurrency Price? Lesson From Indonesia</a>	PDF
Citra Anggun Kusumastuty, Dwi Wulandari, Bagus Shandy Narmaditya, Mahirah Kamaludin	131-142
<a href="#">RCA Analysis With Selected Product: Modified Approach Applied to Indonesian Export</a>	PDF
Jongkers Tampubolon	143-157
<a href="#">Why Fiscal Dynamics Occur in Samarinda City ?</a>	PDF
Adi Wijaya, Juliansyah Roy, Dio Caesar Darma	158-176
<a href="#">Bank Credit Development: A Study of Macro-Prudential Effect</a>	PDF
Sebastiana Viphindartin, Silvi Asna Prestianawati, Ayman Nazzal	177-185

ISSN (Print) 2086-1575    ISSN (Online) 2502-7112

[View My Stats](#)



This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

[EDITORIAL BOARD](#)

[PEER REVIEWERS](#)

[FOCUS AND SCOPE](#)

[ABSTRACTING/INDEXING](#)

[PUBLICATION ETHICS](#)

[AUTHOR GUIDELINES](#)

[VISITOR STATISTICS](#)

[CONTACT](#)

#### REFERENCE TOOLS



[Journal Help](#)

[OPEN JOURNAL SYSTEMS](#)

#### USER

Username   
 Password   
 Remember me  
[Login](#)

#### NOTIFICATIONS

- [View](#)
- [Subscribe](#)

#### LANGUAGE

Select Language  
 English ▼  
[Submit](#)

#### JOURNAL CONTENT

Search   
 Search Scope ▼  
 All  
[Search](#)  
 Browse  

- [By Issue](#)
- [By Author](#)
- [By Title](#)
- [Other Journals](#)

#### FONT SIZE

00036493

[View My Stats](#)

#### Visitors

5,535	65
785	51
303	40
107	37
72	36

[FLAG count](#)

#### INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

### Bank Credit Development: A Study of Macro-Prudential Effect

Sebastiana Viphindartin, Silvi Asna Prestianawati, Ayman Nazzal

#### Abstract

Macroprudential policy is a policy that leads to the analysis of the financials systems as whole as of financials individuals including banking. This research want to show the effect of macroprudential policy on the development of banking credit in Indonesia by using monthly time series data from January 2010 until June 2017. This research uses several variables namely credits, exchange rates, Return on Assets (ROA), Loan to Deposits Ratio (LDR), Capitals Adequacy Ratio (CAR) and interest rates. The method used in this research is using Autoregressive (VAR). The result of this study indicate that macroprudential policy has an effect on the development of bank credit in Indonesia. Macroprudential policy that is Loan to Deposits Ratio (LDR) have an influence in improving credit development in Indonesia. In addition, the change in interest rate from the BI Rate to BI 7 Day Repo Rate affect the development of credit in Indonesia. Profit earned and capital owned by banks also affects the development of credit in Indonesia. These results are supported by Impulse Response Function (IRF) and Variance Decomposition (VD) tests where macroprudential policy appears stable in response to credit shocks.

#### Keywords

Macroprudential Policy, Credit, VAR

#### Full Text:

[PDF](#)

#### Refbacks

- There are currently no refbacks.

ISSN (Print) 2086-1575

ISSN (Online) 2502-7112

[View My Stats](#)

This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

[EDITORIAL BOARD](#)[PEER REVIEWERS](#)[FOCUS AND SCOPE](#)[ABSTRACTING/INDEXING](#)[PUBLICATION ETHICS](#)[AUTHOR GUIDELINES](#)[VISITOR STATISTICS](#)[CONTACT](#)

REFERENCE TOOLS

[Journal Help](#)

OPEN JOURNAL SYSTEMS

USER

Username Password  Remember me

NOTIFICATIONS

- [View](#)
- [Subscribe](#)

LANGUAGE

Select Language

English

JOURNAL CONTENT

Search 

Search Scope

All

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)
- [Other Journals](#)

FONT SIZE

00036494

[View My Stats](#)

#### Visitors

5,535	65
785	51
303	40
107	37
72	36

INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)



## Bank Credit Development: A Study of Macro-prudential Effect

Sebastiana Viphindrartin<sup>1</sup>, Silvi Asna Prestianawati<sup>2</sup>, Ayman Nazzal<sup>3</sup>

<sup>1</sup>Faculty of Economics and Business, University of Jember, Indonesia <sup>2</sup>

Faculty of Economics and Business, Universitas Brawijaya, Indonesia

<sup>3</sup>Faculty of Economics and Business, Palestine Technical University,  
Palestine E-mail: [silvi.febub@gmail.com](mailto:silvi.febub@gmail.com)

Received: July, 2019; Accepted: November, 2019; Published: December, 2019

Permalink/DOI: <http://dx.doi.org/10.17977/um002v11i22019p177>

---

### Abstract

Macroprudential policy is a policy that leads to the analysis of the financial systems as whole as of financial individuals including banking. This research want to show the effect of macroprudential policy on the development of banking credit in Indonesia by using monthly time series data from January 2010 until June 2017. This research uses several variables namely credits, exchange rates, Return on Assets (ROA), Loan to Deposits Ratio (LDR), Capitals Adequacy Ratio (CAR) and interest rates. The method used in this research is using Autoregressive (VAR). The result of this study indicate that macroprudential policy has an effect on the development of bank credit in Indonesia. Macroprudential policy that is Loan to Deposits Ratio (LDR) has an influence in improving credit development in Indonesia. In addition, the change in interest rate from the BI Rate to BI 7 Day Repo Rate affect the development of credit in Indonesia. Profit earned and capital owned by banks also affects the development of credit in Indonesia. These results are supported by Impulse Response Function (IRF) and Variance Decomposition (VD) tests where macroprudential policy appears stable in response to credit shocks.

**Keywords:** *Macroprudential Policy, Credit, VAR*

**JEL Classification:** E51

---

### INTRODUCTION

A strong introduction engages the reader in the problem of interest and Macroprudential policy is a policy that leads to the analysis of the financial system as a whole as a collection of financial individuals including banking. Macroprudential policies can prevent and mitigate systemic risk, encourage more balanced and quality intermediation function, and improve financial system efficiency and financial access. The financial system is a framework or system that facilitates savings and loan of funds or money (the function of banking intermediation). The stability of the financial system depends on the health of financial institutions and financial market stability. The financial system has an important role in the economy where the financial system can help reallocate resources especially the funds so that excessive funds from the excess funds can be utilized by the under-funded parties.

Banking is one of the economic sectors within the framework of a very important financial system role in the economic development of Indonesia. Because economic growth will be faster with better banking role. The role of good banking

can be seen from the efficiency of each banking. Efficiency is a performance parameter that theoretically underlies the entire performance of a company. Ability to produce maximum output with existing input. Banking efficiency is one of the indicators that can know and analyze the strength of a bank. With the identified input output allocation, it can be further analyzed to see the cause of inefficiency (Jiang et al., 2019).

Systemic risk becomes an empirical debate in various studies conducted in developed and developing countries. Schularsik and Taylor (2012) show that the importance of credit as a guide in understanding the financial cycle as well as its impact on the crisis. Research from Calderon and Kubota (2012) suggests that private capital inflows may encourage a credit boom. In mitigating systemic risks not only can be done using one indicator, but a comprehensive set of measuring tools (Aaron,2015) is required. Risks can be addressed using macroprudential policy instruments, a study conducted by Lim et al. (2011) argue that the increasing number of instruments used will be more effective in reducing the procyclicality and effectiveness of the shocks caused by the financial sector. The familiarity of macroprudential policy in Spain can help in overcoming the increasing credit losses during the global financial crisis. A research conducted by Purnawan and Nasir (2015) in analyzing macroprudential policy roles in

Indonesia found that the movement of macroprudential policy components done after the 2008 financial crisis is relatively following the average of economic conditions, especially in terms of encouraging optimal GWM + LDR policies in risk management credit and maintain the volatility of the rupiah. Credit growth and changes in the ratio of credit to GDP have the best and most significant signal properties against credit to GDP in almost all policies (Gersl and Jasova, 2018). A study conducted by Surjaningsih et al. (2014) indicates that the bank's liquidity ratio could signal a year before the 2008 financial crisis.

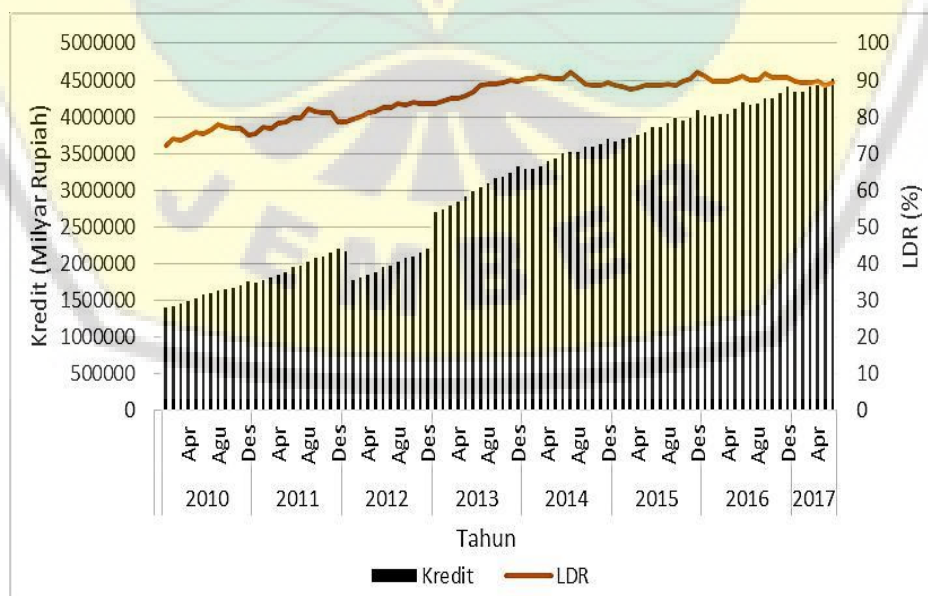


Figure 1. Development of Credit and LDR  
 (Source: Financial Services Authority (OJK))

Broadly speaking, the development of bank credit in Indonesia has increased. In 2010 to 2011 banking credit movement increased, then at the end of 2011 credit movement showed a decline. In 2012 the movement of credit is lower than the previous year. From the year 2013 to June 2017 the movement of credit shows its essence with the continuous increase of credit by banks. The movement of Loan to Deposit Ratio (LDR) continued to increase from during the observation period although the increase was not significant. In the period 2013 - 2017 which ranges in the number 83.47% - 89.31%. In 2012, the increasing movement of LDR is not accompanied by credit growth, the high ratio of loans provided by banks is not responded by credit growth. This is evidenced by the decline in loan growth in 2012 than in the previous year although the LDR has increased. Increased credit movement is also not accompanied by good banking performance, global economic pressures and declining oil prices since mid-2014 have an impact on the mining sector. These conditions resulted in slightly declining credit growth (Bank Indonesia, 2016). The implementation of macroprudential policy in managing credit development became the background in this research. The focus in this research is to know how the role of macroprudential policy in managing credit growth of banking sector.

## METHOD

This research uses Vector Autoregressive (VAR) method. Vector Autoregressive was introduced by C. A Sims (1972) as thought of Granger (1969) which was then used extensively in econometrics. Granger says if two variables, eg x and y have a causal relationship where x affects y then x's past information can help predict y. There are several advantages VAR, one of which is a simple model, so no need to determine the endogenous and exogenous variables because all variables are endogenous. The general VAR equation according to Baum (2013) is as follows:

$$y_t = v + A_1 y_{t-1} + \dots + A_p y_{t-p} + B_0 x_t + B_1 x_{t-1} + \dots + B_s x_{t-s} + u_t$$

where is the vector of the variable K, each model as a function of lag p for each variable and always put the exogenous variable . Assumed that :

$$(u_t) = 0, E(u_t u_t') = \Sigma \text{ and } E(u_t u_s') = 0 \forall t \neq s$$

The method used to know how much influence of exchange rate, Return on Assets (ROA), Loan to Deposits Ratio (LDR), Capital Adequacy Ratio (CAR) and interest rate to credit. The equation model in this research is as follows:

$$\text{LogKREDIT}_t = \beta_0 + \beta_1 \text{LogKREDIT}_{t-1} + \beta_2 \text{LogNER}_{t-1} + \beta_3 \text{ROA}_{t-1} + \beta_4 \text{LDR}_{t-1} + \beta_5 \text{CAR}_{t-1} + \beta_6 I_{t-1} + \epsilon_t$$

## RESULTS AND DISCUSSION

A stable financial system will be able to allocate resources and absorb shocks that may prevent disruptions to real sector activities and financial systems. The rapid development of credit shows that the role of banks is very important

in financing infrastructure in Indonesia so that the availability of credit in the economy is highly dependent on banking behavior. The instability in the financial sector can be affected by internal or external shocks. Such instability can lead to credit, liquidity, market and operational risks so that macro prudential policies are used to limit the risks and costs that may arise from the instability of the financial system.

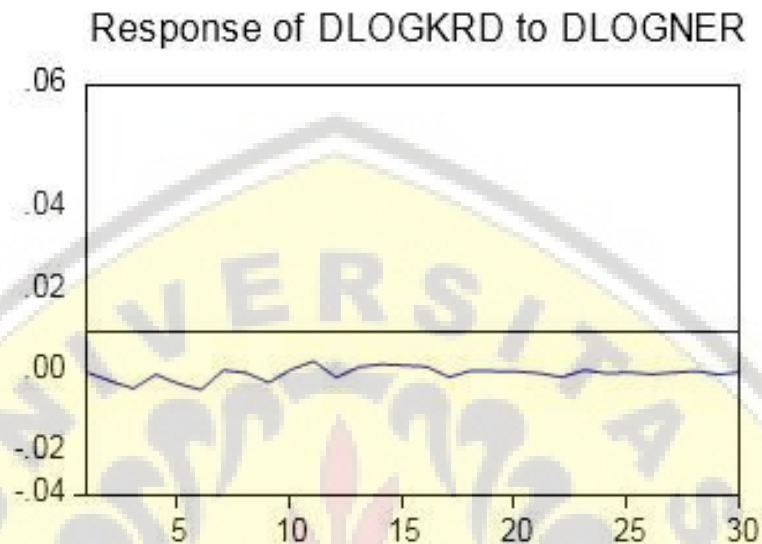


Figure 1. Impulse Response Function Result of Credit to Exchange Rate

The effect of shocks from credit variables, exchange rates, ROA, LDR, CAR and interest rates can be seen through impulse response function (IRF) in VAR model analysis (see figure 1). The results of the IRF test show that credit response to exchange rate shocks is stable and vice versa, the exchange rate response to credit shocks is stable in Indonesia. The statement indicates that both credit and exchange rate have a great influence in Indonesia. This study is in line with book of Green (2018) which states that changes in exchange rates will affect the decision on credit. The result is supported by the banking capital that is still secure so that credit growth in Indonesia continues to grow. The Indonesian banking industry has also developed a number of strategies to deal with the weakening of the rupiah exchange rate, in the case of credit channeling of its banks, mostly to the micro, small and medium enterprises.

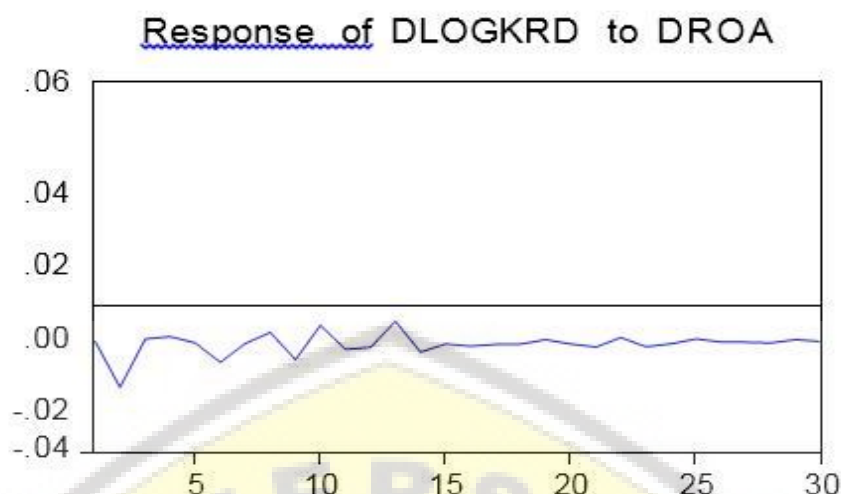


Figure 2. Impulse Response Function Result of Credit to ROA

Figure 2 indicates that credit on ROA shocks appears stable and vice versa, the ROA response to credit shocks is stable, meaning that both credit and ROA are equally influential. This study is in line with the theory where ROA is an indicator that indicates that if ROA increases then bank asset has been used optimally to gain profit so that ROA and credit have a positive relationship (Kusumasturi,2019). The greater the ROA of a bank, the greater the rate of profit achieved so that the bank has the opportunity to channel its credit is greater. This study concurs with the research of Effendi (2018) which states that ROA has a positive and significant impact on credit development.

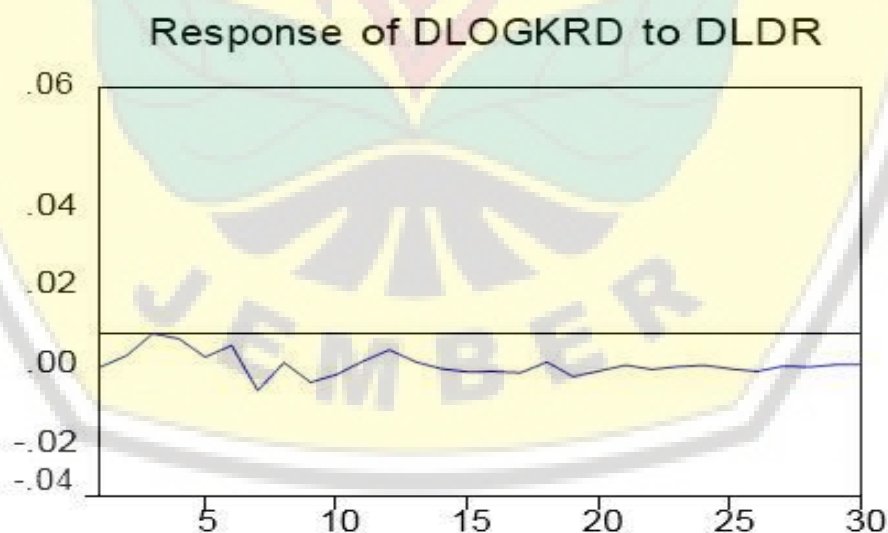


Figure 3. Impulse Response Function Result of Credit to LDR

From figure 3 we see that LDR responds to stable credit shocks as well as on the contrary, credit response to LDR is stable in Indonesia, indicating that both LDR and credit have a big influence. This research is in line with the policy of Bank Indonesia in Bank Indonesia Regulation Number 17/11 / PBI / 2015 which is to encourage economic growth through banking credit growth, adjustment of GWM

policy through LDR calculation. This study concurs with the research of Yuliana (2014) which shows that LDR has a significant effect on lending. Macro prudential policy by using LDR instrument is very influential to the development of credit in Indonesia where the higher LDR in a bank hence credit ability which has been channeled by banking also higher, this is indicated by the development of LDR period 2013 - 2017 which is around 83.47% 89.31% as well as the continuous development of credit during the observation period.

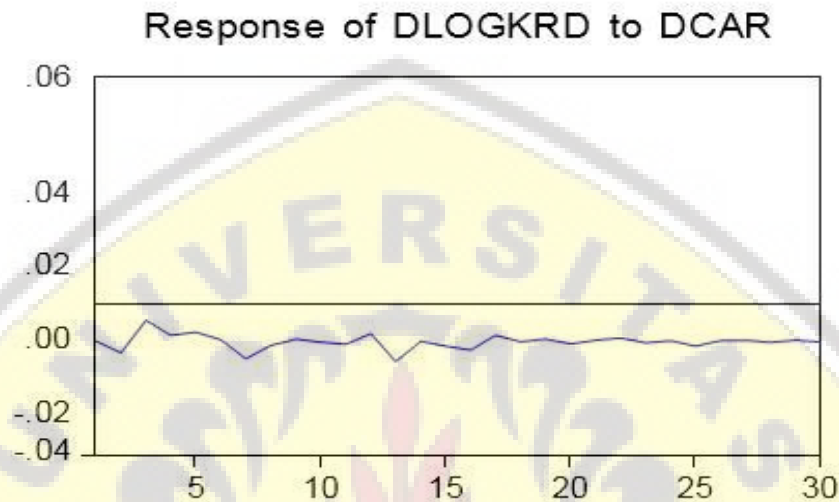


Figure 4. Impulse Response Function Result of Credit to CAR

Credit response to CAR shocks is stable and vice versa, the CAR response to credit is stable, indicating that both credit and CAR have a big influence (see figure 4). Rachman et al (2018) argues that there are two internal factors that affect the volume of credit granting CAR and ATMR. Factors that usually influence banking behavior in offering credit are caused by low banking assets, high Non Performing Loan (NPL) or a drop in banking capital due to depreciation, thus decreasing the ability of banks to provide loans (Kingu, 2018). This study concurs with the research of Yuliana (2014) who argues that CAR has a significant influence on credit.

This research is supported by Bank Indonesia Regulation Number 3/21 / PBI / 2001 concerning the obligation of minimum capital provision for commercial banks, in which each bank is required to provide minimum capital of 8% of risk-weighted assets procured by CAR. This regulation is supported also by the development of CAR during the observation period which ranges from 18.66% - 22.75%. This research is in line with the above- mentioned theory which states that the behavior of banks in offering credit is very influential on the CAR so it can be said that the greater the value of CAR then the possibility of banks to make credit offer is also greater.

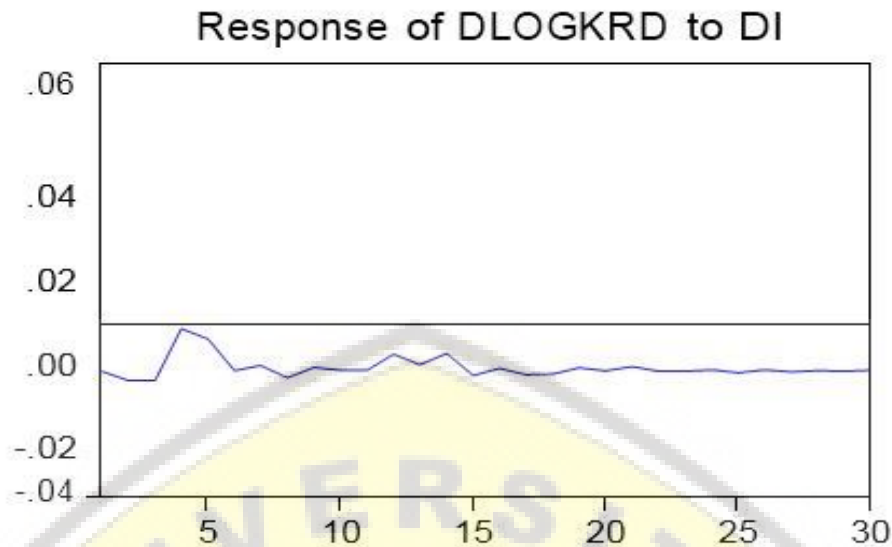


Figure 5. Impulse Response Function Result of Credit to Interest Rate

Credit responds to interest rate shocks is stable and vice versa, the interest rate response to credit shocks is stable. The statement indicates that both credit and interest rates have a large influence. This research is supported by research conducted by Dawood (2018) who argue that interest rates have an effect on the amount of credit in Indonesia. In 2017, Bank Indonesia's interest rate decline to be 4.50%, this is done to improve banking liquidity. The decline in interest rates was responded by banks, so that demand for loans is higher than the previous year due to lower loan interest rates.

## CONCLUSION

Based on the results of the analysis using Vector Autoregressive (VAR) method on the effect of exchange rate, ROA, LDR, CAR and interest rate on credit, it can be concluded as follows: a) Exchange rates have a significant effect both positive and negative on credit, this indicates that if there is a change in the exchange rate it will affect the development of credit in Indonesia; b) ROA has a significant influence both positive and negative to credit, it indicates that if there is a change to the ROA it will affect the development of credit in Indonesia; c) LDR has a significant influence both positive and negative on credit, it indicates that if there is a change to LDR it will affect the development of credit in Indonesia; d) CAR has a significant effect both positive and negative on credit, it indicates that if there is a change to the CAR it will affect the development of credit in Indonesia; and e) Interest rates have a significant effect both positive and negative on credit, this indicates that if there is a change in interest rates it will affect the development of credit in Indonesia.

## REFERENCES

- Baum, Christopher F. (2013). *VAR, SVAR and VECM models*. Boston College.  
Retrieved from <http://fmwww.bc.edu/EC-C/S2013/823/EC823.S2013.nn10.slides.pdf>
- Bank Indonesia. (2016). *Mengupas Kebijakan Makroprudensial*. Jakarta: Bank Indonesia.
- Calderon, C. and M. Kubota. (2012). *Gross Inflows Gone Wild: Gross Capital Inflows, Credit Booms and Crises*. World Bank Group, Economic Research.  
Retrieved from [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=FEMES12&paper\\_id=148](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=FEMES12&paper_id=148)
- Dawood, Taufiq Carnegie. (2018). *Monetary Policy, Foreign Interest Rate impact on Indonesian Bank Credit*. *Journal of Economics and Policy*. 11(2).pp 338-355. <https://doi.org/10.15294/jejak.v11i2.16056>
- Effendi, Maya, R. Budi, M. Mumun (2018). *The Determinants of Banking Credit Disbursement and its Implications on the Return on Assets (ROA): Empirical Study to the Banks Listed on Indonesian Stock Exchange*. *International Journal of Applied Business and Economic Research*. 15(22)
- Gersl, Adam & Martina Jasova. (2018). *Credit-based Early Warning Indicators of Banking Crises in Emerging Markets*. *Economic System*. 42 (1), 18-3. <https://doi.org/10.1016/j.ecosys.2017.05.004>
- Green. Gary P. (2018). *Finance Capital And Uneven Development*. Westview Press. New York
- Jiang, Yongzhong, Xueli C., Vivian V., & Tomas, B. (2019). *Evaluating Economic and Environmental Performance of the Chinese Industry Sector*. *Sustainability*, 11 (6084). doi:10.3390/su11236804www
- Kingu, Peter, S. Macha, R. Gwahula. (2018). *Impact of Non-Performing Loans on Bank's Profitability: Empirical Evidence from Commercial Banks in Tanzania*. *International Journal of Scientific Research and Management*. doi: 10.18535/ijserm/v6i1.em11
- Kusumastuti, W. Intan & A. Alam (2019). *Analysis of impact of CAR, BOPO, NPF on profitability of Islamic Banks (Year 2015-2017)*. *Journal of Islamic Economic Laws*. 2(1).pp 30-59
- Lim, C. et al (2011). *Macroprudential Policy: What Instruments and How to Use Them?*. IMF Working Paper, No. WP/11/238
- Mehrotta, Aaron & Y. James. (2015). *Financial inclusion – issues for central banks*. *BIS Quarterly Review*. Retrieved from [https://www.bis.org/publ/qtrpdf/r\\_qt1503h.pdf](https://www.bis.org/publ/qtrpdf/r_qt1503h.pdf)
- Purnawan, Muhammad Edhie & M. Abd. Nasir. (2015). *The role of macroprudential policy to manage eExchange rate volatility, excess banking liquidity and credits*. *Buletin Ekonomi Moneter dan Perbankan*, Vol. 18 No. 1
- Rachman, R. Arrina, Y.B. Kadarusman, K. Anggriono & R. Setiadi (2018). *Bank-specific Factors Affecting Non-performing Loans in Developing Countries: Case Study of Indonesia*. *The Journal of Asian Finance, Economics and Business*. 5(2).pp 35-2
- Schularick, Moritz & A.M. Taylor (2012). *Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008*. American



Economic Review, 102(2): 1029–1061  
<http://dx.doi.org/10.1257/aer.102.2.1029>

- Surjaningsih, Ndari, Y.Diana & D.Elis.( 2014). *Early warning indicator risiko likuiditas perbankan*. Bank Indonesia. Working Paper, No. WP/1/2014
- Yuliana, Amalia. (2014). *Pengaruh LDR, CAR, ROA dan NPL Terhadap Penyaluran Kredit Pada Bank Umum di Indonesia Periode 2008 – 2013*. Jurnal Dinamika Manajemen.2(3)

