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A Bibliometric Study of Research Patterns in National Income and Economic Growth, 2015–2024

Novita Aprilia[1*], Waspodo Tjipto Subroto[2], Norida Canda Sakti[3]
Postgraduate Faculty of Economics and Business, State University of Surabaya
Corresponding Author: Novita Aprilia novita.22002@mhs.unesa.ac.id

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A B S T R A C T

This study aims to examine the evolution of national economic development and infrastructure research from 2015 to 2024. The research data used are those that have been published in scholarly journals that are indexed by Scopus. Data extraction results are derived from 239 documents. Results of research on the topic of national development and economic stagnation indicate that the number of trains is rather unstable. However, research on the national economy and building boom increased from 2015 to 2016 and experienced a decline in 2017. However, from 2017 to 2019 there was another decline in growth, and from 2019 to 2020 there was another decline in growth. The final year of the trend was 2020 to 2023 there was a slight decline in growth, but from 2023 to 2024 there was a further decline in growth. The results of the study on the Rodriguez-Pose domain show that there are four clusters that have been identified

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INTRODUCTION

Two important indicators for assessing the economic health of a country are economic growth and national income (Bloom et al., 2018; Miladinov, 2020). Positive economic growth can increase national income, and high national income can encourage faster economic growth. In situations like this, research on economic growth trends and national income becomes very important, especially considering rapid global changes.

Based on the latest projections, global economic growth is estimated to reach 3.1% in 2024. Several large countries, including the United States and developing countries in Asia, are doing better than expected, despite problems such as high inflation and geopolitical uncertainty (Adjei, 2023; Banna et al., 2023). This provides an opportunity for other countries to develop with the right policies and innovation.

Economic growth is also showing signs of recovery. Indonesia's economic growth was recorded at 4.94% in the third quarter of 2023, slightly lower than the previous quarter, according to data from the Central Statistics Agency (BPS). This growth is mainly driven by industries such as processing and food. Apart from that, increasing visits from domestic and foreign tourists also improves the economy (Eric et al., 2020; González-Rodríguez et al., 2023; Tiku et al., 2022).

To improve the quality of life of society and the competitiveness of a country, the two main components are national growth and development (Bodislav et al., 2023; Mensah, 2019; Surya et al., 2021). Economic growth, usually measured by indicators such as Gross Domestic Product (GDP), shows that a country's production capacity for goods and services has increased. However, societal welfare cannot be guaranteed by growth alone. Consequently, national development must be understood as a broader process that includes social, political and environmental elements (Glass & Newig, 2019; Hariram et al., 2023; Naseemullah, 2023). Research becomes an important tool in this context to understand the dynamics of development and progress and to create successful and sustainable policies.

Research on national growth and development provides in-depth insight into the various components that influence a country's development. Research helps discover new opportunities for economic growth, such as technological innovation and the development of new sectors. Additionally, research helps identify societal problems such as poverty, income inequality, and limited access to education and health services (Lieten, 2015; O'Donnell, 2024; Rebouças et al., 2022). The government can create evidence-based policies to address problems and encourage inclusive growth with the right data and analysis.

The development of the digital economy is one of the many factors influencing Indonesia's national income (Aryanto & Chrismastuti, 2011; Tian & Xiang, 2024; Tiku et al., 2022; Yusuf, 2021). In 2030, the contribution of the digital economy to national GDP is expected to increase to 23.6%. The fintech and e-commerce sectors are growing rapidly, and by 2023, e-commerce transactions are estimated to reach IDR 533.5 trillion. This shows that national income growth is influenced by digital transformation.

On the other hand, growth and development research must be considered. Limited spending, inaccurate data access, and political interference often hinder research. Nevertheless, there can be no doubt how important research is in this context. Research can improve decision making, increase human resource capabilities, and promote environmental sustainability. Therefore, to ensure that the progress and advancement of the nation is in line with sustainable development goals, the government and other stakeholders must give great priority to investment in research.

Despite positive trends in economic growth and national income, there are still several problems to be resolved (Corlet Walker et al., 2021a; Ngubane et al., 2023; Zhenmin, 2019). Global uncertainty caused by geopolitical conflicts and climate change can have a negative impact on economic stability. Therefore, it is important for researchers to learn more about the components that influence this growth as well as the methods that can be used to maximize growth potential in the future. The aim of this research is to gain a deeper understanding of how national income and economic growth influence each other, and how public policy can help both in a changing world.

LITERATURE REVIEW

Bibliometric Analysis

Bibliometric analysis, which uses a quantitative approach to evaluate and map the scientific literature in a research field, aims to find publication trends, author collaborations, and citation patterns within a research field. This method collects and analyzes data from various sources, such as journals indexed by Scopus and Google Scholar. The information generated can be used for decision-making and research development. Bibliometric analysis usually consists of several steps. This includes data collection, keyword selection, relationship matrix creation, results appearance, and data interpretation. Researchers can describe the network of collaboration between authors and the distribution of publications by year and discipline by using software such as Publish or Perish and VOSviewer. This analysis also helps uncover the excellence and contribution of an individual or institution in a particular field.

National Income

National income is the total value of goods and services produced by an economy in a certain period of time, usually one year, and includes all income received by the community from the factors of production used in the production process. This idea serves as the main indicator to assess the economic condition of a country and the level of welfare of its people.

Economic Growth

The theory of economic growth explains how a country's production capacity increases over time, which is indicated by an increase in GDP per capita. Many things can affect this growth, such as capital accumulation, technological advancements, improving the quality of the workforce, and government policies.

METHODOLOGY

Literature study with bibliometric analysis is the method used in this research. Analyzing published articles and then using them for further research, this is the meaning of bibliometric analysis. In 1969 the term "bibliometric" appeared and this was according to Alan Pritchard (Pritchard, 1969) It is hoped that the term can be used explicitly in all studies conducted to measure written communication processes and that the term can be accepted in the field of information science." Scopus base data used in this research (Reen, T. S., & Gochhait, 2020). The research is global in nature so data from Scopus is suitable for use as a source of research. The keywords used in searching data in Scopus are "Economic AND Growth AND National AND Income" from 2015-2024. Data that met the criteria from the Scopus database in 2015-2024 found 239 documents. According to (Van Eck, N. J., & Waltman, 2020) The data that has been obtained from the Scopus database in RIS format is then processed using the VOSviewer application which can determine cluster visualization in research on economic growth and national development. Data from Scopus can be saved in Microsoft Excel, data that has been collected from the Scopus database can be visualized into graphs. A tool that can be used to visualize bibliometric data and networks is VOSviewer. The network referred to is such as researchers, journals, etc., and this can be created through citation relationships, as well as authorship (Mohan, B. S., & Kumbar, 2020), (Suprapto, 2021a). (Suprapto, 2021b), (Suprapto, N., Prahani, B. K., & Deta, 2021a), (Suprapto, N., Prahani, B. K., & Deta, 2021b) stated that the results of all data that had been processed through VOSviewer and Excel visualization were used to analyze document publications, distribution of affiliations and institutions, top authors who played a role in publications, distribution of publications in countries and languages, and cluster visualization results in economic growth and development research national, journal sources and publishers.

RESULT AND DISCUSSION

Output of Publications and Research Documents on Economic Growth and National Development

The data obtained contained 239 documents related to research on economic growth and national development in the Scopus database in 2015-2024. The data used is only 239 documents because this research uses the period 2015 to 2024. Documents that appear in the search include Articles, Conference Papers, Book Chapters, Reviews, Books, and Conference Reviews. Publications of research on economic growth and national income from 2015 to 2024 are shown in Figure 1. It can be seen in Figure 1 that the most numerous documents are articles, totaling 223 documents with a percentage of 88.7%. Furthermore, the most numerous documents after Articles are Book Chapters with 5 documents with a percentage of 3.8%. The third largest document is a review of 5 documents with a percentage of 3.8%. The fourth largest number of documents in the Book are 3 documents with a percentage of 2.5%. The fifth largest number of Conference Paper documents is 2 documents with a percentage of 0.8%. The sixth most common document is Letter with a percentage of 0.4% with 1 document.

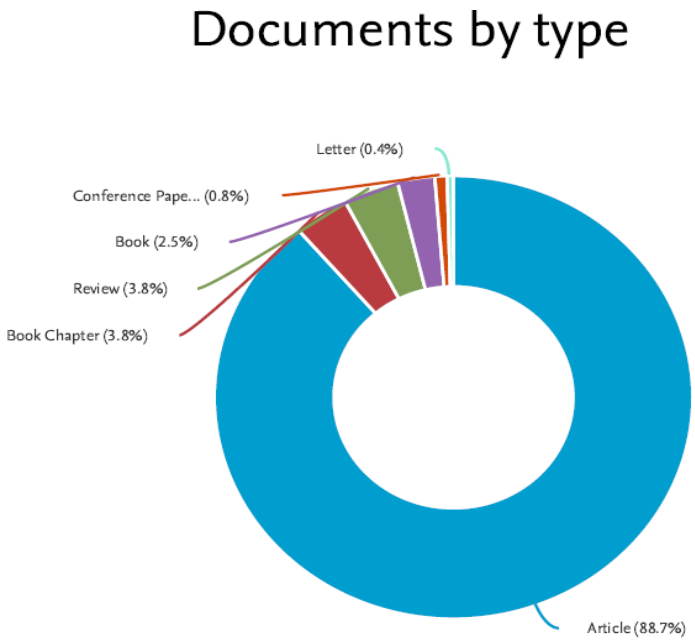

Figure 1. Document Type Research on Economic Growth and National Development
Source: Data Processed 2024

It can be seen in Figure 2 that the number of documents generally increases from year to year, although the increase is not consistent. For example, from 2015 to 2016 it increased, but in 2016 to 2017 it decreased and there was another significant increase in 2017, in 2020 it experienced another decrease. However, the decline is not too much, and in 2023-2024 it will decrease.

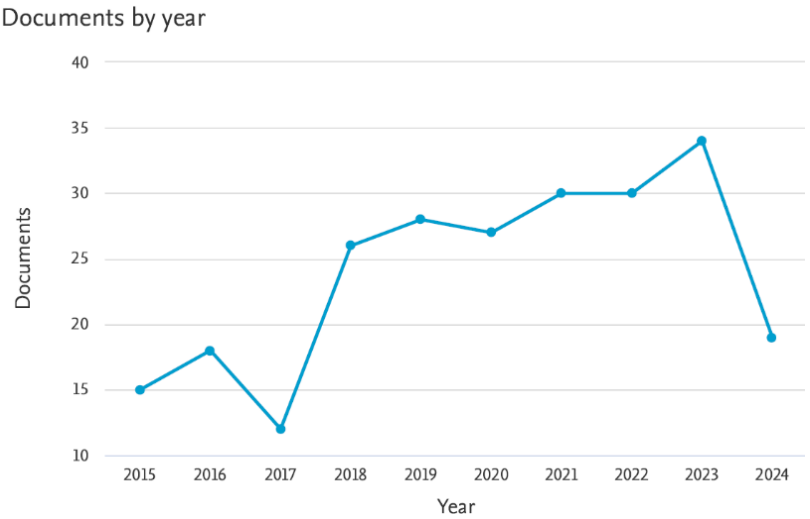

Figure 2. Number of Research Documents from Year to Year
Source: Data Processed 2024

Distribution of Research Publications on Economic Growth and National Development by Country

Based on documents obtained from the Scopus database, the country most involved in research topics on economic growth and national development is the United States which can be seen in Figure 3. Apart from the United States, other countries that dominate include the United States (57 documents), the United Kingdom (23 documents), China (22 documents), Russian Federation (19 documents), India (13 documents), Indonesia (13 documents), Germany (11 documents), Turkey (11 documents), and Brazil (9 documents).

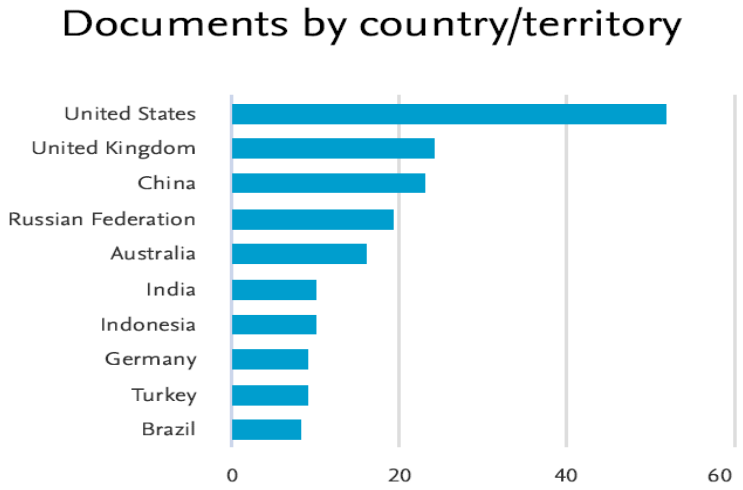

Figure 3. List of Countries Involved in Research on Economic Growth and National Development
Source: Data Processed 2024

Distribution of Journal Sources and Publishers in Economic Growth and National Development Research

In this publication, the Russian Academy dominates the publishers of research documents on economic growth and national development from 2015 to 2024 by publishing 6 documents. The Australian National, National University Singapore, HSE University, University of Oxford, and Financial University Under The Government Of The Russian Federation are in second place with 4 documents each, in third place are the University of Johann, London School of Economics, Seoul National University , and Institute of Economy with 3 documents. Apart from these ten publishers, there are many other publishers spread throughout the world, but the number of documents published is not large, only ranging from 1-2 documents. The top publishers can be seen in more detail in Figure 4. Publishers dominate research publications on economic growth and national development.

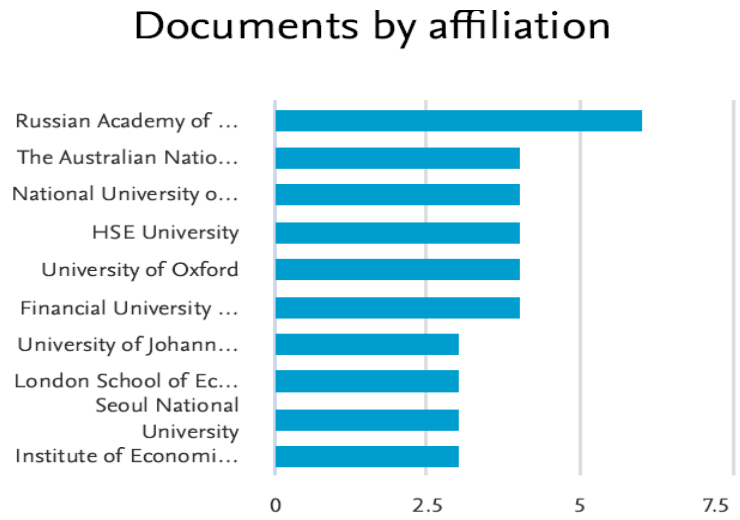

Figure 4. Top Publishers in Economic Growth and National Development Research
Source: Data Processed 2024

Top Writer in Researching Economic Growth and National Development

In Figure 5, we can see several authors from Scopus data. The author with the most research from 2015 to 2024 is Rodriguez-Pose., who produced 3 research documents, followed by Alvarado, R., Arora, R.U., Arvin, M.B., Barra, C., Bhandari, M.P., Brueckner, M., Chang, H.L., Dutta, P.B, and Fitz, D., who produced 2 research documents.

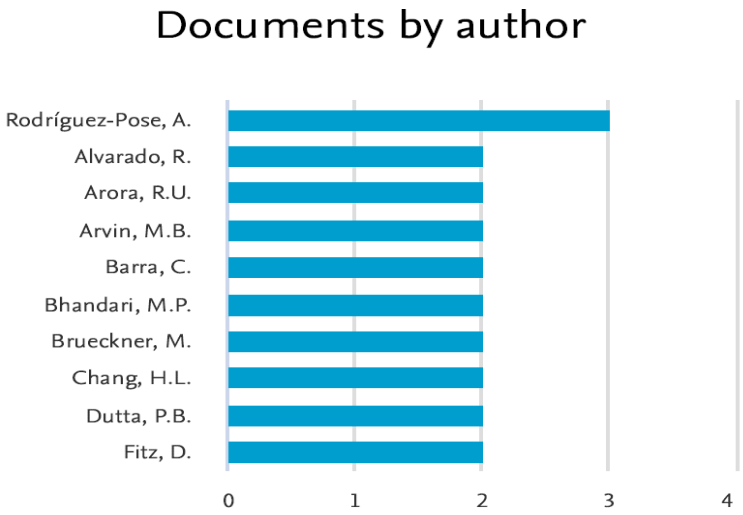

Figure 5. Distribution of Research Authors on Economic Growth and National Development
Source: Data Processed 2024

Complete Visualization of Economic Growth and National Development Research with Vosviewer

Based on data obtained from Scopus, among the existing documents, 239 documents related to research on economic growth and national development can be visualized using the VOSviewer application. The research results show that there are several connected clusters. These related clusters show the

relationship between variables and research design. This can help in discovering new things from published studies. Figure 6 shows a visualization of the overall research on economic growth and national development. The entire research produced four clusters.

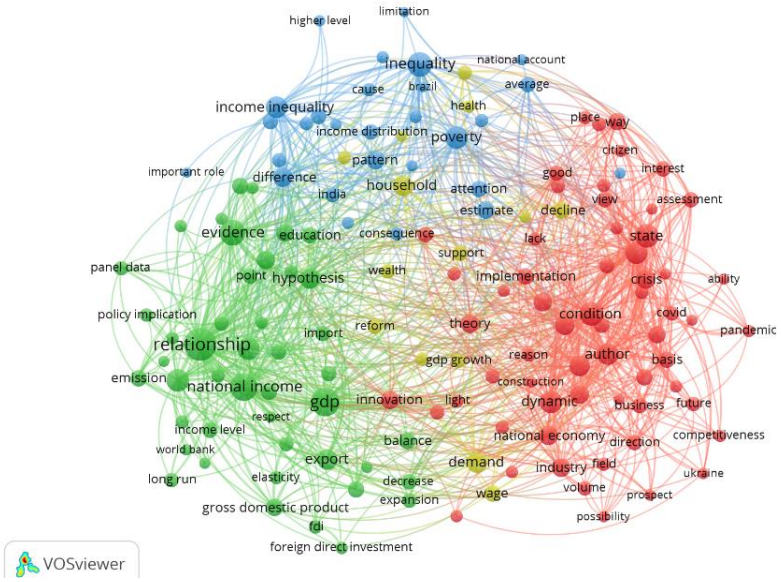

Figure 6. Visualization of the Distribution Network for Research on Economic Growth and National Development
Source: Data Processed 2024

In Figure 6 you can see the first cluster in yellow, namely the relationship between research on economic growth and national development with household, food, decline, demand, wage, access, hand, support, GDP growth, agriculture, individual. The second cluster is green which is the relationship between economic growth and national development with relationship, national income, GDP, import, balance, decline, inflation, expansion, foreign direct investment, long run, panel data, expenditure, long term, income level, and government spending. The third cluster is blue which is the relationship between economic growth and national development with limitation, average, income inequality, cause, income distribution, poverty, national account, higher level, difference, evolution, national level, pattern and principle. The fourth cluster is red which is the relationship between economic growth and national development with place, way, good, state, interest, assessment, crisis, ability, income, risk, business, future, threat, prospect, possibility, volume, industry, national economy, reason, dynamic, concept, unemployment, interest, process, condition, innovation. Figure 7 shows a visualization of the overall study of economic growth and national development by year of research carried out.

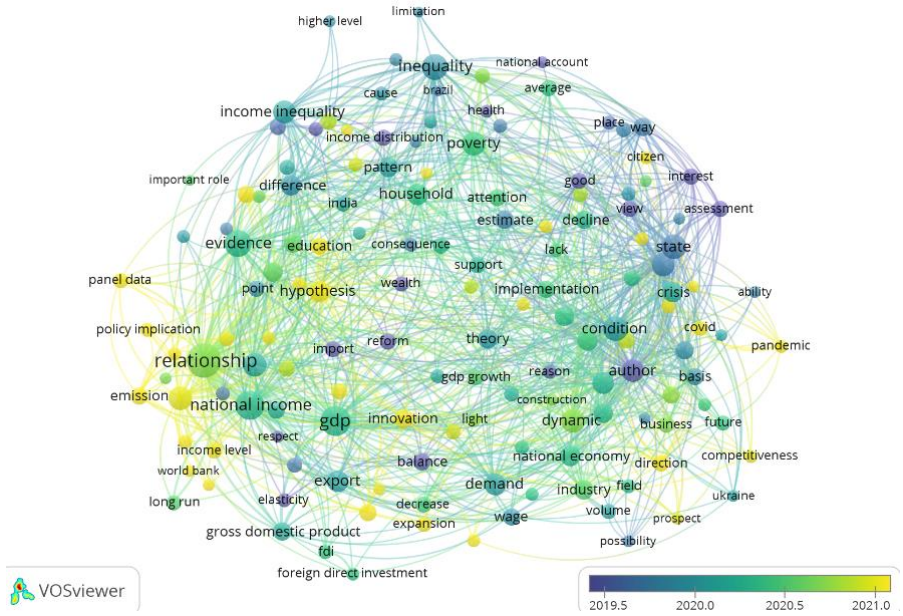

Figure 7. Visualization of the Distribution of Research on Economic Growth and National Development
Source: Data Processed 2024

Figure 7 shows the distribution of clusters by year of distribution. This can be seen from the color that distinguishes each journal in its publication. The darker the color, the older the journal, and the brighter the color, the more recently the journal was published. It can be seen in Figure 7 that the purple color indicates that the article was published in a journal in 2019 to 2020. This is in accordance with research conducted by (Zhang & Diao, 2020) with the title The changing role of agriculture with economic structural change – The case of China. Meanwhile, the green color shows that the article was published in 2020 to 2021 in accordance with the research and this is also in accordance with the research conducted Corlet Walker et al., (2021b) entitled Welfare systems without economic growth: A review of the challenges and next steps for the field and research from (Runtunuwu, 2020) Relationship Economic Growth with Foreign Direct Investment and (Mdingi & Ho, 2021) entitled Literature review on income inequality and economic growth. Furthermore, the yellow color shows that the article was published in 2021 until now, this is in accordance with research (Benetrix et al., 2022) entitled The Elusive Link Between FDI and Economic Growthdan, and (Ochi, 2023) entitled Inequality and the impact of growth on poverty in sub-Saharan Africa: A GMM estimator in a dynamic panel threshold model.

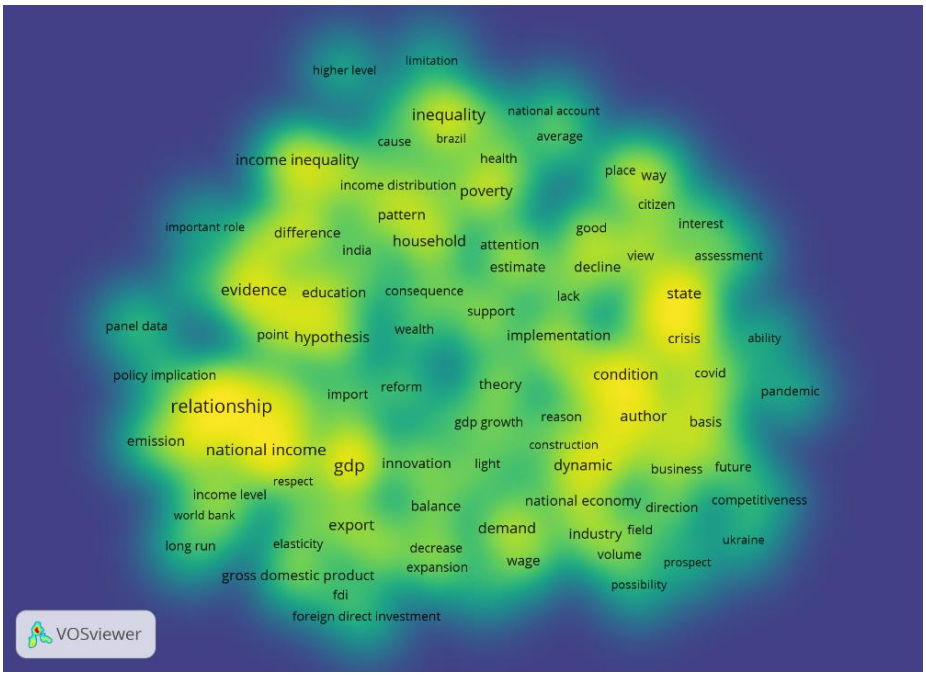

Figure 8. Vos Viewer Density Visualization Keyword Research Results
Source: Data Processed 2024

The image above shows many of the keywords studied related to the themes in this research. The brighter and bigger the circle, the more research there will be for that keyword. It can be seen from the results of publications with a maximum of 239 documents that economic growth and national development have the largest loop because they are the most researched keywords. There are also those that have small loops with a faint yellow color, they even tend to be green like the stem, student engagement which means that there is still little research on the theme of this research.

CONCLUSION AND RECOMMENDATION

There are several important conclusions obtained from libbiometric analysis research regarding economic growth and national development in 2015-2024. The number of documents obtained from the Scopus database was 239 documents and the most dominant researcher was Rodriguez-Pose, who produced 3 article or journal research documents regarding economic growth and national development. However, the research trend regarding economic growth and national development increased from 2015 to 2016 and decreased in 2017, but in 2017 to 2019 it increased again, and in 2019 to 2020 it experienced a decrease, in the following year, namely 2020 to 2023, it experienced a rapid increase. , but in 2023 to 2024 there will be a decline because 2024 is not yet December. The top author in the Rodriguez-Pose domain, in this research produced 4 clusters which were visualized via the VOSviewer application. The first cluster is yellow, namely regarding household, food, decline, demand, wage, access, hand, support, GDP growth, agriculture, individual. The second cluster is green, namely regarding relationships, national income, GDP, import, balance, decline, inflation, expansion, foreign direct investment, long run, panel data, expenditure, long term, income level, and government spending. The third cluster is blue, namely regarding

limitation, average, income inequality, cause, income distribution, poverty, national account, higher level, difference, evolution, national level, pattern and principle. The fourth cluster is red, namely regarding place, way, good, state, interest, assessment, crisis, ability, income, risk, business, future, threat, prospect, possibility, volume, industry, national economy, reason, dynamic, concept, unemployment, interest, process, condition, innovation. Data that has been visualized, research on the topic of economic growth and national income, which is linked to various variables, and research trends that have been carried out, and the potential for research on the topic of economic growth and national income through the VOSviewer application shows that research on economic growth and income national level is associated with various relevant variables, and research trends are still fluctuating, the potential for conducting research is still large.

FURTHER STUDY

The next study researchers can conduct research on the influence of national income and economic growth in order to add to research on the theme of national income and economic growth.

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