



Indonesian Government Budgeting: A Bibliometric Analysis

Tri Oktaviyani¹

¹ Politeknik STIA LAN Jakarta, Indonesia, 3oktavi@gmail.com

Corresponding Author: 3oktavi@gmail.com

Abstract: One of the important processes in financial management is budgeting. It is also needed in the Indonesian government's financial system. So far, there have been many previous studies that have addressed the topic of budgeting in the Indonesian government's financial system. However, there have been no studies involving developmental research on the Indonesian government on a global scale. This study aims to fill this gap. This research type is desk research. Bibliometric analysis was used in this study. The data source analyzed is the Scopus database. The results found that research on Indonesian Government Budgeting has been present since 1993. The total number of articles discussing this topic up to July 4th, 2023, was 113 articles. The most publications occurred in 2020. The most prolific authors were Kahar, S.H.A., and Prabowo, T.K.W., with each producing 3 articles discussing Indonesian government budgeting. The most productive journals was the IOP Conference Series: Materials Science and Engineering. Indonesian government budgeting was most widely discussed in the field of Social Sciences. The title of the most cited article was 'Can Indonesia Succeed in Decentralization? Plans, Problems, and Prospects,' published in Bulletin of Indonesian Economics (2021) and written by the Alm J., Aten R.H., and Bahl R. The journal is also the most cited source.

Keyword: Budgeting, Government, Indonesia.

INTRODUCTION

State financial budgeting is a process of preparing the annual financial plan of the Indonesian state government approved by the House of Representatives, in the form of the State Budget (APBN). APBN contains a systematic and detailed list of planned state revenues and expenditures for one fiscal year. Government in achieving their goals design budgets **periodically**. Budgeting is a key component in planning. In line with the Guidelines for Implementing Performance-Based Budgeting (National Development Planning Agency, 2009).

The State Budget (APBN) plays a crucial role in regulating the management of the country's finances, maintaining a balance between revenue and expenditure, and supporting sustainable development and public services. Therefore, the process of national financial

budgeting must be conducted carefully and transparently to achieve the development goals desired by the society and the government. Therefore, budgeting becomes one of the important processes in government financial management. So far, there have been numerous previous studies that have focused on the topic of budgeting in the Indonesian government's financial system. However, there has not been any study that maps the development of research on Indonesian government budgeting on a global scale. Therefore, this study aims to conduct a mapping of research related to Indonesian government budgeting using bibliometric analysis.

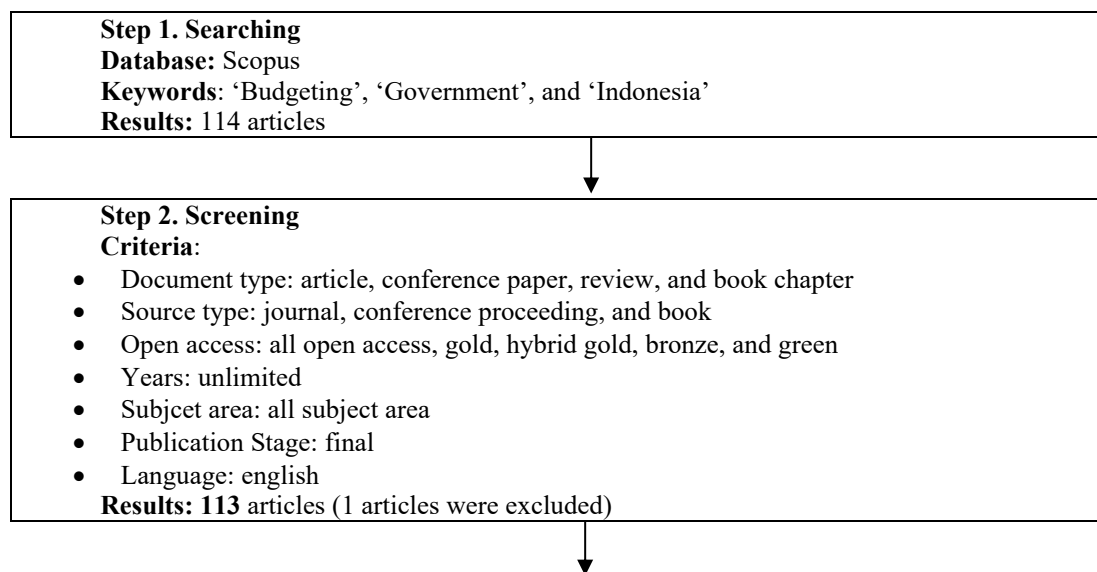
METHODS

The research is a desk research that uses the bibliometric method. To group and interpret statistics related to publications or books, you can use the bibliometric research method (Haq & Bahit, 2021), (Caciatori Junior & Cherobim, 2020). Bibliometric method can be used to predict the development of new technologies and can also be used to measure specific research topics (Bahit & Utami, 2021), (Li et al., 2015).

Steps of this research: The first step involves searching for articles relevant to the research topic, which is " Indonesian government budgeting." The article search is conducted only in the Scopus journal database. We chose Scopus because it is one of the leading global scientific journal databases. The search was performed using the keywords "budgeting," "government," and "Indonesia." The search process was conducted on July 4, 2023. The results show that a total of 114 articles were identified.

The next step is screening. Selecting relevant articles based on criteria: (1) the document type are article, conference paper, review, and book chapter, (2) the source type are journal, conference proceeding, and book, (3) the open access are all open access, gold, hybrid gold, bronze, and green, (4) there is no restriction on the publication year, (5) the subject area is all subject area, (6) the publication stage is only final stage, and (6) language is only English. From the 114 selected articles, this study obtained 113 articles that met the specified criteria. There is 1 article that did not meet the criteria because the articles were 'article in press'.

The final step is data analysis. Data analysis is conducted using bibliometric analysis. In this research, bibliometric analysis is utilized to demonstrate the following: (1) Trends of articles discussing Indonesian government budgeting over the years, (2) The number of articles discussing Indonesian government budgeting based on authorship, affiliations, document sources, subject areas, and document types, (3) citation analysis. In this study, Bibliometric analysis was conducted using Vosviewer Software.



- Step 3. Data Analysis**
- Documents analysis by author, affiliation, source, subject area, and document type
 - Citation analysis: the most cited publications, the most cited source.

Figure 1. Data Collection Process

RESULT AND DISCUSSION

Characteristics of Research Documents

Figure 2 shows the trend of Indonesian government budgeting publication numbers over the past 20 years. The research on this topic was first discussed in Scopus in the year 1993. Although research on Indonesian government budgeting has been discussed for a long time, the topic was still very sparsely addressed until 2014. The peak was in the year 2020 with 23 articles, and in the year 2019 with 22 documents. Unfortunately, after 2020, the number experienced a declining trend.

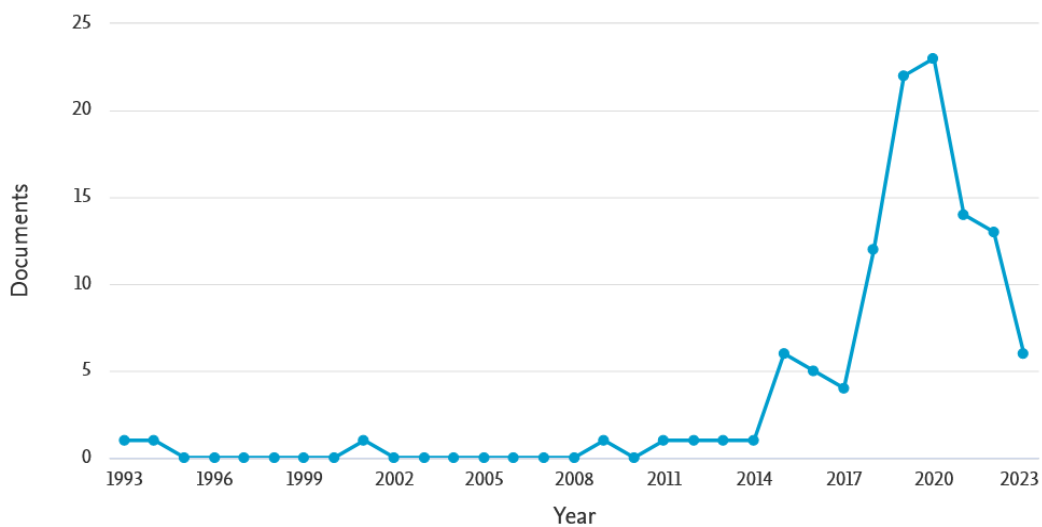


Figure 2. Documents per year

Figure 3 shows the 10 most productive authors researching about Indonesian government budgeting. Research on Indonesian government budgeting is mostly authored by Kahar, S.H.A., and Prabowo, T.K.W., with 3 articles each. The rest have written 2 articles each, namely Abdullah, S., Bandiyono, A., Chariri, A., Daud, S., Erlina, Fahlevi, H., Furqan, A.C., and Ghazali, R.

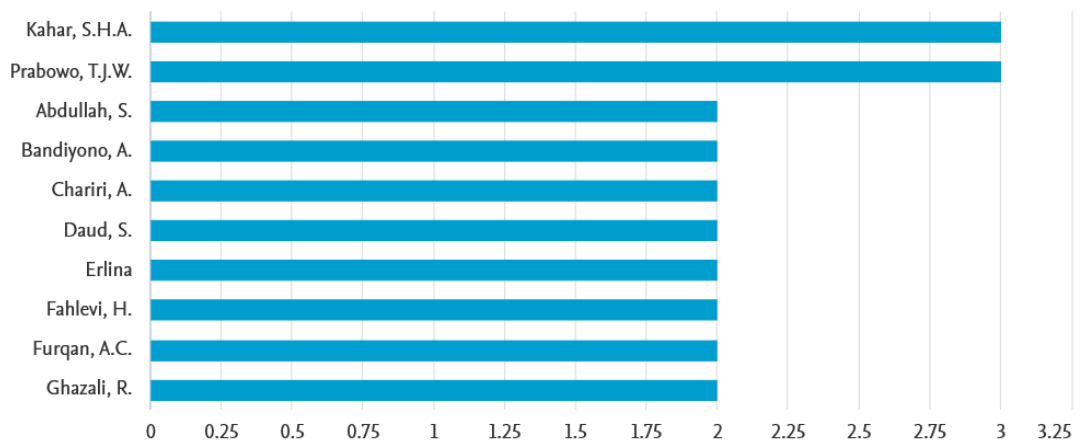


Figure 3. Documents by author

Figure 4 shows a list of articles based on author affiliations. The most productive affiliation researching Indonesian government budgeting is Universitas Diponegoro with 8 articles. The second position is held by the Universitas Indonesia with 7 articles. The third position, it is achieved by four universities, namely Institut Teknologi Bandung, Brawijaya University, Universitas Syiah Kuala, Universitas Sebelas Maret, and Universitas Tadulako. Each of them has produced 5 articles discussing Indonesian government budgeting.

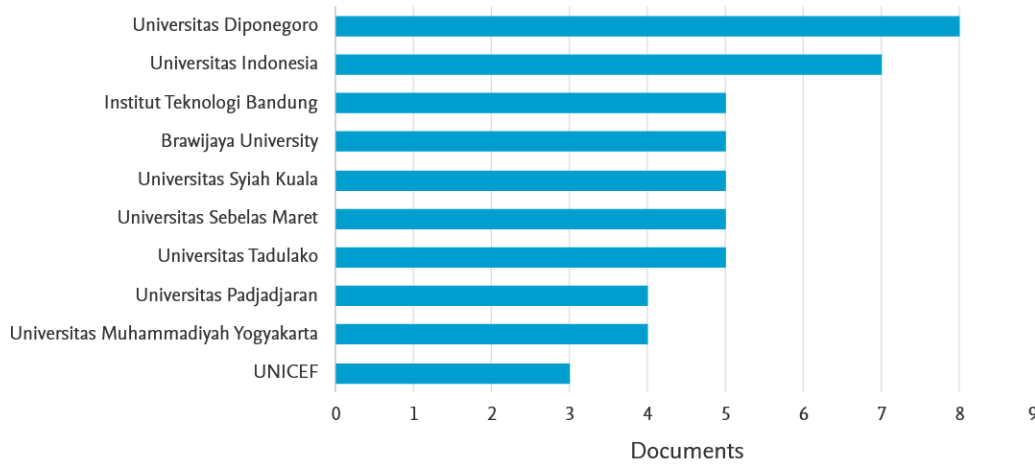


Figure 4. Documents by affiliation

Figure 5 shows the trend in the number of articles each year based on their sources. IOP Conferences Series Earth and Environmental Science is a journal source that produces the latest articles, with 3 documents published in 2021 (1 document) and 2022 (2 documents). IOP Conference Series Materials Science and Engineering is the journal source that discusses this topic the most, contributing 4 documents from 2017 to 2020. The International Journal of Scientific and Technology Research is the source that produces the highest number of articles in a single year, with 3 documents in 2020.

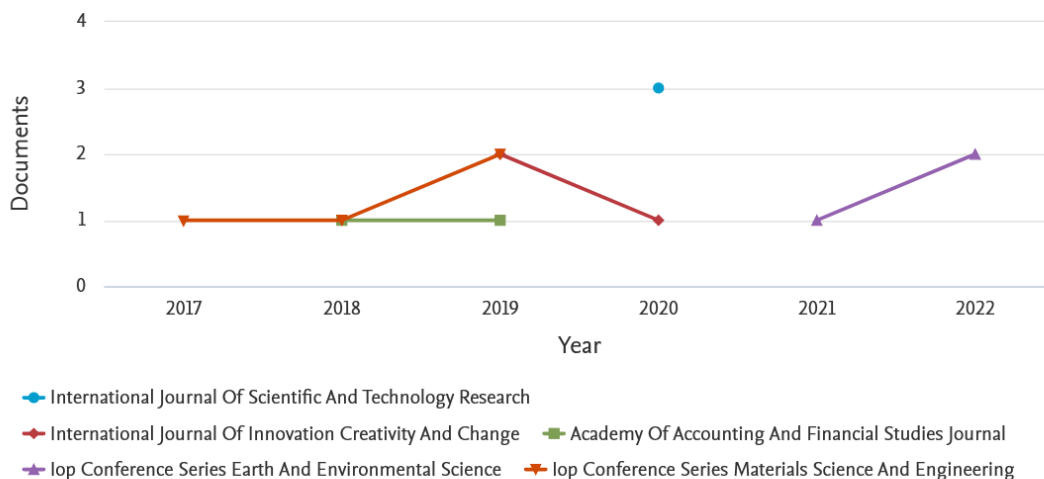


Figure 5. Documents per Year by Source

The subject area that discusses Indonesian government budgeting the most is Social Sciences with 49 documents. The second most is Business, Management and Accounting with 40 documents. The third most is Economics, Econometrics, and Finance with 22 documents. This is logical as the budgeting topic is closely related to the fields of Social

Sciences and Economics (Business, Management, and Accounting). The total document list based on subject areas can be seen in Table 1.

Table 1. Total documents by subject area

No	Subject area	Total Documents
1	Social Sciences	49
2	Business, Management and Accounting	40
3	Economics, Econometrics and Finance	22
4	Engineering	19
5	Environmental Science	18
6	Computer Science	11
7	Arts and Humanities	8
8	Medicine	8
9	Agricultural and Biological Sciences	7
10	Decision Sciences	6
11	Earth and Planetary Sciences	6
12	Materials Science	5
13	Energy	3
14	Pharmacology, Toxicology and Pharmaceutics	3
15	Biochemistry, Genetics and Molecular Biology	2
16	Multidisciplinary	2
17	Physics and Astronomy	2
18	Chemical Engineering	1
19	Health Professions	1
20	Immunology and Microbiology	1

Table 2 presents a list of articles based on document types. The most published document type is Article with 93 articles. Conference Paper follows with 13 articles, followed by 4 articles for Review and 3 articles for Book Chapter.

Table 2. Total documents by document type

No	Document type	Total Documents
1	Article	93
2	Conference Paper	13
3	Review	4
4	Book Chapter	3

Citation Analysis

Table 3 shows a list of articles based on 'The Most Cited Publications' discussing this topic. The publication with the highest number of citations is 'Can Indonesia decentralise successfully? Plans, problems and prospects (2001)' with 73 citations. The publication titled 'Priorities and realities: Addressing the rich-poor gaps in health status and service access in Indonesia (2011)' has 33 citations, and in the third place is the publication titled 'Public sector reforms and financial transparency: Experiences from Indonesian districts (2009)' with 26 citations.

Table 3. The most cited publications

No	Title of Documents (Year)	Authors	Total Citations
1	Can Indonesia decentralise successfully? Plans, problems and prospects (2001)	Alm J., Aten R.H., Bahl R.	73
2	Priorities and realities: Addressing the rich-poor gaps in health status and service access in Indonesia (2011)	Utomo B., Sucahya P.K., Utami F.R.	33
3	Public sector reforms and financial transparency: Experiences from Indonesian districts (2009)	Kristiansen S., Dwiyanto A., Pramusinto A., Putranto E.A.	26
4	Achieving the Sustainable Development Goals	Odagiri M., Cronin A.A.,	19

	for water and sanitation in Indonesia – Results from a five-year (2013–2017) large-scale effectiveness evaluation (2020)	Thomas A., Kurniawan M.A., Zainal M., Setiabudi W., Gnilo M.E., Badloe C., Virgiyanti T.D., Nurali I.A., Wahanudin L., Mardikanto A., Pronyk P.	
5	The role of working capital, productivity, applied technology and selling market prices on fisherman's revenues(2017)	Muda I., Rahmanta, Syahputra A., Marhayanie	18
6	Authority of Second-Tier Governments to Reduce Deforestation in 30 Tropical Countries (2020)	Busch J., Amarjargal O.	17
7	Identification of factors affecting stakeholders' intentions to promote preparedness in disaster waste management: A structural equation modeling approach (2015)	Maryono, Nakayama H., Shimaoka T.	14
8	Participative budgeting, budgetary slack and job satisfaction in the public sector (2016)	Kahar S.H.A., Rohman A., Chariri A.	13
9	Reforms in public sector accounting and budgeting in Indonesia (2003-2015): Confusions in implementation (2017)	Prabowo T.J.W., Leung P., Guthrie J.	13
10	Evaluation of The Venue Management Program of The National Sports Week (Pon) XVII of Riau Province, Indonesia (2021)	Purwanto P., Nopembri S., Burhaein E., Phytanza D.T.P.	13
11	Disaster management following decentralization in Indonesia: Regulation, institutional establishment, planning, and budgeting (2019)	Putra D.I., Matsuyuki M.	13

Table 4 shows "the most cited source. The highest number of citations, with 73 citations, is in the 'Bulletin of Indonesian Economic Studies'. 'International Journal for Equity' is in the second position with 33 citations, and 'Contemporary Southeast Asia' is in the third position with 26 citations.

Table 4. The most cited source

No	Title of Source	Total Documents	Total Citations	Rank
1	Bulletin of Indonesian Economic Studies	2	73	1
2	International Journal for Equity in	1	33	2
3	Contemporary Southeast Asia	1	26	3
4	International Journal of Hygiene	1	19	4
5	International Journal of Economic	1	18	5
6	Frontiers in Forests and Global	1	17	6
7	Journal of Public Budgeting, Accounting and Financial Management	2	16	7
8	Memoirs of the Faculty of Engineer	1	14	8

CONCLUSION

This research aims to map studies related to Indonesian government budgeting using bibliometric analysis. The research on this topic was first discussed in Scopus in the year 1993. The total number of articles discussing this topic up to July 4th, 2023, was 113 articles. The most publications occurred in 2020. Unfortunately, after 2020, the number experienced a declining trend.

Among authors, Kahar, S.H.A., and Prabowo, T.K.W., emerged as the most prolific, each contributing 3 articles focusing on Indonesian government budgeting. The IOP

Conference Series: Materials Science and Engineering emerged as the most prolific journal. The realm of Social Sciences encompassed the widest discourse on Indonesian government budgeting.

The title 'Can Indonesia Succeed in Decentralization? Plans, Problems, and Prospects,' published in the Bulletin of Indonesian Economics (2021) and co-authored by Alm J., Aten R.H., and Bahl R., emerged as the most cited article. It was also cited as the primary source. This study underscores the significance of a comprehensive understanding of Indonesian government budgeting, contributing to the academic discourse in this realm.

REFERENCES

- Bahit, M., & Utami, N. P. (2021). Analisis Bibliometrik Untuk Implementasi Enterprise Resource Planning (ERP). *Seminar Nasional Manajemen, Ekonomi Dan Akuntansi*, 6, 830–834.
- [Caciatori Junior, I.](#) and [Cherobim, A.P.M.S.](#) (2020), Academic production and technological emergence in finance: Bibliometric study on FinTechs, *Innovation & Management Review*, Vol. 17 No. 2, pp. 115-131.
- Haq, A., & Bahit, M. (2021). Visualization and Bibliometric Analysis of FinTech Trend Research. *Proceedings of the 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020)*, 191(AICoBPA 2020), 80–84.
- Li, X., Zhou, Y., Xue, L., & Huang, L. (2015). Integrating bibliometrics and roadmapping methods: A case of dye-sensitized solar cell technology-based industry in China. *Technological Forecasting and Social Change*, 97, 205–222.
- National Development Planning Agency. (2009). Guidelines for Implementing Performance-Based Budgeting. Jakarta.