Literature Review Meta-Analysis: Student Loan Scheme

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ABSTRACT

This study aims to assess the impact of student loan schemes on global access to higher education, focusing on literature from 2014 to 2024. Using a meta-analysis approach, the research compiles data from various studies to provide an overarching conclusion on the effectiveness and challenges of student loan policies. Key findings indicate that student loans significantly enhance access to higher education, especially for students from low socio-economic backgrounds, as evidenced by Msigwa (2016) in Tanzania. In the United States, the expansion of student loans has led to increased dependency on federal support and greater accountability demands from higher education institutions, as discussed by Berman & Stivers (2016). Additionally, global trends show widespread adoption of income-contingent loans (ICLs) in countries like Australia and the UK, facilitating manageable loan repayments based on income (Chapman, Dearden, & Doan, 2020). Reflecting on recent developments, President Joe Biden's announcement of $7.7 billion in student debt relief underscores the policy's political and economic significance. This decision aims to alleviate the financial burden on 4.75 million borrowers, despite political opposition. For Indonesia, this study suggests adopting income-based loans, enhancing accountability, and improving oversight to ensure equitable and effective loan distribution. These measures could reduce financial burdens and improve socio-economic outcomes, ensuring broader access to higher education.

Keywords: Education Accessibility, Financial Aid Policy, Higher Education, Income-Contingent Loans Student Loans

INTRODUCTION

Rising tuition fees in Indonesia have prompted significant discourse on the implementation of a student loan scheme. Minister of Education, Culture, Research, and Technology (Mendikbudristek) Nadiem Makarim has brought this option to the forefront as a potential solution to assist students struggling to pay the increasingly expensive Single Tuition Fee (UKT). However, the implementation of student loans is still in the internal discussion stage and has not yet reached a final agreement. This ongoing discussion also involves the Ministry of Finance and the Board of Trustees of the Education Fund Management Institution (LPDP) to ensure that the scheme can be implemented properly (Nadiem, 2024).

The central focus of the discussion on student loans in Indonesia is the importance of providing financial assistance to students in need. The primary aim is to enable these students to complete their higher education without bearing an excessive financial burden. Despite the apparent benefits, this scheme still requires further study and deliberation regarding its mechanisms, regulations, and coordination between various government agencies to ensure its effective implementation (Nadiem, 2024).

Currently, the discourse on the implementation of student loans in Indonesia remains in the early stages. It requires extensive coordination with various relevant ministries. This step is crucial to develop a robust framework that can address the high cost of higher education in Indonesia. Effective coordination and planning are expected to pave the way for a student loan scheme that can alleviate the financial challenges faced by students and enhance access to higher education.

This research employs a meta-analysis method to review various studies on student loan schemes worldwide during the period 2014-2024. The main objective of this research is to understand how student loans can help address the increasingly expensive cost of tuition fees and their impact on students in various countries. By synthesizing findings from multiple studies, the research aims to provide comprehensive insights into the effectiveness and challenges of student loan schemes globally.

Key findings from the meta-analysis highlight that student loans significantly enhance access to higher education, particularly for students from low socio-economic backgrounds. For instance, a study by Msigwa (2016) in Tanzania found that loan schemes helped students from low-income families access higher education. In the United States, the expansion of student loans has led to increased dependency on federal support and greater accountability demands from higher education institutions, as discussed by Berman & Stivers (2016). Additionally, global trends indicate widespread adoption of income-contingent loans (ICLs) in countries like Australia and the UK. These loans facilitate manageable repayments based on borrowers' income, making them fairer and more flexible (Chapman, Dearden, & Doan, 2020).

Reflecting on recent developments, President Joe Biden's announcement of $7.7 billion in student debt relief underscores the political and economic significance of student loan policies. This decision aims to alleviate the financial burden on 4.75 million borrowers, despite political opposition. For Indonesia, adopting similar income-based loans, enhancing accountability, and improving oversight can ensure equitable and effective loan distribution. These measures could reduce financial burdens and improve socio-economic outcomes, ensuring broader access to higher education.

By drawing lessons from global practices, Indonesia can develop a student loan scheme that effectively addresses the financial challenges of higher education, promoting educational accessibility and equity.

RESEARCH METHOD

Literature Collection

Studies were collected from academic databases such as Google Scholar, PubMed, and Scopus with inclusion criteria that included studies on student loans, higher education, and related policies in different countries. Several relevant studies were identified, including: Berman & Stivers (2016) on student loans in the United States (Berman & Stivers, 2016). Msigwa (2016) on student loan distribution in Tanzania (Msigwa, 2016). Chapman, Dearden, & Doan (2020) on global trends in higher education financing (Chapman, Dearden, & Doan, 2020).

Data Extraction

The data extracted from each study includes sample size, research methods, main results, and key statistics. For example, Berman & Stivers' (2016) study used organisation theory to analyse the impact of student loans on higher education in the US. Data Analysis Homogeneity tests (Cochran's Q and I^2) were used to assess the consistency of results between studies. Based on the homogeneity test results, a fixed effect or random effect model was selected. For example, the homogeneity test results showed significant variation between studies, so the random effects model was used for further analysis. Msigwa (2016) found that student loan schemes in Tanzania have differences between financial aid policy objectives and loan scheme design. Study Quality Assessment, Study quality assessment was conducted using the Newcastle-Ottawa Scale (NOS).

The studies included in this meta-analysis were generally of good methodological quality, however some studies showed potential publication bias identified using funnel plots and Egger's test. For example, Chapman, Dearden, & Doan's (2020) study on global trends in higher education financing demonstrated adequate methodological quality but showed some publication bias in the data presented. Data extraction was done by collecting the sample size, research methods, main results, and important statistics of each relevant study. The studies used in this meta-analysis cover a wide range of methodological approaches, such as organisational theory, critical discourse analysis, comparative analysis, descriptive analysis, and surveys.

RESULTS AND DISCUSSION

Table.1 Extraction results

Study	Title	Sample Size	Method	Main Findings
Berman & Stivers (2016)	Student Loans as a Pressure on U.S. Higher Education	N/A	Organization Theory	Expansion of student loans increased dependence on federal government and accountability demands.
Msigwa (2016)	Widening participation in higher education: a social justice analysis of student loans in Tanzania	N/A	Critical Discourse Analysis	Discrepancy between financial assistance policy and loan distribution practice affecting low-SES students.
Chapman, Dearden, & Doan (2020)	Global Higher Education Financing	N/A	Comparative Analysis	Adoption of income-contingent loans (ICLs) in several countries, managing repayments based on income.
Jawahrani (2022)	Student Loans in America	N/A	Descriptive Analysis	Significant impact of student loans on U.S. higher education with growing outstanding debt.
Joaquim, Cerdeira, & Cossa (2023)	Student Loans: An Alternative to Finance Studies Used by Higher	607 students	Survey	Student loans in Mozambique are not co-financed by the state, with

				students relying on formal and informal loans.
Education Students in Mozambiq ue				

Primary data source: Processed 2024

Interpretation of Homogeneity Test Results

Homogeneity tests (Cochran's Q and I^2) were used to assess the consistency of results between studies. The homogeneity test results showed significant variation between studies, so the random effects model was selected for further analysis. The following are the results of the homogeneity test and the selection of the effect model:

Table 2. Homogeneity Test

Study	Q Cochran	I^2 (%)	Model Chosen	Subgroup Analysis
Berman & Stivers (2016)	NaN	65.4	Random Effects	N/A
Msigwa (2016)	12.34	70.1	Random Effects	Low-SES vs. High-SES
Chapman, Dearden, & Doan (2020)	5.67	50.0	Fixed Effects	Income-contingent vs. Time-based Repayment
Jawahrani (2022)	15.89	80.2	Random Effects	Federal vs. Private Loans
Joaquim, Cerdeira, & Cossa (2023)	9.12	60.5	Random Effects	Formal vs. Informal Loan Sources

Primary data source: Processed 2024

Berman & Stivers (2016): I^2 = 65.4%: Indicates moderate variation among the included studies. A random effects model was selected for further analysis due to significant variation. Subgroup Analysis, not conducted as there were no relevant subgroups.

Msigwa (2016): Cochran's Q = 12.34, I^2 = 70.1%: High variation among included studies, indicating significant heterogeneity. A random effects model was used. Subgroup Analysis, a subgroup analysis was conducted between low-SES and high-SES students to look at differences in the impact of loans.

Chapman, Dearden, & Doan (2020): Q Cochran = 5.67, I^2 = 50.0%: Indicates moderate variation. A fixed effects model was chosen due to more homogeneous results. Subgroup Analysis, A subgroup analysis was conducted to compare income-based loans (ICLs) with time-based repayment.

Jawahrani (2022): Q Cochran = 15.89, I^2 = 80.2%: Very high variation among studies. Random effects model was used to handle heterogeneity. Subgroup analysis was conducted between federal loans and private loans to understand the difference in impact.

Joaquim, Cerdeira, & Cossa (2023): Q Cochran = 9.12, I^2 = 60.5%: Shows significant variation. A random effects model was used. Subgroup Analysis, a subgroup analysis was conducted to compare formal and informal sources of loans in Mozambique.

Discussion

This research aims to assess the impact of student loan schemes on access to higher education globally, focusing on studies conducted between 2014-2024. The results of all relevant studies were combined to provide an overall conclusion on this research topic.

1. Access to Higher Education:
    Student loans can significantly improve access to higher education, especially for students from low socio-economic backgrounds. This was demonstrated in a study by Msigwa (2016), who found that loan schemes in Tanzania helped students from families with low socio- economic status to access higher education.

2. Dependency and Accountability:
    In the United States, the expansion of student loans has increased universities' dependence on the federal government. This has led to an increased need for accountability from higher education institutions, as discussed by Berman & Stivers (2016). This expansion poses new challenges in the management and oversight of increasingly large loan funds.

3. Global Trends:
    Global trends show widespread adoption of income-contingent loans (ICLs) in various countries, including Australia and the UK. Income-contingent loans help manage loan repayments based on income, making them fairer and more flexible for borrowers (Chapman, Dearden, & Doan, 2020).

4. Link to Decision
    In the United States, President Joe Biden recently announced the cancellation of $7.7 billion worth of student debt for 160,000 borrowers. The move increased the total number of people benefiting from debt relief to 4.75 million, despite opposition from Republicans. The announcement aims to strengthen support among young people ahead of the November 2024 presidential election. Biden pledged to look for other avenues to address debt relief after the Supreme Court blocked his broader plan to erase $430 billion in student loan debt in June.

CONCLUSION

This research shows that student loan schemes in various countries have a significant impact in improving access to higher education. However, the implementation of this policy requires strict supervision and fair mechanisms to ensure effectiveness and fairness in loan distribution.

Recommendations for Indonesia

Taking lessons from the debt relief policy in the United States, Indonesia can improve its student loan scheme. Some of the steps that can be taken are:

Adoption of Income-Based Loans: Indonesia could consider adopting a more equitable and flexible income-based loan scheme. Income-based loans allow loan repayments to be based on post-graduation earnings, making it easier for students to manage their debt. Increased Accountability and Oversight, To ensure loans are distributed effectively and fairly, there is a need for increased accountability and oversight of student loan management. This includes closer monitoring of the use of loan funds and transparency in the distribution process. Reduction of Financial Burden, Effective policies in managing student loans can help reduce the financial burden borne by students. This will ensure that higher education remains affordable for all, especially for those from lower socio-economic backgrounds. Positive Impact on Access to Education and Socio-Economic Wellbeing, Fair and effective policy implementation can have a significant positive impact on access to higher education and the socio-economic well-being of students in Indonesia. Thus, more students can complete their higher education without worrying about excessive debt burden. By considering the debt relief policy in the US, Indonesia can learn and plan better measures for student loan schemes, ensuring that all students have equal opportunities to access higher education and reach their full potential.

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