

THE GOVERNMENT SPENDING ON HUMAN DEVELOPMENT IN DRIVING ECONOMIC GROWTH: A SYSTEMATIC LITERATURE REVIEW OF ASEAN COUNTRIES

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Abstract: *Although research on economic growth in ASEAN is increasing, there is a lack of in-depth analysis that connects government spending on human development with sustained economic performance. Most existing studies tend to focus on education, health, and social sectors separately, without considering their combined impact on growth. This study aims to comprehensively review the empirical literature on the effects of government spending on education and health on human development, which in turn influences economic growth in ASEAN countries. A literature search was conducted using Scopus and Web of Science databases for articles published between 2015 and 2025. Relevant studies were selected based on specific inclusion and exclusion criteria, and key data were extracted and analyzed thematically. The findings suggest that strategic spending in human development, particularly in education and health, is strongly and positively linked to economic growth, although results vary depending on country policy contexts. This review contributes to the literature by providing a structured synthesis of existing evidence and laying the groundwork for future empirical and policy-driven research.*

Keywords: *government expenditure, ASEAN, economic growth, human capital*

Introduction

Human development is widely recognized as a key foundation for long-term economic growth, encompassing access to information, healthcare, and a decent quality of life. International organizations such as the United Nations Development Programme (UNDP, 1990) and the OECD (2020) emphasize that investment in education and health expands people's choices, improves productivity, and strengthens resilience, making public spending in these areas a central driver of sustainable development.

In developing regions, however, the effects of government spending on human development remain uneven. While research shows that expenditure in education and health can enhance welfare outcomes and support economic growth (Gupta et al., 2002; Dao, 2012), findings across countries often differ due to variations in fiscal capacity, institutional quality, and governance. Within Southeast Asia, the Association of Southeast Asian Nations (ASEAN), comprising Malaysia, Indonesia, Singapore, the Philippines, Vietnam, Myanmar, Cambodia, Brunei, Laos, and Thailand, faces enormous challenges to achieve long-term growth while ensuring macroeconomic stability and improving human development. The region's diversity in economic systems and governance capacities has led to varied outcomes of government spending. To address these disparities, ASEAN has created regional mechanisms such as the ASEAN Economic Community (AEC), which aims to promote integration and collective development through cooperation in priority sectors like health, education, technology, and tourism (Ishikawa, 2021).

Although studies in ASEAN have examined the relationship between government expenditure, human development, and growth, they remain fragmented and limited, often focusing on individual countries or single sectors. These variations underscore the influence of country context, sectoral focus, and methodological approach. Yet, no systematic review has synthesized these findings at a regional level.

Therefore, this study aims to conduct a systematic literature review (SLR) on the impact of government spending on human development, specifically in education and health, on economic growth in ASEAN countries. By critically synthesizing existing empirical studies, highlighting methodological differences, and comparing outcomes across member states, this review seeks to provide an integrated understanding that can guide future academic research and policy formulation in the region.

Significance of Study

This study holds significant academic and policy value as it addresses a longstanding gap in understanding the government spending on human development, particularly in education and health on impacts economic growth across ASEAN countries. Unlike previous studies that tend to examine these sectors in isolation or within single-country contexts, this systematic literature review synthesizes empirical findings across the region, offering a broader and more integrated perspective.

This is especially important in ASEAN, where fiscal capacities and human development outcomes vary greatly across member states, leading to uneven growth and policy effectiveness. By employing rigorous inclusion criteria and reviewing studies published between 2015 and 2025, the study presents up-to-date, evidence-based insights that are essential for formulating inclusive and growth-oriented fiscal strategies.

It highlights patterns of spending effectiveness, sectoral and national disparities, and the presence of time-lagged or nonlinear relationships between spending and growth. In doing so, it equips policymakers, development agencies, and researchers with practical knowledge on how strategic public investment in human capital can drive sustainable economic performance. Hence, the findings of the review will benefit policymakers, development agencies, and researchers by providing an evidence-based understanding of spending effectiveness, identifying best practices, and highlighting policy gaps to support inclusive and sustainable growth across the region.

Literature Review

A growing body of work in ASEAN has examined how government spending on education and health contributes to human development and, eventually, economic growth. Yet the results are far from broad, as different countries, sectors, and methods often point in different directions. Abdullah and Rusdarti (2017) examined Indonesia, Malaysia, and Singapore using regression analysis for 1990–2015. Their findings suggest that government expenditure has a significant impact on GDP growth in all three countries, confirming both Keynesian and Wagnerian hypotheses.

Indonesia has attracted particular attention because of the availability of detailed subnational data. For example, Imantria and Kurnia (2024) used panel data from 508 districts between 2017 and 2022, applying a Fixed Effects Model to capture local variations. By breaking down expenditure into education, health, economic development, and capital spending, they revealed a more nuanced picture: while education, health, and economic expenditure all raised the Human Development Index (HDI), capital spending had the opposite effect. This shows that not all types of government spending translate equally into welfare and growth, and that the composition of the budget can matter as much as its size.

In Malaysia, Norain et al. (2010) examined the composition of government expenditure and economic growth using Vector Autoregressive (VAR) models. Their findings revealed evidence for Keynesian hypotheses, where in the long run, government spending drives national income, while in the short run, economic growth influences government expenditure. By distinguishing between recurrent and development expenditure, the study underscored the importance of expenditure composition in shaping long-term growth.

Evidence from Vietnam tells another story. Le and Tran (2021) employed VAR and Granger causality tests for the period 2006–2019 and reported a strong two-way relationship between education spending and GDP growth. This suggests that investment in education both supports growth and is boosted by growth itself. Yet, other findings complicate this picture. Alfian and Bintoro (2024), focusing on 29 regencies and nine cities in East Java (Indonesia), found that education spending had little effect on HDI, while health spending showed a much stronger influence. This contrast implies that while education may take longer to show results, health investment can deliver more immediate improvements in welfare.

From a broader theoretical perspective, Barro (2013) argues that education spending is a long-term investment in human capital, forming the backbone of sustainable economic development. Likewise, the World Health Organization (2024) stresses that universal health coverage and adequate health financing are not only social priorities but also essential strategies for building resilience and competitiveness in ASEAN economies.

Methodology

The review was carried out based on the Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) guideline (Page et al., 2021). The review aims for empirical studies that explain the relationship between government spending on human development (education and health) and economic growth in ASEAN countries.

Search Strategy

A systematic search was conducted in Scopus and Web of Science using predefined search strings. The search was limited to peer-reviewed journal articles published between 2015 and 2025 to capture the most recent trends and developments. The set of keywords for searching articles in each database is demonstrated in Table 1. The last search run was on 17th May 2025. The following search strings were applied:

Table 1: Search String for Databases

Databases	Search String
Web of Science	TS= (("ASEAN" OR "asean countr*" OR "Association of Southeast Asian Nations" OR "Association of Southeast Asian Nations countr*" OR "Brunei" OR "Cambodia" OR "Indonesia" OR "Laos" OR "Malaysia" OR "Myanmar" OR "Philippines" OR "Singapore" OR "Thailand" OR "Vietnam") AND ("human development" OR "human capital" OR "education" OR "health") AND ("government spending" OR "public expenditure" OR "fiscal policy") AND ("econom* grow*" OR "GDP" OR "GDP grow*" OR "gross domestic produc*"))
Scopus	TITLE-ABS-KEY (("ASEAN" OR "asean countr*" OR "Association of Southeast Asian Nations" OR "Association of Southeast Asian Nations countr*" OR "Brunei" OR "Cambodia" OR "Indonesia" OR "Laos" OR "Malaysia" OR "Myanmar" OR "Philippines" OR "Singapore" OR "Thailand" OR "Vietnam") AND ("human development" OR "human capital" OR "education" OR "health") AND ("government spending" OR "public expenditure" OR "fiscal policy") AND ("econom* grow*" OR "GDP" OR "GDP grow*" OR "gross domestic produc*"))

Screening and Data Management

All retrieved records were imported into Microsoft Excel for organization and tracking. Duplicates were identified and removed using Excel's automated filtering functions. Subsequently, the remaining articles were subjected to a series of inclusion and exclusion filters based on publication year (2015–2025), document type (peer-reviewed journal articles), and language (English only). Two reviewers worked independently at each stage, and disagreements were resolved through discussion.

Inclusion and Exclusion Criteria

The PICOC framework (Population, Intervention, Comparator, Outcome, Context) was employed to establish the inclusion and exclusion criteria (Table 2).

Table 2: Eligibility criteria of the identified studies according to the following PICOC (Population, Intervention, Comparison, Outcomes, and Context)

Properties	Eligibility Criteria
Population	ASEAN Countries
Intervention	Government spending on Education and/or Health
Comparison	Higher and lower levels of government spending
Outcomes	- Economic growth by GDP - Human development improvement
Context	ASEAN region, Macroeconomic perspective

Study selection

Two reviewers independently screened the titles and abstracts retrieved from the databases to assess their eligibility. The screening was conducted using Microsoft Excel, where the number of records identified in each database and the duplicates found were documented. Duplicate entries were removed using Excel's built-in "remove duplicates" function. Abstracts that met the inclusion criteria were then shortlisted for further review, after which the corresponding full-text articles were obtained and assessed against the inclusion and exclusion criteria. Subsequently, both reviewers performed the quality assessment and data extraction. The overall article selection process is illustrated in Figure 1.

Data Extraction and Coding

To analyze findings systematically, a thematic coding approach was adopted. Studies were coded inductively into major themes: (i) education spending and growth, (ii) health spending and growth, and (iii) cross-sectoral or combined impacts. Coding was conducted by two reviewers independently to ensure consistency and reduce bias. For each included study, the first author's surname, year of publication, participants' demographics, study design, interventions, and outcome measures were extracted and summarized in Table 4.

Quality Assessment

To assess methodological rigor, all included studies (n=15) were appraised using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Analytical Cross-sectional Studies. The checklist consists of 8 items which rate as Yes, No, Unclear, or Not Applicable.

Table 3: Depiction of the Risk of Bias Assessment

JBI Checklist	1	2	3	4	5	6	7	8	Total
Basuki et al. (2020)	Y	Y	N	Y	Y	Y	U	Y	6/8
Thamma-Apiroam (2015)	Y	Y	Y	Y	Y	U	Y	Y	7/8
Solihin et al. (2021)	Y	Y	Y	U	Y	U	Y	Y	6/8
Pradiana & Wahyuni (2024)	Y	Y	N	Y	Y	Y	U	Y	6/8
Matahir et al. (2022)	Y	Y	N	Y	Y	Y	Y	Y	7/8
Suwandaru et al. (2021)	Y	Y	Y	U	Y	Y	Y	Y	7/8
Soejoto et al. (2015)	Y	Y	Y	Y	Y	N	N	Y	6/8
Le & Tran (2021)	Y	Y	Y	Y	N	NA	Y	Y	6/8
Gunarto et al. (2018)	Y	Y	N	Y	Y	Y	N	Y	6/8
Ginting et al. (2019)	Y	Y	N	N	Y	Y	Y	N	5/8
Ngoc et al. (2024)	Y	Y	Y	U	Y	Y	Y	Y	7/8
Rambeli et al. (2021)	Y	Y	Y	Y	Y	Y	U	Y	7/8
Maneejuk & Yamaka (2021)	Y	Y	N	Y	Y	Y	U	Y	6/8
Basuki et al. (2019)	Y	Y	N	Y	Y	Y	U	Y	6/8
Rambe et al. (2022)	N	Y	Y	N	Y	Y	Y	Y	6/8

Results showed that five studies scored 7/8 (low risk of bias), nine studies scored 6/8 (moderate risk), and one study scored 5/8 (moderate-to-high risk). Overall, most studies demonstrated acceptable quality, with low-risk studies forming the strongest evidence base, while moderate and higher-risk studies were interpreted with caution.

Screening and Selection Process

The screening process involved multiple stages. The initial database search yielded 151 articles. After removing 24 duplicates, 127 records remained. Based on filters for publication year, document type, and language, 48 articles were excluded, leaving 79 for title and abstract screening. From these, 28 were excluded for not meeting inclusion criteria.

A total of 28 full-text articles were sought for retrieval, but 1 could not be accessed due to accessibility. After full-text review of the remaining 27 articles, 12 article was excluded due to an outcome and interval mismatch. Ultimately, 15 studies were included in the final synthesis. The full selection process is illustrated in Figure 1 (PRISMA Flow Diagram).

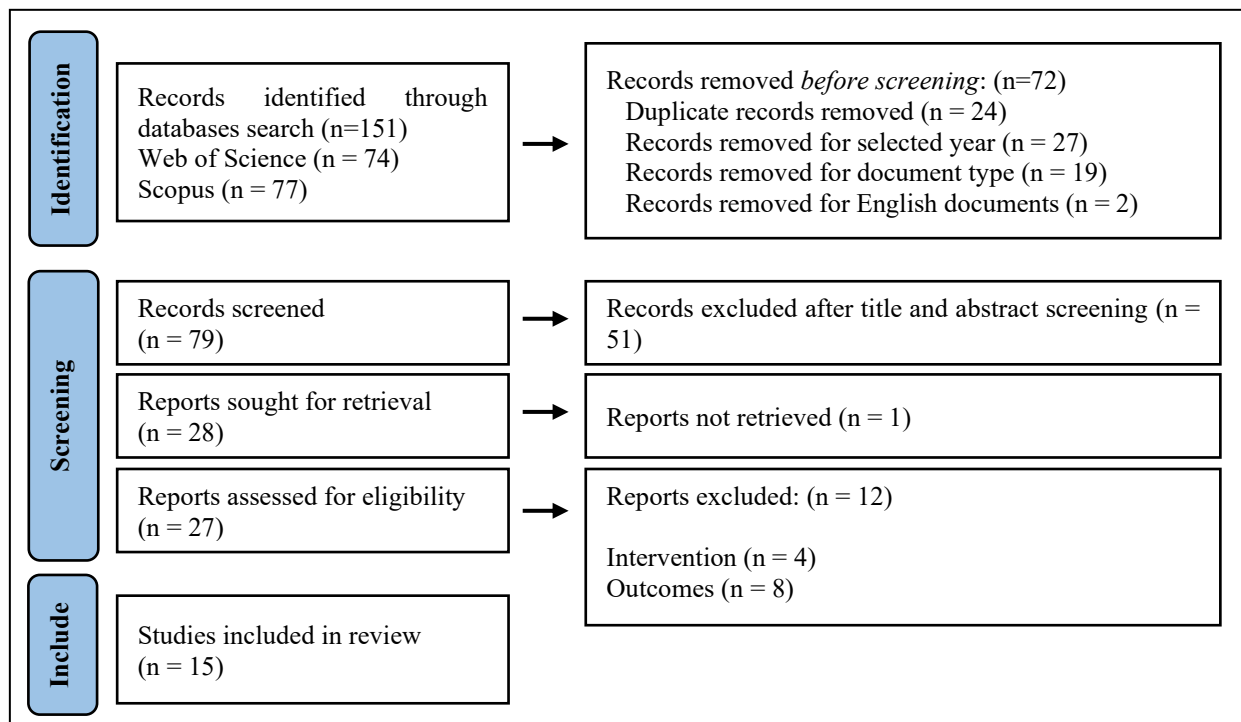


Figure 1: PRISMA 2020 flow diagram

Result

Overview of Included Studies

Figure 1 shows a flow chart of the search and selection process of included studies. The initial search obtained was (n=151). Before the initial screening, duplicate was removed (n=24). In addition, 27 data had been removed because they were outside the stated publication year range (2015-2025), (n=19) records were removed because they were not journal papers, and 2 records were eliminated because these were not in English.

Then, 51 articles were excluded from the study after the title and abstract screening. There were one article that is not able to retrieved and 12 articles paper were excluded due to the

intervention study and irrelevant outcomes. The final synthesis comprised 15 empirical studies, including several ASEAN countries, including Indonesia, Malaysia, Vietnam, and Thailand.

Most studies utilised panel data regression, Autoregressive Distributed Lag models (ARDL), spatial econometrics, or time-series analysis to examine the relationship between government expenditure, particularly in health, education, and economic growth, which is frequently measured by GDP or similar tests.

The scope, analytical techniques, and metrics utilised to measure economic success and human development varied between the researchers. Some studied public expenditure efficiency or larger fiscal decentralisation frameworks, while others mixed health and education, and yet others concentrated solely on the impacts of education spending.

Patterns and Findings

Health Spending and Economic Growth

Findings on health spending were generally supportive of a positive contribution to economic growth. Basuki et al. (2020) noted that increases in the health budget improved public health and labour productivity, thereby enhancing long-term economic performance. However, Solihin et al. (2021) mentioned that direct effects of health spending on regional growth were statistically insignificant, while human capital indicators like average schooling years had stronger associations.

Education Spending and Economic Growth

Most of the research found a favourable correlation between economic growth and government spending on education. For example, Le and Tran (2021) discovered a strong mutual direct relationship between Vietnam's GDP growth and education spending. Similar to this, Suwandaru et al. (2021) found that Indonesian education spending had a short-term negative impact before turning positive over time (long-term), which suggests a time lag.

Proxies for Human Development

Research that included measures of human development, such as the Human Development Index (HDI) or the average number of years spent in school, showed a steady correlation with economic success. For example, Wahyuni and Pradiana (2024) discovered that both HDI and education spending were strong predictors of Green Total Factor Productivity, which they used as a stand-in for sustainable growth.

Countries Included

The most represented countries in the included research were Indonesia, followed by Vietnam, Thailand, and Malaysia. Several studies, mostly in Indonesia, used subnational analysis to assess regional inequalities in public expenditure effectiveness. This reflects both the availability of subnational statistics and the importance of fiscal decentralisation in Indonesia's governance framework.

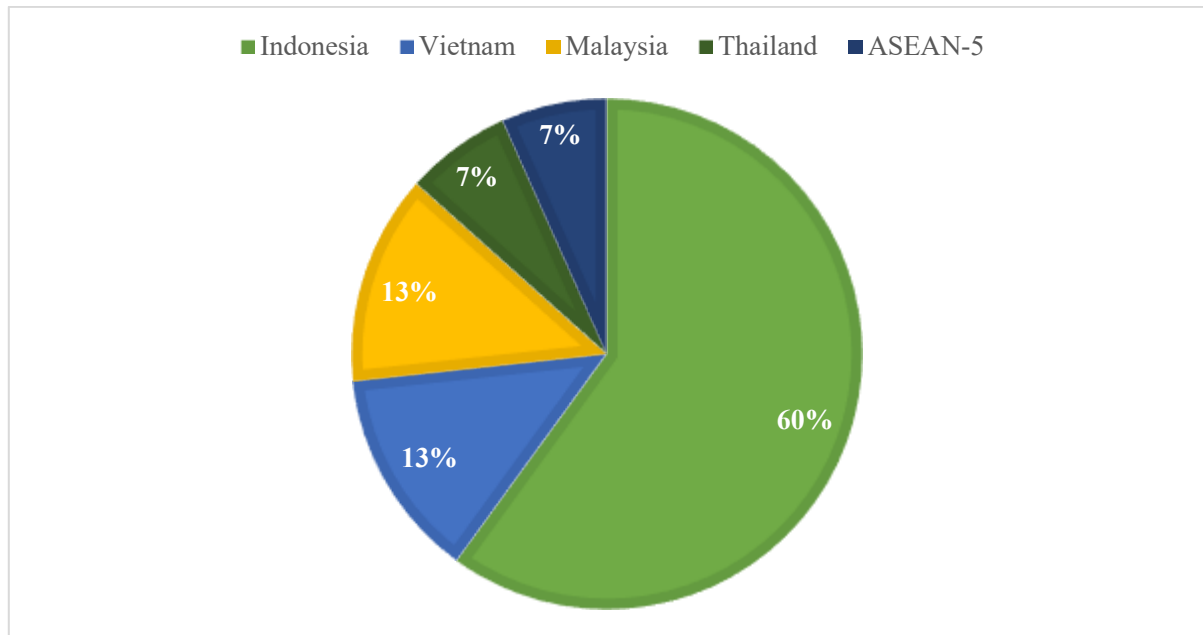


Figure 2: Countries Included

The pie chart illustrates the country distribution of studies reviewed. Indonesia tops the list at 60%, reflecting its significant focus on study subjects of education, health spending, fiscal decentralization, and regional development policies. Vietnam and Malaysia follow with 13.3% each. Vietnam's research centers around education spending and state human capital investment, with Malaysia emphasizing the dynamic roles of education and health spending in economic growth and energy efficiency. Thailand accounts for 6.7% and with a research study into the interdependence between education spending and GDP growth. Lastly, an examination of the region's ASEAN-5 countries explains another 6.7%, with a focus on investment in higher education and its contribution to GDP per capita across countries.

Summary of Included Studies

In addition, Table 3 has a full overview of the 15 included studies, highlighting significant characteristics such as country focus, kind of intervention (education or health spending), outcome measures (GDP, HDI, etc.), and main findings.

Table 4: Summary Matrix of Included Studies

Author(S)/ Year	Country	Title	Intervention	Outcome	Key Findings
Basuki et al. (2020)	Indonesia	Determinants of Economic Growth in Indonesia: A Dynamic Panel Model	Health spending, public finance	Long-term GDP growth	Health spending improves labour productivity and long-term GDP, agriculture spending is ineffective, and fiscal policies have a minimal growth impact.
Thamma-Apiroam (2015)	Thailand	Approaches for Human Capital Measurement with an Empirical Application for Growth Policy	Education spending	Bidirectional GDP education	Education spending drives GDP growth, and GDP growth also increases education spending after 3 years (bidirectional effect).

Solihin et al. (2021)	Indonesia	Do Government Policies Drive Economic Growth Convergence? Evidence from East Java, Indonesia	Education, health	Regional economic growth	Education and health spending show no direct impact on growth, but human capital (schooling) has a significant positive effect.
Pradiana & Wahyuni (2024)	Indonesia	Determinants of green total factor productivity in Indonesia: The Role of Environment in Economic Development with A Parametric Approach	Education spending, HDI	Green TFP (proxy for sustainable growth)	Education spending and HDI significantly improve green total factor productivity, indicating a sustainable economic impact.
Matahir et al. (2022)	Malaysia	Dynamic relationship between Energy efficiency, health Expenditure and economic growth: In pursuit for the SDGs in Malaysia	Health expenditure	Real GDP and energy intensity	Health spending increases energy consumption, and economic growth enhances energy efficiency, highlighting trade-offs.
Suwandaru et al. (2021)	Indonesia	Empirical Analysis On Public Expenditure For Education And Economic Growth: Evidence From Indonesia	Education spending	Short- and long-term GDP growth	Education spending negatively affects GDP short term but contributes positively in the long run.
Soejoto et al. (2015)	Indonesia	Fiscal Decentralization Policy In Promoting Indonesia Human Development	Education, health via decentralization	HDI and GDP	Fiscal decentralization boosts education and health spending, leading to improvements in HDI and GDP.
Le & Tran (2021)	Vietnam	Government Education Expenditure And Economic Growth Nexus: Empirical Evidence From Vietnam	Education spending	GDP growth	Education spending significantly drives GDP growth, and a bidirectional relationship exists between spending and growth.
Gunarto et al. (2018)	Indonesia	Local government expenditures and Economic growth in a new Autonomous in Indonesia	Education, health, and social spending	Regional economic growth (GDP)	Education, health, and social spending positively impact regional GDP, while agriculture and housing spending have no or negative effects.
Ginting et al. (2019)	Indonesia	Path Analysis On Economy, Human Development Index And Poverty In Indonesia	JKN (health insurance), health spending, infrastructure spending	Economic growth and HDI	Health and infrastructure spending improve GDP and HDI, JKN (health insurance) reduces poverty via indirect growth pathways.

Ngoc et al. (2024)	Vietnam	Public Human Capital Spending and Economic Growth in Vietnam: The Bayes Approach	Public spending on education, health, and social security, moderated by literacy & labor	GDP growth (provincial level)	Education spending increases GDP, health has a weak effect, social security reduces growth, literacy, and labor moderate outcomes.
Rambeli et al. (2021)	Malaysia	The Dynamic Impact Of Government Expenditure In Education On Economic Growth	Education spending	Short- and long-term economic growth (GDP proxy: Industrial Production Index)	Education spending and GDP are bidirectionally linked in the short term and co-integrated in the long term; education boosts recovery post-crisis.
Maneejuk & Yamaka (2021)	ASEAN-5	The Impact of Higher Education on Economic Growth in ASEAN-5 Countries	Public expenditure per tertiary student, tertiary enrollment, unemployment with higher education	GDP per capita	Higher education spending and enrollment significantly raise GDP per capita, and non-linear effects depend on thresholds.
Basuki et al. (2019)	Indonesia	The Role Of Local Government Expenditure On Economic Growth: A Review Of Panel Data In Indonesia	Education, health, and infrastructure (local government spending)	Regional GDP growth	Local government spending on education, health, and infrastructure significantly drives regional economic growth.
Rambe et al. (2022)	Indonesia	Efficiency Comparison of Pro-Growth Poverty Reduction Spending before and during the COVID-19 Pandemic: A Study of Regional Governments in Indonesia	Spending in education, health, economic, social protection, and infrastructure.	Economic growth and poverty reduction, measured before and during COVID-19.	Balanced spending in education, health, and social sectors improves growth and poverty outcomes, and efficiency rose during COVID-19 reallocations.

Discussion

This review summarises 15 empirical studies on the connection between economic growth in ASEAN nations and government spending on human development, especially in the areas of health and education. Key developing issues serve as the framework for the discussion: (1) proof of economic returns from spending in human development, (2) differences in impact between countries and sectors, and (3) temporal patterns and lag effects.

The Nexus Between Government Spending and Economic Growth in ASEAN

Across the reviewed studies, there is a consistent affirmation that government spending, particularly in the sectors of education and health, plays a crucial role in promoting economic

growth in ASEAN countries. The effect is most pronounced when spending is targeted, consistent, and efficiently managed. For instance, several studies show that education expenditure, particularly in higher education, correlates positively with GDP growth, provided the labor market can absorb educated workers (Maneejuk and Yamaka, 2021).

The positive relationship between government spending in human development sectors and economic growth, especially over the long term, is a consistent result throughout the investigated research. While spending on health increased labour productivity and GDP in Indonesia and Malaysia (Basuki et al., 2020) and (Matahir et al., 2022), respectively, education spending was shown to considerably encourage economic growth in Vietnam, Malaysia, and Indonesia (Le & Tran, 2021; Rambeli et al., 2021; Suwandaru et al., 2021).

Even while government spending has a generally positive impact on development, several studies find inconsistent or specific results to a sector. For example, Solihin et al. (2021) showed that health and education spending had no direct effect on regional growth in East Java, but that human capital has a significance positive effect, measured by average years of schooling, did have a role. Similarly, Ngoc et al. (2024) found that social security expenditure had a negative impact on provincial growth in Vietnam, whereas health had a minor influence.

Lagged or nonlinear impacts of expenditure on human development were found in several areas of research. Thamma-Apiroam (2015) and Rambeli et al. (2021) discovered that GDP growth and education spending were correlated in both directions. Education and health spending may have short-term negative effects, but long-term positive effects, according to Suwandaru et al. (2021).

Education Spending: A Strategic Investment for Future Growth

Education emerged as a dominant channel through which government spending affects economic outcomes. Most of the studies in this review highlight the beneficial long-term impact of education spending on GDP development, both at the national and subnational levels (Thamma-Apiroam, 2015; Rambeli et al., 2021; Gunarto et al., 2018).

Multiple studies (e.g., Maneejuk & Yamaka, 2021; Basuki et al., 2019) identified a positive and statistically significant impact of educational investment, especially higher education on long-term economic performance. This suggests that constant spending in basic and higher education is essential but it must be followed with labor market changes in order to effectively utilize an educated workforce.

However, challenges such as a mismatch between education output and labor market demands (i.e., graduate unemployment) were noted, particularly in middle-income ASEAN nations. Suwandaru et al. (2021) and Rambeli et al. (2021) discovered a delayed impact, indicating that initial education spending may provide limited or negative short-term benefits but offers significant long-term advantages through increased worker productivity and creativity.

Health Expenditure and Human Capital Quality

Government investment in health was also found to be a robust driver of economic growth, mainly through its role in improving labor productivity and reducing mortality. According to research such as Basuki et al. (2020) and Matahir et al. (2022), increasing government spending on healthcare improves worker productivity and public well-being, both of which are critical for economic efficiency.

However, trade-offs must be managed well. Matahir et al. (2022) found that while health spending increases GDP, it also raises energy intensity. This shows a basic conflict between development and sustainability. Still, there are some cases where health spending does not lead to economic growth, often because of poor governance or misallocation of resources.

Country-Specific Disparities in Spending Efficiency

A common theme in the studies was the difference in efficiency and results among ASEAN member states. The reviewed studies show that the efficiency of public spending varies greatly among ASEAN countries and between regions in the same country. For instance, Rambe et al. (2022) found significant differences in the success of pro-growth spending before and after the COVID-19 pandemic. Provinces in Kalimantan had better reallocation strategies compared to those in Sulawesi.

Pradiana and Wahyuni (2024) found that HDI and government expenditure on education in Indonesia had a considerable effect on Green Total Factor Productivity (GTFP). This provides an alternative framework for explaining long-term economic achievement. Their findings accentuate the significance of local government, consistent policies, and budgetary control in improving spending efficiency and development outcomes.

Institutional and Fiscal Factors Affecting Impact

The financial rates of return on public spending are extremely dependent on institutional quality, decentralization, and fiscal management, along with the scale of spending. Soejoto et al. (2015) illustrate that expenditure decentralization has the potential to yield more efficient and responsive spending in the human development domain, as long as capabilities in local government are strong. According to Basuki et al. (2020), development goals can be compromised when general allocation funds are used mainly to settle normal expenses. Program design, including Indonesia's Jaminan Kesehatan Nasional (JKN), labor literacy, and institutional quality, all exerted a moderating effect on spending outcomes, as noted by Ngoc et al. (2024) and Ginting et al. (2019). These findings imply that to enhance the developmental contribution of ASEAN through government spending, there is a necessity to reallocate program targeting, budget execution, and institutional oversight.

Bias and Limitations in Reviewed Studies

Despite the immense insight from selected studies, there are certain limitations to consider. First, there are some studies on Indonesia, while other ASEAN countries, such as Brunei, Laos, or Cambodia, are less represented based on geographical bias. This limits validity for the entire region. Secondly, the use of alternative outcome measures made it more challenging to generate and compare the outcomes.

The proxies, such as industrial production or HDI, were used by some, while others used GDP. Lastly, the quality of evidence was undermined by using sub-country samples. These samples may fail to capture macroeconomic change or the absence of long-term data. These biases show the need for more fair, comparable, and methodologically solid research to improve the information about the role of government spending in ASEAN's economic growth and human development.

Conclusion

This systematic review finds strong and growing evidence that government spending on human development, and most notably in education and health, is crucial to supporting economic growth in ASEAN countries. Across most of the research reviewed, investment in these two priority areas is repeatedly linked to positive correlations with long-run economic performance, though the extent and nature of the effect vary by country, sector, and policy context.

Investment in education, in particular, is a certain growth driver. Not only will it help to make the labor force more productive and skilled, but also drive innovation and social mobility. Investment in health also aids economic growth, but its effect is more dependent upon where and how the money is being invested. Factors like access to care, system efficiency, and population demographic profile can all impact the extent to which health budgets are translated into economic dividends.

Interestingly, this review also reveals that the impact of public spending is not uniform throughout the region. Some countries are getting more than others, reflecting differences in policy design, governance, and also fiscal capacity. This suggests that increasing public spending alone is not enough, and what also counts is how it is targeted and spent.

To reap the most from public spending on human development, ASEAN governments must work toward flexible, informed, and evidence-based spending plans. That way, they can better address the region's diverse economic and social difficulties and unlock more inclusive and sustainable growth. In the long run, smart investment in people through good education and quality healthcare offers one of the most effective ways for ASEAN nations to build stronger, more resilient economies that benefit everyone.

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