The Effects of Government Expenditure on the Human Development Index

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Abstract. This scholarly discourse examines the impact of government fiscal allocations, with a particular focus on the Regional Revenue and Expenditure Budget (RREB) and the Special Autonomy Fund, on the Human Development Index (HDI) in the Indonesian context. A comprehensive analysis of numerous previous studies revealed that government expenditure significantly enhances the population's quality of life, especially in the domains of education, health, and social welfare. Empirical studies indicate that the judicious allocation of the budget and the Special Autonomy Fund not only promotes the advancement of HDI but also strengthens the regional economic framework. Nevertheless, persistent challenges remain in terms of the efficiency and effectiveness of budget utilization, which require attention in order to optimize the positive impact on HDI. This literature argues for improved monitoring and systematic evaluation of government expenditure to ensure that allocated resources yield maximum benefits for human development. Subsequent research aims to examine the interplay between government expenditure and HDI within a broader framework, building on these findings.

Keywords: Government Expenditure, Human Development Index

1 Introduction

Government expenditure plays an essential role in shaping the Human Development Index (HDI) in Indonesia, particularly through mechanisms such as the Regional Revenue and Expenditure Budget (RREB) and the Special Autonomy Fund. Empirical research indicates that the influence of government expenditure on HDI can exhibit considerable variability contingent upon regional circumstances and the nature of funding distribution. In the case of Papua Province, for instance, despite the allocation of Special Autonomy Funds, the pronounced negative ramifications on HDI imply that the management of these funds may be inadequate in realizing human development objectives. Conversely, in North Sumatra, the integration of Special Allocation Funds, General Allocation Funds, and Regional Own Income demonstrated a marked positive effect on HDI, signifying enhanced efficacy in advancing infrastructure, health, and education. In Bali, the distribution of regional revenue and capital expenditure led to similar improvements in HDI. Conversely, the examination of Eastern Indonesia revealed that regional investments in education and health funded by the state budget produced favorable outcomes, whereas expenditures

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from the state budget yielded more ambivalent results. This underscores the necessity for the alignment of government expenditure with the distinct requirements of each region. Furthermore, in other contexts such as Indragiri Hilir and the Bangka Belitung Islands, discrepancies in the effects of spending on HDI underscore the imperative for a balanced and strategic methodology in fund allocation. In summary, the intricate nature of the relationship between government expenditure and human development in Indonesia necessitates rigorous planning and execution to optimize favorable impacts on HDI across diverse regions.

Government expenditures, particularly through the Regional Budget and Revenue Expenditure (RREB) and the Special Autonomy Fund, significantly influence the Human Development Index (HDI) across various regions of Indonesia. Researchers have identified the Special Autonomy Funds, particularly in the Papua Province, as having a notable adverse effect on HDI, suggesting that their allocation may not effectively enhance human development outcomes [1] However, in North Sumatra, the Special Allocation Fund, the General Allocation Fund, and Regional Own Income have all had a positive and significant effect on HDI. This shows that these funds were effectively used to improve infrastructure, health, and education, all of which are important for human development [2]. Similarly, in Bali, there is a positive correlation between the allocation of regional revenue and capital expenditure and improvements in HDI, highlighting the crucial need for strategic resource allocation and efficient utilization to achieve favorable human development outcomes [3]. In the eastern regions of Indonesia, regional expenditures on education and health from the State Budget exert a significant positive influence on HDI, whereas expenditures from the State Budget present mixed outcomes, with educational expenditures displaying negative effects and health expenditures being statistically insignificant [4]. This indicates that local government expenditure proves more efficacious when aligned with the specific needs of the region. In Indragiri Hilir, government expenditure on environmental functions had a positive correlation with HDI, but expenditure on social protection functions had a negative correlation. This shows that allocation strategies need to be fair [5]. Moreover, in the Bangka Belitung Islands Province, government investments in education and health positively affect IPM, accentuating the significance of these sectors in facilitating human development [6]. More research from 33 Indonesian provinces supports the idea that expenditure on health, agriculture, and households has a positive effect on HDI. However, spending on education and infrastructure does not show a significant correlation. This suggests that the effects of government expenditure can be very different depending on regional priorities and how they are implemented [7]. Additionally, a study of how government expenditure works showed that spending on education and social protection has a positive impact on HDI, but spending on healthcare has a negative impact, suggesting that health spending may not be used efficiently or correctly [8]. These findings collectively shed light on the complex relationship between government expenditure and human development, underscoring the need for strategic planning and execution that optimizes the positive impact of funds, whether from the Budget or the Special Autonomy Fund, on HDI in various regions of Indonesia.

2 Methodology

This research uses a qualitative research design, and the research methodology includes a literature review of several previous studies. We used secondary data obtained from online sources, documented books, and periodicals for data collection techniques. In this study, we employed descriptive analysis techniques for data analysis. The process of using the descriptive analysis approach involves collecting data, interpreting it, and analyzing it to offer insights into the effects of government expenditure on the human development index.

An illustration of this research process can be seen below:

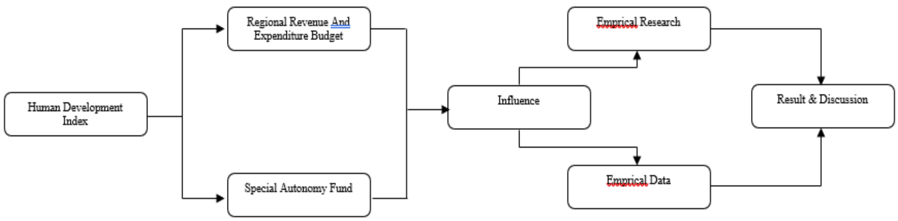

Fig. 1. Research conceptual framework

3 Results and Discussion

An in-depth literature review reveals that government expenditure, specifically the Regional Budget and Special Autonomy Funds, significantly contributes to enhancing the Human Development Index (HDI). The results show that efficient and targeted government budget allocations in strategic sectors directly affect the HDI component.

3.1 Human Development Index (HDI) and Regional Revenue and Expenditure Budget (RREB)

The Human Development Index (HDI) is a crucial metric that assesses the overall well-being and quality of life of individuals in a given region. HDI encompasses three principal dimensions: health, education, and income, which collectively signify an individual's capacity to realize their full potential. Conversely, the Regional Revenue and Expenditure Budget functions as a fiscal instrument that governs the administration of regional resources, with the objective of financing diverse development initiatives that enhance public welfare. The correlation between HDI and the budget is particularly pertinent, considering that judicious and efficient budget allocation can yield a direct impact on the enhancement of individuals' quality of life. This research endeavors to investigate the interplay between HDI and the budget, as well as to assess how regional budget management can facilitate the augmentation of

HDI within the context of Indonesia. We anticipate achieving an enriched understanding of sustainable and inclusive development strategies through this examination.

The Human Development Index (HDI) and the Regional Revenue and Expenditure Budget (RREB) exhibit a significant interconnection, as demonstrated by numerous empirical investigations conducted across various regions of Indonesia. The budget, encompassing regional financial distributions, is pivotal in shaping the HDI by dictating investment levels in essential sectors such as education, health, and infrastructure. While direct budgetary allocations may not have an immediate effect, the economic activities they support can improve human development outcomes [9]. For example, in Makassar City, the budget had little effect on the HDI, but economic growth made it much higher. A study of regional income and capital expenditures in DKI Jakarta found a positive and statistically significant correlation with the HDI [9]. This suggests that wisely managing money can lead to better human development by supporting planned investments and initiatives. Similarly, in North Sumatra, the HDI benefits from fiscal decentralization and provincial financial contributions. However, the presence of countervailing funds can have adverse effects, highlighting the complex nature of financial allocations and their diverse effects on human development [10].Research in East Java has demonstrated that regional revenues such as PAD, DAU, DAK, and village funds catalyze economic growth, leading to a positive impact on the HDI. This reinforces the importance of these revenue-financed economic activities in advancing human development [11]. Further research in North Sumatra confirmed that special allocation funds, general allocation funds, and local revenues all have a positive and substantial effect on the HDI. This shows how important these types of funds are for improving infrastructure, health, and education, all of which are necessary for human development [2]. In West Sumatra, investments in education and local income reveal a positive correlation with the HDI, suggesting that strategic investments in human capital can yield a more educated workforce and improved economic conditions, thus enhancing the HDI [12]. In Aceh, spending on social services shows positive trends while spending on education shows negative but statistically insignificant effects [14]. This shows that while some types of spending don't directly affect the HDI, they all contribute to a more human-friendly environment. When it comes to Eastern Indonesia, spending on education and health that comes from the State Budget has a big positive impact on the HDI. Other state budget allocations have less of an effect, which shows how important regional budget management is for reaching human development goals [4]. Lastly, an analysis of the inclusive economic development index in Indonesia revealed that health, education, social protection functions, and village funding exert significant positive influences on the index, suggesting that comprehensive policies that integrate these components can enhance human development [13]. All of these academic studies show that the budget does play a role in improving human development outcomes across different regions, even though its direct effects on the HDI may change. This is because it helps the economy grow and supports key sectors.

People frequently regard the Human Development Index (HDI) and the Regional Revenue and Expenditure Budget as interconnected constructs; however, some argue that the strength of these relationships may not be as robust as anticipated. Firstly, not only do regional budgetary allocations shape HDI, but extrinsic variables like global economic climates, national policy frameworks, and localized cultural dynamics significantly influence the quality of life individuals experience. In numerous instances, despite the allocation of budgetary resources to the education and health sectors, the efficacy of such financial expenditures is frequently subject to scrutiny. For instance, misappropriation of resources intended for HDI enhancement may occur in jurisdictions characterized by elevated levels of corruption, failing to yield the anticipated outcomes. Furthermore, there exists a contention that economic advancement does not invariably correlate with an enhancement in HDI. In certain regions, accelerated economic growth may coincide with escalating social disparities and inequities, which can ultimately detract from the quality of life for the populace. Consequently, while there is empirical evidence suggesting that the budget can play a role in augmenting HDI, it is imperative to take into account the broader contextual factors and inherent complexities. For example, in DKI Jakarta, although regional revenue and capital expenditures appear to positively influence HDI, this may be attributable more to the distinct social and economic circumstances prevalent in the region rather than exclusively to effective financial governance. On the other hand, critics also point to the methodological approaches used in examining the relationship between the budget and HDI. A significant number of studies depend on secondary data that may not accurately represent the actual conditions on the ground. Additionally, the long-term ramifications of budgetary disbursements on HDI are often challenging to quantify, leading to conclusions that may lack precision. In specific contexts like Aceh, a declining trend in educational expenditures may not necessarily indicate policy shortcomings, but could instead point to alternative factors like insufficient infrastructure or a shortage of qualified teaching personnel. In summation, while a relationship exists between RREB and HDI, it is crucial to avoid conceiving it as a straightforward and unidirectional association. Numerous additional variables influence the determinants of quality of life, necessitating a more holistic, evidence-informed analysis to comprehend these dynamics with greater depth.

3.2 Human Development Index (HDI) and Special Autonomy Fund (SAF)

The Human Development Index (HDI) in Indonesia represents a pivotal indicator of human advancement, encapsulating the dimensions of quality of life, educational attainment, and health status within a given locality. The Special Autonomy Fund (SAF) significantly influences HDI, particularly within regions designated with special autonomy status, such as Aceh and Papua. In Aceh, the SAF has functioned as a crucial instrument for regional development since its inception in 2008, with objectives oriented toward post-conflict recovery and sustainable advancement. Despite well-intentioned objectives, the fund's influence on HDI exhibits a mixed pattern. A lot of research shows that while the SAF does have a positive effect on HDI, it's not strong enough to make a big difference in human development across different districts. This means that other socioeconomic factors play a big role as well [14].Furthermore, the administration of the fund in Aceh has encountered numerous obstacles, including inadequate institutional capacity and a deficiency in accountability, which have undermined its efficacy in alleviating poverty and enhancing HDI [15];[16]. Conversely, in Papua, the SAF has shown significant negative effects on HDI, despite positive contributions from local government expenditures. This suggests that the allocation and management of funds play a crucial role in achieving the intended objectives [1]. In Merauke Regency, Papua, the SAF has exerted a notable impact on HDI, although its growth trajectory remains sluggish, thereby underscoring the necessity for more efficacious fund utilization [19]. Evidence suggests that the Special Allocation Fund (DAK), a subset of SAF, positively and significantly influences HDI in North Sumatra. This underscores the importance of targeted and well-regulated fund allocation to improve educational facilities, healthcare services, and infrastructure, all crucial for human development [20]; [2]. The Profit-Sharing Fund (DBH) and the Village Fund also exert partial influences on HDI, indicating that a multifaceted approach to funding is requisite for the enhancement of human development [21]. The situation in Aceh shows that SAF has been successful in some areas, like building infrastructure and running educational programs. However, it is still not very good at reducing poverty and raising HDI because of problems with governance and a lack of comprehensive management strategies [22]; [23]. These results show how complicated it is to use dedicated autonomy funds to improve human development. They also show how important strong governance, strategic foresight, and effective implementation are in order to get the most out of the fund and raise HDI across all of Indonesia's autonomous regions.

The Human Development Index (HDI) in Indonesia often fails to accurately represent the intricate realities of human development. Special Autonomy Funds (SAF) for regions like Aceh and Papua do not consistently yield beneficial effects. In Aceh, despite the intention for post-conflict recovery, critics argue that SAF has not significantly enhanced HDI. Addressing fundamental socioeconomic issues is essential, as reliance on SAF may disincentivize local governments from pursuing sustainable solutions. In Papua, the adverse effects of SAF on HDI may stem from entrenched issues like political instability rather than merely fund allocation. Furthermore, effective fund management is crucial, as evidenced by local government expenditure having a greater impact than the sheer volume of funds. In Merauke, the stagnation of HDI growth appears linked to structural issues beyond mere SAF management. Consequently, the belief that SAF and similar funds can meaningfully elevate HDI in Indonesia's autonomous regions may be overly naive. A comprehensive strategy prioritizing institutional capacity, transparency, and accountability is imperative to effectively tackle existing challenges and fulfill human development objectives.

4 Conclusion

The study identifies a significant correlation between the Human Development Index (HDI) and government expenditures, notably in Regional Revenue and Expenditure Budgets (RREB) and special autonomy funds. An increase in HDI motivates local governments to enhance budget allocations for development programs in education, health, and welfare. A high HDI indicates an improved quality of life, necessitating increased fiscal intervention for sustainability.

Additionally, regions receiving Special Autonomy Funds demonstrate heightened responsiveness in budget allocations toward human development priorities. These funds are effective in advancing HDI in areas facing specific challenges; however, their success is contingent upon governance quality and budgetary transparency and accountability.

In summary, the study underscores the critical role of strategic government expenditure in enhancing HDI as a comprehensive development measure. We encourage local governments to increase their budgetary support for HDI-impacting sectors and to execute policies effectively to bring about tangible improvements in quality of life.

References

1. F. Firmansyah, S. Mukhtar and K. D. A. Sebayang, "The effect of special autonomy funds, regional original revenue and local government expenditures on welfare in papua province," *International Journal of Econo-my, Education and Entrepreneurship,* vol. 2, no. 3, p. 601–609, 2022.
2. H. Gulo, Fitrawaty and Arwansyah, "Analisis pengaruh dana alokasi khusus, dana alokasi umum dan pendapatan asli daerah terhadap indeks pembangunan manusia di Sumatera Utara," *SOSIOHUMANIORA: Jurnal Ilmiah Ilmu Sosial Dan Humaniora,* vol. 9, no. 1, p. 59–73, 2023.
3. I. A. C. Y. Sari and N. L. Supadmi, "The influence of local revenue and capital expenditure on increasing the human development index," *E-Journal of Accounting,* 2016.
4. N. N. Erwanti, Wahyunadi and H. Mahmudi, "The Influence of Regional Expenditure In The Education, Health, And Investment Sectors On The Human Development Index In Eastern Indonesia Region," *Return : Study of Management, Economic And Bussines,* vol. 2, no. 6, pp. 544-558, 2023.
5. F. Fadly and Y. Edward, "Government Spending Effect on HDI Indragiri Hilir: An ECM Approach," *Economics Development Analysis Journal,* vol. 12, no. 2, pp. 257-269, 2023.
6. T. Kurnia, D. Valeriani and F. Darmawan, "The Influence of Government Spending in Education, Health, and Economics on Indicators for Calculation of Human Development Index in Bangka Belitung Islands Province," *International Journal of Current Science Research and Review,* 2023.
7. I. H. Lubis, "Regional Government Budgets and Human Development Outcomes Across Indonesia's Provinces (Study Case of Provinces in Indo-nesia).," *International Institute of Social Studies,* 2015.
8. A. O. T. Wiratmoko and L. Purwanti, "IMPACT OF GOVERNMENT EXPENDITURE ON HUMAN DEVELOPMENT INDEX IN INDONESIA BY FUNCTIONS," *The EUrASEANs: Journal on Global Socio-Economic Dynamics,* vol. 6, no. 43, pp. 191-201, 2023.
9. M. Maknun, "Impact of Regional Revenue and Expenditure Budgets and Economic Growth on the Human Development Index," *Advances in Economics & Financial Studies,* vol. 1, no. 1, p. 25–35, 2023.
10. H. A. Rasyid and A. T. I. K, "Pengaruh Pendapatan Asli Daerah Dan Belanja Modal Pada Peningkatan Indeks Pembangunan Manusia Provinsi DKI Jakarta Tahun 2015 – 2022," *Owner : Riset Dan Jurnal Akuntansi,* vol. 7, no. 4, pp. 3691-3701, 2023.
11. M. S. H. Simatupang, A. Maksum and C. Situmeang, "The Effect of Fiscal Decentralization, Balanced Budget, Provincial Financial Aid, and Public Investment on Human Development Index with Population as a Moderation Variable in Regency/City Regional Government in North Sumatra Province," *International Journal of Research and Review,* vol. 11, no. 2, pp. 278-293, 2024.
12. S. W. N. Hidayati, E. Subiyantoro and M. Burhan, "The Influence of Regional Income

on Economic Growth and its Implications for the Human Development Index in East Java," *Journal of Economics, Finance and Management Studies,* vol. 6, no. 9, pp. 4436-4441, 2023.

13. N. Yanti, Nurtati and Syamsurizal, "Human Development Index: The Impact of Human Resources Investment in Education and Regional Revenue," *Galore International Journal of Applied Sciences and Humanities,* vol. 6, no. 2, pp. 15-22, 2022.
14. Z. Siregar, Erlina and Sirojuzilam, "Pengaruh Alokasi Belanja Pendidikan, Kesehatan dan Sosial Terhadap Tingkat Indeks Pembangunan Manusia Kabupaten/Kota Provinsi Aceh," *Jurnal Intervensi Sosial dan Pembangunan (JISP),* vol. 4, no. 1, pp. 9-18, 2023.
15. P. R. Sihombing, A. M. Arsani and D. Purwanti, "Apakah Fungsi Belanja APBD Dan Dana Desa Mempengaruhi Indeks Pembangun Ekonomi Inklusif di Indonesia?," *Khatulistiwa: Jurnal Pendidikan Dan Sosial Humaniora,* vol. 3, no. 1, p. 151–160, 2023.
16. I. Safwadi, "The Impact of the Special Autonomy Fund on the Convergence of the Human Development Index in Aceh," *Jurnal Ilmiah Peuradeun,* vol. 8, no. 1, pp. 179-200, 2020.
17. D. Dahlawi, H. Helmi, A. M. Qahar, N. Fajri, M. Mukhrijal, N. Kamaly, A. Afrijal and N. Nofriadi, "Special Autonomy Fund Management and Strengthening Institutional Governance in Realizing Sustainable Development," *Journal of Governance and Public Policy,* vol. 10, no. 3, p. 253–262, 2023.
18. Ikhsan, I. R. Latif, V. Hajad, E. Hasan, M. Mardhatillah and Herizal, "The Abundance of Special Autonomy Funds: An Ironic Portraitof Aceh’s Poverty Alleviation," *Journal of Government and Civil Society,* vol. 7, no. 1, pp. 96-108, 2023.
19. E. Cabui and A. Fangohoy, "Pengaruh Dana Otonomi Khusus Terhadap Indeks Pembangunan Manusia," *Musamus Journal of Economics Development,* vol. 3, no. 1, pp. 35-43, 2021.
20. R. Maysaroh and M. Arif, "Analisis Peran Dana Alokasi Khusus (DAK) Fisik Dalam Meningkatkan Indeks Pembangunan Manusia (IPM) dan Pertumbuhan Ekonomi Provinsi Sumatera Utara," *El-Mujtama: Jurnal Pengabdian Masyarakat,* vol. 2, no. 3, pp. 322-335, 2022.
21. F. Nurmansyah and V. A. Tandean, "Analysis of central government transfer funds in influencing the human development index in special au-tonomous regions," *Jurnal Budgeting.*
22. F. P. Litami and A. Lutfi, "Special Autonomy Fund as Implementation of Special Autonomy Policy Aceh," *Return: Study ofManagementEconomic And Business,* vol. 2, no. 12, pp. 1200-1207, 2023.
23. M. H. Saputra, "PENGARUH DANA OTONOMI KHUSUS TERHADAP INDEKS PEMBANGUNAN MANUSIA KABUPATEN/KOTA DI PROVINSI ACEH," *Quantitative Economics Journal,* vol. 3, no. 4, pp. 246-261, 2014.