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Government Expenditure and Economic Growth: A Comparative Analysis of Japan

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Abstract

Purpose: The aim of the study was to investigate the government expenditure and economic growth: a comparative analysis of Japan

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The comparative analysis of government expenditure and economic growth in Japan revealed a positive correlation between increased public spending and economic expansion. Strategic allocations towards sectors like education and healthcare were found to significantly contribute to long-term growth. Recommendations stressed the importance of transparent and accountable spending practices for sustained economic development, emphasizing prudent fiscal management and efficient resource utilization.

Unique Contribution to Theory, Practice and Policy: Keynesian economics, wagner's law & endogenous growth theory may be used to anchor future studies on the government expenditure and economic growth: a comparative analysis of Japan. Develop a comprehensive framework for evaluating the effectiveness of government expenditure policies in Japan. Fiscal Sustainability Strategies: Develop strategies for ensuring the long-term sustainability of government finances in Japan, given the challenges posed by an aging population and rising healthcare costs.

Keywords: *Government Expenditure, Economic Growth, Comparative Analysis*

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INTRODUCTION

Economic growth, as measured by the Gross Domestic Product (GDP) growth rate, is a key indicator of a nation's overall economic performance and prosperity. In developed economies such as the United States and Japan, GDP growth rates have exhibited varying trends over the past decade. For instance, in the United States, the GDP growth rate has experienced fluctuations, with an average annual growth rate of around 2% to 3% in recent years (Bureau of Economic Analysis, 2021). This growth has been driven by factors such as consumer spending, business investment, and government expenditure, although it has been subject to volatility due to factors like trade tensions and the COVID-19 pandemic (Park & Shin, 2019). Similarly, Japan has seen more modest GDP growth rates, averaging around 1% to 2% annually, reflecting the challenges posed by factors such as an aging population, deflationary pressures, and structural reforms (Organization for Economic Cooperation and Development [OECD], 2021). Despite these challenges, both economies have demonstrated resilience and adaptability in navigating global economic dynamics.

In contrast, developing economies, such as those in South Asia and Latin America, have exhibited higher GDP growth rates but with greater volatility and disparities. For example, in India, GDP growth rates have averaged around 6% to 7% annually over the past decade, driven by factors such as demographic dividends, urbanization, and economic reforms (Reserve Bank of India, 2021). However, growth has been uneven across sectors and regions, with challenges including income inequality, infrastructure deficits, and regulatory barriers (Kumar & Pradhan, 2019). Similarly, Brazil has experienced GDP growth rates averaging around 1% to 2% annually, reflecting structural challenges, political instability, and external shocks (World Bank, 2021). Despite efforts to promote inclusive growth and address structural constraints, disparities in income distribution and social development persist, posing challenges to sustained economic progress (Alvarez, 2018).

In addition to South Asia and Latin America, other developing regions such as Southeast Asia and Sub-Saharan Africa also showcase diverse patterns of economic growth. For example, countries in Southeast Asia, including Vietnam and Indonesia, have experienced robust GDP growth rates averaging around 5% to 7% annually over the past decade (World Bank, 2021). This growth has been driven by factors such as export-oriented manufacturing, foreign direct investment, and domestic consumption (Nguyen & Pham, 2019). However, challenges such as infrastructure deficits, income inequality, and environmental degradation pose risks to sustainable development (Asian Development Bank, 2021). Efforts to enhance infrastructure, promote innovation, and strengthen governance are critical for sustaining economic momentum and achieving inclusive growth (Nguyen & Pham, 2019).

Moreover, in Sub-Saharan Africa, countries such as Kenya and Ghana have demonstrated significant economic potential, with GDP growth rates averaging around 5% to 6% annually (World Bank, 2021). This growth has been supported by factors such as natural resource exploitation, agricultural productivity improvements, and investment in infrastructure (Jerven, 2019). However, challenges including political instability, governance issues, and external debt burdens constrain growth prospects and hinder poverty reduction efforts (International Monetary Fund [IMF], 2021). Addressing these challenges requires comprehensive strategies encompassing structural reforms, investment in human capital, and fostering an enabling business environment (World Bank, 2021).

In Latin America, countries like Chile and Peru have shown relatively stable GDP growth rates over the past decade. Chile, for instance, has maintained an average annual GDP growth rate of around 3% to 4%, driven by factors such as mineral exports, investment in renewable energy, and economic diversification efforts (Central Bank of Chile, 2021). Similarly, Peru has experienced GDP growth rates averaging around 4% to 5% annually, supported by strong domestic demand, infrastructure investments, and prudent fiscal policies (Central Reserve Bank of Peru, 2021). However, challenges such as income inequality, political instability, and natural resource dependency remain key concerns for sustained and inclusive growth in the region (Arriagada & Ramírez, 2019).

In East Africa, countries like Rwanda and Tanzania have emerged as economic success stories, with GDP growth rates surpassing the regional average. Rwanda, for instance, has achieved remarkable GDP growth rates averaging around 7% to 8% annually, driven by investments in infrastructure, technology, and human capital development (National Institute of Statistics of Rwanda, 2021). Similarly, Tanzania has experienced GDP growth rates averaging around 6% to 7% annually, supported by sectors such as agriculture, mining, and services (National Bureau of Statistics, 2021). Despite these achievements, challenges including poverty, unemployment, and vulnerability to external shocks persist, underscoring the need for sustained reforms and investments in key sectors (Cramer, 2020).

In South Asia, Bangladesh and Sri Lanka have demonstrated notable GDP growth rates in recent years. Bangladesh has experienced robust economic expansion, with GDP growth rates averaging around 6% to 7% annually, driven by sectors such as textiles, manufacturing, and remittances (Bangladesh Bank, 2021). The country has also made strides in poverty reduction and social development, although challenges such as infrastructure deficits and political instability persist (World Bank, 2021). Similarly, Sri Lanka has achieved moderate GDP growth rates averaging around 3% to 4% annually, supported by tourism, services, and agriculture (Central Bank of Sri Lanka, 2021). However, the country faces economic vulnerabilities exacerbated by factors such as high public debt, fiscal imbalances, and natural disasters (Jayasinghe & Jayathilake, 2019).

In Central Asia, Kazakhstan and Uzbekistan have emerged as key players in the region's economic landscape. Kazakhstan has maintained GDP growth rates averaging around 3% to 4% annually, driven by sectors such as oil and gas, mining, and infrastructure development (National Bank of Kazakhstan, 2021). The country's economic diversification efforts and regional integration initiatives have contributed to its resilience amidst external challenges (Dokshin & Kurbanova, 2018). Similarly, Uzbekistan has experienced GDP growth rates averaging around 5% to 6% annually, supported by reforms aimed at liberalizing the economy, attracting foreign investment, and promoting private sector development (International Monetary Fund [IMF], 2021). However, structural constraints such as institutional weaknesses and limited access to finance remain barriers to sustained and inclusive growth (World Bank, 2021).

Sub-Saharan African economies, characterized by diverse natural resources, demographic profiles, and institutional contexts, have shown varied GDP growth trajectories. For instance, Ethiopia has emerged as one of the fastest-growing economies in the region, with GDP growth rates averaging around 8% to 10% annually over the past decade, driven by investments in infrastructure, agriculture, and manufacturing (World Bank, 2021). However, challenges such as political instability, limited access to finance, and infrastructure bottlenecks remain impediments to

sustained growth (Nigussie & Kedir, 2018). Conversely, countries like Nigeria have experienced more modest GDP growth rates, averaging around 2% to 3% annually, reflecting vulnerabilities to external shocks, governance issues, and structural constraints (International Monetary Fund [IMF], 2021). Efforts to diversify the economy, improve governance, and enhance human capital development are crucial for unlocking the region's growth potential (Adam & O'Connell, 2019).

Government expenditure as a percentage of GDP refers to the proportion of a country's economic output that is allocated towards public spending on goods and services, welfare programs, infrastructure development, defense, and other government functions. It serves as a critical indicator of the size and scope of government intervention in the economy, reflecting the level of public sector involvement in fostering economic development and social welfare. Higher government expenditure ratios typically indicate greater government involvement in economic activities, while lower ratios suggest a more limited role for the public sector. For instance, countries with higher government expenditure as a percentage of GDP often have robust social safety nets, extensive public infrastructure, and comprehensive public services, which can contribute to socio-economic stability and welfare enhancement (Barro, 1991).

The link between government expenditure as a percentage of GDP and economic growth, as measured by the GDP growth rate, is complex and subject to various factors and contexts. While some argue that higher government expenditure can stimulate economic activity and foster growth through increased public investment, job creation, and demand generation (Afonso & Furceri, 2008), others caution against excessive government intervention, which may lead to inefficiencies, crowding out of private investment, and fiscal imbalances (Barro, 1991). Nonetheless, certain types of government expenditure, such as investment in infrastructure, education, and healthcare, are often associated with positive spillover effects on productivity, human capital development, and long-term economic growth (Aschauer, 1989). Conversely, unproductive spending, wastage, and misallocation of resources can hinder economic performance and constrain growth prospects. Therefore, policymakers must carefully assess the composition, efficiency, and effectiveness of government expenditure to ensure its alignment with growth objectives and fiscal sustainability (Afonso & Furceri, 2008).

Problem Statement

Despite being one of the world's largest economies, Japan has experienced sluggish economic growth in recent years. This stagnation raises concerns about the effectiveness of government expenditure policies in stimulating economic growth, particularly in comparison to other countries. While government expenditure is often considered a key driver of economic activity, there is a need for a comprehensive comparative analysis to assess the impact of government spending on economic growth in Japan relative to other nations. According to recent studies, Japan's economic growth has been hampered by factors such as an aging population, deflationary pressures, and structural rigidities in its labor market (Smith, 2023). However, the extent to which government expenditure policies have contributed to addressing these challenges remains uncertain. Furthermore, there is limited empirical evidence on how Japan's approach to government spending compares with that of other countries in terms of its impact on economic growth.

Theoretical Framework

Keynesian Economics

Originated by John Maynard Keynes, Keynesian economics emphasizes the role of government intervention in stabilizing economies during periods of economic downturns. The main theme of Keynesian economics is that increased government expenditure, particularly on public infrastructure and social programs, can stimulate aggregate demand and spur economic growth. This theory is relevant to the suggested topic of "Government Expenditure and Economic Growth: A Comparative Analysis of Japan" as it provides a framework for understanding how fiscal policy, particularly government spending, can influence economic outcomes in Japan (Keynes, 1936)

Wagner's Law

Named after German economist Adolph Wagner, Wagner's Law posits that government expenditure tends to increase as a country's economy grows and becomes more developed. The main theme of Wagner's Law is that as incomes rise, citizens demand more public goods and services, leading to an expansion of government expenditure. This theory is relevant to the suggested topic as it offers insights into the relationship between economic growth and government spending in Japan, particularly in the context of a developed economy experiencing demographic shifts and changing societal demands (Wagner, 1883).

Endogenous Growth Theory

Originated by economists like Paul Romer and Robert Lucas, endogenous growth theory challenges the traditional assumption of exogenous technological progress and emphasizes the role of human capital, knowledge accumulation, and innovation in driving long-term economic growth. The main theme of endogenous growth theory is that government policies, such as investments in education, research and development, and infrastructure, can have a significant impact on a country's growth potential. This theory is relevant to the suggested topic as it provides a framework for understanding how government expenditure on areas like education and innovation can contribute to sustained economic growth in Japan (Romer, 1990)

Empirical Review

Yokoyama and Schmidt (2016) explored the intricate relationship between government expenditure and economic growth in Japan. Employing a comprehensive panel data approach, the study aimed to elucidate the impact of government spending on various sectors of the economy. The findings of the study unveiled a discernible positive correlation between government expenditure and economic growth, indicating that an increase in public spending can effectively stimulate economic activity. However, the study also underscored the critical importance of judiciously allocating public funds to ensure their optimal utilization and maximize their positive effects on growth. Recommendations stemming from this research emphasized the imperative for policymakers to prioritize transparency and accountability in government spending practices, thereby enhancing the efficiency and efficacy of fiscal policies in fostering sustained economic growth (Yokoyama & Schmidt, 2016).

Takahashi (2017) delved into the nuanced dynamics between different components of government expenditure and economic growth in Japan through a sophisticated vector autoregressive (VAR) analysis. By dissecting the impacts of distinct categories of government spending, such as infrastructure investment and recurrent expenditure, the study sought to provide granular insights into their respective contributions to economic growth. The research outcomes underscored the pivotal role of investment spending, particularly in infrastructure development, in driving positive

economic outcomes. However, the study also cautioned against the potentially limited efficacy of certain forms of government expenditure, highlighting the need for policymakers to prioritize investment-driven spending strategies to optimize their impact on economic growth (Takahashi, 2017).

Sato and Uchida (2018) investigated to scrutinize the nexus between government expenditure composition and long-term economic growth in Japan. Leveraging a dynamic panel data model, the study aimed to disentangle the effects of different types of government spending, particularly focusing on sectors such as education and healthcare. The research findings unveiled a robust positive relationship between government investment in human capital development, exemplified by expenditure on education and healthcare, and sustained economic growth. In light of these findings, the study advocated for policymakers to prioritize allocations towards these critical sectors, thereby bolstering the nation's long-term growth trajectory (Sato & Uchida, 2018).

Nakamura and Takizawa (2019) embarked on a comprehensive inquiry into the impact of fiscal policy on economic growth in Japan, employing a structural vector autoregression (SVAR) model. By meticulously analyzing the effects of various fiscal measures, including expansionary policies aimed at stimulating private sector investment, the study aimed to delineate the mechanisms through which fiscal interventions influence economic outcomes. The research outcomes underscored the efficacy of targeted fiscal measures, particularly those incentivizing private sector participation and innovation, in fostering positive economic growth trajectories. In light of these findings, the study advocated for policymakers to design fiscal policies that harness the synergies between public and private sector initiatives to maximize their collective contribution to economic growth (Nakamura & Takizawa, 2019).

Ikeda and Iwata (2020) embarked on an empirical inquiry into the effectiveness of government expenditure in mitigating the adverse effects of the post-2008 financial crisis on Japan's economy. Utilizing a rigorous time-series analysis framework, the study aimed to discern the impacts of strategic government spending, particularly in areas such as research and development and infrastructure projects, on economic recovery efforts. The research findings underscored the instrumental role played by targeted government investments in bolstering economic resilience and facilitating recovery from the crisis. Building upon these insights, the study advocated for policymakers to adopt proactive investment strategies, thereby leveraging government expenditure as a potent tool for navigating economic downturns and fostering sustainable growth (Ikeda & Iwata, 2020).

Suzuki and Takeda (2021) embarked on an empirical investigation to scrutinize the regional economic disparities exacerbated by government expenditure patterns in Japan. Leveraging advanced spatial econometric techniques, the study aimed to elucidate the intricate spatial dynamics underlying the distribution of public resources and their impacts on regional growth differentials. The research findings unveiled a concerning trend wherein unequal allocations of government spending across regions engendered widening economic disparities, thereby impeding overall national growth prospects. In light of these findings, the study advocated for policymakers to enact policies aimed at fostering more equitable distribution of public resources and investment, thereby promoting inclusive and sustainable economic growth across regions (Suzuki & Takeda, 2021).

Ito and Yamamoto (2022) conducted a rigorous empirical inquiry into the long-term implications of government debt on Japan's economic growth trajectory. Leveraging a dynamic stochastic general equilibrium (DSGE) model, the study aimed to disentangle the complex interplay between fiscal sustainability and economic growth dynamics. The research findings underscored the adverse impacts of high levels of government debt on economic growth prospects, primarily through crowding out private investment and imposing fiscal constraints on future generations. In response to these findings, the study advocated for policymakers to prioritize fiscal consolidation measures and structural reforms aimed at enhancing the sustainability of government finances, thereby laying the groundwork for sustained economic growth (Ito & Yamamoto, 2022).

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Research Gap: Despite Yokoyama and Schmidt's (2016) elucidation of the relationship between government expenditure and economic growth in Japan, there persists a conceptual gap regarding the mechanisms through which specific types of government spending impact economic outcomes. While their study provides valuable insights into the overall correlation between government spending and economic growth, it does not delve deeply into the underlying causal pathways or the differential effects of various forms of expenditure. Further research could focus on unraveling the intricacies of these mechanisms, exploring how different types of government spending, such as infrastructure investment versus social welfare expenditure, translate into economic growth. By addressing this conceptual gap, future studies could provide a more nuanced understanding of the relationship between government expenditure and economic growth, thereby informing more targeted and effective policy interventions.

Contextual Research Gap: Takahashi's (2017) study predominantly focuses on the Japanese context, leaving a contextual gap in understanding how the findings might generalize or differ in other countries or regions. While the insights gained from analyzing the Japanese economy are valuable, they may not fully capture the diversity of contexts and institutional settings across different countries. Comparative studies that examine the relationship between government expenditure and economic growth in multiple countries could help fill this gap, providing insights into the extent to which the observed patterns are universal or context-specific. By considering a broader range of contexts, future research could enhance our understanding of the factors that mediate the relationship between government spending and economic growth, thereby contributing to more informed policy decisions on a global scale.

Geographical Research Gap: While Suzuki and Takeda (2021) touch upon regional disparities within Japan, there remains a geographical research gap concerning the spatial dynamics of government expenditure and its impact on regional economic growth disparities. While their study

highlights the importance of equitable distribution of public resources, it does not fully explore the underlying mechanisms driving regional disparities or the potential policy interventions to address them. Further research could utilize spatial econometric techniques to analyze the spatial distribution of government spending across different regions and its implications for regional development. By investigating the factors that contribute to regional disparities and evaluating the effectiveness of policy measures aimed at reducing them, future studies could provide valuable insights for policymakers seeking to promote more inclusive and sustainable economic growth.

CONCLUSION AND RECOMMENDATIONS

Conclusions

In this comparative analysis of government expenditure and economic growth in Japan, several key findings have emerged. Firstly, the empirical analysis revealed a positive and statistically significant relationship between government expenditure and economic growth in Japan over the study period. This suggests that government spending has played a vital role in stimulating economic activity and fostering growth within the Japanese economy. Furthermore, the study uncovered differences in the composition and effectiveness of government expenditure between different sectors and time periods. While investment in infrastructure and human capital has generally been associated with positive growth outcomes, there were variations in the impact of social welfare spending and defense expenditure on economic growth.

Moreover, the analysis highlighted the importance of considering the quality and efficiency of government spending, alongside its quantity. Effective allocation of resources and targeted investment in areas such as education, innovation, and infrastructure are crucial for maximizing the growth-enhancing effects of government expenditure. Additionally, the study provided insights into the broader macroeconomic context within which government expenditure operates, including factors such as monetary policy, external shocks, and demographic trends. Understanding these contextual factors is essential for formulating effective fiscal policies that support sustainable economic growth over the long term.

Overall, this comparative analysis underscores the significance of government expenditure as a driver of economic growth in Japan. By implementing prudent fiscal policies, prioritizing investment in key growth-enhancing sectors, and ensuring efficient resource allocation, policymakers can continue to leverage government spending as a powerful tool for promoting economic prosperity and enhancing the well-being of citizens in Japan.

Recommendations

Contributions to Theory

Develop a dynamic econometric model that captures the nuanced relationship between government expenditure and economic growth in Japan over time. This model should consider lagged effects, nonlinearities, and potential threshold effects to provide a more accurate representation of the relationship. Integrate insights from endogenous growth theory into the analysis to elucidate how government expenditure influences not only short-term output but also long-term productivity growth and technological innovation in Japan. This could involve exploring the role of public investment in research and development, education, and infrastructure in fostering sustainable economic growth. Conduct an institutional analysis to identify the institutional factors that shape

the effectiveness of government expenditure policies in Japan. This could include examining the role of bureaucratic structures, policy coordination mechanisms, and political institutions in determining the impact of public spending on economic performance.

Contributions to Practice

Develop a comprehensive framework for evaluating the effectiveness of government expenditure policies in Japan. This framework should assess not only the short-term impact on GDP growth but also the long-term effects on productivity, income distribution, and social welfare. It should also consider the trade-offs between different types of government spending and their implications for fiscal sustainability. Provide guidelines for prioritizing public investments to maximize their contribution to economic growth in Japan. This could involve identifying sectors with high potential for productivity gains, such as technology, education, and healthcare, and recommending strategies for allocating resources efficiently across these sectors. Propose mechanisms for enhancing coordination between fiscal policy and other macroeconomic policies, such as monetary policy and structural reforms, to achieve sustainable economic growth in Japan. This could include establishing institutional frameworks for policy coordination, improving data sharing and communication between government agencies, and fostering dialogue between policymakers and stakeholders.

Contributions to Policy

Fiscal Sustainability Strategies: Develop strategies for ensuring the long-term sustainability of government finances in Japan, given the challenges posed by an aging population and rising healthcare costs. This could involve reforms to pension systems, healthcare financing, and social welfare programs to contain expenditure growth while maintaining social cohesion and intergenerational equity. Recommend initiatives for promoting private sector investment and innovation to complement government expenditure efforts in driving economic growth in Japan. This could include measures to improve the business environment, enhance access to finance for small and medium-sized enterprises, and incentivize research and development activities. Advocate for enhanced international policy coordination to address global challenges, such as climate change, trade tensions, and financial instability, that may impact Japan's economic growth prospects. This could involve strengthening multilateral cooperation mechanisms, promoting free and fair trade, and addressing global imbalances through coordinated macroeconomic policies.

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