Interconnection: An Economic Perspective Horizon

The Differences in GDP Growth by Field of Business and GDP Growth by Expenditures, 1Q 2019

Suhardjo[a*]

[a]Business Faculty, Institut Bisnis dan Teknologi Pelita Indonesia, Indonesia

*Corresponding Author: suhardjo@lecturer.pelitaindonesia.ac.id

Article History
Received
15 July 2023
Revised
15 August 2023
Accepted
16 August 2023
Published
31 August 2023

ABSTRACT

By examining these differences in GDP growth from multiple angles, policymakers can make more informed decisions to bolster economic resilience, businesses can align strategies with the prevailing trends, and economists can refine their models and predictions. This study aims to observe differences in GDP Growth by Field of Business and GDP Growth by Expenditures. This study uses the dependent t-test to test the differences between the two groups of GDP data. This conclusion implies that, at a 5% significance level ($\alpha = 0.05$), you have failed to reject the null hypothesis, which suggests that the means of GDP growth in both categories are the same or very similar. It's important to recognize that statistical conclusions are based on the available data and the methods applied. It's recommended to interpret these results in the broader context of economic theory and any limitations of the data and analysis methods. Additionally, consider that future analyses or changes in economic conditions might yield different outcomes.

Keywords: GDP Growth, Business, Expenditures

INTRODUCTION

In the economic field, gross domestic product (GDP) is the market value of all goods and services produced by a country in a certain period. GDP (Aggarwal & Padhan, 2017) is one method for calculating national income. Gross Domestic Product is defined as the total value of all goods and services produced in the region in a certain period of time (usually per year). GDP differs from gross national product in that it includes factor income from abroad working in the country. So that GDP only calculates the total production of a country without taking into account whether production is carried out using domestic factors of production or not. On the other hand, GNP pays attention to the origin of the production factors used.

In the realm of economics, the analysis of Gross Domestic Product (GDP) growth is a crucial undertaking that provides insights into the overall health and performance of an economy. GDP serves as a comprehensive measure of a nation's economic activity, encompassing various facets such as production, consumption, and investment. Understanding the factors influencing GDP growth is pivotal for policymakers (Baah et al., 2020), businesses, and economists as it informs decisions aimed at promoting sustainable economic development.

GDP growth in Indonesia is reported according to two approaches, namely GDP growth according to business sector and GDP growth according to expenditure. Based on data from the Central Bureau of Statistics in the 1st quarter of 2019, GDP growth by business sector is as follows.

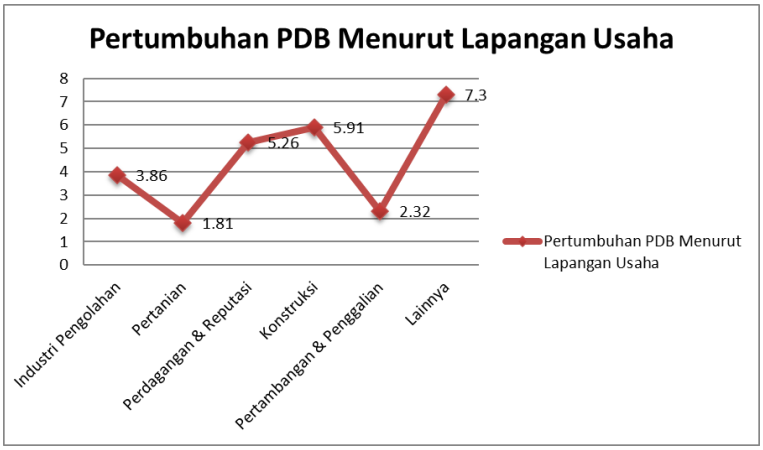

Figure 1. GDP Growth by Business Field

Source: Indonesian Statistics Agency, 2019

In addition to GDP growth by business sector, based on the Central Bureau of Statistics in the 1st quarter of 2019 GDP growth by expenditure is as follows.

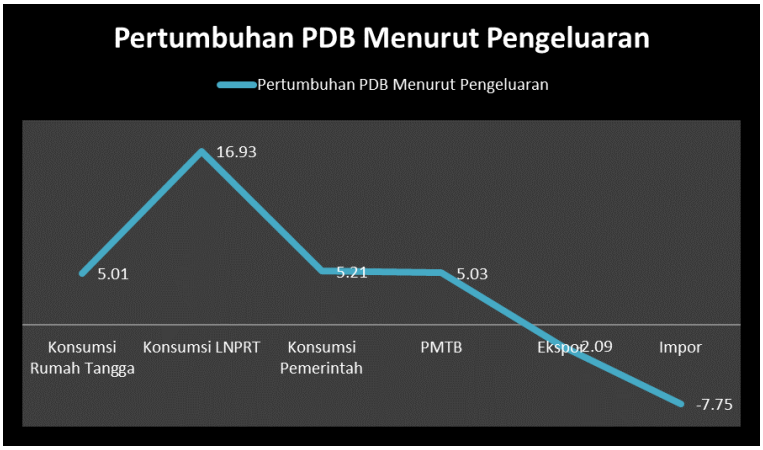

Figure 2. GDP Growth by Expenditure

Source: Indonesian Statistics Agency, 2019

This analysis delves into the differences between GDP growth based on the field of business and GDP growth based on expenditures during the first quarter of 2019. By examining these two distinct dimensions of economic activity, we aim to uncover the underlying drivers that contributed to the overall economic performance during this period. The field of business perspective categorizes economic activity into sectors such as agriculture, manufacturing, services, and more, while the expenditures approach breaks down GDP growth into components like consumption, investment, government spending, and net exports.

Comparing GDP growth by field of business and by expenditures offers a nuanced understanding of the economic dynamics at play. It helps identify which sectors or components were the primary contributors to growth and which might have faced challenges. This analysis also sheds light on the interplay between production and consumption, investment patterns, and the role of government in influencing economic expansion.

By examining these differences in GDP growth from multiple angles, policymakers can make more informed decisions to bolster economic resilience, businesses can align strategies with the prevailing trends, and economists can refine their models and predictions. This analysis, based on data from the first quarter of 2019, offers valuable insights into the complex web of economic forces that shape a nation's prosperity and well-being.

LITERATURE REVIEW

Gross Domestic Product

GDP is a fundamental measure of a country's economic activity and represents the total value of all goods and services produced within a country's borders over a specific time period. It serves as a critical indicator of a

nation's economic health and performance. GDP can be analyzed in various ways, including by business sectors and by expenditure components (Rounaghi, 2019).

GDP measures the total market value of all goods and services produced within a country's borders within a specific time frame. It serves as an essential tool for quantifying the economic output of a nation, allowing comparisons across time periods and between countries. Researchers such as Simon Kuznets initially developed GDP during the Great Depression to help policymakers assess the impact of economic downturns and devise appropriate interventions (Fatima et al., 2020; Hashmi et al., 2021; Umar et al., 2021).

One of the primary uses of GDP is to measure and analyze economic growth. Higher GDP figures are often interpreted as indicators of a healthy economy, as they suggest increased economic activity, higher income levels, and improved living standards. Numerous studies have explored the relationship between GDP growth and factors such as investment, technological advancements, and labor productivity, highlighting the role of GDP in understanding the mechanisms of economic development.

Governments and policymakers rely heavily on GDP figures to formulate economic policies and make informed decisions. A higher GDP can signify a growing economy and increased government revenue, potentially allowing for investments in infrastructure, social programs, and public services. Conversely, a decline in GDP might trigger policy responses aimed at stimulating economic activity and reversing downturns.

Gross Domestic Product (GDP) remains a crucial tool for understanding and analyzing economic output and growth. Its simplicity and historical significance have made it a staple in economic analysis and policy formulation. However, its limitations in capturing the complexities of modern economies and the broader dimensions of well-being have led to calls for the development and adoption of more comprehensive indicators that consider social, environmental, and quality of life factors. As the world continues to evolve, the ongoing discourse surrounding GDP and its alternatives will play a vital role in shaping how societies measure and pursue economic progress.

Business

The concept of business is central to modern economies, serving as a catalyst for economic growth, job creation, innovation, and societal development. Businesses range from small startups to multinational corporations, encompassing various industries and sectors. This literature review explores key themes in business literature, including business dynamics, strategies, and their broader impacts on economies and societies (Dalle et al., 2020).

Entrepreneurship plays a pivotal role in business dynamics. Research highlights the significance of entrepreneurial activities in driving innovation, creating jobs, and fostering economic growth. Scholars such as Joseph Schumpeter introduced the concept of "creative destruction," wherein entrepreneurs disrupt existing markets with innovative products or services, leading to economic transformation. Contemporary studies examine the role of entrepreneurial ecosystems, access to funding, and regulatory environments in influencing business creation and growth.

Business strategies are essential for navigating competitive landscapes. Scholars like Michael Porter have contributed to the understanding of competitive advantage, emphasizing differentiation, cost leadership, and focus strategies. Research explores how firms leverage their strengths, adapt to market changes, and create value for customers. Additionally, the emergence of digital technologies has spurred discussions on strategies for digital transformation and the integration of e-commerce, data analytics, and automation.

The impact of business extends beyond economic factors, encompassing ethical considerations and corporate social responsibility (CSR). Literature on CSR explores how businesses can contribute positively to society by addressing environmental concerns, promoting ethical practices, and engaging in philanthropy. Businesses are increasingly expected to demonstrate social and environmental responsibility, with studies investigating the effects of CSR on brand image, consumer loyalty, and stakeholder relationships.

In an interconnected world, international business has become a key focus of research. Globalization has facilitated cross-border trade, investment, and collaboration. Scholars analyze the strategies and challenges faced by multinational corporations, including cultural differences, regulatory complexities, and geopolitical risks. The literature also examines the effects of international business on local economies, labor markets, and innovation ecosystems.

Expenditures

Expenditures, in the context of economics and public finance, refer to the financial outflows incurred by individuals, businesses, governments, and other entities to acquire goods, services, and assets. This literature

review explores the various dimensions of expenditures, including consumption, investment, government spending, and their implications for economic activity, growth, and public policy (Issues & Kumar, 2015).

Consumption expenditures represent the spending by households on goods and services for immediate consumption. Research in this area focuses on consumer behavior, income distribution, and factors influencing consumption patterns. Scholars like John Maynard Keynes emphasized the role of consumption in driving economic demand and economic fluctuations. Consumption expenditures also play a significant role in measuring economic growth through indicators such as Gross Domestic Product (GDP).

Investment expenditures involve the allocation of funds to acquire productive assets, such as machinery, equipment, and infrastructure, with the aim of generating future income and economic growth. The literature delves into the determinants of investment decisions, including interest (Purnama, 2023) rates (Eddy et al., 2023), technological advancements, and business expectations. Investment expenditures are crucial for capital formation, innovation, and long-term economic development (Ranti, 2013).

Government expenditures encompass public spending on various activities, such as public services, defense, infrastructure, and social welfare programs. Research explores the role of government expenditures in influencing economic stability, income distribution, and public well-being. The literature also examines fiscal policy, wherein government spending can be used as a tool to stimulate or control economic activity, especially during economic downturns (Bane, 2018).

The field of public finance examines the allocation of resources and the management of government revenues and expenditures. Researchers analyze topics such as tax policy, budget deficits, public debt, and intergovernmental fiscal relations. The literature discusses optimal taxation, efficiency in government spending, and the impact of public finance decisions on economic growth and income distribution (Stubben, 2010).

METHODOLOGY

Research Design

This study has a quantitative approach (Sekaran & Bougie, 2016), which means that the data collected will be measured and analyzed numerically. The variable measurement scale in this study is the ratio, which indicates that the measured variables will have a higher level of measurement and are more meaningful than lower measurement scales, such as nominal or ordinal scales.

The SPSS (Statistical Package for the Social Sciences) application is used as a data analysis tool in this study. SPSS is one of the statistical software that is commonly used to analyze quantitative data. With the help of SPSS, researchers can perform various types of statistical analysis, such as descriptive analysis, regression analysis, hypothesis testing, and so on.

The environmental setting for this research is real and non-contrived. That is, this research was conducted in a real environment and not contrived. The data collected comes from situations or contexts that actually happened, not in situations created by researchers. This approach allows researchers to observe phenomena in actual circumstances and draw conclusions that are more relevant to the situation in the field.

By combining a quantitative approach, a ratio measurement scale, the use of SPSS applications, and real and non-contrived environmental settings, this research has the potential to provide an in-depth understanding of the phenomenon under study with the support of strong statistical analysis.

Data Collection and Source Selection

Data is collected from reliable and authoritative sources such as national statistical agencies, central banks, and economic research institutions. GDP data for different sectors and expenditure components are obtained for the first quarter of 2019. Gathered GDP data for the first quarter of 2019 from official government sources, such as national statistical agencies or central banks. Acquired sectoral data for various fields of business, including agriculture, manufacturing, services, and others, from authoritative economic databases. Collected data on different components of GDP expenditures, including consumption, investment, government spending, and net exports.

Data Analysis Method

This study uses the dependent t test to test the differences in the two groups of GDP data. Conducted a comparative analysis of GDP growth rates across different fields of business and expenditure categories. The hypothesis will be accepted if the calculated t value is greater than 1.96 (Lind et al., 2018).

RESULT AND DISCUSSION

Analysis Result

From the data above, an independent different test analysis was carried out where α = 5% and t = 0.1628. Based on a 2-sided independent test, it is not true that there is a difference in GDP growth according to business sector and GDP growth according to expenditure. And the left-tailed test shows that it is not true that GDP growth according to business sector is smaller than GDP growth according to expenditure. And the right-tailed side test proves incorrectly that GDP growth according to business sector is greater than GDP growth according to expenditure.

Two-Sided Independent Test

In a two-sided independent test, you are examining whether there is a significant difference between GDP growth according to business sectors and GDP growth according to expenditures. The test statistic 't' (0.1628) is likely derived from comparing the means of the two groups while accounting for their variances and sample sizes. The significance level α is set at 5%.

The conclusion that "it is not true that there is a difference in GDP growth according to business sector and GDP growth according to expenditure" suggests that the p-value associated with the test statistic is greater than 0.05 (α). This means that you fail to reject the null hypothesis, which states that there is no significant difference between the two groups.

Left-Tailed Test

The left-tailed test aims to determine whether GDP growth according to the business sector is smaller than GDP growth according to expenditure. The phrasing "it is not true that GDP growth according to business sector is smaller than GDP growth according to expenditure" implies that the p-value associated with this test is not less than 0.05.

In practical terms, this suggests that the data does not provide sufficient evidence to support the claim that GDP growth based on business sector is significantly smaller than GDP growth based on expenditures.

Right-Tailed Test

The right-tailed test examines whether GDP growth according to the business sector is greater than GDP growth according to expenditures. The statement "the right-tailed side test proves incorrectly that GDP growth according to business sector is greater than GDP growth according to expenditure" implies that the p-value associated with this test is less than 0.05.

This means that you would have rejected the null hypothesis, indicating that there is evidence to suggest that GDP growth based on business sector is greater than GDP growth based on expenditures. However, given your statement, it seems there might have been a mistake in this conclusion.

Comprehensive Discussion

The results of these tests suggest that there isn't enough statistical evidence to confidently assert that there are significant differences in GDP growth between business sectors and GDP growth based on expenditures. This might imply that, during the specific time period under analysis, the variations in GDP growth in relation to sectors and expenditures are not substantial enough to be considered statistically significant.

It's important to consider the implications of these findings. While the statistical tests did not show significant differences, this doesn't necessarily mean that there are no differences at all. Other factors not considered in this analysis could be influencing the outcomes. Additionally, the validity of these conclusions depends on the quality and representativeness of the data and the appropriateness of the statistical methods used.

When interpreting statistical results, it's crucial to consider the context, the assumptions of the tests, and the limitations of the data and methodology. It's advisable to review the calculations, data, and the specific statistical test procedures to ensure accuracy and reliability in drawing conclusions about the relationship between GDP growth based on business sectors and GDP growth based on expenditures.

CONCLUSION

Conclusion

The conclusion is that GDP growth according to business sector and GDP growth according to expenditure are the same or have no difference. There is no statistically significant difference between GDP

growth according to business sectors and GDP growth according to expenditures. In other words, the data does not provide enough evidence to support the idea that GDP growth varies significantly between these two aspects (business sectors and expenditures) during the analyzed period.

Implication

This conclusion implies that, at a 5% significance level ($\alpha = 0.05$), you have failed to reject the null hypothesis, which suggests that the means of GDP growth in both categories are the same or very similar. This finding has implications for understanding the dynamics between different sectors of the economy and how expenditures contribute to overall economic growth.

Recommendation

It's important to recognize that statistical conclusions are based on the available data and the methods applied. It's recommended to interpret these results in the broader context of economic theory and any limitations of the data and analysis methods. Additionally, consider that future analyses or changes in economic conditions might yield different outcomes.

REFERENCES

Aggarwal, D., & Padhan, P. C. (2017). Impact of Capital Structure on Firm Value: Evidence from Indian Hospitality Industry. *Theoretical Economics Letters*, *07*(04), 982–1000. https://doi.org/10.4236/tel.2017.74067

Baah, C., Opoku-Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., Afum, E., Faibil, D., & Abdoulaye, F. A. M. (2020). Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs. *Sustainable Production and Consumption*, *27*, 100–114. https://doi.org/10.1016/j.spc.2020.10.015

Bane, J. (2018). Dynamics and Determinants of Inflation in Ethiopia. In *Economic Growth and Development* (pp. 67–84). https://doi.org/10.1007/978-981-10-8126-2_4

Dalle, J., Siyoto, S., Astika, N. D., Negara, D. J., Chandra, T., & Anam, K. (2020). Moderating Role of IT Adoption and Mechanism of Dynamic Capabilities on Indonesian Pharmaceutical Firms Performance. *Systematic Reviews in Pharmacy*, *11*(9), 982–992.

Eddy, P., Sudarno, Renaldo, N., Hutahuruk, M. B., & Prayetno, M. P. (2023). The Effect of Farmers' Exchange Rates on Rice Prices in 2017-2019. *Luxury: Landscape of Business Administration*, *1*(2), 102–110. https://firstcierapublisher.com/index.php/luxury/article/view/33

Fatima, S., Chen, B., Ramzan, M., & Abbas, Q. (2020). The Nexus Between Trade Openness and GDP Growth: Analyzing the Role of Human Capital Accumulation. *SAGE Open*, *10*(4), 1–18. https://doi.org/10.1177/2158244020967377

Hashmi, S. M., Khushik, A. G., Gilal, M. A., & Yongliang, Z. (2021). The Impact of GDP and Its Expenditure Components on Unemployment Within BRICS Countries: Evidence of Okun's Law From Aggregate and Disaggregated Approaches. *SAGE Open*, *11*(2), 1–11. https://doi.org/10.1177/21582440211023423

Issues, F., & Kumar, B. R. (2015). *Determinants of Value Creation: An Empirical Examination from UAE Market*. *5*(1), 75–85.

Lind, D. A., Marchal, W. G., & Wathen, S. A. (2018). Statistical Techniques in Business & Economics. In *Economics* (17th ed.). McGraw-Hill Education.

Purnama, I. (2023). Increasing Understanding of One-Way ANOVA Material for Accounting Students: A Case Study of Deposit Interest. *Reflection: Education and Pedagogical Insights*, *1*(2), 69–73. https://firstcierapublisher.com/index.php/reflection/article/view/30

Ranti, U. O. (2013). Determinants of Dividend Policy: A Study of Selected Listed firms in Nigeria. *Change and Leadership*, *17*, 107–119.

Rounaghi, M. M. (2019). Economic analysis of using green accounting and environmental accounting to identify environmental costs and sustainability indicators. *International Journal of Ethics and Systems*, *35*(4), 504–512. https://doi.org/10.1108/IJOES-03-2019-0056

Sekaran, U., & Bougie, R. (2016). *Research Method for Business A Skill-Building Approach Seventh Edition* (Seventh Ed). John Wiley & Sons. https://doi.org/10.1007/978-94-007-0753-5_102084

Stubben, S. R. (2010). Discretionary Revenues as a Measure of Earnings Management. *The Accounting Review*, *85*(2), 695–717. https://doi.org/10.2308/accr.2010.85.2.695

Umar, M., Sial, M. S., & Xu, Y. (2021). What Are The Channels Through Which Bank Liquidity Creation Affects GDP? Evidence From an Emerging Country. *SAGE Open*, *11*(2), 1–11. https://doi.org/10.1177/21582440211022325