

Analysis of The Differences in the Financial Performance of The GKJ Pension Fund before and During the Covid-19 Pandemic

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ABSTRACT

This research aims to determine the Differences in the Financial Performance of the GKJ Pension Fund before and during the COVID-19 pandemic using Return On Investment (ROI), Operational Cost Efficiency (OCE), Investment Cost Efficiency (ICE), and Fund Sufficiency Ratio (FSR). The research results indicate that there is no significant difference in Return On Investment (ROI) before and during the COVID-19 pandemic, suggesting that the ability to generate ROI remains consistent before and during the pandemic. There is no significant difference in Operational Cost Efficiency (OCE) before and during the COVID-19 pandemic, indicating that the GKJ pension fund can achieve operational cost efficiency both before and during the pandemic. Investment Cost Efficiency (ICE) shows no significant difference before and during the COVID-19 pandemic, likely because thorough analysis is conducted before making investments, considering both investment returns and costs. The Fund Sufficiency Ratio (FSR) shows a significant difference before and during the COVID-19 pandemic, attributed to the growth of net assets used as a funding source being smaller than actuarial obligations. The COVID-19 pandemic led to an increase in actuarial obligations. The GKJ Pension Fund needs to enhance the Fund Sufficiency Ratio in order to demonstrate the quality of the GKJ Pension Fund.

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1. INTRODUCTION

There are several alternatives for providing employee welfare guarantees to ensure their well-being, one of which is through pension fund institutions. The welfare assurance provided is a significant factor in reducing employee-related issues caused by challenges they face in their lives, such as the risk of job termination, advancing age, and disasters that may lead to impaired bodily functions or even death. These risks have economic impacts on the lives of employees or participants and their families, potentially disrupting their livelihoods. To address these issues, various preventive measures have been established, including the establishment of pension programs, whether managed by private companies/organizations or government entities, as has been well-known.

Well-being is a form of benefit provided by employers or founders to employees or participants to ensure they and their families do not experience financial difficulties in case they are no longer able to work or reach retirement age. According to pension fund regulations, the primary responsibility of pension funds is to manage and execute programs that provide pension benefits.

The mechanism for funding pension programs involves contributions from participants and founders, and the collected funds are invested in various forms to generate returns that can be used to pay pension benefits to participants.

Two types of non-bank financial institutions in Indonesia provide programs for ensuring the continuity of individuals' livelihoods: 1) Pension Funds established by individuals, private business entities, or governments that employ workers, referred to as Employer-Sponsored Pension Funds. The pension program commonly consists of two forms: defined benefit plans with fixed benefits but variable contributions calculated using specific formulas, and fixed contribution plans with variable pension amounts determined by the accumulated contributions and their investment returns. 2) Financial institutions called Pension Funds of Financial Institutions (DPLK) established by banks and life insurance companies to offer pension programs to individuals, including employees and self-employed individuals not affiliated with Employer-Sponsored Pension Funds.

During the COVID-19 pandemic, the pension fund industry, including both types of institutions, did not experience significant impacts, according to the Financial Services Authority (OJK) data until November 2020. Although resilient, the pension fund industry should remain attentive to its financial performance amid changing circumstances. Industry experts have noted pressures on pension fund investments due to the pandemic, particularly the decline in interest rates across various investment instruments.

In light of these conditions, the Association of Indonesian Pension Funds (ADPI) assesses pension fund performance using indicators such as Return On Investment (ROI), Operational Cost Efficiency (EBO), Investment Cost Efficiency (EBI), and Fund Sufficiency Ratio (RKD). Similar to other pension funds, the GKJ Pension Fund was established with the purpose of providing sustainable income for participants after retirement and for eligible beneficiaries, such as heirs. The program, often referred to as a defined benefit plan, employs specific formulas for calculating benefits and determining contribution amounts based on actuarial calculations. The GKJ Pension Fund, in line with ADPI standards, also utilizes these indicators to evaluate financial performance.

Given the unavoidable impact of the COVID-19 pandemic, the GKJ Pension Fund is not exempt from its pressures. Thus, it is intriguing to investigate the effects of the pandemic on its financial performance.

Problem Formulation

Based on the provided description, the research problem formulated is the difference in the financial performance of the GKJ Pension Fund before and during the COVID-19 pandemic.

Literature Review

To ensure the proper implementation of financial regulations for a company, an analysis of the financial condition, often referred to as financial performance analysis, is conducted (Fahmi, 2018). A company's financial performance is considered good when it adheres to applicable financial regulations (Munawir, 2010). Financial performance evaluation involves comparing a company's financial ratios with industry standards or conducting time series analysis to compare the financial conditions of the assessment year with previous years, thereby assessing the achievement of financial goals using each ratio. The performance evaluation of pension funds can be measured using indicators such as Return On Investment (ROI), Operational Cost Efficiency (EBO), Investment Cost Efficiency (EBI), and Fund Sufficiency Ratio (RKD). These indicators are used by the Association of Indonesian Pension Funds (ADPI) to determine the best-performing pension fund institutions, which are awarded annually (Diah R, 2017).

ROI (Return On Investment)

Profitability can be measured by the rate of return on investment, known as Return On Investment (ROI). Therefore, it can be said that measuring the level of profitability involves comparing the expected investment returns with the actual returns generated. If the investment outcomes exceed the expected level, the investment is considered profitable. According to Fahmi (2011), the term used for investment return is often referred to as Return on Total Assets (ROA), which assesses the ability of invested assets to generate returns as anticipated. These investments are essentially equivalent to

the assets of a company that have been invested or placed. Meanwhile, according to Kasmir (2015), ROI is a ratio that signifies the return on the amount of assets used within a company. ROI also serves as a measure of management effectiveness in managing investments (Kasmir, 2015). Return On Investment (ROI) represents the capability of a company or institution to generate profits in the past (Diah R, 2017). Given its field of activity, which involves investing collected contributions, ROI refers to the outcomes of various forms of investment placed as indicators of financial performance.

EBO (Operational Cost Efficiency)

Operational Cost Efficiency is a ratio that measures the efficiency of a pension fund in conducting operational activities and fulfilling its role as a fund collector, investor, and provider of pension benefits to participants who have entered the retirement phase (Diah R, 2017). Operational Cost Efficiency (EBO) is a comparison used to assess the efficiency of a pension fund in carrying out operational activities and fulfilling its responsibilities as a fund collector, investor, and provider of pension payments to participants who have reached the retirement phase.

EBI (Investment Cost Efficiency)

Investment Cost Efficiency is a ratio that measures the efficiency of a pension fund in conducting its investment activities across various types of investments as per investment directives (Endang et al., 2021). Investment costs refer to expenses incurred during investment activities, derived from the contributions paid by participants and already received. Meanwhile, the permissible forms of investment align with the investment directives. If investment costs are substantial, they can impact the reduction of development outcomes (Diah, R, 2017). Given these circumstances, an investment plan in line with investment directives necessitates the calculation of the investment costs to be incurred. Each form or type of investment will have distinct associated costs.

Fund Sufficiency Ratio (RKD)

The Fund Sufficiency Ratio is the result of Wealth to Funding with Present Value of Actuarial Obligations (Endang R, 2021). Alternatively, it's the comparison between the net asset value and actuarial obligations. The financial performance measurement, indicating the health level of a pension fund, is assessed through the Fund Sufficiency Ratio (RKD), the capacity of net assets to meet the present value of actuarial obligations or obligations calculated assuming the pension fund's continuity until all participant and beneficiary obligations are fulfilled. The limit for the pension fund's RKD is 100%. If the RKD achievement exceeds 100%, it indicates sufficient funding or being funded. However, if the RKD is less than 100%, it signifies that the pension fund lacks sufficient funding to meet its obligations or is unfunded.

Conceptual Framework

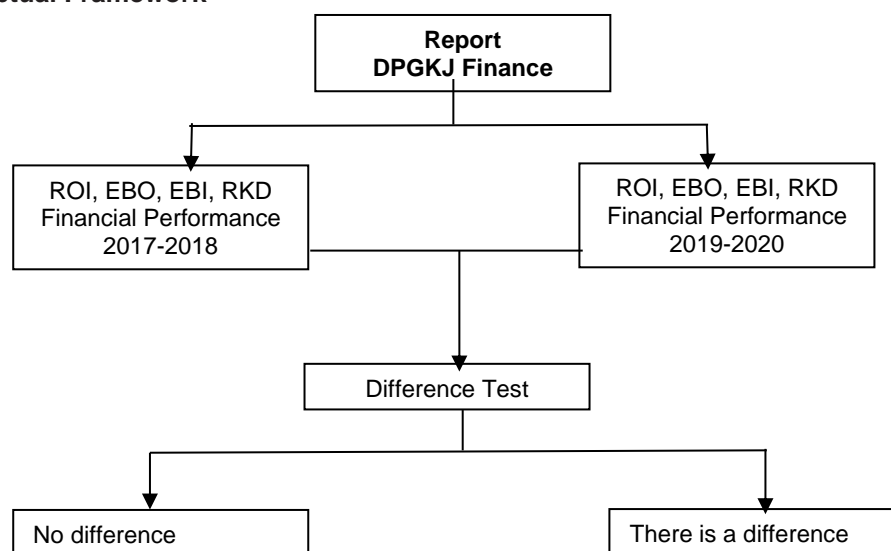


Figure 1. Framework for Thinking about Differences in Financial Performance

Hypothesis:

There are significant differences in the financial performance of DPGKJ (ROI, EBO, EBI, RKD) before and during the Covid-19 pandemic

2. RESEARCH METHOD

This type of quantitative descriptive research is research conducted to gather information about an indication or situation that is happening at the moment. (Uma Sekaran: 2006) The descriptive method is research on a group of people, objects, conditions, systems of ideas, thoughts or an overview at the moment. While quantitative research is a study with data analysis in the form of numbers or data that is not numbers but is made into numbers or quantified.

Observation Unit

The unit of observation is a medium as a source for obtaining information and data about the unit of analysis. (Gulo: 2005). The unit of observation or research object is the GKJ Pension Fund in Salatiga.

Analysis Unit

The unit of analysis is the object that contains the information you want to know. (Gulo: 2005). The unit of research analysis is the DPGKJ financial reports before and during the covid 19 pandemic. (2017 – 2020).

Conceptual Definition and Operational Definition

Earnings from investments, or Return On Investment (ROI), is a comparison or ratio indicating the magnitude of the return rate on investments made based on net income, obtained using the formula:

$$\text{ROI} = \frac{\text{Net Investment Result}}{\text{Average Total Investment}} \times 100\%$$

Operational Cost Efficiency (EBO) is a ratio that measures the efficiency of operational activities, receipt of contributions deposited by participants and employers, investment, and payment of pension benefits to participants who have entered the retirement phase. The formula to calculate EBO is as follows:

$$\text{EBO} = \frac{\text{Operational Cost}}{\text{Net Assets}} \times 100\%$$

Investment Cost Efficiency (EBI) is a ratio that measures the efficiency of a pension fund in conducting its investment activities across various types of investments as per the established investment directives for the pension fund. The formula for calculating EBI is as follows:

$$\text{EBI} = \frac{\text{Investment Cost}}{\text{Investment Income}} \times 100\%$$

Fund Sufficiency Ratio is the result of Wealth to Funding with Present Value of Actuarial Obligations. Its calculation is as follows:

$$\text{RKD} = \frac{\text{Wealth to Funding}}{\text{Present Value of Actuarial Obligations}} = X 100\%$$

Analysis Method

Paired Samples T Test Statistical Method

The Paired Samples T test is used to test the difference in means between two paired data groups or samples. (Duwi P, 2010)

Statistical Hypothesis:

Ho: $\mu_1 = \mu_2$ There is no significant difference in the Financial Performance of DPGKJ before and during the Covid-19 pandemic.

Ha: $\mu_1 \neq \mu_2$ There is a significant difference in the Financial Performance of DPGKJ before and during the Covid-19 pandemic.

3. RESULTS AND DISCUSSIONS

Secondary data is used as a reference to address the research problem. The secondary data referred to is the financial reports of the GKJ Pension Fund for the years 2016-2020.

Tabel 1. Financial Performance of GKJ Pension Fund for the Years 2016-2018
(Before the Covid-19 Pandemic)

Description	2016	2017	2018
ROI	7,73 %	7,78 %	6,99 %
EBO	1,90 %	1,71 %	1,62 %
EBI	2,02 %	1,79 %	2,77 %
RKD	97,00 %	98,30 %	93,50 %

Source: Data processed in 2022

From Table 1, the financial performance of the GKJ Pension Fund for the period of 2016-2018, based on the Return On Investment (ROI), shows that the investment result increased by 0.05% in 2017 compared to 2016 due to an increase in investment returns. However, in 2018, it decreased by 0.79% due to lower deposit interest rates received, which were not as high as guaranteed. The Operational Cost Efficiency (EBO) decreased by 0.19% in 2017 compared to 2016, and in 2018, there was a decrease of 0.09% due to reduced operational costs, indicating that GKJ Pension Fund achieved operational cost efficiency. The Investment Cost Efficiency (EBI) decreased by 0.23% in 2017 compared to 2016 due to lower investment costs, while in 2018, it increased by 0.98% due to higher investment expenses. The Funding Sufficiency Ratio (RKD) increased in 2017 compared to 2016, but in 2018, it decreased despite an increase in funding wealth.

Tabel 2. Financial Performance of GKJ Pension Fund for the Years 2019-2021
(During the Covid-19 Pandemic)

Description	2019	2020	2021
ROI	7,45 %	7,45 %	6,52 %
EBO	1,54 %	1,61 %	1,50 %
EBI	2,14 %	1,99 %	2,17 %
RKD	84,40 %	68,80 %	71,55 %

Source: Data processed in 2022

During the Covid-19 pandemic, the financial performance of the GKJ Pension Fund shows a decrease in investment results as indicated by Return On Investment (ROI) in 2021. This decrease is attributed to the economic impact of the pandemic, leading to lower deposit and bond coupon rates. Operational Cost Efficiency (EBO) in 2020 increased due to expenses related to accounting and actuarial services. Investment Cost Efficiency (EBI) in 2021 increased in terms of investment expenses, while investment results decreased. The Funding Sufficiency Ratio (RKD) decreased significantly, indicating challenges in funding due to the pandemic's impact.

Tabel 3. Paired Samples Test Results

Financial Performance	Mean Before	Mean During	Sig
ROI	7,5000	7,2133	,140
EBO	1,7433	1,5500	,147
EBI	2,1933	2,1000	,749
RKD	96,2667	74,9167	,049

Data processed

From the test results, it is observed that there is no significant difference in the magnitude of investment outcomes or Return On Investment (ROI) before and during the COVID-19 pandemic. Despite the pandemic's impact across all business sectors, the achieved ROI of the GKJ Pension Fund has not been affected by the pressures of the COVID-19 pandemic. In managing its investment portfolio, the GKJ Pension Fund is capable of selecting investment forms that yield high returns while considering risks and adhering to established investment guidelines. A significant proportion of the GKJ Pension Fund's portfolio is allocated to fixed deposit investments. The contribution of fixed deposit interest remains high compared to other types of investments. Apart from fixed deposits, the GKJ Pension Fund also invests in bonds that provide coupon payments equivalent to fixed deposit interest rates. This research's findings contradict previous studies (Stevani, Sueiji: 2021) that showed differing financial performance in banks before and during the COVID-19 pandemic. Similarly, they do not align with the study by Fajar et al. (2021).

The research findings demonstrate that there is no significant difference in the magnitude of Operational Cost Efficiency (EBO) before and during the COVID-19 pandemic. The pandemic's pressures have not impacted the efficiency of operational costs, as the GKJ Pension Fund adheres to standardized costs and budgetary considerations to maintain efficient expenditure. This condition indicates that the GKJ Pension Fund is capable of maintaining operational cost efficiency both before and during the COVID-19 pandemic. There is no significant difference in Investment Cost Efficiency (EBI) before and during the COVID-19 pandemic. Investment costs, including commissions and fees, are always considered by the GKJ Pension Fund before making investment placements. If high investment costs are projected, the fund switches to investment forms with lower costs. Rarely does the fund purchase bonds on the secondary market to avoid high commission costs. High investment costs can diminish investment returns (Diah, R: 2017).

The Funding Sufficiency Ratio (RKD) demonstrates a significant and different outcome before and during the COVID-19 pandemic. This difference arises from an increase in net wealth available for funding, which is lower than the increase in actuarial obligations. Actuarial obligations are calculated by actuaries, considering various assumptions such as interest rates, increases in basic pension income, and average participant age. In 2020, the GKJ Pension Fund increased basic pension income by around 48%, leading to a decrease in the Funding Sufficiency Ratio (RKD). Funding sources comprise regular and additional contributions, as well as investment income. During the pandemic, challenges emerged in making additional contributions, while investment income also declined due to lowered interest rates and market conditions impacted by the COVID-19 pandemic.

This supports the findings of a study by Diah (2017), which suggested that a higher ratio indicates better pension fund funding quality.

4. CONCLUSION

There is no significant difference in the financial performance of the GKJ Pension Fund before and during the COVID-19 pandemic, as measured by the Return On Investment (ROI). Despite the decline in interest rates and the impact of the pandemic on the capital market, the ROI remains consistent, indicating that the investment portfolio of the GKJ Pension Fund consistently considers returns while still being mindful of risks and adhering to investment directives. There is no significant difference in the financial performance of the GKJ Pension Fund measured by Operational Cost Efficiency (EBO) before and during the COVID-19 pandemic. It can be concluded that the institution efficiently manages operational expenditures both before and during the pandemic. There is no significant difference in the financial performance of the GKJ Pension Fund measured by Investment Cost Efficiency (EBI) before and during the COVID-19 pandemic. This shows that investment cost efficiency is well-maintained. Every investment is carefully analyzed in terms of the associated costs. If the investment costs are too high, adjustments are made to other investment choices. This aligns with prior research, where high investment costs can indeed impact investment returns (Diah, R: 2017). There is a significant difference in the financial performance of the GKJ Pension Fund, as evaluated through the Funding Sufficiency Ratio (RKD) before and during the COVID-19 pandemic. This difference arises from an increase in net wealth that falls short of the actuarial value. A higher Funding Sufficiency Ratio signifies better funding quality (Diah, R: 2017).

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