

Analysis of Branch Office Efficiency in the Ranks of DKI Jakarta Regional Office BPJS Ketenagakerjaan

Aristin Nanda Kumalasari*, Popong Nurhayati, Yudha Heriyawan Asnawi

IPB University, Indonesia

Email: kumalasarinda11@gmail.com*, popong@apps.ipb.ac.id,
yudha.asnawi@apps.ipb.ac.id

KEYWORDS	ABSTRACT
DEA; Efficiency; Branch Offices; Tobit Regression	The number of active workers who register as BPJS Employment participants is still relatively low. This shows that the use of resources owned by branch offices has not been optimal in an effort to achieve the set targets. This study aims to analyze the efficiency of branch offices in the DKI Jakarta area using the Data Envelopment Analysis (DEA) method with a production approach, which is then followed by Tobit regression analysis to identify the factors that affect the efficiency level. The results of the study show that there is a variation in the level of efficiency between branch offices within the DKI Jakarta Regional Office during the period 2019 to 2023. During the five-year observation period, branch offices with a 3A classification were recorded to have the highest level of efficiency compared to other categories. Tobit's regression analysis revealed that the type of branch office had a significant negative effect on the level of efficiency. On the other hand, the variable in the number of claim cases actually shows a significant positive influence on efficiency. The formulation of recommendations based on the results of the analysis includes appreciation of best practices, adjustment of branch office types, digitization of JHT Claims, and management of employee mutation systems.

Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)



INTRODUCTION

The Employment Social Security Administration Agency (*BPJS*) is an institution mandated by law to manage and run the employment social security program, as stipulated in Law No. 24 of 2011. *BPJS Ketenagakerjaan* has broad responsibilities; this institution not only serves formal workers, but also includes informal sector workers, workers in the construction services sector, and Indonesian migrant workers working abroad. Currently, *BPJS Ketenagakerjaan* has five programs as a form of protection for workers, which include the Work Accident Insurance Program (*JKK*), Death Insurance (*JKM*), Old Age Insurance (*JHT*), Pension Insurance (*JP*), and Job Loss Insurance (*JKP*).

BPJS Employment branch offices play a very important role in the overall operation of the institution. As units that interact directly with participants, namely employers/companies and workers, branch offices are the spearhead in the implementation of *BPJS Employment* services in various regions. Productivity measurement and efficiency assessments are important for public sector institutions, especially when there is a risk of resource constraints. The efficiency measurement that is often used is Data Envelopment Analysis (*DEA*). In addition, an analysis of the factors that affect the efficiency of each branch office needs to be carried out comprehensively.

Based on *BPJS Ketenagakerjaan*'s annual report in Table 1.2, the total number of contribution receipts from participants received by *BPJS Ketenagakerjaan* after being accumulated from all branch offices in Indonesia in 2020 decreased by 0.22% from 2019. On

the other hand, expenditure in the form of claim payments in 2020 experienced a significant increase compared to the previous year, by 23%. This occurred due to an increase in the number of *JHT* claims paid by 18.4% in 2020. This increase is likely due to the deterioration of economic conditions caused by the Covid-19 pandemic and the high number of claims submitted. As economic conditions began to stabilize, there was a consecutive increase in contribution receipts from 2021 to 2023, reaching 96,868,468 million rupiah or an increase of 32%.

Table 1. Receipt of contributions and claim payments for 2019-2023

Year	Fees (Million Rupiah)	Claim Payment (Million Rupiah)	Case (Claim)
2019	73.427.496	29.716.412	2.469.527
2020	73.263.768	36.445.470	2.904.593
2021	80.252.707	42.778.360	3.038.684
2022	88.312.845	49.038.380	3.937.699
2023	96.868.468	53.513.116	4.577.146

Source: BPJS Employment (2019-2023)

The aspect of *BPJS Ketenagakerjaan* contribution receipts has grown, but this trend is not in line with the scope of active workforce participation. In Table 1.3, it can be seen that the number of active workers registered in the *BPJS Employment* program has not reached the target set by the institution for the last five years. This is reflected in the gap in the number of active workers that has not been successfully achieved by several branch offices. In 2023, the number of active participants in *BPJS Ketenagakerjaan* reached 41 million workers. When compared to the total working population in Indonesia, which reaches 140 million people (BPS, 2023), only about 30% of the workforce receives protection through the employment social security program.

Table 2. Coverage of BPJS Ketenagakerjaan membership in 2019-2023

Year	Active Labor Target (people) ^a	Active Workforce (person) ^a	Difference in Achievement of Active Labor (people)	Total Working Population (people) ^b	Proportion (%)
2019	34.354.268	34.166.257	188.011	128.454.180	26,60
2020	40.602.736	29.980.082	10.622.654	128.454.184	23,34
2021	37.000.000	30.660.901	6.339.099	131.050.523	23,40
2022	37.932.718	35.864.017	2.068.701	135.296.713	26,51
2023	46.349.942	41.523.516	4.826.426	139.852.377	29,69

aSource: BPJS Employment (2019-2023)bSource: BPS (2023)

The low percentage of active labor coverage shows a significant gap, indicating that most of the workforce in Indonesia has not been registered as *BPJS Ketenagakerjaan* participants. This condition reflects the potential for contribution receipts that have not been optimized by branch offices, demonstrating that there remains a great opportunity for *BPJS Ketenagakerjaan* to reach workers who are not yet participants. Contribution receipts that are not optimal affect the sustainability of *BPJS Ketenagakerjaan* as a whole. The phenomenon of performance disparity between branch offices is also a concern; in some branch offices, the achievement of membership and contribution management shows a positive trend, while in other branch offices, indications of inefficiency are still found. In addition to the low social security literacy factor among Indonesian workers, the efficiency and optimization of resource management at *BPJS Ketenagakerjaan* branch offices are also

suspected to be causes of the limited membership coverage. Factors such as limited resources in branch offices, variations in the number of registered participants, and differences in workload levels (targets to be achieved) are suspected to affect branch office efficiency.

Efficiency measurement is an important aspect in assessing company performance because it can evaluate the company's managerial performance and assess the competitiveness of the industry to survive in the future (Dwijayanti et al. 2022). As an important institution in the economy of the Republic of Indonesia, there is a need for good performance supervision related to the implementation of Employment Social Security. Efficiency measurement can be observed based on two aspects, namely the aspects of the company's expenditure (output) and income (input) (Mirghaderi et al. 2017). Data Envelopment Analysis (*DEA*) is a non-parametric method that is often used for efficiency measurement.

This research will be specifically focused on *BPJS Employment* branch offices in the Jakarta Regional Office (*Kanwil*) area. This region was chosen because it is one of the largest economic centers in Indonesia with a high level of labor mobility. In addition, the DKI Jakarta Regional Office also contributed a number of active participants which reached 18% of the total active participants in *BPJS Ketenagakerjaan* nationally, as well as a contribution receipt amounting to 40% of the total contributions received by *BPJS Ketenagakerjaan* in 2023. This area is the right location to evaluate the operational efficiency of branch offices in a dynamic and complex work environment.

Previous studies have examined efficiency and performance measurement in public sector institutions. Research by Färe et al. (2019) applied the Data Envelopment Analysis (*DEA*) method to evaluate efficiency in social security organizations across various countries and found that efficiency is strongly influenced by institutional management and regional economic factors. Similarly, a study by Nugroho and Hendratmoko (2021) focused on *BPJS Ketenagakerjaan* in Central Java, identifying that inefficiencies in branch offices were caused by low resource utilization and the gap in social security literacy among workers. However, both studies did not provide an in-depth analysis of branch office performance using integrated models that combine *DEA* and Tobit regression, nor did they focus on high-density regions with significant economic activity such as Jakarta.

This study aims to analyze efficiency and identify factors that affect the efficiency of branch offices. The phenomenon of not achieving the target of active labor by the branch office reflects that the branch office has not fully optimized the available resources. Branch offices as operational units are measured based on the achievement of performance indicators, namely contribution receipts and the number of active workforce. Contribution receipts are the total funds obtained from participant payments and accumulated from all social security programs managed by *BPJS Ketenagakerjaan*, while active workers are participants who routinely pay contributions. In this study, the efficiency of branch offices was analyzed using the Data Envelopment Analysis (*DEA*) method, which aims to assess the extent to which the inputs used are able to produce output optimally. After obtaining the efficiency value from the *DEA* analysis, this study will be continued with Tobit regression analysis to identify factors that affect the efficiency of branch offices. The results of the research are expected to be the basis for the formulation of efficiency improvement strategies for branch offices that have not been optimal, and to maintain efficiency for branch offices that have shown good performance, so that *BPJS Ketenagakerjaan* can further optimize resources, increase productivity, and ensure the sustainability of the labor protection program more effectively.

Analysis of Branch Office Efficiency in the Ranks of DKI Jakarta Regional Office BPJS Ketenagakerjaan

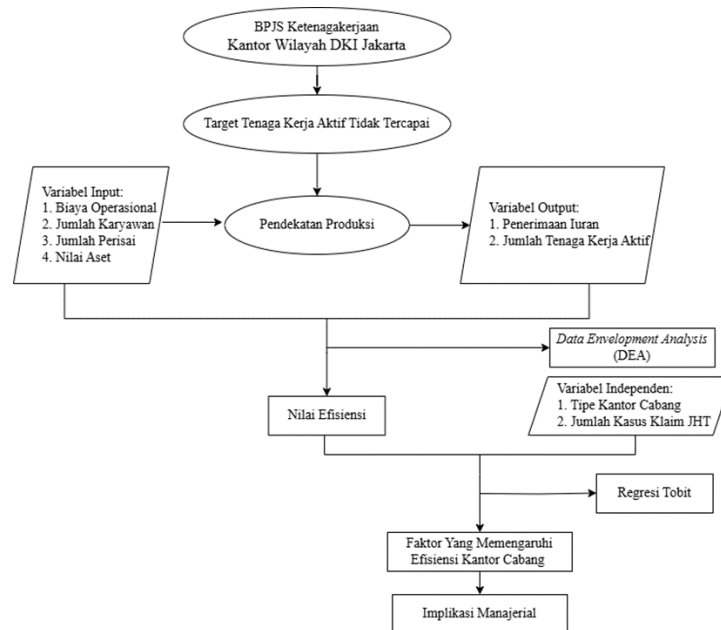


Figure 1. Frame of Mind

The hypothesis as an initial conjecture to test this study was formulated based on the findings of previous research. The hypotheses in this study are as follows:

1. Influence of Branch Office Type
H0 : Branch office type has no effect on efficiency
H1 : The type of branch office affects efficiency
2. The effect of the number of JHT claims
H0 : The number of JHT claim cases has no effect on efficiency
H1 : The number of JHT claim cases affects efficiency

The objectives of this study are: (1) to measure the efficiency level of branch offices in the DKI Jakarta Regional Office in 2019–2023, (2) to analyze the factors that affect the efficiency of branch offices in the DKI Jakarta Regional Office in 2019–2023, and (3) to formulate recommendations based on the results of the efficiency analysis for branch offices in the *Jakarta Regional Office*. Moreover, the results of this research are expected to provide useful information for various parties. For *BPJS Ketenagakerjaan*, this research is expected to serve as a reference in conducting performance evaluations and improving institutional performance. For academics, this research is expected to be a reference for further studies and to increase knowledge related to employment social security.

METHOD

The type of data in this study uses secondary data obtained from the BPJS Employment Financial Statements, the 2019-2023 BPJS Employment Annual Report, and data from related Directorates at BPJS Employment. This study uses a *total sampling* technique, with the population being all branch offices in the DKI Jakarta Regional Office of BPJS Ketenagakerjaan. The sample used in this study is 23 branch offices in the DKI Jakarta BPJS Employment Regional Office in 2019-2023.

Data Envelopment Analysis (DEA)

In the DEA method, the company is referred to as a *Decision Making Unit (DMU)*. The term is introduced in the same way as an entity, each entity is evaluated as part of a group that utilizes inputs to produce outputs. The results of the evaluation resulted in an efficiency score

between 0 to 1 obtained from the assessed entity (Cooper *et al.* 2006). Here is a mathematical model of the DEA method (Ascarya *et al.* 2010):

$$Efisiensi DMU_j = \frac{\sum_{k=1}^p \mu_k y_{kj}}{\sum_{i=1}^m \mu_i x_{ij}}$$

Where:

m = number of variables *Input*

p = number of variables *Output*

y_{kj} = value of *Output* k from DMUj

x_{ij} = value of *Input* i from DMUj

μ_i = the weight or coefficient for *input* i, which reflects each other's contributions *Input* against efficiency

μ_k = the weight or coefficient for *Input* K, which reflects each other's contributions *Input* against efficiency

j = 1.2.....n with n = total DMU studied

Tobit Regression

The Tobit model is used to analyze the influence of free variables on non-free variables on the condition that the non-free variables have limited or deliberately censored values while non-free variables have unlimited/restricted values (Gujarati 2003). The Tobit model used in this study is as follows:

$$E_{i,t} = \beta_0 + \beta_1 D_{1\ i,t} + \beta_2 X_{1\ i,t} + \varepsilon_{i,t}$$

Where:

$E_{i,t}$ = The relative efficiency level of the branch to i at period t

$D_{1\ i,t}$ = variable *Dummy* of type Branch Office I in Year T

$X_{1\ i,t}$ = Number of Branch Office Claim Cases I in Year T

β_0 = constant

β_1, β_2 = coefficient of independent variable

$\varepsilon_{i,t}$ = residual value

Table 3. Operational Variables

Variable	
Input	New Strategic Cost (Rupiah)
	Advanced Strategic Cost (Rupiah)
	Operating Costs (Rupiah)
	Routine and Subscription Fees (Rupiah)
	Number of Employees (People)
	Number of Shield Agents (People)
	Asset Value (Rupiah)
Output	Contribution Receipt (Rupiah)
	Total Active Workforce (People)
Dependent	Efficiency value
Independent	Branch Office Type (Dummy)
	Number of JHT Claim Cases (Cases)

RESULTS AND DISCUSSION

Efficiency of Branch Offices in the DKI Jakarta Regional Office BPJS Employment

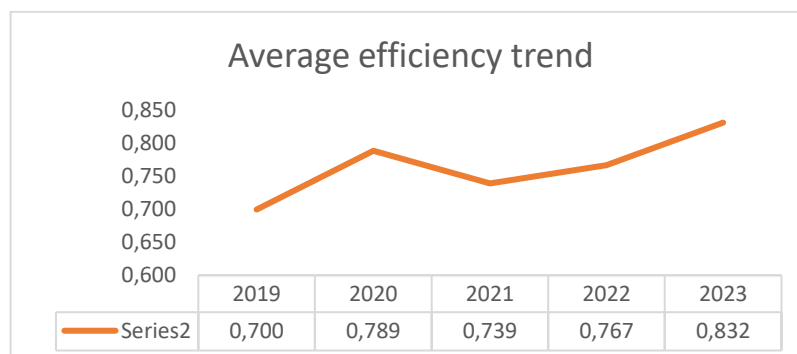


Figure 2. Average efficiency trend of DKI Jakarta BPJS Employment Branch Office for the 2019-2023 period

Based on Figure 2, it can be seen that there are fluctuations in the efficiency score of the Branch Office in the DKI Jakarta Regional Office of BPJS Employment. In 2019, the average efficiency score was recorded at 0.700, which indicates that the average branch office has not achieved optimal operational efficiency. However, in 2020 there was a significant increase to 0.789 or an increase of 13% from 2019. The increase in efficiency in 2020 did not continue in 2021, where the efficiency score decreased to 0.739 or a 6% decrease from 2020. This can be caused by operational and adaptation challenges in the ongoing pandemic situation, resulting in a decrease in effectiveness in resource management. Entering 2023, the efficiency score has started to increase again to 0.767, indicating a sustained recovery in operational efficiency. This positive trend continues in 2023 with a significant increase in efficiency score to 0.832 or an increase of 8% from 2022, indicating that branch offices in DKI Jakarta are increasingly optimal in managing resources and increasing productivity.

Table 4. Relative efficiency value of branch offices in 2019-2023

Branch Office	2019	2020	2021	2022	2023	Average
Graha Bpjsostek	1	1	1	1	1	1
Jakarta Kebayoran Lama	1	1	1	1	1	1
Jakarta Duren Sawit	1	1	1	1	1	1
Jakarta Cengkareng	0.941	1	1	1	1	0.9882
Jakarta Menara Jamsostek	1	0.898	0.989	1	1	0.9774
Jakarta Kemun Sirih	0.868	1	1	1	1	0.9736
Jakarta Sunday Market	1	1	1	0.755	1	0.951
Jakarta Marunda	0.598	1	1	1	1	0.9196
Jakarta Grogol	1	0.946	0.917	0.779	0.838	0.896
Jakarta Rawamangun	0.868	0.829	0.798	1	0.91	0.881
Jakarta Salemba	1	0.939	0.879	0.696	0.816	0.866
Jakarta Kelapa Gading	0.820	0.838	0.831	0.826	1	0.863
Jakarta Gambir	0.836	0.485	0.851	0.671	1	0.7686
Plaza Bpjsostek	0.388	1	0.482	0.686	0.999	0.711
Jakarta, Cilandak	0.588	0.640	0.786	0.731	0.682	0.6854
Jakarta Ceger	0.490	0.681	0.611	0.679	0.925	0.677
Jakarta Kebayoran Baru	0.622	0.618	0.548	0.834	0.583	0.641

Branch Office	2019	2020	2021	2022	2023	Average
Jakarta Pluit	0.456	0.508	0.569	0.530	0.655	0.5436
Jakarta Mango Dua	0.291	1	0.382	0.487	0.465	0.525
Holiday rentals in Bali, T	0.366	0.450	0.407	0.346	1	0.5138
Jakarta Mampang	0.439	0.455	0.417	0.553	0.524	0.4776
Jakarta Cilincing	0.249	0.538	0.259	0.651	0.322	0.4038
Holiday rentals in Bali, Bali, T	0.277	0.325	0.279	0.422	0.414	0.3434

Table 4 shows the relative efficiency values of the various branch offices in Jakarta for the period 2019 to 2023. This efficiency value indicates how well each branch is performing in achieving its operational objectives by taking into account various influencing factors, such as available resources, operational management, and market conditions. Based on the available data, there are quite significant variations between branch offices from one branch to another, both in terms of efficiency numbers recorded each year and fluctuations seen in each period.

Several branches that consistently show relatively perfect efficiency values, namely one for the last five years, are Jakarta Duren Sawit, Jakarta Kebayoran Lama, and Jakarta Duren Sawit. This branch reflects its ability to run its operations very efficiently without any significant obstacles. However, there are also branches that show low average relative efficiency, such as Jakarta Pulogebang, Jakarta Cilincing, and Jakarta Mampang. These low efficiency scores indicate challenges faced by those branches, such as resource limitations, problems in operational management, or external factors affecting their performance. In addition, fluctuations in several branches also indicate instability in operations or efforts for improvement that have not been fully successful.

Overall, this table reflects that operational efficiencies between branches can vary greatly, and this depends on the various factors affecting each location. Some branches have stable performance with high efficiency, while others may need to perform evaluations and improvements to improve their performance. Further analysis of the factors affecting efficiency in each branch will be very useful to identify areas that require special attention and to develop more effective strategies in achieving optimal efficiency goals across branches.

After each branch office obtained an efficiency value for five years, an analysis was carried out by cross-tabulation between the branch office profile and the relative efficiency conditions of the branch office. This analysis is carried out to find out the characteristics of efficient and inefficient branch offices. Based on Table 4.4 in class 1 branch offices, there are 17 branch offices or 40% that are classified as efficient, while 28 branch offices or 38% are declared inefficient. For Class 2, only 1 branch office (2%) is efficient, while the other 29 branch offices or 40% are in the inefficient category, indicating a very low level of efficiency in this class. In Class 3, there are 1 branch office or 2% that are efficient and 9 branch offices or 12% that are inefficient. Meanwhile, Class 3A showed the best performance with 23 branch offices or 55% rated efficient and only 7 branch offices or 10% inefficient. Overall, of the total 115 branch offices analyzed, 42 branch offices or 36.5% were in efficient condition and 73 branch offices or 63.5% were in inefficient condition. These findings show that Class 3A branch offices have the highest level of efficiency compared to other categories, while Class 2 is the group with the highest level of inefficiency. Overall during the 5 years of observation, the majority of branch offices (63.5%) were in an inefficient condition.

Table 5. Characteristics of branch offices with efficiency values

Branch Office Categories	Condition			
	Efficient	%	Inefficient	%
Class 1	17	40%	28	38%

Analysis of Branch Office Efficiency in the Ranks of DKI Jakarta Regional Office BPJS Ketenagakerjaan

Class 2	1	2%	29	40%
Class 3	1	2%	9	12%
Class 3A	23	55%	7	10%
Total	42	100%	73	100%

Unrealized Output Variables

In addition to measuring efficiency values as described in the previous section, this analysis also allows the identification of the magnitude of the unrealized output variables that should be obtained by the branch office to achieve efficiency. The magnitude of the output variable in the branch office that is inefficient will refer to the performance of the branch office that has been efficient and used as a benchmark. The inefficiency of a branch office shows that the utilization of inputs and output achievements have not been optimized according to the targets that should be achieved.

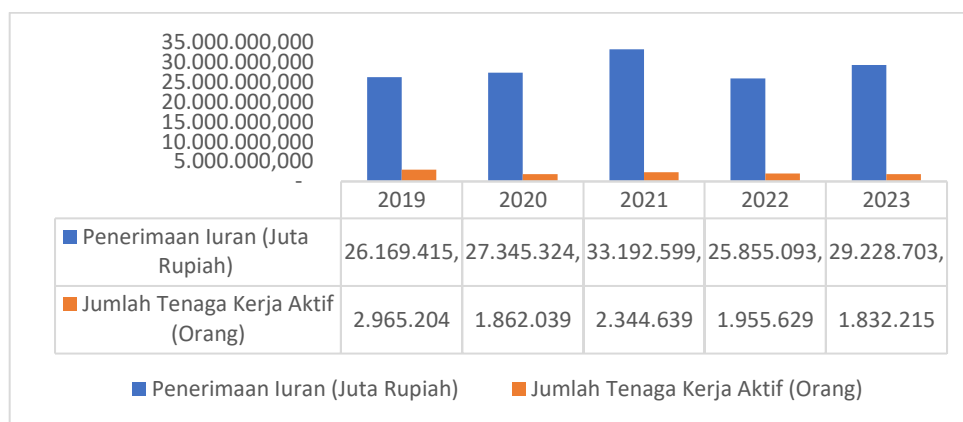


Figure 3. Potential improvement branch office

Based on Figure 3, the largest potential for contribution revenue is in 2021, which is 33 trillion, while the largest potential for active labor is in 2019, which is 2.9 million people. This indicates that in that year most branch offices have not been able to optimize inputs so that there is a large opportunity to receive contributions that should be obtained by branch offices. This is in line with the fact that in 2019 and 2021 most branch offices were in an inefficient condition.

Tobit Regression Analysis and Hypothesis Test Results

Likelihood Ratio Test

Table 6. Test likelihood ratio

Likelihood ratio test	40.51
Probability	0.0052

Source: Tobit regression output (processed), real level 5%

Based on the above results, it shows that *the probability Likelihood ratio test* is less than 0.05, which means minus H_0 which indicates that *the branch office type variable*, and the number of claim cases in the model simultaneously affect the efficiency variable used.

Wald Test

Table 7. Results of tobit regression analysis

Independent Variables	Coefficient	Probability
Office Type	-0.252316	0.005*

Number of Claim Cases	0.000004	0.012*
Constant	0.865585	0.000*

Source: Tobit regression output (Data processed). *significant at a real level of 5%

Table 7 of the results of the Tobit regression estimation can be seen the influence of each independent variable on the dependent variable. All variables have a significant effect on efficiency. Some variables have a positive effect and other variables have a negative effect on efficiency. The following is the effect of each variable tested on efficiency:

The Effect of Office Type on Efficiency

The Branch Office Type variable in this study showed a significant negative relationship with efficiency, with a coefficient of -0.252316 with a probability of 0.005. This means that every increase in the type of branch office by 1 level will cause a decrease in efficiency of 25.23%. This negative relationship indicates that an increase in the size or type of branch office actually has an impact on operational efficiency. Larger branches tend to require more resources and manage more complex tasks, which ultimately leads to decreased operational efficiency. This result is contrary to previous research, namely Kader *et al.* (2010) and Indrarini *et al.* (2019) which states that the size of the company has a significant positive effect on efficiency. The results of this study also contradict the results of previous research conducted by Koiri and Erdkhadifa (2022) which found that size affects the efficiency of banks positively and significantly. However, these results are in line with the research of Sari and Saraswati (2017) and Ranaswijaya *et al.* (2019). According to the two studies, the size of the company does not affect the level of efficiency. This research also supports the research results of Mazviona *et al.* (2017) which states that a larger branch office can also have a negative effect on the level of efficiency in insurance companies. These results show that although branch offices of a higher type offer greater capacity and coverage, this is not always directly proportional to increased operational efficiency. In contrast, larger branch offices, such as class 1 and class 2 at BPJS Ketenagakerjaan, can face greater challenges in managing claims, costs, and resources. Therefore, while larger branch office types may offer more services and coverage, their operational efficiency has the potential to decline due to increased complexity factors.

The Effect of the Number of Claim Cases on Efficiency

The variable of the number of claim cases in this study has a positive coefficient of 0.000004 with a probability of 0.012, which shows a significant positive relationship between the number of claim cases and operational efficiency. This positive coefficient means that any increase in the number of claim cases by 1 case will lead to an efficiency increase of 0.0004%. While an increase in the number of claims tends to increase operational burden, this measurable positive effect on efficiency can be attributed to other factors that support more efficient claims management or more organized administrative processes as experience and resources become available. This result is contrary to the research of Wicaksono and Mulyaningsih (2019) who stated that the total claims variable does not have a significant effect on efficiency. The same thing happened in the study of Fenn *et al.* (2008) which analyzed the efficiency of insurance companies in Europe found that the total claims variable had no significant effect on efficiency.

A higher number of claims can improve efficiency if managed properly through automated systems and efficient procedures (Ihwanto et al., 2024). However, this also depends on how BPJS Ketenagakerjaan handles the claim. If a large number of claims are not supported by efficient infrastructure and processes, it can actually reduce operational efficiency. In other words, while high claims have the potential to increase efficiency in management and service,

it is highly dependent on the readiness of the system and management in dealing with the ever-increasing burden of claims (Febriyanti et al., 2025; Ginting & Aslami, 2022).

Recommendations

Based on the results of the efficiency analysis of BPJS Employment branch offices in the DKI Jakarta Regional Office during the 2019–2023 period, the following are recommendations that can be implemented by management:

1. Appreciation of best practices

Based on the results of the analysis, most branch offices are in inefficient conditions. Therefore, in order to provide motivation as well as appreciation to branch offices that have succeeded in achieving a high level of efficiency, it is necessary to give formal appreciation by the Regional Office or Head Office. This appreciation is not only intended as a form of appreciation for good performance, but also as an effective motivational tool to encourage the creation of a competitive and productive work culture. In addition, the appreciation can serve as a means of disseminating best practices that are worthy of replication by other branch offices in order to improve the overall performance of the organization (Wandebori, 2019; Yunaningsih et al., 2021).

2. Branch office type adjustment

In branch offices of type 3A or 3 that have maximum efficiency, management may consider upgrading the type to support the completion of larger workloads. On the other hand, branch offices that have sluggish efficiency but are at a high type need to be adjusted. However, in adjusting the type of branch office, it is necessary to add cost variables as an assessment component in the branch office classification indicator, with the aim of encouraging the creation of operational efficiency, transparency in budget management, and accountability in the use of resources in each work unit. This approach is expected to motivate branch offices to not only focus on achieving targets, but also on cost-effectiveness in carrying out service and operational functions in a sustainable manner.

3. Digitization of JHT claims

The number of JHT claims has a significant effect on the efficiency of branch offices. Therefore, good management is needed in the management of the JHT claim process. Strengthening the digitalization system is an important strategy to reduce dependence on manual claims service (Ibhanto et al., 2020; Samudera & Pertiwi, 2022). The development of digital technology contributes to reducing workload, because digitalization simplifies and accelerates repetitive activities that were previously carried out traditionally (Fauziyyah, 2022). BPJS Ketenagakerjaan currently has two main digital channels for the JHT claim process, namely the JMO application and the Lapak Asik website. Branch offices can process claims submitted through both platforms to improve the efficiency and quality of service for the number of claims received.

4. Management of employee mutation system

The mutation of 137 employees in 2022 proved to cause significant disruption to branch office efficiency. Unpreparedness in dealing with new changes in the work environment has an impact on decreased performance (Ginting & Aslami, 2022; Yunaningsih et al., 2021). Therefore, to anticipate similar impacts in the future, a comprehensive, transparent, and fair employee mutation system is needed. In addition, intensive training and mentoring programs for employees affected by mutations are essential to help the process of adapting to new tasks, roles, and work environments. This approach not only supports operational sustainability, but also improves individual confidence and performance post-mutation (Putri & Ikaningtyas, 2024; Utami Azmarani & Nurbaiti, 2025). By implementing a comprehensive transition system, organizations can ensure that the mutation process does

not become a source of disruption, but rather becomes part of an ongoing HR development strategy (Nurdiana & Irmalis, 2022).

CONCLUSION

Based on the results of the analysis in this study, the following conclusions can be drawn: (1) The results of the efficiency level measurement using the Data Envelopment Analysis (DEA) approach show that there are variations in efficiency levels between branch offices within the DKI Jakarta Regional Office during the period 2019 to 2023. The year 2020 recorded significant efficiency growth compared to the previous year, but this positive trend did not continue in 2021, where the efficiency level decreased. Entering 2022 and 2023, efficiency again showed an upward trend. (2) The results of data processing and hypothesis testing indicated that the type of branch office had a significant negative effect on the level of efficiency, while the variable number of *JHT* claim cases showed a significant positive effect on the level of efficiency. (3) There are several managerial implications for improving the efficiency of branch offices, especially in the DKI Jakarta Regional Office, namely adjusting the type of branch office, digitizing *JHT* claims, and appreciating best practices.

REFERENCES

- Ascarya, Y., Yumanita, D., Achsani, N., & Rokhimah, G. S. (2010). Measuring the efficiency of Islamic banks in Indonesia and Malaysia using parametric and nonparametric approaches. *3rd International Conference on Islamic Banking and Finance*, Jakarta, Indonesia.
- Athanassopoulos, A. D. (1998). Decision support for target-based resource allocation of public services in multiunit and multilevel systems. *Management Science*, 44(2), 173–187. <https://doi.org/10.1287/mnsc.44.2.173>
- Benarda, S., Sumarwan, U., & Hosen, M. N. (2016). The efficiency level of the sharia life insurance industry uses the two-stage Data Envelopment Analysis approach. *Journal of Business and Management Applications*, 2(1), 64–72. <https://doi.org/10.17358/JABM.2.1.64>
- BPJS Employment. (2019–2023). *Annual report 2019–2023*. Jakarta.
- BPS [Central Statistics Agency]. (2019–2023). *Residents aged 15 years and above who worked during the past week by age group and total working hours overall*. [Diunduh 1 November 2024].
- Cooper, W. W., Seiford, L. M., & Tone, K. (2006). *Introduction to Data Envelopment Analysis and its uses*. Springer.
- Dara, S. (2017). Testing the efficiency of conventional banking in Indonesia through the Data Envelopment Analysis (DEA) approach. *Journal of Management and Business Research (JRMB) Faculty of Economics UNIAT*, 2. <https://doi.org/10.36226/jrmb.v2iS1.58>
- Dwijayanti, E., Danisworo, D. S., & Mauluddi, H. A. (2022). Efficiency analysis of general insurance companies and sharia reinsurance companies in Indonesia using the data envelopment analysis method. *Journal of Applied Islamic Economics and Finance*, 2(3), 569–578.
- Färe, R., Grosskopf, S., & Lovell, C. A. K. (2019). *Production frontiers*. Cambridge University Press.
- Febriyanti, D., Putri, E. G., & Zubaidah, S. (2025). The impact of digital transformation of

- BPJS Ketenagakerjaan on the claim process of the Old-Age Insurance Program (JHT). *Government & Resilience*, 3(1), 21–37. https://www.researchgate.net/publication/390454409_Enhancing_Online_Claims_Overcoming_Challenges_in_BPJS_Ketenagakerjaan%27s_Digital_Transformation_Journey
- Ghoni, A. (2021). Comparison of the efficiency level of Sharia General Insurance Companies in Indonesia before and during the Covid-19 pandemic. *Journal of Syar'insurances (SIJAS)*, 1(1), 1–15. <https://doi.org/10.32678/sijas.v7i2.4981>
- Ginting, M., & Aslami, N. (2022). Payment system for Old Age Security (JHT) claims at BPJS Employment of Medan City Branch Office. *Universitas Islam Negeri Sumatera Utara*. https://www.researchgate.net/publication/362325227_Payment_System_For_Old_Age_Security_Claims_At_Bpjs_Employment_Of_Medan_City_Branch_Office
- Gujarati, D. (2003). *Basics of econometrics book 2*. Jakarta: Salemba Empat.
- Hadad, M. D., Santoso, W., Ilyas, D., & Mardanugraha, E. (2003). Analysis of the efficiency of the Indonesian banking industry: The use of the nonparametric method of Data Envelopment Analysis (DEA). *Research Paper*, No. 7/5, Financial System Stability Bureau of Bank Indonesia.
- Ibhanto, A. P., & Co-authors. (2020). Digitalizing employment social security services in Indonesia. *Jurnal Digitalisasi & Admin Terapan (JDSAI)*. <https://e-journal.gomit.id/jdsai/article/view/25>
- Ihwanto, A. D., Widyanto, M. L., & Kurniawati, S. (2024). Analysis of the implementation of changes in Old Age Security (JHT) claim procedures during the COVID-19 pandemic: Case study at BPJS Employment Jakarta Cilandak Branch Office. *East African Scholars Journal of Economics, Business and Management*, 7(5). <https://www.easpublisher.com/get-articles/4050>
- Iskandar, D., Achasni, N. A., & Djohar, S. (2020). An analysis of productivity and factors affecting the efficiency of sharia insurance in Indonesia: An empirical study. *Al-Muzara'ah*, 8(2), 153–171. <https://doi.org/10.29244/jam.8.2.153-171>
- Jemric, I., & Vujcic, B. (2002). Efficiency of banks in Croatia: A DEA approach. *Comparative Economic Studies*, 44, 169–193. <https://doi.org/10.1057/CES.2002.13>
- Lee, H. S., Cheng, F. F., Har, W. M., Md Nassir, A., & Ab Razak, N. H. (2019). Firm-specific and corporate governance factors of the Takaful insurance. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(3), 368–387. <https://doi.org/10.1108/IMEFM-06-2018-0187>
- Mirghaderi, S. A. H., Aboumasoudi, A. S., Branch, N., January, R., & June, A. (2017). The ranking of financial efficiency of companies accepted in Stock Exchange of Tehran between 2013 to 2016 through financial ratio approach and using DEA. *Journal of Financial Analysis*, 5(3).
- Nugroho, A., & Hendratmoko, M. (2021). Efficiency analysis of BPJS Ketenagakerjaan branch offices using DEA. *Jurnal Manajemen dan Kewirausahaan*, 23(2), 115–128. <https://doi.org/10.9744/jmk.23.2.115-128>
- Nurhasanah, S., & Lubis, D. (2017). Performance efficiency of Baznas Bogor and Sukabumi: An approach to data envelopment analysis. *Journal of Islamic Accounting and Finance*, 5(2), 105–120.

- Nurdiana, S., & Irmalis, A. (2022). Analysis of user satisfaction level of Jamsostek Mobile application in Aceh using End User Computing Satisfaction. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 2(5), 869–876. <https://journal.stiemb.ac.id/index.php/mea/article/view/4595>
- Putri, N. H. A., & Ikaningtyas, M. (2024). Efektivitas Jamsostek Mobile (JMO) dalam klaim Jaminan Hari Tua (JHT) pada peserta BPJS Ketenagakerjaan Mojokerto. *Economics and Business Management Journal (EBMJ)*, 3(2), 116–121. <https://e-journal.gomit.id/jdsai/article/view/25>
- Rahmawati, D., Wajdi, F., & Isa, M. (2020). Analysis of the efficiency of the national zakat management organization with the Data Envelopment Analysis (DEA) approach. *Thesis*. University of Muhammadiyah Surakarta.
- Ramanathan, R. (2003). *An introduction to Data Envelopment Analysis: A tool for performance measurement*. New Delhi: Sage Publication India Pvt Ltd.
- Riani, D., & Hendrawan, S. (2020). Data Envelopment Analysis (DEA): Comparison of the efficiency of Islamic banks and conventional banks for the period 2014–2018. *Scientific Journal of Accounting and Finance*, 15(2), 25–41. <https://doi.org/10.32832/neraca.v15i2.3498>
- Samudera, M. F. D., & Pertiwi, V. I. (2022). Inovasi pelayanan publik melalui JMO (studi kasus di BPJS Ketenagakerjaan cabang Rungkut, Kota Surabaya). *JPAP: Jurnal Penelitian Administrasi Publik*, 8(1), 152–172. <https://e-journal.gomit.id/jdsai/article/view/25>
- Utami Azmarani, N., & Nurbaiti, F. (2025). Pengaruh implementasi dan kemudahan klaim terhadap program Jaminan Hari Tua (JHT) informal melalui Jamsostek Mobile (JMO) di BPJS Ketenagakerjaan Kantor Cabang Bandar Lampung. *Journal of Management and Innovation Entrepreneurship (JMIE)*, 2(3), 2125–2132. <https://e-journal.gomit.id/jdsai/article/view/25>
- Wandebori, H. (2019). Proposed business strategy improvement through service quality gap model to increase membership coverage of BPJS Ketenagakerjaan. *Jurnal Manajemen & Teknologi*. <https://e-journal.unair.ac.id/JMTT/article/download/14833/pdf/60385>
- Yunaningsih, A., Indah, D., & Septiawan, E. F. (2021). Upaya meningkatkan kualitas layanan publik melalui digitalisasi. *Altasia: Jurnal Pariwisata Indonesia*, 3(1), 9–16. <https://e-journal.gomit.id/jdsai/article/view/25>
- Zahara, N., & Saputra, M. (2020). Comparative analysis of the efficiency of conventional life insurance companies and sharia life insurance companies in Indonesia using the Data Envelopment Analysis (DEA) method. *Scientific Journal of Accounting Economics Students*, 5(2), 229–238. <https://doi.org/10.24815/jimeka.v5i2.15558>