

THE EFFECT OF ECONOMIC GROWTH, PROVINCIAL MINIMUM WAGE, AND INVESTMENT ON LABOR ABSORPTION IN DKI JAKARTA PROVINCE IN 2018-2022

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ABSTRACT

The employment problem in Indonesia is not just limited opportunities or employment opportunities and low productivity. The increase in unemployment rates is caused by limited demand for work, which is then associated with other external factors including the decline in the balance of payments, increasing foreign debt and other policies which result in a decline in economic growth, decline in wages, investment and decline in employment. The purpose of this study is to determine the effect of Economic Growth, Provincial Minimum Wage, Investment, and Covid-19 Dummy on Employment in DKI Jakarta Province in 2018-2022. This study used multiple linear regression method with Generalized Least Square (GLS) model. This study uses secondary data while Covid-19 is included in the dummy variable category. The results of this study show that economic growth has a positive and significant influence on employment. Meanwhile, the provincial minimum wage, investment, and Covid-19 dummy have a negative and insignificant effect on labor absorption in DKI Jakarta Province in 2018-2022.
Keyword: Economic growth, Provincial minimum wage, Investment, Labor absorption

ABSTRAK

Masalah ketenagakerjaan di Indonesia tidak hanya sekedar terbatasnya peluang atau lapangan pekerjaan dan rendahnya produktivitas. Peningkatan angka pengangguran disebabkan oleh terbatasnya permintaan kerja, yang selanjutnya dikaitkan dengan faktor-faktor eksternal lain diantara yaitu menurunnya kondisi neraca pembayaran, meningkatnya utang luar negeri dan kebijakan-kebijakan lain yang mengakibatkan kemerosotan pertumbuhan ekonomi, menurunnya tingkat upah, investasi, dan menurunnya lapangan pekerjaan. Tujuan penelitian ini adalah untuk mengetahui pengaruh Pertumbuhan Ekonomi, Upah Minimum Provinsi, Investasi, dan *Dummy* Covid-19 Terhadap Penyerapan Tenaga Kerja di Provinsi DKI Jakarta. Penelitian ini menggunakan metode regresi linear berganda dengan model Generalized Least Square (GLS). Penelitian ini menggunakan data sekunder sedangkan Covid-19 termasuk dalam kategori variabel dummy. Hasil dari penelitian ini menunjukkan bahwa pertumbuhan ekonomi memiliki pengaruh positif dan signifikan terhadap penyerapan tenaga kerja. Sedangkan upah minimum provinsi, investasi, dan *dummy* Covid-19 berpengaruh negatif dan tidak signifikan terhadap penyerapan tenaga kerja di Provinsi DKI Jakarta Tahun 2018-2022.

Kata Kunci: Pertumbuhan ekonomi, Upah minimum provinsi, Investasi, Penyerapan tenaga kerja

INTRODUCTION

Employment problem in Indonesia is not only due to low labor absorption opportunities and productivity. The increase in Labor Absorption was caused by limited demand for Labor Absorption, which was further attributed to other external factors such as declining balance of payments conditions, increasing external debt and other policies that resulted in deterioration in economic growth, declining wage levels, investment, and declining Labor Absorption. According to Huang and Gao (2023), labor absorption capacity is a condition that represents the willingness of labor organizations to adequately perform a job or the availability of employment or jobs by job seekers.

The Covid-19 pandemic that has hit countries around the world, including Indonesia, has caused several sectors to decline, the largest being the economic sector: According to 2020 BPS data, Indonesia experienced an economic growth contraction of -2.07%. As Indonesia's economic development is unstable, this situation causes the Indonesian economy to experience deflation or a sharp decline in 2020. This change is due to the Covid 19 pandemic. The development of the local economy is the added value of human development in the region. The ability to absorb labor is expected to boost national economic growth and various efforts are being made to increase regional output: According to Haya et al. (2022), economic growth is the long-term increase in output per capita and is defined as an increase in output per capita over three years and consists of three elements: process, output per capita and long-term output. Gross regional product is the value added produced by the sectors operating in the region. An increase in labor absorption capacity contributes to better economic development outcomes if it is accompanied by an improvement in the fate of workers. Under certain circumstances, efforts to improve the fate of workers may not necessarily have a positive impact on labor absorption and may reduce labor absorption.

GDP data are used to measure regional prosperity. Investment is a necessary component of economic growth. When investment enters a region, it increases capital for economic activity. This additional capital can stimulate economic growth in the region and if investment continues to enter the region and is accompanied by a highly competitive economy in the long run, supply through the capital stock will increase. This increase in the capital stock has the effect of increasing the productive capacity of society and stimulating economic activity in the region; higher capital accumulation leads to higher rates of economic growth and social welfare. Realization of investment in DKI Jakarta Province in 2018-2022, can be seen in Table 1.

Table 1. Realization of Investment in DKI Jakarta Province in 2018-2022 (Investment Value US\$)

CITY	YEARS				
	2018	2019	2020	2021	2022
Kep. Seribu	0	0	33.395,9	45.000,0	2.119,4
South Jakarta	9.931.086,3	15.302.265,4	10.505.462	15.476.692,6	33.502.121,2
East Jakarta	7.887.210,6	3.157.692,6	2.597.67,8	4.360.535,7	15.902.685,9
Central Jakarta	26.186.280,8	35.400.587,7	22.968.502,3	26.651.829	19.478.971,4
West Jakarta	3.662.371,3	9.683.627,1	5.080.214,9	4.737.623,7	7.399.401,3
North Jakarta	6.288.204,5	2.385.740,6	5.382.752,5	6.767.115,7	16.682.359,6
DKI Jakarta Province	53.955.153,5	66.217.837,7	46.56.006,4	58.038.796,7	92.967.658,8

Source: NSWI BPKM

To address labor supply and demand, the national development goal is to expand labor absorption opportunities by improving economic sectors and increasing minimum wages. According to Sitompul et al. (2008), International Labor Organization (ILO) findings in Indonesia show that economic growth without expanded labor absorption opportunities leads to increased labor absorption and lower living standards. The issue of labor absorption in

Indonesia is closely linked to the wage system. The wage system is regulated in the Labor Law No. 13 of 2003 and described in the Government Regulation on Wages No. 78 of 2015. DKI Jakarta Provincial minimum wage for 2018-2022, can be seen Table 2. Minimum wage policy is an important labor issue. Every year many trade unions demand wage increases from the Government. However, the wage increases demanded by these workers are not accompanied by an increase in workers' productivity. According to many assumptions, companies are unable to meet these demands, so they close down or move their activities abroad, leading to increased layoffs and labor absorption.

Table 2. DKI Jakarta Provincial Minimum Wage for 2018-2022 (Million Rupiah)

Year	Provincial Minimum Wage
2018	3.648.035
2019	3.940.973
2020	4.267.349
2021	4.416.187
2022	4.573.845

Source: Central Bureau of Statistics (2023)

According to Nur and Rakhman (2019) the economic sectors that produced the highest GDP values in the economic base sectors of DKI Jakarta include the large business and retail sector and the car and motorcycle repair sector, which produced high GDP values in the national growth component, reaching Rp77.601,1 billion. The information and communication sector also produced a high GDP value in the industrial component, amounting to Rp 46.502,4 billion. In addition, the financial services and insurance sector also produced high GDP values of Rp 25.228,8 billion and Rp 68.943,4 billion in the industrial mix component of total GDP growth. Regional economic growth tends to discuss economic growth by grouping regions according to their growth structure. Development of GDP of DKI Jakarta Province in 2018-2022, can be seen in Table 3.

Table 3. Development of GDP of DKI Jakarta Province in 2018-2022 Basic Constant Prices by City/Regency (Billion rupiah)

CITY	YEARS				
	2018	2019	2020	2021	2022
Kep. Seribu	3.936,01	3.898,74	3.706,25	3.648,88	3.591,86
South Jakarta	394.429,96	421.300,85	419.257,19	429.277,95	451.765,49
East Jakarta	298.530,65	313.550,67	299.515,16	313.816,53	329.680,72
Central Jakarta	424.204,37	452.521,54	449.518,14	460.024,27	482.088,23
West Jakarta	299.452,40	318.927,93	316.172,61	327.613,14	345.685,84
North Jakarta	320.658,35	332.747,11	312.100,58	330.883,87	350.232,86
DKI Jakarta Province	1.735.208,29	1.836.240,55	1.792.291,09	1.856.075,82	1.953.455,85

Source: Central Bureau of Statistics (2023)

In the same case, GRDP can affect the absorption of labor if the output or sales made by the company are getting bigger, it will encourage the company to increase demand for labor to increase its production output, directly with increasing production output, it will also increase labor absorption (Al-Mawaddah, Kolaka, & Tahir, 2018). Rapid economic growth and increased worker productivity are two things that are indispensable to create new jobs and retain workers who are still working in many developing countries (Chen, Kumara, & Sivakumar, 2023), where economic growth must be maintained to optimize work participation for the poor and the next period the poor will benefit from the fruits of their work. The benefits obtained include wages for work that will be used to meet his needs.

Table 4. Number of DKI Jakarta Province Labor Force Based on City 2018-2022 (Person)

City	Years					Amount
	2018	2019	2020	2021	2022	
Kep. Seribu	9.408	9.077	9.985	10.811	11.381	50.662
South Jakarta	1.050.756	1.020.437	1.011.605	1.020.587	1.075.250	5.178.635
East Jakarta	1.249.412	1.330.671	1.257.752	1.257.540	1.271.123	6.366.498
Central Jakarta	432.460	431.484	409.589	422.188	434.918	884.533
West Jakarta	1.142.915	1.177.100	1.148.244	1.181.095	1.232.966	5.882.320
North Jakarta	841.828	868.208	822.076	845.194	849.464	4.226.770
DKI Jakarta and Growth (%)	4.726.779	4.836.977	4.659.251	4.737.415	4.875.102	-
	-	2.28%	-3.81%	1.65%	2.82%	-
Number of Labor Force	5 041.620	5.157.878	5.232.031	5.177.314	5.252.396	-
Absorbed Labor Force	93.76%	93.78%	89.05%	91.50%	92.82%	-

Source: Central Bureau of Statistics (2023)

Based on labor absorption data for DKI Jakarta Province in Table 4, the number of workforces in DKI Jakarta Province by city fluctuates every year. The fluctuating number of the workforce is a big problem because not all of the workforces can enter the world of work due to limited job opportunities. As economic growth is closely linked to the availability of a sufficient number of jobs to offset the number of job seekers entering the labor market (Assad, Krafft, & Yassin, 2020), labor absorption in DKI Jakarta province should be considered. Efforts can be made to reduce unemployment by improving the performance of key sectors in the region. The purpose of this study is to determine the effect of Economic Growth, Provincial Minimum Wage, Investment, and Covid-19 Dummy on Employment in DKI Jakarta Province in 2018-2022.

METHOD

The subjects of this research are economic growth, provincial minimum wage, investment, and labor absorption in the Jakarta Capital Region registered with the Central Bureau of Statistics (BPS).

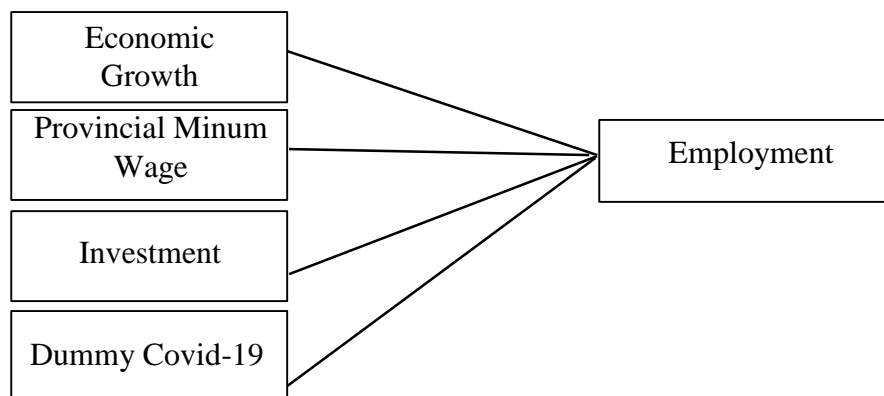


Figure 1. Theoretical Framework

Source: Processed by Researchers

Based on Figure 1, that has been prepared, researchers formulate research hypotheses as follows:

1. H_0 : Economic growth has an insignificant impact on labor absorption in DKI Jakarta
 H_1 : Economic growth has a significant impact on labor absorption in DKI Jakarta
2. H_0 : Provincial minimum wage has an insignificant impact on labor absorption in DKI Jakarta
 H_1 : Provincial minimum wage has a significant impact on labor absorption in DKI Jakarta
3. H_0 : Investment has an insignificant impact on labor absorption in DKI Jakarta.
 H_1 : Investment has a significant impact on labor absorption in DKI Jakarta.
4. H_0 : Dummy Covid-19 have an insignificant impact on labor absorption in DKI Jakarta
 H_1 : Dummy Covid-19 variable has a significant impact on labor absorption in DK Jakarta.

The study uses multiple regression method with Generalized Least Squares (GLS) to calculate and analyze the extent to which economic growth, minimum wage, and investment affect labor absorption (Sriyana, 2014). This process also aims to identify the functional relationship between labor absorption (Y) and the independent variables (X), namely economic growth, minimum wage and investment, and the dummy variable (D), namely Covid-19. Were data on labor absorption. economic growth, minimum wages are obtained through the www.bps.go.id website for the 2018-2022 period, and investment is obtained through the nswi.bkpm.co.id website. Meanwhile, Covid-19 is included in the category of dummy variables and 0 in its measurement means no Covid-19 in that year and 1 means Covid-19 in that year. The functional relationship of such a set of variables can be written in Eq:

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 D_{it} + e_{it}$$

Information:

- Y = Labor Absorption
- α = Constant
- $\beta_1 - \beta_3$ = Regression coefficient of each variable
- X_1 = Economic Growth
- X_2 = Provincial minimum wage
- X_3 = Investment
- D_{it} = Covid-19 Dummy Variables
- e_{it} = Standard error

RESULTS AND DISCUSSION

In this research, a REM is selecting the best model from regression data panel. Table 4 presents the results of the Chow test, Table 5 the Hausman test and Table 6 Langrange multiplier test.

Table 4. Chow Test Results

Probability F	Chow Test Hypothesis	Information
0.0000	Probability < Alpha (0.05)	Fixed Effect Model (FEM)

Source: Processed with Eviews 9 (2023)

Probability value of the Chow test is less than 0.05 and is known as 0.0000 (0.0000 < 0.05). This means that the model selected for this study is a FEM.

Table 5. Hausman Test Results

Probability F	Chow Test Hypothesis	Information
1.0000	Probability > Alpha (0.05)	Random Effect Model (REM)

Source: Processed with Eviews 9 (2023)

Probability value obtained is greater than 0.05 and is known as (1.0000 > 0.05). Model selected is a REM.

Table 6. Langrange Multiplier Test Results

Probability F	Chow Test Hypothesis	Information
(0.0000)	Probability < Alpha (0.05)	Random Effect Model (REM)

Source: Processed with Eviews 9 (2023)

The cross-sectional show probability is less than 0.05 (0.0000 < 0.05). Model used in this study is the REM. After determining best model is REM model, estimation for data panel are as follows:

Table 7. Regression Model Estimation

Dependent Variable: PTK				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	523370.9	109206.0	4.792512	0.0001
PE	0.011534	0.003681	3.133067	0.0044
UPP	-0.018167	0.019527	-0.930366	0.3611
INVESTASI	-2.55E-05	6.50E-05	-0.391851	0.6985
DUMMY	-12298.76	11165.43	-1.101504	0.2812
Adjusted R-squared	0.203674			
Prob(F-statistic)	0.044646			

Source: processed with Eviews 9 (2023)

Table 7 show outcome of the regression equation for the labor absorption model are obtained as follows:

$$PTK = 523370.941195 + 0.0115341290026PE - 0.0181672467616UPP - 2.54832590039e-05INVESTASI - 12298.7606983DUMMY + e$$

The results of the above equation can be concluded. P-value of the economic growth variable is $0.0044 < 0.05$ with a coefficient value of 0.011534. The results of this test show that H_1 accepted, show a significant influence between economic growth and labor absorption in DKI Jakarta. The provincial minimum wage variable has a P-value of $0.3611 > 0.05$, coefficient value is -0.018167; the P-value of the investment variable is $0.6985 > 0.05$, coefficient value is -0.025; P-value of the Covid-19 dummy variable is $0.2812 > 0.05$ and the coefficient value is -12298.76. The test results for local minimum wage, investment and Covid-19 dummy variables indicate that H_0 is accepted. It is that there is an insignificant influence between the local minimum wage, investment and the Covid-19 dummy on work energy absorption in DKI Jakarta.

The F-statistic is 2.854313 and the probability value is 0.044646, which is less than 0.05 ($0.044646 < 0.05$), that economic growth, minimum wage, investment and Covid-19 dummy variables simultaneously have a significant impact on energy absorption. The R-Squared value is 0.203674, meaning that 20% of the variation in the Labor Absorption variable

in DKI Jakarta is influenced by changes in the variables in this research. The remaining 80% is influenced by other factors outside the research.

The Effect of Economic Growth on Labor Absorption

According to Rostow (1990), economic growth is a process that brings about changes in people's lives - in politics, social structure, social values, and the structure of economic activities. Outcomes of the regression analysis in this research show economic growth has a significant value of $0.0044 < 0.05$ and H_1 is accepted. The coefficient is 0.011534, which indicates that there is a positive difference between economic growth and labor absorption. If economic growth increases, labor absorption increases in DKI Jakarta.

This is in line with research by Mayhew and Anand (2020), which states that rapid economic growth and increased worker productivity are two things that are urgently needed in many developing countries to create new jobs and retain workers who are still employed, and that economic growth must be sustained to optimize the labor force participation of the poor. The poor will benefit from the results of their labor. The benefits received include the remuneration for the labor used to meet their needs. This study is in line with the study by Sabihi, Kumenaung and Niode (2021) titled 'The Impact of Local Minimum Wage, Investment and Economic Growth on Labor Absorption in Manado City'. The findings show that economic growth has a statistically significant positive impact on labor absorption. Economic growth has a statistically significant positive effect on labor absorption. This shows that increasing the GDP of an economic sector can increase the number of workers.

The Effect of the Provincial Minimum Wage on Labor Absorption

According to Ricardo (2005) wages are the remuneration given to workers to maintain and sustain their livelihood. In other words, wages can be interpreted as remuneration given from the employer to the employee for the performance of work, valued in the form of money based on a legal decision and paid by the employer based on an agreement with the employee. The regression analysis showed that the significant value of the local minimum wage in this study is $0.3611 > 0.05$. This means that H_0 is accepted and the minimum wage has an insignificant effect on labor absorption. The coefficient is -0.018167, which means that there is a negative and insignificant effect between minimum wage and labor absorption. If the minimum wage increases, labor absorption in Jakarta decreases.

This is because higher wages in DKI Jakarta will affect the cost of production, which in turn will increase commodity prices in the market. Society responds to rising commodity prices by reducing consumption and businesses reduce their output. As output decreases due to higher production costs, firms prefer to replace labor with technology such as machines. According to the research presented by Purnomo (2021) wages affect the high and low cost of production, leading to a decrease or increase in labor absorption. When wages rise, producers tend to reduce the amount of labor due to their structure always trying to maximize profits. Conversely, when wages fall, producers are less opposed to increasing the amount of labor they use, thus increasing labor absorption.

This study is in line with the study by Alfin and Priana (2022)) titled "Analysis of the Impact of Labor, Investment, District/City Minimum Wage and Inflation on Labor. Labor Absorption in Tuban Regency" The study explained that the minimum wage has a negative impact of -0.005%, meaning that for every 1% increase in the minimum wage, labor absorption decreases by 0.005%. This means that a higher or lower minimum wage has no impact on the labor absorption rate.

The Effect of Investment on Labor Absorption

According to Kusairi et al. (2023), Investment is expenditure on the purchase of capital goods and production equipment with the aim of obtaining and exchanging capital goods for use in the production of goods and services in the future. Outcomes of the regression analysis in this study show that the significance value of investment is $0.6985 > 0.05$, H_0 is accepted and investment has no significant effect on labor absorption. The result of the coefficient is -0.025. This means that there is a negative effect between investment and labor absorption. If investment is an increaser, will reduce labor absorption in DKI Jakarta. This study in DKI Jakarta does not follow the theory proposed by Harrod-Domar, which claims that capital accumulation (investment) and savings can increase the level of output and labor absorption opportunities. This implies that investment in Jakarta province is directed towards capital intensive sectors rather than labor intensive sectors. According to the official website of the Jakarta Investment Center, the largest investments are in the real estate and transport sectors, and capital from domestic or foreign investment has no significant impact on labor absorption. A study by Fadel, Mallongi and Selong (2021) titled 'The Impact of Investment and Output on Labor Absorption in the Industrial Sector in Makassar City' found that investment has no significant impact on labor absorption. As a result, investment had no significant impact on labor absorption ($0.235 > 0.05$). Fadel et al. (2021) consider that investment in Makassar City is a capital-intensive investment.

The Effect of Covid-19 Dummy on Labor Absorption

The results of the regression analysis in this study show that the significance value of the Covid-19 dummy is $0.2812 > 0.05$, H_0 is accepted and the Covid-19 dummy has no significant effect on labor absorption. The coefficient of the Covid-19 dummy is -12298.76, which means that there is a negative effect between the dummy and labor absorption: As the Covid-19 dummy increases, labor absorption in DKI Jakarta decreases during the Covid-19 period. The negative and insignificant effect of the Covid-19 dummy is due to the paralysis of the tourism sector because of the massive social restriction policy implemented by the government during the pandemic, which increased the labor absorption capacity as tourism is one of the sectors that provide employment to people inside and outside the tourism destination. Not only the tourism sector is paralyzed but company employees are also affected by the Covid-19 pandemic, Not only is the tourism sector paralyzed, company employees are also affected by the Covid-19 pandemic, normal outside activities have to be carried out from home which has an impact on many employees who are threatened with termination of employment because of work that cannot be done at home, such as production activities that depending on the machines at the production site.

The end of labor absorption had to be implemented due to reduced public consumption and export restrictions, which reduced firms' revenues and they incurred losses. Firms operating due to losses will cause an increase in labor absorption. This study is in line with the study by Suryadi (2023) titled 'The impact of social welfare contributions, investments and the COVID-19 pandemic on the absorption of Generation Z workers'. The results showed that the COVID-19 pandemic has a negative and insignificant impact of 0.0026 on Generation Z labor absorption. This is due to the measures taken by the Government to optimize domestic potential. These measures include lowering interest rates and monitoring global and domestic economic developments deemed appropriate by the government to keep inflation under control.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the findings and data analysis on the impact of economic growth, minimum wage, investment, and Covid-19 dummies on labor absorption in the DKI Jakarta area, the

author can draw the following conclusions is Economic growth rate had a partially positive and significant effect on labor absorption in DKI Jakarta with a coefficient value of 0.011534. These results show that a 1% increase in the economic growth rate leads to a 1% increase in the labor absorption rate. Provincial minimum wage had a partially negative and insignificant effect on labor absorption in DKI Jakarta with a coefficient value of -0.018167. The results of this test show that a 1% increase in the minimum wage reduces labor absorption in DKI Jakarta by 0.018%. Investment had a partially negative and insignificant effect on labor absorption in DKI Jakarta with a coefficient value of -0.0025. The results of this test show that a 1% increase in the level of investment reduces labor absorption by 0.0025%. The Covid-19 dummy had a negative and insignificant effect on labor absorption in Indonesia and different labor absorption figures emerge before and during Covid-19. The coefficient value of 12.76 indicates that a 1% increase in the Covid-19 dummy leads to a 12% decrease in labor absorption in DKI Jakarta after the Covid-19 period.

Recommendation

The Government of DKI Jakarta should place greater emphasis on policies related to sectors of the economy that can stimulate growth in gross domestic product, so that it can identify and prioritize sectors that have the potential to attract workers. The DKI Jakarta Government should also monitor the minimum wage policy to ensure that the minimum wage set is truly in line with DKI Jakarta's needs for a decent living. Of course, this will also help to create a balanced labor market in terms of the number of workers. The DKI Jakarta government must continue to encourage increased investment that creates job opportunities by creating a policy of easy business licensing so that investors will be interested in opening businesses in DKI Jakarta, and labor absorption will increase. After the Covid-19 pandemic, the government and economic actors must rise together to continue to expand employment opportunities through developing MSMEs in DKI Jakarta so that high labor absorption can be achieved.

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