

## The Role of Investment on Social Welfare, Economic Growth, and Labor Absorption: Cases in Mineral Mining Areas

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**Abstract**—The main objective of the development of a country is to realize social welfare or what is commonly termed prosperity. Investment is seen as one of the key drivers in creating social welfare. Another opinion is that prosperity will be realized when there is an improvement (growth) in the economy, and welfare will be created when people have jobs (in this study it is proportionate to labor absorption). This study analyzes the role of investment in creating social welfare for the community through economic growth and employment. Using a quantitative approach to test the theory with an explanatory design. Using secondary data that is a time series for the period 2006-2020. Data were analyzed using depth analysis techniques. The results of the analysis found that investment is considered to play a role in social welfare, economic growth, and employment. Next, that economic growth and employment have not been able to play a role in the social welfare of the community. Finally, that investment plays a role in social welfare both through economic growth and through employment.

**Index Terms**—Investment, Social Welfare, Economic Growth, Labor.

### INTRODUCTION

Social welfare (in this case the community) is built on and rooted in sociological and political theories that lead to efforts to reduce complexity and gaps between communities. Esping-Andersen (1990) as quoted from Hemerijct et al., [1], and Leoni [2] stated that the world view of capitalism shifted to welfare capitalism as well as this thought symbolizes the paradigm revolution of social welfare studies which is comparative in nature with its various dynamics (each-each country). Several experts and researchers who focus on studying this include [3]-[5]. Ferragina [6] continued that decommodification was intended (Hemerijct) to be the core of social welfare insurance, especially in the industrial era, therefore investigation (research) of a country's welfare as well as representing a prosperous country starts from here.

Esping-Andersen, 1999 then continued [3], [6], [1] revealing that there are difficulties in assessing social welfare which lies in the conceptual distribution and categories used. In the industrial era, investment was positioned as a driving force for the creation of economic growth [7] directed at social welfare. Both lie from the role of the state (government). Then he continued with several other theories that investment has a good impact on economic growth, and at the same time, there is the mobilization of human resources as a labor (labor absorption).

Several studies prove that investment directly plays a role (contributes) to economic growth [8]-[15]. These results strengthen the initial theory that investment is for economic growth. However, this does not always apply in general, because other findings show different things as revealed by [16]-[18] that investment has not proven to play a role in economic growth.

Investment is proven to be able to contribute to the social welfare of society as evidenced by [11]. It's just that testing the relationship between the two does not simultaneously place a relationship with the subjects (variables) built into this model (investment, social welfare, economic growth, and employment).

Another study found that investment had a significant effect on employment [19], [20], [21]. However, recent studies that are consistent with the model built in this study (simultaneous comparisons between investment, labor, and economic growth) are still relatively limited.

Studies several studies show that there is a significant role between economic growth on social welfare [8],

[10], [11], [21]. However, this is different from the findings [22] that economic growth is not correlated or does not directly affect social welfare.

Another conceptual model reviewed is the role of investment in social welfare through economic growth. Siregar [11] in his research stated that investment indirectly through economic growth plays a role (contributes) to the social welfare of society. This means that investment can play a good role in improving the social welfare of society if there are indications of increased economic growth.

Theoretically that ideally investment exists for that purpose, but research and empirical facts show inconsistency. It can be said that investment activities in a region or country directly have a positive impact on the social welfare of the community which is still being debated (gaps). Another gap is that investment has not been able to significantly increase economic growth, including the absorption of labor. This means that there are other factors that are in the spotlight why this happened.

An interesting fact occurred in Indonesia, especially in areas with the aim of investing in the mineral sector, namely Central Sulawesi Province. For example, investment in Central Sulawesi Province through the Foreign Investment (PMA) and Domestic Investment (PMDN) schemes over the last five years has not yielded good results from a regional economic perspective (through DDRB). This is proven that the economic growth rate (shared in GRDP) for Central Sulawesi Province in 2016 was 9.98%, then in 2017 it decreased to 7.10%, then in 2018 it rose to 20.60%, and most recently in 2021, it was estimated at 11.70 % (2019 and 2020 were not included because there was an assumption that the subject was a co-19) [23]. This fact shows that there are regional economic performance fluctuations in Central Sulawesi Province. The thing to note is that there was a significant decrease in regional economic achievements (decreasing) in the period from 2018 to 2021.

The fact of decline in GRDP goes hand in hand with investment performance in 2016 of around 6.38%, then in 2017 it fell by around 0.7 points which ultimately had an impact on the investment value in 2018 remaining at 4.79%. When the two are compared with the regional economic achievements, there is the same trend (decrease), so the regional economic performance is suspected to be the result of a decrease in investment.

The problem is that the labor force figures show a tendency to increase at the same time there is a tendency for labor absorption. The workforce in Central Sulawesi in 2016 is around 1,459,803 people from the total workforce (1,509,505 people, so there are 49,702 people who are unemployed). Then [23] released that the workforce in 2017 was 1,374,214 (decreased compared to 2016), however, there was an increase in the number of unemployed to 54,369 people. The total workforce in 2018 rose to 1,520,304 people (previously 1,509,505 people), but there was a decrease in the unemployment rate to 50,082 people. The thing to note is the incident in 2017, where there was a decrease in the number of workers from 2016, but in contrast to the unemployment rate which actually showed an increase. The latest number of the workforce in 2021 is around 1,584,101 people, an increase of around 63,797 people from 2018. The number of people who have/are working in 2021 is recorded at around 1,524,730 people or around 59,371 people are unemployed or unemployed. The dynamics of the workforce cannot be separated from population growth. Between 2010-2020 the population of Central Sulawesi increased by around 1.22%, and between 2020 and 2021 alone it increased by around 1.62%.

The largest contribution to the regional economy (contribution to economic growth) is from the Agriculture, Forestry, and Fisheries sector/business field between 28.86% (2017) to 20.70% (2021). Then there is the Processing Industry sector around 12.50% (2017) to 29.11% (2021). The Base Metal Industry is between 4% (2017) to 23.59% (2021), and the Mining and Quarrying sector is between 14.64% (2017) to 16.52% (2021). Of these four sectors, there are three (3) sectors that have experienced an increase, namely Mining, and Quarrying; Basic Metal Industry; and Processing Industry. On the other hand, the agriculture, forestry, and fisheries sectors experienced a decline. Based on this fact, it can be assumed that the investment made in Central Sulawesi Province is more dominantly targeting this sector, especially in sectors that have experienced an increase in contribution (%).

Recent studies highlighting investment in social welfare through economic growth and employment were carried out by [19]. Some of his findings are supported by previous research such as [22] which still finds a contradiction (gab) in which investment can theoretically play a role in increasing economic growth but this is not proven. Meanwhile research [11] in his research that investment has a direct effect on economic growth. The second gap is from the results of their research [19], [22] that economic growth that occurs in an area does not provide welfare to the community, and has no effect on employment. The next challenge is that efforts to maximize employment do not appear to have a positive correlation with social welfare.

Efforts to review existing theories and reconstruct the facts as revealed in the research gaps above (theoretical gaps, research gaps, and phenomena/empirical gaps), and in particular [19] suggest conducting further studies on the role of investment in social welfare society through the role of economic growth, and employment. Daengs' study [19], [11] does not specifically analyze the role of absorbing labor, so there is a void that needs further exploration, namely the role of investment in social welfare through employment. This vacancy is at the same time a key position (state of the art) for this research as well as a claim for research novelty.

In particular, this study takes cases in areas with special characteristics of mineral (nickel) mining investments in Central Sulawesi Province. The focus of study locations in mineral mining areas adds to the uniqueness of the research while at the same time strengthening the novelty of the research.

The aim of this research is to identify and analyze the direct relationship between investment and its impact on social welfare, economic growth, and employment. Then analyze the effect of economic growth on the social welfare of the community, and the effect of employment on the social welfare of the community. The final study analyzes the role of economic growth and employment as mediating variables.

## I. MATERIALS AND METHODS

### A. Time and Place

This research was conducted in 2021-2022 by taking cases in Central Sulawesi Province. The selection of study focus locations was carried out purposively with the consideration that studies related to study objects were based on the economy and/or the dominance of mining sector investment was very limited. Related studies such as [19], [10], [20], [11], [22] the investment study analyzed is not specifically in areas based on the mineral mining sector.

### B. Research Type and Design

This study uses a quantitative approach using explanatory design to test the theory according to the hypothesis that was built, namely the effect of investment on social welfare through economic growth, and employment opportunities. The hypothesis is then distributed into seven hypotheses.

### C. Research Data

The research data is time series in the last 15 years, namely 2006-2020. These data are secondary in nature and obtained from several government agencies in Central Sulawesi Province which present data according to the variables analyzed.

### D. Research Variable

The focus of the research analysis (variables) consists of four, namely investment as the independent variable (X), then social welfare, economic growth, and employment each as the related variable (Y). Then a conceptual model was developed by placing the variables of economic growth and employment as independent variables (X) on social welfare (Y). The next model is economic growth, and employment is positioned as an intermediate variable (mediation/Z) the effect of investment (X) on the social welfare of society.

Investment data in Central Sulawesi during the 2006-2020 period is presented in Table 1 below,

Table 1. Development of Investment in Central Sulawesi Province in 2006-2020

Year	Domestic investment/ PMDN (Billion IDR)	Foreign investment/ PMA (Billion IDR)	Average (Billion IDR)	Investment value (%)
2006	223.59	652.45	438.016	5.01
2007	237.00	678.54	457.77	4.51
2008	253.59	732.83	493.21	7.74
2009	266.27	776.80	521.53	5.74
2010	287.57	831.17	559.37	7.26
2011	310.58	897.67	604.12	8.00
2012	332.32	789.95	561.13	7.12

2013	312.38	750.45	531.41	5.30
2014	340.49	802.98	571.74	7.59
2015	303.04	762.83	532.94	6.79
2016	266.67	823.86	545.27	2.31
2017	296.01	856.81	576.41	5.71
2018	325.61	916.79	621.20	7.77
2019	367.94	861.78	614.86	7.52
2020	404.73	844.55	624.64	7.89

Sources: Bappeda, Central Sulawesi Province (2022)

Community social welfare variables were analyzed with indicators consisting of education, health, and purchasing power. Information about the social welfare of the people of Central Sulawesi during the 2006-2020 period is best presented in Table 2 below,

Table 2. Development of Community Social Welfare in Central Sulawesi Province in 2006-2020

Year	Education (Billion IDR)	Health (Billion IDR)	Purchasing power (Billion IDR)	Average (Billion IDR)	Human Development Index (IPM)
2006	820.52	745.76	457.79	674.70	55.65
2007	902.57	820.34	503.57	742.16	54.82
2008	812.32	902.37	553.93	756.20	55.12
2009	893.55	992.61	609.32	831.82	60.87
2010	982.90	1,091.87	670.25	915.01	61.32
2011	884.61	982.68	603.22	823.51	64.55
2012	973.08	1,080.95	663.55	905.86	65.57
2013	1,070.38	972.85	729.91	924.39	65.87
2014	1,177.42	875.57	802.90	951.96	66.38
2015	1,059.68	963.12	883.18	968.66	66.76
2016	1,165.65	1,059.44	971.50	1,065.52	67.47
2017	1,282.21	1,165.38	1,068.65	1,172.08	68.11
2018	1,153.99	1,048.84	961.78	1,054.88	68.88
2019	1,038.60	943.96	1,057.96	1,013.50	69.50
2020	1,142.45	1,038.35	1,163.76	1,114.86	69.55
Average	1,024.00	978.94	780.08	927.67	64.03

Sources: Bappeda, Central Sulawesi Province (2022)

The economic growth analyzed is income inequality, economic structure, employment opportunities, public services, and GRDP [24]. Data on the development of economic growth analyzed in full is presented in Table 3.

Table 3. Development of Economic Growth in Central Sulawesi Province in 2006-2020

Year	Economic Growth (%)	Year	Economic Growth (%)
2006	5.03	2014	5.16
2007	5.48	2015	4.96

2008	5.86	2016	5.20
2009	5.25	2017	5.01
2010	4.82	2018	5.19
2011	5.03	2019	4.90
2012	4.98	2020	5.09
2013	5.06		

Sources: [26], [27]

Finally, labor absorption is analyzed with indicators of employment, worker needs, the labor market, and the workforce [25]. Data related to labor absorption is presented in Table 4 below,

Table 4. The Development of Labor Absorption in Central Sulawesi Province in 2006-2020

Year	Employment (people)	Manpower needs (people)	Labor market (people)	Total work force (people)	Number of labor absorption (%)
2006	1,257	408,125	224,575	697,551	69.76
2007	1,358	424,450	229,067	753,355	75.34
2008	1,425	458,406	238,229	813,623	81.36
2009	1,454	481,326	247,758	821,760	82.18
2010	1,512	505,393	250,236	829,977	83.00
2011	1,618	545,824	255,241	838,277	83.83
2012	1,650	600,406	268,003	846,660	84.67
2013	1,733	672,455	273,363	855,126	85.51
2014	1,767	773,323	278,830	863,678	86.37
2015	1,838	850,656	281,618	872,315	87.23
2016	1,875	927,215	287,251	881,038	88.10
2017	1,950	1,038,481	301,613	889,848	88.98
2018	2,047	1,194,253	307,645	898,747	89.87
2019	2,191	1,349,506	316,875	907,734	90.77
2020	2,256	1,538,436	320,044	916,811	91.68

Sumber: BPS Sulawesi Tengah (2022)

The research conceptual model can be seen in Figure 1 below,

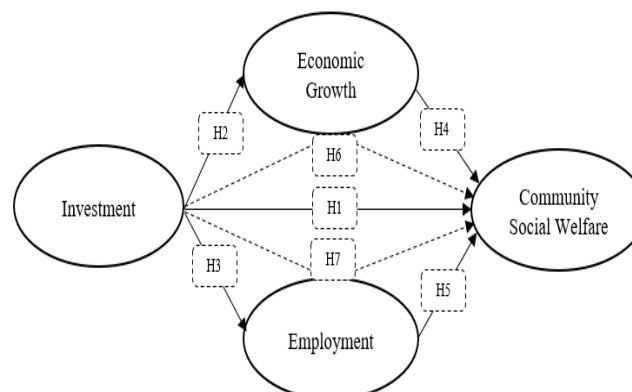


Figure 1. Research Conceptual Model

### E. Data Analysis Technique

Data analysis is used with path analysis techniques. This technique was chosen with the consideration that there is a causal (cause and effect) relationship between variables, using time series data, there are intermediate or intervening variables, and the relationship between variables is not reciprocal (confirmative). The use of path

analysis tools in relevant research (conceptual model fit) was carried out by [8], [21]. The equation model used is (visualization of the path model shown in Figure 2):

$$X = \rho_{xy_1}Y_1 + \rho_{xy_2}Y_2 + \rho_{xy_3}Y_3 + e(1)$$

Information:

$X$  = Investment  $Y_1$  = Economic Growth

$Y_2$  = Number of Labor Absorption (Employment)

$Y_3$  = Community Social Welfare

Relationship path between variables:

$\rho_{XY_1}$  = Investment - Economic Growth

$\rho_{XY_2}$  = Investment- Employment

$\rho_{XY_3}$  = Investment-Community Social Welfare

$\rho_{Y_1Y_3}$  = Economic Growth- Community Social Welfare

$\rho_{Y_2Y_3}$  = Employment- Community Social Welfare

$\rho_{XY_1Y_3}$  = Investment -Economic Growth - Community Social Welfare

$\rho_{XY_2Y_3}$  = Investment – Employment - Community Social Welfare

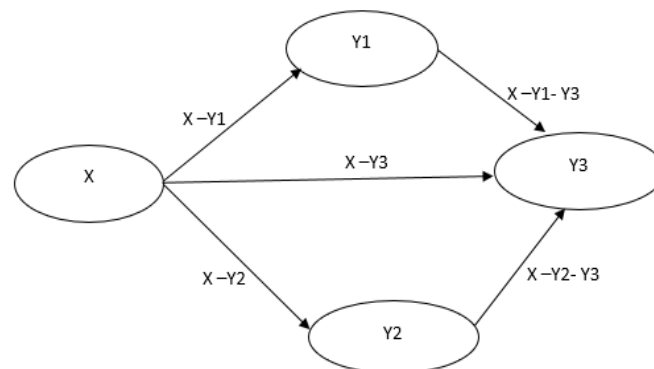


Figure 2. Path Relationship Model Between Variables

In accordance with the framework of the concept model and path relationship model as shown in Figure 1 and Figure 2, the hypotheses proposed to be proven in this study are:

- Investment has a positive and significant effect on social welfare (H1), economic growth (H2), and employment (H3),
- Economic growth has a positive and significant effect on social welfare (H4),
- Labor absorption has a positive and significant effect on the social welfare of society (H5), and
- Investment has a positive and significant effect on social welfare through economic growth (H6), and through employment (H7).

## II. RESULTS

### A. Validity

The results of the data validity test are presented in Table 5 below,

Table 5. Data Validity Test Results

Validity		X	y	z1	z2
x	Pearson Correlation	1	.730**	.751**	.592*
	Sig. (2-tailed)		.002	.001	.020
	N	15	15	15	15
y	Pearson Correlation	.730**	1	.426	.414
	Sig. (2-tailed)	.002		.113	.125

	N	15	15	15	15
z1	Pearson Correlation	.751**	.426	1	.858**
	Sig. (2-tailed)	.001	.113		.000
	N	15	15	15	15
z2	Pearson Correlation	.592*	.414	.858**	1
	Sig. (2-tailed)	.020	.125	.000	
	N	15	15	15	15

The results of the validity test in Table 5 above show that the data used in this study fulfilled the requirements of  $r > 0.30$ , so that data on investment, social welfare, economic growth, and employment have a correlation and are declared valid to be used in the analytical testing stage furthermore.

Other information that the relationship between social welfare and economic growth is valid but not significant because the value of  $\alpha > 0.05$  is 0.113 of the 15 data tested. Likewise, the relationship between social welfare and employment is valid but not significant because the value  $\alpha > 0.05$  is 0.125 from the 15 data tested. However, overall the data in this study is valid.

### B. Reliability

The reliability test is used to measure the reliability of the data used in this study. Reliable data requirements are  $\alpha > 0.60$  is reliable data, and if  $\alpha < 0.60$  is unreliable or unreliable data. The results of the data validity test are presented as in Table 6,

Table 6. Data Reliability Test Results

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.849	.871	4

The alpha value ( $\alpha$ ) obtained is 0.849 so that  $\alpha > 0.60$ . This means that the data used in the research can be relied upon to answer the formulation of the research problem. It was found that investment data, community social welfare, economic growth, and employment data were reliable for analysis purposes.

### C. Hypothesis Testing

Test the hypothesis and the significance of the effect of the independent variables on the dependent variable partially using the t test. Then test simultaneously using the F test. The results of testing the hypothesis are presented in Table 7.

Table 7. Hypothesis Test Results

Symbol	Variable path model	t-count value	t-table value	Sig
INV – CSW	X-Y	3.850	1.771	0.002
INV – EG	X -Z <sub>1</sub>	4.099	1.771	0.001
INV – EMP	X- Z <sub>2</sub>	2.648	1.771	0.020
EG – CSW	Z1-Y	1.699	1.771	0.113
EMP – CSW	Z2-Y	1.640	1.771	0.125
INV – EG – CSW	X-Z <sub>1</sub> -Y	3.266	1.771	0.007
INV – EMP – CSW	X-Z <sub>2</sub> -Y	3.050	1.771	0.010

The data in Table 7 above shows the relationship between the variables suspected of having a relationship which can be explained as follows:

- The INV-CSW path shows the relationship between investment variables and social welfare where the t-count = 3,850 is greater than t-table = 1,771 with a significant  $\alpha < 0.05$ , which is 0.002. This means that there is a significant relationship between investment and social welfare.  
Thus, the hypothesis ( $H_1$ ) that investment has a significant positive effect on social welfare is accepted or proven.
  - The INV-EG line shows the relationship between investment variables and economic growth where the t-count = 4.099 is greater than t-table = 1.771 with a significant  $\alpha < 0.05$ , which is 0.001. This means that there is a significant relationship between investment and economic growth.  
Thus, the hypothesis ( $H_2$ ) that investment has a significant positive effect on economic growth is accepted or proven.
  - The INV-EMP path shows the relationship between investment variables and employment where the t-count = 2.648 is greater than t-table = 1.771 with a significant  $\alpha < 0.05$ , which is 0.020. This means that there is a significant relationship between investment and employment.  
So the hypothesis ( $H_3$ ) that investment has a significant positive effect on employment is accepted or proven.
  - The EG-CSW line shows the relationship between economic growth and social welfare where the t-count = 1,699 is smaller than the t-table = 1,771 with a significant  $\alpha > 0.05$ , which is 0.113. This means that between economic growth and social welfare there is a relationship but not significant.  
Finally it was found that the hypothesis ( $H_4$ ) that economic growth has a significant positive effect on social welfare is rejected or not proven.
  - The EMP-CSW path shows the relationship between employment and social welfare where the t-count = 1.640 is smaller than the t-table = 1.771 with a significant  $\alpha > 0.05$ , which is 0.125. This means that there is a relationship between employment and social welfare but not significant.  
Finally it was found that the hypothesis ( $H_5$ ) that employment had a significant positive effect on the social welfare of the community was rejected or not proven.
  - The INV-EG-CSW path shows the relationship between investment variables and social welfare through economic growth where the t-count = 3.266 is greater than t-table = 1.771 with a significant  $\alpha < 0.05$ , which is 0.007. This means that there is a significant relationship between investment and social welfare through economic growth.  
This means that the hypothesis proposed ( $H_6$ ) that investment has a significant positive effect on social welfare through economic growth is accepted.
  - The INV-EMP-CSW path shows the relationship between investment variables and social welfare through employment where the t-count = 3.050 is greater than t-table = 1.771 with a significant  $\alpha < 0.05$ , which is 0.010. This means that there is a significant relationship between investment and social welfare through employment.  
This means that the hypothesis proposed ( $H_7$ ) that investment has a significant positive effect on social welfare through employment is accepted.
- Furthermore, the results of the path model are explained with reference to the conceptual model in Figure 2. The path model built is a direct path model and an indirect path model (reviewed in the subtitles below).

#### **D. Direct Path Analysis Model**

The path of the investment relationship to the social welfare of the community (INV-CSW) is presented with the following equation:

$$X = a + \rho Y$$

$$X = -37.916 + 0.730Y$$

So obtained:

1. The constant value  $a = -37,916$  indicates that when there is no investment, welfare will decrease by IDR 37,916.
2. The coefficient value of  $\rho Y = 0.730$  indicates that if investment increases, the absolute level of welfare will increase by 73% assuming other factors are constant.

The investment relationship path to economic growth (INV-EG) is presented by the following equation:

$$X = a + \rho Z_1$$

$$X = -3.081 + 0.751 Z_1$$

So obtained:



- 1) The constant value  $a = -3,081$  indicates that when there is no economic growth, welfare will decrease by IDR 3,081.
- 2) The coefficient value of  $\rho Z_1 = 0.751$  indicates that if economic growth increases, the absolute level of welfare will increase by 75.10% assuming other factors are constant.

The investment-relationship path to employment (INV-EMP) is represented by the following equation:

$$X = a + \rho Z_2$$

$$X = -8.890 + 0.592 Z_2$$

Obtained that:

- 1) The constant value  $a = -8,890$  indicates that when there is no employment, welfare will decrease by IDR 8,890.
- 2) The value of the coefficient  $\rho Z_2 = 0.592$  indicates that if employment increases, the absolute level of welfare will increase by 59.20% assuming other factors are constant.

#### E. Indirect Path Analysis Model

The indirect path model referred to in this study is the relationship between variables mediated by other variables. The *First* line model is the relationship between investment and social welfare through economic growth (INV-EG-CSW), namely:

$$X = a + \rho Z_1 + \rho Y$$

$$X = -30.446 + 0.501 Z_1 + 0.537 Y$$

The results of path analysis obtained that:

- a. The relationship between the investment variable and social welfare through economic growth shows a constant value of  $a = -30,446$ , meaning that if there is no investment, economic growth and social welfare will decrease by IDR. 38,446.
- b. The coefficient  $\rho Z_1 = 0.501$  indicates that there is a positive influence of investment towards economic growth of 50.10% to improve the social welfare of the people in Central Sulawesi Province.
- c. The coefficient  $\rho Y = 0.537$  indicates that there is a positive influence of investment towards social welfare of 53.70% through economic growth in Central Sulawesi Province.

The value of the intended indirect path model is presented in full in Figure 3 below,

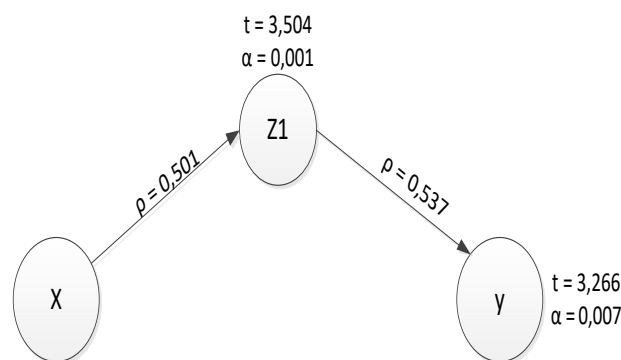


Figure 3. Model of Investment Relationship to Community Social Welfare Through Economic Growth

The *Second* line model is the relationship between investment and social welfare through employment (INV-EMP-CSW), namely:

$$X = a + \rho Z_2 + \rho Y$$

$$X = -37.820 + 0.585 Z_2 + 0.350 Y$$

The results of the analysis are visually shown in Figure 4 below,

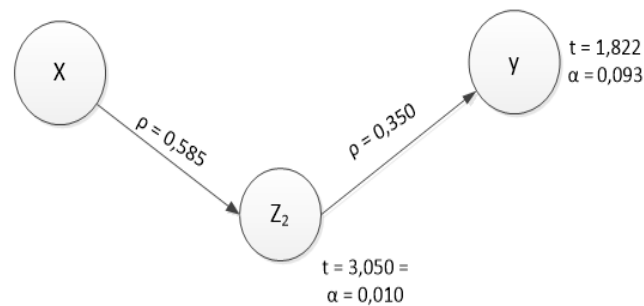


Figure 4. Model of Investment Relationship to Community Social Welfare through Labor Absorption (Employment)

The results of path analysis obtained that:

- 1) The relationship between investment variables on social welfare through employment opportunities shows a constant value of  $a = -37,820$  meaning that if there is no investment, employment and social welfare will decrease by IDR 38,446.
- 2) The coefficient  $\rho_{Z_2} = 0.585$  indicates that there is a positive effect of investment through employment of 58.50% for improving the social welfare of the people in Central Sulawesi Province.
- 3) The coefficient  $\rho_Y = 0.350$  indicates that there is a positive effect of investment on social welfare by 35% through employment in Central Sulawesi Province.

Finally, the mediation variable relationship model (indirect path) was obtained in this study as shown in Figure 5 below,

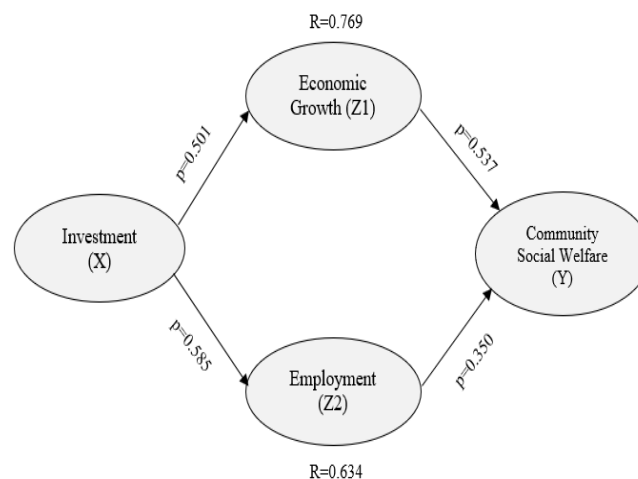


Figure 5. Model of Investment Relationship to Community Social Welfare Through Economic Growth and Labor Absorption

The end result is that economic growth and employment can play a role in increasing the contribution of investment to the social welfare of society. Then the path of the investment relationship to social welfare through stronger economic growth with a determination value ( $R^2 = 0.769$  or 76.90%) means that the changes that occur in social welfare are caused by investments that have an impact on increasing economic growth. Meanwhile, the path between investment and social welfare through absorption of labor produces a determination value ( $R^2 = 0.634$  or 63.40%). This means that the changes that occur in the social welfare of the community are caused by investments that support employment.

### III. DISCUSSION

#### A. Investment in Community Social Welfare

The analysis shows that investment has a significant positive effect on social welfare with a contribution (determination) of around 73%. This finding strengthens the previous study by [19] which found the same thing. Departing from these findings, the data says that investment during the 2006-2020 period has proven to be able to

play a role in creating social welfare for people in Central Sulawesi. Study [19] has weaknesses, namely using data for a low period (five years), and spatial analysis, namely investment in social welfare. Due to this limitation, Siregar's results and the generalization of these findings are still weak.

As a region with mining investment, it can be said that mining investment (along with three other sectors that contribute >20% to GRDP) is able to create social welfare for the community. When viewed from the social welfare figures accumulated in the Human Development Index (IPM) between 2006-2020, it shows an improvement trend.

The theoretical implication of this finding is that investment policy, especially in the current industrialization, as said by some experts, is considered a source of driving the creation of economic growth directed at social welfare [7]. The practical implication of these findings is that the government (Indonesia) and specifically the Province of Central Sulawesi to maintain the existing investment climate because it has been proven capable of playing a role in the social welfare of society. There needs to be more strategic follow-up efforts that lead to investment growth in Central Sulawesi.

### ***B. Investment Against Economic Growth***

Investment has been shown to play a role (positive and significant) in the economic growth of up to 75.10%, meaning that investment during the 2006-2020 period contributed to the economic growth of 75.10%.

Investment in Central Sulawesi has started to show an increase since 2011, meanwhile economic growth during the 2006-2020 economic period was quite good, even if there was a decline it only occurred in three years. According to the results of the analysis, it means that investment development during the observation period has a very strong role in maintaining or contributing to the regional economy.

Theoretically, the view of some experts is correct that investment is a source of driving the creation of economic growth [7]. This is then supported by previous studies such as [8]-[15] that investment contributes directly (significantly) to economic growth. The research position strengthens the results of these previous studies, as well as rejects the findings [16]-[18].

The practical implication is that the special government of Central Sulawesi Province must maintain the investment climate to maintain or increase economic performance. If the investment value can be increased in the future, it will be linear with an increase in economic growth.

### ***C. Investment Against Labor Absorption (Employment)***

Research is able to prove that investment can make a positive and significant contribution to employment. The development of investment during the observation period has a role of around 59.20% of employment. This result is consistent with the fact that there was an increase in employment during the observation period, from 69.76 to 91.68.

Our study reinforces the previous theory and has been proven by several previous researchers such as [19], [20] that investment was found to have a significant effect on employment. The practical implication is that maintaining the investment climate is not only useful for economic growth, but also for employment purposes. Facing population growth followed by growth in the workforce, one way to absorb labor is to increase investment both from within the country (PMDN) and from abroad (PMA).

### ***D. Economic Growth on Community Social Welfare***

In fact, economic growth has not been able to have a significant effect on the social welfare of the community. Territorially, it is interpreted that social welfare performance (HDI which shows an increase) is not directly a result of economic growth, or in other words that economic growth, although it has increased, does not directly have a significant impact on improving the social welfare of the community. The second theoretical consequence is that the results of this study reject or are not in line with the results of research [21], [8], [10], [11]. The results of this study agree more with the results of [19], [22] that economic growth does not directly affect people's welfare.

The practical implication is that the efforts made so far to pursue economic growth have not set off or lead to the real goal of social welfare for the community. It is important now that the government and specifically the Province of Central Sulawesi re-evaluate investment policies if the goal is for social welfare.

### ***E. Labor Absorption (Employment) on Community Social Welfare***

Our findings show that employment does not have a significant effect on social welfare. Judging from the performance figures, the absorption of labor is quite good and shows an increase, as well as the degree of welfare, however, the two are not significantly correlated with each other. It can be said that there is no role that is shown to be significant as a representation of the benefits of absorbing labor for welfare, in other words that achievements in the social welfare of the community (during the observation period) are not sourced from achievements in absorbing labor.

The theoretical implication is that research supports the study [19] that there is no significant between employment on the social welfare of society. The practical implication is that policies (efforts) in absorbing labor need to be reviewed, because what has been done so far has not contributed to human resource development (social welfare). There needs to be another effort to synchronize investment, and economic growth is directed at the absorption of labor in order to increase the degree of social welfare.

### ***F. Investment in Community Social Welfare Through Economic Growth***

The results of the analysis prove that investment has a significant positive effect on people's welfare through economic growth. Theoretically it means that investment plays a role in the social welfare of society when there is economic growth, or in other words when investment has an impact on economic growth it is possible that it will be able to increase the degree of social welfare of the community.

The second theoretical consequence or implication that these results strengthen the first hypothesis ( $H_1$ ) that investment has a significant positive effect on social welfare, and answers the weakness of the fourth hypothesis ( $H_4$ ) that economic growth has no significant effect on social welfare.

Finally, theoretically these findings support previous research by [11] investment plays a role (contributes) to people's welfare through economic growth. Finally, these findings and the results of Siregar [11] strengthen that investment will have a good role in social welfare if there are indications of increased economic growth.

### ***G. Investment in Community Social Welfare Through Absorption of Manpower(Employment)***

According to the results of the analysis it was found that investment has a significant positive effect on the social welfare of the community through employment. The logical consequence of this finding is that investment plays a role in the social welfare of society when there is an increase in the absorption of labor, in other words that investment will have a better role in social welfare if there is an increase in labor absorption first.

Theoretically, these findings strengthen the third hypothesis ( $H_3$ ) that investment has a significant positive effect on employment, and strengthens the first hypothesis ( $H_1$ ) that investment has a significant positive effect on social welfare. Next, this result also covers the weakness of the hypothesis ( $H_5$ ) that employment does not have a significant positive effect on the social welfare of society, so that the relationship between the two will be good (significant) if there is an improvement in investment performance first. The theoretical consequence is that investment will play a good role in welfare if the investment is able to increase employment.

There has been no prior research related to this model explicitly, so this finding is a key position for research novelty. If in the future there is a model that has been offered, this new position will specifically generalize cases in investment-based areas in the mining sector.

Based on the results of the analysis of the two models of the intermediate variable (mediation), it was found that the path of the relationship between investment and social welfare through economic growth is stronger with a determinant value ( $R^2 = 0.769$  or 76.90%) than through employment (determination  $R^2 = 0.634$  or 63.40%). The logical consequence is that investment through economic growth has a stronger or greater positive impact on social welfare than through employment.

## **IV. CONCLUSION**

Investment has a significant positive effect on social welfare, economic growth, and on employment. This means that investments made in regional cases based on the mining sector have proven to be able to contribute to social welfare, economic growth, and to employment.

Furthermore, it was found that economic growth did not have a significant positive effect on the social welfare of the community. Then the absorption of labor does not have a significant positive effect on the social welfare of the community. This can be interpreted that economic growth, and absorption of special workforce in regional

cases based on the mining sector have not made a real contribution to the social welfare of the community.

The results of the analysis of the use of the intermediate variable (mediation) show that investment has a significant positive effect on the social welfare of the community through acceptable economic growth. Then investment has a significant positive effect on the social welfare of society through employment. This means that investment will contribute better to social welfare if there is economic growth first, and there is an increase in labor absorption.

### ***Excess (Novelty) Research***

In accordance with the position (state of the art) research emphasized at the beginning of the review (background), it was found that investment is proven to be able to contribute (significantly) to social welfare through employment. This finding opens a new paradigm for further discussion, whether the model applies to other cases (generalization) or vice versa. For the government, our findings have opened up the treasures behind investment implementation in relation to social welfare and employment.

### ***Weaknesses and Research Suggestions***

There are two main weaknesses of this study. First, the data used uses fifteen years of data, which is still relatively short. On this basis, we suggest that future research can use longer data so that research generalizations are stronger.

The second weakness is that this research has not been able to prove that economic growth and employment have a good (significant) impact on the social welfare of the community. Theoretically and the ideal condition of the investment objective is to absorb labor, and the absorption of labor will have a positive impact on the social welfare of society. On this basis, it is suggested to carry out further analysis to add to the repertoire, whether it is able to prove the intended theory or does not show a positive correlation at all to then be used as a critique (weakness) on policies and implementation of investment activities that are based on the goals of economic growth and employment. work for the social welfare of society.

Practically it is recommended for the Regional Government to pay attention and if necessary re-evaluate the current implementing policies that lead to economic growth (related to investment). This is based on the results of a study which found that economic growth has not had a significant impact on social welfare. The second note for the government is related to employment which is proven to have no real impact on the social welfare of the community. These results suggest that there are things that need to be improved related to employment (in relation to investment). Reviewing this matter is important and urgent, so that investment in the regions really provides benefits in increasing employment absorption which in turn is able to improve the social welfare of the community.

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