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Analysis of the Role of Industry, Investment, Quality of Human Resources and Realization of Regional Expenditure in Improving the Quality of Economic Growth in Southeast Sulawesi Province

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Abstract

Quality economic growth is the main goal in regional development, because it not only emphasizes increasing GRDP figures, but also on equalizing development results and improving community welfare. This research investigates how industrial activity, investment levels, the skill and education of the workforce (human resources), and the execution of the regional budget influence the quality of economic growth in Southeast Sulawesi Province. Furthermore, it seeks to determine how these factors contribute to improved living standards for the region's population. This research uses a quantitative descriptive method with the research area limited to six districts and two cities in Southeast Sulawesi Province, and uses secondary data from various official agencies for the period 2006 to 2015. Data analysis was carried out using an econometric approach through a panel data regression model using the Eviews 7 application, as well as testing the significance of the model through the F, t and R^2 tests. The study reveals that, collectively, investment, industrial activity, human resource quality, and regional budget execution positively and significantly impact the quality of economic growth in Southeast Sulawesi Province. However, when examined individually, only investment and regional expenditure show a statistically significant influence. The quality of economic growth has been proven to have a positive and significant effect on improving the welfare of the people in the region. Therefore, the recommended policy strategies include strengthening the basic economic sector, increasing capital expenditure, improving the quality of human resources, equal distribution of regional budget allocations, and developing a people-based creative economy.

Keywords: *Regional Spending, Industry, Investment, Quality of Human Resources, Quality of Economic Growth.*

Introduction

Development aims to improve the standard of living and welfare of the community. Improving welfare is achieved through various human efforts to find solutions to problems in their own lives, such as foot problems, without interference from other parties, including the government. This is left entirely to the regulation of market mechanisms by the invisible hand, as described by Adam Smith (Mankiw et al., 2001). Nevertheless, as activities across all sectors expand,

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individuals encounter heightened competition. Consequently, governmental involvement becomes essential to manage the overall economic stability and promote widespread prosperity. Sustained growth in per capita income over time is a key metric for assessing economic development. Thus, economic development can be understood as a process that drives long-term increases in individual income (Sukirno, 2006).

The strategic efforts of a regional government to realize the welfare of its people are carried out by trying to pursue economic growth in the development implementation process. Kuznet in (Todaro, 2003) views economic growth as a country's growing long-term capacity to provide economic goods. The ability to produce more is enhanced by progress in technology, changes in how systems are organized, shifts in prevailing beliefs, or by the need to adapt to current situations. Pressman (2000) attributes to Deep Kuznets the idea that economic expansion is a product of both significant productivity and a large population base.

To secure quality economic growth, it is imperative to undertake physical economic development measures, including the promotion of industrial sector expansion, infrastructure development, and the advancement of manufactured goods production. Foster substantial investment in projects requiring significant capital to ensure that income from capital assets surpasses income from labor, which will enhance the value of various community production activities. This increase in investment will increase economic activity.

Generally, desirable economic growth is achieved when the Gross Domestic Product increases. This increase in GDP can be attributed to the growth of physical capital or human resources, or by increasing the amount of capital available, even if there is also an increase in the workforce. Simply put, regional economic growth, measured by GDP or GRDP increases, needs catalysts. The GRDP growth rate is a key measure of regional economic expansion, which is also characterized by increased production of goods and services.

The extent to which economic growth is considered "quality" can be determined by how closely it aligns with an equitable distribution of income. A high level of economic growth must be felt by many people so that it does not lead to inequality in income distribution. However, what often happens is that high economic growth results in unequal distribution of income (Kuznets Simon, 1955). This can be seen in economic growth and income distribution in many developing countries or regions/regions, especially areas with a rapid economic development process or with a high rate of economic growth. The distribution of national income reflects the equal or unequal distribution of the results of a country's development among its population (Dumairy, 1999). Often there is a *trade-off* between inequality and growth. However, the reality proves that inequality in developing countries in recent decades is related to low economic growth (Kuncoro, 2003). According to (Lincolin, 2004), When rapid economic growth is paired with rising unemployment and uneven income distribution, it demonstrates a lack of inclusive progress.

To assess the quality of economic growth, we must consider high GDP growth, fair income distribution, and reduced regional disparities, as well as its ability to decrease poverty. However, Maskin and Basu (2011) point out that globalization can disconnect economic growth from improved population welfare.

Therefore, the goal of development is not only to increase economic growth, but also how to equalize and distribute income among the community, implement development evenly in the autonomous region of a region and can be seen from the reduction in the number of poor people

in a region. Sukirno, (1980) states that the equal distribution of income between residents/households contains two important aspects. The first is to improve the living standards of those below the poverty line. The second is overall income equality, in the sense of narrowing differences in income levels between households (Rudatin, 2001). Poverty in economic development is a problem that cannot be eliminated because poverty can be created relatively, absolutely, structurally and culturally (Sudantoko & Muliawan, 2009).

Based on the theoretical studies described above, it shows that strategic economic development efforts are needed to increase welfare by improving the quality of economic growth. The process of economic development needs to be sustained to promote fair and equitable welfare for all members of society. The Human Development Index is the key indicator for measuring community welfare.

As a key part of national development, Southeast Sulawesi is pursuing economic development strategies that prioritize quality growth to improve the living standards of its residents. The industrial sector, specifically the secondary sector, is seen as critical in bolstering the economic output of the primary sector. The contribution of the processing, electricity, gas and water industries in forming GRDP in Southeast Sulawesi is still very small, even though in fact the shift in the contribution of the economic sector from the primary sector to the secondary sector should occur in a balanced manner. Based on data from 2010 to 2014, the contribution of the processing, gas and water industries was only around 6.42 percent, which is very low compared to the contribution of the tertiary sector. (BPS, 2015). This shows that the economic situation in Southeast Sulawesi Province is not balanced between the primary sector, secondary sector and tertiary sector. The processing, gas and water industries which should have a very strategic role in shaping the GRDP of Southeast Sulawesi Province, however, have only contributed a GRDP contribution of only 6.32 percent over the last five years. Therefore, it is necessary to implement policy strategies aimed at enhancing the processing industry's contribution to GRDP, ensuring a more equitable balance with the primary and secondary sectors. The processing, gas and water industrial sector must grow above 10 percent so that the performance of the processing, gas and water industrial sector in Southeast Sulawesi plays a role in supporting accelerated regional economic growth. The performance of the processing, gas and water processing industry sectors must play an even greater role in supporting economic growth in Southeast Sulawesi.

Although industry and investment are major contributors to economic growth, the availability of a skilled and productive workforce, reliant on quality human resources, is indispensable. Educational services play a vital role in developing the quality human resources necessary for economic growth. In addition to industry, investment, and human resource quality, the flow of money between regions is a key factor in Southeast Sulawesi's economic growth. The amount of money between regions in Southeast Sulawesi Province can be measured from the size of the realization of the “Regional Revenue and Expenditure Budget (APBD)” to finance various kinds of economic development activities in Southeast Sulawesi. The economic condition of Southeast Sulawesi Province can be seen from the GRDP from 2010 to 2014 which is shown in table 1 below:

No.	YEAR	Gross Regional Domestic Product (GRDP)			
		ADH Konstan 2010	Growth (%)	ADH Occurs	Growth (%)

1	2010	48.401.152,38	-	48.401.152,38	-
2	2011	53.546.689,52	10,63	55.758.554,87	15,20
3	2012	59.785.399,06	11,65	64.693.984,56	16,03
4	2013	64.273.783,78	7,51	71.041.288,85	9,81
5	2014	68.298.724,30	6,25	78.620.389,17	10,67
	Rate-rate	**58.861.149,81**	**9,01**	**63.703.073,97**	**12,95**

Table 1. GRDP Based On 2010 Constant Prices and Applicable According to Business Field, Southeast Sulawesi Province 2010-2014 (Thousands of Rupiah)

Data source: BPS Sultra 2015 (secondary data processed)

Based on the data in table 1. shown above, the GRDP value of Southeast Sulawesi Province is based on 2010 constant prices and with various products valued at the basic prices in effect in the current year. GRDP from 2010 to 2014, if viewed based on constant ADH, GRDP acquisition has increased with an average value each year of Rp. 58,861,149,810,000,- but the growth tends to decrease with an average value of Rp. 9.01 percent. However, if we look at the ADH, the current GRDP from 2010 to 2014 also tends to increase in GDP, with an average value of IDR. 63,703,073,970,000,-, but growth tended to decrease from 2010 to 2013 and increased again in 2014 with an average annual value of 12.93 percent. Through the constant price approach, each year's GRDP can provide an overview of changes in GRDP in volume or quantity only (without any price changes). The expenditure component of GRDP based on constant basic prices describes real economic changes or growth, mainly related to the increase in income volume in each economic sector in Southeast Sulawesi Province.

However, Southeast Sulawesi's economic growth as a regional economic development achievement may not be able to provide overall prosperity to the people in that region. This is because the distribution of the results of economic development is uneven or because the population of an area is very large. Therefore, an economic development strategy is needed to improve the quality of economic growth with a strong economic structure. GRDP growth should be distributed well among all groups of society so that the welfare of society can be enjoyed as a whole.

The aforementioned situation highlights the necessity for a systematic and comprehensive investigation of economic development policy strategies to foster quality economic growth, ultimately leading to improved prosperity within Southeast Sulawesi Province. This observation is consonant with the empirical findings of Germanu, (2012), which states that with the rapid development of applied mathematics and econometric techniques, there is a need for strategic models to assess and test development process phenomena such as endogenous economic growth systems. It is hoped that the models that have been built, tested and analyzed can form long-term and sustainable development policies and strategies that are considered to be the most effective.

This is further strengthened by the results of research by (Kuznetsova & Vorobeya, 2015) it is concluded that economic development can be comprehensively understood by analyzing multiple economic factors and indicators, including GDP growth, the Gini index, poverty levels, per capita income, and the Human Development Index, which collectively reveal a country or region's economic potential. In connection with this, it is considered important to carry out an analysis regarding "Strategies for improving community welfare through quality economic growth in Southeast Sulawesi Province".

This research provides a comprehensive analysis of the relationship between "industrial activity, investment, human resource quality, and regional budget implementation", and their effects on "economic growth and community welfare" in Southeast Sulawesi Province. The novelty of this research lies in its approach which not only highlights economic growth quantitatively, but also emphasizes the importance of the quality of growth as measured through the concept of average elasticity, which reflects income distribution, equitable development, as well as reducing poverty and unemployment rates. Thus, this research provides a strategic contribution in formulating regional development policies that are more inclusive and sustainable.

Research Methods

The research utilizes quantitative descriptive methods and is geographically situated in Southeast Sulawesi Province, with a scope limited to six districts and two cities within the region. The districts in question are "Buton Regency, Muna Regency, Konawe Regency, Kolaka Regency, South Konawe Regency and North Kolaka Regency, while the other two cities are Kendari City and Bau-Bau City".

The source and type of data used in this research is secondary data. Data sources come from official sources, namely the "Office of the Governor of Southeast Sulawesi Province, BPS Regency/City, BPS Province of Southeast Sulawesi, BAPPEDA of Southeast Sulawesi Province and several publications from Bank Indonesia Province of Southeast Sulawesi from 2006 to 2015", and other supporting literature.

Given the chosen analysis techniques, this research will utilize both quantitative and qualitative data to provide a complete overview of how different factors influence economic growth quality and its effects on community welfare in Southeast Sulawesi Province. Data were analyzed through an econometric approach using a panel data regression model. The Eviews 7 application was employed to analyze the causal relationships between the independent and dependent variables. To conclude the results, significance tests were used simultaneously (F-test), individually (t-test), and model goodness-of-fit testing (R^2), all of which aim to test the significance of the influence of factors.

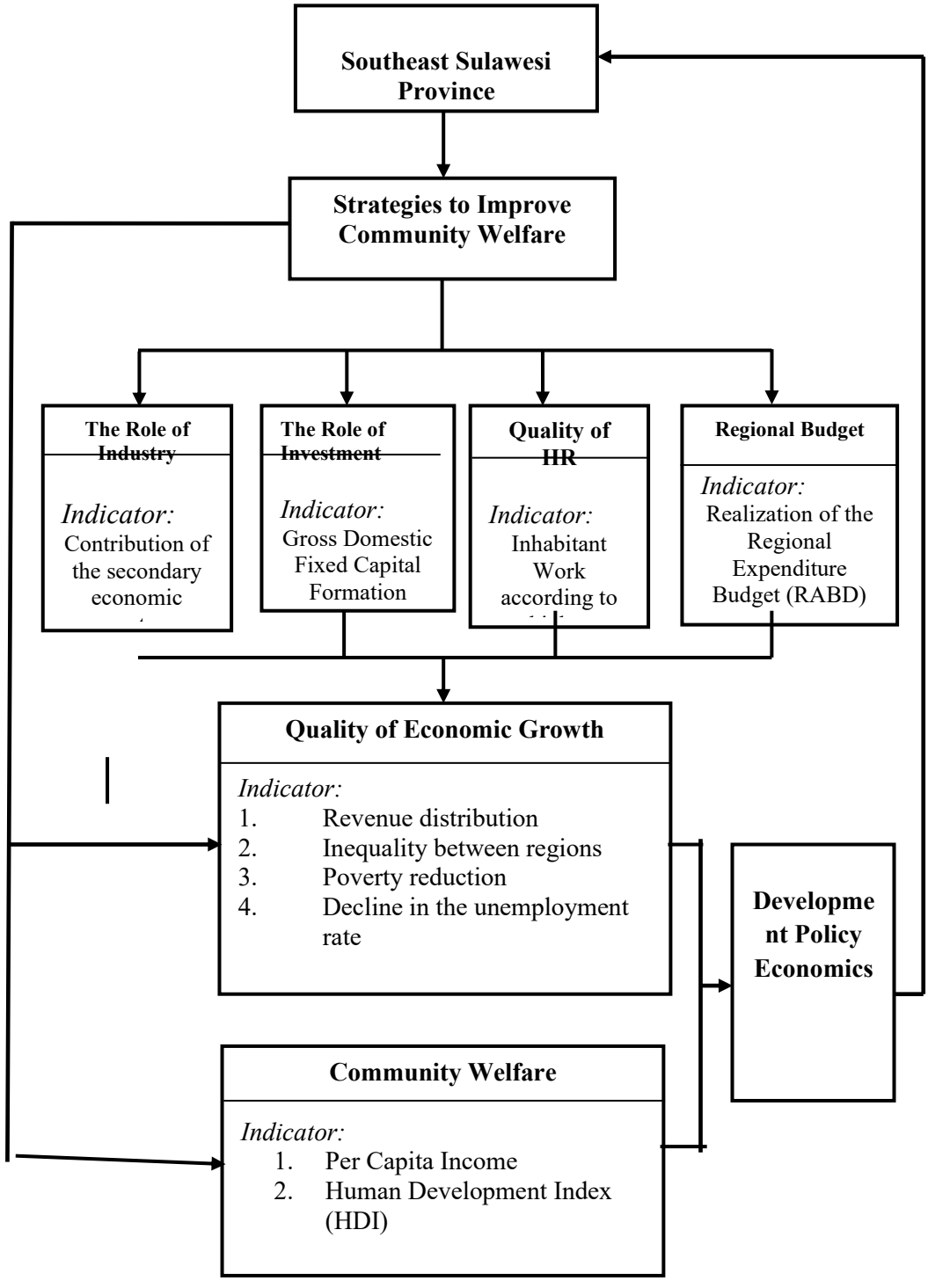

Figure 1. Research Framework

Results and Discussion

a. Results

Descriptive Analysis of Research Variables

This analysis is aimed at finding out a general description of the research variables in Southeast Sulawesi Province with several districts/cities as samples totaling 8 districts/cities. Using the Eviews 7.2 software, a descriptive analysis was performed, and the resulting data for the sample districts/cities are summarized in Table 2:

	X1_INDUSTRY	X2_PMTDB	X3_FORCE WORK	X4_RABD	Y1_KPE	Y2_WHO
Mean	-3.593.022	-9.988.889	-0.011111	0.011111	0.066667	8.891.111
Median	-1.424.000	-1.543.000	-4.427.500	-3.065.500	-3.382.500	-2.083.500
Maximum	45119.00	15830.00	38652.00	43375.00	44500.00	43607.00
Minimum	-72679.00	-12379.00	-6.188.000	-5.390.000	-6.604.000	-13933.00
Std. Dev.	17950.57	7.916.210	10000.05	10000.06	9.999.936	9.958.858
Skewness	-1.148.157	0.269529	2.453.958	3.129.851	2.748.042	2.034.740
Kurtosis	7.039.004	1.721.536	8.636.025	1.211.066	1.008.874	8.427.212
Jarque-Bera	8.094.979	7.218.948	2.094.465	4.582.053	3.017.146	1.725.573
Probability	0.000000	0.027066	0.000000	0.000000	0.000000	0.000000
Sum	-323372.0	-8.990.000	-1.000.000	1.000.000	6.000.000	8.002.000
Sum Sq. Dev.	2.87E+10	5.58E+09	8.90E+09	8.90E+09	8.90E+09	8.83E+09
Observations	90	90	90	90	90	90

Table 2. Results of Descriptive Analysis of Research Variables in Districts/Cities In Southeast Sulawesi Province

Source: Eviews output

According to Table 1, the indicators of economic growth quality in Southeast Sulawesi Province "GDP growth rate, Gini Ratio Index, Williamson Index, poverty percentage, and open unemployment rate" resulted in an average value of 0.066667, with values ranging from a minimum of -6,604,000 to a maximum of 44,500.00, and a standard deviation of 9,999,936. The independent variables that influence it consist of processing industry (mean -3,593,022; min -72,679.00; max 45,119.00; standard deviation 17,950.57), PMTDB (mean -9,988,889; max 15,830.00; standard deviation 7,916,210), labor force (mean -0.011111; min -6,188,000; max 38,652.00; standard deviation 10,000.05), and realization of regional expenditure budget or RABD (mean 0.011111; min -5,390,000; max 43,375.00; standard deviation 10,000.06). Meanwhile, the level of community welfare as measured by GDP per capita and the Human Development Index (HDI) has an average of 8,891,111, a minimum value of -13,933.00, a maximum of 43,607.00, and a standard deviation of 9,958,858, which reflects variations in the increase in welfare in each district/city due to differences in the quality of economic growth.

Panel Data Regression on "the Role of Industry, Role of Investment, Quality of Human Resources and Regional Expenditure Budget" on "the Quality of Economic Growth"

Hypothesis Model Selection Test I

1. F-statistic test (*Chow Test*)

o select between the common effect (OLS) and fixed effect models, the F-test is necessary. Prior to the test, two regression models are run: the first with the assumption of uniform slopes and intercepts, and the second with the assumption of uniform slopes but differing intercepts. The table presents the fixed effects model testing results:

Effects Test		**Statistic**	**d.f.**	**Prob.**
Cross-section F		**11.474281**	**(8,77)**	**0.0000**
Cross-section Chi-square		**70.638757**	**8**	**0.0000**

Table 3. Model Test Results Fixed Effect With Dummy Variables

Source: Eviews data processing results ver 7.2

Table 2 displays the F-test results, where a probability value below 0.05 indicates the suitability of the fixed effects (FE) model, and a value above 0.05 favors the common effects (CE) model. Given the obtained probability of 0.0000, the FE model is deemed more accurate. Thus, the appropriate panel data model for analyzing the behavior of the eight districts/cities in Southeast Sulawesi is the model *Common Effect. (*THIS*)*.

2. Hausman Test

After the F-test, the Hausman test determines if FE or RE is better. The table below displays the

Hausman test results:

Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		2.048730	4	0.7268

Table 4. Results of Model Selection Using The Hausman Test

Source: Data processing with Eviews.

The results of processing table 5.3 above show the probability value (Prob.) *Cross-section* random. If the probability value is > 0.05 then the selected model is RE, but if the probability is < 0.05 then the selected model is FE. In the table it can be seen that the value of Prob. *Cross-section* random is 0.7268, the value is > 0.05, so it can be concluded that the RE model is more accurate than the FE model.

3. *Long Range Multiplier* (LM) *Test*

For the purpose of choosing between common effects (CE) and random effects (RE) models, the LM test is performed. This test uses OLS residuals to evaluate if the random effects model provides a better fit than the common effects model:

$$LM = \frac{nT}{2(T-1)}\left[\frac{\sum_{i-1}^{n}\left[\sum_{t-1}^{T}\hat{e}_{it}\right]}{\sum_{i-1}^{n}\sum_{t-1}^{T}\hat{e}_{it}^{2}}-1\right]^{2}$$

$$LM = \frac{9(10)}{2(10-1)}\left[\frac{\sum_{i-1}^{n}10^{2}_{it}(3{,}22336)}{\sum_{i-1}^{n}1{,}85155}-1\right]^{2}$$

$$LM = 149.800$$

Following the estimation of panel data regression parameters using common, fixed, and random effects methods, and the application of the F, Hausman, and LM tests, the random effects model was determined to be the most appropriate for this analysis. The calculated LM statistic of 149,800, which is higher than the Chi-Squared table value of 107,520 at a 5% significance level, supports the selection of the random effects model. These results are also in line with testing via the Chow and Hausman Test. From the results of these data processing calculations, a panel data regression equation is obtained regarding the influence of "the role of industry, the role of investment, the quality of human resources and the realization of regional expenditure budgets" on "the quality of economic growth" as follows:

Estimation Equation:

==========

Z_KPE_it = C(1)* (C2)Z_INDS_it+(C3)*Z_PMTDB_it + C(4)*Z_ANG_KERJA_it +

C(5)*Z_RABD_it + [CX=F]

Substituted Coefficients:

==========

Z_KPE_it = -25.4343905797-0.00211091381433*Z_INDS_it+0.732811630372*Z_PMTDB_it-

0.254486941201*Z_ANG_KERJA_it + 0.319471594929*Z_RABD_IT + [CX=F]

Or:

Y_{it} = -25,4344 -0,0021$X_{1\ it}$ + 0,7328$X_{2\ it}$ – 0,2545$X_{3\ it}$ + 0,3195$X_{4\ it}$

The subsequent explanation details the interpretation of the coefficients found in the panel data regression equation:

1. The constant (α) of -25.43 means that without any influence from the independent variable, namely processing industry, PMTDB, quality of human resources and realization of regional budgets, the probability of quality economic growth will decrease by 25.43 percent.

2. The direction of influence of the role of industry as measured by the processing, electricity, gas and clean water industry sectors (X1) on the quality of economic growth in Southeast Sulawesi Province shows a negative relationship. This means that, even though there was a decrease in the role of the sector by 1 percent, the quality of economic growth actually increased by 0.0021 percent, assuming other variables remained constant.

3. The analysis indicates a positive correlation between investment (PMTDB/X2) and economic growth quality in Southeast Sulawesi Province. Specifically, a 1% increase in investment leads to a 0.7328% increase in growth, assuming all other variables remain unchanged.

4. A negative relationship exists between highly educated workers and economic growth. A 1% drop in X3 results in a 0.2545% growth increase, assuming other factors remain unchanged.

5. The analysis indicates a positive correlation between regional expenditure budgets (X4) and economic growth quality in Southeast Sulawesi Province. Specifically, a 1% increase in budget realization leads to a 0.3195% increase in growth, assuming all other variables remain unchanged.

Hypothesis Test I

1. Coefficient of Determination Test (R^2)

The adjusted R2 value of 0.845 signifies that the combined effect of investment, industry, human resource quality, and inter-regional money flows accounts for 84.5% of the variation in economic growth quality. The remaining 15.5% of the variation is explained by variables not included in this study.

2. Simultaneous Hypothesis Testing (F Test)

A significant simultaneous effect exists between the independent and dependent variables, confirmed by the F-test probability of 0.0000, which is less than 0.05.

Partial Hypothesis Test (t Test)

To evaluate the individual significance of each independent variable, t-tests were carried out at a significance level of alpha 0.05. The following details the t-values and probabilities obtained:

1. The Influence of the Role of Industry on the Quality of Economic Growth

Based on the test results using the Eviews program, a significance value of 0.6863 was obtained which was greater than 0.05, so the hypothesis (Hi) was rejected. This shows that the role of the processing industry, electricity and clean water sectors did not have a significant effect on the quality of economic growth in several districts/cities in Southeast Sulawesi Province during the 2006–2015 period.

2. Influence of the Role of Investment on the Quality of Economic Growth

Based on the test results using the Eviews program, a significance value of 0.0000 was obtained, which is smaller than 0.05, so the hypothesis (Hi) was accepted. This means that the role of investment as measured through PMTDB has a significant effect on the quality of economic growth in several districts/cities in Southeast Sulawesi Province during the 2006–2015 period.

3. Influence of HR Quality on the Quality of Economic Growth

Based on the test results using the Eviews program, a significance value of 0.4357 was obtained which was greater than 0.05, so the hypothesis (Hi) was rejected. This shows that the quality of human resources as measured by the number of highly educated workforce, does not have a significant effect on the quality of economic growth in several districts/cities in Southeast Sulawesi Province during the 2006–2015 period.

4. The Influence of Regional Expenditure Budgets on the Quality of Economic Growth

Based on the Eviews analysis yielded a significance value of 0.000, which is less than the 0.05 threshold. This result supports the hypothesis that regional budget realization has a significant influence on economic growth quality in Southeast Sulawesi districts and cities from 2006 to 2015.

Panel Data Regression on the Effect of the Quality of Economic Growth on the Level of Community Welfare

Hypothesis Model Selection Test II

1. F-statistic test (*Chow Test*)

The F-test helps decide between common effects (OLS) and fixed effects models. This requires a preliminary step of running two regressions: one with the same slopes and intercepts, and the other with different intercepts. The results of the fixed effects model testing are then presented in the table:

Redundant Fixed Effects Tests				
Equation: Untitled				
Test cross-section fixed effects				
Effects Test		Statistic	d.f.	Prob.
Cross-section F		5.152747	(8,80)	0.0000
Cross-section Chi-square		37.403704	8	0.0000

Table 5. Model Test Results Fixed Effect with Dummy Variables

Source: Results of program data processing *Eviews* see 7.2

The F-test results in Table 5 are used to determine model selection. If the probability value is greater than 0.05, the CE model is preferred; if it is less than 0.05, the FE model is preferred. Since the F-test probability is 0.000 (less than 0.05), the FE model is more accurate than the CE model, making FE the suitable panel data model for this analysis.

2. Hausman Test

After the F-test selects fixed effects (FE), the Hausman test determines if FE or random effects (RE) is better. The table shows the RE-based Hausman test results:

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		33.279624	1	0.0000
Cross-section random effects test comparisons:				
Variable	Fixed	random	Var(Diff.)	Prob.
Y_KPE	0.405025	0.459997	0.000091	0.0000

Table 6. Model Test Results Random Effect with The Hausman Test

Source: Process data with the program *Eviews* see 7.2.

Based on the 0.05 significance level, Table 6's probability (0.000) confirms that the fixed effects (FE) model is more accurate than the random effects (RE) model. Because the Chow and Hausman tests selected the fixed effects model, the LM test was not performed. The LM test is

only applied to differentiate between common and random effects.

After testing common, fixed, and random effects models, the fixed effects model was chosen. The resulting equation shows the impact of economic growth on community welfare in Southeast Sulawesi:

Estimation Equation:

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Y_KES = C(1) + C(2)*X_KPE + [CX=F]

Substituted Coefficients:

==========

Y_KES = 88.8164725091 + 1.41957902967*X_KPE + [CX=F]

The interpretation of the coefficients derived from the panel data regression equation is presented below:

2. The constant (α) of 88.8165 means that without any influence from the independent variable, namely quality economic growth, level of social welfare continued to increase by 88.82 percent.

3. The direction of the influence of the quality of economic growth (X) on the level of community welfare as measured by the GDP per capita indicator and the human development index (HDI) value in Southeast Sulawesi Province is positive. This means that every 1 percent increase in the quality of economic growth will improve people's welfare amounting to 1.42 percent assuming other variables remain constant.

Hypothesis Test II

Coefficient of Determination Test (R^2)

Based 79.36% of the social welfare variation is explained by economic growth, as shown by the adjusted R2 of 0.7936. The remaining 20.64% is from other variables.

Partial Hypothesis Test (t Test)

The statistically significant value of 0.000 (less than 0.05) from the Eviews analysis confirms a significant impact of economic growth on community welfare in Southeast Sulawesi (2006-2015).

Discussion

The Influence of the Role of Industry, the Role of Investment, Quality of Human Resources and Regional Expenditure Budgets on the Quality of Economic Growth

The findings of this research demonstrate that “investment, the role of industry, the quality of human resources (HR), and regional budgets have a positive and significant effect on the quality of economic growth in the districts/cities of Southeast Sulawesi Province”. The analysis found a statistically significant impact (0.0000 < 0.05) from investment, industry, human resources, and budgets on economic growth. These variables account for 75.5% of the growth's variation, with the remaining 24.5% explained by other variables.

This research's outcomes corroborate various established viewpoints and previous research,

which consistently point to the significance of the industrial sector, investment, quality of human resources (HR), and regional spending have a significant role in driving economic growth. Lincolin Arsyad (1999) they suggest a direct correlation between industrial sector contribution and regional economic advancement, while Anggiat Sinurat (2001) emphasized that the industrial sector can change the regional economic structure. Tiebout (1962) and the Harrod-Domar growth model (Kuncoro, 2000) emphasizes the importance of investment in sustainable development. In HR, Krugman (1994), Deolalikar (1997), as well as Mankiw, Romer, and Weil (1992) states that investment in higher education increases productivity and technology. Todaro (2000) underscored the significant contribution of higher education to a country's economic progress. In terms of budget, Saragih (2003) and Mardiasmo (2002) shows that capital expenditure that is greater than routine expenditure can encourage economic growth through improving public services and community participation. Thus, this research strengthens the findings of various researchers who consistently find a significant influence of investment, labor, government spending and the quality of human resources on economic growth.

Analysis of the Influence of the Role of Industry on the Quality of Economic Growth

The results of this study demonstrate that the "industrial sector does not significantly influence economic growth in Southeast Sulawesi, and the effect is negative, with a significance value of 0.9533". This is due to the low contribution of the processing, electricity and water industrial sectors to GRDP as well as the tendency of industrial activities to focus on processing mining products into semi-finished goods without involving the wider community. Apart from that, industrial activities do not yet support the main base sectors such as agriculture, fisheries and forestry which are dominant in the area, so they have not been able to create added value and absorb labor optimally. Empirical data also shows that the contribution of the processing, electricity and water industrial sectors to GRDP in most districts/cities is still low and growth tends to fluctuate or decline during the 2006–2015 period, with most of the primary sector products being directly traded in raw form without further processing.

This research supports the view of Lincolin Arsyad (1999) which states that regions with an industrial sector contribution to GDP of less than 10 percent are categorized as non-industrial and have no effect on the quality of economic growth. Anggiat (2001) adding that natural resource wealth which is only exported in the form of primary products without further processing causes the industrial sector not to provide high added value and fails to significantly absorb labor. Kuncoro (2000) also stated that developing industries are still dominated by labor-intensive industries with short value chains and low added value, even though they are able to absorb labor and provide sufficient income. In line with that, Dan Su and Yang Yao (2016) emphasized that the economic growth of developing countries is highly dependent on the contribution of the industrial sector, and the low role of industry is the main obstacle in accelerating development and sustainable economic growth.

Analysis of the Influence of the Role of Investment on the Quality of Economic Growth

The research indicates that "investment has a positive and significant impact on economic growth in Southeast Sulawesi from 2006 to 2015". With a significance value of 0.0127 and a beta coefficient of 0.107, a 1% increase in investment results in a 0.11% increase in economic growth quality. The indicator used is Gross Domestic Fixed Capital Formation (PMTDB) against GRDP based on constant prices, which shows an increasing trend even though growth is fluctuating and not yet in line with the role of the industrial sector. Incoming investment, both in the form of PMDN and PMA, has been proven to provide a stimulus for infrastructure

development, increasing income and expanding employment opportunities, although the impact is still limited to some communities and has not fully stimulated the people's economy which is dominant in the agriculture, plantation and fisheries sectors. Several regions such as Muna and South Konawe Regencies recorded the highest PMTDB growth, while Kolaka Regency, despite contributing greatly to GRDP, had the lowest growth rate. Overall, an increase in PMTDB has the potential to be a stimulant for higher quality economic growth in the region.

The results obtained from this study corroborate the Harrod–Domar theory of economic growth (Romer, 2006) which emphasizes that investment has a key role in creating income and increasing production capacity through increasing capital stock. According to Sukirno (2000), investment helps increase economic activity, employment opportunities, national income and the level of prosperity of society. Saptomo (2008) highlighted the role of capital accumulation in economic growth.

Analysis of the Influence of Human Resource Quality on the Quality of Economic Growth

The results of this research show that "the quality of Human Resources (HR) has a positive but not significant effect on the quality of economic growth in several districts/cities in Southeast Sulawesi Province". With a significance of 0.158 (above 0.05), human resources have no significant impact on economic growth (2006-2015), despite a positive coefficient of 0.097. This means a 1% HR increase only boosts growth by 0.097%. This finding is reinforced by the empirical fact that the number of highly educated workforce in the region is still relatively low, even though it is experiencing fluctuating growth, with the highest growth in Bau-Bau City (23.80 percent) and the lowest in Kolaka Regency (2.66 percent). In general, the low proportion of highly educated workers is a factor that has not been able to encourage a significant increase in the quality of economic growth in the region.

The results of this research are in line with the opinion of Krugman (1994) who states that improving the quality of human resources (HR) plays an important role in development, and if the quality is low, it cannot encourage economic development. Deolalikar (1997) also emphasized that improving the quality of human resources can encourage technological progress and productivity, while Barro (1991), Mankiw et al. (1992), and Romer (1994) state that quality human resources are able to master technology, encourage innovation, and create production efficiency. On the other hand, if the quality of human resources is still low, measured through indicators of education, health and literacy rates, it will not be able to improve the quality of economic growth (World Bank, 2000). Deolalikar's (1997) opinion emphasizes that low educational participation reflects the weak quality of human resources which has a negative impact on development. This is reinforced by Riana Fauzia Saputri's (2014) research shows higher education doesn't significantly impact human capital, but does positively relate to growth. Therefore, improving human resources remains crucial for sustainable development.

Analysis of the Effect of Regional Expenditure Budgets on the Quality of Economic Growth

The findings of this research demonstrate that " the realization of the regional budget (RABD) has a positive and significant effect on the quality of economic growth in several districts/cities in Southeast Sulawesi Province during the 2006–2015 period". Through panel data regression analysis, a significance value of 0.000 <0.05 was obtained and a β coefficient of 0.48, which means that every 1 percent increase in RABD can improve the quality of economic growth by 0.48 percent. This illustrates that an increase in RABD is generally able to encourage

improvements in the quality of economic growth as measured through indicators such as GRDP growth, reduction in income inequality (Gini Ratio), inequality between regions (Williamson Index), reduction in poverty, and reduction in unemployment. Empirically, the highest increase in regional budget realization occurred in North Kolaka Regency, Baubau City and Kendari City, while Muna Regency had the largest APBD realization but the lowest growth rate. Overall, the increase in RABD from year to year has proven to provide a significant stimulus to improve the quality of economic growth in the region.

The results of this investigation are congruent with the opinion articulated by Samuelson and Nordhaus (1996) which states that government capital expenditure plays a role as social overhead capital (SOC) in providing public facilities that encourage economic growth and increase income, as well as increasing aggregate demand which is reflected in an increase in GRDP. Dumairy (1999) emphasized the importance of the role of government allocation and distribution through fiscal policy so that the APBD can be used optimally and fairly. Saragih (2003) adding that regional budget expansion policies through capital and routine spending can encourage economic growth. This is also supported by Hakim et al. (2013) which states that government intervention through spending can increase people's income and consumption.

Analysis of the Influence of the Quality of Economic Growth on the Level of Welfare

The study found that "economic growth quality positively and significantly influences community welfare in Southeast Sulawesi". Specifically, a 1% increase in economic growth, as determined by the Gross Domestic Product growth rate, Gini ratio index, Williamson index, poverty reduction, and open unemployment rate, yields a 1.46% increase in community welfare, as proxied by per capita income and the Human Development Index (HDI). During the 2006–2015 period, all districts/cities experienced increased economic growth and improved social indicators, as seen in Kendari City which recorded the highest growth of 9.70% to Muna Regency with the lowest growth of 7.65%. Each region shows different trends in reducing poverty, unemployment and development inequality, but in general improving the quality of economic growth has a real impact on improving the welfare of the people in that region.

The results of this research are in line with various theories and previous empirical findings which emphasize that quality economic growth can improve people's welfare. According to Sudantoko (2009), economic development will create a trickle-down effect of prosperity, while Sukirno (2013) states that increasing labor, education and work experience will encourage GDP/GDP growth and societal prosperity. Sagir (2009) argued that The HDI, which measures education, health, income distribution, and price stability, should improve alongside economic growth.

Conclusion

An analysis of the research results leads to the conclusion that the strategy to improve community welfare in Southeast Sulawesi Province is significantly influenced by the quality of economic growth, which in the long term is determined by factors such as the role of investment and realization of regional budgets, while the role of industry and the quality of human resources have not shown a partially significant influence. Therefore, the Southeast Sulawesi Provincial government needs to focus policies on strengthening the value-added economic sector, increasing capital expenditure, improving the quality of human resources through formal and non-formal education, as well as developing infrastructure and a people-based creative economy as the main strategy to encourage higher quality and sustainable economic growth in order to

improve the welfare of society evenly.

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