

# BUSINESS REVIEW



### DISPARITY OF INCOME DISTRIBUTION BETWEEN REGENCIES/CITIES IN BALI PROVINCE OF INDONESIA

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#### **ABSTRACT**

**Purpose:** This study aims to examine the impact of regional riginal revenue and balance funds on unemployment rates and disparity of distribution income between regions in Bali Province of Indonesia.

**Design/methodology/approach:** A deductive strategy was required to interpret the data and the quantitative approach with path analysis was adopted to answer research questions. This article included panel data on all variables in this field from 2012 to 2019.

**Findings:** The results indicate that the regional original revenue, balancing funds, and unemployment rates have a negative and insignificant effect on disparity of distribution income between regions, whereas regional original revenue and balancing funds have no effect on disparity of distribution income between regions via unemployment rates in the districts and cities of Bali Province.

**Implications:** By investigating income disparities, the study can shed light on the allocation of resources across different regions within Bali Province of Indonesia. It will assist policymakers determine where resources are required the most and ensure a more balanced distribution of public services, infrastructure development, and economic opportunities in Bali or other areas in Indonesia.

**Originality/value:** The study will be expected to provide insights into the extent of income disparities between different regencies/cities in Bali Province of Indonesia. It helps to identify regions with significant gaps in income distribution and highlighting areas where socioeconomic conditions might be more challenging.

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### DISPARIDADE DA DISTRIBUIÇÃO DE RENDA ENTRE REGÊNCIAS/CIDADES NA PROVÍNCIA DE BALI, NA INDONÉSIA

#### **RESUMO**

**Objetivo:** Este estudo tem como objetivo examinar o impacto da receita regional regional e dos fundos de equilíbrio sobre as taxas de desemprego e a disparidade da distribuição de renda entre as regiões da província de Bali, na Indonésia.

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**Projeto/metodologia/abordagem:** Foi necessária uma estratégia dedutiva para interpretar os dados, e a abordagem quantitativa com análise de caminho foi adotada para responder às perguntas da pesquisa. Este artigo incluiu dados de painel sobre todas as variáveis nesse campo de 2012 a 2019.

**Conclusões:** Os resultados indicam que a receita original regional, os fundos de equilíbrio e as taxas de desemprego têm um efeito negativo e insignificante sobre a disparidade da distribuição de renda entre as regiões, enquanto a receita original regional e os fundos de equilíbrio não têm efeito sobre a disparidade da distribuição de renda entre as regiões por meio das taxas de desemprego nos distritos e cidades da província de Bali.

**Implicações:** Ao investigar as disparidades de renda, o estudo pode esclarecer a alocação de recursos em diferentes regiões da província de Bali, na Indonésia. Ele ajudará os formuladores de políticas a determinar onde os recursos são mais necessários e a garantir uma distribuição mais equilibrada de serviços públicos, desenvolvimento de infraestrutura e oportunidades econômicas em Bali ou em outras áreas da Indonésia.

**Originalidade/valor:** Espera-se que o estudo forneça percepções sobre a extensão das disparidades de renda entre diferentes regências/cidades na província de Bali, na Indonésia. Ele ajuda a identificar regiões com lacunas significativas na distribuição de renda e a destacar áreas em que as condições socioeconômicas podem ser mais desafiadoras.

**Palavras-chave:** Fundo de Equilíbrio, Disparidade de Distribuição de Renda, Receita Original Regional, Taxa de Desemprego.

### DISPARIDAD EN LA DISTRIBUCIÓN DE LA RENTA ENTRE REGENCIAS/CIUDADES DE LA PROVINCIA DE BALI, INDONESIA

#### **RESUMEN**

**Propósito:** Este estudio pretende examinar el impacto de los ingresos regionales y los fondos de equilibrio en las tasas de desempleo y la disparidad en la distribución de la renta entre las regiones de la provincia de Bali, Indonesia.

**Diseño/metodología/enfoque:** Para interpretar los datos fue necesaria una estrategia deductiva, y para responder a las preguntas de la investigación se adoptó un enfoque cuantitativo con análisis de trayectorias. Este trabajo incluyó datos de panel sobre todas las variables en este campo desde 2012 hasta 2019.

**Conclusiones:** los resultados indican que los ingresos originales regionales, los fondos de compensación y las tasas de desempleo tienen un efecto negativo e insignificante en la disparidad de la distribución de los ingresos entre las regiones, mientras que los ingresos originales regionales y los fondos de compensación no tienen ningún efecto en la disparidad de la distribución de los ingresos entre las regiones a través de las tasas de desempleo en los distritos y ciudades de la provincia de Bali.

**Implicaciones:** Al investigar las disparidades de ingresos, el estudio puede arrojar luz sobre la asignación de recursos en las diferentes regiones de la provincia de Bali, Indonesia. Ayudará a los responsables políticos a determinar dónde son más necesarios los recursos y a garantizar una distribución más equilibrada de los servicios públicos, el desarrollo de infraestructuras y las oportunidades económicas en Bali o en otras zonas de Indonesia.

**Originalidad/valor:** Se espera que el estudio proporcione información sobre el alcance de las disparidades de ingresos entre las distintas regencias/ciudades de la provincia de Bali (Indonesia). Ayuda a identificar las regiones con importantes diferencias en la distribución de la renta y a poner de relieve las zonas donde las condiciones socioeconómicas pueden ser más difíciles.

**Palabras clave:** Fondo de Equilibrio, Disparidad en la Distribución de la Renta, Ingresos Regionales Originales, Tasa de Desempleo.

#### INTRODUCTION

Based on Pancasila and the Constitution of 1945, the goal of implementing the development of Indonesia is to create a just, prosperous and physically, psychologically, materially and spiritually prosperous society. Development is a dynamic and multifaceted process that aims to increase social welfare (Corlet Walker et al., 2021; Islam & Clarke, 2002), while also pursuing accelerated economic growth, addressing income inequality, and reducing

poverty (Lall, 1981; Todaro & Smith, 2015). It involves a number of fundamental changes to social structure, societal attitudes, and institutions. Since Indonesia is divided into smaller-scale provinces, districts, cities, and regions (Ningtiyas & Nuraini Dwiputri, 2021; Rubiarko, 2013; Simanjuntak, 2015), it is impossible to separate the implementation of national development from that of regional development in Indonesia (Putri, 2022). It is more centralized than decentralized if it is connected to the implementation of the prior development (the New Order era).

Without balancing it with democratic and just social, political, and economic life, the centralized and unequal development that has been carried out thus far has primarily stressed economic expansion (Rajah, 2018). Due to development policies that have ignored the needs and potentials of each region as well as the role of development actors in the regions, there is inequality between regions and even between development sectors, which makes it impossible to promote the growth of the local regional economy (Supartoyo et al., 2014; Taufiqurakhman, 2014). The pattern of development that is used will be affected by the variations in conditions in each region. Policies that are successfully implemented in one location may not always benefit other regions in the same way (Shipan & Volden, 2008).

The type of development used can differ depending on area factors (Arsyad, 2005). Imitating successful policy strategies in one location does not always translate to similar advantages in other areas. According to Carlsson and Jacobsson (1994); Kurniawan and Managi (2018); Simmons and Elkins (2004), and other authors, the policies adopted while developing an area must take into account its conditions (issues, needs, and potential). Due to this circumstance, regional autonomy was created, as required by Law Number 32 of 2004 regarding regional government. Regional governments now have the freedom to control and administer their own administration thanks to regional autonomy that is implemented in accordance with broad, genuine, and responsible principles. In order to prevent development disparities between regions and achieve sustainable interregional development, government affairs are focused on accelerating the realization of social welfare while still being guided by national planning (Soeharjoto, 2020; Supartoyo et al., 2014).

Economic development, which is accomplished through initiatives to spur economic growth, is the focus of regional development (Arwani et al., 2023). Production of commodities and services is enhanced during economic growth. To hasten the transition from the primary economic sector to a balanced and vibrant secondary and tertiary economic sector in the region, high economic growth is required (Indartini et al., 2021). In order to raise people's incomes and

reduce socioeconomic inequality, economic growth is also necessary to propel and drive development in other industries. According to the Perroux-popularized growth pole idea, growth does not occur simultaneously in all places (Arsyad, 2005; Jumino, 2019). Only a few locations, known as centers (poles) of growth, experience growth, and these locations vary in intensity. The core of Perroux's theory is that (1) during periods of change, a leading industry will emerge that serves as the primary engine for a region's development, (2) industrial concentration in a region will speed up economic growth, and (3) the economy is made up of a variety of relatively high industrial systems. comparatively passive and active industries.

Macroeconomically speaking, the Province of Bali has had tremendous economic growth despite a number of events that have shaken the tourism sector, which serves as the province's primary economic driver (Purba & Wahyuningsi, 2022). This economic expansion cannot be separated from the government's, society's, and economic actors' collaborative efforts to improve Bali's reputation abroad, particularly the tourism industry, which is the economy's main driver. Between 2016 and 2019, Bali's province, as well as its districts and cities, saw economic growth. Bali's economic growth had surpassed 6 percent up until 2016. In the face of a continuing crisis, this situation is unquestionably highly positive. There is no denying, however, that the ongoing crisis also had an impact on Bali's rate of economic growth in 2017, which was weaker than in 2016.

Table 1. Economic Growth Rate in Bali Province during 2016 – 2019 (%)

No.	Regency/ City —		Rate			
		2016	2017	2018	2019	Kate
1.	Jembrana	5.96	5.28	5.59	5.56	5.59
2.	Tabanan	6.14	5.37	5.73	5.60	5.71
3.	Badung	6.81	6.08	6.74	5.83	6.36
4.	Gianyar	6.31	5.46	6.03	5.64	5.86
5.	Klungkung	6.28	5.32	5.50	5.44	5.63
6.	Bangli	6.24	5.31	5.50	5.47	5.63
7.	Karangasem	5.92	5.06	5.48	5.50	5.49
8.	Buleleng	6.02	5.38	5.62	5.55	5.64
9.	Denpasar	6.51	6.05	6.43	5.84	6.20
	Bali province	6.33	5.56	6.33	5.63	5.96

Source: Statictics Bali (2020)

According to Table 1, Bali's economic growth in 2017 was 5.56 percent, which was less than the 6.33 percent increase in 2016. Badung Regency had the highest average rate of economic growth over the past four years (2016-2019), averaging 6.36 percent, while Denpasar City came in second, averaging 6.20 percent. Karangasem Regency had the lowest average economic growth rate for the same time period, at 5.49 percent. If the economic growth rate is

divided into three clusters, it can be explained that Badung Regency and Denpasar City belong to the first cluster, followed by Gianyar and Buleleng Regencies in the second cluster, while the other five districts, namely Jembrana, Tabanan, Bangli, Klungkung, and Karangasem Regencies, share the same similarities and form a single cluster.

The amount of labor, capital, actual natural resources, production methods, and social and cultural traits that are present in a place all have a significant impact on its economic output. Because of the differences in regional conditions, infrastructure, and the quantity and quality of human resources, each region experiences development and expansion at a different rate. When taken as a whole, this demonstrates that there are discrepancies, which are mostly brought on by variations in an area's features, such as variations in the potential of natural resources and demographic circumstances. Differences in the amount of money invested in the area's growth, which affects the availability of infrastructure, banking, communications, and other services, can also contribute to disparities.

Table 2. Income Disparity Index in Bali Province during 2016 – 2019

No.	Regencies/Cities		Da4a			
		2016	2017	2018	2019	Rate
1.	Jembrana	0.013	0.001	0.011	0.020	0.011
2.	Tabanan	0.061	0.050	0.035	0.014	0.040
3.	Badung	0.334	0.369	0.283	0.286	0.318
4.	Gianyar	0.002	0.020	0.039	0.067	0.032
5.	Bangli	0.016	0.025	0.038	0.056	0.034
6.	Klungkung	0.071	0.065	0.053	0.044	0.058
7.	Karangasem	0.117	0.111	0.100	0.084	0.103
8.	Buleleng	0.094	0.081	0.062	0.036	0.068
9.	Denpasar	0.004	0.029	0.047	0.074	0.038
	Bali	0.379	0.387	0.301	0.290	0.340

Source: Statistic Bali (2020)

The income disparity index in the Bali Province was 0.379 in 2016 and 0.387 in 2017. However, with an index of 0.301 and 0.290, respectively, it continued to fall in 2018 and 2019. Less than 0.30 of an inequality index is considered low, between 0.30 and 0.50 is considered moderate, and more than 0.50 is considered high. Badung Regency, which has the highest GRDP per capita, and Karangasem Regency, which has the lowest GRDP per capita, are the two regions that contribute the most to the wealth difference. As indicated in Table 2, the Williamson Index, which serves as a proxy for the income difference across districts and cities in Bali Province over the past four years (2016-2019), has demonstrated a declining trend. It can be seen that, when income disparities in Bali Province between 2016 and 2019 were examined using the cluster method, they were divided into two clusters, with Badung Regency

alone having the biggest disparity while the other eight districts were grouped into one with relatively modest differences.

Decentralization of fiscal policy began in early 2001 when the government made a political commitment to successfully implement the Regional Administration Law No. 32 of 2004 and the National and Regional Financial Balance Law No. 33 of 2004 and government regulations its implementation. It marked a fundamental change in the implementation system of regional government, giving very extensive powers to regional autonomy. The local authority should see this both as an opportunity and as a serious threat. In order to give local governments, the flexibility to carry out service functions for the community in order to improve service and community welfare, regional autonomy is essentially demonstrated to bring community services closer to the area in accordance with their needs.

The concentration of economic activity, investment allocation, the low level of factor mobility between regions, resource differences between regions, demographic differences between regions, and the lack of smooth trade between regions are the main causes of economic disparities between regions (Gazali & Muta'ali, 2014; Ilham & Pangaribowo, 2017; Maesza et al., 2022; Odhiambo, 2023; Syawie, 2013; Wang et al., 2023). Capital or development money are needed for the process of regional development from both inside and beyond the region. Because all government activities require funding, which is supported by revenue (both routine revenue and development revenue), government spending can be used as a measure of the size of government activities. The rise in government spending relative to GRDP reflects the growing involvement of the government.

To change development and lessen inequality in a region, government budget policies are crucial. Because only some groups benefit from routine spending, it will only have an effect on widening disparities. On the other hand, the higher volume of development expenditure directly affects employment and income opportunities, economic growth, and both. The ability of the regions to realize Regional Own Revenue, the ability of the regions to realize the Balancing Fund, and the level of unemployment that the areas concerned can attain are other factors that can affect the degree of discrepancy across regions. The following research inquiries are answered in light of the background information provided:

RQ1 : How do the district or city unemployment rates in Bali's province compare to the local own revenue and balancing funds levels?

RQ2 : What impact do differences in the distribution of district and city income in the Province of Bali have on balancing funds, unemployment rates, and local own revenue?

RQ3 : Do discrepancies in income distribution in the Province of Bali's district or city unemployment rates have an impact on balancing finances and local own revenues?

#### LITERATURE REVIEW

Income disparity refers to the unequal distribution of income among individuals or households within a society. There are several theories that attempt to explain income disparity. One significant theory is the skill-biased technological change theory (Olubiyi et al., 2023). According to this theory, technological advancements have resulted in increased demand for skilled labor, leading to higher wages for those with high skills and lower wages for those with low skills (Acemoglu & Autor, 2011). Another theory is the globalization theory, which suggests that globalization has resulted in increased competition among workers and firms, this leads to lower wages for low-skilled workers and higher wages for high-skilled workers (Milanovic, 2016; Agustina et al., 2023). The institutional theory remarked that the level of income inequality is influenced by the political and economic institutions of a society. For instance, countries with stronger labor unions tend to have lower income inequality due to collective bargaining and better wages for workers (Freeman & Medoff, 1984).

In addition, the human capital theory mentioned that investing in education can reduce income inequality by increasing the skills of the workforce and thereby raising wages (Becker, 1964). According to Kuznets, who was referenced by Todaro and Smith (2015), the distribution of income or wellbeing tends to deteriorate in the early phases of expansion but improves later on. Numerous studies connect fundamental structural issues with the deterioration of income distribution during the early stages of development. The modern industrial sector will see the bulk of the early expansion phase. Although there are few jobs available right now, wages and productivity are high. The income gap between the traditional agricultural sector and modern industry grows rapidly at first before narrowing again.

#### **METHODOLOGY**

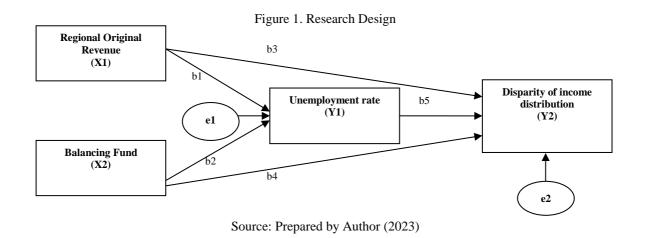
This research was written using a quantitative descriptive technique, which means it was done to find out the relationship between the variables used in the study. The data that has been gathered can be described in its current state using a descriptive technique without the desire to draw broad inferences or generalizations. Since this study involved quantitative data obtained through statistical procedures or other quantification techniques, this research falls under the category of quantitative research. According to Sugiyono (2019), an association

paradigm was used to conduct this study. Direct effects of regional basic incomes and equalization funds on unemployment rates, direct effects of regional basic incomes, equalization funds, and unemployment rates on differences in income distribution, and indirect effects of regional basic incomes and equalization funds on income differences. distribution unemployment rates across counties and cities are all subject to experiments by researchers.

Regional primary income (X1) is the income received by the administrative municipalities/ urban areas of Bali Province collected by the local government according to regional regulations, expressed in thousands of rupiah per capita. The balanced fund (X2) is the realization of APBN revenues and funds allocated to the Regions to finance regional needs. Equalization funds consist of tax distribution or tax-free profit distribution, general provident funds and special funds in units of thousands of rupees per capita. The unemployment rate (Y1) is the population group entering the working life (15-64 years), who do not work and do not look for work, who do not work and do not prepare for work, who do not work and do not look. for work because they feel they cannot get a job, those who are not working and have found work but have not yet started work, in percentage units. The income distribution gap (Y2) is the difference in income distribution between districts/cities in Bali province, measured in points using the Williamson index.

#### **Data Analysis**

Path analysis is a data analytic technique used to address issues in research. Regression analysis is a specific case of path analysis, which can be thought of as a special form of route analysis since path analysis is a development of regression analysis.



The cause-and-effect model of the link between variables is described and put to the test using path analysis. This method determines both the direct relationship between the independent factors and the dependent variable and the indirect relationship created by intermediate variables. Regional original income (X1) and balancing funds (X2) do not explain the total variance of the unemployment rate variable (Y1), as indicated by arrow e1 of the unemployment rate variable (Y1). The e2 arrow of the variable of disparity of distribution income (Y2) indicates the portion of the of disparity of distribution income that cannot be explained by Regional original income (X1), balancing funds (X2), and unemployment rate (Y1). Standard error of estimation, more specifically:

$$e_I = \sqrt{(1-r^2)}$$
....(1)

The path coefficient is a standardized regression coefficient. Path coefficients are calculated by constructing two regression equations representing the hypothesized relationship. In this case the two equations are:

$$Y_2 = b_3 X_1 + b_4 X_2 + b_5 Y_1 e_2 \dots \dots \dots (3)$$

The direct effect of regional initial income (X1) on the unemployment rate (Y1) is expressed by the path coefficient b1, the direct effect of balance funds (X2) on the unemployment rate (Y1) is expressed by the linear coefficient b2, the direct effect of regional initial income (X1) on distributive income differences (Y2) is shown by the path coefficient b3, the direct effect of balanced funds (X2) on distributive income differences (Y2) through the path coefficient b4, the direct effect of the unemployment rate (Y1) on the level of the difference in income distribution (Y2) is expressed by the path coefficient b5, the indirect effect of regional initial income (X1) on differences in income distribution (Y2) through the unemployment rate (Y1) is obtained by multiplying the path coefficient b1 by the path coefficient b5, the indirect effect of equalization funds (X2) on the differences in distribution income (Y2) through the unemployment rate (Y1) is obtained by multiplying the path coefficient b2 by the path coefficient b5. The total indirect effect of regional initial income (X1) on distributive income differences (Y2) and balanced funds (X2) on distributive income differences (Y2) is obtained by summing the direct and indirect effects.

The standardized coefficients of equation (1) give the values of b1 and b2. The standardized coefficients in equation (2) give the values of b3, b4 and b5. The total diversity of the data explained by the model is measured:

$$R_m^2 = 1 - e_1^2 e_2^2 e_n^2$$
....(4)

In this case, the interpretation of  $R_m^2$  is the same as the interpretation of the coefficient of determination (R2) in regression analysis. Pei, which is the standard error of the regression model estimate, is calculated using the formula:

$$e_2 = \sqrt{(1-r^2)}$$
....(5)

Test the validity of the path coefficient in each path for the direct effect in the same way as in the regression analysis, using the p-value of the t-test, that is, the partial standardized variable regression coefficient test. Based on truncation theory, irrelevant paths are discarded to obtain a model supported by empirical data.

#### **RESULTS AND DISCUSSION**

#### Path Analysis and Hypothesis Testing

Results of the direct effect test

Table 3. Regression Test Results of Regional Original Income and Balancing Funds on Unemployment Rates

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4.030	.567		7.102	.000
	Regional original revenue	.000	.000	254	-1.989	.051
	Balancing Fund	001	.000	295	-2.312	.024

a. Dependent Variable: Unemployment rate Source: Prepared by Author (2023)

Table 3 shows that regional initial income has a negative and significant effect on the unemployment rate at a significance level of  $0.000\,0.05$ . With Sig.  $0.000\,0.05$ , balancing funds also negatively and significantly affects the unemployment rate. Regarding testing the research hypothesis about the direct effect of local income and balance funds on unemployment rate at 95% (= 0.05) confidence level, H0 is accepted and H1 is rejected because it is not statistically significant. If the probability value exceeds the significance level ( $0.05 > {\rm sig.}$ ), then H0 is rejected and H1 is accepted. The results obtained are as follows.

- Testing the direct influence of regional original income on the unemployment rate yields a beta value of -0.254 and a probability of 0.051. With a probability value of  $0.051 \ge 0.05$ , H0 is rejected and H1 is accepted, indicating that local revenue (X1) has a negative and statistically significant effect on the unemployment rate (Y1).
- From testing the direct effect of balancing funds on the unemployment rate, a beta value of -0.295 and a probability value of 0.024 are derived. With a probability value of 0.024 < 0.05, H0 is rejected and H1 is accepted, indicating that balancing funds (X2) have a negative and statistically significant effect on the unemployment rate (Y1).

Table 4 informs that regional original income with a sig. i.e. 0.623 > 0.05 has a negative and insignificant effect on income distribution disparities, and balancing funds have a negative and insignificant effect on income distribution disparities with a sig. 0.828 > 0.05 and 0.760 > 0.05, indicating that the unemployment rate has a negative and insignificant impact on income distribution disparities.

Table 4. Regression Test Results for Regional Original Income, Balancing Funds and Unemployment Rates on Disparities of Income Distribution

		Disparities of I	licome Distribut	1011		
		Unstandardized		Standardized		
		Coefficients		Coefficients		
Mo	del	В	Std. Error	Beta	t	Sig.
1	(Constant)	.150	.077		1.945	.057
	Regional original revenue	-9.6E-006	.000	069	495	.623
	Balancing Fund	-8.8E-006	.000	031	218	.828
	Unemployment Rate	004	.013	042	307	.760

a. Dependent Variable: Disparity of Income Distribution Source: Prepared by Author (2023)

Using a 95 percent confidence level ( $\alpha = 0.05$ ) and if the probability value of 0.05 is less than the probability value sig, H0 is accepted and H1 is rejected because it is not statistically significant. If the probability value exceeds the significance level (0.05 > sig.), then H0 is rejected and H1 is accepted. The obtained results are as follows.

- 1) Testing the direct effect of regional original income on income distribution disparities yields a beta coefficient value of -0.069 and a probability value of 0.623. With a standardised coefficient beta value of -0.069 and a probability value of 0.623 > 0.05, H0 is accepted and H1 is rejected, indicating that regional original income (X1) has a negative but insignificant effect on income distribution disparities (Y2).
- Testing the direct effect of fund balancing on income distribution disparities yields a standardised beta coefficient value of -0.031 and a probability value of 0.828%. With a standardised coefficient beta value of -0.031 and a probability value of 0.828

0.05, H0 is accepted and H1 is rejected, indicating that balanced funds (X2) have a negative and insignificant effect on inequality of income distribution (Y2).

Testing the direct effect of the unemployment rate on differences in income distribution, the beta value is -0.042 and the probability is 0.760. With a standardised coefficient beta value of -0.042 and a probability value of 0.760 > 0.05, H0 is accepted and H1 is rejected, indicating that the unemployment rate (Y1) has a negative but insignificant effect on disparity of distribution income (Y2).

#### **Path Analysis Test Results**

Based on the research results, it can be seen that the relationship between the research variables is the path coefficient in this study. Path coefficients can be made in the form of path diagrams. Models can also be expressed in structural equations, such as Structural Equation Models 6 and 7.

Structural Equation ......(6) 
$$Y_1 = -0.254X_1 - 0.295X2 + e_i$$
 Structural Equation ......(7) 
$$Y_2 = -0.069X_1 - 0.031X_2 - 0.042Y_1 + e_2$$

#### **Standard Estimated Error Value Results**

To find out the value of e1, which indicates the total variance of the unemployment rate not explained by regional primary incomes and balance funds, it is calculated using the formula:

$$e_1 = \sqrt{1 - R_i^2} = \sqrt{1 - 0.108} = 0.945....(8)$$

Find the value of e2, which expresses the variance of the difference variable of income distribution, which is not explained by the regional initial income, balance and unemployment rate variables, calculating this formula:

$$e_2 = \sqrt{1 - R_i^2} = \sqrt{1 - 0.005} = 0.997....(9)$$

Regional Original not Sig. Revenue -0.069 (X1) Sig. -0.254Disparity of Unemployment Income not Sig. 0.94 Rate Distribution -0.042 (Y1) (Y2) Sig. **Balancing Fund** -0.295 (X2) Not sig -0.031 0.997

Figure 2. Path Analysis Results Diagram

Source: Prepared by Author (2023)

#### **Indirect Effect Testing**

The indirect effect of regional initial income and equalization funds on differences in income distribution through the unemployment rate, using a confidence level of 95% ( $\alpha$  = 0.05), and if Z count < 1.64, then H0 is accepted, indicating that the unemployment rate is not a variable intervene. If Z count is  $\geq$ 1.64, then the null hypothesis (H0) is rejected and the unemployment rate is an intervening variable. The obtained results are as follows.

- 1) From testing the indirect effect of regional original income on income distribution disparities through the unemployment rate, an indirect standard error value of 0 is obtained and z count is  $\infty$ . Because Z count is absolute  $\infty < 1.64$ . This means that the unemployment rate (Y1) is not an intervening variable in regional original income (X1) on disparity of distribution income (Y2) in Bali Province or in other words regional original income does not have an indirect effect on income distribution disparities through the unemployment rate.
- When testing the indirect effect of balanced funds on differences in income distribution through the unemployment rate, the implied standard error is 0 and the z-score is  $\infty$ . Because the Z number is absolute  $\infty < 1.64$ . This means that the unemployment rate (Y1) is not an intermediate variable in balanced fund (X2) and income distribution difference (Y2) in Bali province, in other words, balanced finances have no indirect effect on the unemployment rate of the income distribution.

#### **DISCUSSION**

#### The Direct Effect of Regional Original Income on the Unemployment Rate

In this study, a negative relationship is found between regional original income variables and the unemployment rate because regional original income is closely associated with unemployment and poverty. Currently, unemployment and poverty have not been addressed optimally in all districts/cities of the Province of Bali. With an increase in Regional Original Income, economic performance will improve further, resulting in a decline in the unemployment rate, which indicates the community's prosperity.

Regional economic growth will be stimulated by an increase in regional taxes and fees, which are components of regional original revenue (Adriani & Yasa, 2015; Suwandika & Yasa, 2015). If each region can optimally manage revenues from regional taxes and fees, then the regions will be able to increase the importance of economic growth-related sectors. Consequently, the region will be able to reduce its unemployment rate. With an increase in Regional Original Income, the community and government have successfully managed the region's potential. This demonstrates that the real sector is expanding, which will create new employment opportunities and eventually significantly reduce the unemployment rate. The results of this study are consistent with those of several previous studies, which found that unemployment is inversely related to local income conditions. (Beladi, 1990; Jung et al., 2023; Mayes & Viren, 2006; Wilantari et al., 2022).

According to the results of the preceding analysis, an increase in local income in the administrative districts/cities of Bali province can lower the unemployment rate. In other words, if local revenues increase, the unemployment rate in the districts and cities of Bali Province falls. This shows that the development of municipalities and cities in Bali province has been able to reduce unemployment.

#### The Effect of Balancing Funds on the Unemployment Rate

In this study, the negative and statistically significant relationship between the variable balancing funds and the unemployment rate has a close connection with regional spending. The balance of funds is increasing. Consequently, the budget of the regional government will increase to support the welfare of its citizens. According to the theory of Harrod-Domar (Sukirno, 2016), the formation of capital plays an important role in economic growth. According to Hugh Patrick (Todaro and Smith, 2015), the development of the financial sector

influenced economic growth in the early stages of modern development. However, if the financial system were to stabilize, it would accelerate the growth of the real sector.

Additionally, the well-maintained financial system will stabilize government expenditures to promote regional development. Local governments can allocate balancing funds to bolster the local (Adriani & Yasa, 2015; Atella et al., 2023; Holtz-Eakin et al., 1994; Suwandika & Yasa, 2015). This will eventually be able to create jobs and increase income, thereby reducing unemployment and enhancing the welfare of the populace.

According to the results of the preceding analysis, the increase in balancing funds in the province of Bali's regencies and cities has been able to reduce the unemployment rate.

#### The Effect of Regional Original Income on Disparity of Distribution Income

The negative and insignificant relationship found in this study between the initial regional income variable and the difference in income distribution suggests that regional initial income is not equally distributed and managed, so there is still a large number of people who are not rich. unequal distribution of income between regions. The allocation of regional own-source revenue is intended to finance regional governance and development, including the provision of regional infrastructure and facilities (Benedetti & Crescenzi, 2023; Wilantari et al., 2022; Zhao et al., 2022). People will be able to increase their productivity if they are able to carry out their daily activities in a safe and comfortable manner and if there are adequate facilities and infrastructure. However, infrastructure development has not yet been distributed evenly across regions, so the quality of public services has not been improved uniformly. In addition, differences in infrastructure development between regions have failed to maximize potential between regions and increase public participation in development, leading to unresolved differences in income distribution between regions.

#### The Effect of Balancing Funds on Disparity of Distribution Income

In this study, the existence of a negative and insignificant relationship between the effect of balanced funds and inequality of income distribution suggests that the possible use of funds is not optimal in each region due to their specific geographical location. In an effort to reduce income disparities between regions, balancing funds are actually transfers from the central government to regions that have not been able to provide infrastructure with their own regional income. The relationship between central government transfers and local government expenditures is extremely close (Holtz-Eakin et al., 1994). Long-term government transfers

have an effect on regional spending, according to empirical evidence (Legrenzi, 2009). However, the outcome has not been as anticipated. The uneven distribution of balance funds obtained by each region will result in disparities in infrastructure development expenditures between regions. This condition will lead to an imbalance in investment allocation between regions, preventing optimal resolution of disparities in regional income distribution. Thus, the balancing fund has not had a significant impact on resolving the disparity in regional income distribution.

#### The Direct Effect of the Unemployment Rate on Income Distribution Disparities

The negative and insignificant relationship between the unemployment rate and the income distribution gap observed in this study shows that the low unemployment rate could not significantly reduce the income distribution gap between regions. According to (Todaro & Smith, 2015), there is a close relationship between high (overt and covert) unemployment rates, rampant absolute poverty, and disparities in income distribution. In reality, however, a low unemployment rate does not guarantee an improvement in people's welfare, as many workers work part-time or less than 35 hours per week. This will have an effect on the incomes of workers with relatively low levels of education and skills, resulting in regional income disparities that cannot be resolved optimally.

#### The Indirect Effect of Regional Original Income on Income Distribution Disparities is Through the Unemployment Rate

According to the findings of the research and the Z calculation, the unemployment rate (Y1) in Bali Province is not an intervening variable between regional original income (X1) and income distribution disparities (Y2); in other words, regional original income has no indirect effect on income distribution disparities via the unemployment rate. Regions with higher original income often have a more diverse and developed economic base, leading to more job opportunities. This, in turn, lowers the unemployment rate in those regions. Conversely, regions with lower original income may have fewer economic opportunities, resulting in higher unemployment rates

## The Indirect Effect of Balancing Funds on Income Distribution Disparities is Through the Unemployment Rate

According to the results of the research and the Z calculation, the unemployment rate (Y1) in Bali Province is not an intervening variable between balancing funds (X2) and income distribution disparities (Y2); in other words, capital balancing has no indirect effect on income inequality through the unemployment rate.

#### **CONCLUSION**

The following conclusion can be drawn from the results of the analysis and discussion described above. Regional initial income and balance funds have a negative and significant effect on the unemployment rate in the province and cities of Bali. Regional initial income, equalization funds, and unemployment rate have negative and insignificant effects on interregional income distribution in the regions/cities of Bali. The Regional Basic Income and Equalization Funds do not affect differences in regional income distribution as measured by the unemployment rate of regions/cities in Bali Province.

Based on the above discussion and conclusions, several propositions can be made based on these findings. Immediate action is required to increase the realisation of regional own-source revenues and balancing funds in order to increase regional spending, particularly regional infrastructure spending, so that efforts to increase both revenues continue to be made in accordance with regional potential and applicable regulations. In addition, these two revenues should be properly managed according to their definition in order to increase the availability of infrastructure-related services equally between regions and thus reduce differences in regional income distribution.

Even though the open unemployment Rate in Bali Province is relatively low, overcoming the problem of unemployment between regions, particularly in areas with an Open Unemployment Rate above that of the province, must be a top priority. In addition, workers are not fully employed; both underemployed and part-time workers warrant greater concern. Nonfull employment increased by 2.67 percent between February 2014 and February 2015, while underemployment increased by 10.6 percent during the same time frame. The Open Unemployment Rate tends to be higher for those with high school and postsecondary education than for those with less education. Central, provincial and district/city governments should comprehensively cooperate on this issue. If this can be overcome, the relatively low

unemployment performance in the Province of Bali will significantly reduce, if not eliminate, the disparities in income distribution between regions.

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