



## Factors Influencing the Large of Income and Remittance of Karangasem Migrant Workers in Denpasar City

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**Abstract.** Denpasar City is one of the main destinations for migrants in Bali Province. This is because the development carried out tends to be centered in Denpasar City, which is reflected in the concentration of various activities that act as the center of government, economy, trade, education activities, health services, and tourism activities. The objectives of this study are to: 1) Analyze the influence of education level, number of family dependents in the area of origin, allocation of working hours, on the amount of income of Karangasem migrant workers in Denpasar City. 2) Analyze the influence of education level, number of family dependents in the area of origin, allocation of working hours, on the amount of remittances of Karangasem migrant workers in Denpasar City. 3) Analyze the indirect influence of education level, number of family dependents in the area of origin, allocation of working hours on remittances through the income of Karangasem migrant workers in Denpasar City. The determination of the sample in this study used the Accidental Sampling technique. The type of data used is quantitative data with primary data sources. Data collection was carried out using observation methods, structured interviews and in-depth interviews. The data used were then analyzed using path analysis techniques. The results of the study found that 1) education level, number of family dependents, and allocation of working hours have a positive and significant effect on the income of Karangasem migrant workers in Denpasar City. 2) education level has a positive and insignificant effect on remittances of Karangasem migrant workers in Denpasar City, the number of family dependents in the area of origin has a positive and significant effect on remittances of Karangasem migrant workers in Denpasar City, and allocation of working hours has a negative and significant effect on remittances of Karangasem migrant workers in Denpasar City. 3) Education level, number of family dependents in the area of origin, allocation of working hours have an indirect and significant effect on remittances through the income of Karangasem migrant workers in Denpasar City.

**Keywords:** Income, Remittances, Education Level, Number of Family Dependents in Area of Origin, Allocation of Working Hours

### 1. INTRODUCTION

Income is one of the indicators that plays an important role in describing the relationship between the welfare or prosperity of a country or city and its economic conditions. The measure of welfare and economic linkages is described through the ability to produce various products, create income, consume, and increase assets owned by the people of a country in a certain period of time. According to the Indonesian Institute of Accountants (2015), income is income arising from the implementation of normal entity activities and is known by different names, such as sales, service income, interest, dividends, royalties and rent.

According to Kieso, Warfield and Weygandt (2011), income is the inflow of cash assets or settlement of liabilities from the delivery or production of goods, the provision of services and other profit-seeking activities which are the main or major operations that are continuous for a period. The increase in a city's income will have an impact on increasing the level of welfare of its residents. Per capita income can be used as a reference for welfare itself where

per capita income is the income received by each citizen. If per capita income increases, it can be ascertained that the level of welfare of the population also increases. The level of economic activity of a community can be seen from the value of the income owned by the city. This means that if the income value increases over a certain period of time, then the increase in value is an indication that the economic activity of the city's residents is increasing. Conversely, if there is a decrease in the value of its income, it means that there has been a decrease in the economic activity of the city concerned. National income also plays a role in comparing how the economic activities of the community are from year to year. Economic development cannot be separated from economic growth, and vice versa, economic growth facilitates the process of economic development. Economic growth is a long-term economic event and the standard of social and economic life. The term economic growth is used to describe the progress or economic development of a country (Murni, 2016:10). By observing the growth rate achieved from year to year, the achievements and success of a region can be assessed in controlling its economic activities in the short term and efforts to develop its economy in the long term (Kambono & Indrawati, 2020). High economic growth can contribute to economic development by increasing per capita income and community welfare.

According to Tadoro (2000) there is a positive relationship between education and income to be earned. When a worker has a high level of education, their income will increase. Higher levels of education will make someone have more knowledge, so it will be easier to understand. The occurrence of unfair income differences creates a poverty gap. Poverty often occurs in villages which causes people to go to the city to look for work (Syafitri, 2012).

Allocation of working hours affects income. The higher the working hours of migrant workers, the higher the income earned (Andharista, 2016). Each individual must decide how many hours to work and how many hours to consume various goods and how much time to devote to other household activities. The longer the working hours of migrant workers will affect their income each month. The economic level of a society can be seen from the income value of the city. This means that if the income value increases over a certain period of time, the increase in the value is an indication that the economic activity of the city's residents is increasing. Conversely, if there is a decrease in the income value, it means that there has been a decrease in the economic activity of the city concerned.

The Original Regional Income of Bali Province based on data from the Central Statistics Agency in 2022 was 3,863,191,407 Rupiah. Denpasar City is the city with the second largest income after Badung Regency, while Karangasem Regency is the city with the third lowest income in Bali Province. High income is also supported by population mobility in the

area. Denpasar City is the city that is most often the main destination for population mobility. This is because Denpasar City is the provincial capital, besides that it is also the center of government and can be said to be a city that is considered capable of providing economic opportunities for business or business for migrant workers so that this results in high interest of migrant workers to mobilize to Denpasar City. According to Osaki (2003) population migration occurs because of the intrinsic labor in the community. Therefore, regional development needs to be directed to further develop and align the growth rate between regions, both urban and rural areas. The mobility of residents from rural areas to urban areas is an example of the difference in growth and uneven development facilities between rural and urban areas.

**Table 1. Population Projection of Bali Province by Gender and Regency/City 2020-2022**

No.	Regency/City	Population Projection of Bali Province by Gender and Regency/City Year (Thousand People)		
		2020	2021	2022
1.	Jembrana	317.1	318.8	312.2
2.	Tabanan	461.6	462.9	464.5
3.	Badung	584.2	552.8	558.1
4.	Gianyar	515.3	517.7	520.9
5.	Klungkung	206.9	207.3	208.1
6.	Bangli	258.7	259.3	260.4
7.	Karangasem	492.2	494.9	497.5
8.	Buleleng	791.8	796.4	802.8
9.	Denpasar	725.3	733.3	741.4
	<b>Bali Province</b>	4 317.4	4 343.5	4 374.3

Source: BPS Bali Province

Illustration of migration is often associated with increasing population density of a region. Table 1 shows that the Regency/City with the largest population projection is Denpasar City, which is 741.4 thousand people in 2022. This figure will continue to increase every year due to the small area of Denpasar City but residents continue to come in. This is because this area has a strategic function and role as a government area, the running of the economy and trade, educational activities and health services and a center for tourism activities that play a major role in economic development in Bali Province.

In general, migration is divided into two forms, namely permanent migration and non-permanent migration. Permanent migration is the movement of people crossing the boundaries of their area of origin to another area with the intention of settling in the destination area. While non-permanent migration is the movement of people from one area to another with no intention of settling in the destination area. A person who migrates is called a migrant. In this study, the researcher focuses more on permanent migrants.

The employment sector sought by migrants to meet their needs and carry out remittance practices to their home areas is divided into formal and informal sectors. The formal sector is a field or business sector that has permission from the government which is usually sought by educated people, while the informal sector is a field or business sector that is unorganized, irregular and mostly legal but does not have permission from the government and is usually sought by people seeking fortune in the city in the hope of getting a large income. If the residents who come have good qualities that are balanced with good education, it will be an opportunity for both the destination area and the area of origin. Education is the right way to improve human resources. The informal sector occurs when the city is limited to providing adequate employment. Informal sector actors are generally migrant workers with low education and are unskilled.

Connell (1980) stated that in developing countries there are a very close relationship between migrants and their area of origin, giving rise to a special phenomenon of population mobility, namely the transfer of income to the area of origin, called remittances. Balinese people have a very close relationship with customs and culture, so that wherever they are, they always feel a connection to their area of origin, which gives rise to the phenomenon of remittances. Remittances are one form of manifestation of the close relationship between migrants and their families and areas of origin. The close relationship between migrants and their areas of origin is caused by the nature of "bi-local population" in migrants. "Bi-local population" means that even though migrants now live in the destination area of migrants, migrants still consider the area where they were born as their place of residence (Sudibia, 2007).

According to Wiyono (1994) remittances are part of the migrant's income that is set aside to be sent to the area of origin. Thus, it can be logically explained that the greater the migrant's income, the greater the remittances sent to the area of origin. Barbone et al. (2012) explained that remittances have a direct impact on increasing disposable income for remittance recipients if allocated for consumption or saving activities. The amount of remittances can be influenced by several economic factors such as remittances, income and social factors such as age, gender, education, work experience. Analysis of remittance expenditure is often preceded by an explanation of a person's motivation in migrating and subsequent delivery behavior (Stark, 1991).

According to Rhomas (2008) a migrant sends and brings money or goods to the area of origin to be given to relatives left behind or to help with family finances and other material assistance. In line with this explanation, if we pay attention, migrants from Bali have a very

close relationship with customs and culture so that wherever migrants are, they always feel connected to their area of origin, so that this gives rise to the phenomenon of remittances. Remittances will increase when household income in the area of origin decreases, and vice versa when household income in the area of origin increases, remittances will decrease.

Based on data from the BPS of Bali Province, Denpasar City is the area with the largest migration destination, namely 282,689 thousand people. The high number of migrants in Denpasar City is due to the large pull factor so that migrants tend to choose Denpasar City as a migration destination. The imbalance in the development of more adequate infrastructure facilities in Denpasar City, differences in job opportunities, high wage levels and differences in economic income between regions have caused Denpasar City to be a migration destination. The large number of migrants entering Denpasar City is because Denpasar City is the center of all activities which causes economic growth in this city to be much more advanced than other cities in Bali.

In Denpasar City, there are many large industrial companies that can absorb labor, which is one of the economies in Denpasar, so that many residents move to find a better life, especially for economic purposes. In recent years, the investment value in Denpasar City has increased, making economic growth in Denpasar City even better. That is also the reason why many people in Karangasem choose to move.

**Table 2. Original Regional Income (PAD) of Regency/City of Bali Province (Thousand Rupiah) 2020-2022**

No.	Regency/City	Original Regional Income (PAD) of Regency/City Bali Province (Thousand Rupiah)		
		2020	2021	2022
1.	Jembrana	148 045 103	185 004 035	175 992 513
2.	Tabanan	313 042 530	362 314 631	436 408 393
3.	Badung	2 116 974 302	1 750 345 226	3 705 745 447
4.	Gianyar	545 869 873	430 172 109	857 553 633
5.	The city of Klungkung	220 893 875	254b 494 496	309 462 453
6.	Bangli	104 325 150	163 537 096	144 005 843
7.	Karangasem	219 176 733	252 688 747	301 332 231
8.	Buleleng	318 986 891	391 988 445	410 564 892
9.	Denpasar	731 261 281	792 362 414	888 051 856
<b>Bali Province</b>		<b>3 069 474 218</b>	<b>3 117 070 009</b>	<b>3 863 191 407</b>

Source: BPS Bali Province

According to the Regional Financial Statistics Survey data, BPS Bali Province in 2022, Karangasem Regency is the city with the third lowest local revenue in Bali Province with an amount of 301 million Rupiah, while Denpasar City is the city with the second highest local revenue in Bali Province with an income of 888 million Rupiah. This difference is because Denpasar City has job opportunities that have the potential to improve the welfare of people's lives compared to other cities. This is what causes residents of Karangasem Regency to migrate to Denpasar City, in the hope of getting a higher income so they can send remittances to their

families in their home areas and help develop their home areas.

Remittances are the most important part of rural community life, because most of them depend on remittances for their livelihood. The impact of sending remittances is also very complex. Changes in the family economy in the village, workers who experience changes in lifestyle and the increasing development of rural areas themselves. The amount of remittances sent by migrant workers is influenced by the income of migrant workers. According to Samuelson and Nordhaus (2003) income is defined as the total amount of money received by a person or household during a certain period (usually one year). Income consists of wages or labor income, income from wealth such as: rent, interest, dividends and transfer payments or receipts from the government such as social benefits or unemployment insurance.

Income levels are influenced by the level of education of migrant workers. Migrant workers generally work in the informal sector, but it is possible to work in the formal sector, considering that the level of education of migrant workers also varies. According to Duflo (2012), Samarakoon & Parinduri (2015), Anwar et al. (2013), education is something that is identified with human capital. Revealing that because the education of migrants is generally low, and also because they do not have adequate skills, it often results in them earning a living in the city by doing small independent businesses, using simple equipment and skills that they have mastered.

One of the factors that influences the amount of remittances is the number of family dependents in the area of origin. Curson (1981) stated that remittances occur because of the close relationship between migrants and their areas of origin, so that migrant workers still/also support their family members in their areas of origin. The number of family dependents influences the decision to carry out mobility which has an impact on increasing migrant income. The more family dependents that must be supported by migrant workers, the more remittances must be sent to their areas of origin. The number of family dependents is what ultimately influences the frequency of sending remittances to their areas of origin because the number of families can influence the frequency of sending remittances for each migrant.

Allocation of working hours has a positive and significant effect on income. According to Ehrenberg and Smith (2012), the allocation of time for work or leisure is influenced by opportunity costs. Each individual must decide how many hours to work and how many hours for other household activities. The longer the working hours of migrant workers will affect the income received each month by migrant workers. Each individual must decide how many hours to work and how many hours to consume various goods and how much time is devoted to other household activities.

## 2. RESEARCH METHODS

This study uses an associative quantitative method. The purpose of quantitative research is to develop and use mathematical models, theories, and hypotheses with the phenomena investigated in an associative form, namely research that examines the influence of variables on other variables or determines the relationship between one or more variables. In this study, associative research is used to analyze the influence of income and remittances on Karangasem migrant workers in Denpasar City.

The population of this study is the migrant population of Karangasem in Denpasar City as many as 38,870 people. The type of data used is quantitative data with primary data sources. Data collection was carried out using observation methods, structured interviews and in-depth interviews. The data used were then analyzed using path analysis techniques. The data collection method in this study uses non-probability sampling where each element in the population does not necessarily have the same opportunity to be selected as a subject in the sample. Using the snowball sampling method, namely in determining the sample, one or two people are first selected, but because with these two people it is felt that they have not obtained complete data, the researcher looks for other people who are considered able to complete the required data.

## 3. RESULTS AND DISCUSSION

### Description of Research Variables

#### Descriptive Analysis

Descriptive analysis in this study was conducted to obtain an overview of the calculation of minimum and maximum values, averages and standard deviations in relation to research on factors that influence the income and remittances of migrant workers in Karangasem, Denpasar City.

**Table 3. Descriptive Statistics Results**

	N	Minimum	Maximum	Mean	Std. Deviation
X1	95	6.00	16.00	12,1000	2.62719
X2	95	1.00	3.00	1.6316	0.65319
X3	95	45.00	98.00	69,1053	13.92264
Y1	95	2250000,00	8500000,00	5407894,7368	1669522,09670
Y2	95	500000,00	3000000,00	1575789,4737	718999,86528
Valid N (listwise)	95				

Source: Appendix 3

Information :

X1 = Education Level (Years)

X2 = Number of Family Dependents in Area of Origin

(People/person)

X3 = Allocation of Working Hours (Hours/Week)

Y1 = Income (Rupiah/Month)

Y2 = Remittance (Rupiah/Month)

Based on the results of descriptive analysis on Table 3 shows the number of observer points as many as 95 points obtained from the number of respondents as many as 95 respondents. The Education Level variable (X1) has a minimum value of 6 years, a maximum value of 16 years and an average of 12 years with a standard deviation of 2.6 years. The variable number of family dependents in the area of origin (X2) has a minimum value of 1 soul/person, maximum value 3 souls/person and an average of 1.6 people/person, with a standard deviation of 0.65 people/person. The working hour allocation variable (X3) has a minimum value 45 hours/week, maximum 98 hours/week, and average 69.10 hours/week with a standard deviation of 13.92 hours/week. The income variable (Y1) has a minimum value of 2,250,000 rupiah, a maximum value of 8,500,000 rupiah and an average of 5,407,894 rupiah with a standard deviation of 1,669,552 rupiah. The remittance variable (Y2) has a minimum value of 500,000 rupiah, a maximum value of 3,000,000 rupiah and an average of 1,575,789 rupiah with a standard deviation of 718,999 rupiah.

**Path Analysis**

Data testing in this study uses path analysis techniques, where path analysis is an extension of multiple linear regression analysis to test the causal relationship between 2 or more variables. In this path analysis, the first discussion is about the feasibility of the model or Goodness of Fit, the second is about the direct influence, and the third is about the indirect influence.

1) Goodness of Fit

Ghozali (2016) The coefficient of determination is a number to see how far the model's ability to explain the variation of the dependent variable. Based on the statistical results, it is known that the R-square of each model with dependent variables of income and remittances is presented again in Table 4.

**Table 4. R-Square of Dependent Variable**

No	Dependent Variable	R-Square	Information
1	Income (Y1)	0.448	Currently
2	Remittance (Y2)	0.767	Strong

Source: Appendix 5



Based on Table 4 can be explained that the R-square or coefficient of determination of the first model is 0.448, which is classified as moderate because its value is between 0.19-0.67. If the value is between 0.19 - 0.67 it is classified as moderate, and if it is less than 0.19 it is classified as weak (Utama, 2021). The R-square of 0.459 means that 44.8 percent of the income (Y1) of Karangasem migrant workers can be explained by the variables of education level, number of family dependents in the area of origin, and allocation of working hours. The remaining 55.2 percent is explained by other variables outside the model.

The R-square or coefficient of determination of the second model with the dependent variable remittance of 0.767 is classified as strong, because its value is greater than 0.67. The R-square of 0.767 means that 76.7 percent of the variation in remittances (Y2) of migrant workers can be explained by the level of education, number of dependents in the area of origin, allocation of working hours, and income, the remaining 23.3 percent is explained by other variables outside the model.

Based on the two coefficients of determination, the combined coefficient of determination can be calculated as follows.

$$R2m = 1 - \{(1 - R21) (1 - R22)\}$$

$$R2 m = 1 - \{(1 - 0.448) (1 - 0.767)\}$$

$$R2 m = 1 - \{(0.552) (0.233)\}$$

$$R2 m = 1 - 0.128616$$

$$R2m = 0.87$$

Combined coefficient of determination or  $R^2 m = 0.871$  means that 87.1 percent of the variation in the remittance variable is directly and indirectly influenced by the level of education, number of family dependents in the area of origin, allocation of working hours, and income, the remaining 12.9 percent is explained by other variables outside the model.

## 2) Direct Effect Test

The path coefficient calculation was carried out using SPSS 25.0 for Windows software, and the results obtained were shown in Table 5 below:

**Table 5. Path analysis test results (Structure 1)**

Variables	Unstandardized Coefficients		Standardized Coefficients	t count	Sig.
	B	Std. Error	Beta		
(Constant)	12,076	0.583		20,715	0,000
X1	0.052	0.010	0.410	5,174	0,000
LnX2	0.175	0.069	0.210	2,540	0.013
LnX3	0.635	0.137	0.377	4,635	0,000

Source: Processed secondary data, 2024 (Appendix 4)

**Table 6. Path analysis test results (Structure 2)**

Variables	Unstandardized Coefficients		Standardized Coefficients Beta	t count	Sig.
	B	Std. Error			
<b>(Constant)</b>	-16560754.23	1967446,330		-8,417	0,000
<b>X1</b>	22851,303	16105,231	0.083	1,419	0.159
<b>LnX2</b>	848449,265	100453,002	0.472	8,446	0,000
<b>LnX3</b>	-653268,706	214934,089	-0.179	-3,039	0.003
<b>LnY1</b>	1311578,609	147983,495	0.606	8,863	0 0,000

Source: Processed secondary data, 2024 (Appendix 4)

Information :

X1= Education Level (Year)

X2= Number of Family Dependents in Area of Origin (People/Person)

X3= Allocation of Working Hours (Hours/Week)

Y1= Income (Rupiah/Month)

Y2= Remittance (Rupiah/Month)

**Table 7. Direct Influence Between Research Variables**

Variable Relationship	Regression Coefficient		Standard Error	t	Sig
	Non-Standard	Standard			
X1 □ Y1	0.052	0.410	0.010	5,174	0,000
X2 □ Y1	0.175	0.210	0.069	2,540	0.013
X3 □ Y1	0.635	0.377	0.137	4,635	0,000
X1 □ Y2	2851,303	0.083	16105,231	1,419	0.159
X2 □ Y2	848449,265	0.472	100453,002	8,446	0,000
X3 □ Y2	-653268,706	-0.179	214934,089	-3,039	0.003
Y1 □ Y2	1311578,609	0.606	147983,495	8,863	0,000

Source: Appendix 4

Information :

X1= Education Level (Year)

X2= Number of Family Dependents in Area of Origin (People/Person)

X3= Allocation of Working Hours (Hours/Week)

Y1= Income (Rupiah/Month)

Y2= Remittance (Rupiah/Month)

Based on Table 7 can be used to create a structural equation using standardized regression coefficients as follows:

$$\hat{Y}_1 = 0.410 X1 + 0.210 X2 + 0.377 X3$$

$$\hat{Y}_2 = 0.083X1 + 0.472X2 - 0.179X3 + 0.606Y1$$

Based on Table 7 can also explain the direct influence between independent or exogenous variables and dependent or endogenous variables as follows:

- 1) The level of education has a positive and significant effect on the income of Karangasem migrant workers in Denpasar City, with a coefficient of 0.410 with a significance of 0.000 which is smaller than 0.05.
- 2) The number of family dependents in the area of origin has a positive and negative effect.  
significant on the income of Karangasem migrant workers in Denpasar City, with a coefficient of 0.210 with a significance of 0.00 which is smaller than 0.05.
- 3) Allocation of working hours has a positive and significant effect on the income of Karangasem migrant workers in Denpasar City, with a coefficient of 0.377 with a significance of 0.000 which is smaller than 0.05.
- 4) The level of education is positive and not significant towards remittances of migrant workers from Karangasem, Denpasar City, with a coefficient of 0.083 with a significance of 0.159 which is greater than 0.05.
- 5) The number of family dependents in the area of origin has a positive and significant effect on remittances from migrant workers in Karangasem, Denpasar City, with a coefficient of 0.472 with a significance of 0.000 which is smaller than 0.05.
- 6) Allocation of working hours has a negative and significant effect on remittances of migrant workers in Karangasem, Denpasar City, with a coefficient of -0.179 with a significance of 0.003 which is smaller than 0.05.
- 7) Income has a positive and significant effect on remittances from migrant workers in Karangasem, Denpasar City, with a coefficient of 0.606 with a significance of 0.000 which is smaller than 0.05.

### 3) Indirect Influence

**Table 8. Test of Indirect Influence Between Research Constructs**

Variable Relationship	Mediating Variables	Indirect Influence	Ab	Sat	Z	Caption
X1-Y2	Y1	537747.23	68202.09	13138,0702	5,191	Significant
X2 - Y2	Y1	275431.51	229526.25	90512,0134	2,535	Significant
X3 - Y2	Y1	494465,135	832852.42	180183,8345	4,662	Significant

Source: Appendices 6 to 7

Information :

X1 = Education Level (Year)

X2 = Number of Family Dependents in Area of Origin (People/person)

X3 = Allocation of Working Hours (Hours.Week)

Y1 = Income (Rupiah/Month)

Y2 = Remittance (Rupiah/Month)

Based on Table 8 can be explained as follows:

- 1) The education level variable (X1) has a significant indirect effect on remittances (Y2) through the income variable (Y1) because the calculated z is 5.191 which is greater than the z table of 1.96. The indirect effect coefficient of the relationship between these variables is 537747.23
- 2) The variable of the number of dependents in the Region of Origin (X2) has a significant indirect effect on the remittance variable (Y2) through the income variable (Y1) because the calculated z is 2.535 which is greater than the z table of 1.96. The indirect influence coefficient of the relationship between these variables is 275431.51
- 3) The variable of working hour allocation (X3) has a significant indirect effect on remittances (Y2) through the income variable (Y1) because the calculated z is 4.662 which is greater than the z table of 1.96.

## **Discussion**

### **Testing the direct influence of education level on the income of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of 0.052 and a significance value of 0.000, which means that education has a positive and significant effect on the income of Karangasem migrant workers in Denpasar City. This indicates a unidirectional relationship between education and income. The relationship in question is, the higher the education of migrant workers, the higher the income obtained by Karangasem migrant workers in Denpasar City. Based on observations that have been made, migrant workers with higher levels of education tend to have higher incomes than migrant workers with lower levels of education.

The results of this study are in line with research Aleman and Kim (2015) stated that education has a positive and significant partial effect on individual income. This study shows that each additional year of education obtained can increase a person's potential income, indicating that higher levels of education are directly related to increased income. In other words, the results of their analysis underline the importance of investing in education as an effective strategy to improve economic welfare and social mobility. Higher education will improve skills that allow migrant workers to obtain jobs with higher salaries. In addition, with higher education, migrant workers can access positions with better compensation and more

favorable working conditions. Education gives migrant workers the knowledge and confidence to negotiate wages and working conditions so that it will affect the level of income earned.

### **Testing the direct influence of the number of family dependents in the area of origin on the income of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of 0.175 and a significance value of 0.013, which means that the number of family dependents in the area of origin has a positive and significant effect on the income of Karangasem migrant workers in Denpasar City. This shows that there is a unidirectional relationship between the number of family dependents in the destination area and income. Research shows that the more family dependents that must be supported in the hometown, the higher the income earned by migrant workers in the city. This shows that there is a unidirectional relationship between the number of family dependents in the area of origin and the income earned in the destination area. This means that migrant workers who have more family dependents tend to try harder to increase their income in an effort to meet the needs of the families left behind, thus having a positive impact on their total income in Denpasar City.

The results of this study are in line with research on the number of family dependents affecting the size of migrant employee income. Where according to Purwanti (2014), with the increasing number of family dependents, there are relatively more needs that must be met, so that they tend to encourage them to work to meet their family's economic needs in their area of origin. This is proven by research by Wiyasa (2017) & Jayanti (2016) that the number of family dependents has a positive and significant effect on income. This is also in line with research by Tomi (2018) and Putra (2018) which states that the number of family dependents in the area of origin has a positive and significant effect on income. The number of people who still have to be supported causes migrant workers to be motivated to work harder in order to earn income to meet their living needs.

### **Testing the direct influence of working hour allocation on the income of Karangasem migrant workers in Denpasar City.**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of 0.635 and a significance value of 0.000, which means that the allocation of working hours has a positive and significant effect on the income of Karangasem migrant workers in Denpasar City. This shows a unidirectional relationship between the allocation of working hours and income, so that the higher the allocation of working hours of Karangasem migrant workers in Denpasar City, the higher the income obtained by Karangasem migrant workers in Denpasar City.

The results of this study are in line with research on the allocation of working hours having a positive and significant effect on income. This shows that there is a unidirectional relationship between the allocation of working hours and income, so that the higher the allocation of working hours of migrant workers, the higher the income obtained by migrant workers (Nurfitria, 2019). The results of this study are also in accordance with the research of Paderi (2018) in his research which states that there is a positive and significant influence between the allocation of working hours on the income of migrant workers, where the longer the working hours, the higher the income received. In addition, Anggraini (2021) also said that working hours have a positive and significant effect on the income of street vendors in Bogor City.

The results of this study were also strengthened based on the results of in-depth interviews with Wisnu Wiguntara as a respondent as a Karangasem migrant worker working in Denpasar City.

"I used to work 6-8 hours a day, the income was not much. Now

I tried to increase it to 10 hours per day, and my income increased quite a lot. So I am consistent in opening 10 hours per day, sometimes longer if sales are not too busy"

### **Testing the direct influence of education level on remittances of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the level of education is positive and insignificant towards the remittances of migrant workers in Karangasem, Denpasar City, with a coefficient of 0.083 with a significance of 0.159 which is greater than 0.05. In other words, variations in the level of education of migrant workers do not significantly affect the amount of remittances they send. This shows that, although there is a correlation between the variable Level of Education and the remittance variable, the correlation is not strong enough to be considered statistically significant.

The results of Rempel and Lobdell's (1978) study suggest that the higher the level of education of migrant workers, the greater the remittances sent to their home countries. According to their study, the higher the level of education of a migrant worker, the greater the remittances they can send. This is because migrant workers with higher education generally have better job opportunities and higher incomes, which allows them to send larger amounts to their families in their home countries. This study reflects that

Education not only increases an individual's ability to obtain higher-paying jobs, but also increases their capacity to provide financial support to the families left behind.

### **Testing the direct influence of the number of family dependents in the area of origin on remittances of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of 0.472 with a significance of 0.000, which means that the number of family dependents has a positive and significant effect on remittances of Karangasem migrant workers in Denpasar City. This shows a unidirectional relationship between the number of family dependents in the area of origin and income, so that the more family dependents that must be met in the area of origin, the greater the possibility of income needed to meet these needs. In other words, individuals or families who have more dependents will tend to need higher incomes to maintain their standard of living and meet basic needs.

The results of Mamoran's (2020) study stated that the number of family dependents has a positive and significant effect on sending remittances (Mamoran, 2020). The results of this study are in line with research conducted by Cahyadi (2021) which states that the number of family dependents has a positive and significant effect on the amount of remittances for migrant workers. If the number of families left behind who are still supported is large, then the remittances sent are also in accordance with the number of family dependents. Remittances will be greater if the family receiving the remittances is a nuclear family. This is also in line with research conducted by Hendrawati (2021) that the number of family dependents has a positive and significant influence on migrant workers' remittances.

The results of this study are also supported by in-depth interviews conducted with I Made Edy Setiawan as a respondent of Karangasem migrant workers in Denpasar City on August 9, 2024, who said that

"I have three families in Karangasem that I still have to take care of, so I have to send more money. Thank God the salary I get is enough to support my life here and send to my family in Karangasem. Sometimes I also send more if I get a bonus"

### **Testing the direct influence of working hour allocation on remittances of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of -0.179 with a significance of 0.003 which is smaller than 0.05, which means that the allocation of working hours has a negative and significant effect on remittances of Karangasem migrant workers in Denpasar City. This means that the more working hours allocated by migrant workers, the smaller the amount of remittances they send. This finding suggests that the time spent working is inversely related to the amount of remittances, where a higher allocation of working hours can result in a reduced ability or desire for migrant workers

to send money to their families in their home areas.

The research results showing that the allocation of working hours has a negative influence on remittances can be justified from various angles.

from a deeper economic, psychological, and social perspective. First, from an economic perspective, excessive working hours can lead to decreased productivity due to fatigue and stress. When productivity decreases, the income generated by migrant workers also tends to decrease, which affects the amount of remittances they can send to their home countries. In addition, in situations where workers have to work longer hours, there is a tendency for the cost of living in the country where they work to increase. These increased costs can be related to basic needs such as food, transportation, and health care, all of which reduce the net income available to be sent as remittances.

From a psychological and social perspective, workers who spend more time working tend to have less time to interact with their families back home. This isolation can affect their decisions in allocating income, where they may feel more need to meet their own needs in the country where they work rather than sending money home. In addition, harsh working conditions can make workers focus more on meeting their personal needs to maintain their health and well-being, reducing their ability and desire to send remittances.

Furthermore, in a sociological context, remittances are often considered as a form of social investment by migrant workers to maintain relationships with their families and communities in their home countries. However, when the allocation of working hours increases, workers may not have enough time or energy to maintain these relationships, leading to a decrease in motivation to send remittances. Ultimately, these factors interact to

creating a situation where increasing working hours not only does not increase the amount of remittances, but can actually decrease them significantly. This phenomenon underscores the importance of understanding the complex relationships between working conditions, worker well-being, and economic decisions that affect remittances.

### **Testing the direct influence of income on remittances of Karangasem migrant workers in Denpasar City**

Based on the results of the hypothesis testing, the significance value obtained a path coefficient value of 0.606 with a significance of 0.000 which is smaller than 0.05, which means that income has a positive and significant effect on remittances of Karangasem migrant workers in Denpasar City. This shows a unidirectional relationship between income and remittances, so that the higher the income earned by migrant workers, the greater the amount of remittances they send to their families in their home areas. This phenomenon reflects that increased income



provides greater financial capacity for migrant workers to support their families through remittances, and strengthens the role of income as a key factor in determining the amount of their financial contribution.

The research results of Redehegn (2019) and Andharista (2016) stated that income has a positive and significant effect on sending remittances to the areas of origin of migrant workers. Income is defined as wages earned while working. Income sent to the family is basically part of the income set aside to be given to the area of origin. Thus, the greater the income, the greater the amount of remittances given to the area of origin (Ardana, 2011).

The results of this study are also in line with the results of research conducted by Hendrawati (2021) that income has a positive and significant effect on migrant workers' remittances. In addition, research conducted by Agustika and Rustayuni (2017) also stated that income has a positive and significant effect on remittances.

The results of this study were also strengthened based on in-depth interviews conducted with Putu Asyan as a respondent of Karangasem migrant workers working in Denpasar City on August 8, 2024, who said that

“When I first moved to Denpasar, the income I got from

I didn't work much, so the money I could send to my family in Karangasem was only a little. But now my income has increased, enough for me here and I can send a little more than before to my family in Karangasem so that my family's economy is not in trouble anymore.”

### **The indirect effect of income variables on education levels on remittances of Karangasem migrant workers in Denpasar City**

Based on the calculation shows that the value, which is  $5.191 > z \text{ table} = 1.96$  which means  $H_0$  is rejected and  $H_1$  is accepted. Thus it can be concluded that the first income ( $Y_1$ ) has a significant role as a mediating variable in the relationship between the Education variable ( $X_1$ ) and remittances ( $Y_2$ ) or in other words education has an indirect effect on remittances through income.

The results of this study are in line with the human capital theory where education can increase a person's income through increasing a person's work productivity. Rempel and Lobdell (1978) stated that the higher

The higher the level of education of migrant workers, the greater the remittances sent to their home regions. This is basically related to the function of remittances as a repayment of the educational investment that the family has invested in migrant individuals. Higher levels of education often open up access to better job opportunities and higher salaries, because individuals with better education tend to get jobs with higher compensation. Migrant workers

with higher education can usually earn higher incomes in the countries where they work. This higher income then gives them a greater ability to send money as remittances to their families back home. Therefore, although education does not directly affect remittances, increasing levels of education can increase income which in turn contributes to the amount of remittances sent.

### **The indirect effect of income variables on the number of family dependents in the area of origin on remittances of Karangasem migrant workers in Denpasar City**

Based on the calculation shows that the value,  $2.325 > z \text{ table} = 1.96$  which means  $H_0$  is rejected and  $H_1$  is accepted. Thus it can be concluded that the first income (Y1) has a significant role as a mediating variable in the relationship between the variable number of family dependents in the area of origin (X2) to remittances (Y2) or in other words the number of family dependents in the area of origin has an indirect effect on remittances through income.

The results of this study are in line with research by Wiyasa (2017) & Jayanti (2016) which states that the number of family dependents has a positive effect. and significant to income. The presence of family in the area of origin affects the amount of remittances sent to the area of origin. The variable of the number of family dependents in the area of origin significantly affects the remittances of migrant workers. When a migrant worker has many dependents in their hometown, the financial needs of the family tend to increase, motivating workers to seek higher-paying jobs in order to meet their remittance obligations. In an effort to support many dependents, migrant workers may work harder or seek higher-paying jobs in the country where they work. Higher incomes, resulting from better jobs or additional working hours, then allow them to send larger amounts of remittances. Thus, although the number of dependents does not directly affect remittances, through increased income, the need to meet dependents in the area of origin significantly impacts the amount of remittances sent.

### **The indirect effect of income variables on the allocation of working hours on remittances of Karangasem migrant workers in Denpasar City**

Based on the calculation shows that the value of  $4.662 > z \text{ table} = 1.96$  which means  $H_0$  is rejected and  $H_1$  is accepted. Thus it can be concluded that the first income (Y1) has a significant role as a mediating variable in the relationship between the variable of the number of working hours allocation (X3) to remittances (Y2) or in other words the allocation of working hours has an indirect effect on remittances through income.

The results of this study are in line with Paderi (2018) who in his study stated that there is a positive and significant influence between the allocation of working hours and the income of migrant workers, where the longer the work, the higher the income received. According to

Ehrenberg and Smith (2012: 171) in Marhaeni and Manuati (2011: 11) the allocation of time for work or leisure is influenced by opportunity costs. Each individual must decide how many hours to work and how many hours for other household activities. When migrant workers allocate more working hours, either by taking overtime or working multiple jobs at once, they tend to increase their total income. This increase in income gives them additional capacity to send larger remittances to their families back home. In other words, although the allocation of working hours is not directly related to remittances, through the increase in income generated from additional working hours, the allocation of working hours indirectly increases the amount of remittances that can be sent to the family.

#### **4. CONCLUSION**

Based on the results of the previous discussion and description, the following conclusions are drawn:

- 1) Education level, number of family dependents in the area of origin and allocation of working hours have a positive and significant effect on the income of Karangasem migrant workers in Denpasar City.
- 2) The level of education has a positive and insignificant effect on remittances of Karangasem migrant workers in Denpasar City. The number of family dependents in the area of origin has a positive and significant effect on remittances of Karangasem migrant workers in Denpasar City. Meanwhile, the allocation of working hours has a negative and significant effect on remittances of Karangasem migrant workers in Denpasar City.
- 3) Education level, number of family dependents in the area of origin and allocation of working hours have an indirect and significant influence on remittances through the income of Karangasem migrant workers in Denpasar City.

#### **BIBLIOGRAPHY**

- Agustika, I. G., & Rustariyani, S. D. (2017). Factors affecting cruise ship worker remittances and their utilization in the Regency Tabanan. *Pyramid: Journal of Population and Human Resource Development*, 13(1), 37-50.
- Aisyah, S., & Rahman, A. (2022). Socioeconomic and demographic characteristics affecting migrant workers' remittances. *Performance: Journal of Economics and Management, Faculty of Economics and Business, Alauddin Islamic University*, 19(1), 2428-1127.

- Andharista, N. P. M., & Sudibia, I. K. (2016). Socio-demographic influence on remittances of non-permanent migrant workers from outside Bali in Denpasar City. *E-Journal of Development Economics, Udayana University*, 5(8), 846-864.
- Apriliana, D., & Meydianawathi, L. G. (2013). Factors affecting remittances of Indonesian migrant workers from Bali to the United States. *E-Journal of Development Economics, Udayana University*, 2(8), 44627.
- Ardana, I. K., Sudibia, I. K., & Wirathi, I. (2011). Factors affecting the amount of remittances to the region of origin: Case study of internship workers from Jembrana Regency in Japan. *Pyramida Journal of Population and Human Resource Development*, 4(2), 130-137.
- Cahyadi, L. A., Sunlip, W., & Lestari, E. K. (2021). Factors affecting the amount of remittances from Indonesian migrant workers' families in Pasuruan Regency. *Journal of Development Economics, University of Jember*, 10(1), 10-20.
- Central Statistics Agency of Bali Province. (2020). Lifetime migration flows between regencies/cities in Bali Province: Results of the 2020 Bali Province population census long form. Retrieved from <https://bali.bps.go.id/publication/2023/07/14/6c13fb4474fe694b8ccd0b68/bali-province-migration-statistics-results-of-long-form-population-census-2020.html>
- Central Statistics Agency of Bali Province. (2020). Number of poor population in Bali Province by regency/city (thousand people). *National Socio-Economic Survey*. Retrieved from <https://bali.bps.go.id/indicator/23/261/1/besar-penbangun-miskin-bali-province-by-district-city.html>
- Central Statistics Agency of Bali Province. (2020). Original regional income (PAD) of regencies/cities in Bali Province (thousand Rupiah). *Bali Regional Financial Statistics Survey*. Retrieved from <https://bali.bps.go.id/indicator/13/244/1/pendapatan-asli-region-pad-district-city-in-bali-province.html>
- Central Statistics Agency of Bali Province. (2020). Population of Bali Province by regency/city, gender and migration status risen: Results of the 2020 population census. Retrieved from <https://bali.beta.bps.go.id/id/statistics-table/1/MzcyjMQ==/penresident-Bali-Province-by-Regency/City--Gender--and-Migration-Status-lifetime-results-of-the-2010-and-2020-population-census.html>
- Central Statistics Agency of Bali Province. (2023). Population projection of Bali Province by gender and regency/city of Bali Province: 2020 population census results. Retrieved from <https://bali.bps.go.id/indicator/12/28/1/projecti-penbangun-provinsi-bali-by-gender.html>
- Dewi, M. A. L., & Dewi, N. P. M. (2018). The effect of age, education, and number of family dependents on the income of female workers in the informal sector in Denpasar City. *E-Journal of Development Economics, Udayana University*, 7(1), 1-29.

- Enggoresta, E., & Wardana, I. G. (2018). Factors affecting the income of Minang ethnic migrant traders of Padang cuisine in Denpasar City. *E-Journal of Economics and Business, Udayana University*, 7(5), 896-927.
- Erika, L., & Aswitari, L. P. (2021). Analysis of several factors affecting the income of female street vendors in Denpasar City. *E-Journal of Development Economics, Udayana University*, 10(3), 986-1013.
- Hendrawati, N. N. D. M., & Sudibia, I. K. (2021). Factors influencing remittances to the region of origin by non-permanent migrant workers in Denpasar City. *Indonesian Scientific Journal*, 1(3), 274-283.
- Indrawan, H., & Ayuningsasi, A. A. K. (2017). Analysis of variables affecting traders' income at Kreneng Market, Denpasar City. *E-Journal of Development Economics, Udayana University*, 6(10), 1952-1982.
- Mamoran, I. N. S., & Yasa, I. G. W. M. (2020). Analysis of several factors affecting the amount of migrant remittances of formal sector workers in Sesetan, South Denpasar. *E-Journal of Development Economics, Udayana University*, 9(9), 2009-2035.
- Novayanti, L., & Sudibia, I. K. (2013). Factors affecting non-permanent migrant remittances to the region of origin: Case study in Jimbaran Village, South Kuta District, Badung Regency. *E-Journal of Development Economics, Udayana University*, 2(12), 44399.
- Octania, K. Y., & Yasa, I. G. W. M. (2014). Remittances and their determining factors: Case study of risen migrants, Jimbaran Village, South Kuta District. *E-Journal of Development Economics, Udayana University*, 3(9), 44473.
- Oktarina, N. P. P. (2020). Analysis of factors affecting the flow of working hours and income of Hindu female traders in Badung Market. *E-Journal of Development Economics, Udayana University*, 10(2), 772-799.
- Pamungkas, M. M., & Badriyah, N. (2022). Factors affecting remittances and priorities of remittance use. *Journal of Development Economic and Social Studies Development Economics, Brawijaya University*, 1(2).
- Prabawati, N. K. A. G. U., Sudibia, I. K., Yasa, I. G. W. M., & Dewi, M. (2020). Analysis of factors affecting remittance flows: A case study of migrant workers from Bali in Surabaya City. *E-Journal of Development Economics, Udayana University*, 9(5), 1082-1113.
- Pramana, I. P. I. A., & Sudibia, I. K. (2021). Factors affecting the income of informal sector female workers in Kerobokan Market, Badung Regency. *E-Journal of Development Economics, Udayana University*, 10(8), 3418-3445.
- Purba, A. B., & Sudibia, I. K. (2022). Analysis of remittance sending factors by Batak migrant workers in Denpasar City to their areas of origin during the Covid-19 pandemic. *E-Journal of Economics and Business, Udayana University*, 11(3), 241-256.

- Purnami, N. K. A., & Sudibia, I. K. (2023). Analysis of factors influencing remittances by non-permanent migrant workers in the informal sector in Jimbaran Village. *E-Journal of Economics and Business, Udayana University*, 12(7), 1399-1409.
- Purwanto, K. A., Sudibia, I. K., & Yuliarmi, N. (2016). The influence of economic, social, and demographic factors on income and remittances sent to the region of origin by non-permanent migrants in West Denpasar District. *E-Journal of Economics and Business, Udayana University*, (2016), 2723-2748.
- Reshmasari, N. P. Y., & Yasa, I. N. M. (2020). Factors affecting remittances of non-permanent migrants in Kedonganan Traditional Village, Bali. *E-Journal of Development Economics, Udayana University*, 11(8), 2987-3014.
- Sanjaya, N. N., & Wardana, G. (2019). Analysis of factors that influence remittance giving by migrant risen informal sector traders. *E-Journal of Development Economics, Udayana University*, 8(9), 2133.
- Santi, P. I. M. A., & Yasa, I. G. W. M. (2023). Analysis of factors affecting income levels and contributions of poor female household workers in Karangasem District. *E-Journal of Economics and Business, Udayana University*, 12(7), 1280-1239.
- Sudarsani, N. P., Sukarsa, M., & Marhaeni, A. A. I. N. (2015). Analysis of factors affecting the income of migrant women in the Tedung Bali craftsman industry, Mengwi District, Badung Regency. *E-Journal of Economics and Business, Udayana University*, 4(8), 923-935.
- Trendyari, A. A. T., & Yasa, I. N. M. (2014). Analysis of factors affecting incoming migration to Denpasar City. *E-Journal of Development Economics, Udayana University*, 3(10), 476-484.