



REMITTANCE OF INFORMAL SECTOR MIGRANT WORKERS: A CASE STUDY FROM DENPASAR-BALI, INDONESIA

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Abstract

This study examines the role of migrant workers in improving the family economy and development in the area of origin, in order to determine: the relationship of migrant workers with their origin in terms of remittances and visits to the area of origin and remittance models of migrant workers based on the demographic and socio-economic characteristics of migrants. The study was conducted in two locations in Denpasar, namely West Denpasar District and South Denpasar District. The research data was collected by interviews using questionnaires. The results of the study obtained that most respondents stated that they sent their income to the area of origin in the form of money and for shipping goods. The reason underlying the respondent sending money or goods is dominated for the purposes of religious activities. Visits to the area of origin, most of the respondents stated that they visited the area of origin in the past one year, with an average frequency of visits twice a year. The variables that significantly influence the proportion of remittances sent to the area of origin are the level of education, the status of the house occupied, and the frequency of visits.

Keywords: Remittance, migrant, migrant workers, informal sector, informal sector workers

INTRODUCTION

The arrival of migrant workers in the city of Denpasar, Bali Province is in the hope of improving their socio-economic conditions, rather than in their home regions. The influx of migrants has a positive or negative impact on the City of Denpasar and the area of origin. The positive impact is the fulfillment of the need for labor in certain types of work that began to be abandoned by indigenous Balinese. Besides, the number of migrants who come to Bali have an impact on the high rate of population density and the high rate of population growth in the city of Denpasar.

The arrival of workers from outside Bali besides the initiative itself, headed to Bali with the aim of getting a job to improve their standard of living than in the area of origin. Their arrival is also often due to being carried by building contractors who are also outsiders of Bali, these contractors often choose to bring their own labor from their home areas, because it is based on consideration of lower labor costs than those from Bali, this causing more and more non-permanent migrants. After the construction of the project is complete, often the migrant workers remain in the destination, seek their own work on their own initiative or with the help of relatives or friends from the same area of origin. This also led to many migrant workers finally cultivating many types of jobs in the informal sector.

The greater number of migrants entering Bali, on the one hand, will lead to higher concentration and population density in the destination area, while also providing a positive impact on the development of the region through sending remittances sent by migrant workers to the area of origin.

Based on the background above, some research problems can be formulated, including: What is the general description of the demographic and socio-economic characteristics of informal sector migrant workers from outside Bali?, Does the length of stay of migrants affect the proportion of remittances sent to the area of origin?, How is the use of remittances sent to the area of origin?, How comparative proportion of remittances sent to the area of origin of migrants between the length of stay of less than five years and migrants who live more than 5 years?, How is the use of remittances sent to the area of origin?, How do migrant workers visit the area of origin?, What is the model of remittance delivery based on the demographic and socio-economic characteristics of migrants?

The purpose of this study was to find out: 1) General description of the demographic and socio-economic characteristics of informal sector migrant workers from outside Bali in the City of Denpasar; 2) relations with the region of origin of migrant workers in terms of remittances, visits to areas of origin, and the use of remittances sent to the area of origin; 3) Comparison of remittances sent to the area of origin based on differences in the category of length of stay of

migrants (≤ 5 years and > 5 years); and 4) the remittance model of migrant workers based on the demographic and socio-economic characteristics of migrants.

Based on the research questions mentioned above, this research is important to be carried out in order to examine the role of migrant workers in improving the family economy and development in the area of origin. Specifically, this research is important for assessing the relationship of migrants with the area of origin in the form of remittances and visits to the area of origin, as well as models of remittance delivery based on the demographic and socio-economic characteristics of migrants.

Connel (1980) explained that the relationship of migrants with regions of origin in developing countries is very well known, so that it becomes one of the characteristics of the phenomenon of migration in developing countries. The relationship is realized, among others, by sending money, goods, and even development ideas to the area of origin, directly or indirectly. Intensity, among others, is determined by distance, transportation facilities, duration of wanderings, marital status, or distance of family relationships. Mantra (1994) sees an inverse relationship between distance and intensity of relationships. The closer the migrant residence is, the higher the frequency of visits to the area of origin.

The existence of remittances is one indicator to find out the relationship between the mobility actors in the destination and their origin. The magnitude of remittances sent to the area of origin is largely determined by the nature of worker mobility, the nature of the relationship between migrants and their families, and all their needs in the area of origin. Incoming remittances tend to be greater when labor mobility associated with household strategies for survival. The nature of the mobility of such workers causes the social relations of migrants with families in the area of origin to be quite strong. If mobility is an effort to cover family needs (Effendi, 1995). Further explained that workers who carry out permanent mobility will send fewer remittances compared to workers who carry out non-permanent mobility.

Furthermore Curson (1981) explains that remittances sent to the origin area have functions such as: (1) Supporting the family economy, (2) Celebrating special days in the life cycle, (3) Travel costs to help with the costs of traveling new potential migrants (4) Paying debts, (5) Investing, as an investment used to support old age, (6) pension plan. Hugo (1986) suggested the impact of rural-urban mobility on the area of origin. It was found that the motive for conducting mobility was to increase the income of families living in the village. Almost all circular mobility actors send 21% -44% of their income to the village. The amount of remittance is determined by the type of mobility carried out by the villagers. The biggest expenses of remittances include spending on food that is rather cheap and little for buying clothes. The cost

of education is also large as the fees used for celebrations in the village, then only used to buy other items.

The amount of remittance sent to the area of origin according to Stahl, depends on the income of migrants, the portion of income sent, and the number of people who leave the area. On the micro level, the amount of remittances sent to the area of origin is also related to migrants settling time in the destination area. Remittances to parents are increasing in number as migrant income increases. The more established someone is in the country, the greater and more often someone sends money back home (Mantra, 1999).

Jellinek (1986) explains that in order to minimize remittance out and increase entry remittances, there is a tendency for migrant workers to adopt “the mondoksistem”, which is to live together in one rental house in the destination. Mondok system allows migrants to reduce the cost of living. In addition, the assurance of getting a job can be guaranteed with the boarding system. Migrant workers originating from one village can take turns returning to their home areas. The cost of sending remittances to the area of origin can also be reduced because remittances will be carried by friends who return to their area of origin. Papanek & Kuncorojakti (1986) revealed that in addition to the boarding house system, migrant workers in the city also carry out strategies in the accumulation of remittances, for example by reducing expenses for entertainment and food costs. This strategy is done in an effort to increase the amount of remittances to be sent to the area of origin.

Research on the impact of international migration and remittances on poverty in developing countries has been done before. The results of Adam Jr& Page (2005) research in 71 developing countries, show that both international migration and remittances significantly reduce the level, depth and severity of poverty in developing countries. It was found that an average 10% increase in the share of international migrants in the population would cause a decline of 2.1% of the population living with poverty at less than \$ 1.00 per person per day. Likewise a significant increase in international remittances by 10% per capita will cause a decline of 3.5% of people living in poverty.

Remittance contributes to poverty reduction, especially through its direct effects. Therefore, migration and remittances have the potential to be a valuable complement to broad-based development efforts (Imai, et al. 2014). Lipton (1980) in his study of 40 villages in India which focused more on internal migration than international migration, found that migration increased intra-rural inequality because better migrants were drawn to fairly strong job prospects (in cities or abroad), while the poor are driven by rural poverty and the method of replacing labor.

Moore (2010) reports that remittances can play a key role in reducing the impact of adverse output shocks but have no significant effect on volatility in consumption and investment. Furthermore Barham & Boucher (1998) explains that sending money and goods by migrants to their communities of origin can have an important impact on income distribution and household welfare. This is especially true in developing countries, where household income is low, inequality is often widespread, and family member migration or domestic or international migration can be the main source of income through remittances/wages earned by migrants.

Edwards & Ureta (2003) examined the impact of remittances on school decisions in El Salvador, using data from the 1997 National Household Survey, the authors found remittances had a statistically significant effect on school attendance and retention, especially in poor rural areas. While Woodruff & Zenteno (2007) found that remittances were also positively associated with the level of investment and profits of micro-enterprises. Haas (2006) also notes that remittances received by households are invested more in housing and agriculture.

Remittance refers to money and goods sent to households by migrant workers who work outside their home communities, whether in urban areas or abroad. Adam Jr (2011) in his review of the 50 most recent empirical studies on the economic impact of international remittances to developing countries based on household survey data. The authors have found that international remittances generally have a positive impact on poverty and health in developing countries, remittances can have a negative impact on labor supply, education, and economic growth.

Furthermore the authors suggest that the impact of sending international remittances on health and education in developing countries varies. On the one hand, most studies have found that international migration and remittances increase infant mortality and child health, by increasing household income and by increasing maternal knowledge about health. On the other hand, the impact of migration and remittances on registration and school performance is more controversial. While some studies have found that international remittances increase school retention rates, other studies have found that international migration has a negative impact on school attendance rates for boys and girls because of the absence of parents during migration. Several recent studies also show that international remittances can create disincentives for investment in schools.

Adams Jr. (2011) argues that there are still debates about how migrants spend and invest their remittance income. Some studies have found that international migrants spend a large part of their remittances on consumer goods (e.g. food and consumer goods), and that this pattern of expenditure has little positive impact on the local economy. However, other studies have found that households that receive remittances tend to spend on investment goods (for

example, education, housing), and that this pattern of expenditure can help build human and physical capital in developing countries. The issue of whether remittances can help stimulate investment in entrepreneurial activity is also open, some studies have found that remittances help stimulate the creation of small businesses, while other studies find just the opposite.

The theoretical reasons for migrants sending money goods include: (a) altruism, the desire of migrants to help family members at home; (b) insurance, where migrants send to guarantee their families against adverse risks and shocks at home; and (c) investments, where migrants send to invest in homes or to receive potential family inheritance. Most empirical studies have found that remittances are motivated by a combination of altruistic motives, insurance, and investment (Rapoport & Docquier, 2006).

Gubert (2002) conducted a survey of households in Mali, analyzing the motivation to send both internal migrants (within Mali) and international migrants (outside Mali). The survey results found that households in rural Mali used remittances to ensure themselves against adverse shocks. For the average household, the output of 500 kilograms of wheat results in an increase of 48 percent in money transfers; If the decline in wheat output is combined with death in the family, remittances increase by 124 percent.

The Ivlevs article (2016) explores the effect of remittances on informal jobs in migrant home countries, both remittance recipient households and non-migrant households. The research findings show that acceptance of remittances increases the likelihood of working informally. At the regional level, the high rate of remittance delivery is associated with the possibility of higher informal employment among non-migrant households. Therefore, migration and remittances can contribute to informal work in migrant sending countries.

Stahl & Arnold (1986) explained that remittances were spent mainly on daily consumption expenses, housing, land purchases, and debt payments. Although only a small proportion of remittances are directed towards productive investment, this does not guarantee the conclusion that the value of development of remittances is ignored. In fact, remittances issued for domestic goods and services in Asia provide an important stimulus for indigenous industries and the economies of labor supplier countries.

Based on previous research, it was found that the majority of migrant workers who pursue this type of work in the informal sector are migrants, both permanent and non-permanent migrants. So that this study will examine migrant informal sector workers who are focused on their relationship with the area of origin in the form of remittance.

RESEARCH METHOD

The study was conducted in several locations that have large numbers of migrants in addition to considering the work of the majority of the population in the study location. Denpasar is divided into four sub-districts namely, West Denpasar District, North Denpasar, East Denpasar, and South Denpasar. According to the Denpasar City Population and Civil Registration Office, the highest number of residents holding the "Temporary Identity Card" per District in Denpasar City in 2013, was found in South Denpasar Subdistrict, which was 12,658 people, while West Denpasar District was second with the population who owned "Temporary Identity Card" is 8,410 people.

In addition to the considerations above, the employment of most residents of the West Denpasar District is a tertiary sector which includes trade/hotels and restaurants, transportation, finance and services. Likewise for South Denpasar District, the majority of the population's employment is in services, trade and industry. Based on the considerations mentioned above, in this study South Denpasar District and West Denpasar District were selected as the study sample. The locations for taking respondents were determined purposively in the two districts.

Respondents in this study are individuals who have criteria as workers from outside Bali who work in the informal sector, are perpetrators of both permanent and non-permanent mobility, and are located in the research locations of West Denpasar District and South Denpasar District. Sampling in this study was conducted by purposive sampling, which is a sampling technique in which sample selection is done with certain subjective considerations based on the characteristics possessed by the sample, which are seen to be closely related to the characteristics of the population that was previously known. The considerations used in selecting respondents are working as informal sector workers (street vendors, hawkers, masseurs, souvenir vendors, individual services, and other types of informal jobs), as well as migrants from outside Bali, both permanent and non-permanent migrants. The number of samples in this study was determined by 150 respondents.

Data collection in this study was conducted by interviewing questionnaires, in-depth interviews, and observations in the field. The questionnaire is used to collect data with structured interviews, containing a list of questions according to the desired data. Data collected includes demographic and socio-economic characteristics, and relationships with areas of origin.

The variables used in this study were demographic and socioeconomic characteristics variables including the following variables: Age, sex, marital status, education level, number of household members, employment in the area of origin, migrant origin area, length of stay, house status occupied, type of main job, duration of occupation, income, working hours / day,

expenditure. Relationship variables with the area of origin include: Remittances, Delivery of goods, Visits to the area of origin, Frequency of visits, Frequency of remittance delivery to the area of origin, Use of remittances in the area of origin. The dependent variable Remittance, described in the proportion of remittances sent to income earned.

Qualitative data collection was carried out by in-depth interviews with 10 informants, consisting of 2 key informants, 2 expert informants, and 6 incidental informants. In implementing this method, guidelines for in-depth interviews and lists of informants were prepared. The informants interviewed consisted of key informants namely village heads in two districts, expert informants namely practitioners from the civil registry service, incidental (man on the street) informants who could provide information such as long-lived migrants, recent migrants who had recently live in the research location, and other informants who can provide information that supports the research objectives.

To complete the results obtained from interviews with questionnaires and the results of in-depth interviews, data will be collected by observation. Observations will be made to observe directly the conditions of residence, economic activities including the type of work, merchandise sold (for those who are seller), and other things that support the research objectives.

The data analysis technique in this study, with the following steps: 1) Conduct a descriptive analysis to obtain a description of the demographic and socio-economic characteristics of the informal sector migrant workers and the relationship with the origin area in the form of remittances and visits to the area of origin, by determining the percentage of variables univariately; 2) Perform multivariate analysis techniques using linear regression analysis.

Regression is a statistical method that utilizes the relationship between two or more quantitative variables so that one variable can be predicted from other variables (Neter, 1997). In general, the linear regression model can be written as follows:

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_{p-1} X_{i p-1} + \varepsilon_i \quad (1)$$

with:

Y_i is the value of the response variable in observation to-i

$\beta_0, \beta_1, \dots, \beta_{p-1}$ state the parameters

$X_{i1}, \dots, X_{i p-1}$ are known constants, i.e. the value of the independent variables from the observation of-i.

ε_i is a random error term with mean $E\{\varepsilon_i\} = 0$ dan variance $\sigma^2\{\varepsilon_i\} = \sigma^2$

In the use of linear regression methods there are several assumptions that must be fulfilled such as homogeneity of variety and normality. All data was edited, collected, and analyzed using the

SPSS 19.0 statistical program. Linear regression analysis is done to find a model between demographic and socioeconomic characteristics with the proportion of remittances sent to the area of origin of income.

RESULTS AND DISCUSSION

Description of respondents' characteristics

Data collection of respondents was conducted in two locations in Denpasar City, South Denpasar District and West Denpasar. Data collected was 150 respondents who were informal sector migrant workers from outside Bali. General description of the demographic and socio-economic characteristics of informal sector migrant workers in Denpasar City based on the results of data analysis obtained the average age of informal sector migrant workers who were respondents in this study was 33.58 years. The majority of respondents were male 69.3% (104 respondents) and female 30.7% (46 respondents). Marital status, a pattern that shows that migrant workers in the informal sector are dominated by those who are married, that is 60.67%, while those with unmarried status are 37.33%, only a small proportion are divorced (2.0%). The description of the characteristics of age, sex, and marital status is in accordance with the characteristics of informal sector actors in general. Manning & Effendi (1996) explains that the informal sector is mostly carried out by the prime age population (30–49 years) in the workforce. Most migrant workers have household members of 4 people (40%), 3 people (29.3%), 5 people (18.7%), 2 people (6.7%), and > 5 people (5.33 %). Overall, it appears that the majority of migrant workers have household members from 3 to 4 people. The level of education of the respondents was sufficient, it was seen that more than half (72.7%) of the respondents had junior high school, high school, and college, while the rest were not in school and elementary school. In detail the education level of migrant workers is not in school (1.30%), elementary school (26.0%), junior high school (30.0%), high school (38.70%), and College 4.0%.

The types work of respondents in the area of origin is dominated by types of work as laborers (20 percent), unemployed (22.7 percent), and the remaining are farming, gardening, laborers, builders, private employees, traders, domestic helpers, and other types of odd jobs.

The area of origin of the respondents was dominated by migrants with areas from East Java, which came from Jember (22.7%) and Banyuwangi (20.0%). The rest comes from various regions in Indonesia, namely Surabaya, Lumajang, Madiun, Madura, Makassar, Malang, Ambon, Bandung, Bantul, Bekasi, Blitar, Brebes, Flores, Garut, Jakarta, Kupang, Lamongan, Lombok Mataram, Nganjuk, Padang, Semarang, Solo, Sumbawa, Sumenep, Tasikmalaya, and Tegal.

The home status occupied by respondents was mostly 88.7% with rent status, while self-owned was only 7.3%, and other status was 4.0%. The type of work of respondents in Denpasar City is dominated by types of work as seller (93.3%) and labor (6.7%). The largest percentage of the main types of work occupied by respondents were as seller, including street vendors

Respondents' income shows an average income per month of 4,323,333IDR and average expenditure of 2,468,600 IDR per month. The average income doubled compared to the State Minimum Wage (MSE) of Denpasar of 2,007,000 IDR. One of the supporting factors is why they are able to obtain sufficient income, this is due to the economic conditions in Bali in general, and especially Denpasar City which tends to be stable considering the tourism sector is a mainstay sector in regional revenue. The city of Denpasar with an urban economic structure (tertiary sector) supported by the trade, hotel & restaurant and services sectors caused Denpasar City to reach GRDP per capita in second place after Badung Regency (BPS Province of Bali, 2018).

The business characteristics of the respondents showed an average length of business of 4.6 years. The average working hours are 9 hours per day, with a minimum working hours of 4 hours and a maximum of 13 hours per day. Working hours are one indicator of the productivity level of a worker. Based on the restrictions used by the Central Bureau of Statistics, using standard working hours for workers is 35 hours/week, the average working hours of respondents in this study is 64.03 hours/week. Most of the respondents worked more than 35 hours/week, with details > 35-50 hours/week 18.67% (28 respondents), > 50 hours/week 78.00% (117 respondents), while a small number had working hours <35 hours/week (5 respondents).

Table 1. Employment status of migrant workers according to working hours/week

Employment status	working hours/week			Total	
	≤ 35	>35-50	> 50	Frequency	%
Self-employed with family workers	4(5.97)	23(34.33)	40(59.70)	67	44,67
Self-employed assisted by temporary worker	1(12.5)	1 (12.5)	6(75.00)	8	5,33
Self-employed assisted by permanent worker /paid worker	-	-	4(100.00)	4	2,67
Employee	-	4(5.63)	67(94.37)	71	47,33
Total (%)	3.33	18.67	78.00	150	100
Frequency	5	28	117		

Overall the data in Table 1 shows that there is no variation of each working hour according to the employment status of the respondent. In all categories of employment status respondents indicated that most had working hours/weeks more than 35 hours. The results of this study indicate that employment in the informal sector with self-employed with family workers, self-employed assisted by temporary worker/unpaid worker, self-employed assisted by permanent worker /paid worker, and status as employees/workers have working hours of more than 35 hours/week. The results of this study indicate that 96.67% of respondents have working hours of more than 35 hours/week, this is possible because of the influence of limited business capital and a high level of competition among migrant workers on the same type of work.

Respondents' answers regarding the existence/absence of alternative income they have other than working on jobs occupied during the survey were carried out, most of the respondents (73.3%) stated that they did not have a side job, and only 26.7% stated that they had other income alternatives.

Relations between migrants and areas of origin and use of remittances

The relationship of migrant workers to their home areas is indicated by remittances sent to the area of origin (delivery of goods and / or money) and visits to the area of origin. The intensity of visits to the area of origin can include various social and economic factors. The proportion of remittances also depends on various factors such as the socio-economic conditions of migrant workers in the destination.

Remittances in this study were all calculated in the form of money. Items in the form of goods are converted into money values. Because of the problem of uncertainty they send remittances in each month, then in this study remittances are calculated for one year, based on the average of one send multiplied by the frequency of send in the past year. Whereas to calculate the proportion of remittances sent to income earned in the past year, in this case the income is also converted into income over the past year, so the unit between remittances equals income in one year, then compared to get proportions.

Some limitations that can be noted from this study are: the questions asked to respondents are limited to the use of remittances in the area of origin, there is no further investigation into the reasons migrants send money/goods such as altruism reasons, insurance, investments and other reasons. Likewise, the relationship of migrant workers with the area of origin is only viewed from remittances (the sending of money and/or goods, and visits to the area of origin) that are material. Relations with the origin area in the form of non-material remittances (such as ideas, new ideas, etc.) were not examined in this study.

Based on the results of a survey of 150 respondents, 69.3% (104 respondents) stated that they sent their income to the area of origin in the form of money, while the remaining 30.7% (46 respondents) stated that they did not send their income to the area of origin. Remittances in the form of shipping goods, most of the respondents (82.0 percent) stated that they did not ship goods to their origin area, only 18.0 percent said that they sent goods to their origin in the past year.

Table 2. Use of remittances (money and/or goods) sent to the area of origin

Use of remittance	Frequency	%
Not send	41	27.3
Religious activities	60	40.0
Supporting family needs	23	15.3
Economic and agricultural activities	12	8.0
Others	14	9.3
Total	150	100.0

The reasons underlying the respondent sent money or goods to the area of origin including for the needs of religious activities 40.0%, supporting family needs 15.3%, 8.0% economic activities, and others 9.3%. The remaining 27.3% stated that they did not send money or goods to the area of origin.

Respondent's answer regarding the visit to the area of origin, 94.67% of respondents stated that they visited the area of origin in the past one year, with an average frequency of visits of 2.6 times per year. The remaining 5.33% said that they did not visit the area of origin in the past one year. The results of the descriptive analysis show that migrants send remittances in the form of money or goods to the area of origin with an average frequency of 7 times in the past one year, with a range of at least 1 time and a maximum of 36 times.

Likewise, for reasons of going home (Table 3), the majority of respondents (56.7%) stated that they visited the area of origin with reasons to visit the family, 36.0% for religious activities, economic and agricultural activities 1.3%, other activities 0.7%, and 5.3 % of respondents stated that they had not visited the area of origin in the past year.

Table 3. Reasons of migrant workers to visit the area of origin

Reason for visiting the area of origin	Frequency	%
Not visiting	8	5.3
Religious activities	54	36.0

Visiting family	85	56.7
Economic and agricultural activities	2	1.3
Others	1	0.7
Total	150	100.0

Based on table 3, it can be seen that the form of visits by migrant workers is dominated by the need to visit family and religious activities (Eid Mubarak, marriage, and other religious activities). Family visits are carried out routinely in order to provide the income they earn in the destination for family members in the area of origin.

Comparison of remittances sent to the area of origin based on the length of stay category

The length of stay of migrant workers in this study was categorized into 2 groups: length of stay ≤ 5 years and length of stay > 5 years. According to these categories the respondents consisted of 57.3% (86 respondents) with a length of stay of ≤ 5 years, and 42.7% (64 respondents) with a stay of > 5 years.

Based on the results of cross tabulation analysis between the length of stay variables and remittance delivery variables presented in Table 4, that of 86 respondents with a length of stay ≤ 5 years, there are 3 people sending money and goods to the area of origin, 7 people do not send money but send goods, 59 people did not send goods but sent money, and 17 people did not send goods and did not send money. Whereas for migrant workers who have a stay of > 5 years, 11 people send goods and money, 6 people send goods but do not send money, 31 people send money but do not send goods, and 16 people do not send money or goods.

Based on the results of the cross tabulation in Table 4, 69.3% (104 respondents) stated that they sent their income to the area of origin in the form of money, while the remaining 30.7% (46 respondents) stated that they did not send their income to the area of origin. Then, out of 104 respondents who sent the money, 62 respondents were migrants with a length of stay of ≤ 5 years, and 42 respondents with a stay of > 5 years. Whereas from 46 respondents who stated that they did not send money to the area of origin there were 24 respondents with a length of stay of ≤ 5 years, the remaining 22 respondents with a length of stay > 5 years.

Likewise for the delivery of goods, most of the respondents 82.0% (123 respondents) said do not deliver the goods to the area of origin, only 18.0% (27 respondents) stated deliver the goods in the past year. Then, out of 123 respondents who stated not deliver the goods, there were 76 respondents with a length of stay of ≤ 5 years and 47 respondents with length of stay > 5 years, as well as for the 27 respondents stated that send goods to the area of origin,

there were 10 respondents with length of stay of ≤ 5 years and 17 respondents with length of stay > 5 years.

Table 4. Cross tabulation between the length of stay category and the delivery of money and goods

Length of stay category * Send_money * Send_goods_Yes/No Crosstabulation

Send_goods			Send_money			
			1.00	2.00	Total	
1.00	Length of stay category	≤ 5 years	Count	3	7	10
			% of Total	11.1%	25.9%	37.0%
		> 5 years	Count	11	6	17
			% of Total	40.7%	22.2%	63.0%
	Total		Count	14	13	27
			% of Total	51.9%	48.1%	100.0%
2.00	Length of stay category	≤ 5 years	Count	59	17	76
			% of Total	48.0%	13.8%	61.8%
		> 5 years	Count	31	16	47
			% of Total	25.2%	13.0%	38.2%
	Total		Count	90	33	123
			% of Total	73.2%	26.8%	100.0%
Total	Length of stay category	≤ 5 years	Count	62	24	86
			% of Total	41.3%	16.0%	57.3%
		> 5 years	Count	42	22	64
			% of Total	28.0%	14.7%	42.7%
	Total		Count	104	46	150
			% of Total	69.3%	30.7%	100.0%

Description: 1 = Yes, 2 = No

The remittance model of migrant workers based on demographic and socio-economic characteristics

Remittance in this study is measured by the proportion of money and / or goods sent to the origin of the income of migrant workers in the informal sector in the city of Denpasar. What factors influence the proportion of remittances sent to the area of origin when viewed from demographic and socio-economic characteristics, for this reason a linear regression analysis is performed. Testing the first hypothesis is done simultaneously or all independent variables on

the dependent variable. The independent variables in this study are demographic and socioeconomic characteristics variables, and the dependent variable is the proportion of remittances (money and/or goods) sent to the area of origin. The hypothesis is arranged as follows:

H_0 :there is no linear influence between demographic and socio-economic characteristics variables on the proportion of remittances sent to the area of origin of migrant

$$\beta_1 = \beta_2 = \dots = \beta_{12} = 0$$

H_1 :There is a linear influence between demographic and socio-economic characteristics variables on the proportion of remittances sent to the area of origin of migrant

There is at least one $\beta_i \neq 0; i = 1, , \dots, 12$

The statistical test used in the simultaneous hypothesis testing is the F test, which is arranged in an analysis of variance table, which is presented in Table 5. The F test results with a significance level of 5% can be concluded that H_0 is rejected or H_1 is accepted, this is seen from significant values 0,000 which is smaller than the 5% significance level. This means that there is a linear relationship between variables of demographic and socio-economic characteristics with variable proportion of remittances sent to the area of origin.

Table 5. Analysis of variance table of the influence of demographic and socio-economic characteristics on remittance proportions sent to the area of origin

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12324.750	12	1027.062	5.259	.000 ^b
	Residual	20701.889	106	195.301		
	Total	33026.639	118			

a. Dependent Variable: proportion_sent

b. Predictors: (Constant), frequency_of visits, Income_perMonth, Household_members, Working hour_perDay, Gender, Length_ofbusiness, Home_status, Marital_status, Level_education, Expenditure_perMonth, Age, Length_ofStay

The next analysis is to do partial testing to find out which independent variables have a significant effect on remittance proportions sent to the area of origin. The hypotheses tested are:

$H_0 : \beta_j = 0, i=1, , \dots, 12$

H_1 : there is at least one $\beta_j \neq 0, i=1,2, \dots, 12$

The test used is the t test. The results of the t test are presented in Table 6.

There are twelve variable demographic and socio-economic characteristics of migrant workers which is thought to explain the proportion of remittances sent to the area of origin. The variables

that significantly influence the proportion of remittances sent to the area of origin are the level of education, the status of the house occupied, and the frequency of visits. The best model that can explain the proportion of remittances sent to the area of origin is:

$$Y = -23,616 + 4,820\text{education} + 14,871\text{House status} + 2,195\text{Frequency visit}(3.1)$$

Based on model 3.1, for constants -23.616 it is explained that if there are no variables in education level, home status, and frequency of visits, the proportion of remittances sent by migrant workers to the area of origin is decreased by 23,616. The regression coefficient of 4.820 indicates that the difference in one level of education will increase the proportion of remittances sent to the origin of 4.820% if the other variables are constant. The regression coefficient for the status of houses occupied is 14,871 indicating that an increase in home status will increase the proportion of remittances sent to the origin area by 14.871% assuming the other variables are constant. The regression coefficient for the frequency of visits of 2.195 indicates that the increase in return frequency of one visit will increase the proportion of remittances sent to the origin area of 2.195% if the other variables are constant. While the other characteristic variables did not significantly influence the proportion of remittances sent to the area of origin.

Table 6. The results of the partial test of the relationship between demographic and socio-economic characteristics with the proportion of remittances sent to the area of origin

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-23.616	14.338		-1.647	.103
	Age	.008	.206	.005	.040	.968
	Gender	4.173	3.050	.114	1.368	.174
	Marital_status	-1.647	3.080	-.057	-.535	.594
	Level_Education	4.820	1.598	.263	3.016	.003
	Household_members	-1.405	1.245	-.094	-1.128	.262
	Length_ofStay	-.411	.263	-.200	-1.561	.121
	Home_status	14.871	4.607	.270	3.228	.002
	Length_ofbusiness	.207	.310	.086	.669	.505
	Income_perMonth	-9.844E-7	.000	-.187	-1.615	.109
	Working hour_perDay	-.578	.637	-.074	-.906	.367
	expenditure_perMonth	-5.683E-7	.000	-.078	-.656	.513
	Frequency_of Visits	2.195	.572	.311	3.836	.000

a. Dependent Variable: Proportion sent

Model (3.1) shows that the variable level education of migrant has a significant effect on the proportion of remittances sent to the area of origin. The findings of this study are in line with Rempel and Lobdell (1978), who suggested that the higher the level of migrant education, the greater the remittance sent to the area of origin. This is related to the function of remittance as repayment of education investments that have been invested by families to migrant individuals. The level of migrant education shows the size of the education investment invested by the family, and at a later stage has an impact on the size of the repayment manifested in the form of remittance.

The variable type of home status occupied by respondents shows the level of establishment of migrants in the destination area. When a migrant is able to have their own home in the destination area the more migrants are established economically, which affects the proportion of remittances sent to the area of origin. Likewise for the frequency of visits to the area of origin, the more frequent migrants visiting the origin area, the more often migrants carry goods and/or money when making visits, because along with migrant visits often bring money and/or goods.

CONCLUSIONS AND RECOMMENDATIONS

Most of the respondents (69.3%) stated that they sent their income to the area of origin in the form of money, while for the delivery of goods most of the respondents (82.0 percent) stated that they did not ship the goods. The reason underlying the respondents sending money or goods to the area of origin is dominated by the need for religious activities (40.0%). Visits to the area of origin, 94.67% of respondents stated that they visited the area of origin in the past one year, with an average frequency of visits per year 2 times. Migrants send remittances in the form of money or goods to the area of origin with an average frequency of 7 times in the past year. Most of the respondents (56.7%) stated that they visited the area of origin with reasons to visit their families and 36.0% for religious activities.

Based on the length of stay category, respondents consisted of 57.3% with length of stay of ≤ 5 years and 42.7% with length of stay > 5 years. The results of the cross tabulation obtained 69.3% (104 respondents) sending their income to the area of origin in the form of money, while the remaining 30.7% (46 respondents) stated that they did not send their income to the area of origin. Of the 104 respondents who sent the money, 62 respondents were migrants with a length of stay of ≤ 5 years, and 42 respondents with a length of stay > 5 years. Whereas from 46 respondents who stated that they did not send money to the area of origin there were 24 respondents with a length of stay of ≤ 5 years, the remaining 22 respondents with a length of stay > 5 years. Likewise, for the delivery of goods, most respondents 82.0% (123

respondents) stated that they did not ship goods to the area of origin, only 18.0% (27 respondents) stated that they sent goods to their origin in the past year. Respondents who stated that they did not ship goods, there were 76 respondents with a length of stay of ≤ 5 years and 47 respondents with a length of stay > 5 years, as well as 27 respondents who stated that they sent goods to the destination area, there were 10 respondents with length of stay of ≤ 5 years and 17 respondents with a stay of > 5 years.

The variables that significantly influence the proportion of remittances sent to the area of origin are the level of education, the status of the house occupied, and the frequency of visits. The best model that can explain the proportion of remittances sent to the area of origin is:

$$Y = -23,616 + 4,820\text{education} + 14,871\text{House status} + 2,195\text{Frequency_visit}.$$

Based on the findings of this study, the authors offer the following recommendations: (1) Many studies on migrant workers have been done before. Most of the research came to the statement or opinion that migrant workers usually do not have an intention to stay permanently in the country or region where they work. The findings of this study indicate that there is a close relationship between migrant workers and their home regions, as seen from the large percentage of respondents who send remittances and make regular visits to their home areas. The closeness of the relationship between migrants and the area of origin can be expected to affect the decision to settle in the destination. However, until now, it has not been proven statistically whether the proximity of migrant relations with the origin area influences the decision of migrants to stay permanently in the destination area?. Based on this, recommendations for further research need to be carried out further studies on what factors influence migrant decisions to stay permanently in the destination area and examine whether the proximity of migrant relations with the origin area influences the decision of migrants to stay permanently in the destination area or not. Further research is important in order to examine the current development of the phenomenon of international and internal migration. (2) The research findings also show that the level of education plays an important role in the proportion of remittances sent to the area of origin. In the case of respondents in this study, who are workers in the informal sector, improving education can be done through efforts to improve work skills. Based on this, the results of this study recommend improving the policies of the informal sector migrant workers. Empowerment programs that have been implemented by the government during this time in the form of an opportunity to obtain skills training needs to be evaluated its success, both types of programs offered as well as its targets. Empowerment programs to suit user needs and touch the right target.

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