Abstract

This study aims to analyze the factors that influence the amount dowry/wedding gift in marriage. The study used female individuals (n=1,532) from The Indonesia Family Life Survey (IFLS) East data who lived in 7 provinces in eastern Indonesia.

Using multivariate regression, the results of this study found that the economic status and the level of education of female before marriage have positive effect on the amount of dowry. Geographical, ethnic, and religious factors can also explain the variation of dowry. Married female in East Nusa Tenggara province, Muslim’s female, and Bugis-Makassar-Toraja’s female receive higher dowry than other counterparts. The results of this study provide evidence regarding the reasons for the high dowry in several communities in eastern part of Indonesia.

Keywords: dowry, marriage, IFLS east

JEL Classification: J12

INTRODUCTION

Wedding parties in Indonesia are among the most expensive and most luxurious in the world. Marriage is closely related to customs which have been preserved inter-generations. With diverse customs, marriage parties also have different uniqueness. This contributes to the difference in the cost of marriage parties. Figure 1 shows the average marriage costs per province in Indonesia in 2017.
From Figure 1 above, it can be seen that the average marriage costs of the highest 25% are in the provinces of Bengkulu, Jambi, West Java, Central Java, Bali, East Kalimantan, South Sulawesi, and West Papua. Most of these provinces are still strongly influenced by customs in the procession of marriage, such as Buginese customs in South Sulawesi. In the Buginese wedding procession, there are a number of traditional processes that are quite long and festive because they involve a large family of the two brides, including mammanu-manu (exploratory), madduta (applying), mappacci (purification ceremony), and so forth. This wedding processions have certainly a lot of costs.

The high cost of marriage in Indonesia raises economic and social burdens for families who will get married. The costs in the marriage process are generally divided into two, namely the costs for wedding reception or traditional ceremony and the cost for delivering the amount of money or goods between families as a dowry or a wedding gift. The size of the costs of receptions and dowry/wedding gifts depends on the social, economic, and cultural conditions of the local community and the families that carry out marriage party.

The marriage procession generally begins with giving money/goods from the male to female family, or from the female family to the male. In the literature, the provision of money/goods from the male to the female family is called the bride-price, while the money/goods provision from the female family to the male is called dowry. In Indonesia, generally, the male’s family is the giver. On the other hand, in other countries, such as India, the women's family is the giver.

In some tribes in Indonesia, such as Buginese and Sumbanese, the cost of marriage is high, not only from traditional marriage processions but also from the amount of money/goods that must be given by the male family. This condition is called 'uang panai' in the Buginese community and 'belis' in the Sumbanese community. ‘Uang panai’ or ‘belis’ has been a hereditary tradition in each tribe. Interestingly, the value of these traditions tend to increase, giving more economic burdens on the male family.
Until now, there is no study in Indonesia that is empirically examined the determinants of the cost of marriage, especially from the value of money/goods delivered by the male-female family. So far, the reasons stated are still opinions, such as the socio-economic status of female and male families, the level of education of female and male, and ethnic background. The study aimed to analyze the determinants of dowry/wedding gifts by using female observations in several provinces in eastern Indonesia. The marriage tradition according to customs that are still applied by most people in eastern Indonesia lies behind the selection of this study sample.

**Literature Review**

Marriage plays an important role of life in most societies (Zhang & Chan, 1999). The pattern of marriage has major implications for various factors, such as the number of births and population growth; female labor participation; inequality of income, ability and other characteristics among family members; allocation of leisure time and resources in the family (Becker, 1973). Studies of marriage have been carried out, both in terms of theoretical and empirical.

Becker (1973) suggested the reason for marriage. Because it is voluntary, people who carry out marriage are assumed to have an incentive to get higher satisfaction (utility) than to live alone (single). This satisfaction is mainly obtained from the opportunity for couples to have biological children and establish physical and emotional relationships, which are called "love".

Before marriage occurs, there is a transfer of money or goods between male and female families. In economic literature, two terms are bride-price and dowry. If the female's party experiences a surplus or more is received from the male family than the one delivered, then it is called the "bride-price". Conversely, if the male family receives more than what is handed over to the female family, then the surplus is called "dowry" (Becker, 1973).

Dowry or bride-price is the price for getting the right partner on the marriage market. Dowry or bride-price is also considered a complementary instrument for the enforcement of efficient marriage contracts (Zhang & Chan, 1999). According to Rosen in Zhang & Chan (1999), the bride-price shows a hedonic function that maps the characteristics of the bride and groom (or different characteristics between the two) which results in the transfer of money or goods between the two families.

Various studies have been conducted to examine the determinants of the size of the bride-price or dowry, and their implications, especially for women. Gaspart & Platteau study (2010) found that the average bride price for educated women (who have completed primary education) is significantly higher than the bride-price for uneducated women. Meanwhile, the bride-price is lower for women who are widows than girls. The study in India, where the female family gave dowry to the male family, found that factors such as duration of education, economic status, caste, religion, and the type of family from men played an important role in determining the number of dowries. The Afzal (2009) study in Pakistan also found that the choice of
land by male families and the education level of male fathers had a positive influence on the number of dowries.

The study of Zhang & Chan (1999) in Taiwan found that the higher of the dowry, the higher the likelihood of a husband (male) doing housework, while the size of the bride-price has no effect on that possibility. This finding supports the theory that dowry can improve wife welfare through income effects and bargaining power effects. On the other hand, the bride-price tradition has a positive effect on the formation of human capital. Ashraf, Bau, Nunn, & Voena (2016) in Indonesia found that parents from regions with a tradition of bride prices tended to invest more in girls’ education. Thus the girl's education tends to be higher in the community that implements the bride-price. Dowry can also improve the status of women in households built with her husband, especially if the woman does not have inheritance rights from her family (Makino, 2017).

Methodology

This study uses secondary data sourced from the Indonesia Family Life Survey (IFLS) East 2012. The IFLS East data is a large-scale, multi-topic household and community survey covering the living conditions of people in a number of provinces in eastern Indonesia. This survey collected observations of around 10,000 individuals and 2,500 households living in 99 communities (enumeration areas), and spread across 7 provinces in eastern Indonesia, including: East Nusa Tenggara, East Kalimantan, Southeast Sulawesi, Maluku, North Maluku, West Papua, and Papua (Sikoki, Witoelar, Strauss, Meijer, & Suriastini, 2013).

This study used a sample of female aged 15 - 49 years who were married for the first time, where there were 1,532 observations that met the criteria. Because the IFLS East data has only been collected in one period, in 2012, the data structure is cross section. For analyzing the influence of various factors suspected of determining the number of bride-prices, the estimation model used is multivariate regression using the Ordinary Least Square (OLS) method.

The empirical estimation model used refers to the Edlund (2006) model with some modifications. The dependent variable is the amount of dowry/wedding gift. The amount of dowry is obtained from the questions in the IFLS, namely: "how much is the value of dowry from the last marriage when the marriage takes place?". While the number of gifts is obtained from follow-up questions regarding the value of the gift if the respondent receives gift that is not consumed at the wedding party. In Indonesia, generally giving (dowry and gift) from male family to a female family can be in the form of money or goods, so that both money and value of goods are accumulated to get the total giving of male family. The cost of the dowry/wedding gift does not include the costs for receptions or wedding party processions. This study use term ‘dowry” as representative of dowry as well as wedding gift from male family to female family. The independent variables include female characteristics, male characteristics, and location. The empirical equation is as follows:

\[ Y_i = \alpha + \beta_1 X_i + \beta_2 X_j + \beta_3 \text{Province}_i + \varepsilon_i \]
The variable $Y_i$ shows the amount of dowry received by a female, $X_i$ variable is several characteristics of female, such as the value of assets before marriage, education level at marriage, age at marriage, religion, the residence of village/city during the marriage, and the tribe of the biological father. $X_j$ variable is a male characteristic, that is the level of education when marriage occurs. This study also controls provincial variables, namely East Nusa Tenggara, East Kalimantan, Southeast Sulawesi, Maluku, North Maluku, West Papua, and Papua.

Result and Discussion

The statistical summary of the variables is shown in Table 1. With a total observation of 1,532 females, the average number of dowries was IDR3,157,934. Comparing urban and rural, the average number of dowries is slightly higher in rural areas. The average value of assets owned by females is Rp1,382,814, where females in urban areas have assets that are far higher than female in rural areas.

In terms of female's education, the average level of education of female in urban areas is higher than rural areas, where only 6% of female in rural areas are highly educated, while in urban areas it is 19%. Conversely, there are 54% of female in rural areas who are only educated in elementary school, while in urban areas there are fewer, which is only 17%. The limitations of education facilities in rural areas and parents' awareness of the importance of education contribute to the low level of education of females in rural areas. Like the level of education of females, males living in rural areas also tend to be less educated than males who live in urban areas.

Table 1. Summary of Statistics

|                                | Total Average | Average in Rural | Average in Urban |
|--------------------------------|---------------|------------------|------------------|
| The amount of dowry/gift       | 3,157,934     | 3,199,740        | 3,068,497        |
| Log the amount of dowry/gift   | 10,66         | 10,35            | 11,32            |
| The amount of asset before marriage | 1,382,814   | 741,053          | 2,755,762        |
| Log the amount of asset before marriage | 5,47       | 4,90             | 6,68             |
| Education level at marriage    |               |                  |                  |
| - Uneducated/Elementary school | 0,42          | 0,54             | 0,17             |
| - Junior High School or equal  | 0,19          | 0,20             | 0,15             |
| - Senior High School or equal  | 0,29          | 0,20             | 0,49             |
| - College                      | 0,10          | 0,06             | 0,19             |
| Husband’s Education level at marriage |            |                  |                  |
| - Uneducated/Elementary school | 0,34          | 0,43             | 0,16             |
| - Junior High School or equal  | 0,19          | 0,22             | 0,15             |
| - Senior High School or equal  | 0,33          | 0,28             | 0,44             |
| - College                      | 0,13          | 0,08             | 0,25             |
| Age at marriage                | 20,61         | 20,03            | 21,83            |
| Dummy of living together before | 0,18          | 0,20             | 0,12             |
The regression results in Table 2 show the influence of various factors that are thought to determine the amount of dowries. The amount of assets owned by females before marriage has a positive effect on the value of dowries. Every one percent of additional assets, the average number of dowries will increase by 0.07%. The amount of assets owned by female shows the economic status of females. Usually, females who have assets before marriage for the first time are worker. Ownership of assets by females also reflects the economic status of the family. The findings of this study support the findings of previous studies that the number of assets owned by females or their families has a positive effect on the number of dowries (Afzal, 2009).

Educational variables have a positive effect on the number of dowries. Females who graduate from university on average earn 182 percent higher than females who are elementary school graduate or un-school. For senior high school graduates, the value of dowries is on average 83 percent higher than those with elementary education or un-school. The findings of this study support previous studies that education has a positive effect on the number of dowries (Gaspart & Platteau, 2010).

Interestingly, female education is more influential in urban than rural. In rural area, females graduating from university obtain dowries are 134% higher than females with elementary or un-school. But for females with junior high school or senior high school education, there is no significant difference between female graduating from elementary school or un-school. In contrary for females in urban

| Dummy of tribe          | Total Average | Average in Rural | Average in Urban |
|------------------------|---------------|------------------|------------------|
| Bugis-Makassar         | 0.13          | 0.11             | 0.15             |
| Jawa                   | 0.08          | 0.08             | 0.08             |
| Ambon                  | 0.14          | 0.09             | 0.23             |
| Others                 | 0.66          | 0.71             | 0.53             |
| Dummy of Religion      |               |                  |                  |
| Islam                  | 0.60          | 0.55             | 0.70             |
| Protestant             | 0.30          | 0.34             | 0.23             |
| Catholic               | 0.08          | 0.08             | 0.07             |
| Others                 | 0.02          | 0.03             | 0.00             |
| Dummy of Province      |               |                  |                  |
| East Nusa Tenggara    | 0.16          | 0.17             | 0.12             |
| East Kalimantan        | 0.13          | 0.04             | 0.32             |
| Southeast Sulawesi     | 0.17          | 0.20             | 0.09             |
| North Maluku (Moluccas)| 0.16          | 0.18             | 0.11             |
| Maluku (Moluccas)      | 0.16          | 0.18             | 0.12             |
| West Papua             | 0.13          | 0.14             | 0.12             |
| Papua                  | 0.10          | 0.09             | 0.12             |
| Number of Observations | 1,532         | 1,044            | 488              |
areas, females who graduated from junior high school, senior high school and university each have significant differences with females who have graduated from elementary school or un-school. This shows that the education factor in urban areas is more valued than in rural areas. Conversely, factors of social status or nobility are likely to be more important in rural areas than aspects of education.

The high cost of marriage encourages a number of couples living together before officially getting married. For female who had previously lived in the same house with her husband, the dowries were 163 percent lower than who did not live together before married. This is thought to occur because couples who live in a house have established physical and psychological relationships so that female's families tend to relieve the value of dowries. Official marriage tie is certainly more expected by spouses and their families than cohabitate.

Marriage in Indonesia is very affected by tradition in each tribe. Compared to female from the Bugis-Makassar-Toraja communities, female from the Ambonese received an average dowries was 220 percent lower, whereas those with the Javanese were no different. Although it is suspected that females from the Bugis-Makassar-Toraja tribe received dowries that were on average higher than other tribes in Indonesia, this study proved that there was no difference between the Javanese (the majority of the population in Indonesia). The differences in religion also explain the variation in the number of dowries. Compared to Islam, females who are Protestants, Catholics and others each get lower dowries on average 422%, 152%, and 647%, respectively.

In terms of location, compared to female living in East Nusa Tenggara, females from the provinces of East Kalimantan, Southeast Sulawesi, North Maluku, and Maluku obtained lower dowries on average with differences of 157%, 136 %, 385%, and 276%, respectively. Traditionally, marriage in East Nusa Tenggara, especially in the Sumbanese, does require male families hand over large amount of money/goods/ livestock to female families.

### Table 2. Results of Regression

| Variable | (1) Rural + Urban | (2) Rural | (3) Urban |
|----------|-------------------|----------|----------|
| Log amount of asset before marriage | 0.07*** (0.02) | 0.06** (0.03) | 0.08** (0.03) |
| Education level at marriage (base: elementary / uneducated) | | | |
| - Junior High School or equal | 0.40 (0.36) | 0.03 (0.42) | 2.48*** (0.76) |
| - Senior High School or equal | 0.87** (0.38) | 0.59 (0.47) | 2.39*** (0.75) |
| - College/Univeristy | 1.82*** (0.53) | 1.34* (0.74) | 3.18*** (0.91) |
| Husband’s Education level at marriage (base: elementary / uneducated) | | | |
| - Junior High School or equal | 0.58 | 0.82** | -0.33 |
| Variable                                      | (1) Rural + Urban | (2) Rural | (3) Urban |
|----------------------------------------------|-------------------|-----------|-----------|
| - Senior High School or equal                | 0.36 (0.36)       | 0.60 (0.36) | 0.28 (0.71) |
| - College/University                         | -0.01 (0.53)      | 0.09 (0.75) | 0.68 (0.84) |
| Age at marriage                              | -0.01 (0.03)      | -0.03 (0.03) | 0.05 (0.04) |
| Living together before marriage              | -1.63*** (0.51)  | -1.64*** (0.60) | -1.64 (1.00) |
| Urban                                        | 0.34 (0.32)       |           |           |
| Tribe (base: Bugis-Makassar)                 |                   |           |           |
| - Javanese                                   | -0.55 (0.68)      | -0.32 (0.78) | -1.81 (1.38) |
| - Ambonese                                   | -2.20*** (0.46)   | -3.78*** (0.76) | -0.66 (0.67) |
| - Others                                     | -0.50 (0.33)      | -1.05*** (0.37) | 0.13 (0.62) |
| Religion (base: Islam)                       |                   |           |           |
| - Protestant                                 | -4.22*** (0.43)   | -4.34*** (0.54) | -3.64*** (0.86) |
| - Catholic                                   | -1.52** (0.70)    | -1.34 (0.92) | -1.72 (1.16) |
| - Others                                     | -6.47*** (1.27)   | -6.03*** (1.32) | -11.22*** (1.30) |
| Province (base: East Nusa Tenggara)          |                   |           |           |
| - East Kalimantan                            | -1.57*** (0.59)   | -1.75 (1.09) | -1.71*** (0.70) |
| - Southeast Sulawesi                         | -1.36*** (0.51)   | -1.77*** (0.67) | -0.78 (0.79) |
| - North Maluku                               | -3.85*** (0.67)   | -4.05*** (0.80) | -3.62*** (1.28) |
| - Maluku                                     | -2.76*** (0.53)   | -3.29*** (0.70) | -1.32* (0.67) |
| - West Papua                                 | -0.64 (0.66)      | -0.56 (0.90) | -0.22 (0.97) |
| - Papua                                      | 0.55 (0.70)       | 1.29 (0.95) | -0.20 (1.01) |
| Constants                                    | 13.43*** (0.77)   | 15.08** (0.96) | 10.64*** (1.19) |
| Number of Observations                       | 1,532             | 1,044     | 488       |
| R-Square                                     | 0.24              | 0.23      | 0.29      |

Robust standard errors in parantheses

*** p<0.01, ** p<0.05, * p<0.1

Conclusion
This study aims to analyze the factors that are thought to influence number of dowries in marriage. The study used female individuals (n = 1,532) from the Indonesia Family Life Survey (IFLS) East data in 7 provinces in eastern Indonesia. The results of this study support the findings of previous studies with case studies in other countries, that the economic status of female families and the level of education of female have positive effect on the number of dowries. Geographical, ethnic, and religious factors can also explain the variation in the amount of dowries to people in eastern Indonesia. Married women in East Nusa Tenggara province receive higher dowries on average than most other provinces in Indonesia. Meanwhile, females who are Muslim also get higher dowries on average than those of other religions. Finally, the Bugis-Makassar-Toraja tribe, which is widely known to have a high number of dowries, does not appear to be supported by this study. Indeed, the number of dowries is higher than the Ambonese, but there is no difference with Javanese female.

The results of this study can provide evidence of opinion in the community regarding the determinants of the high dowries, considering that until now there has been no similar study with cases in Indonesia. Of course, more comprehensive studies are needed, not only covering the determinants of the number of dowries, but also analyzing their impact on family welfare after marriage.

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