Dowry in Rural Bangladesh: Participation as Insurance Against Divorce

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June 2004

Abstract

The dowry custom is often seen as a form of gender discrimination against females, particularly in South Asia. This paper analyses dowry payments in a rural area in Bangladesh using household survey data containing retrospective marriage information for marriages spanning 1931-1996. While the average amount of dowry in real terms has not recently increased, the participation in the dowry system has dramatically increased since the 1970s, especially for Muslims. We find that dowry functions as an insurance against divorce for Muslim couples: this is supported by the fact that the probability of remaining married is significantly higher for couples who were given higher dowries. This holds for Muslims only (as opposed to Hindus), suggesting that the rising incidence of dowry is indirectly related to Muslim personal law, which allows husbands the right to unilateral divorce. The identification strategy makes use of religious affiliation and geographic origin of the spouse. The estimation of dowry payments confirms the insurance interpretation of dowry. We conclude that dowry for Muslims in rural Bangladesh is not a form of discrimination but a form of parental protection that has arisen as a consequence of highly unequal gender relations in both the social and legal spheres.

1 Introduction

> *Indian Government statistics show that husbands and in-laws killed nearly 7,000 women in 2001 over inadequate dowry payments* (BBC News, July 2003)

> *Dowry can be seen as a form of pre-mortem inheritance to the bride* (Goody, 1973)

> *Once the dowry has been paid, a woman's position may be strengthened because the husband cannot drive her out of the house so easily. To do that he would have to pay back that money first* (Simmons, 1996)

While they have disappeared in Europe, dowry payments still exist in South Asia.[1] Not only do they still exist but also it has been reported that these payments have been increasing since the 1950s.[2] Moreover, although originally dowry was given by the bride's family and remained under possession of the bride, it is reportedly now received by the groom or the groom's family.[3]

In this paper, we examine dowries being paid in marriages held during 1931-1996 in the Matlab region, a rural sub district in Bangladesh, using household survey data gathered in 1996. We find that the incidence of dowry has substantially increased, especially since the 1970s. Nonetheless, we fail to find increasing dowry payments: in particular, the average dowry in real terms has been decreasing since the 1950s.

We present evidence that the so-called rise in dowries is actually only an incidence rise, and that this is mainly a Muslim phenomenon. In particular, while only 4% of the Muslim couples in our sample who got married in the 1960s received a dowry, this figure rose up to 60% in the 1980s. The hypothesis in this paper is, to our knowledge, new in the literature, and it is that dowry (in particular for Muslims in rural Bangladesh) functions as an insurance against divorce. We argue that the dramatic increase in dowry participation in the Matlab region is due to the fact that, by giving the groom a dowry, the bride's parents insure themselves and their daughter against their daughter's divorce, as the husband, who is nevertheless the dowry's recipient, would have to refund the dowry in order to exercise (unilateral) divorce.

In rural Bangladesh, marriage is the only true vocation for women. Women get married at an early age. After marriage, brides usually leave their parents' house for

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[1] Despite being forbidden or limited by law: Dowry Prohibition Acts were passed in 1961 in India and 1980 in Bangladesh. In Pakistan the Dowry and Bridal Gifts Act of 1976 limits dowry payments.

[2] See e.g. Caldwell et al. (1983), Rao (1993), and Billig (1992) for India. Lindenbaum (1981) analyses the evolution of marriage transactions over time in the Comilla district in Bangladesh from an anthropological point of view.

[3] Women's rights to property are mentioned in ancient Indian texts in the context of their rights to the *strīdhana*, i.e. wealth given to them at marriage that, at least normatively, was inviolable to a large extent (Sheel 1999).

the groom's house, where they are under the authority of the husband and in-laws. Once they are married, the possibility of divorce is different for Muslims and Hindus, as the concept of marriage itself is different. Marriage among Muslims is civil and contractual, whereas it is sacramental and eternal for Hindus.

In this context, we argue that parents are increasingly providing their daughters' marriage with a dowry, in order to minimise the probability of their daughters' divorce and subsequent abandonment, whose return to the parental home would not only raise their living costs but also jeopardise their position in the community. The higher the dowry they give, the more difficult it would be for the husband to divorce, as a bigger amount has to be returned.[4]

We find support for the insurance hypothesis from a variety of sources. The identification strategy makes use of religious affiliation and geographical origin of the spouse. First we run regressions revealing that *ceteris paribus* the probability of remaining married (for both men and women) is higher, the higher the dowry that was paid by the bride's parents. This is statistically significant for Muslims, but it is not significant for Hindus. Second, we find additional support for the insurance hypothesis from the fact that a couple was more likely to receive a dowry if the spouse came from the same village, in which case an insurance against divorce would be less needed. Again, this holds for Muslims only. Third, we find that couples were likely to be given higher dowries in case the groom came from outside the village.

The timing of the start in the dramatic increase in dowry participation by Muslims coincides with the enactment of the Muslim Marriage (Registration) Act in 1974 (which made registration of marriages compulsory), as in being a proof of marriage, it may have served to enforce the dowry refund or at least to strenghten the woman's legal position.

Examination of the dowry amount in real terms provides some evidence that wealthier parents, either Muslims or Hindus, provide their daughters with higher dowries. Finally, we suggest that the observed average decrease in dowry in real terms may be related to the fact that poorer households are gradually joining the dowry system since the 1970s. In fact, we find that literate Muslim grooms and brides are less likely to participate in the dowry system. We do not find support for the *marriage squeeze* interpretation of dowry, according to which seemingly increasing male scarcity would increase equilibrium dowry.

Additionally, Muslim women are less likely to get a dowry if they had received inheritance. The correlation is significant for Muslims post-1975, but not for Hindus, and neither it is for Muslims before 1975. That is, Muslim parents who provide

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[4]Dowry should not be confused with dower, which is a sum that under Islamic law a Bangladeshi woman can claim, to be given to her when she marries or in case of divorce (although usually not requested), see Kamal and Ahmer and Naher (1987). We believe that the rise of dowry is precisely related to the husband's failure to comply with dower obligations stipulated in the marriage contract, and the lack of judicial enforcement of this obligation (see the Background Appendix for a detailed analysis of Islamic law and women's rights in Bangladesh).

inheritance to their daughters do not endow them with dowries.

In recent times, incidents of dowry violence, or dowry deaths, have become well known whereby a husband keeps extracting resources from the wife's family and eventually hurts or kills her in case her family fails to comply with his demands. We do not undervalue this violence, but rather argue that the source of this violence or mistreatment of women is not dowry itself, but the vulnerability of rural women in a legal and social systems that favor the male and provide no outside option off marriage.

The organisation of the paper is as follows. Section two describes some related literature. In section three we describe the household data and the region where these were gathered. In section four we turn to the empirical evidence. Finally, section five concludes and discusses some policy implications regarding dowry payments in rural Bangladesh.

2 Related literature

Even though the economic literature on dowry is not nearly as extensive as the sociological and anthropological literature, economists have previously tried and assessed 1) why dowries have arisen, 2) why dowries have increased in South Asia, and 3) what the relationship between dowry and the wife's welfare is. Thus we can distinguish three types of literature: the *existence*, the *increase*, and the *welfare* approaches.

In the *existence* approach there is the seminal work of Becker (1991), who argued that in the presence of indivisibilities dowry would be the difference between the joint value of the marriage and the utility of the husband. We distinguish two main motives for dowries, the groomprice and the inheritance motives. The former motive is modeled by Rao (1993), who models dowry (using Rosen's 1974 implicit market model) as the price resulting from a nonlinear hedonic dowry function that maps differences in the traits of potential brides and grooms, and in Rajaraman (1983), who describes dowry as a compensatory payment for the groom's side. According to the latter motive, dowry serves as a pre-mortem bequest. On the one hand, Botticini and Siow (2003) argue that in virilocal or patrilocal residential settings, where brides typically go to live with the husband's household of origin, dowries are given to daughters at the time of marriage to discourage them from claiming a property share at the time of the father's death, a possibility that would lead the son to exert too low an effort in the household property. Hence dowries would avoid free-riding among siblings by making the son the residual claimant of the property. Edlund (2001) in contrast argues that the need for a dowry arises due to sex asymmetries in fecundity: parents would like to bequeath on children at their offspring, but at that point daughters may no longer be fecund. Finally, and related to the *welfare* approach, Zhang and Chan (1999) treat dowry as a pre-mortem bequest arguing that dowry would remain under the wife's property (and would be given back to the wife

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in case of divorce).[5] Using data from Taiwan, they find that a higher dowry would tend to increase the wife's welfare.[6] Brown (2002) also finds a positive relationship between dowry and several indicators of the wife's welfare in rural China.

In the *increase* approach we distinguish two main studies. First, there is the *marriage squeeze* argument, which was first suggested by anthropologists.[7] Using ICRISAT data from six villages in South-Central India, Rao (1993) argues that dowries have risen due to an increase in the ratio of the number of females of marriageable age to the number of males of marriageable age: in the context of population growth, the age gap at marriage implies younger brides, that is, *higher quality* brides, so that increased competition would shift the price function upwards. According to this interpretation, families of older brides woud be willing to outbid the younger,[8] hence implying a reduction in the marriage age gap.[9] Second, Anderson (2003) argues that the reported increase in dowries in India would be given by modernization (understood as an increase in wealth and an increase in the dispersion of wealth) in the context of a rigid caste-based system with hypergamy.[10]

Participation in the dowry system was already substantial for Hindus in the 1950s, but it was not until the 1970s that participation by Muslims was sizeable. The process whereby the dowry custom has spread from higher to lower castes (in India) or classes (in Bangladesh) has been called *Sanskritization* meaning an imitation of the higher by the lower classes (Srinivas 1957).

Lindenbaum (1981) analyses the evolution of marriage transactions over time in an area in the Comilla district in Bangladesh. She describes the reversal from brideprice (whereby the transfer is from the groom's to the bride's side, also called bridewealth[11]) to dowry, which has occurred since the 1950s, as the consequence of social and economic changes. She claims that this reversal cannot be attributed to a particular religious group, as dowry has recently been practiced both by Muslims

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[5]There is evidence that this is the case for Nepal (Ekvall 1968). While the fact that dowry must be refunded in case of divorce is also true for rural Bangladesh, the evidence seems to be that dowry does not remain under the wife's property.

[6]The idea of dowry as female inheritance was first introduced by Goody (1973) in the context of Eurasia, and Tambiah (1973) for South Asia; it is also mentioned by Chen (1985) for China. Freedman (1970) and Chen (1985) argue that dowry in contemporary China remains under the control of the bride. However East Asia and South Asia would be different in that brideprice and dowry can be observed at the same time in the former, while in the latter, at least for India and Bangladesh, a reversal from brideprice to dowry has been observed in the twentieth century (Caldwell et al. 1983, Amin and Cain 1995, Zhang and Chan 1999). Also, there is no evidence of brideprice in Bangladesh since the 1940s (Amin and Cain 1995). Therefore the study of Zhang and Chan (1999), while sensible for East Asia would not seem to be applicable to South Asia.

[7]See Caldwell et al. (1983).

[8]For more information on the topic of marriage squeeze in India, see Bhat and Halli (1999).

[9]Using the same data set, Edlund (2000) is unable to replicate Rao's findings; this disparity seems to be due to differences in the definitions of state boundaries (Rao 2000). In summary, the empirical evidence on the marriage squeeze for India is sensitive to the econometric specification.

[10]In a hypergamous marriage, the woman can marry up in status/caste but not down.

[11]Goody (1973).

(who constitute a majority in Bangladesh), and Hindus. Regarding the amount of dowry that has been given, the author reports increasing nominal dowries, but unfortunately does not explain the evolution of dowry in real terms. To our knowledge the only quantitative study of dowry in Bangladesh, Amin and Cain (1995), examines payments in two villages in northern rural Bangladesh, and report an increasing incidence of dowry and a rise in the real amount of the dowry being paid. They mention that while the practice of dowry among Muslims in Bangladesh is recent, it was common among certain high-caste Hindus. While they do not run any econometric test, they claim that the increase is due to a rise in the eligible sex ratio (the number of eligible females to the number of eligible males),[12] that is, the so-called marriage squeeze.[13]

The law on marriage in Bangladesh is governed by the personal laws applicable to each community – Buddhist, Christian, Hindu, Muslim, Parsi or Sikh – and relevant statutory modifications. Marriage registration is compulsory for Muslims under the Muslim Marriages and Divorces (Registration) Act, enacted in 1974 in order to strengthen the inducements for civil registration. Although there is no legislation to this effect, there is a customary trend in Bangladesh towards encouraging the insertion of stipulations relating to delegated divorce in the marriage contract. Registration of marriages was rare before this law was passed, but a majority of families is currently believed to register their daughters' marriages.[14] No similar registration law exists for Hindus in Bangladesh.

Consequently with the respective concepts of marriage, divorce for Hindus is extremely rare, while it is more feasible for Muslims (see details about Muslim family law and legal rights of women in Bangladesh in the Background Appendix). Under Islamic personal law there are several types of divorce, but it is unilateral irrevocable divorce by husbands (*talaq al-bidah*) which is by far the most common in rural areas. Even though Muslim marriage is not sacramental, divorced Bangladeshi women are usually stigmatised: after marital disruption, return to the parental home is not respectable by the community, and may be especially difficult if parents are deceased or in poverty. As a result, divorced women are socially disgraced and hence all brides are expected to try their best to make their marriage a success (Bhuiya and Chowdhury 1997). Hence, although divorce rates in Bangladesh are typically low, the possibility of being divorced by the husband is feared. In fact, this explains institutional concerns with unilateral irrevocable divorce (see the Background Appendix for more details). Furthermore, as mentioned by Ahmed and Naher (1987), since marriage in Bangladesh is regarded as being the only true vocation for women in society, a single,

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[12] While the convention for the sex ratio is to divide the number of males by the number of females, in this paper we follow Rao (1993) and related literature in using females to males for the sake of comparison.

[13] Anderson (2000b) analyses current dowry payments in Pakistan, a country with a majority of Muslim population, and finds evidence for the pre-mortem inheritance motive in rural areas.

[14] MHSS questionnaire (Rahman et al 1999b).

or divorced, working woman is not accorded equal status to that given to a married woman.[15]

There are two traditional marital transfers in rural Bangladesh. The first of them, dower (*mehr*, or *mahr*), is Islamic in nature and constitutes a protection against utter destitution should she lose her husband through separation or death. The sum can be claimed by her either when she marries or in case of divorce. However, this payment is not usually given, and many women are unaware of this right. In sum, dower is, as Amin and Cain (1995) point out, seldom of any real significance. In contrast, dowry (*joutuk* or the English word *demand*), is a (customary) transfer from the bride's family to the groom and his family, and is not directly related to Islamic personal law. Even though brideprice (*pawn*) existed in Bangladesh during the first decades of the twentieth century, whereby the transfer was made from the groom's to the bride's side,[16] dowry payments have been reported since at least the 1940s. In this paper we do not focus on the change from brideprice to dowry, which involved only the Hindu minority,[17] but on the evolution of dowry from approximately the 1940s on, especially on payments made by the Muslim community, who constitute roughly 90% of the Bangladeshi population. The Dowry Prohibition Act of 1980 prohibits dowry payments in Bangladesh. Not only is this law often unknown and very frequently not observed, especially in rural areas, but also its usefulness is questionable, as the time it stipulates for dowry cases is only one year.[18]

Dowry violence has been modelled by Bloch and Rao (2003), who use data from rural India and find empirical support for the hypothesis that violence against wives is negatively related to dowry payments.[19]

What is dowry in rural Bangladesh? If dowry constitutes a mere groomprice, so that increased female competition for males due to either a marriage squeeze (Rao 1993) or higher male heterogeneity in the context of stratification (Anderson 2003, Gaulin and Boster 1990), which result in dowry inflation, then this inflation represents a welfare loss to the bride. However, if dowry is nevertheless a pre-mortem bequest, then dowry inflation could be due to wealth accumulation and hence, it reflects an underlying welfare increase. There is almost no economic study of dowry in

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[15]This is the case in other South Asian countries as well, e.g. India (especially Northwestern India, see Drèze and Sen 1995) and Pakistan.

[16]The change from brideprice to dowry has been extensively studied for India (Caldwell et al. 1993).

[17]Jahan (1988).

[18]There is some confusion between dowry and dower in some sources. Dower is provided for under Muslim law (Muslim Family Laws Ordinance), and is supposed to protect the wife. Disputes over dower are brough to family courts. However as mentioned above especially in rural areas dower is reported not to be given. Dowry, as it is beyond the Islamic marriage contract, is mainly demanded through oral agreement.

[19]So-called dowry deaths have been reported by the media, first for India and also for Bangladesh. Dowry-related violence in Bangladesh constituted in 1997, though, only 11% of total violent incidents against females, as reported by the police (Yasmin 2000). The number is similar in other studies, but of course there may misreporting of cases, or fake suicides or mortal accidents.

Bangladesh, and female pre-mortem inheritance has not been mentioned as a motive in any case, perhaps because of the incidence of dowry-related violence.

Interestingly, Simmons (1996) undertook interviews with women from rural Bangladesh who reported that a dowry makes it more difficult for husbands to make use of unilateral divorce: "once the dowry has been paid, a woman's position may be strengthened because *the husband cannot drive her out of the house so easily. To do that he would have to pay back that money first*", an argument that gives support to the insurance hypothesis in this paper.[20]

3   Data and area of study

The data used in this paper comes mainly from the Matlab Health and Socio Economic Survey (MHSS). The MHSS is a collaborative effort of RAND, the Harvard School of Public Health, the University of Pennsylvania, the University of Colorado at Boulder, Brown University, Mitra and Associates and the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B).[21] The Main sample in this household survey, which is the sample that we use for our analysis, gathers information from interviews performed in 1996 to 27,009 individuals in about 4,364 households in 2,687 baris or residential compounds in Matlab, a rural subdistrict (*Thana*) in the nowadays Chandpur Zila (Chittagong division) of Bangladesh. As Phillips et al. (1988) point out, Matlab has remained predominantly traditional and religiously conservative even though some modernising influences have reached the area since the 1980s—through widespread access to radios, growing emphasis on education, and increasing contact with urban areas. Like much of Bengal since the 1970s, economic deterioration, famine, and political upheaval have profoundly affected the area, preventing the development of towns, and slowing the introduction of modern amenities and social services, which has perpetuated poverty. Subsistence agriculture and fishing dominate the economy, with trade and commerce hampered by the absence of roads, electrification, communication, or ready access to markets.

Information about the (nominal) amount of dowry is reported by more than 2,000 households, however some of these do not report the year of marriage and hence these nominal observations cannot be deflated.[22] Dowry typically consisted of one or more of the following items: cash, jewellery, furniture or household items, land, bicycle, boat, rickshaw or van, TV, radio, cassette player, clock or watch, cow or goat. The usable sample consists of 855 observations of female-reported dowry and 340 of male-reported dowry, which gives us information on the amount of dowry for 1,015 couples. Different parts of the questionnaire were given to different family members;

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[20]Under customary law, dowry/brideprice is refundable upon divorce for Muslim communities in other countries too (e.g. Sierra Leone), and non-Muslim countries (e.g. Taiwan).

[21]This is one of the RAND Family Life Surveys. For more details see Rahman et al (1999a).

[22]We use the price of rice as a deflator (Khan and Hossain 1989, Amin and Cain 1995). See the Data Appendix for details about the construction of the deflator.

in particular in the sample there are 171 cases of couples where the two spouses report the dowry amount.

The average dowry paid for marriages held in 1996 was 12,700 Taka, which corresponds to approximately 62% of the average annual gross income earned by a couple.[23] Figure 1 depicts the evolution of dowry in nominal terms over time, while Figure 2 depicts the evolution of dowry in real terms: although there is a clear increasing pattern in nominal dowry, there is no clear pattern for dowry when increases in the price level are considered.

There is as well information on whether a dowry was given or not in the marriage: this is available for 6,347 couples. Again, when we take into account the availability of the year of marriage the usable sample drops further, this time to 2,098 couples. When considering other variables in the picture, we are left with fewer observations.[24]

Bangladeshi demographic and macroeconomic variables of interest such as the number of males and females by age are available from various Census issues: census of British India for 1931-48, Census of Pakistan for 1949-67, and Census of Bangladesh for 1968-96 (see the Data Appendix for details).

Table 1 provides decade averages for some variables of interest. Every observation corresponds to a couple. The first interesting aspect is that, as opposed to the Indian case, dowry has not been steadily increasing; rather it has been recently decreasing. The dramatic increase in the incidence of dowry from the 1970s can be explained as a Muslim phenomenon as can be seen from examining incidence split by religious group: over 40% of Hindu marriages in the 1950s were given a dowry, compared to approximately 2% of Muslim marriages (Table 1). Table 2 provides descriptive statistics for several variables of interest. The average real dowry over the period is 1,392 rice kg, with a standard deviation of four times that figure. Literacy rates in our sample are 44% and 34% for men and women respectively. A 8% of spouses belong to the same extended households (lived in same bari), while in 13% of couples, both spouses were from the the same village. About 4% of husbands report having more than one wife.

Figures 3 and 4 show the kernel density estimate of dowry payments. Figure 3 uses the real amount for the whole sample (but from a few observations where dowry is larger than 20,000 rice kg), while Figure 4 shows the nominal amount for the last five years in the sample, which is roughly comparable. It can be seen that most dowries are of relatively low value.

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[23]The average annual gross income earned by females (males) in 1995 is 960 (19,700) Taka.

[24]McCarthy et al. (1978) explains how individuals and especially women in rural Bangladesh only have a rough idea of their actual year of birth—explaining the fact that the year of marriage is missing for many individuals.

4 Empirical evidence

The empirical analysis consists of four parts. In the first section, we directly test our main hypothesis: that dowry is an insurance against divorce for Muslims in rural Bangladesh. For this, we explore the probability of remaining married of men and women. We relate this to the geographical origin of the spouse. In the second part, we estimate dowry payments taking into account that there is a selection issue, namely that the decision of participating in the dowry system might be different from the decision about the amount of dowry given. We indirectly test the insurance motive by analyzing the effect of the spouse's origin (whether it is the same bari, village, or another village) on both the likelihood to participate in the dowry system and the amount paid. Finally, in the fourth part we look at the substitutability between dowry and inheritance to daughters.

Throughout the entire section, standard errors are estimated with the robust option and are clustered at the extended household level.[25] This relaxes the independence assumption of the estimator to being just independent between clusters.

4.1 Probability of remaining married

4.1.1 Identification and estimation

The main hypothesis in this paper is that dowry functions as an insurance against divorce for Muslims. The intuition is that a husband who has been given a dowry does not find it as easy to unilaterally divorce his wife because in that case he would have to refund the dowry he was given.[26] If this is true, then the larger the amount of the dowry payment the husband has received, the larger the probability that he remains married (that is, the more binding it is the refund constraint). The same should be true for wives, as their probability of being divorced/abandoned should be lower the larger the dowry their marriage was provided with. The identification strategy is based on two characteristics: religious affiliation and geographical origin of the spouse.

On the one hand, and as previously explained, marriage is sacramental for Hindus—unilateral divorce is not specified under Hindu law as it is for Muslims, and henceforth the dowry refund argument would not apply for this group. Therefore the first strategy lies in comparing both religious groups. On the other hand, if dowry is an insurance against wife repudiation, it makes sense that such an insurance is more needed when the spouse comes from further away. For instance, if the daughter is marrying someone belonging to the same extended household,[27] or if the groom is

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[25]For a few extended households we have more than one couple in the sample. We cannot cluster standard errors at the village level because the village code has been scrambled from the data for confidentiality reasons.

[26]One of the reasons might be the existence of imperfect credit markets in rural Bangladesh.

[27]Marriages among individuals belonging to the same extended household are not rare in the sam-

from the same village, a dowry (or a high dowry) may be less necessary than if the daughter is marrying a groom from outside the bride's village, because the husband's social cost of abandoning a wife is greater if her family resides in the same village.

Hence we estimate:

$$M_i = \alpha D_i + \xi X_{M_I} + \varepsilon_{M_i} \qquad (1)$$

where M is equal to one if the individual is still married and equal to zero if he or she is not, D is the dowry amount in real terms (rice kg, see Data Appendix), the vector X_M contains other determinants, and i denotes couples. We estimate separate equations for males and females and present the results in Tables 3 and 4.

According to the insurance hypothesis we expect that $\alpha^{\text{Muslim}} > 0$, but $\alpha^{\text{Hindu}} = 0$. Also, we would expect divorce rates to have decreased since 1975.

4.1.2   Results

Table 3 presents probit estimations of the probability of remaining married for Muslims and Hindus separately. Controlling for whether the marriage was arranged (we expect arranged marriages to be more successful as these do not encounter ostracism in the community)[28] and a year of marriage trend, we find that the probability of remaining married is statistically larger the larger the dowry, for both Muslim men and women, while it is not significant for neither Hindu men nor women. As argued before, this is consistent with the insurance hypothesis. Regarding the size of the effect, we can interpret the coefficients by looking at the increase in the probability of remaining married as a result of being given the average dowry. The average dowry in real terms is equivalent to 1,392 rice kg. In that case, the probabilty that a husband does not divorce is 10% larger than without any dowry. If the dowry were say 2,500 rice kg, then this probability is increased by 18%. Regarding women, their probability of remaining married is also increased with a larger dowry: the average dowry increases their chances by 3.2%, while this figure is 6% for a 2,500 dowry. The figure is modest for the average dowry, but it can be impressive for larger values. There are a few observations for which dowry is larger than 20,000 rice kg. For women with these dowries, the probability of being divorced drops by more than 50%. All in all, Muslim men and women are more likely to remain married if they get a dowry, even if this is not large, and the effect can be very big for big dowries.[29]

In Table 4 we are able to use more controls and tackle our second identification

ple, e.g. uncle and niece (although these do no accord with Muslim family law). These individuals were usually residing within the same *bari* (Bangladeshi compound) before the wedding.

[28]15.6% of males report having married someone of their own choice, while the corresponding figure is only 1.4% for females.

[29]The estimation includes observations for which the dowry amount is known, but we do not include the zeros in case we know there was no dowry. The reason for this is that would be to assume that the participation decision and the amount decision are the same, while the evidence in the next section will prove that this is not the case.

strategy: geographical origin of the spouse.[30] In columns (1) and (3) we regress the probability of remaining married on some treats of both wife and husband: literacy, age at marriage, whether the spouse was the parents' choice, asstes in the case of the husband, the eligible sex ratio (females of marriageable age to males of marriageable age, defined following Rao 1993), a year of marriage trend and a dummy for whether the marriage was held after 1975. We do not include dowry in these regressions, but we do include a dummy variable for whether the spouse is from the same village (which includes the extended household level, and the village level itself). We find that for both males and females, if the spouse is from the same village, it is significantly more likely that the individual is still married. However, and as shown in columns (2) and (4), once we control for the amount of dowry given, the village dummy is not significant anymore: once we consider that the husband might have been given a dowry, it does not matter for her non-repudiation that he is from outside her parents' village. As in Table 3, the larger the dowry, the higher the probability of remaining married for both men and women. Other interesting effects are the fact that her literacy is not significant once we control for dowry, and the fact that brides who were older when they got married are more likely to remain married, while men are more likely to remain married to women who married at a younger age. The eligible sex ratio is negatively related to a wife's probability of remaining married, suggesting that increased competition for males is related to more married wives getting divorced. Finally, couples who got married more recently are more likely to remain together.

Incidentally, the evidence that couples that received a dowry are more likely to remain married could also be understood as evidence that dowry is a search device in as much as a dowry helps bringing better matches in a bargaining setting. However, the fact that the probability of remaining married increases with the amount of dowry controlling for arranged marriages, and especially that this relationship is only significant for Muslims, provides support to the insurance hypothesis.

Finally, if the insurance hypothesis is true, and if participation in the dowry system is indeed deterring divorces, we expect divorce rates to have been substantially lower from the late 1970s on, when dowry participation across Muslims escalated (and coinciding with the Muslim Marriage and Divorce (Registration) Act, introduced in 1974). Figure 5 shows male and female divorce rates over 1951-1991 in the Comilla district, where Matlab Thana is. Male divorce rates have decreased since 1951, when rates were similar to those of women, but female divorce rates increased in the 1950s and remained high until 1981, and have impressively declined over the 1980s. This is consistent with higher participation in dowry rates since the late 1970s, with an effect lagging a few years.[31] However, these numbers should be taken with caution, as official divorce rates are likely to be undermeasured (in our sample, there are about 4% of

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[30] Data availability for the Hindu minority prevents us from doing the same exercise for Hindus.

[31] Unfortunately we do not have marital status information by religious group, therefore the graph includes Muslims and Hindus. However, since Hindus represent just 10% of the population, this can be assumed to be a largely Muslim phenomenon.

individuals divorced or separated, while this graph shows figures lower than 1%). The decreasing trend is nevertheless of interest, because there is no obvious reason for which we would expect the undermeasurement problem to increase recently and only for women.

4.2 Dowry amount and dowry participation

4.2.1 Identification and estimation

In this part, we test our insurance hypothesis taking advantage again of the geographical origin of the spouse. In particular, if a dowry is given in order to protect a daughter from abandonment by her husband later on, we expect that this insurance is more necessary in the case where the groom is from another village. In rural Bangladesh, where the bride moves to the groom's household at the time of marriage, her parents are less able to encourage any sort of social sanction against the groom if they live in another village. Therefore as previously mentioned it makes sense that the husband's social cost of abandoning a wife is greater if her family resides in the same village.

We only observe the value of dowry in case that a person/household has decided to participate in the dowry system, so that it could be that the dowry amount is incidentally truncated. As long as the determinants of dowry participation and the dowry amount given might be different, we need to control for selection in the dowry amount equation. People who received dowry payment larger than zero are only a 31% of the sample and, as is well known, estimates from self-selected samples may be biased due to correlation between independent variables and stochastic disturbances induced by the sample selection rule. In this case the framework is Heckman's (1979) maximum likelihood estimation.[32] We can write the dowry amount equation as:

$$\log DA_i = \beta_{AB} Bari_i + \beta_{AV} Village_i + \phi_A X_{Ai} + \sigma_P \lambda_P + \varepsilon_{Ai} \qquad (2)$$

while the selection equation would be

$$Z_i \gamma + u_{Pi} > 0$$

where $\varepsilon_{Ai} \backsim N(0, \sigma)$, $u_{Pi} \backsim N(0, 1)$ and $Corr(\varepsilon_{Ai}, u_{Pi}) = \rho$,

which in our case practically implies to estimate the following selection equation:

$$\beta_{PB} Bari_i + \beta_{PV} Village_i + \xi Post1975 + \phi_P X_{Pi} + \varepsilon_{Pi} > 0 \qquad (3)$$

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[32]This estimation strategy is preferred to a Tobit model with the dowry amount and zeros corresponding to couples not participating in the dowry system. The reason is that including both types of information convolutes the dowry amount decision and the dowry participation decision. For similar models (e.g. women's working hours and women's labor force participation decisions) the Tobit model has been rejected (Cogan 1980, Mroz 1987).

where DA denotes the dowry amount received by couple i, $Bari$ is a dummy variable equal to one if the spouse comes from the same $bari$ or compound (in practice, extended family), and zero otherwise, $Village$ is a dummy variable equal to one if the spouse comes from the same village (but not the same $bari$), and zero otherwise; therefore the omitted category is spouse from outside the village, λ_P is the inverse Mills' ratio from the estimation of (3), X_A and X_P are other controls for the dowry amount and dowry participation respectively, and finally $Post1975$ is a dummy variable equal to one if the marriage was held from 1975 onwards and equal to zero if it was held before.

In particular, we can test different dowry hypothesis with the estimation of (2) and (3):

- *Groomprice motive:* if dowry is a groomprice, that is, if *ceteris paribus* better male attributes increase dowry and better female attributes decrease dowry (Rao 1993), then we expect that $\beta_{kB} < 0$ for $k = \{A, P\}$. The rationale is that groomprices are less commonly paid, or less paid, when the groom belongs to the same extended family (e.g. Cadwell et al. 1982).

- *Inheritance motive:* if alternatively dowry constitutes a pre-mortem bequest, we expect that $\beta_{kB} > 0$ for $k = \{A, P\}$.

- *Insurance motive:* if dowry is an insurance against divorce for Muslims, we expect that $\beta_{kB}^{\text{Muslim}} < 0, \beta_{kV}^{\text{Muslim}} < 0, \beta_{kB}^{\text{Hindu}} = 0, \beta_{kV}^{\text{Hindu}} = 0$ for $k = \{A, P\}$. That is, an insurance is more necessary when the groom is from outside the village, but this is only true for Muslims. Furthermore, if the enactment of the Muslim Marriage (Registration) Act in 1974 has something to do with increased participation, we expect that $\xi^{\text{Muslim}} > 0$ but $\xi^{\text{Hindu}} = 0$.

4.2.2   Results

We estimate (2) and (3) clustering robust standard errors at the extended household level and present the results in Table 5. Results are presented for all observations in the first column, while these are split by religion in the second and third columns for Muslims and Hindus respectively.

In the second panel in Table 5 we present the results of estimating the participation selection equation. First of all, while we cannot reject that $\rho = 0$ for the pooled estimation and for only Hindus, we can reject that $\rho = 0$ at the 1% significance level for Muslims. This means that, for Muslims, the participation decision and the dowry amount decision are different.

The estimation provides some support for the insurance hypothesis: we find $\beta_{kV}^{\text{Muslim}} < 0$, while we cannot reject that $\beta_{kB}^{\text{Hindu}} = 0, \beta_{kV}^{\text{Hindu}} = 0$, for $k = \{A, P\}$. Although some of the coefficients are not highly statistically significant, the Wald tests indicate that we can reject that the Muslim and Hindu coefficients are the same

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with 9% and 17% significance respectively. However, we fail to find that $\beta_{kB}^{\text{Muslim}} < 0$ for $k = \{A, P\}$. That is, although Muslim couples tend to both participate less and get less dowry if the spouse comes from the same village while Hindu couples do not, that is not true for Muslim couples whose spouse comes from the same *bari*. Since we also find no evidence for $\beta_{kB}^{\text{Muslim}} > 0$, one possibility is that both the inheritance and the insurance motives are playing a role: in that case, it could be that both effects cancel each other and hence we do not observe $\beta_{kB}^{\text{Muslim}}$ to be different from zero for Muslims. In fact, these hypotheses do not exclude each other. However, we fail to find more support for the female inheritance motive in the sense that $\beta_{kB}^{\text{Hindu}}$ is not significantly different from zero either. Additionally, we find evidence consistent with the association of the Muslim Marriage Registration Act 1974 and dowry participation: the dummy for post-1975 is positively significant only for Muslims (in fact it is negatively significant for Hindus: *ceteris paribus*, participation has been lower after 1975).[33] This is consistent with the idea that parents of brides would provide a dowry in the context of increased registration, which would have been made more aware thanks to the act. We do know from the interviewed responses in the data set that interviewees are aware that registration makes it possible to have a proof of marriage, that registration ensures the refund of dowry by the husband in case or abandonment (i.e. unilateral divorce), and that registration makes it possible to recover dowry.[34]In sum, these estimates lend some support for the insurance motive. However, we find no support for the groomprice motive: although literate Muslim grooms tend to get higher dowries, that is true for brides too (regardless of religion), which is at odds with the groomprice motive. Moreover, we find that literate grooms are less likely to participate in the dowry system, whether Muslims or Hindus.[35] This shows how different the participation and dowry amount decisions can be: literate Muslim grooms participate less, however, if they participate, then they receive higher dowries.

Other interesting results are as follows. Female literacy for Hindu women increases the probability of being given a dowry (this is consistent with the inheritance hypothesis, as a proxy for assets of the bride's family).[36] In contrast, Muslim literate women

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[33]Ideally, we would use information about the registration status of the marriages in the sample. Unfortunately, marriage registration was not enquired into in the survey.

[34]The particular question in the MHSS questionnaire is: *In the past, most marriages were not registered. These days a majority of the people register their daughters' marriages. What is the benefit of registering a marriage?* (Rahman et al. 1999b). The most cited responses involve legal benefits in general, impossibility for the husband to take a second wife, *dowry refund*, and finally being less beaten by the husband.

[35]Rao (1993) uses the eligible sex ratio as a proxy for the marriage squeeze argument: under that hypothesis, more eligible females per eligible man would imply higher dowry payments. However, in the presence of potential polygyny, it is not clear that the eligible sex ratio constitutes a proper test of the marriage squeeze hypothesis. For this reason and due to data availability we have not presented regressions including it. However, regressions that include it as regressor show that the eligible sex ratio is statistically unsignificant.

[36]Under a female inheritance hypothesis, we would expect wealthier brides to be given larger

seem to be less likely to be given a dowry: this might be interpreted as consistent with the fact that basic education may be an asset in the marriage (that would be the case if literate women are more likely to remain married). However, the fact that female literacy is not important as a determinant of women's probability to remain married (Table 4) does not make this point clearer. Finally, Muslim younger brides are more likely to get a dowry and to get a larger dowry.

In much of the literature about dowry, increasing participation has been understood as *sanskritisation*, that is, lower classes or castes imitating the upper ones.[37] Interestingly, in the case of Muslims of Bangladesh, it is also likely that compulsory marriage registration law made the community more aware of the benefits of registration in case a dowry was given, providing incentives for both marriage registration and dowry participation to minimise the probability of divorce and provide the bride with funds in the event of divorce.[38]

4.3   Dowry vs. inheritance

In this last empirical part we try to know a bit more about the relationship between dowry and inheritance. In the last section we have found some evidence which is consistent with the pre-mortem bequest hypothesis for Hindus. Is it possible that dowry is a pre-mortem bequest to Hindu daughters? And, even though dowry incidence for Muslims may have increased due to the fact that it is minimising the probability of divorce, is it possible that this is somewhat connected with inheritance?

We now take advantage of the information in the data set regarding assets received via inheritance. We cannot undertake a formal regression analysis because although we have information regarding whether an individual has inherited any assets, we do not know when the individual's parents passed away. We do know, however, whether the bride's father was alive at the time of her marriage. Therefore if we

dowries, and possibly to be more likely to be given a dowry. Unfortunately our data set does not contain information about assets of the bride's family. Bride's wealth being omitted, we would expect, as Edlund (2000, 2001) notes, that bride literacy proxies for her family's wealth, and hence we should find a positive relationship between the bride's literacy and participation. Although the nature of the relationship between female education and dowry is complex — as Mabud (1985) explains, Bangladeshi parents may take girls out of the school on the ground that "too much schooling makes a girl unmarriageable"—other evidence seems to indicate that brides' education is a valuable asset in the marriage market.

[37]Srinivas (1957) created the concept of *sanskritization* to denote the process by which patriarchal norms and lifestyle of higher castes in India have been gradually spreading to other castes, patriarchal norms including wives not participating in the labour market.

[38]The model might in fact be estimated with either of two estimators: Heckman maximum likelihood estimator (Heckman 1979), or Heckman two-step estimator (Heckman 1976). We have chosen to provide estimates under the former because it is superior—even though the latter is consistent, it is inefficient. In contrast, maximum likelihood is efficient under the assumption of joint normality of ε_{Ai} and ε_{Pi} (Wooldridge 2001). A practical advantage of using maximimum likelihood is that we can cluster standard errors with a simple STATA command. We have nevertheless estimated the model with the two-step estimator, and our results do not change.

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restrict ourselves to the sample of women whose father was dead at the time of their marriage, we know whether a dowry and/or inheritance have been given.

For the sample of 1,200 women whose father had already passed away when they got married, we look at the correlation between a dummy variable for dowry participation and a dummy variable equal to one in the case that the woman inherited. Table 6 shows these correlations, by religious affiliation and period.

Looking at both religious groups together, we can see that women that got married from 1975 onwards have been less likely to get a dowry if they had recieved inheritance. Although the correlation index is small (-0.06), this is significant at the 5% level. However, no significant correlation exists before 1975: the fact that a woman received inheritance does not seem to have any relationship with whether she got a dowry or not. Table 6 also shows that this negative relationship between dowry and inheritance only exists for Muslims. For Hindus, whether marriage was held before or after 1975, the correlation is not significant.

These correlations constitute just a very simple descriptive statistical analysis. However, it is suggestive of the idea that there exists some degree of substitutability between dowry and inheritance to daughters for Muslims since 1975. Before 1975, a few Muslim families may have been giving both inheritance and dowry to daughters, while others gave just one of them, or none. However, after 1975, brides who had already received a share of inheritance at their fathers' death were not given a dowry at the time of marriage.

Which of the dowry hypotheses are these correlations consistent with? Under the groomprice hypothesis, there could exist a positive relationship: *ceteris paribus* we might expect wealthier parents to give a dowry as well as inheritance to their daughters at the time of their death. However, under that hypothesis it could also be that women who have received inheritance are better endowed later in the marriage market so that their equilibrium dowry may be zero. Under the inheritance hypothesis, if the woman's father has died before her marriage, and she got an inheritance, the incentive problem in Botticini and Siow (2003) disappears, therefore a dowry would not be needed. Finally, under the insurance hypothesis, if a woman's got inheritance, and therefore she has assets of her own, it makes also sense that an insurance is less needed for her protection against divorce – as both her husband's incentive to divorce and her post-divorce economic disgrace would be lower. Hence the three hypotheses seem to be consistent with a negative relationship – however, there is no reason for which the former two would only hold for Muslims, which again lends some support to the insurance hypothesis.

5 Conclusions

This paper examines dowry payments in the Matlab region of rural Bangladesh by using data about couples that married over the 1931-1996 period. We present evidence that the so-called rise in dowries in Bangladesh is only an incidence rise, that this

is mainly a Muslim phenomenon, and that this can be explained by understanding dowry as an insurance against divorce. We argue that the dramatic increase in dowry participation in the region is explained by greater awareness about the fact that by giving the groom a dowry, the bride's parents insure themselves and their daughter against her divorce or abandonment (which would imply her return to the parental home, which is considered a social disgrace and involves substantial economic costs to her family) as a husband who wants to exercise unilateral divorce has to refund the dowry. This hypothesis for dowry, which constitutes a novelty in the economics literature of dowry, is tested in a variety of ways. The identification strategy makes use of religious affiliation of the couple and geographical origin of the spouse. First, we find that the higher the dowry received by a couple, the greater the probability that an individual remains married. This is statistically significant for Muslims, but it is not significant for Hindus—this is related to the Muslim personal law, under which divorce for Muslims is contractual. The dramatic increase in dowry participation by Muslims coincides with the enactment of the Muslim Marriage (Registration) Act in 1974, which made registration of marriages compulsory, and created awareness of the benefits of giving a dowry in the case of Muslims.

Secondly, we find that, consistent with the insurance hypothesis, couples where the groom is from outside the village are more likely to 1) get a dowry and 2) get a higher dowry. Again, and consistent with the hypothesis in this paper, this is only true for Muslims. Third, we also find that from 1975 onwards, Muslim parents seem to be substituting between inheritance to daughters and dowries: among women whose father died before their marriage, women who got inheritance are less likely to receive a dowry—the fact that this is true only for Muslims again suggests a link between dowry and the insurance hypothesis. In the last piece of evidence for the insurance hypothesis, we do find that female divorce rates have dropped since 1981 (Figure 5).

We also find some evidence that could be also consistent with the bequest motive: wealthier Hindu parents provide their daughters with higher dowries. However, we do not find any evidence consistent with the marriage squeeze hypothesis.

All in all we claim that dowry in rural Bangladesh is not a groomprice and that dowry prohibition may not be a useful policy for rural Bangladeshi women. Regarding the Muslim community, dowry does seem to be useful in protecting females against unilateral divorce, which would imply their repudiation and disgrace. The root of the problem is then the social disgrace that divorce brings to women in rural Bangladesh. There are two possible policy options that can be derived from this. First, unilateral divorce (*talaq al-bidah*) might be prohibited. However, as documented in the Background Appendix, restrictions to *talaq al-bidah* were attempted in Pakistan without success. The second, perhaps more hopeful policy option is to improve the legal position of Muslim wives. This would consist of either of the following: a) enforcing traditional substantial dower payments,[39] b) enforcing maintenance following unilat-

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[39]Dower might be provided at the time of marriage or upon a husband's loss, including divorce. Dower payments for Muslim women in South Asia seem to be still included in the marriage contract

eral divorce, and last and most difficult, c) bring about a change in the perception of women in society (if women are able to participate in the economic sphere without being stigmatized, this would provide them with an outside option off marriage). However, since those policies may be difficult to enforce (as is currently happening with dowry prohibition), what seems to be the most effective short-term policy is to further spread awareness of the benefits of marriage registration among the Muslim community (encouraging women to insert stipulations in the marriage contract that are favorable to them), and provide dowry with a legal framework that can prevent violence and extortion through further payments.

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but with a very low value. Furthermore, they are usually not paid in case of divorce (Hossain 2003). See more on this in the Background Appendix.

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6 Data Appendix

Most of the data comes from the Matlab Health and Socio Economic Survey (MHSS) household survey that is explained in section four. The survey gathers data from households in Matlab, a region northeast of Dhaka, Bangladesh.

Rice Price

While information about nominal dowry is provided in the data set, a deflator is needed to trace the evolution of real dowry over time. As a consumers price series for Bangladesh is not available for the period of study, we follow Khan and Hossain (1989) and Amina and Cain (1995) and use rice as a deflator. Since rice is both the main product and the main article of consumption, it is fairly representative of average prices. Getting any time series for Bangladesh is a real challenge: Bangladesh was part of the British Indian provinces of Bengal and Assam during 1757-1947, then it became part of Pakistan in 1947 (and was known as East Pakistan) until 1971, when it became independent.

We use a measure of *retail prices of medium rice* in Bangladesh. Ideally it would be best to use a regional measure (from the Comilla region)[40] , but this is not available, the most disaggregated level that is available is the *division* level, but this is only available in a consistent way for 1978 onwards. Our rice price series draws from several publications. For 1931 to 1946, information was taken from the *Statistical Abstract for British India* [HMSO, London] about the whole British India. For 1947 to 1949, it comes from the *Statistical Abstract: India* [Central Statistical Organisation, India]. For 1949 to 1968, information for Bangladesh is taken from the *Pakistan Statistical Yearbook* [Federal Bureau of Statistics, Karachi]. For 1968 on, we have used the data in the *Bangladesh Statistical Yearbook* [Bureau of Statistics, Bangladesh]. Since the Indian data is not only for Bangladesh but for the whole British India section, we believe that the series is consistent for the 1949-97 period. There are only 80 observations of dowry before 1950, the bulk of the data lying on 1970-96, where only the data from the same publication has been used.

Population statistics

Information about the number of females and males in the 'area' and their marital status comes from the respective censuses (*Census of India* 1931 and 1941 [India], *Census of Pakistan – East Pakistan* 1951 and 1961 [Census Comissioner, Pakistan], *Population Census of Bangladesh 1974*, and *Bangladesh Population Census* 1981 and 1991 [Bureau of Statistics, Bangladesh]).

To calculate the *sex ratio* we use the number of females to males in the Tippera/Comilla district for 1941 to 1981, and in the Chandpur Zila for 1991 (Matlab belonged to Comilla until the geographical reorganisation of 1984). In particular we use the *eligible* sex ratio, that is we take into account that marriageable age is different by gender: following Rao (1993) and related literature we take the ratio of girls aged between 10 and 19 years to the number of boys aged between 20 and 29 years.

To calculate female and male *divorce rates* in the area we take the percentage of the population of age 10 years and above who are divorced.

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[40]Called *Tripura* or *T-para* before the mid 1950s. Jaffor Ullah (2000) explains the reason for the name change: "The name of present-day Comilla district in Bangladesh was Tripura or T-para before mid 1950s. Comilla was the name of one of the major towns in Tripura. However, when East Pakistan was formed in 1947 a part of Tripura was given to East Pakistan. The Pakistani officials could not handle the name Tripura. It sounded almost like a Sanskrit name, which it was. Nevertheless, in the early fifties the district was called Tripura. Later, they named the entire administrative district as Comilla. They must have heaved a great sigh of relief to get rid off that Sanskrit name as quickly as possible."

7 Background Appendix: marriage, divorce and marital transfers in rural Bangladesh

7.1 Introduction

In rural Bangladesh, marriage is the only true vocation for women. The Child Marriage Restraint Act 1929 has been amended by Ordinance in 1984 so that the minimum ages are 21 for men and 18 for women, but even recently it is not rare for women to get married being younger than ten years old. In Bangladesh, parents ordinarily select spouses for their children, although men frequently exercise some influence over the choice of their spouses. After marriage, brides usually leave their parents' house for the groom's house, where they are under the authority of the husband and in-laws. Once they are married, the possibility of divorce is different for Muslims and Hindus,[41] as the concept of marriage itself is different. Marriage among Muslims is civil and contractual, whereas it is sacramental and eternal for Hindus.

The law on marriage in Bangladesh is governed by the personal laws applicable to each community – Buddhist, Christian, Hindu, Muslim, Parsi or Sikh – and relevant statutory modifications.[42]Bangladeshi Muslims are followers of the Hanafi Islamic law school which, although originated in Iraq, extended early to the Indian subcontinent. Of the four schools of classical Islamic law, the Hanafi school is allegedly the one that is more favorable to the male.

7.2 Marriage

Islam considers marriage to be incumbent on every Muslim man and woman unless they are physically or financially unable to pursue conjugal life. Marriage though is not religious in the sense of a sacrament, but rather in the sense of realizing the essence of Islam. In Islamic law, marriage is a civil contract legalizing intercourse and procreation. The law does not require the contract to be made in writing, and the custom of oral contracts seem to have prevailed in the past.

However, marriage written registration is compulsory for Muslims under the Muslim Marriages and Divorces (Registration) Act, enacted in 1974 in order to strengthen the inducements for civil registration. This act states that "every marriage solemnised under the Muslim law shall be registered in accordance with the provisions of this Act" and establishes the licensing of Nikah Registrars. The punishment for not registering a marriage is a prison sentence (three months in jail) and/or a fine (500 Taka). Failure to register does not invalidate a marriage, but it fails to provide the bride with a proof of marriage. It should be noted that, although there is no leg-

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[41]In Bangladesh there are also smaller Christian and Buddhists communities. Since in our sample there are only Muslims (90%) and Hindus (10%), henceforth we only refer to these two religious groups.

[42]Shaikh (1998).

islation to this effect,[43]nowadays it is customary for a bride to introduce condtions that are favorable to her directly into the marriage contract (for instance, a woman may want to eliminate the husband's right to take a second wife, or may want to demand more freedom of mobility, or to allow for delegated divorce). Registration of marriages was rare before this law was passed, but a majority of families is currently believed to register their daughters' marriages.[44] No similar registration law exists for Hindus in Bangladesh.

7.3   Divorce

Consequently with the respective concepts of marriage, divorce is extremely rare for Hindus,[45] while it is more feasible for Muslims. However, although certain types of divorce are approved by Muslim law, divorce is still considered undesirable.[46] Islamic personal law establishes five types of divorce (*talaq*). The first of them, and by far the most common in rural areas (Kamal), is unilateral. *Talaq* can be revocable (*talaq al-sunnah*, which comprises the forms *talaq al-ahsan* and *talaq hasan*), in which case it lies within the Prophet's teachings and is therefore approved, or the innovation, un-approved, irrevocable divorce (*talaq al-bidah*), which basically consists of the husband verbally stating three times that he divorces his wife, and the triple *talaq* becomes ir-revocable. Under Islamic law, unilateral divorce is reserved to men only.[47] The triple *talaq* has favor with men, especially in South Asia, and there has been widespread abuse of this male discretion to divorce (Menski 2000, Kamal). The instant effects of the triple talaq leave Muslim wives totally powerless and, in the harsh realities of South Asian life, husbands may not even honor their obligations in terms of paying maintenance and paying dower (explained below).

There have been some modern attempts at redressing this blatant abuse of patri-archal power in the name of religion. British colonial legislators chose not to get in-volved in legal regulation of talaq al-bidah. Instead, they focused on assisting Muslim wives in obtaining a divorce through court procedures: they did extend the grounds for the wife's requirement of divorce under the Dissolution of Muslim Marriages Act

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[43]Inserting stipulations in the marriage contract is allowed for in the Hanbali school of law, but not in the Hanafi (Esposito 2002).

[44]MHSS questionnaire (Rahman et al 1999b).

[45]The Hindu community finds provision for divorce under the Hindu Married Women's Right to Separate Residence and Maintenance Act of 1946.

[46]Many Quranic verses make clear the undesirability of divorce and the punishments awaiting those who exceed the limits set by God. However, the law did not translate these teachings and values of the *Quran* into specific legal restrictions on the husband's right to divorce to guard against abuses (Esposito 2001).

[47]Rahman (1989) argues against the possibility of unilateral divorce by women as follows: "A woman's psychological and physiological make-up is such that every month for a period of five to seven days she is in a state of pathological change (...) If women were given the power of unilateral divorce, it is probable that millions of them would divorce their husbands and it is probable that millions of divorces would have ensued and there would be chaos in society."

(1939), improving the legal position of Muslim wives (Menski 2000). For instance, while divorce on the grounds of husband desertion was still only available in the case that the husband had gone missing, the waiting period ceased to be ninety years since the husband's birth to four years without knowing the whereabouts of the husband (Esposito 2001). Pakistan enacted the Muslim Family Laws Ordinance (1961) as a state attempt to control the sphere of family law. The statute preserves the man's right for unilateral divorce, but in that case he "shall, as soon as may be after the pronouncement of talaq in any form whatsoever, give the Chairman notice in writing of his having done so, and shall supply a copy thereof to his wife" (Menski 2000). That is, with the reform, although the triple *talaq* was still valid, it needed written confirmation. Later, the written requirement has been considered anti-Islamic and in practice Muslim law in both Pakistan and Bangladesh has taken the view that notice of divorce is not essential.[48]

In the second type of divorce, delegated divorce (*talaq al-tafwid*), the wife has some power to divorce, but this is controlled by the husband. The third type is mutual divorce, either *khul*, where it is the wife who has the desire to separate; the divorce consists of an agreement between the husband and the wife upon the sum that the wife has to pay the husband for that effect, or *mubaraah*, where the desire for separation is mutual. The fourth type of divorce is by judicial process, lian, when the husband accuses the wife of adultery without legal proof, and, faskh, in which case it is the wife who seeks the judicial authority to dissolve the marriage – which she can only require on very narrow grounds in the Hanafi school.[49]Finally, classical Hanafi law allowed for apostasy divorce: by renouncing Islam, the marital tie would be dissolved *ipso facto* (in light of the evidence that some women were using this option to divorce unilaterally, though, this type was ruled out by the Dissolution of Muslim Marriages Act 1939).

Even though Muslim marriage is not sacramental, divorced Bangladeshi women are usually stigmatised: after marital disruption, return to the parental home is not respectable by the community, and may be especially difficult if parents are deceased or in poverty. As a result, divorced women are socially disgraced and hence all brides are expected to try their best to make their marriage a success (Bhuiya and Chowdhury 1997). Furthermore, as mentioned by Ahmed and Naher (1987), since marriage in Bangladesh is regarded as being the only true vocation for women in society, a single, working woman is not accorded equal status to that given to a

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[48]Direct regulation of *talaq al-bidah* has not been attempted in India. Instead, India has tried to exercise some control on the Muslim husband's absolute discretion to divorce through enforcing tougher post-divorce maintenance laws, that is, to at least seek to regulate the socio-economic consequences of marital breakdown (Menski 2000).

[49]Although they did not regulate irrevocable divorce, British colonial legislators did extend the grounds for the wife's requirement of divorce under the Dissolution of Muslim Marriages Act (1939). For instance, while divorce on the grounds of husband desertion was still only available in the case that the husband had gone missing, the waiting period ceased to be ninety years since the husband's birth to four years without knowing the whereabouts of the husband (Esposito 2001).

married woman.[50]

7.4 Marital transfers

7.4.1 Dower

There are two traditional marital transfers in rural Bangladesh. The first of them, dower (*mahr*, or *mehr*), is Islamic in nature (and it is accordingly regulated by Islamic personal law) and constitutes a protection against utter destitution should she lose her husband through separation or death. The sum can be claimed by her either when she marries or in case of divorce. Dower already existed in pre-Islamic Arabia, where it was a payment to the bride's father. Islamic law made dower payable not to the bride's father, but only to the bride herself, so the marriage could not be considered a sale (Esposito 2001). In Hanafi school it is universal to divide the dower into portions, prompt dower (*muqqadam*), payable upon conclusion of the marriage contract, and deferred dower (*muakhkhar*) paid only on termination of the marriage. However, most husbands do not pay the dower to their divorced wives (Hossain 2003). In fact, not only this payment is not usually given, but also many women are unaware of this right.[51] In sum, dower is, as Amin and Cain (1995) point out, seldom of any real significance.

Reportedly, since the early 1970s, the dower system has been replaced by a dowry system (Rozario 1992).

7.4.2 Dowry

Dowry (*joutuk* or the English word *demand*), is a (customary) transfer from the bride's family to the groom and his family, and is not directly related to Islamic personal law. Even though brideprice (*pawn*) existed in Bangladesh during the first decades of the twentieth century, whereby the transfer was made from the groom's to the bride's side,[52] dowry payments have been reported since at least the 1940s.[53] In this paper we do not focus on the change from brideprice to dowry, which involved only the Hindu minority,[54] but on the evolution of dowry from approximately the 1940s on, especially focusing on payments done by the Muslim community, who constitute roughly 90% of the Bangladeshi population. The Dowry Prohibition Act of

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[50]This is the case in other South Asian countries as well, e.g. India (especially Northwestern India, see Drèze and Sen 1995) and Pakistan.

[51]The women who are aware of this right in our region of study also call dower *legal dowry*.

[52]The change from brideprice to dowry has been extensively studied for India (Caldwell et al. 1993).

[53]Actually the first observation in our sample of study in Matlab corresponds to a marriage that took place in 1931. It is not until the 1940s that we find more observations though. An interesting explanation may lie in Anderson's (2003) study about India.

[54]Jahan (1988).

1980 prohibits dowry payments in Bangladesh. Not only is this law often unknown and very frequently not observed, especially in rural areas, but also its usefulness is questionable, as the time it stipulates for dowry cases is only one year.[55] Moreover, the settlement of litigation related to dowry, like other cases, takes a long time and poor women cannot afford the cost of such long process.

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[55] There is some confusion between dowry and dower in some sources. Dower is provided for under Muslim law (Muslim Family Laws Ordinance), and is supposed to protect the wife. Disputes over dower are brough to family courts. However especially in rural areas dower is reported not to be given. Dowry, as it is beyond the Islamic marriage contract, is mainly demand through oral agreement.

Table 1. Evolution of main variables: decade-by-decade averages

Period	1931-49	1950-59	1960-69	1970-79	1980-89	1990-96
Female age at marriage	12 (93)	13.9 (161)	14.7 (252)	15 (493)	17.6 (588)	15.4 (4669)
Female age at *first* marriage[1]	12.3 (89)	14.2 (157)	14.6 (247)	15 (490)	17.7 (581)	15 (4596)
Male age at marriage	21 (47)	24.5 (128)	25.1 (233)	24.7 (437)	25.2 (505)	25.1 (2647)
Male age at *first* marriage[2]	22.4 (43)	24.4 (125)	25 (228)	24 (425)	24.4 (488)	24.7 (2564)
Age gap at marriage	9 (47)	10.9 (126)	10.7 (233)	9.7 (437)	7.6 (458)	9.5 (2603)
Age gap at *first* marriage	10.3 (40)	10.3 (119)	10.4 (224)	9 (422)	6.9 (483)	9.4 (2491)
Spouse from same *bari* (%)[4]	6.6 (91)	10.3 (156)	7.3 (245)	8.1 (482)	9.6 (581)	8.4 (4650)
Spouse from same village (%)	17.6 (91)	19.2 (156)	23.3 (245)	21.4 (482)	22.5 (581)	22.1 (4640)
Husbands with more than one wife (%)	2.2 (91)	3.2 (157)	2 (248)	1. (488)	1.5 (585)	1.5 (4680)
Dowry value[3]	12458 (3)	18559 (10)	4747 (20)	2332 (146)	865 (325)	884 (468)
Couples with dowry (%) – Muslim	3 (98)	2.3 (143)	4 (210)	28 (439)	60 (532)	27 (4274)
Couples with dowry (%) – Hindu	0 (10)	45 (20)	36 (33)	54 (54)	73 (56)	51 (453)

1\Marriages where the female age was between 6-28 (1.6% of the cases are outside these bounds).

2\Marriages where the male age was between 12-40 (3% of the cases are outside these bounds).

3\In rice kg. (see Data appendix).

4*Bari* is a compound where an extended family usually lives in Bangladesh.

Note: Number of observations in parentheses.

Table 2. Descriptive statistics of main variables

Variable	Number of observations	Mean	Standard deviation	Min	Max
Dowry amount	972	1392	4840	0	125000
Dowry participation	6317	0.31	0.46	0	1
Husband can read	4396	0.44	0.50	0	1
Wife can read	6959	0.34	0.47	0	1
Bride's father richer than father-in-law	6249	0.39	0.49	0	1
Husband's assets	4059	144715	197094	0	1826000
Number of bride's brothers older than 15	6239	1.05	1.25	0	14
Husband age at first marriage	3873	24.6	4.87	12	40
Wife age at first marriage	6256	15.4	4.68	6	28
Spouse from same *bari*	6205	0.08	0.28	0	1
Spouse from same village	6205	0.13	0.34	0	1
Spouse was parents' choice	6217	0.80	0.40	0	1
Muslim	13031	0.90	0.30	0	1
Land owned by husband	12826	21.8	71.5	0	1575
Husband has more than one wife	4395	0.04	0.20	0	1

Table 3. Probit estimation of the probability of remaining married

Dependent variable =1 if still married, =0 otherwise

Muslim

Gender:	Male	Female
Dowry amount in real terms	0.00007***	0.00002**
	(2.82)	(2.11)
Parents chose spouse (=1 if yes, =0 if not)	0.03	0.02
	(1.03)	(1.14)
Year of marriage	0.003	0.003***
	(1.53)	(3.33)
Number of observations	565	558

Hindu

Gender:	Male	Female
Dowry amount in real terms	0.00001	0.00001
	(1.25)	(1.09)
Parents chose spouse (=1 if yes, =0 if not)	0.04***	0.03
	(2.37)	(1.36)
Year of marriage	0.0003	0.002***
	(0.66)	(3.10)
Number of observations	123	143

Notes: Absolute t-statistics calculated using robust standard errors clustered at the extended household level are in parentheses, *significant at 10%; **significant at 5%; ***significant at 1%. Coefficients denote the increase in the probability for a one unit increase in the independent variable (this is a discrete change from 0 to 1 in the case of a dummy variable)

Table 4. Probit estimation of the probability of remaining married, only Muslims

Dependent variable =1 if still married, =0 otherwise

Gender:	Male		Female	
	(1)	(2)	(3)	(4)
Dowry amount in real terms		0.00006***		0.00001**
		(2.82)		(1.94)
Wife can read	0.06***	0.04	0.25*	0.006
(=1 if yes, =0 if not)	(2.43)	(1.15)	(1.75)	(0.94)
Husband can read	0.04**	0.03	0.07	0.007
(=1 if yes, =0 if not)	(1.99)	(0.85)	(0.50)	(1.03)
Husband's total assets	-0.001	-0.001	0.001	-0.001
	(1.40)	(0.69)	(0.76)	(1.20)
Groom's age at marriage	0.002	0.002	-0.002***	-0.001***
	(1.27)	(0.59)	(3.09)	(4.24)
Bride's age at marriage	-0.01***	-0.015***	0.005***	0.03***
	(4.13)	(3.13)	(3.00)	(4.82)
Parents chose spouse	0.02	0.03	0.01	0.03**
(=1 if yes, =0 if not)	(0.73)	(0.80)	(0.71)	(2.22)
Spouse from same village (=1 if same	0.04*	0.05	0.03**	-0.0001
HH, bari or village, =0 if not)	(1.83)	(1.34)	(2.10)	(0.26)
Dummy post1975	-0.004	0.15	-0.01	-0.004
	(0.11)	(1.20)	(0.33)	(0.47)
Eligible sex ratio	-0.15	-0.49	-0.11	-0.13**
	(0.99)	(1.49)	(1.17)	(2.19)
Year of marriage	0.003	0.01**	0.002	0.002**
	(1.05)	(2.31)	(0.84)	(2.26)
Number of observations	1087	353	1092	327

Notes: Absolute t-statistics calculated using robust standard errors clustered at the extended household level are in parentheses, *significant at 10%; **significant at 5%; ***significant at 1%. Coefficients denote the increase in the probability for a one unit increase in the independent variable (this is a discrete change from 0 to 1 in the case of a dummy variable)

Table 5. Heckman Maximum Likelihood estimation of dowry payments with dowry participation selection

	All	*Muslim*	*Hindu*
Wife can read	0.40***	0.37***	0.36*
(=1 if yes, =0 if not)	(5.23)	(4.62)	(1.78)
Husband can read	0.29***	0.34***	-0.03
(=1 if yes, =0 if not)	(3.37)	(3.93)	(0.17)
Bride's father was richer than father-in-law	0.14**	0.10	0.51**
(=1 if yes, =0 if not)	(1.94)	(1.33)	(2.36)
Bride's age at marriage	-0.03**	-0.03**	-0.004
	(1.99)	(2.22)	(0.14)
Groom's age at marriage	-0.01*	-0.01	-0.01
	(1.85)	(1.45)	(1.10)
Parents chose spouse	0.17*	0.20*	0.03
(=1 if yes, =0 if not)	(1.72)	(1.87)	(0.13)
Spouse from same bari	-0.06	-0.15	0.22
(=1 if same HH or bari, =0 if not)	(0.36)	(0.93)	(0.50)
Spouse from same village	-0.20	-0.23*	0.04
(=1 if same village, =0 if outside village)	(1.58)	(1.68)	(0.09)
Muslim	-0.65***		
(=1 if Muslim, =0 if not)	(6.13)		
Year of marriage	-0.04***	-0.02***	-0.06***
	(4.73)	(3.45)	(3.79)
Mills inverse ratio	0.11	0.23***	-0.18
	(0.85)	(3.16)	(0.53)
Wald test for dowry payments (p-value)	0.09		

Dependent variable: log of dowry in rice kg.

Notes: Absolute z-statistics calculated using robust standard errors clustered at the extended household level are in parentheses, *significant at 10%; **significant at 5%; ***significant at 1%. The Wald tests for dowry payments and dowry participation tests the null hypothesis that that the Muslim and the Hindu coefficients for whether the spouse comes from the same village are equal.

Table 5 (continued). Heckman Maximum Likelihood estimation of dowry payments with dowry participation selection

	Selection equation		
Wife can read	-0.13	-0.22**	0.43*
(=1 if yes, =0 if not)	(1.45)	(2.25)	(1.65)
Husband can read	-0.32***	-0.31***	-0.46*
(=1 if yes, =0 if not)	(3.64)	(3.31)	(1.55)
Bride's father was richer than father-in-law	0.47***	0.47***	0.36
(=1 if yes, =0 if not)	(5.61)	(5.37)	(1.35)
Bride's age at marriage	-0.05***	-0.05***	-0.05
	(3.99)	(3.78)	(1.48)
Groom's age at marriage	-0.01*	-0.01*	-0.01
	(1.91)	(1.77)	(0.52)
Parents chose spouse	0.16	0.17	0.15
(=1 if yes, =0 if not)	(1.57)	(1.48)	(0.50)
Spouse from same bari	-0.05	-0.10	0.22
(=1 if same HH or bari, =0 if not)	(0.30)	(0.59)	(0.61)
Spouse from same village	-0.34***	-0.32**	-0.56
(=1 if same village, =0 if outside village)	(2.57)	(2.32)	(1.48)
Muslim	-1.61***		
(=1 if Muslim, =0 if not)	(7.30)		
Dummy post1975	-0.57**	0.55***	-0.66
(=1 if marriage after 1975, =0 if not)	(1.96)	(3.14)	(1.54)
Muslim*post 1975 (=1 if Muslim and if married after 1975, =0 if not)	1.10*** (4.13)		
Year of marriage	0.07***	0.07***	0.07***
	(8.46)	(7.73)	(3.98)
Wald test for dowry payments and dowry participation independent (p-value)	0.40	0.002	0.60
Wald test for dowry participation (p-value)	0.17		
Number of observations	1582	1397	185

Notes: Absolute z-statistics calculated using robust standard errors clustered at the extended household level are in parentheses, *significant at 10%; **significant at 5%; ***significant at 1%. The Wald tests for dowry payments and dowry participation tests the null hypothesis that the Muslim and the Hindu coefficients for whether the spouse comes from the same village are equal. The Wald test for the independence of dowry payments and dowry participation equation tests the null hypothesis that these are independent ($\rho=0$).

Table 6. Correlation between inheritance and dowry

All	1931-74	1975-96
Correlation between inheritance and dowry	0.03	-0.06
p-value	0.76	0.03
Number of observations	121	1074
Muslims	1931-74	1975-96
Correlation between inheritance and dowry	0.08	-0.07
p-value	0.38	0.02
Number of observations	114	969
Hindus	1931-74	1975-96
Correlation between inheritance and dowry	-0.18	0.02
p-value	0.48	0.85
Number of observations	17	105

Note: the sample is the number of women whose father was dead at the time of marriage.

Figure 1. Evolution of dowry in nominal terms
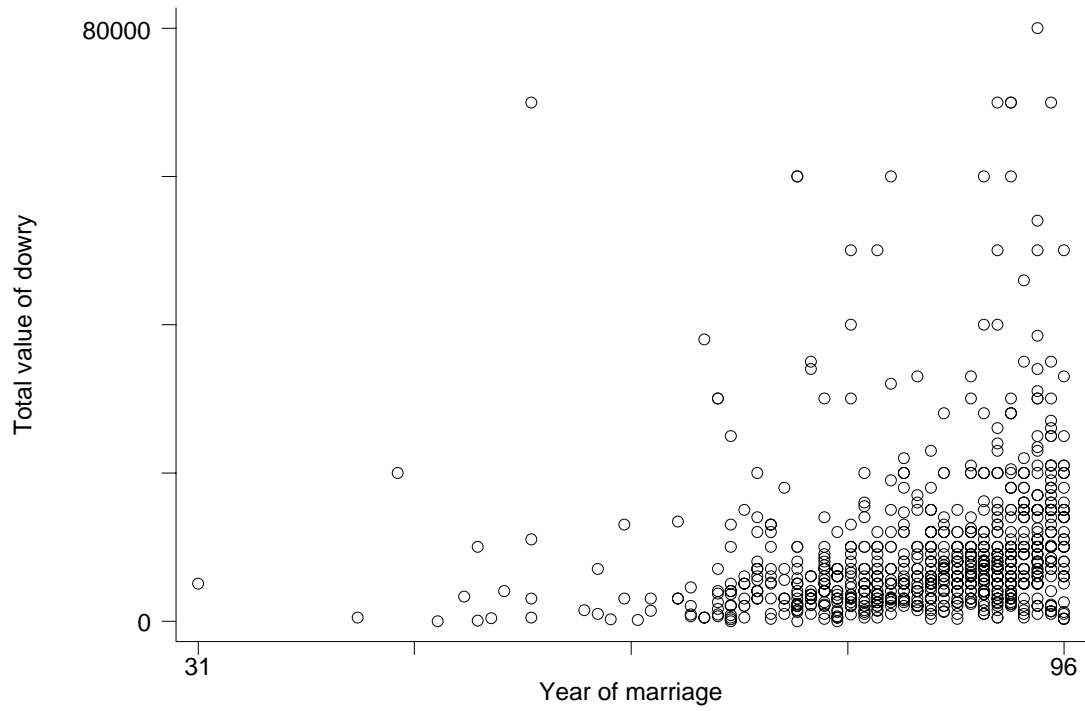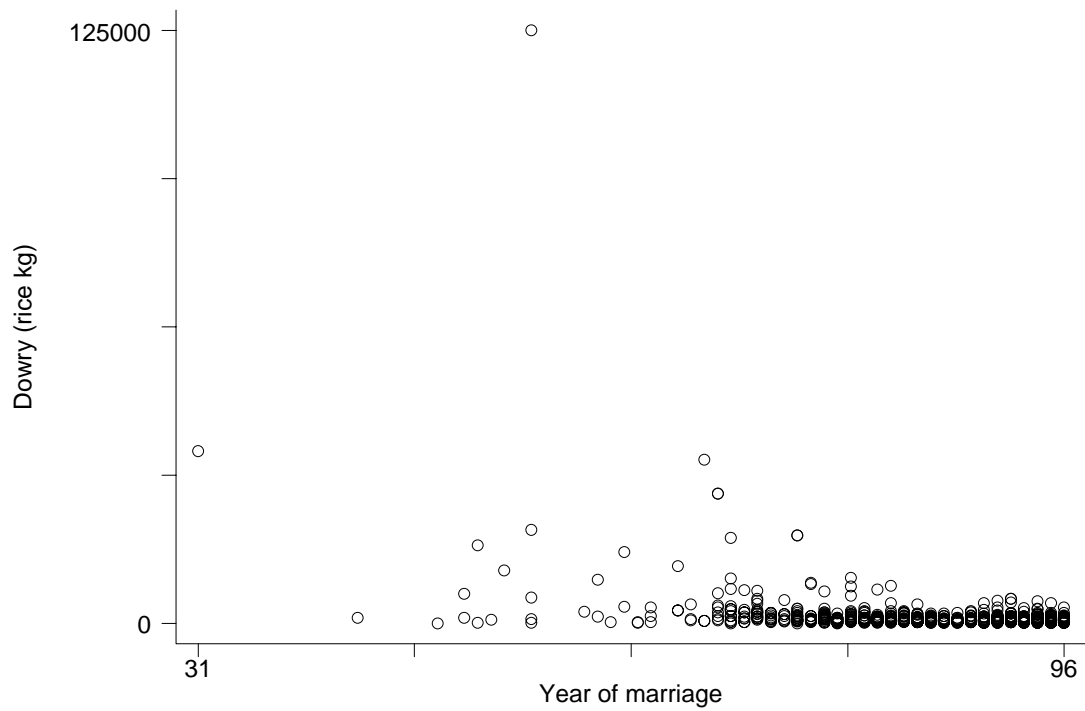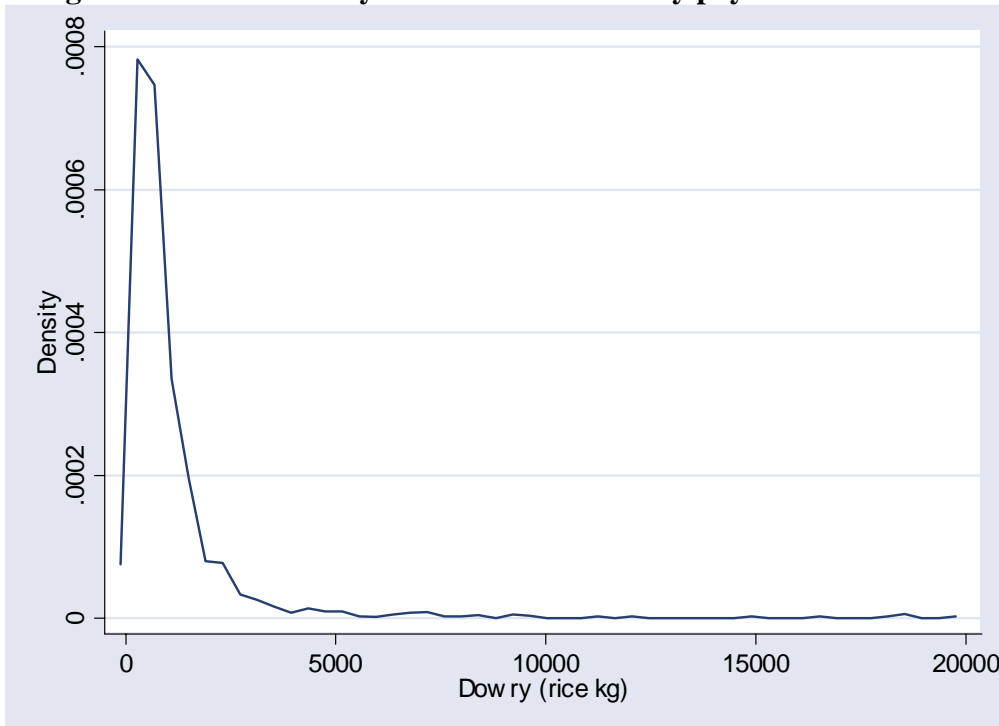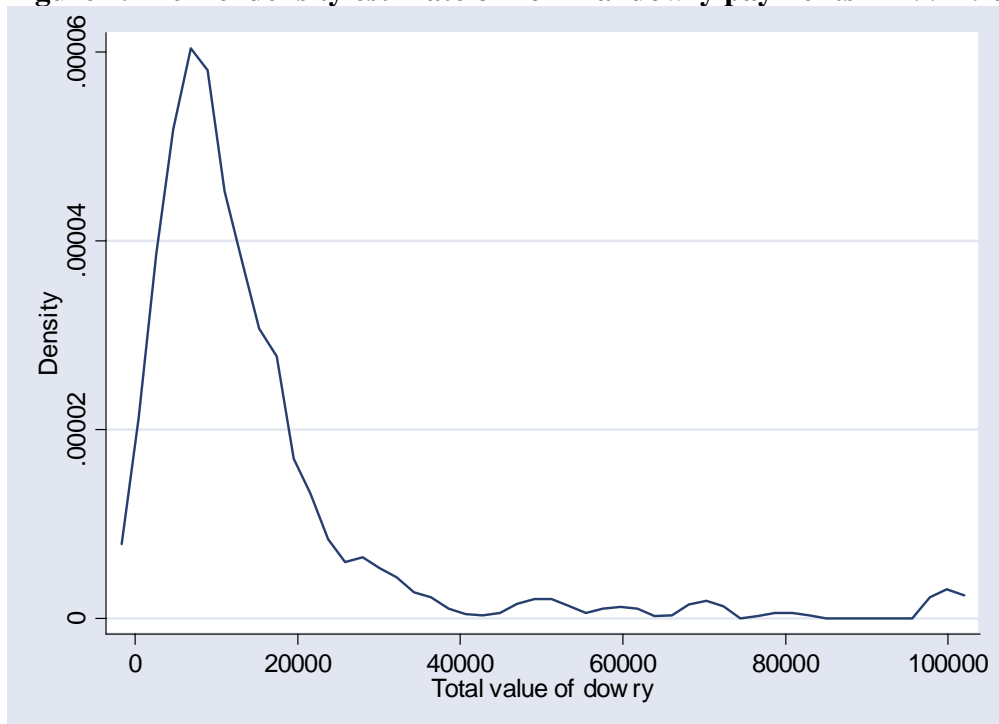

Figure 2. Evolution of dowry in real terms

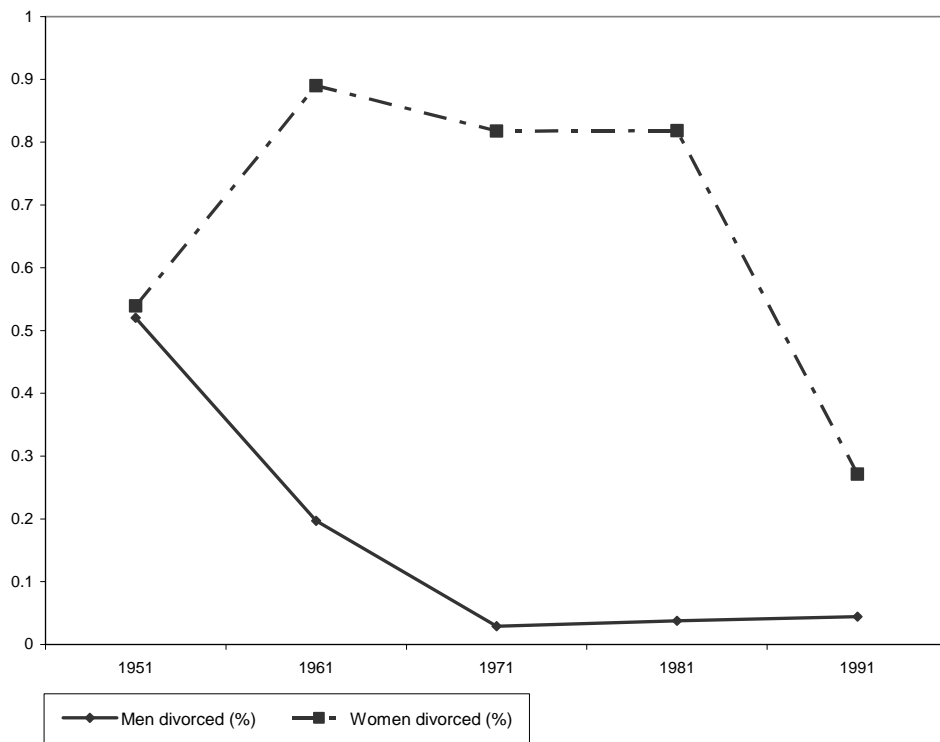**Figure 3. Kernel density estimate of real dowry payments 1931-1996**

Note: four observations for which dowry is larger than 20,000 kg have been dropped.
N=966 observations are available

Figure 4. Kernel density estimate of nominal dowry payments in 1992-96

Note: N=276 observations are available.

Figure 5. Female and male divorce rates, Comilla district, 1951-1991

Note: age 10 years and above. Source: author's calculations using data from the Census of Pakistan and the Census of Bangladesh.