

MARITAL PAYMENTS: DO DISTANCE AND RELIGIOUS IDENTITY MATTER?

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Abstract

This paper presents novel data and results on the relationship between marital payments, distance and religious identities, specifically in reference to the dower. I find that distance and religious identity are significant factors that affect the bargaining of the *mahr* in Islam, thus affecting the socioeconomic standing of the bride within the marriage. A distance of 1000km has an average effect of a 10% increase in the dower, while religious identity has an approximate 56% larger effect. I also test to see if the Punjab Marriage Functions Act 2003, which restricted marriage venue, food and time, has any consequential impacts for women's right to the dower. The results show that the law has had a significant effect in increasing the amount of the *mahr* negotiated at the time of marriage.

JEL Codes: J12, J16

1 Introduction

Within various cultures, the decision making process leading to marriage has become intertwined with exchanges before and after the marriage, sometimes between the two individuals, or between their families. *Dowry*, most commonly known in this discourse, is the transfer of in kind gifts, assets or cash from the bride's family to the groom's family (sometimes to the groom and bride). The *brideprice* is a similar transfer from the groom's family to the bride's family. Another distinction in marriage payments is a *groomprice* which is specifically paid to the groom from the bride's family but is discussed in literature under dowry. Least known category within marriage transfers is the *dower*, which is the transfer from the groom to the bride. This chapter attempts to explore the dower using a novel dataset that has variables which have not yet been considered in this area of economics literature. Using this data, I test how an interesting policy affects the dower.

Brideprice has been observed as the most prevalent marriage payment from Murdock's (1967) World Ethnographic Atlas of societies (Murdock 1981); (Anderson 2007), while less than 4% of these societies practice dowry. However, dowry has received significant attention in research due to its existence amongst the heavily populated regions of Europe and Asia (Anderson 2007). In some societies, both dowries and brideprice coexist, such as in China and Taiwan (Anderson 2014). Within early literature, the distinction between brideprice and dower was ignored and hence the term brideprice was used to refer to societies that also practiced the *dower*. In literature today, the *dower* is classified as the third form of marriage payment different from a brideprice¹.

In Arabic and in Islamic terminology, the dower is known as the *mahr* or in some cultures as the *mehr*. It is stipulated to be no less than a certain amount² and has no upper bound. There are two parts to the *dower*, one that must be paid promptly at the time of marriage and one that is deferred. The amount or ratio of deciding between

¹The dowry and the brideprice have evolved through time due to economic forces within cultures and vary usually in amounts and requirements.

²This amount varies in Islamic understanding and is based on historical precedent to be 2.975 grams of silver, Muslim (1426).

the deferred and prompt varies and is at the discretion of the two families negotiating the marriage contract. The *dower*, though less mentioned compared to dowry, is practiced significantly across the world. Of the total projected world population of 2020³, Muslims are expected to constitute approximately 25% (Center 2011) with the highest concentration of Muslims in the Asia-Pacific region and South Asia. Within this large group of people, the dower or *mahr* is practiced almost universally.

The global Muslim population is expected to grow faster than any major religion (Center 2015), nearing equal shares of the world population of Christian faith by 2050. Considering this growth, the practice of the *dower* is expected to increase. Understanding the *dower* is important and would provide insight into behaviour around Muslim marriages. There is no understanding or study of trends in the dower while research continues to discuss plausible explanations to the trends in increasing dowry and decreasing brideprice. Data on the *dower* is sparse, based on few surveys (Ambrus et al. 2010); (Anderson et al. 2020), and administrative data is hard to gain access to. For this paper, I have collected a fraction of the administrative marriage data that exists in Pakistan.

This data is unique and consists of marriage contracts, which are registered with the municipal authorities in Pakistan. Although this data does not hold comprehensive information about the bride and groom, it does present insights into aspects that have been neglected to date. Specifically, this dataset holds information on bride and groom home locations that I use to understand spatial distribution as a determinant with respect to the dower. Using this data, I attempt to understand some of the costs that a bride faces within an arranged Islamic marriage better in the light of the dower. In an extra step, I attempt to see if a unique policy on marriage expenses has any effect in lessening dower payments.

My results show that physical distance between the bride and grooms family can be a significant determinant for the dower increasing the average by 9% for every average

³The estimated world population in 2020 is 5.8 billion according to Pew Research Center's Forum on Religion and Public Life (Center 2011).

increase of 1000km. This follows intuition that families may determine the *mahr* to cover costs of marriage migration. Most significant is the effect of religious identity on the *mahr*, with a greater than 50% increase on the average *mahr* by holding a religious identity. Our results from exploring the policy show that by making weddings more standardized, a rise in the *mahr* is seen and a less emphasis is placed on the religious identity. This indicates that the policy makes it easier for families to pay more *mahr* and allow for better bargaining power of women in marriages.

Section 2 provides a literature review that highlights important papers within the marriage payments literature and sheds some light on the research already taken place surrounding the dower. In section 3, I provide a background explanation of the context and section 4 presents a deeper understanding of the data and summary statistics. Section 5 discusses a graphical snapshot of the data and section 6 presents OLS and fixed effects results. Section 7 concludes with some possible avenues for future research.

2 Related Literature

Decision making and family formation has been structured through two formative methods in literature. The first stems from [Samuelson \(1956\)](#) consensus and [Becker \(1973\)](#) altruist model of the family as a unit decision maker. Becker's research remains the pioneering work for research in marriages and family economics. The basic competitive model of the family (Becker's) is based on the gain in marriage as opposed to remaining single. Marriage payments in Becker's seminal work were understood as pecuniary transfers that helped clear the market.

The second branch of literature encompasses collective based models, formally introduced by [Manser and Brown \(1980\)](#) and [McElroy and Horney \(1981\)](#) as cooperative bargaining models based on the Nash bargaining solution in the presence of a divorce threat point⁴ ([Lundberg and Pollak 2008](#)). Models belonging to the non-cooperative

⁴that represents the maximum utility attainable outside of marriage. This is also considered the outside option. The collective approach by [Chiaporri \(1988\)](#) aims to generalize previous models by Manser-Brown

bargaining set show that they sustain Pareto optimal equilibria through the threat of punishment and focus on self-enforcing equilibria [Chiappori \(1988\)](#), [Lundberg and Pollak \(1994\)](#). More recently, theory has attempted to bring non-cooperative bargaining models and Nash bargaining models together by separating between short term and long term decisions ([Konrad and Lommerud 2000](#))⁵. In addition to these various discussions on marriage models, researchers have looked at other ways of understanding the marriage contract decision such as distribution of property rights ([Hamilton 1999](#))⁶. [Matouschek and Rasul \(2008\)](#) test different hypotheses to better evaluate the role of the contract between spouses. They find that the prominent reason couples sign a marriage contract is as a commitment device⁷.

Focusing on marriage payments, *dowry* and *groomprice* are two type of payments from the bride’s family at the time of marriage. Between the two, dowry is paid to the groom’s family and groomprice is paid directly to the groom. In most cases, this distinction is hard to make, payments can be easily shared amongst the bride and the groom. In other cases, dowries have evolved in to a mixture of types. Some examples in literature are able to bring specific cases in Europe around the 15th to 17th century to light as examples of stricter groomprice practices ([Anderson 2007](#)). However, since dowry practices are more prevalent in modern day cultures, the study of this practice and its evolution has been more important for family economists today.

The first explanation for the rising trends in dowries in South Asia began with the “marriage squeeze” explanation ([Rao 1993](#)). Rao’s explanation showed that a rising surplus in women in the marriage market through population growth was contribut-

and McElroy-Horney by presenting the “collective rationality” hypothesis where outcomes are Pareto efficient and there exists a “sharing rule” between family members.

⁵Other research extends the discussion on marriage models by building in labor supply ([Chiappori et al. 2002](#)), fertility ([Rasul 2008](#)) decisions.

⁶Through a transaction cost framework, Hamilton discusses the distribution of property rights between spouses. He finds that contracts help those individuals where transaction costs are higher at the time of marriage (in terms of the degree of mismatch) and helped couples towards larger production of jointly produced goods ([Hamilton 1999](#)).

⁷Other researchers consider other models to explain marriage decisions such as [Vogl \(2013\)](#) explores arranged marriages within South Asia through a search model for grooms

ing largely to the the rising practice of dowry ⁸. In exploring 15th century Tuscany archived contracts, Botticini (1999) finds support that dowries served two purposes: as a payment and as an intergenerational transfer⁹. Botticini (1999) present a theory consistent with the standard economic model of dowries but show that in a specific environment, dowries are optimal. They show that dowries occur primarily in monogamous *virilocal*¹⁰ societies where altruistic parents use dowries to help resolve the free riding problem between siblings¹¹ (Botticini and Siow 2003). Their theory supports that disappearance of dowries happens through the development of labor markets as parents begin to make human capital investments and bequests similar for both daughters and sons.

Siwan Anderson's contribution is pivotal in bringing marital transfers forward within economic research. She finds that the dowry serves as a groomprice in urban areas of Pakistan, while in rural areas, dowries act as a pre-mortem inheritance ¹²(Anderson 2000). In another paper, Anderson compares dowry practice in India to that of England to find that there is increasing practice of the dowry in India (Anderson 2003). She argues that the key difference is the primary determinant of social class, wealth or caste ¹³. Researchers find that dowry violence (Bloch and Rao 2002),

⁸In response, Edlund shows the data supports dowries to be an increasing method of intergenerational transfer for brides by their parents (Edlund 2000). In contrast to Rao, Chiplunkar and Weaver (2019) explore different prominent theories of dowry inflation. They find support to show the dowry as an evolving groomprice as a result of the increasing differentiation in groom quality. Their model is based on the model from Anderson and Bidner (2015) research on property rights within dowry.

⁹As a woman's age increases, dowry size increases significantly; at a younger age, brides are expected to have a greater contribution to the marital household. Also, where brides married "down" into groom families, dowry sizes were larger and hence parents' altruism towards their daughter was measured by the size of the dowry.

¹⁰Virilocal societies are where the grooms do not leave their parental home but the daughters leave their parental home to reside with their husbands.

¹¹This free riding problem: the sons stay at home with the parents and have a comparative advantage in working with household wealth and assets, while the daughters move out to their husbands residence. Bequests as opposed to dowries for daughters are inefficient for sons, and incentivize too little effort. Thus this is mitigated through dowries.

¹²Brides migrating from one rural area to another have a significant probability of receiving a dowry, however, this is not significant for brides migrating into urban areas. The understanding provided are traditional tribal practices or close cross-cousin marriages as important influences.

¹³Anderson (2003) model predicts that as caste breaks down, dowry payments decline supporting Botticini and Siow (2003) in linking dowry disappearance with aspects of development. Higher emphasis on caste or religious identity is correlated with higher dower practice.

fertility decisions (Alfano 2017) have also been substantial factors in dowry and dowry bargaining in India¹⁴.

The second category of transfers move in the opposite direction from the groom's family to the bride or the bride's family. The *brideprice* is a payment to the bride's family while the *dower* is a payment that is the property of the bride. In literature, the distinction was not made until more recently. The difference between the two became more apparent when the dower was exclusively found to be prevalent in Islamic societies and brideprice was selectively observed in Africa and parts of South-east Asia (Anderson 2007). Brideprice was commonly observed in kinship and agricultural based societies correlated with polygyny¹⁵ (Anderson 2007). The brideprice was also found to help families with consumption smoothing when adverse income shocks occurred (Corno and Voena 2016)¹⁶. As income shocks are experienced, the hazard into early marriages is lower (Corno et al. 2016). Bau et al. (2019) show that brideprice families respond to educational investments better. Other early papers from disciplines in sociology also study the brideprice and the dower (Saroukhani 1979). However, the first exploration of the brideprice and the dowry was presented by Nunn (2005) in an unpublished paper. Using a game-theoretic framework, he shows that given certain conditions, dowry and brideprice can co-exist as an equilibrium.

The earliest interest in *mahr* and dower is recorded through an analysis of marriage contracts from Pakistan in 1965 (Korson 1967). Korson shows the variation in *mahr* amounts according to class structure (upper, middle and lower) and concludes that the *mahr* provides support in keeping families together and serves as a financial security for women in Pakistan. Of the handful papers that address the *mahr*, the first paper to

¹⁴Bloch and Rao (2002) take an insight into dowry violence in India, where they show how violence can be used to bargain for a higher dowry. Also, a higher number of born sons increases the husband's satisfaction and leads to less violence within marriage. Alfano (2017) shows that where sons are cheaper for parents to have, altering costs through changing legislation effects fertility outcomes, families alter their fertility decisions.

¹⁵Such societies rarely needed to attract wealthier status or lineage and hence the brideprice amounts were uniform across families merely to maintain alliance amongst kin.

¹⁶With adverse income shocks, families were found to marry their daughters earlier at younger ages and bear children earlier.

model the Islamic dower with dowry in a marriage model were [Ambrus et al. \(2010\)](#)¹⁷. The paper stipulates that families practice dowry as a measure of compensation for the *mahr* to the groom.

A recent paper looks into how the *mahr* and dowry coincide within the Bangladeshi marriage market. They observe how *mahr* and dowry respond to negative natural experiments such as the Independence War of 1971 and a famine as well as positive shock such as the Green Revolution¹⁸ ([Chowdhury et al. 2020](#)). Their findings show a positive effect on the dower post Green Revolution but a negative effect on the dower and the dowry following the famine. While dowry and brideprice are cultural practices across societies, the dower for Muslims is compulsory for a legal marriage. [Anderson et al. \(2020\)](#) exploit this feature of the *mahr* to build an understanding of the interaction between culture and institutions. Through unbundling of norms, they show that inside norms (the dominance of men over women inside the household) are a substitute to marital institutions¹⁹. While data is limited, the main contribution in understanding the dower has been theoretical. In accessing newer administrative data, the main contribution of my chapter is to help expand the literature on dower and explore novel explanatory factors of the *mahr*.

3 Background: Islamic Marriages in South Asia

Marriages in South Asia are generally arranged by the parents of the bride and the groom. It is common to have a matchmaker or a common relative/friend help in facilitating the first interaction, where the groom’s family visits the bride’s family at the bride’s residence. This first interaction is where the bride is introduced to the groom’s family and both families get an opportunity to consider the match. After the meeting,

¹⁷They focus on the South Asian context where Muslims practice the dowry and the dower, together at the time of marriage. Within the model, *mahr* is a divorce contingent payment similar to a severance payment in an employment contract as insurance ([Ambrus et al. 2010](#)).

¹⁸The Green Revolution was the introduction of modern agricultural technologies that led to a substantial increase in agricultural productivity.

¹⁹They study how gendered norms interact with marital institutions. They find that inside norms are strengthened, male dominance flourishes inside the household, when deferred dower is lower. Outside norms (the dominance of men over women in the public sphere) are positive determinants ([Anderson et al. 2020](#)).

if the groom's family approves, the bride's family is invited to accept the proposal. The bride's family is invited to the groom's residence and the date for the engagement or marriage is decided.

The responsibility of arranging the *nikkahkawan*²⁰ is usually with the family of the bride. In this arrangement, the *nikkahkawan* explains the parts to the contract to the bride's family and allows them to discuss the details with the groom's family. Of these, the *dower* is negotiated and agreed upon. In Islamic terms, the *dower* is referred to as the *mahr*. Approximately 96% of the population in Pakistan follow the Islamic faith (Statistics 2017). Thus, the practice of paying the *mahr* is almost universal within the country as institutionalized by Islam and thus by the government. There are two parts to the *mahr*; the first is the prompt *mahr* and the second is the deferred *mahr*²¹. The prompt *mahr* is known in Arabic²² as "*muqaddam; muajjal*" is specified to be paid with the marriage or on demand. The deferred *mahr* is known as the "*mu'akhar; ghair muajjal*" which is payable on the dissolution of the marriage (Ambrus et al. 2010); (Chowdhury et al. 2020).

The contract is usually prior filled before the day of the marriage ceremony. The registrar asks the bride in the presence of witnesses, if the bride agrees to the marriage and the dower amount. This is confirmed three times and the bride signs the contract. The registrar then approaches the groom to ask the same, if the groom agrees to the marriage and accepts to pay the dower amount. After confirming three times, the groom signs the contract. A prayer is led by the registrar for the future of the marriage and the families. This completes the marriage contract ceremony and the registrar registers a copy of the contract with the local union council where the bride resides. These sequence of events are the usual occurrence in marriage procedures in Muslim marriages in South Asia.

²⁰The *nikkahkawan* is a religious clerk/registrar that is officiated to perform the marriage ceremony or the "nikkah" (signing of the marriage contract).

²¹The division between the two types of dower or whether to have one type or the other rests mostly with the parents of the bride and groom.

²²The Quran, Holy Book for Muslims is originally written in Arabic. Hence, most Islamic terms are Arabic and have been preserved in understanding through the language of the Holy Book.

4 Data and Empirical Strategy

The context of this paper is South Asia, specifically Pakistan. Pakistan is divided into 4 provinces, a federally administrated area and a disputed territory²³. Each province has administrative authority and delegates certain municipal responsibilities to the smaller tiers. The most populous province of the country is Punjab and its capital is Lahore. Data for this paper was collected from Lahore in 2018. Lahore is the second largest city in the country²⁴ and the historic cultural centre of the country. Provinces are further divided into districts. Each district is divided into smaller units known as *tehsil* which usually encapsulate a town. Within each tehsil, a number of union councils are designated with different responsibilities across the provinces (**Government and Department 2001**). In Punjab and other provinces, one of the tasks of the union councils is to maintain a database of vital statistics, i.e. births, deaths, marriages and divorces.

Lahore is a district that is further divided into 9 towns²⁵. Each town houses between 23-41 union councils²⁶ for a total of 274 union councils in Lahore. These union councils collect and archive a copy of each marriage contract that is registered at the union council. The database maintenance system is archaic, with shelves and files for contracts to be put away at each UC (union council). Sorting through these can be laborious for UC workers and thus access to this data is difficult. In 2015 with the amendment to the UC list and structure, many newer UC jurisdictions were setup. Due to difficulties in records being accessed, 4 towns and their representative union councils were identified and visited for collection. When visiting each UC, it became apparent that there was no established protocol in data archiving.²⁷ The data was collected in

²³The four provinces are Punjab, Sindh, Balochistan and Khyber Pakhtunkhawa. Islamabad is the capital of the country and is located within a federally administrated area. The territory of Gilgit-Baltistan is under Pakistan's administrative authority but is a portion of the disputed Kashmir territory between India and Pakistan.

²⁴Karachi is the most populated city of the country, followed by Lahore.

²⁵see Appendix, Table 2

²⁶These were amended and updated in 2015 based on the **Government and Department (2001)** ordinance law.

²⁷Some UC's would register the entire contract only, while others would also maintain a condensed register of each marriage contract. Some UC's would be organized and able to present contracts as well as registers while some had one or the other. Therefore, most records recorded the total dower amount without the

the form of digital pictures of the available contracts and registers. Examples of the marriage contract in English and in Urdu are shown in Appendix. The picture data was then taken and transcribed from the Urdu language into a database format for analysis.

A total of 2590 contracts were collected from Lahore in 2018, with varying *mahr* amounts. The reported *mahr* is the total registered dower amount for each marriage contracted. Table 3 presents a short snapshot of the data. Of the total contracts, 2325 contracts report the *mahr*, an average of the sample is approximately Rs. 100,000. This is a reasonably large amount which is pulled up due to some extremely large *mahr* amounts and the median is much lower around Rs. 10,000. For reference, in the year 2000, the GDP per capita was approximately 42,000 Pakistani Rupees, and the GDP per capita in 2018 was around 62,000 Pakistani Rupees. This right skewed distribution of the *mahr* towards the lower amounts and such larger outliers makes it harder to study the dower amounts. Hence, we take the log of the variable here forth²⁸. The sample holds contracts over a large range of time, between 1982 to 2018. Since accurate dates are provided with the contracts, specific month and year effects are easily considered over this time span.

4.1. Distance and Religious Identity The novel aspect of this database is the address of each bride and groom’s home residence reported by each marriage contract at each UC. Using this information, the neighbourhood of the bride and the groom is identified. This information is then coded into GIS Mapping software to identify locations geographically. The software is used to measure and estimate distance between the bride’s and the groom’s residences. This distance is unique here and helps understand spatial distribution of brides and grooms unlike any other datasets on marriages. The context of this distance variable is interesting in the case of marriages in Pakistan, where the bride’s primary home is her father’s home before the marriage. However, once she is married, she “migrates” to the groom’s residence whether that is in the same neighbourhood or much farther. Creating a distance variable, we are able to consider whether the dower has a structured relationship with spatial variables.

division between deferred and prompt dower.

²⁸see Appendix, Figure 4

The spatial spread of brides and grooms is very interesting. According to the municipal authority in Pakistan, the marriage contract is registered at the union council that is assigned to the bride’s residence²⁹. The distribution of grooms is wider across the country, and this is reflected in the data, only 70% reside in Lahore. Most of the grooms remain within the province Punjab, roughly 91% with the rest in other provinces and outside of the country as well³⁰. The city of Lahore has grown over time, and thus neighbourhoods differ in social characteristics. Some are affluent, and others have lower literacy levels. Income structures vary between neighbourhoods and evidence of this is seen through the differing mean dower amounts by union council³¹.

Marriage contracts hold important information within names that are usually overlooked. Unique information can be extracted from the names of the fathers, bride and groom. Using family names or common last names between fathers of the bride and the groom, I create a variable to establish that the marriage is between family relatives. Close kin matching is a true reality amongst families in South Asia. Another unique variable can be determined through names, by observing special prefixes. The prefix “Syed” (male) or “Syeda” (female) is usually written before the first name and is used by those families that ascribe their lineage as a direct descendant of the Prophet Muhammad³². This prefix is used by Sunni and Shia Muslims alike where their lineage can be traced back³³. The importance of the “Syeds” is only significant amongst Muslims in South Asia. Muslims across the rest of the world do not assign significance to this nor is the prefix term used. The Muslims who do ascribe importance to this prefix and identity, derive this understanding from a *Hadith*³⁴. The *Hadith*³⁵ indicates that

²⁹To check whether this is actually the case, we can confirm bride locations. This is checked in Table 3 where 97% of the brides in this sample have residences in Lahore.

³⁰Figure 5 shows the bride and groom spatial distribution through maps visually. The brides are concentrated in Lahore and the blue circles representing grooms are spread throughout the country.

³¹See Appendix, Table 6

³²The Prophet Muhammad (peace be upon him) is the revered Messenger that Muslims follow and acknowledge as the individual to be granted the Holy Book, Quran.

³³Many families have actual family trees constructed to be presented as proof to show others.

³⁴Hadith are the sayings and teachings of the Prophet Muhammad (peace be upon him) that have been passed down through text and actions for Muslims in current times.

³⁵The Hadith used to support this states “Abu Huraira reported that Hasan b. ’Ali took one of the dates

any family descendants from the family of Prophet Muhammad (pbuh) are elevated in ranks. Using names, I find whether the groom’s or bride’s family ascribe to this religious identity.

This data is interesting and unique. In the Appendix, figures and tables present some insight into the data. Heatmaps presented show averages of various variables by union councils in Lahore. The blue coloured gradient sections of the city represent the union councils in our data. The rest of the city of Lahore is left as a pale green and was not accessible. The Model Town (Gulberg Town) union council has a much higher average distance between brides and grooms. Most households in this region of the city travel greater distances and are wealthier. Thus being able to afford the costs of a long distance marriage proposal. We see this also reflect in the higher average *mahr* in Figure 8 for the Gulberg Town. Similarly, wealthier households can afford greater education levels for brides, resulting in higher ages at the time of marriage. We see this in the higher average age of the brides in Gulberg Town, with the lower class household areas showing early average marriage ages for brides. This can also be seen for men. Average ages for men are lower in the lower and lower-middle class towns, while the higher status areas show higher average ages for men at the time of marriage.

5 OLS Estimation

Starting with simple OLS estimates, I estimate and analyze the relationship between the basic variables present in the dataset. The equation below helps summarize the estimations reported in the results section. Each marriage contract is indexed by i . The dependant variable Y_i is the log transformation of the *mahr* amount in Pakistani Rupees. This is regressed against the distance variable which is the number of km (in thousands) between the bride and groom’s residence. X_i represents bride specific characteristics and Z_i represents groom’s specific characteristics. η_{mi} and η_{yi} are the month and year fixed effects for each contract. ω_i represents the union council fixed

of the sadaqa and put it in his mouth, whereupon the Prophet (pbuh) said: Leave it, leave it, throw it; don’t you know that we do not eat the sadaqa? (Sahih Muslim 1069a: Book 12, Hadith 210)”.

effects. ϵ represents the error term.

$$Y_i = \beta_0 + \beta_1 Dist_i + \beta_b X_i + \beta_g Z_i + \eta_{mi} + \eta_{yi} + \omega_i + \epsilon_i \quad \forall \quad i = 1, \dots, N \quad (1)$$

5.1. The Punjab Marriage Functions Act 2003 This policy was implemented in 2003 in the province of Punjab of Pakistan in the attempts to curb the rising ostentatious displays and wasteful expenses surrounding marriages. Prior to this law, weddings would be grand events with thousands of guests, multiple festivities running late in to the night and serving elaborate banquet feasts. Through this law, the provincial government placed curfew for events and restricted caterers to serving only one main entree and one dessert option at any wedding event. There is no understanding of what effects or spillover effects resulted of this law other than newspaper articles validating families and marriage halls adhering to the law. I test using a before and after estimator to find whether the law had an effect on the *mahr* shown below in equation 2 by the dummy for marriages Post 2003.

$$Y_i = \beta_0 + \beta_1 Dist_i + \beta_2 Post2003_i + \beta_b X_i + \beta_g Z_i + \eta_{mi} + \omega_i + \epsilon_i \quad \forall \quad i = 1, \dots, N \quad (2)$$

In an attempt to understand the effects of the law, it is helpful to study the average trends in the *mahr* over time. The log of the average *mahr* for the contracts in each year are plotted below in Figure 1. The trends show an increase over time in the *mahr*. The next Figure 2 shows the log of the average *mahr* between Syeds and non-Syeds. Before 2003, the difference in Syeds and non-Syed marriages is pretty clear; however, the difference appears to be removed from 2003 onwards.

6 Results

The table 1 presents the results of the empirical strategies described in the previous section. In the first column are the baseline results of the OLS estimation of the variables of interest on the *mahr*. It is important to see that distance has an extremely significant effect on the *mahr*, approximately 10% in the *mahr* amount for every 1000 km distance. A 1000 km average distance would represent the distance between major

Figure 1: Average Mahr for each year in the dataset (log)

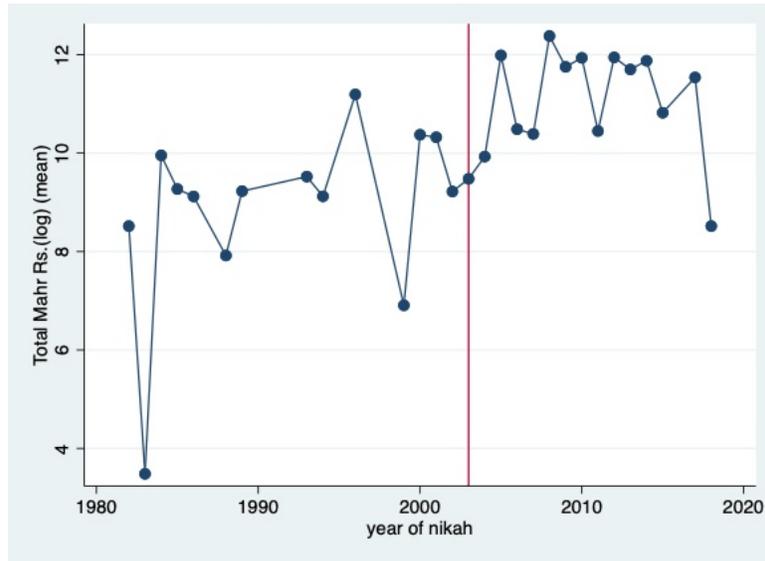
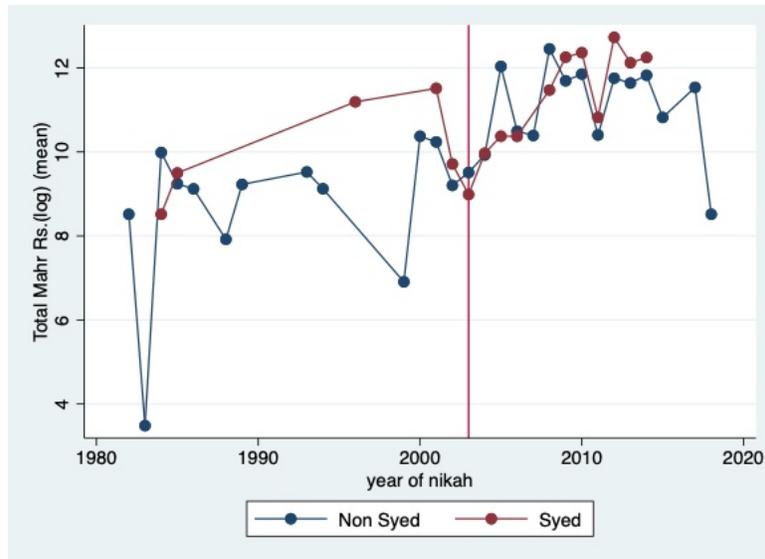


Figure 2: Average Mahr for each year in the dataset by religious identity (log)



cities of neighbouring provinces.

Similarly, groom's age and bride's age are important and positively related. With older grooms and brides, the amount also rises significantly. Intuitively, it follows that grooms from large urban locations are able to afford and pay higher *mahr* amounts. The largest effect that is quite interesting to find is the religious identity, Syed effect. A marriage where at least one of the partners is a Syed has an average effect of 56%

Table 1: Mahr Results

VARIABLES	Mahr Rs(log)		
	(1)	(2)	(3)
Distance '000km	0.10*** (0.03)	0.09*** (0.03)	0.09*** (0.03)
Groom Age	0.10** (0.04)	0.11*** (0.04)	0.10*** (0.04)
Groom Age (squ)	-0.00* (0.00)	-0.00** (0.00)	-0.00** (0.00)
Bride Age	0.11** (0.05)	0.14*** (0.05)	0.14*** (0.05)
Bride Age (squ)	-0.00 (0.00)	-0.00* (0.00)	-0.00* (0.00)
Groom (urban)	0.29*** (0.11)	0.26** (0.11)	0.26** (0.11)
Syed	0.56*** (0.13)	0.55*** (0.13)	1.73*** (0.42)
Post 2003		0.37** (0.15)	0.42*** (0.16)
Syed*Post 2003			-1.26*** (0.44)
Observations	2,131	2,131	2,131
Adjusted R-squared	0.25	0.23	0.23
Month and Year dummy	Both	Month	Month
UC dummy	Yes	Yes	Yes

Robust standard errors in parentheses

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

higher *mahr*. This appears to be the dominant factor in determining the *mahr* as compared to the other variables of interest.

The next two columns in table 1 show the results of tests of the Marriage Function Act of 2003. Column 2 shows how the effects for the other variables as well as the the indicator for marriages that take place after 2003. A simple estimator shows marriages post 2003 have a 37% higher effect on the *mahr*. The last column introduces an interaction between the time variable (post 2003) and Syed (religious identity). As the trends graph indicated, the post 2003 marriages show a 126% drop in *mahr* amount for Syed marriages. The true mechanisms of this shift in religious identity becoming less important after the policy is hard to establish with our data. The speculation is that

with less extravagant public weddings, individuals with different religious identities are able to spend more towards the *mahr*. These are important welfare implications for women since the *mahr* directly holds significance for bargaining power within marriages. A higher *mahr* makes it more costly for the husband to initiate divorce.

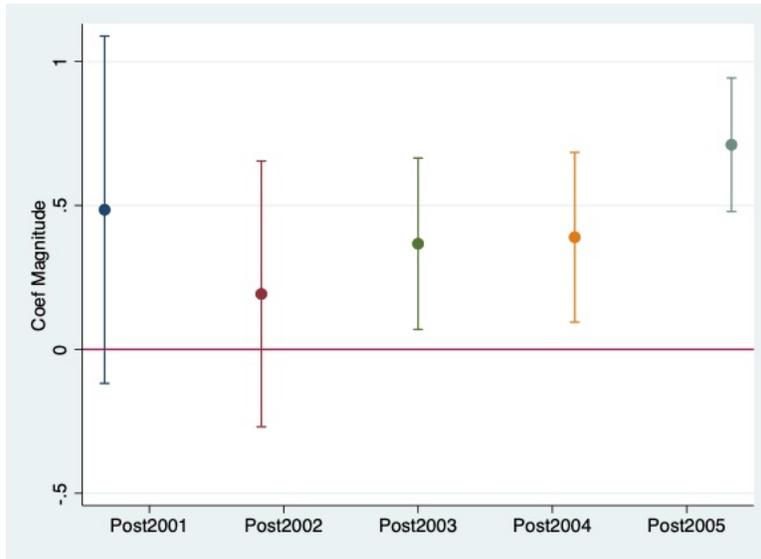
7 Discussion

The primary assumption being made here is that the bride and the groom families are unknown to each other and thus adjustment costs are translated into a high *mahr*. One of the primary concerns with this marriage data are close-kin matches which are common in Pakistan and across South Asia. Although a close kin identifier has been constructed in the data using names, this is only an attempt to address the concern. A potential bias arises where brides are married into related families (with cousins for example). A family relative will be known and the costs of adjustment would be lower, thus the negotiated dower amount would be expected to be lower given another groom who is not a relative but resides as far away as the related groom. This creates a negative selection bias on the expected estimate, indicating that the true effect must be larger. Alternatively, it may be argued that relatives living in farther different cities or provinces of the country while known but may be truly “unknown” in their daily activities to the bride who is migrating. Hence parents of the bride may fear similar costs of adjustment as any other “out of the family” proposal. Here, in this paper, I assume that all families, whether the families are related or not, are foreign in their activities while living at a distance. Thus factoring distance into the decision of the *mahr* becomes important for the bride.

There are concerns tied to the sample selected and the data recorded within these contracts. The first concern are the omitted variables regarding individual and family characteristics that are not recorded within the contract. Although neighbourhoods are known, wealth and income details are absent. Grooms from richer families can afford to give higher *mahr* and thus may look for brides within a larger distance radius. Also, there is no information on education attained by the bride and groom in these

contracts. This is particularly important for understanding the effects of the Marriage Functions Act. Other datasets with average enrolment and income details exist but not at the union level at which these contracts have been collected. Other family characteristics such as family size and siblings would also be helpful in understanding dynamics within the household, also unobserved here.

Figure 3: Anticipatory and Lagged Effects: tests for Marriage Functions Act



This paper is the first paper that attempts to study the law in Pakistan; however, implementation of such a law is tricky. While the law was implemented strictly for marriage halls and venues, the implementation fell short in personal spaces. With the law attempting to curb extravagant expenditures, it did not deter individual gatherings in private farmhouses and land from large ostentatious displays. In an attempt to understand the Marriage Functions Act better, I test placebo runs of the law for two years before and after 2003. Figure 3 shows the before-after estimator coefficient for each placebo run including the original test for 2003. In the years prior to 2003, we find there is no significant effect but a consistently larger significant effect is found in the years following 2003. Since we are not able to control for additional variables or find other important aspects to explain this at the moment, it is hard to establish what is the driver of this effect. Political changes were also taking place within the province and the country around these years and it is hard to disentangle the exact

effect of the law with the current data. However, till date, there is no empirical study or observation that has tested to see if the marriage functions law has had important development effects on the populations behaviour around marriages.

8 Conclusion

In this chapter, I discuss some key elements of the *mahr*, bring novel data to light and discuss results from the data. Most of the research on marital payments has been on Bangladesh and India. This paper brings in the discussion on the dower from another country's context in South Asia: Pakistan. The estimates help understand some of the associations between variables not yet explored within literature. In particular, spatial discussions have been lacking within marital payments. The association of distance with payments has not been possible before with other data. Distances characterize costs in decision making and in the case of arranged marriages, distances represent greater costs of adjustment from the bride. The coefficients are not causal estimates and selection bias is expected. A potential bias arises where brides are married into relative families (with cousins for example). Certain location controls and time effects are added to control some unobserved factors.

Similarly, there is no discussion with regards to religious identities and marriage payments in different cultures other than the Indian caste system. This paper highlights the importance and differences that may be observed amongst Muslim sects. However, for more conclusive discussions, comprehensive data is warranted. With marriage contract data, more information on individuals and households needs to be merged such as bride and groom's education level, wealth or income of the families, caste or religious identities. Other family characteristics such as siblings and occupation of the breadwinner are also helpful in understanding the true factors in determining the dower. With better comprehensive data, it will be possible to answer questions about how random events impact the *mahr*.

Exploring the heterogenous effects between *mahr* and welfare or marital outcomes

such as fertility, domestic violence, decision making power are important development related questions for developing countries where marital payments occur significantly. Many developing countries are in the process of implementing gender based development programs which would benefit from policy based recommendations that arise from such research. However, marital payments are also found to exist within developed countries and there is no data that can help us study how individuals in these countries respond to similar explanatory factors such as distance, religious and ethnic identities.

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9 Appendix

Table 2: Administrative Division of Towns and Union Councils in Lahore

Town Name	No. of Union Councils
Ravi	34
Shalamar	30
Aziz Bhatti	23
Data Gunj Bakhsh	34
Samnabad	31
Gulberg	25
Wahga	25
Allama Iqbal Town	41
Nishter	31
Total	274

Figure 4: Dower (log)

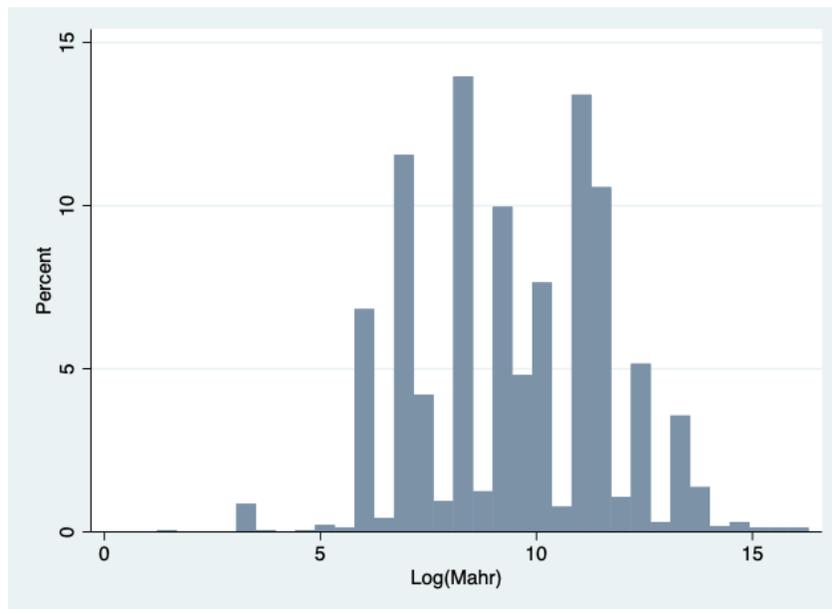
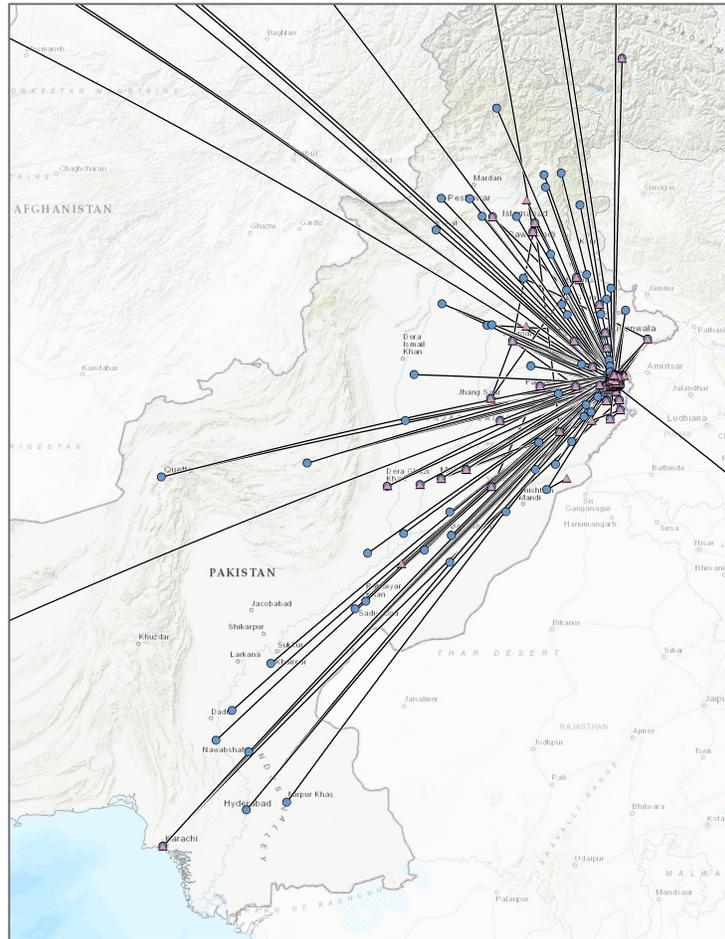


Figure 5: Distance between Brides and Grooms



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Table 3: Summary Statistics

	Contracts	Dower (Mahr Pak Rs.)	Distance* (km)	Contract year
N	2590	2328	2568	2559
mean		100459.8	228.4971	
median		10000	8.86	
max	2590	1.20e+07	18006.71	2018
min	1	3.39	0	1982
sd		462959.2	1354.63	5.80

*This is the distance between the bride and groom's residence as reported in the marriage contract.

Table 4: Geographic Spread of Grooms and Brides

	Grooms	Brides	Both Brides and Grooms
N	2590	2590	
Lahore	1799 (69.5%)	2516 (97.1%)	1768 (68.3%)
Punjab Province	2356 (91%)	2571 (99%)	2340 (90.3%)
Rest of Pakistan	112 (4.3%)	5 (0.2%)	0
Outside Pakistan	31 (1.2%)	3 (0.1%)	0

Table 5: Mean Dower amounts by Groom location

	Mean
Lahore	94904.11
Rest of Province	78292.87
Other Provinces	247284.2
Outside Pakistan	114005.7

Table 6: Means by Union Council (Lahore Town)

Union Council	Dharampura	Model Town	Ravi	Shadbagh
Town	(Aziz Bhatti Town)	(Gulberg Town)	(Ravi Town)	(Shalamar Town)
N	76	1,767	296	451
Dower (Mahr) (Rs)	35544.35	136949.9	32494.62	14588.69
Distance (km)	72.41412	303.1121	99.79496	47.12009
Syed Grooms	2%	89%	3%	9%

Figure 6: Contract year and Log(Mahr) by Union Council

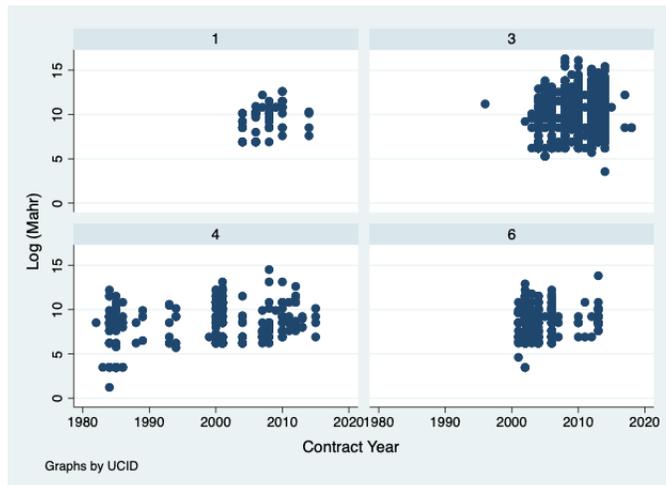


Figure 7: Brides age, Grooms age and Log(Mahr)

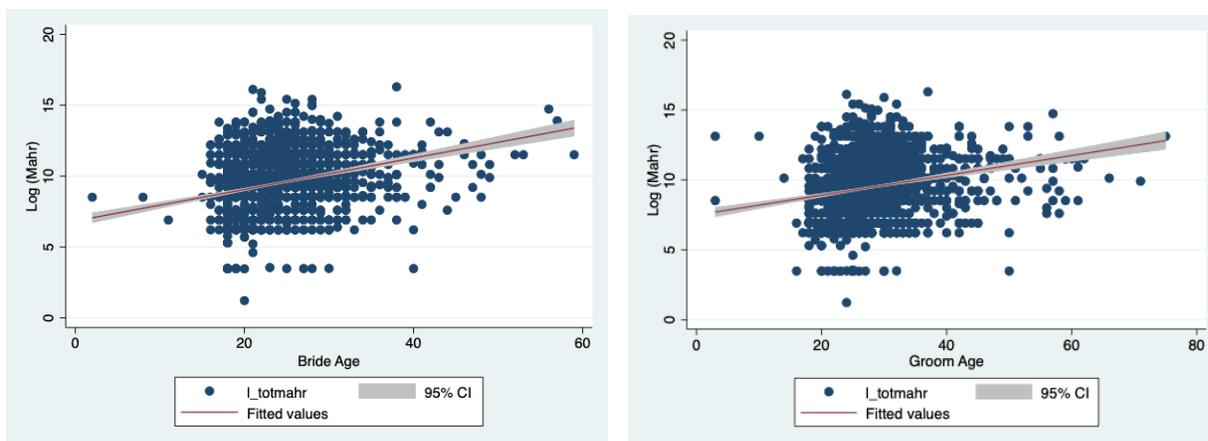


Figure 8: Average Distance (km) by UC

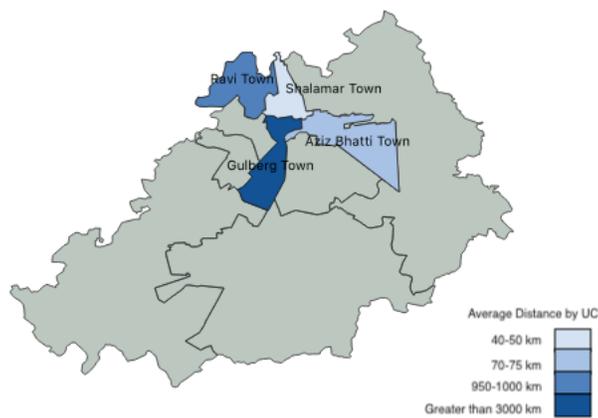


Figure 9: Average Mahr (Rs) by UC

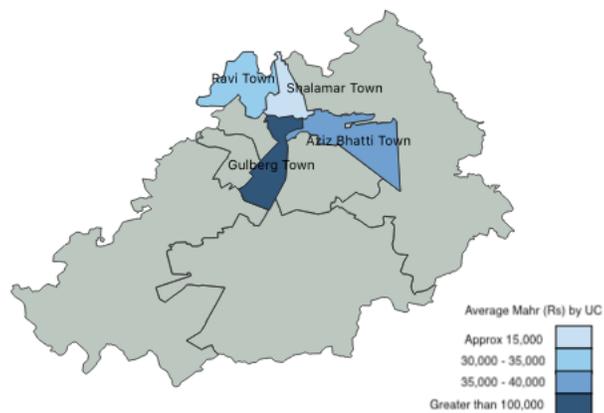
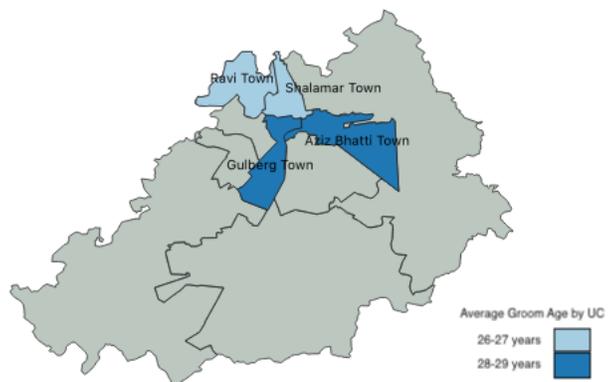
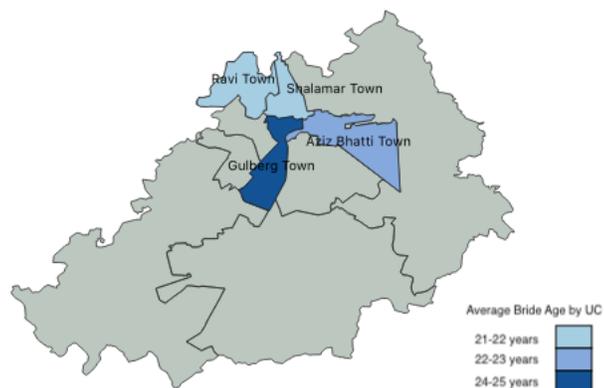


Figure 10: Brides age, Grooms age (average by UC)



Marriage Contract (*Nikkahnama*) A formal translation of the Urdu version of the marriage contract as follows:

1. Name of Ward, Union Council, Tehsil and District
2. Name of groom and his father and respective residence
3. Age of groom
4. Name of bride and her father and respective residence
5. Bride is maiden, widow or divorced
6. Age of bride
7. Name of Wakil³⁶ as appointed by bride, his fathers name and residence
8. Name of witnesses of the bride to appointment of the wakil, their father's names, their residence, and their relationship with the bride
9. Name of Wakil as appointed by groom, his fathers name, and residence
10. Name of witnesses of the groom to appointment of the wakil, their father's names, their residence, and their relationship with the bride
11. Name of witnesses to the marriage, their father's name and residence
12. Date of marriage/ niche
13. Amount of dower
14. Amount of mahr Moawajjal
15. Amount of mahr Ghair Moajjal
16. Whether any portion of dower paid at time of marriage
17. Whether any property was given in lieu of the whole or any portion of the dower, with specification of the same and its valuation agreed between the parties
18. Special conditions if any
19. Whether the husband has delegated the power of divorce to the wife, if so, what conditions
20. Whether the husband's right to divorce is curtailed in anyway
21. Whether any documents drawn up at time of marriage related to dower maintenance
22. Whether groom has an existing wife and he has secured the permission to contract another marriage
23. Number and date of communication conveying the groom permission to contract another marriage
24. Name and address of the person who solemnized the marriage
25. Date of registration of the marriage
26. Registration fee paid
27. Signatures of bride, groom, witnesses etc.

³⁶guardian or legal representative