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The Bridal Income and Education Effects on The Dowry
A Case Study in Rural Karnataka, India

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Abstract

This thesis studies the relationship between the magnitude of the dowry and the bride's education and income. Dowry is defined the gifts transferred along with the bride from the bride's natal family to the groom's household at the time of marriage. Gifts are traditionally also given from the groom household to the bride, the bride who will belong to the groom household after marriage. India has a long tradition of practicing dowry, and is therefore the host for this study. Dowry payments have come to be known as the number one reason for parents to rather want sons than daughters. The magnitude of the dowry is huge, this thesis confirm Rao's (1993) results that the dowry sometimes amounts to six times the annual income of the bridal household, which has negative impact on the savings patterns of the household. Data were collected from interviews I conducted in 2013 with households located in a rural village in Karnataka, South India. All 96 weddings included were conducted within the last five years. OLS-regressions were conducted to discern whether the bride's education and income are significant determinants on the magnitude of the dowry. Three different regressions were executed with the net dowry, the gifts from the bridal household and the groom household as dependent variables. Several explanatory variables, which capture the characteristics of the spouses and their households, were included. Based on the results from the regressions we conclude that the income of the bride has significant negative effect on the net dowry and gifts given by the bridal household, while her education is insignificant for all three equations. The results support Becker's (1981) theory of marriage payments occurring to adjust for the inflexibilities in the division of household commodities.

Key words: Dowry, Female Education, Female Income, Marriage Payments

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1. Introduction

1.1 Background

Dowry is reported as the number one cause for the unwantedness of daughters.

Srinivas, 2005

Marriage payments are practically extinct in most parts of the world, thus we might easily neglect it's existence. However, in populous India the dowry system continues to be a natural part of marriage negotiations, thereby the tradition might affect as much as a fourth of the world population. Dowry is defined to the gifts given from the bride's family to the bride, groom or groom's household, when the bride is transferred in the same direction as the gifts. The groom household will traditionally give gifts to the bride, however we need to consider the fact that it is ambiguous whether the bride will gain control of the gifts after marriage and since the bride will belong to the groom's household, they are in one way gifting themselves. (Botticini et. al, 2003, Dickemann, 1991). The transactions from the bridal household are often large and might exceed six times the annual household income, hence the magnitude of the dowry has great effect on the economic behaviour of households with daughters, which causes parents to not want daughters (Rao, 1993, Srinivas, 1984, Srinivas, 2005). Because of this strong affect on women there is an urgent need to study the dowry system and even though the dowry is negotiated on the household level, it is my opinion that it has external effect on the whole society, thereby it is not only a household problem but a problem of a nation.

Anderson (2003, 2007) concludes that dotal societies share a similar structure, such as being complex socioeconomic societies, conducting monogamous marriages. India fits perfect in to the description and even as India is modernizing marriages are still mainly arranged by the spouses' parents, which is common in dotal societies. Even as the practice of dowry has been prohibited since 1961 it remains rigid and Rao (1993) even claim that dowry payments are increasing. Andersson (2007) suggests that the caste-system has played an important part in preserving and even increasing the practice of dowry.

1.2 Purpose

The purpose of this thesis is to discern whether the bridal income and education are significant determinants of the magnitude of the dowry. Thus I intend to discern whether a woman can negotiate the amount of the dowry through acquiring more education and/or income, or if her traits are irrelevant for the value of the transferred gifts. Based on data I collected from South India May 2013, regressions are executed with explanatory variables likely to affect the magnitude of the dowry. The data consists of 96 weddings conducted within the last 5 years in Rajapura village in Bangalore District.

So far there is no consensus among researchers on which variables that are significant for determining the magnitude of the dowry. The few research that have been conducted differ in their results and also according to which variables included in their regressions. None of them includes the bride's income as possible explanatory variable, thus this is the first attempt to discern the significance of that variable.

How the bride's education and income impact the dowry, will affect how parents invest in their daughters. Should the bride's education be significantly positive for the dowry, households need to choose between continuing to educate their daughters or save for their dowries. But on the other hand, if the bride's education has negative effect, families will have incentives to continue to educate their daughters since that lowers the magnitude of the dowry.

The same reasoning is applicable for the bride's income, however there is no reason to assume that this variable should have positive effect on the magnitude of the dowry, theory rather suggests a purely negative effect. Brides with income should, in any marriage market with rational actors, be more valuable since they can contribute to the household assets. And if so, her own family have incentives to send their daughters to work, possibly at the cost of education depending on which effect education has on the possibilities to acquire a job.

The marriage market is hypothesized to produce assortative matches, where high-quality grooms marry high-quality brides and vice versa, which previous researches have confirmed (Rao, 1993, Andersson 2007). To what extent the bride's traits are correlated to the groom's is of interest since that will affect how parents invest in their daughters. One should also

consider whether the marriage market is defined by groom or bride specific characteristics. If it is groom-specific the bride's characteristics will have no effect on the dowry and vice versa. However, in line with previous results there is reason to believe that the marriage market is neither purely groom nor bride specific, but rather a mix of the two (Dalmia, 2004), which this thesis considers.

2. The Dowry System

2.1 Marriage Payments

Even though the marriage market is different around the world, Anderson (2007) notes that the tradition of marriage payments is or has been a part of most societies at some period of time. Marriage payments mostly occur in societies where marriages are arranged by the parents of the respective spouses. The payments differ in magnitude and the direction transferred in. Bride price, common in Africa, is transferred from the groom's household to the bride's, while dowry is when the payment is transferred along with the bride from their natal families to the groom's family (Dickemann, 1991).

The value of the bride price is usually low, whereas the dowry often exceeds the annual income of the household, leading to impoverishment for some families. Micro data from India reveal that the value of the transferred assets sometimes even exceeds six times the annual income of the household. Since the payments are of such a magnitude it has effect on coming generations and disturbs the savings patterns. (Anderson, 2003 & 2007, Rao 1993, Srinivas, 1984, Srininvas & Lee, 2004)

2.2 Dotal[1] Societies

The societal structure determines which form of marriage payments that are likely to occur. Primitive, tribal, nomadic societies with polygamy mainly have the tradition of bride-price. Dotal societies are usually socioeconomically complex and socially stratified, with endogamous[2] and monogamous marriage practices. Daughters leave their natal home after marriage while sons stay and divorce is prohibited and thus also unusual. (Anderson 2003, 2007, Botticini et. al., 2003)

In dotal societies women and their children are often dependent on the economic support of men and the women's role in agriculture limited (Boserup, 1970, Gaulin et al, 1990). In socially stratified societies, where men reap the benefits of modernization prior to women, dowry payments emerge due to quality differentiation amongst grooms. Thus dowry payments might decrease if the women's value in the marriage market increase, for instance if

[1] Societies practicing dowry payment
[2] Men and women from families with equal status marry

women begin to benefit from modernization. (Anderson, 2003 & 2007) Thereby indicating that brides with income should pay lower dowries.

2.3 Dotal India

2.3.1 Marriages

According to the description of a typical dotal society, one can predict the presence of dowry in India. Dommaraju's (2009) data reveal that 95% of all marriages in India were arranged in the beginning of 2000, indicating that arranged marriages are the norm. Marital dissolution remains rare, and Hindu ideology views marriage as an essential ritual, which all men and women must undergo, in particular women (Dommaraju, 2009, Srinivas, 1984). Brides become members of their husband's kin group after marriage and are expected to consider the interests of their new kin. Another important aspect is that children inherit status from their fathers and caste is in an important indicator of status (Srinivas, 1984).

Dowry is a major part in marriage negotiations and is settled on the individual level prior to the wedding. The age at marriage have increased but still remains low among certain social groups, fortunately women's education has also improved substantially (Dommaraju, 2009).

Andersson (2007) claims that beauty is the most important quality of brides in India, while for grooms it is the ability to earn a living, often reflected in his educational level.

2.3.2. History of Dowry

After introducing *The Dowry Prohibition Act* in 1961, the dowry system should have disappeared or at least decreased. Reality reveals the opposite development, that is, the dowry system has spread to new classes, castes and societies in India to such an extent that we can call it universal. Originally dowry payments were a tradition of the high castes, but like most other high caste traditions, the lower castes have copied, a phenomenon known as Sanskritization (Srinivas, 1984, Srinivas, 2005, Anderson, 2007).

Gold, mainly made into jewelleries, have become the most important part of the dowry in India and thereby is commonly referred to as pavun (gold) (Srinivas, 2005). The bride is the main recipient of the jewelleries, however it is ambiguous whether the bride gains control of them after marriage. Gifts will also be given from the groom family to the bride (Srinivas,

1984), but since the bride is moving in the same direction one could claim that the groom family are gifting themselves.

In India the inherent caste hierarchy remains rigid, 9 out of 10 weddings are conducted with spouses of the same castes as their natal families (Dommaraju, 2009). Dickemann (1991) claim that dowry marriages are tools to secure or create bonds between dominant kin groups.

India has a long tradition of hypergamic marriages, brides marrying grooms of higher status within the same caste, which is assumed to be a strategy for the bride's kin to improve their status (Srinivas, 1984, Srinivas & Lee, 2005). However hypergamy used to occur mostly in North India, whereas South India is more known for cross-cousin marriages, defined within the term isogamy.

3. Theory

3.1 The Marriage Market

The marriage market resembles most other markets, were rational actor search for the partner who will maximize their utility. Each actor is assumed to gain greater utility from being married to *one* person than remaining single (Cigno, 1991). It is assumed that utility can be transferred and that the market reveals full information. The marriage market is full of potential brides and grooms of different traits and characteristics, which make them more or less popular in the market. The marriage market will decide who marries whom, which in its turn depends on the preferences of each actor.

Srinivas (2005) suggests that marriages are conducted on the basis of creating alliances among families and groups to ensure the protection and perpetuation of property, group identity and social status.

Brides and grooms are assumed to have preferences for partners with similar characteristics as themselves, thus an effective marriage market is expected to cause assortative matching. Furthermore, economists expect an efficient marriage market to reach Pareto efficiency, a state when no one can be better of by remaining single or choosing another partner without making someone else worse off (Anderson 2007, Becker 1981, Rao 1993).

3.2 Marriage Payments

Becker's (1981) theory suggests that due to inflexibilities in the division of household commodities, a more powerful or rich individual in the marriage might ask for compensation. Therefore, when two individuals entering into one household have unequal power or unequally contribute to the household assets, marriage payments are likely to arise. Dowry payments will occur when the bride's share of the household income is above her shadow price in the marriage market. Thus dowry can simply be thought of as an economic transaction to compensate for the fact that women produce less into the household (Anderson, 2007).

3.2.1 Dowry

Dowry is primarily a transfer from the bride's natal family to the bride, groom or groom's family at the time of marriage. As mentioned before the dowry and bride move in the same

direction (Srinivas, 2005). Dalmia (2004) maintains that the combination of the bride's, the groom's and their households' characteristics will determine the price of the match in the market, thereby concluding that the dowry is the price of a good match.

3.3 Matching

3.3.1 Groom and/or Bride Specific

Whether the marriage market is groom or bride specific affect how the dowry is determined. If the market is purely groom-specific, the grooms can demand dowry from the bride he chooses regardless of her characteristics (Lahiri & Self, 2007). As a rational actor, the groom will choose the bride willing to pay the highest dowry. If, on the other hand the market is purely bride-specific, brides with higher quality can pay lower dowries (or perhaps even get a bride-price), regardless of the groom characteristics. However, there is a possible third situation, a mix of the two. In such a market both the groom and bride qualities will be valued and thus determinants of the amount of the dowry. Thereby implying that both spouses can use their traits to increase or decrease the dowry. Throughout the thesis I will consider the possibility of a mixed marriage market.

3.3.2 Assortative Matching

Assortative matching indicates that individuals are not randomly matched in the marriage market but rather there are mechanisms that match individuals of similar characteristics, i.e. married couples are assumed to be more similar to any two other random individuals. An efficient marriage market is expected to exhibit positive assortative mating, where high-quality grooms are matched with high-quality brides and low-quality grooms are matched with low-quality brides. This outcome occurs when grooms and brides are complementary inputs into production and the efficient market maximizes aggregate output, so that no person can improve their marriages without making others worse off (pareto efficiency) (Becker, 1981).

3.3.3 Male Hypergamy

In stratified societies male hypergamy is common, the custom of marrying grooms from superior class, within the same jati[3]. Women should wed superior males since children inherit

[3] Includes the thousands of clans, tribes, communities and sub-communities in India

their father's status and therefore hypergamy in the other direction is forbidden since it would cause a lowering of status (Anderson, 2003). When male hypergamy occurs this causes asymmetry between the affinal groups, giving more power to the groom kin, who then can demand dowry (Srinivas, 1984).

In a society where male hypergamy is desirable, the dowry becomes a tool for competition. Families with daughters will try to move up the social ladder by matching their daughters with grooms from high status families, thereby the desire to marry grooms of a higher caste (Srinivas, 2005). However male hypergamy is only possible if the bridal families of a certain class are capable of paying higher dowries than brides of a higher class.

3.4 Determinants of The Dowry

An actor in the marriage market will be more or less popular depending on the traits the individual has acquired. High-quality grooms are expected to be able to demand higher dowries and high-quality brides to pay lower dowries. Which traits that are determinant of quality is ambiguous however high education and income are most likely significant (Cigno, 1991).

Since most marriages in a dotal marriage market are arranged, the characteristics of the spouses' households are also hypothesized to be significant. Schlegel (1993) claims that fathers compete for son-in-laws and young men for the best dowry they can get.

4. Previous Research

India's long tradition of dowry makes popular for studies on the subject. A few studies on the determinants of the magnitude of the dowry have previously been conducted and is thereby of interest for this thesis, however all differ from mine in some important aspect. None of the research includes the bride's nor groom's income as explanatory variables. Three previous studies, Rao (1993), Dalmia (2004) and Sharma & Frijters (2009), execute Oridinary Least Squares (OLS) -regression with dowry as their dependent variable, but with different explanatory variables. A summary of their regression results can be found in table 1 at the end of this section.

Sharma & Frijters (2009) studied the relationship between female dowry and her level of human capital endowment, which in many ways resembles this thesis. Their data include information of 110, which are collected from a general survey on dowry related issues from 2004. The households are located in Patna, Bihar in North India and were selected on a systematic random sampling basis. Questions were asked about the households' expected behaviour, which might be a problem for their research since expected behaviour and actual behaviour is likely to differ. Furthermore they also exclude variables which previous research has shown to be significant, such as the groom's characteristics. Sharma & Frijters (2009) control for selectivity and endogenity biases and still get the same results.

Dalmia (2004) attempted to explain dowry exchange and groom selection in India. Dalmia used data from a household survey conducted in 1995, which initially was used for a study titled 'Poverty, Gender Inequality and Reproductive Choice'. The 1037 households are located in Uttar Pradesh in North India or Karnataka in South India. Dalmia's assumptions are based on Rosen's implicit market model.

Rao (1993) conducted his regressions to prove dowry inflation with data from 240 households residing in six different villages from three different districts of rural South Central India.

Purkayastha (2006) used a theoretical approach to show that reciprocal behaviour within a household is the main driver of dowry, which is determined in the larger market of perfectly competitive assortative marriages. Purkayastha (2006) assumed that the two households must

provide signals to assess and disclose private information about the future partners and concludes that the amount for equilibrium dowry is determined by the market forces.

4.1 Assortative Matching

Empirical findings support assumption of positive assortative matching for spouses with respect to age and schooling (Dalmia & Lawrence 2001, Rao 1993, Behrman et al, 1995). Rao (1993) also found support for correlation between the spouses height and landholdings. However Dalmia & Lawrence (2001) found mixed and weak indications for assortative mating with respect to height and parental wealth. Behrman's et al (1995) research indicated that the bride's age at marriage increase with the groom's education.

Srinivas (2005) and Andersson (2003) highlighted the importance of compatibility for wealth, and assumed this to be a key consideration for marriage matching. Anderson (2003) also claimed perfect assortative matching for caste, suggesting endogamy rather than hypergamy.

Dalmia & Lawrence (2001) found evidence that dowry increases the likelihood of women marrying men with characteristics dissimilar to their own. In other words, dotal marriage markets tend to cause less assortative matching than markets without dowry-payments.

4.2 Male Hypergamy

Indian marriages are traditionally status male hypergamous (Srinivas & Lee, 2004), which Rao (1993) confirmed by his results, which showed that grooms are older, more educated and taller than their brides. Botticini (2003), who also studied the Indian marriage market, implied an increased demand for socioeconomically more successful husbands.

The size of the dowry seems to be affected by hypergamy, indicated by the difference in the amount of land owned by the parents of the respective spouses before marriage (Rao, 1993) and the fact that grooms from higher socio-economic strata demand higher dowries (Dalmia, 2004).

4.3 Determinants of The Dowry

Theory suggests that characteristics of the prospective brides, grooms and their households will be determinant for a match and also the amount of the dowry, something most scholars

agree on. However, previous research indicates dissimilar results. Dalmia's (2004) research showed that the age, schooling and height of the groom are valued traits in the marriage market, along with the status of the groom's household. This could indicate that those traits will also have significant effect on the dowry.

Anderson (2007), Sharma & Frijters (2009) and Dalmia (2004) found the bride's education to have significant, positive effect on the amount of the dowry, which indicate that another year of schooling for the bride increases the amount of the dowry. Anderson (2007) found the groom's education to be significantly positive for the amount of the dowry, while Berhman et al. (1995) did not find any significant relationship. Dalmia (2004) indicated the existence of separate marriage markets for uneducated and educated brides in India. The data I use include less than two uneducated brides and few with less than 7 years education, therefore I have not applied the same reasoning.

Rao (1993) found none of the individual traits of the bride or groom such as schooling, age and height to have significant effect, perhaps explained by the fact that Indian marriages are predominantly arranged by the families of the bride and groom (Dalmia & Lawrence, 2001) and is much more an alliance between families than between a husband and a wife. Therefore the characteristics of parents are also important, sometimes maybe more important than the characteristics of the spouses themselves (Behrman, et al., 1995).

Andersson (2003) claimed that the brides and their families compete for high-status/high-quality grooms by offering higher dowries, and the wealth of the bridal family determine how how much dowry they pay. Thus richer families afford to pay higher dowries, indicating that wealth/income should be a determinant of the magnitude of the dowry. Anderson (2007) found that the dowry increase with the wealth and social status of both the bride and groom households. Rao (1993) found that the difference in land owned by the parents of each spouse before the marriage significantly reduces net dowries.

The dowry and the caste system are highly connected and therefore dowry cannot be understood without reference to the caste system (Srinivas, 1984). Rao (1993) and Anderson (2007) found that higher casts pay the highest dowries.

Purkayastha (2006) also note that the bride´s beauty might be significant, however none has included this as a variable probably because of the difficulty to measure beauty.

	Dalmia	Sharma	Rao
Bride's education	(+)/s	(+)/s	
Bride's age	(+)/n		
Groom's age	(+)/s		
Groom's education	(+)/s		
Bride's Height	(+)/n		
Groom's Height	(+)/s		
Bride's Landholdings	(-)/n		
Groom's Landholdings	(-)/n		
Caste	(+)/s		(+)/n
Year of marriage	(-)/s		
Bride's father's age		(+)/s	
Bride's household income		(+)/s	
Bride's fathers education		(-)/s	
Bride's mothers education		(-)/s	
Bride's brothers average education		(-)/s	
Bride's sisters		(-)/n	
Bride's brothers		(-)/s	
Bride's brothers dowry		(+)/s	
Difference in landholdings			(-)/s
Difference in education			(-)/n
Difference in height			(-)/n
Difference in age			(+)/n

(+) = positive, (-) =negative, (s) =significant, (n) = not significant, (empty) = not included

Table 1, a summary of the regression results made by Rao (1993), Dalmia (2004) and Sharma and Frijters (2009)

4.4 Groom and Bride Specific

Lahiri & Self (2007) considered two different situations, one where a more educated groom demand a higher dowry regardless of the educational level of the bride, referred to as groom-specific. In the other situation the bride's educational level helps to lower dowry payment, regardless of the education of the groom, referred to as bride-specific. Lahiri & Self (2007) conclude that under groom-specific dowry, when the amount of dowry only depends on the groom's characteristics, it increases the level of discrimination against women. Under bride-specific dowry, there is still discrimination if and only if the skill premium in the labour market is larger than that in the marriage market.

5. Methodology and Data

5.1 Method

Rao (1993), Dalmia (2004) and Sharma & Frijters (2009) conducted Ordinary Least Squares-regressions with dowry as the dependent variable, and this thesis uses the same method. Their research use a variety of explanatory variables, all three include the bride's education but neither of them the bride's income. Rao (1993) is mainly interested in proving dowry inflation and Dalmia (2004) in discerning the demand for groom characteristics. Thus this research mostly resembles Sharma and Frijters study, which attempts to discern the relationship between dowry and female education, however, as mentioned before, their variables are based on the expected behaviour of the household and not on the actual behaviour and they do not include any of the groom's characteristics, which previous result has shown to be explanatory. One could thereby expect their regression to suffer from omitted variable bias.

In line with previous research I conducted OLS-regressions, my dependent variable in equation (1) is net dowry, and since the net dowry is composed by the gifts of the groom and bride kin, I also regressed equation (2) with the gifts from the bride and equation (3) gifts from the groom as dependent variables. Equation (1) and (2) are of main interest and are similar to regressions in previous research, but it is also of value to discern how the groom family responds to the traits of the bride and therefore equation (3) is included. However there is not as much theory to support the hypothesis for that regression, but theory suggests that if the groom family desires brides with high education and income, we should expect them to be willing not only demand less gifts from the bridal family but also give more gifts.

$$\text{Net Dowry} = \alpha + \beta_1 X + \beta_2 \text{Bride's\_Education} + \beta_3 * \text{Bride's\_Income} + \varepsilon \quad (1)$$

$$\text{Bride Gifts} = \alpha + \beta_1 X + \beta_2 \text{Bride's\_Education} + \beta_3 * \text{Bride's\_Income} + \varepsilon \quad (2)$$

$$\text{Groom Gifts} = \alpha + \beta_1 X + \beta_2 \text{Bride´s\_Education} + \beta_3 * \text{Bride's\_Income} + \varepsilon \quad (3)$$

This thesis mainly focuses on the significance of the bride's education and income but all other relevant characteristics of the bride, groom and their household are included in vector X. The variables are chosen because they have shown significance in previous research or are hypothesised to be significant according to theory. A list of the variables included will follow

along with a description of them. The equations are linear and all three include an identical set of variables. To remedy the regressions from heteroskedacitet I used White's heteroskedasticity-consistent standard errors & covariance.

5.2 Data

The regressions are based on data I collected in and around the Rajapura village in May 2013. To my help I had a translator originally from Bangalore city, who asked the questions. We used a pre-settled form with questions, which is included in the appendix. We interviewed the elders in the household, mainly the fathers of the bride or groom.

Rajapura is an agricultural society with one dominant caste (Okkaliga) and one high caste (Lingyat). Two thirds of the citizens belong to the dominant caste, while the other castes are represented in fewer numbers. Rajapura is located 7 km from Magadi town belonging to Bangalore Distric, Karnataka State of South India. Data was collected through interviews with either the bride's or groom's household, of totally 101 weddings. Five of the weddings were conducted by Muslims and are thereby excluded[4], however the three love-marriages[5] are included. Thus the data consists of 96 weddings, which is enough to be able to draw conclusions, however a larger sample might give more strength to the results and perhaps even show different results.

All weddings were conducted within the last 5 years (2008-2013) and at least one of the spouses belongs to Rajapura. The reason for choosing marriages within the last 5 years is to avoid misleading results because of time factors, such as the fact that families educate their children longer today than they did in previous decades and families tend to have fewer children. There are many changes in the society that might distort the result if marriages conducted long ago are included and it is also more likely to remember details from marriages conducted recently.

Since dowry is prohibited in India (since 1961) there is reason to believe that people will not be completely honest if asked about dowry given or received, therefore we instead asked which gifts were transferred between the two kin-groups in connection with the wedding. The

[4] Muslims have the tradition on polygamy and are thereby more likely to pay bride-price
[5] Marriages that are not arranged by the spouses parents, but by the spouses themselves

value of the gifts, which mainly consisted of gold, has been calculated according to the prices of 2013 and are presented in Indian Rupees.

To get some insight in which amounts were transferred and the characteristics of the two kin groups, table 2 show descriptive statistics. The statistics reveal that the bridal family generally spend 180 000 Rupees more than the groom family, that the bride is on average seven years younger than her husband and her natal family generally has 0,6 children less. More comments on the statistics will follow in the results.

Variable	Mean	Std Dev.	Min	Max
Bride's Gifts	259705.5	375826.5	0.0	3372302.
Groom's Gifts	80561.2	113971.5	0.0	778223.5
Net Dowry	178909.8	371443.9	-638000.0	3247786.0
Bride's Income	1309.0	3199.7	0.0	22500.0
Groom's Income	7909.7	6967.8	0.	45000.0
Bride's Father's income	3493.5	7175.8	0.0	41666.7
Groom's Father's income	3102.4	6139.9	0.0	33333.3
Bride's Age	20.6	2.5	15.0	27.0
Groom's Age	27.9	2.8	20.0	37.0
Bride nr of children	2.8	1.1	1.0	6.0
Groom nr of children	3.4	1.5	1.0	11.0
Bride nr of Daughters	2.0	0.9	1.0	5.0
Groom nr of Daughters	1.3	1.4	0.0	8.0
Bride's Education	11.6	2.8	0.0	17.0
Groom's Education	10.7	3.3	0.0	17.0
Bride's Father's Edu.	4.9	4.9	0.0	17.0
Groom's Father's Edu.	3.4	4.2	0.0	15.0
Bride's Landholdings	3.1	4.6	0.0	30.0
Groom's Landholdings	3.5	4.0	0.0	20.0
Bride's Waitingtime	3.0	3.0	-3.000000	13.0
Groom's Waitingtime	11.2	4.1	2.0	24.0

Table 2: Descriptive statistics

5.3 Variable Descriptions

5.3.1 Dependent Variable(s)

Net dowry is the dependent variable in regression (1), calculated through subtracting gifts given by the groom's household from gifts given by the bride's household. As expected, the net dowry was almost unexceptionally positive. The regression is executed to discern which traits that have significant effect on the net dowry, in particular the effect of the bridal education and income. The two following regressions uses gifts from the bride and gifts from

the groom as dependent variables, with the same set of explanatory variables as the previous regression. Regression (2) is conducted to discern how the magnitude of the gifts given by the bridal household is affected by the traits of the bride, groom and their households. Regression (3) on the other hand is to discern how the combination of traits affects the amount the groom family spend on gifts. If the household in question value a certain trait this should be reflected in the significance of the variable. As far as I am concerned, regression (3) has not been conducted in any previous research.

The household were asked about the details of the gifts transferred between the groom and bride households. Gold made into jewelleries, was the most common gifts. There is no record of who the recipient of the jewelleries are, but according to the interviews they were mainly given to the bride and groom. Besides that, the bridal household gave bikes, land and money to the groom household. To simplify the variable I calculated the value of the gold according to the price of gold the year of the wedding.

5.3.2 Explanatory Variables

Below is an extensive description of the explanatory variables included in the regressions. The variables mainly measure the characteristics of the bride, groom and their fathers. The hypothesized results on each of the regressions are described.

5.3.2.1 Education

Education is measured in years, starting from class one.

Bride's (Br_Edu)

This variable measures the amount of years the bride have spent in school, i.e. the years the family has spent on investing in their daughters human capital. Theory suggests that the bride's education could have positive and negative impact on net dowry. Significantly positive effect on net dowry indicates that highly educated brides pay higher dowries. In other words, if a household educates their daughter another year they have to pay a higher dowry. The theoretical explanation would be that the spouses' educational levels are positively correlated because of assortative matching in the marriage market. Brides with higher education have the opportunity to marry grooms with higher education, whom can ask for higher dowries since they are more popular in the marriage market. This indicates that the value of the gifts transferred by the bridal family should increase along with the bride's education, thereby indicating positive effect on regression (2) with the gifts from the bridal

household as dependent variable. In this case this variable could have negative effect on regression (3) with the gifts transferred from the groom's household as a dependent variable, since we expect that more educated grooms, whom are more popular, will demand more gifts and give less.

Another aspect is that wealthier fathers afford to educate their daughters longer and also pay higher dowry, therefore we need to consider correlation between the bride's education and her father's income and landholdings.

But if the marriage market is defined by both groom and bride characteristics, this variable should have a negative effect on the net dowry. Implying that brides with higher education is more popular in the marriage market and therefore can use their education as "currency" in the marriage market to lower the dowry. Thus this variable should have a negative effect on the gifts from the bride and positive effect on the gifts from the groom. This would give even poor parents incentives to educate their daughters, opposite to what would be the case if the first scenario is true.

Whether the variable will be positive or negative will depend on which of the powers that is the strongest, and if they are equally strong this variable might not be significant.

Groom (Gr_Edu)

This variable measures the time the groom have spent in school, which is hypothesized to have positive effect on the net dowry and the gifts from the bride, indicating that grooms with higher education can and should ask for higher dowries since education has shown to be a valuable trait in grooms (Anderson, 2007). Furthermore this variable should be significantly negative for the groom's gifts since grooms of higher quality should not have to spend as much on gifts.

Bride's father (BrFa_Ed)

This variable measure the years the bride's father has spent on acquiring school education. Similarly to the bride's education, theory indicates that the bride's father's education could be positive as well as negative for all three regressions. If fathers with higher education are considered to have higher status, they can choose higher-quality grooms for their daughters, thus the variable should have significant positive effect on regression (1) and (2) since higher-quality grooms demand higher dowries. Furthermore this variable could have negative effect

on regression (3). But at the same time the higher status of the father should be attractive on the mixed marriage market, and their daughters able to pay lower dowries than those with less educated fathers. Then we should expect a negative effect on net dowry and gifts from the bride and we should expect the groom to be willing to give more gifts to capture brides with wealthy fathers, indicating a positive affect for this variable in regression (3). As for the bride's education, the expected effect of this variable is ambiguous and depends on which factor is strongest.

Groom's father (GrFa_Ed)

Theory suggests this variable, which measure the years the groom's father has spent in school, to have the same effect on the three regressions as the variable measuring the groom's education.

5.3.2.2 Monthly Income

Bride (Br_Inc)

This is the second variable of major interest for the thesis, which measures the monthly income of the brides. Since theory suggests that marriage payments occur because of inflexibilities in the division of household assets, dowry is assumed to be a compensation to the groom for the bride's lower income or even absence of income. Brides with their own income should thereby be attractive and since they are rare in the rural marriage market this variable should have negative effect on the net dowry as well as gifts transferred by the bridal household. It is also expected to have positive effect on the groom gifts because of the grooms' desire to marry brides with income.

Groom (Gr_Inc)

The groom's monthly income is measured by this variable. High-quality grooms are more popular in the marriage market, and income is hypothesized to be an indicator of quality. Therefore we expect groom income to have a positive effect on the net dowry and bride gifts and negative effect on groom gifts.

Bride's Father (BrFa_Inc)

This variable measures the amount the bride's father earns on a monthly basis. If wealth is associated with high status, brides with richer fathers should be more attractive in the marriage market. These brides can choose a groom demanding lower dowry, indicating this variable to be negative in regression (1) and (2) while positive in regression (3). But on the

other hand, richer fathers can afford higher quality grooms for their daughters and since India is known for hypergamy, we can expect fathers to buy the best son-in-law they can afford, thereby suggesting this variable to be positive in regression (1) and (2). In that case this variable should have negative effect in regression (3).

Groom's Father (GrFa_Inc)

The groom's father's monthly income is suggested to be significant and is thereby measured in this variable. Sons inherit the family wealth, thus grooms with richer fathers should be more popular and this variable have positive effect on regression (1) and (2). Since grooms with rich fathers are popular they have no reason to give more gifts, hence this variable should have negative effect on regression (3).

5.3.2.3 Landholdings

Bride's (Br_LaHo)

This variable measures the number of acres that the bride's family have in their procession. Since the study is conducted in an agricultural society, one can expect landholdings to be a valuable asset and a measurement of wealth, thereby one can apply the same reasoning as for the income of the bride's father. In other words, this variable could be either positive or negative for the three regressions.

Groom (Gr_LaHo)

The groom's household's landholdings in measured in the number of acres by this variable. As mentioned before, landholdings ought to be a valuable asset in an agricultural society and therefore grooms with more landholdings will be more popular and hence ask for higher dowries. In other words, groom landholdings should have a positive effect in regression (1) and (2) and negative effect in regression (3).

5.3.2.4 Caste

The Caste-variable is a dummy variable with high and dominant castes as the reference category, coded as 0. The middle and lower castes are coded as 1. Because of the strong connection between the dowry and the caste system, this variable is naturally included. Even if Sanskritization has taken place, higher castes are expected to pay higher dowries since it originates from them. The dominant castes are also expected to pay higher dowries since they traditionally have had greater freedom to emulate the customs of the higher castes (Srinivas, 1984). This variable should have negative effect on all three regressions.

5.3.2.5 Number of Daughters

Bride (Br_Dau)

This variable measures the number of daughters in the bridal household. For every daughter dowry must be paid at the time of marriage, therefore families with many daughters have to spend larger amounts all in all than those with fewer daughters. One might thereby assume that families with many daughters will afford to spend less money on dowry for every individual daughter. That indicates that this variable should have a negative effect on the bride gifts. It should also have negative effect on the groom gifts since brides with many sisters might not be as popular. Whether the net dowry will be negatively affected by this variable depends on the effect on gifts from the bride and gifts from the groom respectively.

Groom (Gr_Dau)

This variable measures the number of daughters in the groom household. India has the tradition of marrying their daughters first, thereafter their sons. Thus at the time of marriage for their sons the families have spent large amounts on dowry and weddings, and the larger number of daughters the family has, the more they ought to have spent. To add up to the money spent they might ask for higher dowries, indicating that this variable should have a positive effect on gifts from the bridal household. However, families with many daughters might not be as popular in the marriage market and therefore might not be able to ask for higher dowries, thereby indicating that it will have negative effect on the gifts from the bride. One can assume that this variable will affect the groom gifts negatively since the groom family will afford to spend less the more daughters they have. This indicates that this variable could have a negative as well as a positive effect on the net dowry.

5.3.2.6 Isogamy

This variable is a dummy, where marriages with closely related spouses are considered to be of isogamy-character and are assigned the value 1. Grooms closely related to their brides are expected to demand lower dowries, thereby indicating a negative effect on net dowry and gifts from the bride. Because of the close relationship between the spouses the groom household might spend more on gifts to the bride, indicating a positive effect on regression (3).

5.3.2.7 Bride's Age at Time of Marriage / Bride's Waiting-time (Br_Wai)

This variable measure the number of years the bride waits to get married after finishing her studies. Rao (1993) suggests that older brides will be willing to pay higher dowries than the younger brides to make sure that they get married in the present marriage market, while younger brides have the possibility of searching for grooms in a later marriage market. Thus the bride's age at marriage should be significantly positive for the dowry, however age and education are much likely strongly correlated which makes the effect of the bride's age ambiguous. Therefore, instead of a variable measuring the bride's age at marriage, I have included the time the bride waits to get married after finishing studies. The variable might also act as a measure of the popularity of the bride, since brides that quickly marry after finishing their studies ought to be more popular. According to theory this variable should be positive for net dowry and bride gifts while having a negative effect on the groom gifts. All women are more or less obliged to get married and a woman should therefore have a desire to get married as soon as possible after finishing her studies, unless she has her own income.

5.3.2.8 Groom's Age at Time of Marriage / Groom's Waiting-time (Gr_AvWai)

This variable differs from the bride's waiting-time because the situation for men is different, therefore I have calculated the average waiting time to get married after finished studies for grooms, and subtracted this from the grooms actual waiting time. The reason the grooms situation is different is because they don´t have the pressure of getting married quickly, mainly since men have their own income and are assumed to inherit their families wealth. Furthermore, up to a certain age older men might be more popular since they are more mature and have had time to acquire a stable income, but when grooms are above a certain age at marriage that might indicate that they have had problems in getting married. Men that have waited longer than the average waiting time are thereby most likely less popular on the marriage market, and grooms that have waited less than average might be more popular. Theory therefore expects this variable to be negative for bride gifts and net dowry, however it should be positive for groom gifts since men who have problems with getting married might have to compensate by gifting more. There might be other explanations to why a man has waited longer than average.

5.3.3 Not Included Variables

Scholars who study the dowry system tend to recognize that the beauty of the bride is important, however neither of the previous researches have added a variable to measure this.

The reason it is not included in the regressions conducted in this thesis is the difficulty of finding an objective measurement and also the lack of to time develop such a measurement. Since we did not meet all the brides it was even harder to appreciate the beauty of the bride.

Dalmia (2004) added height, mainly as a proxy for nutrition, and found the groom's height to be significantly positive whereas the bride's height was not. In this thesis height is not included because there was no record of the height of the spouses and the parents of the spouses did not have knowledge of their height.

6. Results

6.1 Assortative Matching and Male Hypergamy

Table 3 (in the appendix) show the correlation between the variables, and fortunately none of the variables were correlated to the extent that multicolliniaritet should be a problem. The correlation table indicate high assortative matching between the spouses' education and between the bride's education and groom's income. Thus we can conclude that highly educated individuals are matched with each other and well-educated brides marry wealthier grooms.

The incomes of the spouses were weakly correlated, while the correlation between the bride's education and the groom's income are much stronger. Perhaps because all the brides, except one, were educated while only few of them (24%) had an income. A majority of the groom had their own income (90%), some from working in the field but a large share of the grooms were occupied outside the agricultural sector.

From Figure 1, showing the frequency distribution of years in school for the brides and grooms, we come to know that few individuals from the sample are educated less than 7 years. Furthermore, a majority of the male individuals seem to quit school after finishing 10th class, while more women than men tend to continue studying beyond 10th class. It is also worth noting that the brides on average have 0,9 years more in school, as can be seen in table 2. The data might be misleading since the women generally are 7 years younger than their husbands and school attendance have increased over the years. Data also show indications of positive but weak correlation between the spouses age, as opposed to Dalmia & Lawrence (2001) who found this variable to be the strongest indicator for mating of spouses.

The bride's income and education is correlated, however not as strongly as the correlation between the groom's education and income, which is in line with previous research. Men in dotal societies often have the possibility of gaining from modernization before women do, indicating that even if women educate themselves longer they might not have the possibility of getting a job outside the agricultural sector.

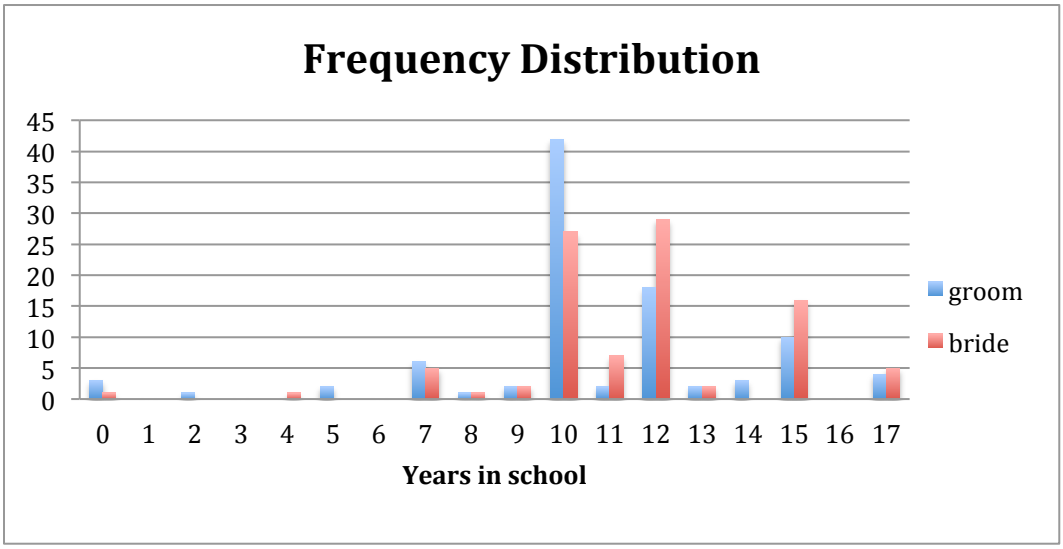

Figure 1: Frequency of years in school divided by brides and grooms

There is a negative correlation between the bride's caste and education, indicating that higher and dominant castes educate their daughters longer, which is understandable since they are predicted to be wealthier. Out of the 96 weddings included in the data, none of them were cross-caste, i.e. the data show perfect assortative mating for castes. Indicating that caste is an important factor in Indian marriages and that cross-caste marriages might be prohibited in this village. However caste did not have significant effect on the net dowry, bride gifts nor groom gifts.

The income of the spouses' fathers and landholdings were positive but weakly correlated. The groom households owned 0,3 acres more than the bridal household on average, which confirms male hypergamy. However the bride's fathers generally earned 400 Rupees more and were on average 1,5 years more educated than the father of the groom, i.e. the opposite of male hypergamy. Since daughters are usually married first and are on average 7 years younger than their grooms, one can assume that the fathers of grooms will be older than fathers of daughters. And since the educational level has increased over the years, we would actually predict that fathers born more recently would have higher education. If this is not the case, we have found data pointing in the opposite direction of male hypergamy.
Data also show that the groom family on average have 0,6 more children than the bridal family. To conclude, data show weak evidence of male hypergamy for the weddings conducted in Rajapura. The brides themselves are even more educated then their grooms, which as mentioned could be explained by the age difference. The only area in which the

grooms excel is earning income. Grooms earn on average 7000 Rupees more than their brides. This would indicate that the dowry is a form of compensation for inflexibilities in income distribution.

6.2. The Magnitude of The Dowry

The net dowry is on average high, but varies allot between the weddings as Table 2 indicate. The bride household spend 260 000 Rupees on average, which account for six times the annual income of their fathers. While the groom household spend allot less on gifts, it is still two times the annual income of the groom's father's income or almost a years annual income of the groom. Thus we can conclude that the amounts transferred are huge and have direct impact on the household economy. More than 90% of the households reported that they borrowed money to finance the dowry, and many of them are still under debt. One should also note that the bridal family on average have two daughters, thereby they totally have to spend 12 times the annual income of the father's income.

6.3 Determinants of The Dowry

The results from the regressions are summarized in table 4. Several other regressions with different combinations of explanatory variables have been conducted, but regardless the combination of variables the basic results remains the same, i.e. the results are robust. Regressions with the bride's and groom's age at marriage were also conducted but neither of the variables were significant.

As hypothesized the bride's income has negative effect on the net dowry and gifts from the bridal household, and is statistically significant at the 5 per cent level. The bride's income does not have significant effect on the gifts given by the groom household. However based on regression (1) and (2) we can conclude that brides with income are more popular on the Indian marriage market and can negotiate the dowry. The fact that the income is significant for net dowry and bride gifts support the thought of dowry being a compensation for the women's lower contribution to the household income. Brides with their own income pay lower dowries due to the fact that they will participate in contributing to the household income. Thus making sure that women get their own income is an important step in removing the dowry system and thereby the unwantedness of daughters. The result also confirms that

dowry payments are rare in developed countries due to a more equal status and opportunities for women and men than in developing countries, such as India.

Unfortunately the results from the regressions indicate that the bride's education does not have significant effect on the magnitude of the dowry. It has a negative effect on the bride gifts and the groom gifts but since the t-statistics is low we cannot reject the null-hypothesis that the variable is insignificant. What we do know is that the bride's education is positively correlated with the income of the groom, indicating that highly educated brides are popular in the marriage market and thereby marry wealthier men.

Furthermore the groom's income is positive and statistically significant for the net dowry at the 10 per cent level and statistically significant at the 5 per cent level for the gifts from the bride and gifts from the groom. Thus we can conclude that income is an important indicator of quality, so that men with higher income demand higher dowries however they also spend more on gifts to the bride. And once again the assumption of dowry being a compensation for the difference in contribution to the household income is confirmed. Since both the bride's and the groom's income have significance we can conclude that the Indian marriage market is a mix of bride and groom specific.

However we also need to note the positive significance on the groom gifts, which is most likely because richer grooms afford to give more gifts to their brides. The gifts to the brides will belong to the groom household, and the bride will wear the jewelleries which could be used a signal to others of the wealth of the groom family. The groom household also tend to give more gifts when the groom is more educated, probably explained by the fact the groom education and groom income is highly correlated.

The groom father's income is strangely significantly negative at the 10 per cent level. The regressions with groom and bride gifts as dependent variables might explain why, since this variable is negative for bride gifts and positive for groom gifts, not significantly though. The reason might be that richer fathers might not have the financial need of asking for high dowries but since they are richer they afford to give more gifts. Another possible explanation could be correlation with an omitted variable.

Table 4: Results equation 1, 2 and 3

	Equation 1 Net Dowry	Equation 2 Bride Gifts	Equation 3 Groom Gifts
Bride's Education	-1965.528	-8276.819	-6594.112
	(25916.98)	(23474.47)	(5744.033)
Groom's Education	7359.691	16104.92	8990.514*
	(13781.95)	(13164.98)	(4633.012)
Bride's Father's Education	-1583.730	-670.0752	816.5548
	(6611.216)	(6135.471)	(1588.296)
Groom's Father's Education	3981.372	2781.643	-1115.080
	(9750.894)	(9084.326)	(2478.946)
Bride's Income	-29.52384**	-24.08770**	5.522941
	(14.13152)	(10.86964)	(6.28615)
Groom's Income	34.30894*	38.56464**	4.238973**
	(19.10332)	(18.30093)	(1.687882)
Bride's Father's Income	-6.271754	-3.731414	2.614980
	(6.242495)	(5.950168)	(1.690948)
Groom's Father's Income	-18.30425*	-12.22474	6.089059
	(9.933586)	(9.256119)	(5.311496)
Bride's Landholdings	8046.420	8158.355	155.0692
	(5899.976)	(5550.151)	(1534.476)
Groom's Landholdings	630.2534	2731.145	2003.305
	(9075.450)	(8449.378)	(4173.179)
Caste	-16760.86	-30486.55	-13760.92
	(56327.42)	(56357.12)	(17335.75)
Bride, Nr of Daughters	-19586.35	-5195.744	14422.14
	(25531.21)	(24073.35)	(9671.196)
Groom, Nr of Daughters	-1621.210	-6579.879	-4664.076
	(31566.11)	(31988.59)	(4949.612)
Isogamy	-102018.0	-37457.24	65238.30***
	(68112.17)	(66934.79)	(21238.73)
Bride's waiting time	-13549.78	-15828.85	-2350.947
	(19582.51)	(17776.02)	(4186.772)
Groom's waiting time	-248.7844	3465.503	3859.863
	(11397.48)	(10662.92)	(2836.155)
Constant	42179.17	-35.39507	-42027.68
	(249228.1)	(244501.3)	(54848.85)
Observations	96	96	96
R-squared	0.481504	0.542658	0.581584
Adjusted R^2	0.376492	0.450031	0.496842

Standard Errors in parentheses

*significant at 10%; **significant at 5%; ***significant at 1%

Isogamy, measured in how closely related the spouses are, show significant, positive effect on groom gifts. Indicating that the groom family give more gifts when they have a close relationship with the bride family. However isogamy has no significant effect on gifts from the bridal family or net dowry.

None of the other variables are significant in neither of the regressions, thus few of the variables showed any significance, which could be a consequence of the small sample but it could also be that it is only these variables that have any effect. It could also be an effect of the fact that there are different powers a play, such as assortative mating and hypergamy.

7. Discussion

The results clearly indicate that dowry payment emerge due to the women's lower status and lower incomes in the Indian society. The fact that the bride's income has significant, negative effect on the dowry indicate that if men and women would have equal incomes the dowry payments would rapidly decrease and eventually disappear. Thus one of the main focuses for improving the women's situation should be to increase their opportunities in being employed.

I was positively surprised by the high levels of education the brides showed to have, however it is disappointing that even though the brides on average are more educated then the grooms in the sample, only 24% of the brides have their own income. Indicating that even if women are more educated they still have less opportunities in getting a paid job.

More of the groom characteristics, such as the groom's education and the groom's father's income, showed to have significant effect, thus we might assume that the marriage market might be a bit more groom specific than bride specific.

The results clearly show that the households, specifically the bridal household, spend huge amounts on dowry. Since families on average have at least one daughter we expect a majority of the families to struggle with dowry payments. For another thesis it would be interesting to investigate how the households would have spent the money, if they didn´t have to spend it on dowry, i.e. what affects would it have on the Indian society if the tradition of dowry disappeared? How would the disappearance of dowry affect women in India? News regularly report crimes due to fights about dowry payments, which mainly hurts the bride.

I suppose it is not a surprise that a majority of the households had to borrow money to finance the dowry, however it is disappointing to know that so many households are or have been under debt because of the dowry system. In this situation we should consider the bridal father's on average earn less than 500 SEK per month.

8. Conclusion

The dowry system has great impact in India on families with daughters, first of all because it causes families to want sons rather than daughters and second of all it disturbs the household economy and their savings patterns. Data, which I collected from rural South India, show that the bridal family on average spend six times the annual income of the father[6]. The magnitude of the dowry forces families to borrow, thus more than 90% of the interviewed households admitted to borrowing a large share of the dowry and declared to still be under debt.

The amount of the dowry is negotiated between the spouse's families and are hypothesized to be determined according to the traits of the bride, groom and their households. There is no consensus among scholars about which characteristics that are significant. This thesis aims at discerning whether the bride's income and education have significant effect on the magnitude of the dowry. In line with previous research I conducted OLS-regressions, using the data I collected from the 96 weddings. Three different regressions were conducted, with the net dowry, the gifts from the bride and the gifts from the groom as dependent variables. The bridal education and income were the explanatory variables of most importance, however several other variables that capture the characteristics of the bride, groom and their households were included.

The results showed that bridal income has significant, positive effect on net dowry and gifts from the bride, which indicate that brides with income are popular on the marriage market and can thereby negotiate the magnitude of the dowry. The negative effect of the bride's income on the net dowry confirms that the dowry is a form of compensation for the difference in contribution to the household assets. Since her income is significant for the dowry we can assume that the marriage market is a mix between bride and groom specific, i.e. both spouses determine the net dowry. However this variable have no significance on the gifts given by the groom household.

Furthermore, the bride's education has no significance in either of the regressions, concluding that the brides can not negotiate the dowry based on their educational level. However the data show that the spouses education are positively correlated, and the groom's income is strongly correlated with the bride's education, indicating that brides with higher education marry richer

[6] The father is the only individual with an income in many rural households

and better educated grooms. The bride's where on average 0,9 years more educated than their husbands, something that can be explained by the fact that grooms are generally seven years older than their wives and since education has increased over time we would expect younger individuals to be more educated. The data on correlation confirm assortative matching in the Indian marriage market but does not confirm male hypergamy.

The groom's income was significantly positive in all three regressions. Isogamy and the groom's education had significant effect on the gifts from the groom and the groom's father's income had significant negative effect on the net dowry. None of the other included variables showed any significance.

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Appendix 1: Correlation Table

	Br_Dau	GrDau	Br_Ed	Gr_Ed	BrFa_Ed	GrFa_Ed	BrFa_Inc	GrFa_Inc	Br_LaHo	Gr_LaHo	Br_Inc	BrWai	Gr_Wai	Gr_Inc	Br_Age	Gr_Age
Br_Dau	1	0.12	-0.16	-0.15	0.16	0.08	-0.03	0.02	0.12	0.13	-0.07	0.14	0.09	-0.19	-0.01	-0.0
Gr_Dau	0.12	1	-0.16	-0.1	-0.04	-0.25	-0.2	-0.09	-0.02	-0.01	-0.15	0.01	0.01	-0.12	-0.17	-0.1
Br_Ed	-0.16	-0.16	1	0.60	0.28	0.38	0.38	0.21	-0.01	0.27	0.35	-0.62	-0.36	0.56	0.36	0.1
Gr_Ed	-0.15	-0.10	0.60	1	0.27	0.42	0.2	0.32	-0.02	0.32	0.28	-0.26	-0.74	0.51	0.35	0.0
BrFa_Ed	0.16	-0.04	0.28	0.27	1	0.28	0.5	0.32	0.13	0.39	0.21	-0.14	-0.2	0.18	0.14	0.0
GrFa_Ed	0.08	-0.25	0.38	0.42	0.28	1	0.23	0.45	-0.01	0.41	0.33	-0.12	-0.28	0.44	0.28	0.0
BrFa_Inc	-0.03	-0.2	0.38	0.2	0.5	0.23	1	0.28	0.16	0.27	0.37	-0.19	-0.14	0.35	0.19	0.0
GrFa_Inc	0.02	-0.09	0.21	0.32	0.32	0.45	0.28	1	0.16	0.62	0.35	-0.13	-0.2	0.36	0.09	0.0
Br_LaHo	0.12	-0.02	-0.01	-0.02	0.13	-0.01	0.16	0.16	1	0.29	0.04	0.01	0.1	0.03	0.01	0.1
Gr_LaHo	0.13	-0.01	0.27	0.32	0.39	0.41	0.27	0.62	0.29	1	0.27	-0.15	-0.14	0.24	0.11	0.1
Br_Inc	-0.07	-0.15	0.35	0.28	0.21	0.33	0.37	0.35	0.04	0.27	1	-0.1	-0.29	0.29	0.26	-0.1
BRWAI	0.14	0.01	-0.62	-0.26	-0.14	-0.12	-0.19	-0.13	0.01	-0.15	-0.1	1	0.28	-0.29	0.50	0.1
GRWAI	0.09	0.01	-0.36	-0.74	-0.2	-0.28	-0.14	-0.2	0.1	-0.14	-0.29	0.28	1	-0.34	-0.06	0.6
Gr_Inc	-0.19	-0.12	0.56	0.51	0.18	0.44	0.35	0.36	0.03	0.24	0.29	-0.29	-0.33	1	0.27	0.1
Br_Age	-0.01	-0.17	0.36	0.36	0.14	0.28	0.19	0.08	0.01	0.11	0.26	0.50	-0.06	0.27	1	0.3
Gr_Age	-0.04	-0.11	0.18	0.08	0.01	0.08	0.03	0.08	0.13	0.17	-0.10	0.11	0.61	0.10	0.33	

Table 3: Correlation between variables

Appendix 2: Interview Questions

No:_____

Bride / Groom household

Bride

Groom

Father´s education

Father´s education

Household landholdings

Household landholding

Household average annual income

Household average annual income

No. of Daughters

No. of Daughters

No. of Sons

No. of Sons

Married children

Sons

Daughters

Married children

Year of marriage

From same village Related

Caste

Caste

Age of Bride

Age of Groom

Education

Education

Income

Before

Income

After

Wedding expenses

Spent by **Bride**

Spent by *Groom*

Gifts from **Bride**

Gifts from *Groom*

How was wedding financed?

Other details