

# Education and Dowry: An Economic Exploration

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## Abstract

Rising levels of dowry often seem to be associated with increasing levels of education. In this article, we briefly survey some of the economic theories that have been put forward to explain the emergence, existence and spread of the dowry phenomenon, especially highlighting the role of education. For a more India-specific perspective, we look at the evolution of dowry among the Muslims and Christians of India. In general, it has been found that dowry increases with the level of the groom's education but is unrelated to that of the bride. Apart from existing theories, we hypothesize about education serving as a signal for the quality of the groom. The idea is that the qualities that help a man earn more education, also make him more attractive in the marriage market and hence, a higher dowry might be a reflection of the price brides are willing to pay for the qualities.

## Keywords

Dowry and education, economic theories of dowry, role of education in dowry inflation, dowry practices among the Muslims in India, dowry practices among the Christians in India, education as a signal of groom qualities, education as a signal in the marriage market

## Introduction

*As a matter of fact, Dowry does figure in the Sastra, and has done so for a very long time. It is handled there in the same sly fashion, half-heartedly, shamefacedly.*

(Derrett 1984)

Education is generally thought to be an unmixed blessing.<sup>1</sup> Especially when questions of marriage,<sup>2</sup> fertility,<sup>3</sup> criminality,<sup>4</sup> peer effects,<sup>5</sup> etc. are being addressed, it is hard to contend such a claim. This present article however does not add to this already large list of benefits of education. All it attempts is to draw the attention of the reader to a link between education and dowry, the latter often being seen as a social evil. It is unfortunate therefore, that increase in education should be associated with an increase in dowry. In this article, we try to explore some of these findings regarding increase in dowry and how might these be related to rise in education and also look at some of the economic explanations that have been put forward in these contexts.

In popular jargon, dowry broadly connotes a transfer of wealth made by the family of the bride to that of the groom

at the time of marriage (see Anderson 2007; Botticini & Siow 2003; Caplan 1984; Waheed 2009, for example). Such a transfer can essentially be subdivided into two parts—'stridhan', a part consisting theoretically, of gifts to the bride for her exclusive consumption, and 'groom price', a part consisting of gifts and valuables for the consumption of the bride's husband and in-laws. In recent times, an unprecedented rise in overall dowry levels (see Anderson 2003 and Rao 1993a, 1993b, for example) specifically driven by increase in the 'groom price' component, has been documented—a rise significant enough to impoverish bride's families, make parents treat their female daughters as liabilities and ultimately lead parents to not want female children—factors that have contributed to dowry denigrating into being a 'social evil'.

Evil or not, the practice has withstood the challenges of time and space and has remarkably, not only entrenched itself more deeply in societies where it was already in vogue, but also found its way in communities that did not practice dowry to begin with. This remarkable nature of the practice has drawn much attention to it and a number of hypotheses have been put forward in trying to explain its emergence, existence and persistence in societies.

This article tries to briefly survey some of the key propositions put forward to this end, like how marriage payments arise in Becker's model of assortative matching (see Becker, 1973 and 1974 for a seminal work on economic modelling of marriages) or how dowries have been treated as pre-mortem inheritance (Botticini & Siow, 2003). We also look at discussions that explain evolution of dowry in brideprice<sup>6</sup> paying communities (Rajaraman, 1998). We then look at hypotheses that rationalize dowry inflation by linking it to castes (Anderson, 2003). In this context, we specifically trace its evolution and inflation in two particular communities in India—the Christians (Caplan, 1984) and the Muslims (Waheed, 2009).

In most of these explanations, one can often deduce an important role of education (especially as an integral part of modernization) and thereby causing and creating upward mobility in men, which in turn has been related to dowry. The last section of the article specifically dwells on findings and explanations for how dowry is related to education levels. In general, it has been found that dowry increases with the level of the groom's education but is unrelated to that of the bride's (Dalmia, 2004; Dalmia *et al.*, 2005). Apart from existing theories, I also put forward a hypothesis about education serving as a signal for the quality of the groom.

The idea is that the intrinsic qualities of a groom which makes him valuable to a bride, qualities like commitment, dedication etc., are also ingredients that are likely to make a person highly educated. In other words, qualities that help a man earn more education, also make him more attractive in the marriage market and hence, a higher dowry in that case, might be a reflection of the price brides are willing to pay for the qualities.

The rest of the article is organized as follows: in the second section, a brief background of dowry is provided and economic explanations as to its existence are discussed; in the third section, its evolution from brideprice and its inflation are discussed—role of education is highlighted all along; the fourth section specifically discusses the role of education and proposes to look upon education to signal qualities in a groom; the fifth section concludes.

## Dowry: Existence

Payment at the time of conjugal alliances exist in most societies. Such payments typically prevail where marital alliances are arranged by the parents of the respective spouses. These marriage payments can be broadly classified into two

broad categories: transfers from the family of the bride to that of the groom, denoted by 'dowry,' or from the groom's family to the bride's, broadly termed as 'brideprice'. The practice of dowry is in vogue primarily in Europe and Asia, where more than 70 percent of the world's population resides. Moreover these payments can be substantial enough to affect the distribution of wealth. For example, according to Rao 1993, transfers per marriage amount to six times the annual household income in South Asia. It is with dowry that we will be concerned with in this article.

Dowry, which originated as *stridhan*, a gift from a bride's parents to her,<sup>7</sup> has nowadays taken the form of 'groomprice', a monetary transfer to the parents/household of the groom, that have a highly contractual colour, and often without which the marital alliance does not materialize.<sup>8</sup> This changing nature of dowry (especially its emergence in places where brideprice was in vogue) and its widespread persistence in spite of being legally prohibited and morally ostracized, has caused much academic deliberation and concerned discussions.

## Why Dowry

Most of the literature on marriage payments in economics is built on the seminal work of Becker 1973 and 1974 (see Anderson, 2007 for a discussion), who developed the marriage market framework. In his model, men and women possess varying qualities (which can be potential incomes). Marriage is seen as a joint venture that results in greater efficiency in production (household, market, or both). Each person chooses the mate who maximizes his/her utility. The marriage market assigns mates and the distribution of returns among them. Optimal sorting ensures that no person (bride or groom) can be made better off by matching with someone else or by not marrying at all.

Usually an efficient marriage market exhibits positive assortative mating, where high-quality men are matched with high-quality women, and low-quality men are matched with low-quality women. This outcome follows when husbands and wives are complementary inputs into production and an efficient market maximizes aggregate output, so that no person can improve their marriage without making others worse off. The equilibrium division of the marriage surplus between spouses is determined by these conditions.

If the rule of division of output within the marriage is inflexible,<sup>9</sup> so that the share of income of each spouse is not the same as under the market solution, then an upfront compensatory transfer will be made between the spouses (or the respective households) and efficiency will be

restored. Thus, if the wife's share of family income is below her shadow price in the marriage market, then a brideprice will be paid by the groom's family to the bride or her family, and this transfer in reverse is a dowry.

Dowry is also often viewed as a pre-mortem inheritance to the daughter, which formally remains her property after marriage. Consider the model of Botticini and Siow (2003) for instance. Their model starts with the observation that dowries occur primarily in virilocal societies (that is where married daughters leave their parental home and married sons do not). In this case, altruistic parents transfer dowries to daughters and bequests to sons to solve a free-riding problem between siblings as follows.

Since married sons live with their parents, they have a comparative advantage in working with the family assets and helping in production of wealth relative to their married sisters. If there was no incentive problem, then parents should not assign any dowry but rather give the daughters their full share of the estate through bequests. However, if married daughters fully share in the parents' bequests, their brothers will not obtain the full benefits of their efforts in extending the family wealth and, therefore, will supply too little effort. Thus though bequests are more efficient for distributing wealth to daughters, they do not provide incentives to sons for putting in enough effort. Thus, parents will want to assign dowries that are large enough (and hence bequests which are small) to daughters, to mitigate the disincentive for their sons. This theory is consistent with societies where daughters who received dowries were excluded from future bequests, as was the case in ancient Greece and Israel, thirteenth century Byzantine law, and some parts of medieval western Europe.

Exploring various historical, empirical and social aspects of the dowry phenomenon is beyond the scope of the present article. Instead, we will restrict our attention to some features of dowry—both spatial and inter-temporal—which seems to be related to education at some level. The third section looks at how dowry has evolved from brideprice and how its inflation is attributed to castes which is intertwined with education. In the fourth section, we specifically look at how education is related to dowry and provide plausible explanations.

### **Dowry: Emergence, Persistence and its Relation with Caste and Education**

Dowry has evolved through space and time. In the first subsection, 'From brideprice to dowry', we explore an

intertemporal trait that has often been associated with the emergence of dowry—that it has substituted brideprice in several cases. Here we look at two economic explanations that have been provided, one (by Becker 1973 and 1974) at a slightly more abstract level and the other (by Rajaraman 1998) in a more India-specific context. The role of education can be traced in the latter, causing upward mobility of the working-class men, leading, in turn, to higher dowry.

In the second subsection, 'From dowry to higher dowry', we explore how dowry inflation has taken place in caste-based society like India. We specifically look closely at the evolution of dowry practices among Christians and Muslims of India, wherein, one can identify the role education has played in these communities in causing dowry to increase.

#### *From Brideprice to Dowry*

Many scholars have observed that previously dowry was confined to the urban, educated, middle classes: '[T]he dowry problem is still largely restricted to the wealthier urban middle classes, especially in the North of India.'—(Paul 1986). However, as time passed, dowry seems to be prevalent among more and more sections of the population, across locations, religions and caste, and often replaced brideprice systems. This example from South India, says it all (Menski [18]):

This unethical system [the dowry system] has grown so strong and spread so wide that it is said to have been accepted and practised by all the religious groups and caste groups...

For a long time the Scheduled Castes remained outside the clutches of the dowry system. But... during the last two decades even these people have begun to adopt this custom.

Leslie (see Chapter 2 in Menski 1998) concludes 'the spread of dowry appears to be in all directions: from urban to rural communities, from higher to lower levels of society, from Hindus to non-Hindus'.... How can this be explained?

The marriage matching framework of Becker (Becker, 1973 and 1974) can explain a transition from brideprice to a dowry with modernization. This is as follows: Consider a primitive society with homogeneous men and homogeneous women, but where women contribute their input into agriculture production, and hence have economic worth. As a result they receive a brideprice in equilibrium. Suppose that now new wage-earning opportunities emerge

for men but not for women. Women remain a homogeneous group but now with less economic value, while men become a heterogeneous group differentiated by their wage-earning capabilities. Brides now compete amongst themselves for the more desirable grooms and those with wealthier fathers outbid poorer ones in the marriage market and award dowries to the grooms with the higher earning power.

Rajaraman (1998) puts forth a similar argument but in a more India-specific context and descriptive pattern. For ease of understanding, we will describe this model with a little more details. She begins by differentiating the 'organized' from the 'unorganized sector'. According to her, the 'organized sector' consists of the sections of society with access to education and employment opportunities, and hence where competitive bidding among prospective brides for a desirable groom drives up the 'price' of the groom, that is, dowry. However, the conundrum to her is that how whole communities, not impinging on the 'organised' sector, has transitioned from brideprice systems. Hence she says:

A major socio-economic development of the last few decades is the switch that seems to have taken place, all over the country, among entire endogamous groups from a brideprice to a dowry system.

In what follows, I summarize her arguments proposed to explain the phenomenon of dowry as an unorganized sector phenomenon.

According to her, there are three elements that determine a payment associated with a marriage, in either direction (i.e. either a brideprice from the groom's side to the bride's or a dowry from the bride's side to the groom's): These are:

- (1) Present discounted value of a female's lifetime's earnings
- (2) Present discounted value of her contribution to child-rearing and other household activities
- (3) Present discounted value of the cost of maintaining her

In the above list, (1) and (2) contribute positively towards her worthwhile (3) contributes negatively. So essentially, if the sum of (1) and (2) is greater than (3), then she has a positive worth in the net, and hence at the time of her marriage the groom's side will have to pay a price to the girl's family to compensate for the production loss they are now going to face. In other words, a brideprice comes into existence which is purely compensatory in nature.

She argues in the same vein that dowry will emerge if (3) outweighs the sum of (1) and (2) so that the female's net worth is negative in which case the girl's family will have to make a payment to the groom's at the time of marriage. The question then, that why communities' transition into dowry practices from brideprice practices, boils down to, when the third component in composition of a female's worth is likely to outweigh the sum of (1) and (2).

Rajaram (1998) answers that Indian census and other statistics show that this is due to a fall in (1). That is, there has been a decline in female contribution to family income. Why might this happen? In agriculture-based communities, a possible avenue could be the decline in female participation in field with increased opportunities of irrigation. It could also be the case that with spread of non-agricultural opportunities (like jobs in the cities of the male members) and decrease in dependence on agriculture, the requirements of female labour got reduced.

In the light of such an argument, theoretically, dowry should not be more punitive in nature than brideprice. This is because both dowry and brideprice, as a price paid for the worth of the bride, is purely compensatory in nature. In words of Rajaraman, dowry should be a 'rotating capital fund'. On the other hand, most evidence, both casual and rigorous, suggests that dowry is more punitive and hence a bane to be shouldered by the household of the female child.

She proposes a possible reason for that as well. Dowry essentially consists of two kinds of expenditures—expenditure on the ceremony itself, and gifts in cash and kind. The first can be divided further into food and non-food expenditures and the second into gifts going to the bride and those to the groom and his family. Expenditure on the ceremony is definitely a leak out of the rotating fund. Hence as this category gains in importance, the punitive incidence of the dowry widens. Has this happened? That is, has expenditure into the 'leakage' component of dowry (expenditure in the ceremony, gifts to the grooms' family that are entirely consumed etc. and hence not used as part of the rotating fund) increased? Again evidence shows that such expenses have 'assumed a far larger percentage significance in the contractual payment than it has in the previous system, if any'.

This of course shifts the question by one more level and that is, why has this (increase in leakages from the rotating fund) happened in the case of dowry but was not there when bride price was in place? This has not been directly answered by Rajaraman, but she mentions the possibility that it is a response to the 'demonstration effect' of 'organised sector' dowries.<sup>10</sup> Since such 'organized sectors' did

not have brideprice, there possibly could not be any question of demonstration effects to the 'unorganized' sector practising brideprice.

Hence to summarize, what she argues is that education and employment among males in the organized sector drive dowries in those sectors. Moreover, these can lead to fall in opportunities of female labour participation in farm and other agricultural practices, so that unorganized sectors can experience transformation from brideprice (negative dowry) to positive dowry practices. Moreover extravagance of dowries in the 'organized' sectors can lead to demonstration effect among the unorganized sector which can then lead to dowry practices assume far harsher character than merely a compensatory payment (contributing towards a rotating capital fund).

### *From Dowry to Higher Dowry*

In Paul's (1986) (1985) case study of Delhi, average real dowry payments increased from 3,998 rupees in 1920–29 to 71,173 rupees in 1980–84. Moreover average dowries are equal to 68 percent of total assets before marriage and can amount to six times the annual wealth of the bridal family (see Anderson 2003 for other such survey results). Some other study shows that the wealth of the bridal family is not an important determinant of dowry payments and hence dowry inflation cannot be explained in terms of wealth effect only. In fact Dowry Prohibition Act in 1961 has outlawed the practice. But in spite of it, dowry not only thrives but is also increasing.

Anderson 2003 links dowry inflation to castes. This hypothesis rests on the assumption that with modernization, the wealth inequality amongst potential grooms of a given status group (caste) increases. Brides rank grooms in terms of both inherited status (caste) and income. Assuming substitutability between these two groom characteristics, low-status brides with wealth place a value on matching with grooms of higher caste, irrespective of the groom's earning power, since these brides highly value marrying into the upper caste. As a result, even if the modernization and the associated market idiosyncratic shocks have caused a high caste groom to become poorer, it will have only minimal effect on the dowry that a lower caste bride is willing to pay for him. These payments thus act as a lower bound on the groom's dowry receipt. However, the high-income, high-caste grooms must see a relative rise in their payments. Thus average dowry payments increase.<sup>11</sup>

In short, the theory states that 'dowry inflation arises as an endogenous response to a modernization process in which individuals of similar inherited status start having differentiated income levels'. This insight is borne out in case of India where many opportunities for economic and political upward mobility arose for lower castes after independence and associated dowry inflation has been documented (with increased heterogeneity within a particular caste). Below we look at two particular communities with specific details as to how these changes came about.

### *Dowry Practices among the Christians*

Caplan (1984) describes a complex interplay of social and demographic factors affecting dowry practices among Christians in the city of Madras (modern Chennai). It is usually seen that class and dowry are related positively, that is, higher the class in social hierarchy, bigger the dowry payments that are made.<sup>12</sup> Does this apply to Christians?

To answer this, we have to first understand the spread of Christianity in South India. Christians in South India have mainly sprung from ritually low Hindu groups, but because of their access to mission education were able to gain qualifications far beyond those normally reached by the Hindu groups. Gradually these Christians begun to compete for several high status occupations and positions as and when they became available.<sup>13</sup> Thus a significant Protestant upper-middle-class core was formed in the city to add to the existing Christian elites of the city (mainly intellectuals, theologians and university teachers centred on the Madras Christian college). These Christians desperately wanted to hold on to their newly won status for which they had to compete not only with people of the same class but belonging to other religious communities but also with less-privileged Protestants who would seek to better themselves. To secure their place and advantage, therefore, these Protestants followed a careful and exclusive marriage policy.

At a typical wedding of such a Protestant female, there are mainly three components in the marriage expenditure as follows:

- (1) Expenditure on the reception and the bride's *tali* (necklace)
- (2) Expenditure on jewels, utensils, furniture etc. that is exclusively for use by the couple
- (3) The bridegroom price that the bride's household transfers to the groom's household

For caste Christians of the upper-middle class, all three expenses are typically borne by the bride's family, with (3) essentially meaning dowry in our context. However, for Christians of 'lower-middle' and working orders, (1) is typically borne by the groom's side, (2) by the bride's and (3) is more or less non-existent.

Hence we might be tempted to conclude that among the urban Protestants, those higher up in the class order pay dowry whereas it is not conspicuous among those lower down in social rungs, which would then echo the practices prevalent among Hindu groups. However, there is another dimension of complexity here—some upper-middle class Protestants will also not pay dowry (that is component (3) of marriage expenses). Though fully concerned about maintaining the elite status, they will eschew such payments to the groom's family. And the reason, in words of Caplan (1984) is:

These Protestants are without caste in the sense that they do not have an exclusive affiliation with a named, endogamous social group.

Hence, (in words of Rajaraman) we can say that any dowry transferred from one household (bride's) to another (groom's) does not contribute to a 'rotating societal fund', and hence the practice does not exist.

But to know why some Protestants have castes while some did not, one has to consider the arrival of western missionaries in south India and the process of early conversions. Initially the western missionaries tried to convert Hindus of the highest castes (with the hope that the others will follow them) but having met with considerable failure, they turned their attention to the lowest rungs. The latter converted to Christianity in large numbers. In fact, approximately four-fifths of all Protestants entered the faith this way. Hence such large scale conversion patterns allowed these people from the same (pre-conversion) caste to reproduce themselves in endogamous circles and maintain their caste pedigree.

The few members of the high castes that converted did so individually and often defying their social and caste groups, thereby giving up their most intimate personal ties. Hence at the time of marriage it was hard for them to maintain caste boundaries and so most matches were across the boundaries of caste. Hence the elite portion of Protestant community consists of quite a number of such 'casteless' members. In other words, the elite Protestant community has two sub-classes, 'caste' households containing members of the same ('pre-conversion') caste and 'casteless' households with members not belonging to any one caste.

For 'caste' households, the primary concern during the search for matrimonial alliances is for the 'caste' status of the potential affine, even though openly such a practice is mostly condemned and called 'unChristian'. For 'casteless' households, forging matrimonial ties is often difficult since many 'caste' Christians who are larger in numbers will not tie knots with them, and hence in terms of mere numbers, choices of a potential affine are much lower for 'casteless' Christians than 'caste' households.

Among them, however, it is seen that about half the marriages are 'arranged' by the elders while about half the couples choose their partners themselves. In this sense therefore, marriageable men and women of 'casteless' upper middle class Protestant households have varied and heterogeneous marriage circle. Now any wealth devolved to another household at the time of marriage is unlikely to take the form of a circulating fund unless it is confined within households of a caste, which is not the case for 'casteless' Protestants. As such they are averse to dispensing with large amounts of property from the domestic unit.

To summarize, upper middle class 'caste' Protestants (who have gained such a position by attaining education) pay dowry as a societal fund to reinforce endogamous caste boundaries while 'casteless' Protestants being part of a much more heterogeneous social circle does not pay such a price. Lower middle class Protestants are economically constrained, and both parties to a marriage share expenses equitably.

#### *Dowry Practices among the Muslims*

That this education-caste interplay plays an important role in keeping the practice of dowry in vogue, not only among Christians but also among the Muslims, is echoed by Waheed (2009).

Muslims constitute about 14 per cent of India's population, and are spread all over the subcontinent. In fact, they are a heterogeneous and stratified community, with as many as 350 regional or ethno-linguistic groups of Muslims. These groups have significant differences in social behaviour, religious beliefs and values, and practices pertaining to matrimony are no exception. In general dowry exists and is called *jahez* among Muslims of north India.

*Dowry among Muslims in pre-independent India:* Indian Muslims, especially of north India, are divided into hierarchically placed *biradaris*, and marriage is preferred within such a *biradari* (endogamy). Any marriage outside the *biradari*, would usually be hypergamy. Both forms of marriage were common among the Muslims of United Punjab. Traditionally, marriage within their *biradari*

(which was also their preferred alliance), minimised bargaining for dowry, but socio-economic changes crept in from the beginning of the 20th century. An educated groom, rather than a groom from the kin group (*biradari*) started being preferred. The rules of endogamy and lack of education meant the emergence of dearth of grooms. It, therefore, resulted in more and more demand for educated grooms by the brides, and the resulting higher and higher offers of dowry.

In fact, Waheed writes that the dowry practice was deep-rooted among the Muslims of United Punjab and assumed the form of a social evil for the not-so-well-to-do classes who tried to emulate lavish dowries of the feudal lords.

*Dowry among Muslims in post-independent India:* The Partition had far-reaching consequences for Indian Muslims. Waheed (2009) writes:

Families of Ashrafs (*biradaris* of the highest social status, such as Saiyads, Mughals, Pathans and Shaikhs), the educated intelligentsia, service personnel, doctors and lawyers migrated to Pakistan *en masse* from urban areas of the north and the Deccan.

Large-scale migration of Muslims, especially the educated youth, had considerably changed patterns of marital alliances among higher-status groups and those of urban areas. Though a majority do prefer marriage within their own *biradaris*, yet a lack of eligible grooms means that often marriages are arranged within the class instead of the kin circle within a *biradari*. Waheed ascribes the change to ‘the new symbols of status such as education, wealth and political power’.

In summary, Waheed’s contention is that initially demonstration effect led to prevalence of dowry practices and later scarcity of quality grooms and hence ensuing competition among the brides have led to substantially increasing dowry payments among the Muslims.

## Dowry and Education

M. K. Gandhi wrote in *Young India* (1928) ‘Any young man who makes dowry a condition of marriage discredits his education and his country and dishonours womankind’. In the same year, Mahatma Gandhi explicitly wrote that change could only be brought about by the educated youth. Hence implicitly, the Mahatma must have believed that the remedy for the social malady dowry, lies in better education for all. Reality has proven to be quite the contrary.

As far as women’s education is concerned, research shows that monetary transfers from brides and their families to grooms and their families are not decreasing in bride’s schooling (see Dalmia *et al.*, 2005). It seems counter-intuitive that women with more education have to pay a larger net dowry. One possible explanation could be that education of a bride serves as a good proxy of her household wealth, and hence both higher education and higher dowry are *effects* of household wealth, without necessarily being causally related to one another. And wealthier fathers pay higher dowries. So it seems that higher education of the brides means higher dowry.

One could also think of another avenue—consider household bargaining after marriage. If the bride is more educated (and assuming that translates to higher outside opportunities like employment), she is likely to have greater bargaining power relative to the groom, compared to a bride with lesser education. Hence, in case of a rift, she is more likely to be able to walk out of the marriage. In other words, he is bearing a greater risk of separation. So, given grooms value the stability or longevity of conjugal life, they will want to be paid a higher price for tying knots with more educated brides (*vis-a-vis* lesser educated ones) as a premium for bearing the additional risk that such marriages entail.

Anderson 2007, provides a model to explain this apparently counterintuitive finding: in this model, both men and women have economic value but with modernization the quality distribution of men is more dispersed. Hence as long as relatively homogeneous brides compete for a smaller supply of high-quality grooms, groom prices will emerge. On the other hand, if grooms and brides are equally heterogeneous, then the supply of high-quality brides and grooms is equal, and groom prices need not exist. So essentially, the acquisition of human capital (education) by daughters is not enough to cause the disappearance of groom prices, as long as earning opportunities of men are more heterogeneous than those of women, but the cause instead lies in a relative increase in the heterogeneity of women’s earning opportunities. A policy prescription would then be to try and increase the heterogeneity of women’s earning opportunities, which is not easy especially in conservative societies like in India.

Not only is it not easy to increase employment and earning opportunities among women, it is in fact not easy to increase education levels among them as well. It is also undoubtedly the case that access to education<sup>14</sup> and opportunities for employment has expanded far more rapidly for men than for women in India, particularly in rural areas. Unequal social and parental investment in male and female

children has further amplified women's disadvantage in the marriage market. As a result education levels among women have not yet advanced to a stage where they can make significant differences in marriage payments.

Unlike the conclusions about the effect of the bride's education on dowry, which is quite ambiguous, what is largely considered accepted is that dowry levels increase with the education of the grooms. Dalmia (2004) writes 'The influence of groom's education on net dowry is as expected: educated grooms are worth more in the marriage market, as is indicated by the significant positive coefficient in the hedonic function for groom's education.'

The most common explanation for why higher education of the groom leads to higher dowry is that competition among brides for a particular groom leads to offers of higher and higher 'groom prices' (read dowries), not unlike bidding in auctions, leading to overall increase in dowry payments.

There is, however, an alternative possibility. Suppose a potential bride cares about the quality of the groom—qualities like commitment, sincerity, loyalty, etc. which might be important for a peaceful marriage. But now suppose this quality is unobservable as is likely to be true. What might be a potential signal for such qualities? Education can probably act as a signal.

For example, a person who is committed and sincere towards education and hence is highly educated is likely to intrinsically possess these qualities. In other words, a deeply committed person is both likely to be highly educated (because of his dedication to education) as well as loyal to marriage and hence should be a desirable husband. Similarly, a less dedicated person, in all likelihood, would have demonstrated lesser perseverance towards attaining education and hence is likely to be less educated—a signal to a potential bride that he might not be greatly dedicated to marriage either.

If that is the case, then altruistic fathers of brides, genuinely concerned with their daughters' welfare, will be willing to pay a higher price to a more educated groom, simply because he is a better quality groom. In other words, as long as attaining higher levels of education is believed to be positively and strongly indicative of certain inherent virtues of the person, it can serve as a signal for quality with which brides and their families are concerned.<sup>15</sup> And hence they are ready to pay more for a more educated person, not for higher education, per se, but for the underlying desirable qualities that it signals.<sup>16</sup>

One might argue that by the same token highly educated brides must pay lower dowries (since education signals qualities valued in marriages), which however is contrary to empirical findings as mentioned above.<sup>17</sup> Intuitively,

there could be two reasons for things actually being otherwise.<sup>18</sup> First of all, especially in India, women are intrinsically perceived to be accommodative, adjusting and committed in nature, so that education (or its dearth) does not serve as any signal (unlike their male counterparts who are not inherently perceived to be so).<sup>19</sup> In other words, it may be that women are assumed to naturally possess attributes that are valuable to marriage and hence other achievements like education become redundant as signals.

Moreover, in a virilocal society, where the bride leaves her parental home and stays with her in-laws, often the scope of the husband to be disloyal to the marriage is much higher than the wife (simply because he can enjoy the support of his family and can continue indulging in practices, like extra-marital affairs, not perceived favourably by the wife but which has no direct impact on the rest of the family). Therefore, irrespective of the quality of the bride, the risks associated with marriage, from the point of view of the husband, are quite low, relative to that faced by the bride.<sup>20</sup> Hence the existence and significance of signals (education and others) in the marriage market are much reduced in case of women. So education ends up being considered as the signal of a groom's quality but not necessarily the bride's.

## Conclusion

In this short article, we take an excursion of the economic theories that have been put forth to explain the emergence, existence and spread of the dowry phenomenon, often looked upon as a social evil. Many scholars believe it measures the economic worth of brides while some look at it as pre-mortem inheritance of daughters in virilocal societies. Dowry inflation is often believed to be an outcome of modernization that entails increasing income-heterogeneity among potential grooms. We also look at evolution of dowry among the Muslims and Christians of India. In all the theories (modernization especially) the role of education is implicit.

We see that a girl's education is ambiguously related to dowry at best, increase in the former leads to increase in the latter, at worst. But we unambiguously see that higher male education leads to higher dowry demands. So in any case, belying Gandhi's hopes, education instead of ameliorating dowry demands, strengthens it.

Why do brides pay more to marry more educated men? One possibility is that men earn more when they are more educated. There could also be another reason—because they

are likely to possess qualities that a bride values. In other words, education signals quality of a groom and hence they are ready to pay a higher price (dowry) for a better groom.

This, somewhat unsettling result, therefore stares in our face—higher education, instead of mitigating social evils like dowry, could be helping to perpetuating it. Hence this article neither attempts to be little the benefits of education, nor tries to collect support for a social malady by economically rationalizing it—instead it merely draws attention to a possible link between education and dowry and tries to rigorously explain it using economic theories.

## Notes

1. There are many nuances however, that such general statements tend to cover. For example, education is really more of an ‘intermediate’ variable in demographic transition and one needs to carefully think about not only why countries build schools, but also why parents send their children to school (especially if compulsory education is not enforced), see Bhatti (1998), Caldwell et. al (1985), for example, and for a comparative study between India and China, see Rao et al. (2003). This article does not address these important issues as it primarily focusses on a related but different issue.
2. Hoelter et al. (2004) studies the influence of education on all aspects of marital dynamics in modern times in Nepal. Arends-Kuenning [3] studies the impact of education on women’s marriage and earning potential in rural Bangladesh.
3. See Bates et al. (2007) for a study in rural Bangladesh and Jain and Nag (1986) for a study in Indian context.
4. See Dreze and Khera (2000) and Lochner and Moretti (2004) for evidence of the moderating influence of education on criminal violence.
5. See Kravdal (2004) for impact of community-level education on child mortality in India.
6. Broadly, brideprice is a transfer from the family of the groom’s to that of the bride’s at the time of marriage (see Anderson (2007) for example). Brideprice generally exists in primitive, tribal, and often nomadic societies which are often associated with a strong female role in agriculture. It has often been argued that brideprice is found in societies in which agriculture relies on light tools (such as the hoe) and thus where women are actively engaged. Moreover such societies have polygyny (men have more than one wife) and also have the possibility of divorce (unlike dowry-paying societies). Typically brideprice is considered to be the payment a husband makes to a bride’s parents for the right to her labour and reproductive capabilities. It is nearly universally practised in sub-Saharan Africa. However there is not much evidence of escalation in the amounts of brideprice, while often it has been replaced by dowry, a transfer in the opposite direction.
7. So *stridhan* is essentially like ‘trousseaux’ consisting mostly of clothes and ornaments for the bride’s use (see Botticini and Siow 2003 and Waheed (2009).
8. Such gifts and valuable assets are referred to as *dahej* or *dandahej* in north India (see Waheed (2009), for further details regarding dowry practices among the Muslims, and Caplan (1984) for those among Christians in India).
9. This is likely to be the case since household commodities like housing and children, which are jointly consumed, are difficult to divide. Also legal restrictions, social norms, or an implicit imbalance of power within the household could restrict the efficient division of surplus.
10. Waheed (2009) also supports ‘demonstration effect’ as a cause for dowry inflation among Muslims in pre-independence India, where the extravagance of the Muslim nobility in gift-giving got emulated by the others. See the discussion on dowry among the Indian Muslims below.
11. In fact, Anderson (see 2007 and the references therein) proposes a theory as to how dowry payments might transcend their original purpose of endowing daughters with some financial security (*stridhan*) into a ‘price’ for grooms, i.e., not only dowry, denoting the *stridhan* component might inflate (as explained above), but also another monetary component in the nature of a ‘groomprice’ might evolve (as is mostly seen in reality). The intuition is as follows: Consider a traditional society, where men have economic value but women do not. Here dowry as a bequest is consistent with wealthier parents giving higher dowries in turn rendering their daughters more attractive to grooms. Also grooms who have higher incomes are in turn more attractive to brides. As a result, grooms with high incomes match with the daughters from families where the optimal size of bequest is large, implying positive assortative matching in the marriage market (recall Becker’s model). Now suppose modernization takes place which increases income-earning opportunities as well as income inequality among men. Increased heterogeneity in the pool of grooms means that brides of equal-wealth fathers match with grooms of differing wealth. If transfers were pure bequests, fathers of equal wealth would give bequests of equal size but since grooms prefer brides with higher bequests, brides receiving them obtain better grooms. Thus, dowry transfers alone cannot simultaneously satisfy optimal bequests and assortative matching in the marriage market. When these two motives for dowry transfer come into tension, equilibrium can only be maintained when a second price instrument emerges. Hence, a pure transfer to the groom (and his family), termed “groomprice”, endogenously comes into being (which has in recent times is denoted by the term dowry).
12. There are however important regional differences to this pattern—in north India, both upper and lower classes seem to practice dowry whereas in southern India, propertied groups practice reciprocity while less well-to-do groups practice brideprice. See Caplan (1984) and the references therein for details.
13. These opportunities mostly commenced with the second world war when Madras and its surroundings became a major industrial and administrative hub. Opportunities further arose with independence and exodus of colonial elites, whereas the Dravidian movement considerably curtailed the power and representation of the Brahmans, especially in the sphere of public employment. These developments further encouraged migration of the Christians from rural areas to the city.

14. Since we are primarily talking about higher education here, given dowry concerns men and women of marriageable age, it may not be out of place to mention a few facts regarding higher education in India (see Tilak et al., 1991). India's higher education system is one of the largest in the world with about 10 million students enrolled in 188 universities and about 14 thousand colleges and with 400 thousand teachers towards late 1980s. More than ₹10 thousand million are invested every year in higher education, which forms 0.9 per cent of GNP.
15. This is especially true in societies which are monogamous (men usually have one wife) and where divorce is rare (as in dowry-paying societies like India).
16. This argument is, in essence, similar to Spence's classic signaling paper (see Spence, 1973), where education signals the quality of a worker.
17. I thank the editors of the journal for explicitly raising the point.
18. Theoretically we know that since there exists multiple equilibria in signaling games depending on beliefs, two groups of people, whose difference lies in an external characteristic like sex or race, but are otherwise identical in all respect including attributes affecting outcomes in the game like costs and utilities, may very well end up in different situations (see Spence, 1973 for a lucid example that explains wage differential among men and women, for example). So it may be the case that, beliefs of men are such that education levels of women fail to signal their quality completely.
19. In fact, the little evidence there is of the influence of female education on dowry is quite the opposite of what can be expected: higher educated women have to pay more as dowry. Hence, it seems that higher education signals, if anything, lack of qualities valued in marriage (for example, a woman might be expected to be less docile and less likely to be subservient to the wishes of her husband and her in-laws).
20. See Spence's argument (Spence, 1973) for hiring to be considered a risky investment by the employer where the worker quality and associated benefits are realized in future. Similarly, a marriage is a risky investment, where the risk borne by the bride seems to be much higher than that by the groom.

## References

- Anderson, S. (2007). The economics of dowry and brideprice. *Journal of Economic Perspectives*, 21(4), 151–174.
- . (2003). Why dowry payments declined with modernization in Europe but are rising in India. *Journal of Political Economy*, 111(2), 269–310.
- Arends-Kuening, M., & Amin, S. (2001). Women's capabilities and the right to education in Bangladesh. *International Journal of Politics, Culture, and Society*, 15(1), 125–142.
- Bates, L. M., Maselko, J., Schuler, & Sidney R. (2007). Women's education and the timing of marriage and childbearing in the next generation: Evidence from rural Bangladesh. *Studies in Family Planning*, 38(2), 101–112.
- Becker, G. S. (1973). A theory of marriage: Part I. *Journal of Political Economy*, 81, 813–846.
- . (1974). A theory of marriage: Part II. *Journal of Political Economy*, 82, 511–26.
- Bhatty, K. (1998). Educational deprivation in India: A survey of field investigations. *Economic and Political Weekly*, 33(28), 1858–1869.
- Botticini, M., & Aloysius S. (2003). Why dowries? *American Economic Review*, 93(4), 1385–98.
- Caldwell, J. C., Reddy, P. H., & Caldwell, P. (1985). Educational transition in rural South India. *Population and Development Review*, 11(1), 29–51.
- Caplan, L. (1984). Bridegroom price in urban India: Class, caste and 'dowry evil' among Christians in Madras. *Man*, 19(2), 216–233.
- Dalmia, S. (2004). A hedonic analysis of marriage transactions in India: estimating determinants of dowries and demand for groom characteristics in marriage. *Research in Economics*, 58, 235–255.
- Dalmia, S., & Lawrence, P. G. (2005). The institution of dowry in India: Why it continues to prevail. *The Journal of Developing Areas*, 38(2), 71–93.
- Derrett, J. D. M. (1984). What the Dharmashastra Has to Say About Dowry. In R.W. Lariviere ed. *Studies in Dharmashastra*, Calcutta.
- Dreze, J., & Khera, R. (2000). Crime, gender, and society in India: Insights from homicide data. *Population and Development Review*, 26(2), 335–352.
- Hoelter, L. F., Axinn, W. G., & Ghimire, D. J. (2004). Social change, premarital nonfamily experiences, and marital dynamics. *Journal of Marriage and Family*, 66(5) (Special Issue), 1131–1151.
- Jain, A. K., & Nag, M. (1986). Importance of female primary education for fertility reduction in India. *Economic and Political Weekly*, 21(36), 1602–1608.
- Kravdal, O. (2004). Child mortality in India: The community-level effect of education. *Population Studies*, 58(2), 177–192.
- Lochner, L., & Enrico M. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *American Economic Review*, 94(1), 155–189.
- Menski, W. (1998). South Asians and dowry problem. Trentham Books.
- Paul, M. C. (1986). Dowry and position of women in India: A study of Delhi metropolis. Delhi: Inter-India Publications.
- Rajaraman, I. (1998). Economics of bride-price and dowry. *Economic and Political Weekly*, 275–279.
- Rao, N., Cheng, K., & Narain, K. (2003). Primary schooling in China and India: Understanding how socio-contextual factors moderate the role of the state. *International Review of Education*, 49(1/2), 153–176.
- Rao, V. (1993a). Dowry 'inflation' in rural India: A statistical investigation. *Population Studies*, 47, 283–93.
- Rao, V. (1993b). The rising price of husbands: A hedonic analysis of dowry increases in rural India. *Journal of Political Economy*, 101(4), 666–77.
- Rouyer, A. R. (1987). Political capacity and the decline of fertility in India. *The American Political Science Review*, 81(2), 453–470.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Tilak, J. B. G. & Varghese, N. V. (1991). Financing higher education in India. *Higher Education*, 21(1), 83–101.
- Waheed, A. (2009). Dowry among Indian Muslims: Ideals and practices. *Indian Journal of Gender Studies*, 16(1), 47–75.