

Dowry: Bequest or Price?

Extended Abstract

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Abstract

Recent papers have modeled dowries as pre-mortem bequests to daughters or as groom-prices paid to in-laws. These two classes of models yield mutually exclusive predictions and contradictory policy prescriptions. Empirical tests have yielded mixed results. This paper explains the heterogeneity of findings by considering a heterogeneous world, in which some households use dowry as inheritance to daughters, while others use dowry to “purchase” desirable sons-in-law. We formally generate predictions from the two models and utilize the predictions in an exogenous switching regression with unknown sample separation in order to place households in the bequest or price regime. We test the empirical model on retrospective data from rural Bangladesh over a period of 85 years. We find considerable evidence of heterogeneity in dowry motives; that bequest dowries decline in prevalence and amount over time; and that bequest households are wealthier than price households. Our preliminary findings contradict arguments against banning dowries.

In the last decade, a sharp debate has emerged over the predominance of dowry in South Asia. In the wake of increasingly male-favored sex ratios, and in the historical knowledge that the practice tends to disappear as dowry-giving societies modernize, the persistence of substantial bride-to-groom marriage transfers has become a puzzle to economists.

One set of answers to this puzzle views dowry as a price. First formalized by Becker (1981), the price model sees dowries as transfers used to equilibrate the marriage market. In this view, a dowry is a transaction between families, in which brides do not directly benefit. Such transfers may be necessary for many reasons. If women tend to marry older men, for instance, then population growth will create a marriage squeeze, and dowry emerges to attract perpetually scarce men into the marriage market (Rao, 1993a,b). In this view, what sets South Asia apart from other high population growth areas is cultural pressure forcing women to marry older men. Similarly, if women tend to marry “up” the social ladder (a practice known as hypergamy), the limited pool of husbands available to women of high social status requires an additional side payment to attract grooms. In this view, South Asia is atypical due to the cultural practices of hypergamy as well as the clear caste divisions which limit the pool of grooms available at the highest levels (Anderson, 2003). Moving away from cultural factors, if rules for division of household output are inflexible, and (due to

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discrimination or other reasons) a woman’s shadow price in the marriage market exceeds her share of income, dowry will emerge as an upfront transfer to equilibrate the marriage market (Botticini and Siow, 2003). In this view, dowry predominates in South Asia because (relative to other parts of the world) women are a net economic burden to the household (Boserup, 1970; Rajaraman, 1983). Other explanations are less helpful at explaining South Asia’s uniqueness, but may be central to understanding the driving forces behind dowry. For instance, greater heterogeneity in market earnings among men than among women may cause dowry to emerge as a mechanism by which brides attract high-quality grooms (Anderson, 2004). Regardless of their differences, these explanations all share one feature: they are grounded in a model of dowry as price.

A competing set of answers to the dowry puzzle views dowry as bequests, in which parents transfer their inheritance to their daughters at the time of marriage (Tambiah, 1973). If there are institutional or legal barriers to women’s property rights, dowry may emerge as a culturally-sanctioned method of bequest. In this view, South Asian societies are unusual due to historically poor property rights for women—with the exception of dowries, which are legally protected property of brides (Zhang and Chan, 1999). Alternatively, in virilocal societies (where daughters leave their natal household at marriage), a pre-mortem bequest to *daughters* may emerge as a method of maintaining *sons’* incentive to exert full effort in maintaining their parents’ estate (Botticini and Siow, 2003). In this view, the persistence of dowry in South Asia may be due to the dual existence of virilocality and poor mechanisms for monitoring or enforcing sons’ behavior. Finally, if such virilocal societies are marked by poor protection of women in their in-laws’ households, dowries can serve to increase brides’ outside option in a bargaining setting, and thus may serve to mitigate the incidence of domestic violence and other forms of abuse. In this view, South Asia is unique for its combination of virilocality, poor protection against domestic violence, and gender inequality.

The policy implications of this debate are critical: if they are bequests, dowries should be protected, as they represent culturally-sanctioned access to property for women. Even explanations which see such bequests emerging as the result of market imperfections do not prescribe the elimination of the practice. Furthermore, dowries as bequests can improve women’s bargaining power within in-laws’ family, and thereby may function to prevent domestic violence, increase household consumption of goods such as children’s clothing, and improve the welfare of women in society as a whole. If dowries are a groom-price, dowries should arguably be banned, particularly in South Asia, as they increase the perceived cost of raising a daughter and thus contribute to worsening sex ratios through selective abortion and infanticide, as well as gender differentials in child mortality that have led to the “missing girls” problem. To date, bans of dowry in South Asia has taken the form of “paper laws” (Setalvad, 1988, pg. 58), but momentum is gaining among activists and policy-makers to make the prohibition of dowries bite, by publicizing regulations, increasing the penalties for violations, and making the reporting of dowries to authorities more attractive.

With the stakes set so high, the empirical evidence has remained mixed. In South Asia and elsewhere, tests of the price and bequest models have yielded contrary results, sometimes within the same paper, as seen in Table 7. Some authors focus on parameter estimation, assuming either that the price model (Behrman et al., 1999) or the bequest model (Brown, 2003) holds—all find evidence in favor for the model being estimated. A few papers explicitly test the price model against the bequest model, finding either for the former (Dalmia, 2004) or for the latter (Zhang and Chan, 1999). Some datasets provide evidence for both models (Botticini, 1999), while other datasets encourage price model enthusiasts to see dowries as price, and bequest model enthusiasts to come to the opposite conclusion (Rao, 1993a; Edlund, 2001).

When there are competing theories, the usual task is to “regress and reject,” but mixed empirical results point to a third possibility: that both theories are correct. We offer a simple explanation: heterogeneity in dowry motives, and develop an empirical strategy to deal with this heterogeneity. In our view, testing the bequest against price model by regressing dowry amounts on bride and groom (and marriage market) characteristics is misguided, precisely because average coefficients are uninformative as to the actual functioning of dowry. However, by beginning with the identifying assumption that each model may hold true—but for different subsets of the population—we can use the theoretical predictions in an exogenous switching regression with unknown sample separation to dissect the marriage market into “bequest households” and “price households.” Thus, rather than rejecting or confirming either model, we instead use the theories to identify which households are likely to belong in either regime and to estimate a dowry function for each regime.

More precisely, we develop two distinct strategies to place households in one of the two regimes. The first uses the theoretical models to generate predictions of the form: “Bequest households should not be affected by groom (or groom’s family) or marriage market variables when determining the dowry amount; in the bequest regime, only characteristics of the bride’s family affects the dowry amount. In the price regime, characteristics of the bride, the groom, their families, and the marriage market all affect the dowry amount.” We then use a switching regression to assign to each household a probability of membership in the bequest or price regime, based on observed characteristics and dowry amounts. While this strategy of using reduced form restrictions has been adopted in other contexts (Vakis et al., 2004, for example), ours is the first application of the technique to dowry.

The second strategy uses the theory to generate specific predictions about households who should *not* be in a given regime, of the form: “In the price model, love marriages fetch no dowry—thus, if a positive dowry is observed, it is probably in the bequest regime. In the bequest model, brides with no brothers should receive inheritances, not dowries—thus, if a positive dowry is observed, it is probably in the price regime.” Restricting the sample to marriages in which positive dowries were given, we then use the exogenous switching regression to assign each marriage a probability of membership in each regime. This strategy of using what we might call “non-membership predictions” is, as far as we are aware, novel in the empirical literature on switching regressions. As such, this approach may have potential for use in other contexts, especially where the theoretical literature makes clear predictions for *non*-membership in a regime.

The paper proceeds as follows. In Section 2, we discuss in greater detail the two models of dowry. We break no new theoretical ground in this section—instead, depending heavily on the existing literature on price and bequest models of dowry, we collect a number of theoretical predictions about the types of households likely to pay dowry and the reduced form structure of the dowry functions under each theory. In Section 3, we review the historical and anthropological literature on dowry, focusing on South Asia. We conclude from this review that nearly every bit of evidence points to heterogeneity of dowry motives, both over time and in the cross-section. We then take this heterogeneity as given, and develop a simple extension to the price and bequest theories, embedding both in a model of a bifurcated marriage market in which some unknown fraction of households are in the price regime, and the rest are in the bequest regime. Section 4 is the empirical heart of the paper, and represents the innovation we bring to current research on dowry. In this section, we use the predictions of the preceding sections to place households within each regime, using the two strategies outlined above. We use the 1996 Matlab Health and Socioeconomic Survey (MHSS), a rich dataset from rural Bangladesh that allows us several checks of robustness. Section 5 concludes with some discussion of policy implications.

There are several preliminary findings. First, we find that a substantial fraction of the sample falls in each of the regimes. Specifically, in the final specification, which draws from the most information from theory, we find that more than a quarter of marriages in which positive dowry was given use dowries as bequests. Second, we find that the dowry function (mapping bride household, groom household, and marriage market characteristics to dowry amounts) differs, in some aspects substantially, between regimes. However, we fail to find support for recent key hypotheses regarding dowry: in particular, we fail to find evidence of a “marriage squeeze” in Bangladesh. Third, we find evidence that dowry as bequest is disappearing, and that dowries increasingly serve as a groom-price. Finally, we find that bequest households are better educated and wealthier (both in terms of assets and other measures of standards of living) than price households. In terms of policy implications, we find little reason to oppose stricter enforcement of prohibitions on dowry.

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