

Marriage Markets and the Rise of Dowry in India

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Abstract

Dowry payments are an important part of household finances in India, typically exceeding a year of household earnings. Yet there is little empirical evidence on determinants of dowry payments, with existing work relying on small and non-representative samples. In the first part of the paper, we leverage data on over 76,000 marriages between 1900 and 1999 to document changes in Indian marriage markets. We show that although there has been little shift in some practices, such as intercaste marriage, there were large changes in dowry payments. Between 1945-1975, the proportion of marriages with dowry increased from 35-40% to nearly 90%. Over the same period, median real dowry more than doubled, but decreased after 1975 in real terms and as a fraction of household income. In the second half of the paper, we use this data to test the major theories of dowry, such as: i) whether dowry serves as a bequest to female children or is a price for grooms; ii) if the spread of dowry resulted from lower castes adopting high caste practices (Sanskritization hypothesis); iii) how changes in sex ratios affect dowry (marriage squeeze hypothesis); and iv) if changes in dowry can be explained by cross-caste competition for grooms (Anderson, 2003). We reject each of these theories and show that they do not explain the observed marriage market shifts. Instead the changes are explained by shifts in the earnings distribution of grooms and a new model of search in marriage markets. These results have important implications for designing anti-dowry policy, a major focus of the Indian government.

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1 Introduction

One of the most significant financial transactions in the life of an Indian household occurs at the time of marriage. Dowry, transfers from the household of a bride to that of her groom, are nearly universal in India, and typically exceed a year of household earnings. Due to the size of these transfers, there is much popular concern about the consequences of the institution, where households may become impoverished as a result of paying dowry or engage in sex-selective abortion to avoid payment of dowry for female children. In this paper, we demonstrate how dowry practices have evolved over time and what factors have driven changes in the size and prevalence of dowry. We test numerous theoretical models of dowry and find that most of them are rejected by the data. We provide a framework for understanding dowry, use this to devise recommendations for the design of anti-dowry policy, and consider the future of dowry in India.

The scope of payments at the time of a wedding in India is astonishing, especially given the poverty of many households and relative weakness of formal financial markets. In addition to the high cost of a wedding, dowry payments claim a significant fraction of households' income and savings. The Indian government considers the payment of dowry to be a major social ill and has passed multiple pieces of legislation to combat dowry,¹ but none have proven effective. Recent papers have found that dowry encourages sex-selective abortion (Bhalotra et al., 2016; Alfano, 2017), alters investment behavior of households (Anukriti et al., 2017), and even encourages violence against wives in hopes of extracting further payment (Bloch and Rao, 2002). Each of these has a variety of consequences for general welfare and development.

It is also critical to understand what drives the payment and size of dowry, since different explanations merit different policy responses. For example, one theory suggests that cross-caste competition for grooms drives up dowry (Anderson, 2003). If this theory is correct, the Indian government could speed the elimination of dowry by providing occupational opportunities for low caste men and working to reduce the importance of caste. However, if dowry serves as a groomprice and marriage markets are segmented by caste, as we show, these efforts could actually increase the average size of dowry. Another theory suggests imbalances in the number of men and women on the marriage market is the cause of high dowries (e.g. Rao (1993b)), which merits a completely

¹This began with the Dowry Prohibition Act of 1961, which was followed by additional tightening, such as in the Dowry Prohibition Rules of 1985.

different policy response.² It is clearly important to know why dowry occurs in order to design effective policy.

We first examine how marriage markets have changed in India over the past century, using data from four large scale national surveys. Many practices have changed little over this period. As was the case 70 years ago, marriages are almost entirely arranged by the parents of the couple, with a majority of brides and grooms meeting only at the time of the wedding. Over 90% of brides move to the household of their husband's family, which is typically in another village. Despite the rise in communications technology, marriage markets remain heavily localized, with the average distance between the homes of brides and grooms remaining steady at around 3.5 hours of travel. Finally, caste remains the most important determinant of who one marries. Around 94% of marriages occur between individuals from the same *jati*, a specific identity group based on the ancestral occupation within a village economy. Strikingly, this rate does not decline at all between 1930 and 2012 in rural areas, with a decline of only 2 percentage points in urban areas.

While there has been little change in some marriage customs, there have been large shifts in dowry practices. Although 35-40% of brides paid dowry in each year between 1900 and 1940, we observe a period of rapid adoption of dowry between 1940-1975 across all of India. Others have noted that dowry is more prevalent than in previous eras, but to the best of our knowledge, this is the first quantitative evidence on the scale and geography of adoption. At the same time, the value of dowry began to rise, as has been noted in numerous other papers (e.g. Rao (1993b)). However, the composition of dowry payments follows a pattern missed in the previous literature. While in the pre-1975 period, dowry values are rising for all types of households, there is actually a decline in high-value dowry payments in the post-1975 period, with stagnation in dowry value at other parts of the distribution. This raises the main question of the paper: why do we observe such huge changes in dowry amount, and what do these changes tell us about why dowry occurs?

This paper provides rigorous tests of numerous prominent theories of dowry, many of which have never been empirically tested. Much of the theoretical debate around dowry is whether it stems from a parental desire to bequeath resources to their daughters or is a market clearing payment for grooms in a competitive market. We show that the latter model more closely fits the data.

²If this theory were true, the government need not do anything since sex-selective abortion is likely to eliminate dowry in many parts of India in the near future. It also suggests that if regulation of sex selective abortion were successful, this could lead to the return of dowry.

Theories of bequest have difficulty rationalizing the massive increase in dowry. Such an increase would either come from increases in family wealth, which are small over this time period, or the desire to provide daughters with a greater share of the inheritance, which is inconsistent with other investment decisions of the family.

Another well-known explanation for changes in dowry prevalence is the Sanskritization hypothesis of Srinivas (1984), which states that dowry was always practiced among the upper castes and spread as lower castes emulated them. This emulation is attributed to low caste groups attempting to “Sanskritize”, or increase their caste status by emulating practices of high caste groups (e.g. vegetarianism, dowry). We show that this theory cannot explain the rise of dowry. Both low and high caste groups began wide-scale adoption of dowry at around the same time and at similar rates.

A number of papers explain changes in dowry as the result of population growth (e.g. Rao 1993b; Billig 1991, 1992; Dalmia and Lawrence 2005; Sautmann 2011). Since men marry at older ages than women, there will be a surplus of women on the marriage market in a growing population. This creates a “marriage squeeze”, where competition over grooms leads to an increase in dowry. Previous empirical papers have documented associations between surpluses of women on the marriage market and increases in dowry using small data sets (typically of fewer than 200 individuals), but there is significant debate over whether such associations exist. We show that the sex ratio in the marriage market is not related to increases in prevalence or size of dowry. Instead, surplus women results in men marrying at earlier ages, which relieves the pressure of the squeeze.

Anderson (2003) creates an elegant theory linking dowry increases to increases in wealth dispersion within caste groups. Intuitively, the paper argues that low caste families prefer to marry their daughters to high caste men, and as there is an increase in the number of wealthy members of the lower castes, they attempt to attract high caste grooms by offering larger dowries. These grooms then use the threat of out-marriage to increase the dowry payments they receive from in-group women, which pushes up the value of dowry. We devise a number of empirically testable predictions of the theory and find that they are violated. For example, increases in dowry size are not concentrated among high caste men or the types of high caste men that the theory would predict. We argue that the rejection of the theory is due to a key assumption on individuals’ preferences over potential partners from other castes.

We provide evidence that the primary driver of the rise of dowry is increased differentiation

in groom quality during the process of modernization. Starting in the 1930s and 1940s, a class of higher earning and salaried positions for Indian men began to emerge, and the education level of men began to rise. Those grooms command higher dowries since those characteristics are valued on the marriage market, and as their numbers increase, this leads to a rise in dowry. We devise model that fits key features of the data, such as showing that when the number of high quality grooms reaches a certain point, this can also lead to dowry deflation, exactly as observed after 1975.

Our paper makes a number of contributions to the literature. First, we contribute an empirical element to the almost entirely theoretical literature on dowry (Anderson, 2003, 2007b; Becker, 1973; Bhaskar, 2016; Botticini and Siow, 2003; Choo and Siow, 2006; Rajaraman, 1983). As a result of the disconnect from data, many of these papers attempt to explain phenomenon that are not actually present in India, such as a continuous inflation in the size of dowry through the modern time period. By testing and invalidating a number of widely cited theories, we are able to describe how marriage markets in India actually function, which is relevant to design of anti-dowry policy.

Second, we present a theoretical model of dowry that maps well into changes in marriage markets in India. Such a model can rationalize the rises and declines in dowry price observed in the data, and has broad applicability in considering dowry and bride price in other contexts.

Third, we provide a thorough characterization of Indian marriage markets in the post-1930 period and document a number of new facts. We show that even as India has economically modernized, many other aspects have not changed. For example, rates of inter-caste marriage remain low throughout the period, with no signs of increase. We also provide quantitative documentation of the early rise of dowry, in both prevalence and size. Our findings contrast with much of the existing literature, which has only had data on a small samples of marriages or has not considered national trends (Rao, 1993b; Edlund, 2006; Arunachalam and Naidu, 2008; Sautmann, 2011). Anukriti et al. (2017) carry out a similar exercise, but focus on different aspects of the marriage market and trends in dowry. Our paper's results are useful for understanding overall patterns in marriage markets, which are relevant to a broader understanding of household finances in India.

The remainder of the paper is organized as follows. Section 2 discusses the data used in the paper, while section 3 uses that data to describe the evolution of marriage markets in India since 1930. Section 4 shows why dowry payments have changed over time and provides quantitative tests of the most prominent theories of dowry. Section 5 concludes.