Introduction

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South-Central India

Imputed Earnings for Urban

Characteristics in Marathi:

The Demand for Powers and Bride

12
A MODEL OF BRIDE SELECTION AND Dowry EXCHANGE

Given that marriage in rural India is largely an alliance between two families, the groom household typically undertakes a search for a bride for its son. Both individual traits (such as beauty, intelligence, and schooling) and family background (such as wealth, father’s occupation and caste) are given consideration in the search for a ‘perfect’ bride. In the large majority of marriages, a dowry is negotiated and paid by the bride household to the groom household, the value of which depends upon the traits of the groom, the bride, and their respective households. However, in the area under study (viz., South-Central India), the reverse transaction—viz., from the groom to the bride household—also takes place with some frequency, although the frequency of such exchanges has declined over time.

To model the demand for bride traits, we assume that the groom household’s utility function is defined over the traits of the potential bride and her parental household, conditional on the traits of the groom and his parental household:

\[
U = U(q_b, H_b, X, \Omega, H, R), \quad U' > 0, \quad U'' < 0, \quad (1)
\]

where the subscript \( b \) refers to the bride, and

- \( q \) = vector of individual traits,
- \( H \) = vector of parental household traits,
- \( X \) = consumption of a composite good (having a price of unity) by the groom household, and
- \( R \) = vector of taste shifts, captured by time and residential location.

The groom household is assumed to maximize the utility function in (1), subject to a budget constraint that includes the dowry payments from the bride household, viz.:

\[
X = Y + D(q_b, H_b, \Omega, H, T), \quad \partial D \partial \Omega > 0, \quad \partial D / \partial \Omega < 0, \quad \partial D / \partial H > 0, \quad \partial D / \partial H < 0, \quad (2)
\]

where,

- \( Y \) = exogenous (non-dowry-related) income of the groom household,
- \( D \) = dowry received (or, if \( D < 0 \), bride price paid) by the groom household, and
- \( T \) = time and residential location.

In part, the reverse transaction may take place because of the ceremonial aspects of marriage, which involve a fee of total transactions between all households. In this paper, we focus on the net exchange, which should differentiate those transactions that are made purely for ceremonial purposes and thereby isolate the groom- and bride-prices.
The dowry relation in (2) can be viewed as a hedonic price that is increasing in the groom's (and his parental household's) traits and decreasing in the bride's (and her parental household's) traits.

The constrained maximization problem yields a set of first-order conditions, which can be expressed as the shadow prices for the desired traits of the bride (\( \pi_b \)) and her parental household (\( \pi_{HH} \)):

\[
(\partial U/\partial \Omega_b) \lambda = \pi_b = -\partial U/\partial \Omega_{HH},
\]

(3)

\[
(\partial U/\partial H_b) \lambda = \pi_{HH} = -\partial U/\partial H_{HH}.
\]

(4)

Equations (3) and (4) imply that the optimizing groom household will demand traits of the potential bride and her parental household such that the marginal utilities it gains from these traits will equal the marginal loss in dowry suffered from the improved traits.

Solution of the first-order conditions and the budget constraint for all the endogenous variables yields the groom household's reduced-form demand for bride and bride household traits:

\[
\Omega_b = \Omega_b(\Omega_b, H_b, Y_b, T_b, R_b),
\]

(5)

\[
H_{HH} = H_{HH}(\Omega_b, H_b, Y_b, T_b),
\]

(6)

which, when substituted back into the dowry relation in (2), yield a reduced-form dowry function:

\[
D = D(\Omega_b, \Omega, Y_b, H_b, T_b, R_b, H_{HH}(\Omega_b, H_b, Y_b, T_b), \Omega, H, T)
\]

(7)

\[
D = D(\Omega, H, Y, T, R).
\]

(11)

where the sign below each variable indicates the sign of the partial derivative of the preceding function with respect to that variable. Interestingly, with the exception of the income effect (which is negative), none of the coefficients in the dowry equation can be signed unambiguously a priori. The reason for this is that, while improved groom characteristics increase the dowry he can command, they also secure him a bride with better traits and family background, which in turn lowers the dowry amount that he can obtain. The two opposing effects render the effect of improved groom characteristics on equilibrium dowry ambiguous.

DATA

The data we use are part of the Village-Level Studies (VLS) panel data collected by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in rural semi-arid South India. A total of 60 villages, purposively selected to represent different agro-climate zones in semi-arid agriculture, were surveyed regularly in the VLS project over the period 1973-76 to 1984-85. A sample of 40 households (30 cultivating and 10 labour) was selected from each village. To ensure equal representation of different farm size groups, cultivating households were first divided into three strata, with each stratum having an equal number of housen-
of the villages were surveyed during each of the 10 years; some were
added half-way into the project, while others were dropped at that time.
However, a total of 120 households from three villages were surveyed
continuously in each of the 10 years. The VLS data contain detailed
information on farm management, income, consumption, time alloca-
tion, and asset ownership.

In 1975–76 and 1976–77 a supplementary survey on health and nu-
tritional intake was conducted in which dietary intake data, based on
24-hour recall, and basic anthropometric indicators, including height,
weight, arm circumference and skinfold, were collected on all
household members.

Subsequently, in 1984 another special survey was undertaken in
which retrospective data on marriage, marriage exchanges, bequests,
and inter-generational changes in land holding and wealth were col-
lected for all the sample households. In addition, information on the
land assets belonging to the families of each household head and his
spouse at the time of their marriage were collected with specifically-
designed questionnaires that sought to carefully reconstruct important
events in a family’s history. Retrospective data are always potentially
subject to recall error. However, a woman’s marriage in India is the sin-
gle most important event in her life and marriage transactions repre-
sent a very large proportion of a household’s assets. Remembering how
much was spent or received during a marriage is somewhat akin, in the
western context, to remembering the amount spent on purchasing a
house or an expensive college education. It is likely that such information
in rather accurately recalled. We have merged these retrospective data
with cross-sectional information for 1984 on the income, personal char-
acteristics, and non-bequested assets of individuals.

We have merged data from the 1984 Retrospective Survey with those
from the 1975–77 Health/Nutrition Survey and the regular VLS
Survey to create a data file on the personal and parental household traits
of all household heads (in 1984) and their spouses, the year of their mar-
riage, and the amount of dowry or bride-price exchanged at the time of
their marriage.


events. From each village, 10 households were selected at random, thus ensuring an equal
sampling fraction in each farm size group. For labor households, a random selection
was made from those who owned less than 0.2 hectares of land and those whose main
occupations were agriculture or labor.

Empirical Model and Estimation

The empirical version of relations (5)–(7) contain three individual (I)
and three parental household (H) traits. The individual attributes in-
clude age at marriage, schooling years, and height, while the parental
household characteristics consist of father’s schooling, father’s occupa-
tion, family wealth, and caste affiliation.

Five points relating to the empirical model deserve mention. First,
since information on traits is not uniformly available for grooms and
brides, a complete (and symmetric) demand system cannot be es-
timated. In particular, we do not have information on the schooling and
occupation of the bride’s father. Thus, these equations are excluded
from the demand system. In addition, although information on the caste
affiliation of the bride is available, assortative mating on the basis of
caste is imperfect in the sample, as all the marriages took place within the
same caste (as is common in most Indian marriages). To avoid perfect
collinearity, the caste affiliation of the bride is also excluded as an equation.

Second, since the groom’s age at marriage is potentially endogenous
to the marital search of the groom household, its inclusion as an expla-
natory variable may introduce simultaneous-equations bias in the estima-
tion of the demand equations. Therefore, we present estimates with and
without the groom’s age at marriage as a right-hand side variable.

Third, since schooling is a rare attribute among adult women in rural
India (with only 16.8 percent of adult women in the sample having had
any schooling), there is substantial censoring of the bride schooling vari-
able at zero. Therefore, in addition to the OLS estimates, we also report
 Tobit maximum likelihood estimates for the bride schooling equation.

Fourth, it is important that the wealth variable reflect the groom house-
hold’s wealth position before or at the time of the marital search—not
at the time of the survey undertaken several years (or decades) later. Fortu-
nately, the 1984 Retrospective Survey obtained information on the
parental household wealth (in terms of dry—or irrigated—and wet—or
irrigated—land owned) of both marriage partners just before they were
married. This is the wealth variable we use. The use of this variable en-
sures that the groom household wealth variable is exogenous to the bride
selection and dowry decisions.

Fifth and finally, data on the pre-marriage income of the groom par-
tental household is not available. However, it is likely to be highly col-
linear with parental household wealth at the time of marriage. Hence,
parental wealth will reflect both an assortative mating and an income
effect in the empirically-estimated demand equations.
The dowry variable is constructed as the net exchange of all cash and in-kind gifts made from the bride household to the groom household at the time of marriage and the expenses incurred in marriage economics by the bride household (net of those incurred by the groom household). A major problem with the net dowry variable is that the dowries in the sample were made at vastly different points in time, since the earliest marriage dates to 1923 and the most recent to 1984. We have dealt with this problem in two ways. First, all net dowry values have been converted to constant 1984 prices. Second, the year when the marriage took place is included as an independent variable in the model to control for cohort-specific trends in assortative mating and dowry exchanges.

EMPIRICAL RESULTS

The means and standard deviations of the variables are reported in Table 6.1. The 'average' marriage took place in 1954 between a 15-year-old bride and 21-year-old groom with 0.8 and 2.4 years of schooling, respectively. The heights of the bride and groom were 169 cm (approximately 5' 6") and 162 cm (5' 3''), respectively. The parental households of the bride and the groom owned about the same amount of land (about 14 acres) at the time of marriage. The average net dowry received by the groom household, including reimbursement for marriage expenses, amounted to Rs 4,246 in constant 1984 prices, which is equivalent to about one-half of average annual household income in 1984 (and considerably more if annual incomes in 1954—the mean year of marriage—were considered). Thus, net dowry receipts were large relative to household income in our sample. However, net dowry receipts were negative in about 43 per cent of the marriages—indicating a net flow of gifts and expenses from the groom to the bride household.

OLS estimates of relations (5)-(7) with the groom's age at marriage as an explanatory variable are shown in Table 6.2. Table 6.3 reports the OLS estimates with the groom's age at marriage excluded. Table 6.4 presents the tobit maximum likelihood results for the bride schooling equation.

Since no price indices exist prior to 1930 for these sample villages, all values were deflated to 1984 levels, using historical data on the price of gold. Gold is the only commodity for which prices are available going back to the last century. Since gold is the most important source of wealth, after land and cattle, among the sample households, the price of gold may reflect accurately the real value of assets over time.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at marriage</td>
<td>15.5</td>
<td>5.7</td>
<td>21.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Schooling years</td>
<td>0.8</td>
<td>2.01</td>
<td>2.37</td>
<td>3.10</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>143.46</td>
<td>4.90</td>
<td>162.16</td>
<td>6.2</td>
</tr>
<tr>
<td>Dry land owned by household at age 15 (acres)</td>
<td>1.34</td>
<td>8.74</td>
<td>1.87</td>
<td>5.97</td>
</tr>
<tr>
<td>Wet land owned by household at age 15 (acres)</td>
<td>12.33</td>
<td>38.94</td>
<td>12.21</td>
<td>32.93</td>
</tr>
<tr>
<td>Year of marriage (1984—)</td>
<td>—</td>
<td>—</td>
<td>54.55</td>
<td>10.44</td>
</tr>
<tr>
<td>Whether father cultivates</td>
<td>—</td>
<td>—</td>
<td>0.24</td>
<td>0.5</td>
</tr>
<tr>
<td>Whether father has any primary schooling</td>
<td>—</td>
<td>—</td>
<td>0.04</td>
<td>0.19</td>
</tr>
<tr>
<td>Whether father completed primary schooling</td>
<td>—</td>
<td>—</td>
<td>0.07</td>
<td>0.26</td>
</tr>
<tr>
<td>Whether father completed middle or secondary school</td>
<td>—</td>
<td>—</td>
<td>0.11</td>
<td>0.32</td>
</tr>
<tr>
<td>Whether low caste</td>
<td>—</td>
<td>—</td>
<td>0.05</td>
<td>0.22</td>
</tr>
<tr>
<td>Whether caste</td>
<td>—</td>
<td>—</td>
<td>0.39</td>
<td>0.49</td>
</tr>
<tr>
<td>Whether medium-low caste</td>
<td>—</td>
<td>—</td>
<td>0.19</td>
<td>0.39</td>
</tr>
<tr>
<td>Whether medium-high caste</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Note: Number of observations is 140. Year of retrospective survey was 1984.

The exclusion of groom's age at marriage as an independent variable from the demand system makes little difference to the number of statistically significant coefficients or to the size of the estimated coefficients. This provides support for the hypothesis of men's age at marriage being determined with respect to the bride selection and dowry exchange decisions. Indeed, Table 6.1 indicates that male age at marriage varies much less than female age at marriage in the sample. For the most part, positive (although not perfect) assortative mating is borne out by the empirical results. For instance, the individual traits

The only example of statistically significant negative assortative mating that is observed in the empirical results is the effect on bride height of the schooling of the groom's father.
Table 6.2
OLS Demand Equations for Bride Characteristics and Net Dowry Payment by Groom Households, Rural South-Central India
(Groom's Age at Marriage not included as an Independent Variable)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Bride's Age at Marriage (yrs.)</th>
<th>Bride's Height (in cm.)</th>
<th>Bride's Schooling Years</th>
<th>Dry Land Owned by Bride Household at Age 15</th>
<th>Wet Land Owned by Bride Household at Age 15</th>
<th>Net Dowry (incl. expenses) Paid by Bride Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest (1-1000)</td>
<td>0.005</td>
<td>0.2</td>
<td>0.012</td>
<td>10.4</td>
<td>-0.031</td>
<td>-0.4</td>
</tr>
<tr>
<td>Groom's height (in cm.)</td>
<td>-0.013</td>
<td>-0.2</td>
<td>0.137</td>
<td>1.9</td>
<td>-0.003</td>
<td>-0.4</td>
</tr>
<tr>
<td>Groom's schooling years</td>
<td>0.126</td>
<td>0.8</td>
<td>0.120</td>
<td>0.9</td>
<td>0.244</td>
<td>5.8</td>
</tr>
<tr>
<td>Dry land owned by groom household at age 15</td>
<td>-0.033</td>
<td>-0.3</td>
<td>0.045</td>
<td>0.4</td>
<td>0.207</td>
<td>3.3</td>
</tr>
<tr>
<td>Wet land owned by groom household at age 15</td>
<td>-0.072</td>
<td>-1.3</td>
<td>0.047</td>
<td>3.1</td>
<td>0.003</td>
<td>0.6</td>
</tr>
<tr>
<td>Year of marriage</td>
<td>0.200</td>
<td>6.6</td>
<td>0.051</td>
<td>1.3</td>
<td>0.035</td>
<td>2.8</td>
</tr>
<tr>
<td>Whether low caste</td>
<td>0.072</td>
<td>0.0</td>
<td>1.221</td>
<td>0.9</td>
<td>-0.146</td>
<td>-0.5</td>
</tr>
<tr>
<td>Whether medium-low caste</td>
<td>-1.181</td>
<td>-0.8</td>
<td>-0.201</td>
<td>-0.2</td>
<td>0.200</td>
<td>0.5</td>
</tr>
<tr>
<td>Whether medium-high caste</td>
<td>-1.377</td>
<td>-2.4</td>
<td>1.600</td>
<td>3.2</td>
<td>-2.279</td>
<td>-0.7</td>
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<tr>
<td>Whether groom's father cultivator</td>
<td>-0.566</td>
<td>-0.5</td>
<td>0.271</td>
<td>0.4</td>
<td>-0.419</td>
<td>-1.6</td>
</tr>
</tbody>
</table>

Table 6.2 Commented

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Bride's Age at Marriage (yrs.)</th>
<th>Bride's Height (in cm.)</th>
<th>Bride's Schooling Years</th>
<th>Dry Land Owned by Bride Household at Age 15</th>
<th>Wet Land Owned by Bride Household at Age 15</th>
<th>Net Dowry (incl. expenses) Paid by Bride Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether groom's father</td>
<td>-1.907</td>
<td>-0.8</td>
<td>0.589</td>
<td>0.3</td>
<td>-0.389</td>
<td>-0.4</td>
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<tr>
<td>agricultural laborer</td>
<td>2.163</td>
<td>1.1</td>
<td>-0.505</td>
<td>-0.8</td>
<td>-0.294</td>
<td>-0.5</td>
</tr>
<tr>
<td>Whether groom's father had any primary schooling</td>
<td>-1.709</td>
<td>-1.2</td>
<td>1.515</td>
<td>1.2</td>
<td>2.049</td>
<td>4.9</td>
</tr>
<tr>
<td>Whether groom's father completed primary schooling</td>
<td>-1.704</td>
<td>-0.7</td>
<td>-0.359</td>
<td>-1.7</td>
<td>1.340</td>
<td>1.9</td>
</tr>
<tr>
<td>F-Ratio</td>
<td>0.84</td>
<td>5.23</td>
<td>10.77</td>
<td>1.47</td>
<td>6.14</td>
<td>5.20</td>
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<tr>
<td>R-Square</td>
<td>0.335</td>
<td>0.250</td>
<td>0.525</td>
<td>0.152</td>
<td>0.388</td>
<td>0.349</td>
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<td>---------</td>
</tr>
<tr>
<td>Intercept (+1,000)</td>
<td>-0.001</td>
<td>-0.1</td>
<td>0.123</td>
<td>10.4</td>
<td>-0.001</td>
<td>-0.2</td>
</tr>
<tr>
<td>Groom's age at marriage (years)</td>
<td>0.606</td>
<td>3.5</td>
<td>-0.082</td>
<td>-0.6</td>
<td>-0.024</td>
<td>-1.5</td>
</tr>
<tr>
<td>Groom's height (in cms)</td>
<td>-0.049</td>
<td>-0.7</td>
<td>0.140</td>
<td>1.9</td>
<td>0.050</td>
<td>0.8</td>
</tr>
<tr>
<td>Groom's schooling years</td>
<td>0.899</td>
<td>7.7</td>
<td>0.131</td>
<td>0.9</td>
<td>0.247</td>
<td>2.1</td>
</tr>
<tr>
<td>Dry land owned by groom household at age 15</td>
<td>0.628</td>
<td>3.2</td>
<td>0.080</td>
<td>0.4</td>
<td>0.103</td>
<td>3.2</td>
</tr>
<tr>
<td>Wet land owned by groom household at age 15</td>
<td>-0.018</td>
<td>-1.5</td>
<td>0.047</td>
<td>3.1</td>
<td>0.003</td>
<td>0.5</td>
</tr>
<tr>
<td>Year of marriage</td>
<td>0.209</td>
<td>5.7</td>
<td>0.057</td>
<td>1.4</td>
<td>0.040</td>
<td>0.4</td>
</tr>
<tr>
<td>Whether low caste</td>
<td>-0.003</td>
<td>0.1</td>
<td>1.221</td>
<td>0.9</td>
<td>-0.160</td>
<td>-0.3</td>
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<tr>
<td>Whether medium-low caste</td>
<td>-0.095</td>
<td>-0.8</td>
<td>-0.276</td>
<td>-0.2</td>
<td>0.187</td>
<td>0.4</td>
</tr>
<tr>
<td>Whether medium-high caste</td>
<td>-1.162</td>
<td>-1.3</td>
<td>1.326</td>
<td>1.1</td>
<td>-0.595</td>
<td>-1.0</td>
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</table>

Table 6.3 Continued

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<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether groom's father educated</td>
<td>0.206</td>
<td>0.4</td>
<td>0.033</td>
<td>0.3</td>
<td>-0.547</td>
<td>-1.7</td>
<td>3.099</td>
<td>1.0</td>
<td>7.255</td>
<td>1.0</td>
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<tr>
<td>Whether groom's father agricultural labourer</td>
<td>-1.216</td>
<td>-0.6</td>
<td>0.118</td>
<td>0.2</td>
<td>-0.342</td>
<td>-0.6</td>
<td>-0.082</td>
<td>0.0</td>
<td>-3.385</td>
<td>-0.2</td>
</tr>
<tr>
<td>Whether groom's father had any primary schooling</td>
<td>1.228</td>
<td>-0.7</td>
<td>3.030</td>
<td>-0.7</td>
<td>-0.028</td>
<td>-0.4</td>
<td>1.354</td>
<td>0.4</td>
<td>3.129</td>
<td>0.2</td>
</tr>
<tr>
<td>Whether groom's father completed primary schooling</td>
<td>-1.535</td>
<td>-1.3</td>
<td>1.501</td>
<td>1.2</td>
<td>2.071</td>
<td>1.9</td>
<td>4.512</td>
<td>1.9</td>
<td>13.843</td>
<td>1.5</td>
</tr>
<tr>
<td>Whether groom's father completed middle or secondary schooling</td>
<td>-0.892</td>
<td>-0.5</td>
<td>3.707</td>
<td>-1.7</td>
<td>1.253</td>
<td>1.8</td>
<td>3.810</td>
<td>0.9</td>
<td>20.340</td>
<td>2.5</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.534</td>
<td>-0.2</td>
<td>0.292</td>
<td>0.2</td>
<td>0.234</td>
<td>0.3</td>
<td>0.177</td>
<td>0.3</td>
<td>0.354</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6.3 Continued
of the groom (viz., schooling, height and age at marriage) have highly significant and positive associations with the respective traits of the bride. Similarly, men with more family wealth (in the form of land) are successful in obtaining brides with more family land wealth. In addition, there are a number of cross-assortative mating effects. For example, men with more schooling are matched with brides from wealthier family backgrounds, while wealthier grooms marry taller and more-educated women. Similarly, grooms with more-educated fathers appear to be successful in attracting more-educated brides from wealthier family backgrounds.

Of course, as discussed in the previous section, the effects of grooms' parental wealth on bride characteristics may capture income effects in addition to assortative mating effects. However, the large number of positive associations between groom and bride characteristics, including traits such as height that are unlikely to have income effects, strongly supports the hypothesis of assortative mating on the basis of individual attributes and family background.

The caste affiliation and parental occupations of grooms have few significant effects on other bride characteristics (e.g., height, schooling or family wealth), possibly because assortative mating on the basis of caste and occupation is close to perfect in rural India.

Finally, the estimated co-efficient on year of marriage suggest that, holding groom characteristics constant, there has been a significant increase over time both in the schooling of brides and in their age at marriage. The co-efficient of year of marriage on bride heights is also positive, but barely approaches significance. All of this suggests that the average quality of female marriage partners improved considerably in the fifty-five years since 1923 in the sample under consideration.

As discussed in the theory section, the reduced-form effects of groom traits on dowry receipts cannot be signed unambiguously, since the indirect effects of improved groom traits on dowry (via their effects on enhanced bride characteristics) are opposite in sign (viz., negative) to the direct effects. This is seen most clearly in the estimated co-efficient of groom height in the dowry equation, which is significant and negative in sign. Although taller men are generally preferred to command higher dowries, they also are more successful than shorter men in marrying taller women, which in turn lowers the dowry they can obtain. In spite of the theoretical ambiguity, however, two-groom household characteristics do have significantly positive estimated effects on equilibrium dowry, viz., ownership of wet land and schooling of the groom's father. It must be emphasized that these results, while 'reasonable', should be treated with some caution since the sample on which these results are based is rather small. However, better data on marriage transactions in India, or anywhere else, are hard to come by.

The empirical results also lend support to a disturbing fact that has been recognized by anthropologists, viz., that the amount of dowry exchanged at marriages has increased steadily over time, holding constant groom characteristics. Indeed, it is claimed that, in the course of the second decade of this century, most of the traditionally bride-price-paying areas of South Asia, including the region of South-Central India under study, witnessed a shift in regime—from bride-price to dowry (Lindenburg 1981; Billig 1989). The shift was accompanied by an increase-
in the magnitude of the transaction. The reasons for this shift are not known; demographers have speculated that dowries emerge as the result of a surplus of women over men in the marriage market (the "marriage squeeze"), which occurs in a situation where (i) younger cohorts expand more rapidly than older cohorts due to rapid population growth, and (ii) younger women traditionally marry older men (Caldwell, Reddy and Caldwell 1983). This aspect of the data is dealt with by Rao (1993a and 1993b).

CONCLUSION

In this paper, we have used data from a retrospective sample survey in rural South-Central India to estimate a model of bride selection and dowry exchange. An important argument of this paper is that since most, if not all, marriages in rural India are arranged by the families of the groom and bride, with neither of the partners having much say in the matter, assortative mating takes place not only on the basis of individual traits (such as beauty, youth and schooling) but also on the basis of parental household characteristics (such as family wealth and father's schooling and occupation). However, the model we have developed does not permit us to sign a priori the effect of groom characteristics on equilibrium dowry, since improved groom traits—which ceteris paribus are certainly correlated with larger dowries—also are associated with enhanced bride attributes, which in turn lower the dowry that the groom can command.

The empirical estimates strongly support the hypothesis of assortative mating on the basis of both individual attributes and family background. In particular, younger men marry younger women; taller men are matched with taller brides; men with more schooling are able to obtain more-schooled brides; and men with greater family wealth in the form of irrigated land marry women with greater family wealth. As expected from the theoretical model, however, few groom characteristics are associated with larger dowry; in fact, only (wet) land ownership and schooling of the groom's father have significant positive effects on dowry. In fact, holding everything else constant, the effect of groom height on dowry is actually negative.

The finding that the reduced-form effects of land ownership and father's schooling on dowry amounts are significantly positive is disturb-

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REFERENCES


