

**Celebrations as Social Investments:
Festival Expenditures, Unit Price Variation and Social Status in Rural India**

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Abstract

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Festival expenditures amount to over 15% of a household's annual expenditures in rural India. Yet they have never been studied by economists. This paper uses both qualitative and quantitative data from a case-study of three South Indian villages to show that festivals are important public goods in the village but neither a pure entertainment motive, nor an altruistic desire to contribute to a public event seem to explain their size. Households who spend money on festivals, everything else held equal, are, however, able to generate tangible rewards - lower prices on food, higher social status and more invitations to meals from other families. This indicates that active participation in festivals generates private economic and social returns which helps resolve a potential free-rider problem. The evidence is consistent with the notion that festivals serve as mechanisms by which communities cement bonds across families and thus build social capital.

Introduction

I will never forget the first time I saw a village festival. In November, 1992 I had spent about a week in a village in Karnataka State in Southern India conducting fieldwork. My team and I were interviewing families with six or seven adults and children who lived in one or two room mud huts with terracotta-tiled roofs, often sharing their space with goats and chickens. The families all belonged to the potter caste but almost all of them also worked as wage labourers. Life for the women revolved around strenuous work in the fields, followed by many hours of gathering firewood and cooking and cleaning and avoiding the drunken violence of their husbands. For the men it also involved working in the fields or on the potter's wheel, and on Wednesday, pay day, an evening of sad systematic drinking. The men were too poor to dress in anything beyond government-issue blue cotton shorts and torn vests, while the women wore threadbare polyester saris that they preferred to cotton because they were cheaper and easier to clean. We were staying in a nearby town and would come in at about 9 in the morning and leave at 6. On the sixth day we were warned that on the next day it would be "difficult to find people in their homes because they would all be at Mariamma'sⁱ festival."

When we arrived the next morning the village had been transformed beyond recognition. Everyone was wearing their best clothes that they had found scarce water to clean. The women had put on gold and silver jewellery and had jasmine flowers in their hair. The men were dressed in crisp white *dhotis* and white bush shirts with a freshly ironed cotton shawl folded neatly over their shoulders. There were colourful fragrant garlands of marigold, jasmine and rose strewn on poles around the village and on the pillars of the local temple, along with festive paper decorations and balloons. Two loudspeakers tied to the temple's roof blared film songs. And then, at about 10 in the morning, with the volume of the temple loudspeakers reduced, the procession began. Three musicians playing the *nadaswaram* - a high volume South Indian wind instrument - and four drummers beating snare drums and *thavils*ⁱⁱ led the procession. A bullock cart, freshly painted in red, yellow and green, followed them pulled by two large colourfully decorated bulls. The cart carried an image of the goddess Marriamma swathed in silk, gold and flowers and tended by two priests reciting prayers.

Immediately behind the bullock cart was a group of about ten important looking men and women who were described as Respected People in the community, followed by hordes of dancing children. I asked some people in the crowd who these Respected People were and was told that they were the heads of those families who had made the largest contributions and had helped organise the celebrations. The festival was obviously a very expensive event entirely

financed by voluntary contributions; all the contributions, whether small or big, were made public at an auspicious time when the Temple Committee which organised the event announced them on loudspeakers. I was told that such celebrations were repeated about two or three times a year during various festival periods.

The average family in this village spends 15 per cent of its annual income on festivalsⁱⁱⁱ, both in the form of contributions to the Temple Committee and on private goods such as special clothes and food for the events. In fact, money spent on festivals is the single largest regularly scheduled expenditure made by these households. The only other events that cost more are weddings, but weddings occur two or three times in the lifetime of a household head while festivals occur every few months. Considering that many of these households live below the poverty line with very low levels of education and health, expenditures on festivals are allocated away from what would seem like more productive investments. Why then do people spend so much money on festivals? Do festival expenditures generate economic and social returns? In this case study, I will attempt to provide some answers to these questions using ethnographic and econometric methods. As with any case study the smallness of sample permits a detailed examination of questions that may be difficult to analyse with secondary data, but this is traded off with the unrepresentativeness of the sample.

The structure of this paper is as follows: Section 2 outlines the qualitative findings which help inform the development of a simple theoretical model, Section 3 provides the econometric methodology, Section 4 presents the econometric results, and Section 5 concludes the paper and presents its policy implications.

2. Qualitative Analysis and a Theory of Festival Expenditures

Data Collection

The data used in this paper are both qualitative and quantitative from a study I conducted in three villages, Halli, Beedu and Ooru^{iv}, located within 70 miles of each other in the South Indian State of Karnataka. The qualitative analysis is based upon focus group discussions and in-depth interviews with 120 men and women who represent a broad cross-section of the potter community in the three villages and 40% of the population. The villages were visited by a team led by me for a period of four months spread between 1992 and 1994 to collect information in a

variety of subjects related to living standards. The team consisted of 3 men and 6 women, and the staff were social workers from nearby villages -- totally familiar with local conditions.

In addition to the qualitative data, all 123 potter families in the three villages were administered a structured quantitative survey that was constructed on the basis of the qualitative findings. The survey instrument had three parts, consisting of a household questionnaire, a women's questionnaire, and a questionnaire for husbands. The questions covered a range of topics, including expenditure, income, wealth, human capital investments, and marriage market data. Another survey of the same households was conducted in 1994 that asked specific questions on festival, social status, income and expenditures and other issues that will form the core of the quantitative analysis in this paper. In the analysis below the qualitative data will inform the construction of a conceptual model, and hypotheses derived from the model will be econometrically tested with the survey data.

Qualitative information is thus able to complement the quantitative analysis in at least the following ways:

- 1) by informing the construction of the survey instrument;
- 2) by suggesting hypotheses that could be modelled and tested against the survey data, and by providing an alternate source of evidence against which statistical results could be compared and validated;
- 3) by asking open ended questions that permitted a discussion to be more informative by allowing a respondent more freedom in determining its direction;
- 4) by understanding people's motives, desires, aspirations, expectations.
- 5) by providing a personalised context and texture to statistical work with anecdotes and excerpts from conversations;
- 6) by understanding the nature of community interactions, and how people related to one another.

Analysis

Public festivals in rural India tend to be of two types, some are collective in that they involve all the communities in a village, others are specific to each sub-caste within a village and other castes generally do not participate in them. Clearly, there are public goods aspects to festivals because they are in many ways a public entertainment. Sociologists since Durkheim

(1912), however, have argued that collective celebrations serve a much more important public function by providing occasions when communities reify their group identity. Turner (1982), for instance, describes festivals as "generally connected with expectable culturally shared events." He suggests that when a social group celebrates a particular event it "celebrates itself" by "manifesting in symbolic form what it conceives to be its essential life." Thus, festivals serve to build social cohesion by reinforcing ties within a community. Furthermore, by providing a specific time and place within which families can signal their commitment to the collective and compete for status with others, festivals have public goods aspects that go beyond pure entertainment. They provide a socially sanctioned arena for publicly observable action.

Festivals, such as those studied in this paper, are widespread across India (*Ostor* 1980, *Fuller* 1992) and particularly so in rural India (*Gough* 1955, *Hanchett* 1972). Moreover, this behaviour is clearly not unique to Indians -- consider, for instance, the large sums spent on gifts with little direct utility during Christmas (*Waldfogel* 1983). Yet, despite their size and significance, economists have rarely studied such celebrations. There are a few exceptions. *Chwe* (1998), for example, argues that public events like ceremonies and festivals solve coordination problems by generating common knowledge and thus play an important role in communicating information. While *Chwe's* work is a contribution towards a general theory of public events that provides valuable insights into why institutions such as festivals and rituals exist, it does not analyse the microeconomics of festival behaviour in households. More specific explanations are required to understand why impoverished households spend so much money on such events, and why some households spend more than others.

Chwe's paper provides a micro-foundation for the concept of social capital (*Coleman* 1988). Any institution that serves to reinforce ties within a community, whether by generating common knowledge or by building trust or by some other means, is building social capital by facilitating the formation of networks and increasing social cohesion. The concept has attracted great attention, and controversy, in recent years, particularly in its potential application to problems of development (*Woolcock and Narayan* 2000, *Isham and Kahkonen* 1999). An emerging empirical literature has begun to establish a connection between social capital and economic productivity (e.g.: *Knack and Keefer* (1997), *Barr* (2000)). *Narayan and Pritchett* (1999), for instance, find that villages which have higher levels of social capital tend to have more households with higher incomes, who also benefit from better schools and faster rates of technology adoption. However, none of these papers tell us much about the process by which households gain access to social capital, or about how social capital is built and sustained within a community. These processes clearly differ from culture to culture and are deeply conditioned by

social norms and constraints. Thus, if we are to understand how social capital works, we must understand the social mechanisms that underlie it and how these mechanisms interact with economic decisions.

Festivals are examples of such mechanisms. As argued above, village festivals provide a space within which households can express their sociability. Sociability can be expressed either by a direct contribution to the Temple Committee, or - particularly for poorer households - by dressing up, making special food, participating in common events and otherwise spending money in a visible manner that enhances the “festival experience” for the entire village. By participating in a festival, a highly associational activity, a family signals its commitment to being an active member of the community; a “good citizen,” a potential partner in mutually beneficial reciprocal relationships. Thus, at the village level, festivals enhance social cohesion and build social capital, while at the level of the family they provide households with an opportunity to access social networks and generate returns from investments in social capital^v.

Halli, the first village that we studied, is a large multi-caste village close to Mysore a city of about three million people. Many residents of Halli work in Mysore as day labourers, but the village remains isolated with very poor health and sanitation facilities. Ooru, which is about 30 miles away from Halli, is also a large, multi-caste village and hosts a monastery which is the seat of a religious order. The monastery is the village's largest landowner and operates a large school, which village residents can attend for a small fee. Ooru also has another school that provides classes until the 10th grade and a primary hospital with a resident physician and rudimentary operating facilities. Beedu, a village consisting entirely of potters, is the third village, located about 70 miles away in Coorg district which is a "forward" area in the sense that the district has relatively good schools and a long tradition of providing basic social services. The village is surrounded by coffee plantations with rather feudal owners who are the area's major employers and creditors.

As noted above, this study is not based upon a random sample of all the households in these villages but rather on a census of households from one particular community - *khumbaras* - the potter caste^{vi}. Since households marry within sub-castes and friendships rarely cross caste boundaries, each community within the village is to some extent a socially distinct group. Thus, many festivals tend to be celebrated in a rather segregated manner. The type of festival, however, can have important implications for social capital formation. Some festivals are private – restricted to family and close friends - many widely observed Hindu festivals, such as *Deepavali*, fall into this category. While *Deepavali* is celebrated by all Kannada^{vii} Hindus at the same time, social interactions in the village during *Deepavali* tend to be restricted to members of

one's extended family. Thus, while *Deepavali* is an occasion where bonds within the family are strengthened, it does not offer many opportunities to create links with families who are not already well known. Some festivals are specific to sub-castes - for instance the potters have a special festival to pray to a goddess whom only the potters consider auspicious. Such festivals serve the function of building cohesion within the potter community but are not structured to enable much cross-community interaction.

There is a third category of festival where all the caste groups in the village celebrate communally. For instance, once or twice a year the village organises a *jatra* - a procession that honours a prominent deity housed in the local temple. Traditionally, these festivals have served to reify hierarchies within the village with each community being assigned a role appropriate to their caste and occupation^{viii}. Village festivals, when they are practised, also serve to preserve links across different groups while reinforcing structures of social stratification. Some, *jatras* therefore have historically been occasions of conflict - usually sparked by upwardly mobile groups attempting to renegotiate their place within the village hierarchy. In the villages studied here, traditional *jatras* have lost their significance with the gradual break up of the *jajmani*^{ix} system. Nevertheless, it is important to note that the type of festival - its size, its structure, and its practices - affect the logic of investment and participation and, therefore, may have different implications for social capital formation^x.

The role of men and women in festivals is also quite different. Collective festivals involving the participation of many different families, as in the opening vignette, tend to be dominated by men. Contributions to the temple are announced in the name of the head of the family who is almost always a man, and women are a distinct minority in the processions. In the festival procession I observed there were very few women were in the procession. They were far more likely to be watching, in all their finery, from the sidelines – even though the deity being worshipped was female. On the hand, family-centred festivals are dominated by women who tend to organise all the celebrations, do the cooking, and purchase the clothes. For these reasons festival seasons tend to be very busy times for women – it is a time when their networks are built and nurtured. During major festivals adult women are expected to pay a visit (sometimes very brief) to the homes of their relatives and friends and exchange token gifts with the women in the family – men tend not to participate in these visits which are considered exclusively in the domain of women. Thus, festival expenditures serve to build networks between both men and women, but with mechanisms that may differ by gender.

Since these data focus on the potter community, they have the advantage of giving us an in-depth look at festival behaviour within one community. However, the data have some

limitations. The focus on potters does not allow a comparison with festival behaviours in other caste and religious groups, or allow an analysis of inter-caste interactions. Moreover, the data do not permit an analysis of some of the complex dynamics of festival behaviour because the questions do not distinguish between private festival expenditures and public contributions. Neither can the data tell us about different types of festivals, nor about gender differences in festival participation. The survey simply provides the total amount spent on festivals by households in the last year. While this does permit a number of hypotheses to be tested, it limits a more complete quantitative investigation. In particular, the quantitative analysis will have to abstract away from comparisons of private and public festival expenditures, gender differences in participation, and effects that may vary with the type of festival.

Table 1 provides some summary statistics about the sample. The average annual income of a household is 14,471 Indian rupees, which is about \$1644 in PPP adjusted US dollars (\$482 at the exchange rate prevalent at the time) - a little over half of per capita household income in India in PPP dollars, and well below the Indian poverty line of 45 rupees per person per day. Only 20 per cent of the households practice pottery even though they belong to the potter caste, most are wage labourers and some are subsistence farmers. However, the average land holding is very low at 0.59 acres. Education is also low, with the average maximum schooling of a person within a family at 4.54 years (the mean years of completed schooling among household heads is much lower at 1.6 years). Despite the low levels of education the villages have recently undergone a fertility transition, which is reflected in the fact that on average households have about 3 adults and 1.5 children.

If festivals serve the function of reinforcing social cohesion in the community then a family that contributes towards festivals is providing a public service and should be rewarded for it by the village. Festival expenditures can thus be viewed as an investment in social capital^{xi}. One can, therefore, hypothesise that families who spend more on festivals should receive a social return apportioned on the basis of the size of contribution. There was much evidence for this in the qualitative data. All the potters took a great deal of interest in collectively organising the festival and this clearly brought the community together. All the potter families saw the festival as being a central event in their social lives. Moreover, donations made towards the festival were not anonymous and the largest donors were publicly honoured with a prominent place in the procession. As explained above, participation in a festival does not have to be in the form of donations however. The quality of the festival is enhanced with more families participating, and particularly when those participating families celebrate in as grand a manner as possible. This allows for more festivities in the village, greater sharing of food, and a more impressive

celebration. Thus, even by spending money in a private but publicly observable manner, the family is contributing to the festival. Active participants in contributing and participating in festivals are treated with respect and deference by the village, while those who chose not to participate tend to be disliked^{xii}.

Take for instance the case of Chikkamma an elderly woman whom I interviewed in Halli village. She was a poor, illiterate, but highly respected individual, not only because of her age but also because she and the rest of her family had a long history of helping those in need by providing food, comfort, advice, and shelter. She and her family spent a disproportionately large amount of money - about 25 per cent of their income - on village festivals. She died recently, and when I visited the village soon after her death I was told that her funeral was a large event attended by all the potters and also by many people from other castes. Contrast her case with Rachappa of Beedu village. Rachappa was an elderly man, rather wealthy by village standards with a number of cows and about 2 acres of land. He was also a moneylender who provided credit at interest rates of close to 200 per cent. He had a reputation as a miser and almost never contributed to village festivals. No one in the village said a kind word about him, but he was given a measure of deference because almost everyone in the village had been in debt with him at some point. Rachappa too passed away recently, but no one seemed to care, not even his children.

What can we learn from these examples and the other qualitative evidence presented so far? Festivals clearly are public goods in that they help generate social capital and cohesion by building bridges across households and communities. As public goods, however, they could face a collective action problem in that families may have an incentive to free ride on the contributions of others. Thus, social mechanisms may have evolved that helped solve the free rider problem by improving the incentives of individuals and families to participate in festivals. We can think of these individual incentives to participate in social activities as “social returns.” Festival participation can generate social returns that can be broadly classified under two categories: returns to social status, and returns from expanding networks.

Social status is an important motivating force in the behaviour of Indian families and anthropologists have long believed that Indian concepts of individuality differ markedly from the Western. An Indian is defined not just by his or her own accomplishments and character, but also by their circle of acquaintances and friends – how many people they know, and the status and respect accorded to them by their social group. Mines (1994), in a study of a South Indian community, shows that men will often describe themselves to a stranger not simply by providing information about who they are and what they do, but by listing all the prominent people they

know. In my own fieldwork, one village leader described himself to me in a similar manner. “I am not a big man, but my father was a freedom fighter and my daughter is married to a big family in Patilur village (about 100 miles away). They have lots of land and her father-in-law is a big Congress politician in the area.” Thus, the village leader’s sense of self seemed to be derived from the “big men” to whom he was related.

Furthermore, mobility within a village is often achieved by imitating the behaviours of families of higher social orders (*Srinivas*, 1989). A great deal of effort and expense is devoted to the presentation of external attributes. Household decisions are often made with an emphasis on how one’s family will be viewed by others; What will others say? What will they think? Status is thus a value in itself. Families clearly gain direct utility from simply moving up the social ladder by contributing the most money or participating in a most lavish manner in the festival. Thus, festival participation can serve as a method by which families gain, or retain, social status.

By spending money on festivals, families can also involve other families in a mutually enjoyable, associational activity that builds trust and a sense of obligation. This allows families who participate in festivals to develop strong relationships with other families and create avenues for information transmission. Festivals thus help build networks. There is now a great deal of empirical evidence from poorer societies that demonstrates the importance of informal networks in insuring families against risk (e.g.: *Townsend* 1994, *Udry* 1994, *Ligon* 1998). Festivals provide a mechanism by which such networks are built. Networks, however, are useful not only for unanticipated shocks but also for more everyday forms of serious but predictable problems. Households with better connections may be able to get access to better jobs (*Collier and Garg* 1998), or find ways of getting lower prices for food. Or they may be able to get better information on potential marriage partners for their children (*Bloch, Rao and Desai*, 1999). The simplest way to conceptualise such social returns to festivals is to think of an equalising difference model (*Rosen*, 1986) where the village has to match households to positions within the village hierarchy that involve different levels of commitment. The social returns functions can then be thought of as the locus of points where households who gain more from returns provided by the village are matched with higher positions within the village hierarchy involving greater commitments in time and money expended on village activities^{xiii}. If there are enough households in the village, then this function is treated exogenously by each household when it is deciding how much to contribute to the village. Alternatively, one can think of a signalling model where a family’s level of sociability is not known to the rest of the village, where sociability is defined as its willingness to participate in social activities and help others during periods of need. Festivals

could then serve as a mechanism whereby a family signals its level of sociability to the village, and in turn receives private returns in terms of higher social status and wider networks.

It is, however, also possible that families spend money on festivals simply for pure consumption. In rural areas with limited access to movie theatres and television sets, festivals could be an important source of entertainment. If festivals were a purely private consumption good, expenditures on them should not generate any other returns. Festivals, however, are potentially both a private and a collective entertainment. To the extent they are public goods, festival contributions could be thought of as altruistic contributions to a village public good. For the purposes of the empirical work, we can summarise the spirit of all these possibilities in the following simple framework. Consider a household with the following utility function:

$$U_i(x_i, f_i, F, r_i) \quad (1)$$

where x_i is the household's private consumption. The public goods aspect of festivals is captured by F , the village's total festival expenditures, which allows households to get direct utility from consuming the collective aspects of a festival. f_i is the household's personal festival expenditure which enters directly into the utility function to allow for the private enjoyment the household receives from celebrating the festival. Finally, r_i is the private return, such as social status, expanded networks, or economic returns that the household might receive by investing in a festival.

The household faces a budget constraint:

$$x_i + f_i = Y_i \quad (2)$$

Where Y_i is its income. It also has to consider the extent to which its contributions affect total festival expenditures in the village:

$$\sum_{i=1}^N f_i = F \quad (3)$$

Where i indexes each household in the village, of which there are N in number. Finally the household has to take the exogenously given social returns function into consideration:

$$r_i = r(f_i, \mathbf{Z}_i, V) \quad (4)$$

In the empirical work I will use three indicators of r , the social status of the family (measured by a method described below), the number of times the family is invited for meals by other families, and a household specific index of the unit prices for food faced by the family.

\mathbf{Z}_i represents a vector of variables which have an impact on the social returns the household receives independent of the effect of festival expenditures. I include the following variables:

- 1) Household head's age – respect within the community tends to rise with age, and older persons would also have more opportunities to develop and nurture networks.
- 2) The number of adults and children in the family – there are two reasons for this, larger families will be able to have reciprocal relationships with a larger number of people and thus have higher social returns. Also, larger families may be able access lower prices for food by being able to make larger purchases.
- 3) The head's education – education and literacy are both valued as indicators of prestige, and useful because the educated tend to be better informed and better able to take advantage of opportunities and access services.
- 4) The land owned by the household in the past and the present – This is directly related to social status. It and also affects prices by influencing the size of purchases in the open market – families with land holdings in this sample tend to be subsistence farmers and therefore rely less on the open market.
- 5) Household income – while it is in the budget constraint, I will also include it in \mathbf{Z}_i since households with more income could be more valued by the village because of their greater ability to help others during periods of need.
- 6) A set of village dummies – each village is a distinct social and economic entity and social returns may vary for reasons that cannot be directly controlled.

Let $F_{-i} = F - f_i$ denote total festival expenditures in a village excluding household i 's contribution.

We can substitute (3) into (1) to get:

$$U_i = U_i(x_i, f_i, F_{-i} + f_i, r_i) \quad (5)$$

Assume that household i takes F_{-i} as exogenous and chooses f_i and x_i to maximize (5) subject to the budget constraint (2) and the social returns function (4). This results in a reduced form expression for festival expenditures f_i :

$$f_i = f_i(F_{-i}, \mathbf{Z}_i, V) \quad (6)$$

Note that for reasons explained above, Y_i is included in \mathbf{Z}_i .

3. Econometric Methodology

Consider the social returns function:

$$r = r(f_i, \mathbf{Z}_i, V) \quad (4)$$

Since both r and f are arguments in the utility function, it is possible that they are determined simultaneously. I use two instruments for festival expenditures, and their interaction, to correct for this possible bias. The first is the number of female children between the ages of ten and sixteen in the family. During the fieldwork I observed that particular attention was paid during the festival to the appearance of girls in this age group. Extra money was spent on their clothes and makeup and an effort was also made to take them to the temple where extra contributions were made. All of this added to festival expenditures. The reason why girls in this age group were given special attention is obvious - they were of marriageable age and the festival served as a public occasion where they could be "displayed" in order to find them the best possible match^{xiv}. Therefore, conditional on the total number of children in this age group (which is included in \mathbf{Z}_i) the number of unmarried girls of marriageable age serves as a good instrument for festival expenditures because they increase them for reasons unrelated to social returns^{xv}. The other instrument that I will employ is the average festival expenditures made by the next door neighbours (defined as the four households living in closest proximity to the reference household). Here the idea is of a demonstration effect. If the neighbouring households celebrate the festival with particular vigour this should induce neighbours to also spend more on festivals.

Thus the festival determinants function can be modified as:

$$f_i = f_i(F_{-i}, \mathbf{Z}_i, V, X) \quad (6)$$

where X denotes the instrumental variables. However, if we believe that the social returns function is given exogenously to households, perhaps because it is a competitively determined equalising difference function, then (4) and (6) are recursive and can be estimated using single equation methods. Thus, I will present both single equation and IV estimates of (4), while (6) will be estimated by OLS.

If a household's expenditure on festivals is not influenced by the village's total festival expenditure, either because the household did not care about the public celebration F , or because F enters the Utility function additively, F_{-i} would not enter (6). Thus, if we estimate (6) and find that F_{-i} has no effect on f_i , we can infer that an altruistic desire for the best possible public celebration is not affecting a household's festival expenditures (*Andreoni*, 1989). To test this I construct F_{-i} by summing up the total expenditures on festivals by potters in a village and subtracting a household's private contribution from it. However, since F is a village specific variable, a regression that includes F_{-i} cannot independently get estimates of the three village fixed effects. Thus Table 2(a) excludes village dummies while including F_{-i} , and Table 2(b) presents estimates with the village dummies and without F_{-i} .

4. Econometric Results

Tables 2(a) and 2(b) show that festival expenditures rise with income, indicating that they are a normal good. Note also that individual festival expenditures are not significantly associated with F_{-i} suggesting that total festival expenditures are not crowding out individual expenditures. This indicates that an altruistic desire to provide a public entertainment is not the primary motive driving festival expenditures. Most of the variation in F_{-i} comes from differences in total festival expenditures in three villages. It is possible, however, that a larger sample spread across a more varied population would have provided more precise estimates of its impact. Notice from Table 2(b) that f_i displays a fair amount of variation across two of the three villages with Beedu having lower levels of festival expenditures than Halli - the reference category. Thus, what Table 2 (a) and (b) together indicate is that while festival expenditures do vary between the villages, this variation is not explained by the village's total expenditure on festivals. Tables 2(a) and (b) also show that a family's festival expenditures rise with the maximum level of education in the family, the number of young children, and the number of girls of marriageable age. The amount spent on festivals by neighbours does not show a significant effect in either regression. While the coefficient on neighbour's expenditures is quite weak, the two instruments – number of girls of

marriageable age and neighbour's expenditures - are jointly significant with an F-statistic of 3.76.

Table 2 shows that household characteristics are, to some extent, driving festival expenditures suggesting that households may be deriving some private benefit from them. What is this private benefit? If all that mattered to a family was the private entertainment value of a festival or the "warm-glow" from giving, then the results from Table 2(b) are puzzling. A private entertainment motive would not be consistent with the village level differences reported in Table 2(b) because festival traditions are quite similar in the three villages and my ethnographic investigation did not reveal strong differences in the taste for festivals between the villages. The potters in all three villages in this sample belong to an extended kin group, they exchange brides, visit each other frequently, and thus tend to celebrate the same set of festivals. The strong village level differences in festival expenditures suggest that there is something beyond differences in festival norms across villages that are affecting a family's festival decisions. One possible reason for these differences is that there are village specific variations in social returns.

I examine three different measures of social returns in estimating equation (4). The first indicator is the number of times members of the household have been invited for meals by other families in the village who are not their immediate relatives. Despite their poverty, sharing meals with friends and relatives was a very important part of social interaction in these villages that served to cement social relationships, to build trust, and sometimes to curry favour. Since sharing meals with immediate relatives was a more routine affair, often a means to share resources rather than a purely social interaction, I focus on invitations to meals at the homes of villagers who are not immediate relatives. Not all households were well connected enough to engage in such interactions routinely, but those that did also tended to be better networked and respected. Thus, such invitations are indicative of a household's degree of socialisation and the quality of its relationships with other members of the community. The second indicator measures the social standing of the family. Its construction requires some explanation. Since this was a census survey, we interviewed every potter family in each village. Consequently, we were also able to ask each family about their sense of the respect and social standing accorded to *other* families in the village. This was coded into a measure with four levels, a score of 1 denoting the lowest level of social standing and 4 denoting the highest. Both these variables are indicators of other latent variables, the first as a measure of socialisation and the second as a measure of status. Thus, I will estimate the invitations to meals with a Tobit since 24 per cent of the observations are truncated at zero, and social status will be estimated with an ordered Probit.

The third indicator of social returns I employ is an index of the unit food prices charged to the households^{xvi}. In the process of doing fieldwork I noticed that there was a large variation in the unit prices charged for food to different members of the village. The primary reason for this were quantity discounts since many of the families were severely liquidity constrained and were compelled to purchase food once a week on the day they were paid. I noticed during the fieldwork that festival participation alleviated this problem because households that took an active part in festivals also tended to be those that had wider circles of friends and better relationships with their relatives. This allowed such better networked households to form informal shopping “clubs” who would buy food in bulk and then distribute it among the members of the club. Shopping clubs would typically operate by pooling resources to make larger food purchases that would then be divided among the various participants according to their contribution. Sometimes, food discounts would be obtained by asking friends and relatives who were going on a trip to the town to buy some groceries at cheaper prices than were obtained in the village.

Better networked households also tended to find it easy to obtain short-term low (or zero) interest loans from their friends and relatives which allowed them to purchase food in larger quantities. This also allowed them to access subsidised food available from “ration shops” operated by the public distribution system. Well networked individuals also tended to be considered “good people” which enabled them to obtain food on credit directly from shopkeepers and avoid paying the mark-ups associated with very small purchases. The interest rates charged by shopkeepers for providing food on credit was nominal or non-existent, as the families usually re-paid entire amount within a month. Thus, socially well connected households seemed to suffer less from higher food prices. On the other hand household's who did not have good social relationships faced mark-ups of between 15-40 per cent on their food purchases.

To get a summary measure of the variation in unit prices across households, I construct a Laspeyres’ price index, denoted as I_j :

$$I_j = \frac{\sum_{i=1}^{K_j} p_i^j q_i^0}{\sum_{i=1}^{K_j} p_i^0 q_i^0} \times 100$$

Where i indexes commodities and j indexes households. p_i^j is the unit price paid by household j for commodity i and q_i^o is the quantity purchased of commodity i by the median household in the sample, similarly p_i^o is the unit price paid by the median household for commodity i . Thus, the index number employs the budget of the median household as the base. While information was collected on over twenty food items, 14 commodities were used in the index number calculations omitting those that were consumed by less than 20 households. These fourteen commodities represent over 70 per cent of the average households budget^{xvii}.

However, even after limiting commodities to those consumed by over 20 households, many families purchased less than the full set of fourteen commodities. Thus, for many households, p_i^j is not defined for all goods. This problem does not have an easy solution, and a simple method was chosen which limited the base budget used in the denominator for each household to those commodities purchased by that household. Thus, i is defined from 1 through K_j where K_j is the number of commodities consumed by household j . With this method an index number I_j is defined for all the households in the sample and is a summary measure of the ratio of prices faced by each household to median prices paid in the sample. Thus, the median household's index number is 100, a household with an index of 200 faces prices that are double the sample median, and a household with an index number of 50 pays prices that are half the sample median^{xviii}.

Econometric Results for Social Returns Regressions

Figure 1 provides a graph of a Kernel Density estimate of the price index described above. The price index was calculated for expenditures made in the week previous to the survey date. The standard assumption made in the literature is that these prices show no variation at all, but these data clearly demonstrate a great deal of heterogeneity in the unit food prices paid by households. The distribution is bell-shaped but has more kurtosis than a Normal distribution indicating that most households are bunched around the median. However, the tails are rather thick with the left tail thicker than the right, suggesting that there are a number of households who pay prices that are less than the median and fewer that pay extremely high prices.

The impact of unit price variation on purchasing power can be observed in Figure 2, which plots Kernel Density estimates of annual income per adult equivalent in nominal terms and in real terms adjusted with the price index defined above. Real incomes are more dispersed than nominal incomes. The Gini for real income at 0.285 is almost 16 per cent higher than the Gini for

nominal income which is 0.246. Figure 2 suggests two main reasons for this increase in dispersion. A small proportion of relatively wealthy families have higher real incomes indicating that they are able to take advantage of quantity discounts and substantially increase their purchasing power. However, and perhaps more interestingly, the distribution of real income is less peaked than the distribution of nominal incomes. This suggests that a fairly large proportion of families at incomes close to the median are also able to access lower prices, but it is unlikely that they are doing so by making bulk purchases individually because of liquidity constraints. Therefore the lower prices that are available to some poorer families may be indicative of their ability to take advantage of social networks, and families who spend more money on festivals may have more access to social networks than those who do not.

These effects are examined in greater detail in Table 3 which presents results of OLS and IV regressions of the social returns function with the price index as the dependent variable. Four different sets of regressions are shown. Table 3(a) is an OLS regressions with festival expenditures included, 3(c) is the same as 3(a) but includes an interaction term between festival expenditures and income. Table 3(b) and (d) follow the same pattern as 3(a) and (c) but present IV estimates. Since these households are below the Indian poverty line and spend 62 per cent of their incomes on food, including income as a regressor should control for quantity discount effects. Yet, income does not have significant effects in any of the four regressions. This is because it is highly correlated with the number of adults in the family that in turn is correlated with lower prices because large families are compelled to purchase food in larger quantities. This is indicated by the fact that an additional adult reduces the price index by more than 2 points in the OLS regressions - though the results are barely significant in the IV specifications.

Another variable that has a strong effect is the father's land holdings. An additional acre in the size of the father's plot of land reduces prices by 0.6 points. However, conditional on the land owned the father, current land holdings do not affect the price index. Since there has been a rather large net loss of land in this community over the last twenty years, this result suggests that the reputation of the family - indicated by how much land the family used to own is far more important in accessing social networks than current land holdings. Most importantly, higher festival expenditures are negatively correlated with the price index. However, the effect is stronger for poorer households since the interaction between income and festival spending increases the price index significantly in the IV regression. At the median income in the sample, a 1000 rupee increase in annual festival expenditures reduces the price index by 6.2 points. This effect is reduced to 5.7 points at the 75th percentile income level, and increases to 6.67 points for incomes at the 25th percentile. While it is always possible that unobserved heterogeneity may be

driving these results, they are consistent with the hypothesis that festival expenditures have an effect on prices independent of the other measured household attributes by providing a social return to a family. Thus, higher festival expenditures, perhaps by increasing a family's ability to tap into social networks, seem to give a household greater access to lower food prices.

To measure the impact of festival expenditures on social status, I use the measure of status described above. The variable is summarised in Table 4. As might be expected, the majority of cases in the sample fall in the second and third categories, with 7 per cent of the sample falling into each of the highest and lowest levels of social status. Under the assumption that this variable is an indicator of a latent measure of social status, Table 5 presents ordered probit estimates of the determinants of social status. In order to ease interpretation, the results are presented as the effect of a marginal change of an independent variable on the standard deviation of the latent status variable.

Neither current nor past land has an impact on status showing that landed families in these communities are not necessarily accorded higher social status. However, controlling for wealth, families with more income have higher social status in the IV specifications. This suggests that a family with greater liquidity and a steady job that produces a high and steady income, is valued possibly because it is able to provide a buffer against risk. Annual festival expenditures are independently associated with higher social status and once again festival expenditures, interacted with income, result in lower status. Looking at the IV estimates in Table 5(d), at the median income a 1000 rupee increase in festival expenditures places the family at a status level that is 0.39 standard deviations higher. None of the other variables are significant in the IV regressions, though the number of adults in the family is associated with higher status in the single-equation Ordered Probit suggesting that larger families may be looked upon with higher regard by the village.

Finally, I look at a more direct measure of social connections, the number of meals to which members of a household have been invited in the last month by other households in the community to whom they are not related. The average household is invited to 1.55 meals with a standard deviation of 1.51. Since invitations to people's homes are an important source of interactions between families, we can think of this variable as an important indicator of a family's degree of social connectedness. The variable is truncated at the left with 26 per cent of families not invited to any meals in the previous month, and is estimated by a Tobit with the results reported in Table 6.

It is clear from the regressions that Halli and Ooru village have higher levels of social interactions in this sense than Beedu village. As in the social status regression, family wealth

does not matter while income has a significant effect in the IV specifications. Once again festival expenditures have a significant and large impact on invitations to meals independent of the measured household attributes. Looking at Table 6(d), at median incomes a 1000 rupee increase in festival expenditures results in 0.83 additional meal invitations per month. And, as in the other regressions, festival expenditures interacted with income have a significant negative effect, demonstrating that the return to festival expenditures is higher for the poor than for the rich.

To summarise, the regressions indicate that festival expenditures are a normal good driven more by private motives than by an altruistic desire to provide a public good. While they provide a form of entertainment, the data also suggest that festival expenditures generate tangible private returns. Families that spend more money on festivals seem to receive lower prices on food, higher social status, and more invitations to meals from other families. Thus, the qualitative and quantitative data presented in this paper demonstrate that festivals serve an important social function, connecting households and building social networks that generate tangible economic and social returns.

Conclusion

These results are based upon a case-study of three villages all located within a short distance of each other in a Southern Indian state. As in any case-study, while this permits a careful detailed examination of a relatively unusual topic with primary data, the generalizability of the findings will have to be determined in future work with larger samples. The implications of the paper are, however, reasonably general since they focus on behaviours that are common to most Indian villages.

Festivals are a central feature of Indian village life. They serve as public entertainments, but more importantly they make the village more cohesive by reifying village and community identity, and solve coordination problems by generating common knowledge. They are, thus, an important public good. Since festivals are expensive events that depend upon contributions from, and the participation of, members of the community, they suffer from a potential free rider problem. The paper presents evidence to indicate mechanisms that help resolve the problem. Household who spend more on festivals, whether as contributions to the village or in private celebrations, receive tangible private returns. They obtain higher social status, gain access to larger networks through which they get lower prices on food and more invitations to meals. In addition, it is possible that there are several other returns to festival participation that I am unable to observe with my data. Future work for instance can examine if festival participation increases

a household's ability to cope with shocks. These tangible returns to festival expenditures help explain why the average household spends 15 per cent of its annual income on festivals. In the harsh context of rural village life where social networks are important mechanisms for survival and mobility, festival participation helps build and sustain networks.

Table 1Means and Standard Deviations of Variables

Variable (N=123)	Mean	Std. Deviation
Annual Festival Expenditures (1994 rupees)	1972.72	1305.13
Annual Income	14,471.31	14,143.28
Father's Land Holdings in Acres	1.16	3.89
Land in Acres	0.59	1.22
Age of Household Head	45.27	13.07
Maximum years of Schooling within the family	4.54	4.06
Number of Family Members older than 16	3.10	1.37
Children Aged 10-16	0.65	0.82
Girls Aged 10-16	0.31	0.53
Children Less than 10	1.09	1.17
Annual F_i	84334.09	5441.01
Average Festival Expenditures of Neighbors	1951.51	902.08
Number of Invitations for Meals	1.55	1.51
Price Index	100.37	14.33
Beedu Village	0.25	
Halli Village	0.44	
Ooru Village	0.30	

Table 2

Determinants of Festival Expenditures - OLS with Huber-White Std. Errors (|t| in parenthesis)

Variable	(a)	(b)
Beedu Village	-0.9679 (2.6)	---
Ooru Village	-0.3659 (1.1)	---
F./1000	---	-0.0296 (1.2)
Father's Land Holdings	0.0127 (0.7)	0.0088 (0.5)
Annual Income/1000 (1992 Rupees)	0.0186 (2.1)	0.0245 (3.1)
Land in Acres	0.1432 (1.1)	0.1584 (1.3)
Number of Adults	0.1147 (1.1)	0.1376 (1.3)
Number of Kids 10-16 years	0.0003 (0.0)	0.1065 (0.6)
Number of Kids < 10 years	0.1765 (1.7)	0.2673 (2.6)
Max Yrs. of Schooling	0.0795 (2.9)	0.0386 (1.5)
Age of Head	0.0030 (0.4)	-0.0005 (0.1)
Number of Girls 10-16 Years	0.6548 (2.2)	0.7486 (2.5)
Festival Expenditures of Next Door Neighbors/1000	-0.0993 (1.0)	0.1125 (1.0)
Constant	1.1033 (2.2)	2.6037 (1.3)
Adjusted R-Squared	0.42	0.38
F (excluded instruments)	3.76	---

Figure 1

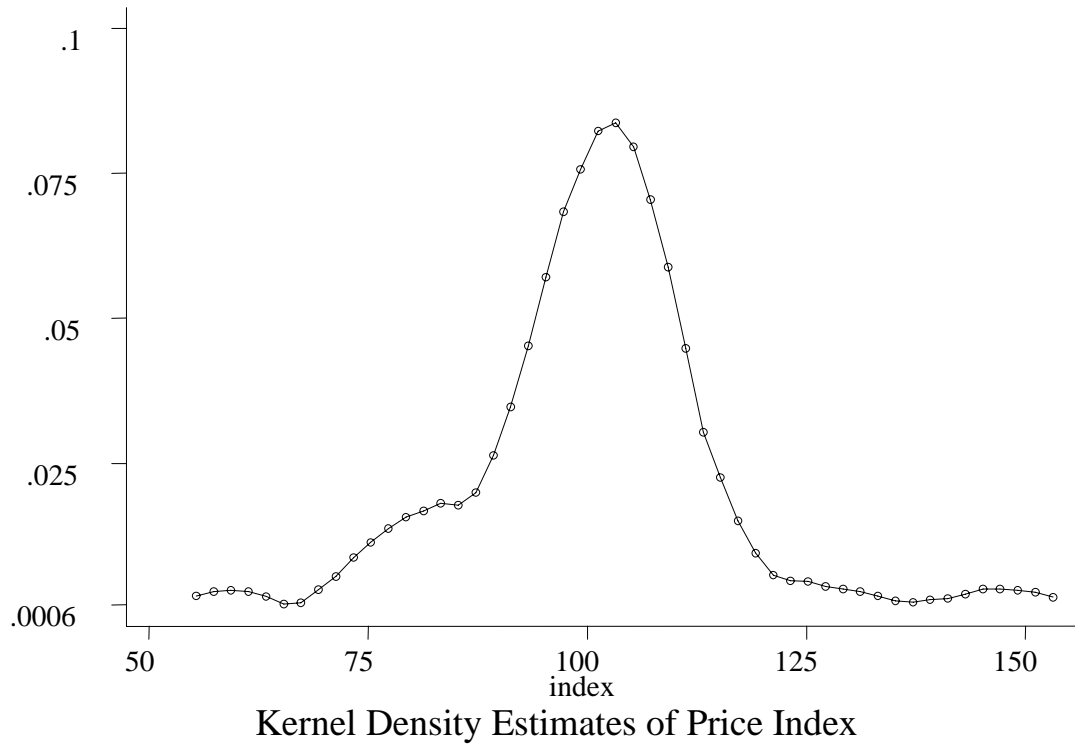


Figure 2

Kernel Density Estimates of Nominal and Real Income Per Adult Equivalent

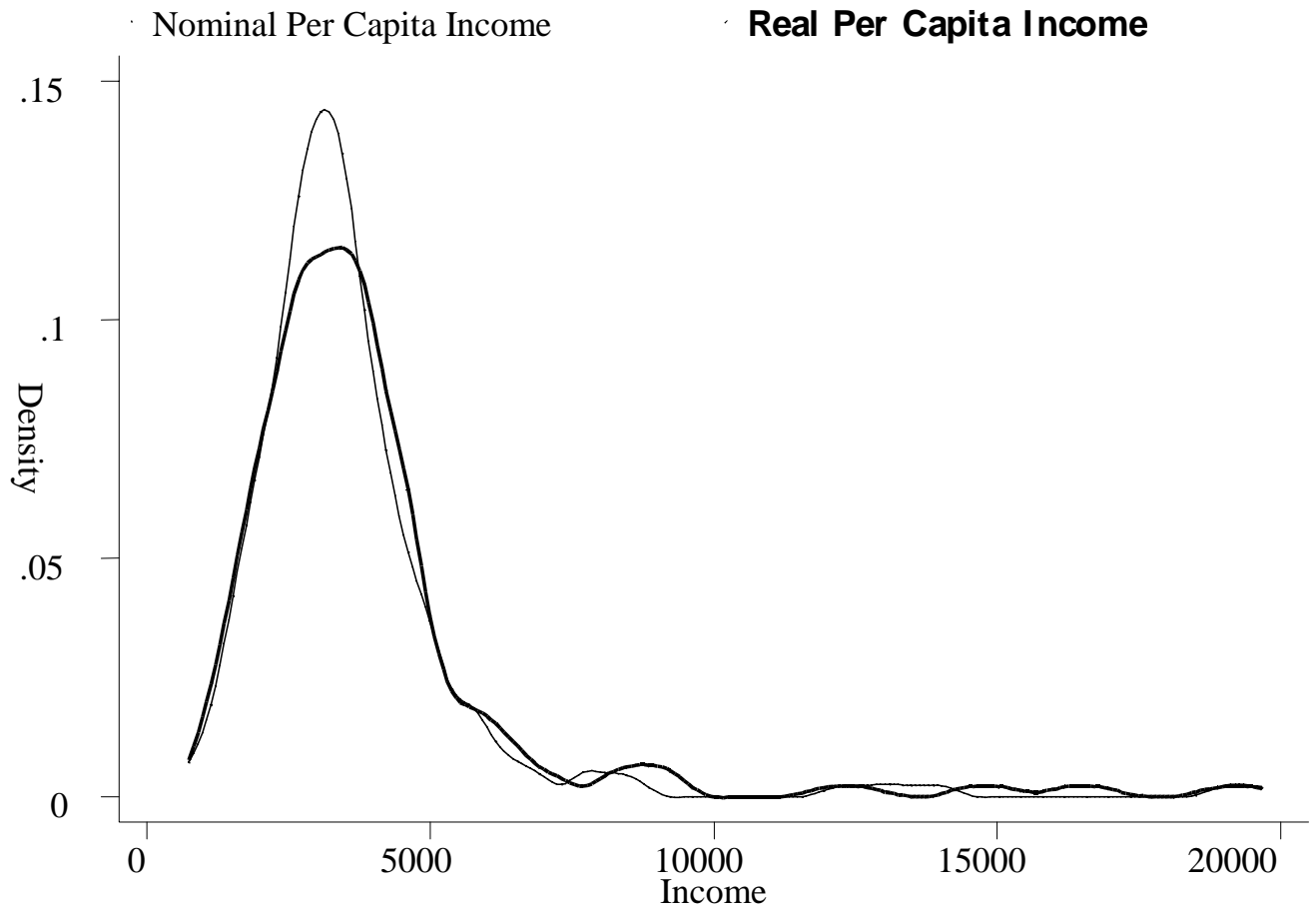


Table 3

Determinants of Price Index - OLS with Huber-White Standard Errors (t| in parenthesis)

Variable	(a)	(b)	(c)	(d)
Festival Expenditures/1000 (1992 rupees)	-1.8102 (1.7)	---	-2.8529 (2.2)	
Festival Expenditures x Income	---	---	0.0595 (1.0)	
Festival Expenditures (Predicted)	---	-5.5314 (1.8)	---	-7.7058 (2.2)
Festival Expenditures (Predicted) x Income	---		---	0.1220 (1.8)
Beedu Village	5.5849 (2.1)	3.5493 (1.0)	4.4174 (1.5)	1.1021 (0.3)
Ooru Village	1.5151 (0.4)	0.0019 (0.0)	1.243 (0.4)	-0.7106 (0.2)
Annual Income/1000 (1992 rupees)	-0.0591 (0.6)	0.0581 (0.6)	-0.3212 (1.0)	-0.5175 (1.3)
Father's Land Holdings	-0.6589 (4.7)	-0.6644 (4.1)	-0.6355 (4.6)	-0.6214 (3.8)
Land in Acres	0.9627 (0.9)	1.9351 (1.7)	0.6652 (0.6)	2.0219 (1.8)
Number of Adults	-2.6409 (1.8)	-2.9491 (1.8)	-2.4313 (1.6)	-2.4876 (1.5)
Number of Kids 10-16 years	0.7638 (0.4)	1.9119 (0.8)	1.0651 (0.5)	2.4375 (1.1)
Number of Kids < 10 years	0.6116 (0.6)	1.0664 (0.8)	0.7804 (0.7)	1.2709 (1.0)
Maximum Years of Schooling	0.0068 (0.0)	0.0383 (0.1)	0.0615 (0.2)	0.1939 (0.4)
Age of Head	0.0262 (0.3)	0.0322 (0.3)	0.0337 (0.4)	0.0319 (0.3)
constant	106.2416 (22.0)	112.0663 (20.5)	109.0430 (20.8)	118.7900 (17.4)
Adjusted R-Squared	0.17	0.21	0.18	0.23

Table 4

Social Status	Number	Percentage
Highest	10	7.14
Second	63	45.00
Third	58	41.43
Lowest	9	6.43
<u>Total</u>	140	100.00

Table 5**Determinants of Social Status - Ordered Probit**

*Coefficient reports unit change in X on standard deviation change in latent Social Status variable
(/z/ in parenthesis)*

Variable	(a) No Interactions	(b) No Interactions	(c) With Interactions	(d) With Interactions
Festival Expenditures/1000 (1992 rupees)	0.1723 (1.8)	---	0.4289 (3.4)	---
Festival Expenditures x Income	---	---	-0.0165 (3.1)	---
Festival Expenditures (Predicted)	---	0.3094 (1.0)	---	0.5753 (1.9)
Festival Expenditures (Predicted) x Income	---	---	---	-0.0155 (3.4)
Beedu Village	-0.0522 (0.2)	-0.0233 (0.1)	0.3151 (1.0)	0.3216 (0.9)
Ooru Village	0.0432 (0.2)	0.0570 (0.2)	0.2172 (0.8)	0.1708 (0.6)
Annual Income/1000 (1992 rupees)	-0.0122 (1.4)	-0.0157 (1.4)	0.0725 (2.6)	0.0669 (2.6)
Father's Land Holdings	0.0084 (0.3)	-0.0037 (0.2)	0.0015 (0.1)	-0.0095 (0.4)
Land in Acres	-0.0560 (0.5)	-0.1304 (1.1)	0.0129 (0.1)	-0.1542 (0.4)
Number of Adults	0.2121 (2.1)	0.2223 (2.2)	0.1083 (1.1)	0.1424 (1.5)
Number of Kids 10-16 years	0.0042 (0.0)	0.0438 (0.3)	-0.0764 (0.6)	-0.0371 (0.2)
Number of Kids < 10 years	0.0907 (0.9)	0.1241 (1.2)	0.0347 (0.4)	0.0964 (0.9)
Maximum Years of Schooling	0.0514 (1.8)	0.0539 (1.6)	0.0348 (1.3)	0.0324 (1.0)
Age of Head	0.0114 (1.4)	0.0926 (0.0)	0.0099 (1.2)	0.0083 (1.1)
Pseudo R-Squared	0.09	0.10	0.13	0.14

Table 6

Determinants of Invitations to Meals - Tobit

(t| in parenthesis)

Variable	(a)	(b)	(c)	(d)
Festival Expenditures/1000 (1992 rupees)	0.4844 (3.3)	---	0.8346 (4.6)	---
Festival Expenditures x Income	---	---	-0.0206 (2.9)	---
Festival Expenditures (Predicted)	---	0.7169 (1.4)	---	1.0821 (2.0)
Festival Expenditures (Predicted) x Income	---	---	---	-0.0211 (2.4)
Beedu Village	-1.6353 (3.4)	-1.5602 (2.2)	-1.2822 (2.7)	-1.1521 (1.6)
Ooru Village	0.1102 (0.3)	0.0531 (0.1)	0.1763 (0.4)	0.1668 (0.3)
Annual Income/1000 (1992 rupees)	-0.0159 (1.3)	-0.0182 (1.1)	0.0726 (2.3)	0.0812 (1.8)
Father's Land Holdings	-0.0223 (0.6)	-0.0330 (0.8)	-0.0305 (0.8)	-0.0406 (1.0)
Land in Acres	-0.1199 (0.7)	-0.2896 (1.4)	-0.0605 (0.3)	-0.3139 (1.6)
Number of Adults	-0.0599 (0.4)	-0.0898 (0.5)	-0.1101 (0.7)	-0.1668 (0.9)
Number of Kids 10-16 years	-0.1359 (0.6)	-0.0658 (0.2)	-0.2322 (1.1)	-0.1549 (0.5)
Number of Kids < 10 years	0.1453 (1.0)	0.1675 (0.9)	0.1019 (0.7)	0.1396 (0.8)
Maximum Years of Schooling	0.0244 (0.6)	0.0150 (0.2)	0.0072 (0.2)	-0.0118 (0.2)
Age of Head	0.0200 (1.5)	0.0199 (1.4)	0.0177 (1.4)	0.0208 (1.5)
constant	0.4961 (0.6)	0.1169 (0.1)	-0.4813 (0.6)	-1.0658 (1.0)
Pseudo R-Squared	0.12	0.10	0.14	0.12

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ⁱ A local village goddess particularly important to the lower castes in this village such as potters and other artisans groups.

ⁱⁱ A very loud South Indian drum which is a typical accompaniment to the *nadaswaram*.

ⁱⁱⁱ With a standard deviation of 9 per cent.

^{iv} The names of the villages have been changed.

^v Similar motives may also be at work when families arrange marriages and negotiate dowries (Heyer 1992, Rao 1993).

^{vi} Beedu is entirely a potter's village, and potters form about 10% of Halli's population and 13% of Ooru's.

^{vii} Citizens of Karnataka.

^{viii} Till about a decade ago, the potters would participate in the *jatra* by making special idols of gods that were worshipped during the period of the *jatra*. Now with very few potters actually practising pottery, and *jatras* becoming less and less important, potters have stopped participating in them.

^{ix} The traditional set of contracts between castes based upon caste-specific divisions of labor with well-defined obligations and hierarchical power structures.

^x See Chapter 6 in Fuller(1992) for a review of the ethnographic literature on the different types of festivals celebrated in rural India.

^{xi} Note that social cohesion can also be a straightjacket and prevent mobile individualists from breaking away from the community. Therefore, it may not always be beneficial to everyone.

^{xii} Unfortunately I do not have enough data to provide a reasonably generalizable breakdown of private and public contributions to festivals.

^{xiii} In an extremely caste-segregated village, social hierarchies may be located within caste groups. In villages with more inter-caste interaction, social hierarchies would be influenced by caste affiliations but not entirely determined by them.

^{xiv} The average age at marriage of girls in these villages is 14.5 with ages varying from 10 to 18, considerably lower than national rural average of 18.7 years.

^{xv} Some justification of these exclusion criteria may be appropriate: Social status, as measured here, is an index of the respect and regard in which the family is held by other members of the village. It is thus not very likely to be affected by the number of *unmarried* daughters of marriageable age. This makes the number of marriageable daughters an appropriate instrument for the relationship between festival expenditures and social status, even if status influences marriage prospects. The invitations to meals refers to invitations to other the homes of other families *in the same village*. In the process of searching for a spouse it is possible that families visit others in the hope of forging an alliance. However, potters in these villages tend to practice village exogamy (75 per cent of the women married outside their home village) – thus meals shared with other families in the *same* village are, to that extent, less likely to be related to marriage negotiations.

^{xvi} A detailed analysis of this can be found in Rao (2000).

^{xvii} Meats, fruits, vegetables and tobacco were also omitted because it proved very difficult to get enough observations of separate prices for each type of meat, fruit, vegetable and tobacco

product. However, the qualitative evidence suggests that all of these commodities also were subject to quantity discounts. Cigarettes for instance are often sold in singles at prices that are about three times as high as purchasing a pack. Households who purchase a single orange are charged about one and a half times the price of a dozen.

^{xviii} Note that the survey instrument used here was specially constructed to measure price heterogeneity. Conventional surveys typically do not ask finely calibrated questions on food items. Thus price variation due to quantity discounts is mixed with quality variation which moves in the other direction. Thus, when the survey does not identify different grades of a commodity it is difficult to distinguish between different sources of price variation.

References:

Andreoni, James, 1989 "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence," Journal of Political Economy, Vol. 97, #6, 1447-58

Barr, Abigail, 2000, "Social Capital and Technical Information Flows in the Ghanaian Manufacturing Sector," Oxford Economic Papers, (forthcoming)

Becker, Gary S., 1991, "A Note on Restaurant Pricing and Other Examples of Social Influences on Price," Journal of Political Economy, Vol. 99 #5, Pp: 1109-16

Bloch, Francis, Vijayendra Rao and Sonalde Desai, 1999, "Wedding Celebrations as Conspicuous Consumption: Signaling Social Status in Rural India," mimeo, World Bank

Chwe, Michael Suk-Young, 1998, "Culture, Circles and Commercials: Publicity, Common Knowledge and Social Coordination," Rationality and Society, Vol. 10, Pp: 47-75

Coleman, James S., 1988, "Social Capital in the Creation of Human Capital," American Journal of Sociology, Vol. 94 (Supplement), Pp: S95-S120

Collier, Paul and Ashish Garg, 1998 "On Kin Groups and Wages in the Ghanaian Labour Market," Oxford Bulletin of Economics and Statistics, 61(2), Pp: 133-51

Durkheim, Émile, 1965 (original 1912) The Elementary Forms of the Religious Life, (translated by J.W.Swain), The Free Press, New York

Fuller, Christopher J., (1992) The Camphor Flame: Popular Hinduism and Society in India, Princeton University Press, Princeton

Gough, E. Kathleen, (1955) "The Social Structure of a Tanjore Village," in McKim Marriot (ed.) Village India, The University of Chicago Press

Knack, Stephen and Philip Keefer, (1997) "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation," Quarterly Journal of Economics, Vol. 112, #4, Pp: 1251-88

Hanchett, Suzanne, 1972, "Festivals and Social Relations in a Mysore Village: Mechanics of Two Processions." Economic and Political Weekly, Vol.7, Pp: 31-33

Heyer, Judith, 1992, "The Role of Dowries and Daughter's Marriages in the Accumulation and Distribution of Capital in a South Indian Community," Journal of International Development, Vol. 4, No. 4, Pp: 419-36

Isham, Jonathan and Satu Kahkonen, 1999, "What Determines the Effectiveness of Community Based Water Projects? Evidence from Central Java, Indonesia on Demand Responsiveness, Service Rules and Social Capital," Social Capital Initiative Working Paper No. 14, The World Bank

Ligon, Ethan, 1998, "Risk Sharing and Information in Village Economics," Review of Economic Studies, V.65 No.4, Pp: 847-64

Mines, Mattison, 1994, Public Faces and Private Voices: Community and Individuality in South India, University of California Press, Berkeley and Los Angeles

Narayan, Deepa and Lant Pritchett, 1999, "Cents and Sociability: Household Income and Social Capital in Rural Tanzania," Economic Development and Cultural Change, Volume 47, No. 4, 871-97

Ostor, Akos, 1980 The Play of the Gods: Locality, Ideology, Structure, and Time in the Festivals of a Bengali Town, The University of Chicago Press, Chicago

Putnam, Robert, 1993, (with Robert Leonardi and Raffella Nanetti), Making Democracy Work, Princeton University Press, Princeton

Rao, Vijayendra, 1993, "The Rising Price of Husbands: A Hedonic Analysis of Dowry Increases in Rural India," Journal of Political Economy, Vol. 101, Pp:666-67

Rao, Vijayendra, 1997. "Can Economics Mediate the Link Between Anthropology and Demography?" Population and Development Review , Vol. 23, No. 4, Pp: 833-38

Rao, Vijayendra, 2000, "Price Heterogeneity and "Real" Inequality: A Case Study of Prices and Poverty in Rural South India," Review of Income and Wealth , Vol. 42 #2, 201-11

Rosen, Sherwin, 1986, "The Theory of Equalizing Differences," Chapter 12 in The Handbook of Labor Economics, Orley Ashenfelter and Richard Layard (editors), North-Holland, Amsterdam and New York

Townsend, Robert M, 1994, "Risk and Insurance in Village India, " Econometrica, LXII, Pp: 539-91

Townsend, Robert M., 1995, "Financial Systems in Northern Thai Villages, The Quarterly Journal of Economics, Vol. 110, No. 4, 1011-46

Turner, Victor, 1982, "Introduction" in Celebration: Studies in Festivity and Ritual , Victor Turner, editor, Smithsonian Institution Press, Washington, D.C

Udry, Christopher, 1994, "Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria," Review of Economic Studies; v61 n3, Pp: 495-536

Wade, Robert, 1988, Village Republics: Economic Conditions for Collective Action in South India, Cambridge University Press, Cambridge

Waldfogel, Joel, 1993, "The Deadweight Loss of Christmas," American Economic Review, Vol. 83, No. 5, 1328-36

Woolcock, Michael and Deepa Narayan, 2000, "Social Capital: Implications for Development Theory, Research and Policy," World Bank Research Observer, Vol. 15(2), Pp: 225-49