

ECONOMIC THEORY, APPLICATIONS AND ISSUES

Working Paper No. 9

Socioeconomic Determinants of the Intra-
Family Status of Wives in Rural India:
An Extension of Earlier Analysis

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Rural India: An Extension of Earlier Analysis***

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SOCIOECONOMIC DETERMINANTS OF THE INTRA-FAMILY STATUS OF WIVES IN RURAL INDIA: ANALYSIS AND EMPIRICAL EVIDENCE

Clem Tisdell, Kartik Roy and Gopal Regmi

Abstract

Relying on a structured survey of 117 wives in four rural villages in the Midnapore District of West Bengal, this article investigates the influence on the intra-family status of wives of variables which may increase the bargaining power of wives in their family. Several indicators of status are considered and investigated using the ANOVA technique and probit analysis. The main hypothesis considered is whether the results support bargaining theories of the intrahousehold status of wives or the view that gender status is primarily determined in Indian society by social customs and the patriarchal structure of society. Given the overall patriarchal structure of Indian society, the results indicate that bargaining theories are at best only marginally relevant. Situations which result in greater bargaining power for wives in Western societies do not necessarily do so in north India given the total pervasiveness of its patriarchal society.

Key Words: bargaining theories of family, economic theories of family, Gender Development Index (GDI), India, patriarchy, status of wives.

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1. Introduction

Sen (1977) has emphasized the importance of the endowments and entitlements of individuals as determinants of economic welfare. While Sen's theory was originally used to explain the occurrence of famine where the aggregate availability of food is adequate to provide for all, it was subsequently extended to help explain the socioeconomic status of women. But Sen's entitlement approach constitutes more a framework than a theory (Gasper, 1993; Tisdell *et al.*, 1999) and needs to be supplemented by more precise theories, such as bargaining theories of the family based on the relative threat power of family members (cf. Folbre, 1984; Agarwal, 1994; Haddad *et al.*, 1997) in order to provide it with predictive power.

In the Indian situation, however, it is unclear how effective bargaining theories can be in explaining the socioeconomic status of wives within their family. It may be that customary social relationships in India provide little scope for the application of bargaining theories of the family, apart from the possibility that wives lack any effective bargaining power in their family. As Cain (1982) contends from Bangladesh, it is possible that gender relationships in countries such as India are mainly culturally determined, which would also imply that they are relatively insensitive to changes in micro-socioeconomic variables. If this is so, it would suggest that theories of social customs or patriarchal structure largely determine the status of the wife in the household (Cain *et al.*, 1979; Cain, 1982; Conklin, 1979; Hartmann, 1976) in India rather than to economic theories or bargaining theories.

By drawing on results from a survey of wives in four rural villages in the Midnapore District of West Bengal, this article will assess the above-mentioned hypothesis. The sample consists of 117 wives. They were interviewed by local interviewers using a structured questionnaire devised by C. Tisdell and K. Roy who also undertook informal follow-up interviews in all these villages. The sample contains 65 tribal Santals, more than half of whom still adhere to their Sari religion, and 52 non-tribal Bengalis all of

whom are Hindus. Of the latter, 42 belonged to schedule castes and 9 to general castes. All respondents either followed Hinduism or the Sari religion.

The four villages where wives were interviewed in the second half of 1999, with the number of interviewed wives shown in brackets, are as follows: Bandhgora (28), Bankskona (31), Janakpur (27) and Sadanandapur (31). All are located within 30 kilometres of Salbani township in western Midnapore. Virtually all wives in each village were interviewed.

In developing the article, possible indicators of the status of wives in the family are first discussed and then the variables which might influence this status are outlined. The empirical relationships between these indicators of the status of wives and independent variables are then explored for their significance. This is done first by employing the analysis of the variance (ANOVA) technique followed by Probit analysis. Discussion of the implications of the results then follows.

2. Indicators of the Social Status of Wives within their Family

The questionnaire enables four indicators of the social status of wives within their family to be considered. These are:

- a) whether the wife has any control over cash in the family;
- b) whether wives are restricted by their husbands in forming or joining social groups;
- c) whether wives are involved in family decisions; and
- d) whether wives are involved in decisions about the future of their children.

Note that it is very difficult to measure socioeconomic status within a family because it consists of a range of components, and not all components may vary in the same direction. However, for the above-mentioned variables it is suggested that the socioeconomic status of a wife in her family is higher if she has some control over cash, has freedom to form and join social groups, is involved in family decisions and in particular has influence on decisions about the future of her children. Nevertheless, because status is indicated by a vector of factors, problems may arise when indicators of social status alter in opposite directions. For example, does a wife who has control over some cash in the family but no involvement in family decisions have a higher

status in the family than one for whom the opposite situation holds. In this paper, the influence on the above indicators of socioeconomic status of selected socioeconomic variables, some of which may indicate the degree of bargaining power of a wife within her family, are investigated. Consider now those variables which may influence the status of wives within their family and the rationale for their inclusion.

3. Variables to be Considered as Determinants of the Status of Wives within their Family and the Rationale for their Consideration

Bargaining theories of the family claim that when a wife has greater relative threat power in her family, this is likely to add to her social status within the family. But just how bargaining or threat power is to be measured in a family situation is complex. Nevertheless, in terms of this survey, it will be supposed that the following are indicative of the bargaining power of the wife:

- 1) whether or not the wife earns income outside the household;
- 2) whether or not she says divorce is possible;
- 3) whether or not her family visits her regularly; and
- 4) whether or not her family would provide her with help in times of need.

Whether or not wives engage in employment outside the household is often taken as an indication of the empowerment of wives. The degree of female participation in the workforce is included as a positive term in estimation of the Gender Development Index (GDI). Development of this index was greatly influenced by Amartya Sen (Anand and Sen, 1995) and reflects his views about the importance of entitlements as determinants of the well-being of individuals. In addition, Agnihotri, Palmer-Jones and Parikh (1998) extensively use female participation rates in the workforce in their spatial (regional) study of female-male ratios in India. These ratios are often employed as indicators of the status of females in comparison to males.

Doubts have, however, been raised about how well participation rates of females in the workforce reflect their empowerment within the family (Tisdell *et al.*, 2000). It is possible for females earning cash in some societies to have no control over that cash in the family and to be little involved in family decisions. They may also have little ability to refuse to work in the workforce if their husband expects them to do so. Refusal to do so may make their lot even more miserable.

The possibility of instigating divorce proceedings can constitute a threat. The threat will be greater the lower is the cost to the wife of such proceedings and the larger the likely settlement of property in her favour. However, in India, it is still extremely difficult for wives to commence divorce proceedings. Furthermore, family property is almost invariably retained by the husband. Even when females obtain property in their own right they usually have little control over it (Agarwal, 1994; Roy *et al.*, 2001, in press). Thus it seems that the possibility of divorce in India provides wives with little bargaining power. Nevertheless, we investigate using the analysis of the variance (ANOVA) technique whether there are any significant connections between the status variables for wives mentioned above and whether a wife said in the survey that “divorce is possible”. Such a statement at least shows awareness of divorce as a possibility.

Dyson and Moore (1993) suggest that close social connections between a wife’s blood family and her acquired family helps to explain higher female-male ratios in southern India than in northern India, and indicates a superior status within the family of wives in southern India compared to its north. The presence and support of a wife’s blood family may increase her bargaining power in her new family. Hence, frequency of visits by a wife’s family to her will be considered in this sample as an influence on her status within her new family. Similarly, whether or not a wife can expect support from her own family in times of need is considered as a possible influence on her intra-family social status.

In this study, the indicators of the status of wives within the family listed in the previous section are treated as dependent variables. The aim of this analysis is, on the basis of the available data, to determine the extent and way that these variables depend on possible indicators of the bargaining power of wives, as listed above, as well as several other socioeconomic variables – whether the husband is supportive of his wife working outside the home for cash, adequacy of family income for two meals a day, whether the wife is tribal (in this case, Santal) or non-tribal (in this case, Bengali) and whether the family follows the Sari or Hindu religion.

However, it should be noted that it is often uncertain whether a socioeconomic variable should be treated as dependent or independent one. Furthermore, 'independent' variables may be dependent on deeper 'causal' variables. For example, a wife may work outside the home for cash income because her husband compels her to do so because he wants to use the extra income for himself. In such a case, the wife has no independent choice and may not be empowered to any significant extent by her outside work. This result is at odds with the view of some economists (e.g. Agnihotri et al., 1998; Anand and Sen, 1995) who treat the earning of income outside the home by wives as a variable leading to their empowerment. We argue here that the causal significance of such a variable depends on the cultural context in which it is embedded, and seems to be different in an Indian context to a Western one. Differences may also occur between rural and urban areas and change with the 'evolution' of societies. The interrelationships between variables of the above type are complex. Nevertheless, our analysis provides strong evidence that the applicability of bargaining theories of the family varies considerably with cultural context.

Our data will be analysed by using ANOVA and then Probit analysis, but it may be useful first of all to outline the analytical framework and provide some summary tables of the raw data from the survey. Some related summary tables are also available in Tisdell (2001).

4. Analytical Framework and Data Limitations

As stated above, four different variables indicating the status of wives in family are considered for analysis in this paper. Those are:

1. whether or not a wife has control over some cash,
2. whether or not wives have freedom to form a group,
3. whether or not they are involved in their family's decision-making process,
and
4. whether or not they are involved in decisions about the future of their children

All of these variables are dichotomous or binary variables, because these involve 'Yes' or 'No' responses. These responses are coded as 0 for 'No' and 1 for 'Yes' response.

We selected twelve other variables as explanatory variables as follows:

1. whether or not the respondent (wife) earns income from working in others field,
2. whether or not her husband is pleased to see her working outside for cash income,
3. whether family income is enough for two meals a day,
4. her perceived economic status of the household in the society,
5. whether she belongs to tribal or non-tribal community,
6. whether she belongs to the Sari or Hindu religious community,
7. whether her family visits her frequently,
8. whether she receives support from her family if needed,
9. whether divorce is possible according to her,
10. ratio of wife's contribution to the food for their children compared to her husband,
11. ratio of wife's contribution to the cash income of the household relative to that of her husband, and
12. the ratios mentioned in 10 and 11 combined

The analysis relies on three different types of variables:- continuous, binary categorical and rank-ordered. Ratios of wife's contribution to the cash income of the household and to the food of their children are continuous variables, perceived economic status is a rank-ordered variable and rest of the variables are binary categorical variables.

Some of the variables used in this study are based on the perception of the respondents and most of variables have been measured in dichotomous categories. Some limitations of the data should be noted. First, obtaining data on perceptions of a respondent is a difficult task and secondly measuring these in dichotomous fashion confounds the problem further when the response category provided is either 'Yes' or 'No' because in such case, the respondent's answer is forced into one of these categories. At times the dichotomy may not actually reflect the perception of the respondent realistically. For example, in case of the question involving control over some cash, women may have

different degrees of control over cash from a very high level to low level. Nevertheless, there is not reason to believe that the overall picture is distorted in this case.

Another problem is that of missing responses. Because the respondents live in remote villages of West Bengal, do not have a very high rate of literacy and have very limited numerical skills, the survey could not secure as high a rate of responses as we would have liked. This limited our analysis. For example, we could not model all the variables in a single equation model.

Two different statistical methods are applied by us to explore the differences in intra-family status of wives in different categories. First we compare the proportions of 'Yes' responses for the 'status variables' and examine the significance of their difference using the ANOVA technique. Secondly we consider to what extent the contribution of wives in their households in terms of food and cash for their families explains the difference in their status in the family. Since all of the dependent variables (the status variables) are binary, we use a Probit model. As stated earlier, due to the problem of a large number of missing observations in the variables, particularly the variables relating to the proportionate contribution of wife to cash income or the food, we rely on bivariate models so as to retain a lot of samples. Before going to ANOVA and Probit analysis we present the summary tables for both dependent as well as independent variables and briefly comment on them.

5. Summary of the Survey Data

Table 1 presents the frequency of respondents by categories of the dependent variables considered. The respondents who did not respond to the question are listed as missing cases. We have assumed that the missing cases and the valid cases have a similar distribution over the categories and therefore, the missing observations do not significantly distort the pattern seen. For the purpose of the discussion, we disregard the missing cases and base our analysis on the frequencies and proportions excluding the missing cases. It can be seen from Table 1 that out of the total respondents (wives) who answered the question about their control over cash, 54.3 reported that they did not have control over cash and only 45.7 percent answered that they had control over cash, indicating higher degree of control over cash by husbands than wives. In response to the question whether they were restricted by their family in organizing or forming a

group, 24.8 percent of respondents said 'Yes'. Of those who answered the question "are you involved in family decision?" 62.6 percent gave an affirmative response. In another words, 37.4 percent of responding wives did not have any significant involvement in family decisions. Similarly 63.3 percent reported that they were actively involved in decisions about the future of their children and 36.7 percent answered that they were not.

Table 1
Frequency of responses for dependent variables used:
Survey of wives in rural villages in West Bengal

Variable Categories	Frequency	Percent	Percent Excluding Missing Cases
Control over cash by wife			
Responding 'No'	50	42.7	54.3
Responding 'Yes'	42	35.9	45.7
Missing	25	21.4	
Restriction in formation of groups by wives			
Responding 'No'	82	70.1	75.2
Responding 'Yes'	27	23.1	24.8
Missing	8	6.8	
Involvement of wives in family decisions			
Responding 'No'	34	29.1	37.4
Responding 'Yes'	57	48.7	62.6
Missing	26	22.2	
Involvement of wives in decisions about the future of their children			
Responding 'No'	40	34.2	36.7
Responding 'Yes'	69	59.0	63.3
Missing	8	6.8	

The frequency distribution of respondents for different categories of independent variables is given in Table 2. As the table indicates, a very high proportion of women (80.3 percent) were earning income from working in others field. However, husbands of only 40 percent of the respondents were 'pleased' to see them working outside for cash income. For 69.2 percent of respondents, family income was enough for two meals a day and the rest of the respondents did not have sufficient family income to provide more than two meals a day. However, in reporting their perceived economic status in their village, 52.6 percent of respondents categorized themselves as falling in lower one third. This implies that the respondents mostly perceived themselves as quite poor because more than half of respondents indicated that their economic status was in the lower one-third in their village. Only 37.2 percent respondents reported that their family (the wife's family) visits them frequently. Nevertheless, 58.4 percent of

responding wives reported that they would receive support from their family if needed. Most wives thought divorce was impossible, at least for them.

Table 2
Frequency of responses for independent variables used:
Survey of wives in rural villages in West Bengal

Variable Categories	Frequency	Percent	Percent Excluding Missing Cases
Wife earns income from working in others' field			
Responding 'No'	23	19.7	19.7
Responding 'Yes'	94	80.3	80.3
Missing	0	0	
Husband is pleased to see her working outside for cash income			
Responding 'No'	64	54.7	59.8
Responding 'Yes'	43	36.8	40.2
Missing	10	8.5	
Family income is enough for two meals a day			
Responding 'No'	36	30.8	30.8
Responding 'Yes'	81	69.2	69.2
Missing	0	0	
Perceived economic status			
Lower one-third	61	52.1	52.6
The middle	36	30.8	31.0
The top one-third	19	16.2	16.4
Missing	1	0.9	
Tribal/non-tribals			
Non-Santals	52	44.4	44.4
Santal	65	55.6	55.6
Missing	0	0	
Saris vs Hindus			
Tribal Saris	36	30.8	31.3
Tribal Hindus	27	23.1	23.5
Non tribal Hindus	52	44.4	45.2
Missing	2	1.7	
Wife's family visits her frequently			
Responding 'No'	71	60.7	62.8
Responding 'Yes'	42	35.9	37.2
Missing	4	3.4	
Wife receives support from her family if needed			
Responding 'No'	47	40.2	41.6
Responding 'Yes'	66	56.4	58.4
Missing	4	3.4	
Divorce is possible according to wife			
Responding 'No'	67	57.3	69.1
Responding 'Yes'	30	25.6	30.9
Missing	20	17.1	

However, it is necessary to go beyond summary tables and consider whether there is evidence of systematic relationships between the dependent and independent variables. Table 3 presents the proportions of respondents having 'Yes' responses to the question related to dependent or status variables classified by categories of independent variables.

Table 3
Proportions of respondents responding 'Yes' to four dependent variables by categories of independent variables: Survey of wives in rural villages in West Bengal

Dependent Variables →	Control over cash by wife		Restriction on formation of groups by wives		Involvement of wives in family decisions		Involvement of wives in decisions about the future of their children	
	Proporti on ¹	No of cases ²	Proporti on ¹	No of cases ²	Proporti on ¹	No of cases ²	Proporti on ¹	No of cases ²
Wife earns income from working in others' field								
Responding 'No'	0.47	17	0.00	22	0.38	21	0.82	22
Responding 'Yes'	0.45	75	0.31	87	0.70	70	0.59	87
Total respondents	0.46	92	0.25***	107	0.63***	91	0.63**	109
Husband is pleased to see her working outside for cash income								
Responding 'No'	0.44	50	0.29	64	0.58	53	0.64	58
Responding 'Yes'	0.42	36	0.18	38	0.70	33	0.54	41
Total respondents	0.43	86	0.25	102	0.63	86	0.60	99
Family income is enough for two meals a day								
Responding 'No'	0.48	31	0.17	35	0.55	33	0.48	33
Responding 'Yes'	0.44	61	0.28	74	0.67	58	0.70	76
Total respondents	0.46	92	0.25	109	0.63	91	0.63**	109
Perceived economic status								
Lower one-third	0.43	46	0.22	55	0.66	44	0.62	56
The middle	0.55	29	0.14	35	0.48	33	0.51	33
The top one-third	0.31	16	0.56	18	0.85	13	0.54	19
Total respondents	0.45	91	0.25***	108	0.62*	90	0.63*	108
Tribal/non-tribals								
Non-Santal	0.45	38	0.26	46	0.68	41	0.55	47
Santal	0.46	54	0.24	63	0.58	50	0.69	62
Total respondents	0.46	92	0.25	109	0.63	91	0.63	109
Saris vs Hindus								
Tribal Saris	0.55	31	0.19	36	0.71	28	0.69	36
Tribal Hindus	0.38	21	0.32	25	0.40	20	0.70	24
Non tribal Hindus	0.45	38	0.26	46	0.68	41	0.55	47
Total respondents	0.46	90	0.25	107	0.63*	89	0.63	107
Wife's family visits her frequently								
Responding 'No'	0.47	55	0.12	65	0.54	55	0.62	66
Responding 'Yes'	0.45	33	0.44	41	0.73	33	0.67	40
Total respondent	0.47	88	0.25***	106	0.61*	88	0.64	106
Wife receives support from her family if needed								
Responding 'No'	0.45	33	0.20	46	0.69	45	0.60	43
Responding 'Yes'	0.46	59	0.28	60	0.55	45	0.63	63
Total respondents	0.46	92	0.24	106	0.62	90	0.62	106
Divorce is possible according to wife								
Responding 'No'	0.36	56	0.26	61	0.67	48	0.83	64
Responding 'Yes'	0.62	21	0.24	29	0.56	25	0.24	25
Total respondents	0.43**	77	0.26	90	0.63	73	0.66***	89

1. Proportions for the dependent variable rounded to nearest hundredth

2. For independent variable

* The difference in proportions between the categories is significant at 10 percent level.

** The difference in proportions between the categories significant at 5 percent level.

*** The difference in proportions between the categories significant at 1 percent level.

By focusing on the entries in its body corresponding to 'Control over cash by wife' (note that control over cash indicates some control, not necessarily complete control) and 'wife earns income from working in others' fields, we can clarify this table. It can be seen in the table that 47 percent of the respondents who did not earn income working in others' field had control over cash in comparison to 45 percent of those who earned income from working in others' field. So the difference is very small. In other words whether a wife earns income from working in others field or not does not make any significant difference to her control over the cash in her family. One can compare proportion of 'Yes' responses to each of the dependent variable between the categories of each of the independent variable in a similar fashion. To test whether any significant differences occur in the dependent status variables as the independent variables change, we now apply the analysis of the variance (ANOVA) technique

6. Empirical Evidence about the Influence of the Selected Variables on the Intra-Family Status of Wives – ANOVA

Analysis of the variance (ANOVA) results concerning the possible influence of the selected socioeconomic variables on different indicators of the intra-family status of wives are summarised in Table 4. Table 4 summarises the results obtained by applying ANOVA to the data shown in Table 3.

Table 4. 'Influences' of socioeconomic variables on intrafamily status of wives in a sample from rural West Bengal: Significance according to ANOVA

Dependent Variable →	Control over cash by wife	Restriction in formation of group by wives	Involvement of wives in family decisions	Involvement of wives in decision about the future of the children
Independent Variables ↓				
Wife earns income from working in other's field	Not significant	Significant*** (positive)	Significant*** (positive)	Significant** (negative)
Husband is pleased to see her working outside for cash income	Not significant	Not significant	Not significant	Not significant
Family income is enough for two meals a day	Not significant	Not significant	Not significant	Significant** (positive)
Perceived economic status of family	Not significant	Significant*** (positive)	Significant* (positive)	Significant* (positive)
Tribal/non-tribal	Not significant	Not significant	Not significant	Not significant
Saris vs Hindus	Not significant	Not significant	Significant* (higher for Saris)	Not significant
Wife's family visits her frequently	Not significant	Significant*** (positive)	Significant* (positive)	Not significant
Wife receives support from her family if needed	Not significant	Not significant	Not significant	Not significant
Divorce is possible according to wife	Significant** (positive)	Not significant	Not significant	Significant*** (negative)

Notes

* Significant at 10 percent level.

** Significant at 5 percent level.

*** Significant at 1 percent level.

The results suggest that in this rural area, the earning of cash by wives in the fields of others does not significantly empower them within their own family. There is in particular, no significant relationship between this variable and their control of cash. Furthermore, wives working outside their home are subject to increased restriction on their ability to join female groups. They suffer even more social restriction than those who do not work in 'outside fields'. They appear to have significantly less involvement in decisions about the future of their children than women who do not work in the fields of others for cash. On the other hand, they appear to have greater involvement in family decisions generally. Thus, the relationship between the intra-family status of wives and this variable is mixed. However, on the whole, it can be concluded that in this rural area in W. Bengal working for income in the fields of others does not empower wives to any

considerable extent in their family. At least in rural societies in India, caution is required in associating employment of women outside the household with an increase in their empowerment in the family. It, therefore, seems likely that an increase in GDI as a result of greater employment of females may well understate the increase in their economic and social status in some patriarchal societies, such as those in India (cf. Tisdell *et al.*, 2001).

It is found that the attitude of husbands to wives working outside their family for cash bears no significant relationship to any of the intra-family indicators of social status of wives considered.

As for the influence of the economic situation of the family on the status of wives in the family, two variables are considered, namely whether the family income can or can not supply two meals a day and the respondent's perception of the economic standing of her family in the village. Only one status variable was influenced by the first mentioned variable, namely wives in a family having sufficient income to provide two meals a day have more involvement in decisions about the future of their children.

There is no significant increase in control over cash by wives in families with higher perceived economic status, but there is some weakly significant increase in their involvement in family decisions and in decisions about the future of their children. However, there is a strongly significant relationship involving social restriction on wives – social restriction on wives intensify with increases in perceived economic status of their family. In India, social restrictions (*purdah*) on women are greater in higher castes than for lower ones. Social restrictions on females are indicative of the social status of the family in northern India. Increases in income, therefore, appear to result in greater restrictions on the social choices of females. This is at least so in India's current less developed state. It is possible that the situation could change in the long-term with a pattern akin to the Kuznets curve emerging (Tisdell, 2001).

In this region and for this sample, it is found that the status of wives is not significantly influenced by whether they are Santals (tribal) or not. It seems likely that there is some overlap between the social values of Santals and Bengalis in this area and some convergence of Santal values towards Bengali ones has occurred. The convergence,

however, is much less marked when Santals continue to follow their Sari religion rather than Hinduism which is the religion of all Bengalis in the area from which this sample is drawn. As is clear from Table 4, the involvement of wives in family decisions in families following the Sari religion (all of whom are Santals) is significantly higher (at the 10 percent level) than in those families which follow Hinduism.

In the light of the observations of Dyson and Moore (1993) based on south Indian experience, it might be thought that where a wife's family frequently visits her household and if she could count on support from her family in times of need that this would give a wife greater empowerment and increase her status in the family. However, our results suggest that the situation in rural West Bengal is not so straightforward because of the strength of the patriarchal society compared to the situation in south India. The West Bengal situation is likely to be repeated in other parts of rural northern India and for Hindu families in rural Nepal. In these areas, visits by the wife's family seem to reinforce traditional social values. For instance, restrictions on wives joining social groups are significantly reinforced (it seems) by visits of their family. Nevertheless, there is a weakly significant increase in the involvement of wives in family decisions in such cases. Otherwise, frequent visits by a wife's family seem to have no significant influence on other indicators of the empowerment of wives in families.

Finally, divorce may be regarded as a threat variable. It was found that those wives who mentioned divorce as a possibility had (significant) positive control over cash within their family but they had significantly less involvement in decisions about the future of their children. However, this variable is not significant in relation to involvement of wives in family decisions generally and is not significant for the degree of restriction on involvement of wives in social groups.

7. Further Observations from ANOVA

Our results demonstrate that caution is required in accepting, at least for rural northern India, that variables often believed to empower women within their family in fact do so. Although some of the indications are mixed, wives earning income by working in other fields do not seem to be empowered to any significant extent by this. It certainly does not result in their having greater control over cash, appears to limit their chances of

joining social groups, and while they are likely to be more involved in the general decisions of their family, they are less likely to be involved in decisions about the future of their children. Rising economic status brings no significant increase in control over cash by females but leads to a considerable reduction in their social interaction. Yet at the same time it results in some weakly significant increase in their involvement in family decisions and in decision about the future of their children. No significant difference is found between Santals (tribals) and non-tribals in this sample as far as the intra-family status of wives is concerned. However, in the case of Saris as opposed to Hindus, Sari wives have significantly greater involvement in family decisions. Frequent visits by the wife's or the likelihood of support being received from the wife's family does not significantly empower wives.

As for control over cash, only in the case of wives who mentioned divorce as a possibility was there some significant increase in control of wives over cash. These wives may have been more assertive than wives who did not mention this possibility. It is unclear how strongly wives who mentioned that divorce is possible contemplated the possibility of divorce themselves.

Restrictions on involvement of wives in formation of social groups is highly significant for wives working in the fields of others, in cases where the wife's family visits her frequently, and the higher is the economic status of the family as perceived by the respondent.

Involvement of wives in family decisions is found to be significantly greater where they work in the fields of others or have higher economic status, to be greater if they follow the Sari religion rather than the Hindu religion, and to be somewhat greater if the wife's family visits her frequently.

Involvement of wives in decisions about the future of their children do not correlate perfectly with the extent of their involvement in general family decisions. Wives belonging to families with higher income or perceived economic status tend to have greater involvement in decisions about the future of their children but this relationship is only weakly significant.

These results indicate that customary conventions play a major role in determining the intra-family status of wives in this sample. These patriarchal conventions do not seem to be weakened by the fact that wives have employment outside their home. Furthermore, frequent visits by the wife's parent seem to strengthen rather than weaken these conventions, as does a rise in perceived economic status of the family. Thus socioeconomic theories of the family, such as bargaining theories developed in the West, appear to have limited explanatory power in the northern Indian cultural context. This may be because wives have few bargaining possibilities, or do not realize their bargaining possibilities even when they do exist (cf. Sen, 1990) or are so surrounded by customary-based social pressures that they are unable to exercise their bargaining power because of the high social costs of doing so.

8. Probit Analysis

Probit models are also used to examine

- 1) the control of wives over cash,
- 2) their involvement in the family decision-making generally, and
- 3) their involvement in the involvement in decisions about their children's future

as a function of each of the following:

- a) the ratio of the wife's contribution to family cash income relative to that of her husbands;
- b) the ratio of the wife's contribution to food for the children relative to that of the husband; and
- c) the simple combined ratio of cash plus food contribution of the wife to cash income plus food for the children relative to that of her husband.

These models allow these continuous (possible) explanatory variables of the status of wives to be taken into account.

We specify the following Probit equations as separate equations, rather than simultaneously:

$$CC = \beta_1 + \beta_2FRATIO$$

$$CC = \beta_1 + \beta_2CRATIO$$

$$CC = \beta_1 + \beta_2COMBRATIO$$

$$\text{IFD} = \beta_1 + \beta_2\text{FRATIO}$$

$$\text{IFD} = \beta_1 + \beta_2\text{CRATIO}$$

$$\text{IFD} = \beta_1 + \beta_2\text{COMBRATIO}$$

$$\text{IDFC} = \beta_1 + \beta_2\text{FRATIO}$$

$$\text{IDFC} = \beta_1 + \beta_2\text{CRATIO}$$

$$\text{IDFC} = \beta_1 + \beta_2\text{COMBRATIO}$$

Here,

CC	wife's control over cash
FRATIO	the ratio of the wife's contribution to family cash income relative to that of husband
CRATIO	the ratio of the wife's contribution to food of children relative to that of husband
COMBRATIO	the simple combined ratio of cash plus food contribution of the wife to cash income plus food for the children relative to that of her husband
IFD	involved in family decision in general
IDFC	involved in decision relating to the future of children

The regression results for estimation of these Probit equations are set out in Table 5.

Table 5. Regression results for the Probit equations: Status of wives as a function of their economic contributions to their family

Dependent Variables →	CC	IDFC	IFD
Independent Variables ↓			
<u>CRATIO</u>			
Constant	-1.11**	0.54**	0.75***
Coefficient	0.88**	-0.18	-0.33
Chi Squared (1 degree of freedom)	5.92**	1.7	4.00**
Log likelihood	-45.94	-56.38	-49.36
No of cases in the equation ¹	72	87	79
<u>FRATIO</u>			
Constant	-0.56**	0.86***	0.27**
Coefficient	0.40*	-0.49**	-0.22
Chi Squared (1 degree of freedom)	3.8*	5.87**	1.58
Log likelihood	-60.73	-68.25	-58.35
No of cases in the equation ¹	91	108	90
<u>COMBRATIO</u>			
Constant	-1.26**	0.92**	1.06**
Coefficient	1.06**	-0.58	0.68*
Chi Squared (1 degree of freedom)	4.77**	2.20	3.15*
Log likelihood	-46.52	-56.12	-49.78
No of cases in the equation ¹	72	87	79

* Significant at 10 percent level.

** Significant at 5 percent level.

*** Significant at 1 percent level.

Note:

1. The number of cases differs between equations because of missing observations.

Although ANOVA analysis identifies no significant relationship between wives working in the fields of others and their control over cash, Probit analysis indicates that as the proportionate contribution of wives to the cash income of their family relative to that of their husbands rises, the likelihood of a wife having control over some cash rises. This relationship is significant at the 5 percent level.

Similarly, Probit analysis suggests that as the wife's contribution to food for the children relative to the husband's rises, the wife is more likely to have control over cash. But this relationship is only significant at the 10 percent level. As the proportionate combined contribution of the wife to cash plus food for the children increases, wives are more likely to have control over some cash in the family. This is significant at the 5 percent level.

This indicates that as the relative importance of the wife in her family as a breadwinner rises, she is more likely to have control over cash.

On the other hand, as the relative importance of the wife as a breadwinner rises, the wife is less likely to be involved in the family decision-making process and less likely to be involved in decisions about the future of her children. However, most of these relationships are not significant even at the 10 per cent level. Yet, as the proportionate contribution of wives to food for their children rises, wives are less involved in decisions about the future of their children and this relationship is significant at the 5 per cent significance level. This may be because those families in which women are higher proportionate contributors to family income have lower economic status. Several studies (Gulati, 1981; Sharma, 1980) found that in India the poorer the family the higher is the proportionate contribution of women to the income of the family. While this may be generally true in India, statistical tests on the sample assessed here revealed no significant difference in the percentage contribution to family income of wives in relation to the perceived economic status of their family within their village. The reasons for this are unclear, but it is not explained in this case by the presence of Santals in the sample. Actually for Santals no significant relationship exists whereas for non-Santals a significant relationship does exist in this sample but one which is the opposite to that found by Gulati (1981) and Sharma (1980) in that those wives in families who perceived their economic status to be in the top one-third in their village made the highest proportionate contribution to family income. Therefore, this finding about influence on decisions seems somewhat inconsistent with that from ANOVA, namely that involvement of wives in family decisions and in decisions about the future of their children is more likely the higher is the perceived economic status of the family. However, this relationship is only weakly significant for ANOVA.

These results imply that although wives are more likely to have some control over cash as they become proportionately more important as breadwinners in their family, this does not give them greater influence in family decision-making. From this point of view there are few if any signs of greater empowerment of wives.

The correlation matrix for the variables used in the Probit analysis, shown in Table 6, further clarifies the main findings. The results indicate that as the economic contribution of the wife to her family relative to her husband increases, she is more

likely to have control over some cash but her involvement in family decisions and especially those about the future of her children does not increase. In fact, the probability of such involvement may decline somewhat. Thus, the wife does not seem to be significantly empowered within her family in this context by her economic contribution to her family relative to her husband's.

Table 6. Correlation matrix for the variables used in Probit analysis to compare wife's intra-family status with her economic contribution to her family

	Combined food and cash contribution of wife relative to her husband's	Wife's contribution to food of children relative to that of husband	Wife's contribution to cash income relative to that of husband	Involvement of wives in family decisions	Wife has control over cash	Involvement of wives in decision about the future of the children
Combined food and cash contribution of wife relative to her husband's	1.00					
Wife's contribution to food of children relative to that of husband	0.74	1.00				
Wife's contribution to cash income relative to that of husband	0.79	0.18	1.00			
Involvement of wives in family decisions	-0.17	-0.13	-0.16	1.00		
Wife has control over cash	0.26	0.19	0.26	-0.06	1.00	
Involvement of wives in decision about the future of the children	-0.11	-0.23	-0.05	-0.03	-0.27	1.00

Note that there is a low correlation between the wife's contribution to cash income relative to that of the husband and the wife's contribution to food for the children relative to that of the husband, but it is positive. As one would expect however, each of these variables is highly correlated with the wife's combined ratios of contribution to food and to cash income relative to her husband's because of the additive mathematics involved.

9. Conclusions

Variables such as wives working in the field of others, wives contributing relatively more to the cash income of the family or to the food requirements of their children do not in their rural context studied in West Bengal appear to empower wives in decision-making in their family. Indeed, a perverse relationship appears to exist. This may be to some extent the case because it is often in families with lower economic status that wives tend to be relatively more important breadwinners for their families. It may also be that in cases where the proportionate contribution of the wife to family income is high that husbands may try to retain their dominance by more frequently excluding their wives from family decisions. This is psychological counterweight which may be used by husbands.

The above analysis suggests that the status of wives within their family is largely a consequence of the total cultural and social context in which they find themselves. While in Western societies wives are likely to be more greatly empowered in the family the greater is their contribution to family income and the more able they are to earn independent income, the situation is more complex in rural India. Scope for independent earning is limited (wives in most cases can only earn income with the approval of the husband) and there is no evidence that as they contribute relatively more to the economic position of the family that their influence on family decisions increases. Indeed, to the contrary, there is some evidence of decreased influence of wives within their family. Changes on a very broad front may be required to alter the current cultural and social context in India.

Note that in virtually all cases considered, possible indications of threat power were relatively ineffective in explaining the status of wives in families in this sample. Possibly this is because, given the cultural context as a whole, the variables considered

did not result in real threats and in some cases, reinforced the cultural status quo e.g. frequent contact of wives with their families, rather than undermined these. Thus it seems that patriarchal forces and social customs are so strong in northern rural India that they leave little scope for bargaining by wives and severely limit the possibilities for meaningfully applying bargaining theories to the determination of the social status of wives within their family. It also seems clear that socioeconomic variables which may help to empower wives in Western society fail to do so in Indian society because of the pervasiveness of patriarchal structures and social customs in that society.

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