CHAPTER V

THE BOYAS' MIGRATION: ECONOMIC ASPECTS

In the previous chapter, the analysis has concerned itself with the interpretative results of the factor analytic procedure on migrational - causes and consequences, decisions and perceptions - aspects of this study. The present chapter further elaborates the economic aspects as gleaned from the data of the primary survey, with 403 samples of the Boya earthworkers.

The chapter reports on three different statistical applications: the factor analysis of 20 selected economic variables from the primary survey. These include a set of two multivariate regressional analyses of data on remittances, the one with nine and the other with five variables related to remittances and yet another set of canonical correlational analyses of variables on remittances as three groups of 4-variable, 5-variable and 7-variable sets with different combinations of 1-variable, 1-variable and 4-variable (dependant) sets, in the groups on the left and 3-variable, 4-variable and 3-variable (independent) sets in the groups on the right, respectively. The results are suitably interpreted so as to make possible an understanding of the economic aspects of the migrant Boyas of Dharmapuri in Coimbatore city.

The discussion is thus in four parts: The first is on the data and the methods of analyses. The second is on the interpretation of the seven dimensions retained from an analysis of a (403 observations x 20 variables) matrix of economic aspects. The third is on the multiple regressional analysis of two sets of remittances data for those who make remittances and hence two matrices of 259 observations of those who make remittances x 9 variables and 259 observations x 5 variables, deleting 4 variables out of the first
regressional set. Finally, the fourth is on the interpretation of the canonical correlational applications, three in all, with a varying number of variables on the left and the right. The implications are discussed simultaneously as inferences from which the results are drawn.

The Data and the Method

There are in effect six sets of data dealt with in three separate applications. While the total set of 20 economic variables listed in table 5.1 has been used in a 7-factor dimensional extraction to understand the underlying economic structures of the study, the five other sets drawn from two groups of variables listed in table 5.2 have been used essentially to verify certain hypotheses. The hypotheses themselves, included earlier in the first chapter, are repeated here in the following section, so as to make certain relationships exemplify ideas that are relevant to social and economic ties between the origins and the destinations and also to show possible developments in the origin as a result of remittances and benefits.

Table 5.1: List of Economic Variables Used in the Factor Analysis

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variable Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improvement on skills</td>
</tr>
<tr>
<td>2</td>
<td>Monthly remittances</td>
</tr>
<tr>
<td>3</td>
<td>Regularity of remittance</td>
</tr>
<tr>
<td>4</td>
<td>Periodicity of remittance</td>
</tr>
<tr>
<td>5</td>
<td>Mode of remittance</td>
</tr>
<tr>
<td>6</td>
<td>Purposes for which remittances are made</td>
</tr>
<tr>
<td>7</td>
<td>Ability to remit certain sums (how much?)</td>
</tr>
<tr>
<td>8</td>
<td>Perception on obtaining new jobs</td>
</tr>
<tr>
<td>9</td>
<td>Perception of what children must do.</td>
</tr>
<tr>
<td>10</td>
<td>Land assets value</td>
</tr>
<tr>
<td>11</td>
<td>House assets value</td>
</tr>
</tbody>
</table>
12 Value of durables owned
13 Income of family members
14 Adequacy of income or otherwise
15 Debts in family
16 Sources of money debt
17 Collateral
18 Purpose of debts and loans
19 Migrant’s monthly income
20 Number of days of earnings in a month

Source: Interview Schedule

Table 5.2: Variables Used in Multiple Regressional and Canonical Correlational Analyses

Data for Regressional Analysis

1 Monthly remittances
2 Regularity of remittance
3 Periodicity of remittance
4 Mode of remittance
5 Income of family members
6 Adequacy of income or otherwise
7 Debts in family
8 Wages/day
9 Migrant’s monthly income

Data for Canonical Correlations

1 Monthly remittances
2 Regularity of remittance
3 Periodicity of remittance
4 Mode of remittance
5 Income of family members
6 Debts in family
7 Migrant’s monthly income

Source: Interview Schedule

The technical details on the methods follow the description and justification for the selection of variables. As factor analysis has already been described with necessary details in the last chapter, it is not cited again. The methods of multiple regression and
canonical correlation alone are described here towards providing some understanding of the techniques.

There were 31 variables, shortlisted for consideration in the applications as regards the economic aspects of the Telugu Boyas migrants to Coimbatore. Eleven of them have been deleted from analysis on one ground or another. For instance, the basis of employment (contract) and the basis of payment of wage (on piece) for all the Boyas were the same. Likewise, no migrant respondent ever suggested the wage at destination was poorer than that at the origin (100 per cent responding wage as better), nor did any of them suggest that they worked less hours than they had at the origin. Everybody, invariably, was of the opinion that there was more opportunity to make a good living in the city of Coimbatore than at the villages of origin in the district of Dharmapuri. So this list of variables got deleted from the list of variables selected.

The other variables which got deleted on similar or other grounds are: (i) membership in trade union/association (for the Boya respondents are not of any union or association), (ii) kind of job (everybody does the same kind of work), (iii) working with current maistry-supervisor (everybody does it, too), (iv) mode of acquiring assets (this is also very nearly the same for everybody), (v) rates of interest for money debt and family income.

It is necessary to mention that all these have been given scores on the basis of a ten-point scaling and the scores in all cases (samples) tended to be the same, leading invariably to divide by zero error in standardising the data prior to actual analysis.

The very first variable entered in the analysis is improvement on skills, which the respondents tended to show as a fact. The six variables on remittances, variables 2 to 7
on the list, have been retained in the analysis for they have shown differences among the respondents. The perception on obtaining a new job has been variously responded to by the Boyas. Many believe it to be still difficult despite having found it easily for themselves. However, the respondents vary very slightly on their perception as to what their children must do (almost invariably). They feel that the children must follow-up on the same occupation. The Boyas are well organised under a single maistry, that is, almost every group of them on a long-term basis, and also often with the same contractor. Everyone has asset and it is valuable for it is acquired from their hard-earned money and a house. The acquisition follows a certain mode at the origin of course, just as they do with the durables which remain with them at the city. These are sent off to the district of origin if necessary.

The other variables include their income, at the city and at the origin, their debts, especially money-debts, purposes for which the debts have been obtained (almost invariably, social, religious, property related and so on), the collaterals, wages and so on. All of the variables are therefore relevant in measuring the economic dimensions of the Boyas.

As can be seen from table 5.2, the only other variable that has been used in regresional analysis is the wage per day, in order to determine the nature, magnitude and the practice of remittances to homes at the origins.

**Multiple Regression.** One of the often used methods in the migrational analyses, is used here for a specific purpose: that of verifying certain hypotheses and coming to conclusions as part of the study. Regression methods are useful for much more than the analysis of observations arranged in order of time or space. They can be used to analyse any multivariate data set when it is useful to consider one of the
variable as the function of the others. For example, it is presumed in this study that the remittances made home by the migrants is a function of the migrants' income and the quantum of remittances depends on regularity, periodicity and mode of payment. Hence, the method becomes handy to test some hypotheses and the suppositions under each of them. As such, in terms of the method, it is as though one variable forms a scale along which observations of the other variables are located, and we examine the nature of changes in the dependent variable as we move up or down the scale.

The theoretical and computational essentials of the method of multiple regression may be had from Anderson (1958), Cooley and Lohnes (1971), Gnanadesikan (1977) and Davis (1986). The regression model has the form

$$ Y = b_0 + b_1 X_1 + b_2 X_2 + \ldots + b_m X_m + e $$

and the variables $X_1$ on to $X_m$ are independent variables while $Y$ forms the dependent. $b_0$ on to $b_m$ are the coefficients. A regression of any $m$ independent variables upon a dependent variable can be found by an appropriate least-squares solution. The regression coefficients of the model are estimated by the sample partial regression coefficients. They are called the partial regression coefficients because each gives the rate of change (or slope) in the dependent variable for a unit change in that particular independent variable, provided all other independent variables are held constant. In general however these coefficients differ from the total regression coefficients which are the simple regressions of each individual $X$ variable on the $Y$ variable. We ordinarily expect multiple regression to account for more of the total variation in $Y$ than will any of the total regression coefficients. This is because multiple regression considers all possible interactions within the combinations of variables as well as the variables themselves.
Computing the regression equation in a standardised form has the disadvantage that the correlation matrix must be created first, increasing the computational efforts. In order to preserve accuracy, the correlations must be calculated by the definitional equation rather than with the computational form. This process requires that the data be handled twice and the resulting coefficients must be unstandardised if they are to be used in a predictive equation with raw data. However, these disadvantages are more than offset by the increased stability and accuracy of the matrix solution, and the standardised coefficients provide a way of assessing the importance of individual variables in the regression. Partial regression coefficients can be derived from the standardised partial regression coefficients.

Although the standardised partial regression coefficients provide a guide to the most effective variables in regression, they are not an infallible index to the best possible regression equation. If we examine the regression equation and decide two variables are contributing a negligible amount to the regression, they can be discarded. When one of the variables is omitted and the regression is recalculated, the goodness-of-fit and the regression equation, of course, changes. If we decide to discard the second variable, again the regression changes. However, if we want to search through a large set of variables and weed out those which are not helpful in the problem, we must do more than simply examine the partial regression coefficients.

To determine the very best possible regression, in the sense of having the most significant F ratio, all possible combinations of the variables would have to be examined. Multiple regression can thus be cumbersome. And, although multiple regression is multivariate in the sense that more than one variable is measured on each observational unit, it really is a univariate technique, because we are concerned only
with the variance of one variable, Y. Behaviour of the independent variables, the Xs, is 
not subject to analysis.

**Canonical Correlation.** A multivariate technique, canonical correlation has 
the same computational basis as factor analysis. It is, in its concept and objectives, 
closely related to multiple regression, however. Multiple regression is, as seen earlier, 
concerned with the relationship between a single dependent variable (remittances in 
this case) and a set of predictor variables (income of the migrant, income of the family 
and debt in the family). An extension of this concern is the relationship between a set 
of dependant variables (remittance, regularity, peridiocity and so forth) and a second 
set of predictor variables (income of the migrant, income of the family, debt in the 
family). In canonical correlations, the relationships may be investigated by finding 
linear combinations of the predictor variables and dependent variables. The linear 
combinations are called canonical variables. In effect, we convert the set of predictor 
variables into a single new variable and the set of dependent variables into another 
single new variable. We, then, determine the correlation between these two new 
variables. The conversion process is linear; that is, the original variables are each 
weighted and added together to yield the canonical variable.

In the application of canonical correlation, the data matrix has the dimensions of 
n x (p + q) where p represents the number of Y (dependent) variables and q the 
number of X (predictor) variables. For computational convenience, the smaller of the 
two sets may be considered the Y set, so p ≤ q. The matrix of variances and 
covariances, [S], is (p + q) x (p + q) and can be thought of as composed of four parts: a 
p into p matrix containing the variances and covariances of the Y variables, a q into q 
matrix containing the variances and covariances of the X variables and finally the p into 
q matrix and its transpose which contains the covariances between the Xs and the Ys.
The objective of the canonical correlation is to select elements of the two new variable vectors, so that the covariances are maximised, subject to the constraint that the variances are equal to one. If the variances are initially standardised to equal one, the covariances are simultaneously standardised and become the correlations between the variables. By using eigenvalue techniques, values of the new variables can be found that have the desired properties. We are by this procedure guaranteed that the canonical correlation will be greater than the largest correlation between any original X variable and any original Y variable - that is, greater than any element in the matrix p into q.

The null hypothesis in the canonical correlation analysis is that all of the canonical correlations are equal to zero. If the test statistic (chi-square statistic) falls in the critical region, at least one of the canonical correlations is significantly greater than zero.

**The Hypotheses**

The following hypotheses emerge from a consideration of the theoretical perspectives that we gain from the analytical stances.

1. There is remittance to origin. This remittance is positively related to the income of the migrants at destination. The two suppositions from the hypothesis may be:

   (a) as the income of the migrant increases, remittances home should correspondingly increase, too,
   
   that is: Remit = f(Inc)
or in a linear form
\[ R = a + b \text{Inc} \]
where \( R \) is remittance made and \( \text{Inc} \) is income of migrant and \( a \) and \( b \) are constants that can be computed by the equation

and

(b) both the income at destination and the income at origin determine the magnitude of remittance.

In equation form \( m\text{Remit} = f(d\text{Inc} + o\text{Inc}) \) or \( mR = a + b(m\text{Remit}) \) where \( mR \) is the magnitude of remittance, \( m\text{Remit} \) is the function of income at the destination \( (d\text{Inc}) \) and income at the origin \( (o\text{Inc}) \) and \( a \) and \( b \) are constants. \( m\text{Remit} \) is not necessarily a function of addition of \( d\text{Inc} \) with \( o\text{Inc} \).

2. Remittance = \( f\{(\text{regularity} + \text{periodicity} + \text{mode})\} \)

This hypothesis presupposes that (a) the quantum of remittances made to origin depends on regularity of remittance, whatever the amount may be, (b) which remittance in turn depends on periodicity, meaning the smaller the period between two successive remittances, the greater is the quantum of remittances and (c) that the personal remittances mean higher quantum.

3. The quantum of remittance that the migrant makes is statistically significant and positively related to wages of the migrant. This presupposes that the greater the wages, the higher is the quantum.
In the form of an equation,

\[ qR = a + bW \]

where \( qR \) is the quantum of remittance, \( W \) is the wages the migrant receives and \( a \) and \( b \) are constants. The relationship is hypothesised as always significantly positive because the higher the wages received, the higher is the quantum of remittance and never the inverse.

4. Debt at origin has a positive impact on remittances home and there may be an increase of debt in family because remittances are big.

5. The greater the number of days at work, the higher is the remittance the migrant makes. There is thus a significantly positive relation between the number of days at work and the quantum of remittances made home.

Quite simply, then, the equation is

\[ R = a + b(DaW) \]

where \( R \) is the remittance made, \( DaW \) is the number of days at work and \( a \) and \( b \) are constants. Following the same logic as in hypothesis 3, the larger the number of days at work, the greater is the remittance. There is never an inverse ratio possible.

Although, the hypotheses have been modelled in simple linear forms, they are to be tested in the multiple regressional context only. It is possible to have the constants recomputed if necessary to understand the simple regressional equations from the multiple regressional solutions.
Economic Well-Being of the Boyas of Dharmapuri

Since the study reported here is of remittances, a brief description on remittances may be in order. First, the scope of what is to be encompassed by remittances must be determined. In what follows, corresponding to most empirical and analytical studies, remittances are defined as personal income transfers directly associated with migration. But that conceals several issues which if ignored can lead to false deductions. Personal implies some individualistic or household or kin based mechanism. Yet all remittances to areas of out-migration or in-migration are by no means personal, private transfers. In some cases - and one should not assume they are sufficiently infrequent to be satisfactorily ignored - migrant associations have collected money and goods to send back for social projects in a native village or to particular groups or households in need (Hart, 1971; Mangin, 1970; Skeldon, 1980). In some cases, as in large parts of Africa, membership of ethnically-based home place associations in cities and towns is almost compulsory for migrants, as is the obligation to contribute to collective assistance for their home in rural areas (Little, 1965; Gugler, 1976). In Latin America, there is evidence of such collective forms of remittances, the most extensively investigated example being that of Lima (Doughty, 1968; Nelson, 1976).

The analytical interest here in remittances of these migrants stems from concern with their potential impact on various behavioural and structural phenomena. It also stems from a desire to understand the factors motivating remittances so as to be able to explain levels and patterns of such transfers. However, assessing the behavioural impact of remittances by means of survey data raises another set of conceptual difficulties.
Most surveys and analyses refer to the 'use' of remittances. Closer examination however reveals that, first, it is not clear whether this means 'intended use' of the sender, intended use of the recipient, or actual use'. These may be quite different. The actual use of remittances may not correspond to that desired by the recipient, or correspond to its actual use. And to complicate the matter still further, perceived use may be subsequently rationalised as the intended use of all concerned. The notions of 'use' and 'purpose' should in this regard be kept distant. An example of the purpose not corresponding to the actual use is where remittances are sent as a form of social security to preserve a social niche in the community, based on kinship reciprocities (Heisler, 1974: 114; Curtain, 1980). In other words, the intended use may not correspond to the intended purpose, as in most forms of behaviour, there will be complex layers of motivating factors, underlying the sending of remittances.

A related difficulty with the notion of use is that the use to which a specific sum of money is put, need not correspond to the expenditure which that remitted money facilitated or induced. In effect, the perceived use is unlikely to be the actual or induced use. The use is not the same as the desired behaviour, following receipt or even that induced by the prospective receipt of an income transfer.
Yet another feature of the use of remittances is the relationships to specific users, as can be schematised for the Boya migrants in the chart 5.1 above.

In the case of the Boya migrants, remittances are made to the old residents, left in the villages, who are generally the parents, or to the wife in the village through migrant friends/villagers who visit the villages on a turn basis. The receivers, parents or wife act as responsible substitutes of the remitter in allocating the funds (a) for the children's education or (b) towards household consumption or (c) repayment on debt or (d) investment on land and housing assets. Household requirements are always taken care of just as the payments on loans are paid without default. There is also corroborative evidence of remittances being directly sent to the head of the family (the father of the migrant) who uses the money primarily for the benefit of the community, in Upper Volta (Skinner, 1965). In South Maragoli of Kenya, the migrants have tended to channel the money to be distributed to the members of the extended family, through
their wives or parents in order to reduce the financial burden. They have also tended to have a witness take note of such actions (Moock, 1976:185). A particular interest in the analysis could be whether the remittances increase the investment or consumption or both. Evidence from the Boya migrants suggest that they repay debts in large numbers, allow money to be spent on consumption in most cases, and make possible investments only in a few cases. However, it is certain that the remittances have made improvements in the economic well being of the community at the origin as also at the destination.

From a careful perusal of schedule-based data, the following relationships emerge as regards remittances and the uses to which they are put to.

1. $A \rightarrow Bu$ : Migrant A remits to dependent B at the origin for dependent’s personal use.

2. $A \rightarrow B \rightarrow Cu$ : Migrant A remits to dependent B, his wife or parents for C’s use, C being migrant’s dependents, children, wife or parents.

3. $A \rightarrow B \rightarrow Au$ : Migrant A remits to dependent B, his wife, parents or a relative for his (migrant’s) use at the origin.

4. $A \rightarrow B \rightarrow Bu, Cu$ : Migrant A remits to dependent B who shares it with C for his/her use.

5. $A \rightarrow B \rightarrow Au, Bu, Cu$: Dependent B receives the remittances from migrant A and distributes it in such a way all benefits are shared.
The migrant’s personal use can be of two types: an investment on land or housing and other assets, and a debt service which he has to pay for, to prove his integrity.

Ownership of land, achieved through the wise use of remittances through the intermediary, can provide for income in old age and also security against urban unemployment. In case of workers who do have the privileges of social securities such as pension, and whose urban earnings do not allow for accumulation of adequate savings for old age, access to land through investment on land will stand them in good stead, at times of need. If these migrants anticipate trouble in the claiming of land on which they have invested through their remittances from the custodian brothers or relatives, they safeguard their position by leaving their wives and children in rural areas to take care of their investments.

**Factor Analytical Results and Interpretation**

Seven factors have been extracted from the factor analysis of 20 variables measured on 403 migrant-respondents. The factor dimensions together explain a total variance of 66.2 per cent, making the structure statistically significant. The first dimension alone accounts for a third of this variance (23.3 per cent) and the others explaining progressively small amounts of variances, and as such the factor dimensions become progressively less important. Table 5.3 presents the factor structure in a form which can be interpreted, for convenience.
Table 5.3: Economic Aspects of Telugu Boya Migrants (Factor Dimensional Matrix)

<table>
<thead>
<tr>
<th>Var No.</th>
<th>Variable Description</th>
<th>Loadings</th>
<th>Comm.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Factor: Remittances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Monthly remittances</td>
<td>0.68</td>
<td>53.3</td>
</tr>
<tr>
<td>3</td>
<td>Regularity of remittance</td>
<td>0.96</td>
<td>91.7</td>
</tr>
<tr>
<td>4</td>
<td>Periodicity of remittance</td>
<td>0.95</td>
<td>91.2</td>
</tr>
<tr>
<td>5</td>
<td>Mode of remittance</td>
<td>0.94</td>
<td>90.1</td>
</tr>
<tr>
<td>6</td>
<td>Purposes for which remittances are made</td>
<td>0.83</td>
<td>74.3</td>
</tr>
<tr>
<td></td>
<td><strong>Eigenvalue</strong></td>
<td>4.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Contribution</strong></td>
<td>23.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Cumulative</strong></td>
<td>23.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Second Factor: Debt in Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Debts in family</td>
<td>-0.72</td>
<td>57.7</td>
</tr>
<tr>
<td>16</td>
<td>Sources of money debt</td>
<td>-0.83</td>
<td>72.0</td>
</tr>
<tr>
<td>17</td>
<td>Collateral</td>
<td>0.80</td>
<td>65.2</td>
</tr>
<tr>
<td>18</td>
<td>Purpose of debts and loans</td>
<td>-0.79</td>
<td>64.3</td>
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<tr>
<td></td>
<td><strong>Eigenvalue</strong></td>
<td>2.54</td>
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<tr>
<td></td>
<td><strong>% Contribution</strong></td>
<td>12.7</td>
<td></td>
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<tr>
<td></td>
<td><strong>Cumulative</strong></td>
<td>36.0</td>
<td></td>
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<tr>
<td></td>
<td><strong>Third Factor: Assets and Durables</strong></td>
<td></td>
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<tr>
<td>12</td>
<td>House asset value</td>
<td>0.65</td>
<td>53.9</td>
</tr>
<tr>
<td>13</td>
<td>Value of durables owned</td>
<td>0.74</td>
<td>57.7</td>
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<tr>
<td></td>
<td><strong>Eigenvalue</strong></td>
<td>1.66</td>
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<tr>
<td></td>
<td><strong>% Contribution</strong></td>
<td>8.3</td>
<td></td>
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<tr>
<td></td>
<td><strong>Cumulative</strong></td>
<td>44.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fourth Factor: Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Income of family members</td>
<td>0.80</td>
<td>69.4</td>
</tr>
<tr>
<td>19</td>
<td>Migrant’s monthly income</td>
<td>0.67</td>
<td>59.7</td>
</tr>
<tr>
<td></td>
<td><strong>Eigenvalue</strong></td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Contribution</strong></td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Cumulative</strong></td>
<td>50.2</td>
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</tbody>
</table>
Fifth Factor: Perception of Future and Income

<table>
<thead>
<tr>
<th></th>
<th>Perception of what children must do</th>
<th>-0.70</th>
<th>69.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Land assets value</td>
<td>-0.50</td>
<td>32.7</td>
</tr>
<tr>
<td>14</td>
<td>Adequacy of income</td>
<td>-0.64</td>
<td>61.8</td>
</tr>
</tbody>
</table>

Eigenvalue: 1.15 %
Contribution: 5.7
Cumulative: 55.9

Sixth Factor: Employment and Improvement

<table>
<thead>
<tr>
<th></th>
<th>Improvement on skills</th>
<th>-0.54</th>
<th>56.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of days of earnings in a month</td>
<td>-0.76</td>
<td>63.4</td>
</tr>
</tbody>
</table>

Eigenvalue: 1.03
% Contribution: 5.2
Cumulative: 61.1

Seventh Factor: Perception on Job

<table>
<thead>
<tr>
<th></th>
<th>Perception on obtaining a new job</th>
<th>-0.90</th>
<th>83.0</th>
</tr>
</thead>
</table>

Eigenvalue: 1.01
% Contribution: 5.1
Cumulative: 66.2

Source: Computer Analysis.

However, in interpreting the factor dimensions, which are fairly straightforward as labelling them has been quite easy because they contain neat variable groupings that aid such classification, the order in which the factors is extracted need not be the order in which they may be interpreted. This is a matter of convenience. The present structure of the economic dimensions may be interpreted in two blocks of dimensions, namely, Assets and Durables, Employment and Improvement, Income, Debt in Family and Remittances. The order therefore is the third, sixth, fourth, second and the first of the dimensions retained in the problem solution. Last there is Perception on Job and Perception of Future and Income (the seventh and the fifth). The two blocks of factor
dimensions place the interpretative possibilities in a nice knock-down argument, for the reason the sequences emerge clearly.

Beginning therefore with assets and durables, we find the assets are not income generating but necessarily and doubtfully a status symbol rather than one providing a money income. This is because it is of a house (0.65) with a significant and positive loading on the factor along with durables (0.74), with an even more significant loading representing only the liking on the part of the migrants for consumer goods and status symbols. In effect, however, the income has to be generated from employment and improvement on skills on the job. This however loads on the sixth factor negatively and yet significantly (-0.54) with work days in a given month severely limited as well (refer to the loading on the number of days at work in a month being -0.76). We may deduce the relationships however from limited employment (-0.76) at the destination to the migrants' income. The income is highly positively correlated and the same holds true with the income of the family (0.80) which may or may not reside at either origin or destination. It is known however that many families have left one or two members, usually the older members, at the origin so that the rest could be gainfully employed in the city. The count of the community at the time of interviews was at least 1000. This is something that favours the conclusion that the income at origin as well as the income at destination have been high for the families of the migrants. The high income at the origin may be deduced as one received from investments made from remittances.

Remittances were being sent by 259 of the 403 migrant-respondents interviewed. It is certain that most families (64.3 per cent) reside in the villages of the district of Dharmapuri, expecting remittances to be made, in whatever amount possible. So remittances (0.68), which form a separate and importantly the main dimension of the analysis are made with certain purposes in mind (0.83), more importantly family
debt (which is the bipolar of the structure, in fact), and with regularity (0.96), specific periodicity (0.95) and mode (0.94). The latter is almost always made by the visitors in turn to the district and villages of origin. The debt in the family (-0.72) however is highly negatively loaded on the bipolar dimension labelled Debt in Family, with purposes of debt or loans (-0.79). The collateral (-0.80) and the sources of money debt (-0.83) are all progressively significant and negatively loaded. This means that perhaps it is (a) a blotch on the community's otherwise hard labour and (b) its lavishness of expenditure on social, religious and ethnic occasions. This makes them heavily indebted and therefore fettered permanently engaged always in clearing it someway or the other.

The impression that we gain from the first block of factor dimensions is that migrants have bettered their income prospects by taking advantage of job opportunities in the city of Coimbatore. The need to migrate arose essentially as a consequence of debts in the family and the honest wish on the migrants' part to repay these debts and also at the same time to become economically independent, as far as possible. But migration has not changed their occupation in any way. It is well known that all of them are engaged in their traditional occupation even in the city. Changes are seen only in the form of occupation in the urban context.

The second block of factor dimensions, namely, the seventh and the fifth, indicates that the migrant still fears the difficulties in obtaining a job. If he has to obtain a new job (-0.90), he thinks it is extremely difficult to comeby. However, with the never ending constructional activity at the city, the prospects are there, and the Boyas being a community specialising in a certain activity related to it, they would be increasingly involved. This is seen in the positive signals from the already-migrated-to-the-city to the potential migrants in the district. The perception of the future is also
indicative that the migrants perceive their children to follow in their own footsteps (-0.70). That might prove difficult for the future generation. Neither do the migrants see the income as adequate (-0.64) nor are their land assets (-0.50) anything worthwhile to fall back on to in future. Most certainly, however, the migrants are progressing economically as they invest their remittances on land, house and such assets which would provide for the future. The general inference that we get from this set of dimensions is that the migrants are, generally, not optimistic either about their future or about their well being. They work hard at making it better all the same. They do not have any other options open for their children other than the offer of the traditional occupation which is not standard, however.

Except for land assets (unique variance 32.7 per cent), all other variables in the analysis explain individually significant variances. Hence they form the relevant variables for such analysis, providing valuable insights to the economic dimensions of the Telugu Boyas. On the economic scale, the Boyas may be placed in the following list.

Continued remittances home by 252 migrants (and irregular remitters are just about 7) show that their well-being at the origin have been taken care of by the migrants at the city. Only 138 (or 32.4 per cent) of the 403 migrants to the city are caught up in the debt trap which is more so than others. The scores further indicate that 144 migrants (or 35.7 per cent) as against 259 (64.3 per cent) migrants are better off in their possession of durables and house assets, whereas only 117 (29 per cent) as against 286 (71 per cent) migrants show up with both better individual and better family incomes. As many as 217 migrants perceive their future, and also income, as bleak while 186 perceive the future to be better. A similar idea is conveyed by the factor scores for the sixth dimension too. Some 249 migrants as against 154 migrants consider
FIG. 5.1. MIGRATION OF THE BOYAS ECONOMIC ASPECTS

COMPUTER RUN
FIG. 5.2. MIGRATION OF THE BOYAS ECONOMIC ASPECTS

VARIMAX SCORES

ASSETS INCOME IMP. EMPLOYMENT

NUMBER

VARIMAX SCORES

-2 to -4 0 to -2 0 to 2 2 to 4 > 4
FIG. 5.3. MIGRATION OF THE BOYAS ECONOMIC ASPECTS

NUMBER

VARIMAX SCORES

> -3 -2 to -3 -1 to -2 0 to -1 0 to 1 1 to 2 2 to 3 > 3

FUTURE PERCEIVED

DEBT IN FAMILY
employment and improvement prospects bleak. Nearly half (199 respondents) consider obtaining a new job as easier while others perceive it as difficult. Thus, the scores place the migrants yet on a poor light as far as their economic well-being is concerned. What is however important is the indication that they work hard at making it brighter, (Figures 5.1 through 5.3). The remitters being only 259, the graphics indicate two bells, with the larger bell on the positive half of the graphics, meaning all the remitters score positive and all the non-remitters negative, as can be clearly seen in Figure 5.1. Negatively skewed curves characterise the dimensions of assets and durables, income and improvement in employment as is seen in Figure 5.2.

Remittances and Related Hypotheses

The results of multiple regression and canonical correlation analyses are reported in the following paragraphs.

**Multiple Regression.** Two separate analyses have been made using 5 and 9 variables, listed in the first panel of table 5.2. The variance-covariance matrix of the first of the two analyses indicate that the income of family members at the destination has a weak positive relation with the quantum of remittances (r = 0.169) made to the origin. Just as the weak relations are exemplified by the income of the migrant and the income of family members (r = 0.140) because the members also work on the same job and by the number of days at work and the income of migrant (r = 0.112). These weak relationships and also the others show up clearly on the regression coefficients as in the equation below:

\[ Y = 0.077 + 0.0019 X_1 - 0.0019 X_2 + 0.0057 X_3 - 0.925 X_4 \]
The multiple $R$ of the analysis is yet again a poor 0.1752 with just about 3.07 per cent fit. The $F$ test value of 2.0099 is also conversely insignificant, as it is below the critical table value of $F$. As such, there is only a very weak relationship exemplified generally by the multiple $R$ and $F$ ratio. However, there are remittances and that it has some specific relation with the income of the family members at the destination, the income of the migrant-respondent, the debt in the family and so on. The relative changes which can be deduced from the standardised partial regression coefficients are that only the income of the family members at the destination (0.164) and income of the migrant (0.0396) determine largely the nature and magnitude of the remittances, rather than the debt burden itself (-0.0429) or the number of days at work at the destination (-0.0875).

The conclusions drawn from the analysis are that first the remittances are significant. Second, as income increases, there is however only a slight increase in remittances. Third, neither the income of the family at the origin nor the income of the migrant at destination has any significant impact on the amount of remittance, for remittances remain small in comparison with these incomes. The only explanation for it may be that the Family, or most of it, stays together at the destination, only a small amount of money is sent towards debt repayment and the village-bound aged of the family.

The fact remains that with an increasing income of migrants, there is increasing debt at home. This emphasizes the reality of debts taken for social occasions (marriage, for example), religious occasions (a payment to a ceremonial fund, for example) and other occasions which often happen to be lavish for the Boyas. But increase in debt due to increase in income is comparatively small and is an interesting fact, probably because it is a small realisation on the part of some of the migrants or even the inability
perceived beforehand that debts are not repaid totally. Neither is there support for the contention that with increasing income, remittances must increase nor is there any gainsaying the fact that with increased number of days at work, there is increasing remittances.

The second analysis accommodates four more different variables - the entire list of the panel one in table 5.2 - regularity, periodicity and mode of payment of remittances and wages. The inclusion does not greatly influence the results, for the multiple R is still the insignificant (0.196) with a goodness-of-fit of 3.84 per cent and the F test value is even smaller at 1.249 and far less than the critical table value. The regression equation computed is

\[ Y = 0.77 - 1.538X_1 - 0.304X_2 + 0.826X_4 + 0.002X_5 - 0.003X_6 - 0.001X_7 + 0.007X_8 - 0.76X_9 \]

The two relations that come out clearly are the regularity and periodicity of remittances \( (r = 0.628) \) which are significantly positively related. Wages and debt in the family, for what they may be worth, are negatively significantly related \( (r = -0.312) \). Wages (in the sense it accounts for one's income) is thus negatively related to debt, which goes in fact against the grain. Otherwise, this analysis supports completely the conclusions of the earlier multiple regression analysis.

It is therefore evident that the hypothesis 1a stands proved, weak though the relationship is. And so is the hypothesis 1b. The third hypothesis is now statistically significantly proved. The second half of the fourth hypothesis is proved false. Hypothesis 5 stands disproved. And thus, the hypotheses formulated and presented in the earlier pages of the chapter stand partially confirmed and partially rejected.
Canonical Maximum Correlation. The canonical correlational analyses have failed to yield significant results in the context of remittances and the relationships between generation of the new variables. In two analyses, the variable remittances alone have been treated as the dependent set while (a) income of the family, debt in the family and income of the migrant and (b) all variables in (a) and the number of days at work have been used as the predictors. In a third, however, four dependents (remittances, regularity, periodicity and mode) and three predictors (income of the family, debt in the family and income of the migrant) have been analysed. The three groups of eigenvalues and maximum correlation and significance test data are furnished below to show how weak the relations turn out to be, no matter how skilfully we may try to compute relationships that could throw light on the materials being studied.

Analysis 1:  
eigenvalue 1 = 0.0313 r = 0.177
  
eigenvalue 2 = 0.0035 r = 0.059
  
eigenvalue 3 = 0.0204 r = 0.143
  
  Chi-square 3.868
  
  Wilks Lambda 0.985

Analysis 2:  
eigenvalue 1 = 0.066 r = 0.258
  
eigenvalue 2 = 0.032 r = 0.180
  
eigenvalue 3 = 0.408 r = 0.639
  
  Chi-square 61.32
  
  Wilks Lambda 1.272
Analysis 3: \[\text{eigenvalue 1} = 0.039, r = 0.198\]
\[\text{eigenvalue 2} = 0.023, r = 0.152\]
\[\text{eigenvalue 3} = 0.009, r = 0.059\]
\[\text{eigenvalue 4} = 0.055, r = 0.234\]
Chi-square 4.960
Wilks Lambda 0.981

As can be seen from the results, only in case of the second analysis, there has been a significant \(r\) value indicating that that relationship alone was worth while. Root 3 explains also 40.8 per cent of the variance. But all relationships, invariably, are positive, although low and insignificant. Wilks lambdas and Chi-squared values are also small and insignificant. Even canonical correlations, that is, the maximum correlations, do not offer better relationships and therefore the hypotheses could only be proved in a similar vein to that in the multiple regression analyses.

**Conclusions**

The chapter has provided much insight into the nature of the economic well-being of the Boyas as migrants in the city of Coimbatore and as people with firm roots, in the district of Dharmapuri. However, the hypotheses that have been formulated for analysis have either proved very weak, or disproved accepting the opposite as the research hypothesis. But something very personal to the migrants emerge very clearly: the Boya community is as close knit as any other. There is a tendency to lavishness but old debts are never, ever forgotten. And so remittances go home still, regularly and properly. The remittances are used in the repayment of debts. Also, to some appreciable extent, it is used for people and for investments on assets, notably land and housing, at the village. The expenditure on people or the altruistic tendencies thus
become highlighted. The Boyar society stands credited with some integrity as for debt repayment goes. The social ties and economic activities are maintained, even improved upon, so that sometime in the future a better Boya society may emerge. For now, hardships remain. Social ties rule supreme. There is hope that the remittances will one day clear all debts and be used to build the Boyas into a prosperous community.
The question of functional forms in validating hypotheses relating to remittances give rise to (a) the question of predictors and (b) the easy alternative of log-linear for hypothesis testing with probably strong supports.

The predictors or explanatory variables that could be considered besides those considered in the analysis here are (i) the number of visits and (ii) the dependency ratio at home (origin). Remittances are being made by 259 of the 403 respondents interviewed for the study. Their mode of remittance is either by the visitor by turn or by themselves when they invariably visit home for social and/or religious obligations. The practice is such that the visitor by turn is a matter of one or two visits only for any given but small number of migrants and the social or religious visits to home is again one or two in a year. So, exceptions apart, the number of visits to home by any migrant is never more than four. As such, small differences in the number of visits cannot adequately explain away any large differences in the remittances made home.

On the other hand, the remittances are a result of savings the migrants make over a long period of time, say a few months rather than a few weeks. Small savings and the ability to make one or two small remittances do not make for larger variations among the migrants making them. As such, the number of visits cannot be considered as the predictor of remittances.

Dependency ratio is yet another proxy but inadequate to act as a predictor in the present case. Most migrants have left their families back home and 64.3 per cent of the migrant families may be rightfully considered as dependents.
However, those who stay home, except for the children and the elders, are also engaged in income generating or earning activities, as agricultural labourers or owner-cultivators or labour-cultivators. Some of them are engaged in the traditional earthwork occupations. As such they cannot be considered as dependents. This being the case, there is yet another problem to it: the survey has not considered the home of the migrants in any great detail except of course in familial backgrounds. Dependency ratio therefore could not be computed with any certainty, and hence cannot be used in the hypothesis testing. Conversely, therefore, higher dependency need not mean higher remittances, the ability to save high being limited by the inability to earn high.

Log-linear form therefore could be of limited use in the hypothesis testing here, unless the direct linear functional form has underestimated rather than overestimated the remittance and predictors relationships. The intuitive interpretation of the remittances from the migrant-based observations also suggests a weak relationships for reasons of small remittances in small number of remittances over a given year. We have therefore no logical reason in the context here to help us in the choice of a log-linear function. Graphical plots of the remittances against the predictors selected have shown that the regression is linear and not log-linear. Hence, the simple linear regression function form for analysis.