CHAPTER VIII

SUMMARY AND CONCLUSION

8.1 INTRODUCTION

In this study an attempt is made to measure wage differentials among the secondary and higher secondary school teachers on the basis of gender, sector of employment and caste or different community groups, based on a sample survey.

The present chapter highlights the results of the study and discusses the possible policy implications. While section 8.2 summarises the findings and the last section discusses the limitations of the study.

8.2 SUMMARY AND IMPORTANT FINDINGS OF THE STUDY

In the first chapter the trends in the labour force participation of women in the developed and developing countries are outlined.

The status of women in India is analysed with the help of secondary data. Majority of women are found concentrated in the unorganised sector, where work is irregular and wages are limited. As far as the distribution of women in the organised sector is considered, women were employed more in the public sector than in the private sector. It is interesting to know that Tamil Nadu has maintained its lead as the state employing the largest number of women in the public sector. If we see women's status as indicated in all sectors
of employment it would be clear that women are concentrated in low paid jobs. Women's participation in economic and political life shows that they have adversarial ratios to men in all developed and developing countries in political employment. In addition, India lags behind developed countries in professional and technical employment for women.

The significance and need for a study of wage differences on the basis of gender, sector and caste in the teachers labour market is emphasised. The reason for choosing the teaching profession is brought out. The chapter also discusses the objectives of the study, the value of the thesis and the methodology used in this study.

Chapter II examines the structure and functioning of the teacher's labour market with special reference to Tamil Nadu. Data compiled from the secondary sources on the growth of schools, enrollment and teachers in Tamil Nadu over a period of time are presented. The wage determination in the teacher's labour market for the public and private schools are examined. The data collected from the secondary source reveal that there is a definite increase in the demand for educational Institutions and correspondingly there is an increase in the demand for teachers. The number of female teachers recruited has also shown a considerable increase.

A survey of literature has been presented in Chapter III. The available literature on wage discrimination was reviewed. The theories of discrimination, namely, the neo-classical theories, Institutional theories and the Marxian theories are presented. The non-stochastic neo-classical models followed by statistical discrimination theories are viewed as complementary to
such factors as monopoly element and a variety of social factors such as health, education and business conditions.


Empirical evidence on gender, sectoral and caste discrimination in wages are presented for the developed countries. More focus was on the findings of various studies pertaining to developing countries, and with special reference to the econometric analysis of wage differentials in India.

Chapter IV focusses on the methodology adopted in this study. Several methods have been followed in the literature to decompose the earnings gap into explained and unexplained parts. The recently developed wage decomposition method due to Oaxaca and Ransom (1994) is adopted to decompose the wage differentials and identify the discrimination component by gender, sector of employment and caste in the labour market for secondary school teachers. It can be shown that the total wage differential consists of two components: one to differences in productivity characteristics and the second due to a residual component which may be attributed to labour market discrimination against a particular group.

This methodology requires estimation of earnings functions separately for each group namely men, women, public and private school teachers, teachers in the forward community and teachers belonging to "other" community groups. The Mincerian semi-logarithmic earnings function is
specified and estimated. Three specifications namely, the basic model I, model II and model III are used in the estimation of the earnings function for different groups of workers. The basic model I includes schooling, experience and experience squared variables while in the extended model II, additional variables such as training and parental education are included. In the extended model III, more dummy variables for sex, public school and marital status are introduced.

The discrimination component is computed using alternative non-discriminatory wage structures proposed by Oaxaca (1973), Cotton (1988) and Neumark (1988).

The study requires data on the wages and information on the individual, socio-economic and demographic characteristics of the teachers. Since secondary data from the Census of India or the National Sample Survey do not provide wage and other required information, it was decided to collect the required data through a primary survey.

A stratified two-stage random sampling method was adopted for the collection of data. The schools were stratified on the basis of different types, viz., the government, corporation, aided, unaided and matriculation schools. In the first stage, 10 percent of the schools are randomly selected. Out of the total number of 486 schools, 50 schools were selected in such a manner that all the types of schools were represented. In the second stage, 20 percent of the teachers from each sample school were selected using simple random sampling method. The survey thus covered 800 high and higher secondary school teachers consisting of 278 (35 percent) male teachers and 522 (65 percent)
female teachers. A pre-prepared questionnaire was used to collect the relevant information form the teachers through interview method.

Chapter V deals with Gender Discrimination in the Teacher Labour Market. The Mincerian wage equation was estimated by the ordinary least square method. The estimates of the basic and extended models are presented. The results of the four decomposition methods are presented separately for each group.

**EMPIRICAL FINDINGS**

**Returns to schooling and Experience**

As observed in several studies, education has a positive and statistically significant effect on earnings at the one percent level in all the equations. On average teachers with masters degree earn 24 percent more than their counterparts with undergraduate degree, comparing the coefficient of education variable in male and female earnings functions suggests that on average, the returns to additional years of male education is much higher than that to a female education.

The labour market experience has a positive effect on earnings and the effect is statistically significant at the one percent level in all the equations (in the public, private, forward and other caste groups). The coefficient of experience square term in negative and statistically significant at one percent level. This indicates that the experience-earnings profile is nonlinear and earnings increase at a decreasing rate with experience as hypothesised.
The Male-female gross wage differential was 28 percent. The geometric mean wage of a male teacher is Rs.55.68 per hour and that of a female teacher is Rs.41.73 per hour. The difference of Rs.13.95 per hour indicate that the apparent difference in the wages of male and female teachers is very high.

One of the reasons for such a wide disparity in the earnings of a male and female teacher is that, the majority of the male teachers in the sample are working in public schools, where their pay structure is fixed by the government. Out of 278 male teachers in the sample, 179 teachers are working in public schools (65%), and the remaining 99 teachers (35%) are working in private schools. Whereas if we consider the female sample, out of 522 female teachers, 284 teachers work in public schools (55%), and 233 teachers work in private schools (45%). From the above, we can infer that male-female disparity in the teacher labour market may be due to the fact that, more female teachers are employed in the private schools. If the management of private school introduce some uniform measure of pay scales for the teachers on the basis of their qualification, experience and training, then the wage-gap that prevails at present in the teacher labour market can be narrowed down to a certain extent.

The decomposition of male-female wage differential for the entire sample for the extended model (III) shows that out of the four non-discriminatory wage-structures adopted, the most preferred pooled method shows the lowest unexplained differential of 37 percent and the highest explained difference of 63 percent due to productivity factors.
As far as the contribution of individual variables are concerned, Table 5.4 shows that the most important determinant of the male-female disparity is the constant term, which shows that the discrimination against females exists mainly at the entry point. The other variables that favour the male teachers are experience, father's education and the marital status of the teacher.

It is clear from the results of the studies in chapter V, there is discrimination against female in several segments of the labour market. The present study also has confirmed the presence of discrimination on the basis of sex among secondary school teachers. The endowment difference in the present study though accounts for the existence of more than 60 percent of the gross wage differentials, on the basis of gender, there is a clear indication of discrimination to the extent of 39 percent in the teacher labour market in the urban India. This is in spite of several measures and policies implemented by the government and other agencies to reduce the gender inequality in the labour market.

It is possible that the gender discrimination in the labour market can be reduced by the governmental and other agencies by concerted effort. However, not much efforts seem to have focussed on the sources of premarket discrimination and the means to eliminate them. It is high time the future research into gender inequality should take a serious note of this significant point.
Certain policy implications can be drawn from the results obtained in this study. Since the return to education is positive in the teacher labour market the government should continue to give priority to the educational expenditures in the budget. Further, the government's education policies should be aimed at providing more training opportunities to women as training leads to increased wages for women.

The wage differential between the public and private school teachers is discussed in Chapter VI. The earnings function for the public and private school teachers are estimated separately and the difference in the earnings are decomposed into explained and unexplained parts. The alternative wage structures are assumed and wage differentials are decomposed for the basic and extended models. The empirical results are summarized below.

The wages in the public schools are administered prices, determined by the pay commissions, appointed by the Government from time to time. The teachers working in the public schools enjoy certain monetary and non-monetary benefits like attractive pay, medical advances, leave travel concessions, rent allowance, retirement benefits, job security and vacation etc. The teachers working in private schools might also enjoy certain advantages like flexibility in their work, free transport facilities, free education for their children, etc.

The private unaided schools are composed of Matriculation schools which are recognised by the state Government. These schools manage their finances by collecting fees from their students and donations from the public. Government sources contribute about 97 percent and 94 percent of the revenue
of the respective public and private aided schools. The revenue from fees alone account for 87 percent of the recurring revenue in the private aided schools and the rest is from donations, interest from endowments etc. About 94 percent of the total revenue per student is raised through fees by the management of private aided schools. (S.P. Subramanian, 2001)

If we look at the descriptive statistics given in the Table 6.1 it becomes clear that there is a wide disparity in the wages of teachers working in the public and private school. The difference in the logarithm of hourly wages in the public and private school is 0.9898. This means that a teacher working in a pubic school earns rupees 10/hour more than a teacher working in a private school. This indicates that the wage difference in the public and private schools are very high.

The education dummy variable shows, that the teachers in the public schools are more educated than the teachers in the private schools. The average labour market experience gained by a teacher in the public and private schools are 17 years and 7 years respectively. Teachers with M.Ed. training degree earns more in a public school and male teachers in the public school earns more than their colleagues in the private school.

The returns to the post-graduate education is more or less stable, even after the introduction of more control variables for the teachers in the public school and that it is flexible for a teacher in the private school. As far as the training variables are concerned, both the M.Ed and the B.Ed levels bring more revenue to a teacher in the private school. The family background variables, namely, the education of the father and mother does not
significantly influence the earnings of the teacher in the public or private schools. The dummy variable, sex, brings a premium of 25 percent to male teachers in the public schools than in the private schools.

The general inference drawn from the decomposition analysis is that the pooled equation shows the lowest discrimination differential of 51, 48 and 49 percentages in all the three models and the highest productivity differential of 49, 52 and 51 percentages in all the three specifications.

The contribution of independent variables to the total unexplained differential clearly shows that the earnings disadvantage (29 percent) to private schools are more than the earnings advantage (20 percent) to public schools. The most significant variable that has contributed to the advantage of the public school teacher is the constant term. It explains 164 percent of the total unexplained difference. Therefore, the conclusion drawn is that although variables like experience (21 percent), M.Ed. (20 percent), B.Ed (35 percent), mother's education (18 percent) and sex dummy (16 percent) - reduces the earnings disadvantage of the teachers in the private school, the returns to the constant term (164 percent) for a teacher in the public school more than offset the effects of the above said variables in the private school. Therefore discrimination against the teachers in the private schools occur mainly at the entry point.

An attempt to measure the wage differential between the public and private schools in Chennai reveal the presence of wage gap. This result is similar to some of the earlier studies: Lindauer and Sabot (1983) conclude that a substantial wage premium exists for public employees (in Tanzania);
Psacharopoulos (1983) reports the difference in returns to schooling between the "competitive private" sector and the "non competitive public" are to be 3 percentage points on average (13 percent and 10 percent respectively). Duraisamy and Duraisamy (1995) examine the possible consequences of structural reform programmes on the wage differentials between the public and private sectors in the labour market in India for persons with higher education. Their study suggest that the premium attached to being a private sector employee is about 48 percent for males and being a public sector employee is about 56 percent for females. The authors suggest that a sect of appropriate labour market policies to accompany the structural adjustment programmes in order to reduce the wage gap between sectors and sex.

An analysis of gender discrimination in the public and private schools are presented in section 6.2 and 6.3 respectively. As far as the Public schools are concerned, the gross wage differential of 10 percent between the male and female teachers is mainly due to the constant term and family background variables; especially mother's education in the case of male teachers and father's education in the case of women teachers. The experience gained in the teaching profession enhances more earnings to the male teacher than to female teachers.

The average hourly earnings of a male teacher in a private school is Rs.33.24 and that of a female teacher is Rs.23.24. The difference of Rs.10.00 shows the wage difference between a male and female teacher which may be partly due to differences in the productivity factors and due to some unobserved factors that are associated with the independent variables.
The male-female logarithmic earnings differential is 36 percent. The decomposition results show that the pooled method exhibits the smallest discriminatory differential of 23 percent and the largest estimated productivity differential of 13 percent in the extended model three. It also indicate that the male teachers in the private schools are better placed than their female counterparts. The Decomposition results on the basis of alternative wage structures does not indicate any reduction in the female disadvantage. A major part of the unexplained wage differential comes through the difference in the intercept suggesting that the unexplained male-female wage differential occurs mainly at the entry point.

Chapter VII deals with wage discrimination between the forward and "other" communities.

The various castes are divided into two categories: (i) The forward caste and (2) the other caste. The number of teachers under the scheduled caste group was only 31 which is hardly 4 percent of the sample size (800). Therefore it was decided to group the various communities into the "forward caste" and the "other caste". The "other caste" communities includes the teachers belonging to the Backward class (B.C.), the most backward class (MBC), the scheduled caste (S.C) and the scheduled Tribe (S.T.).

The coefficient of post graduate level of education enhances the earnings of the teachers in the "forward caste" by 20 percent when compared with the teachers who have no training in specification three. In the "other castes", the earnings are increased by 22 percent when compared with the reference group. Labour market experience increases the wages of teachers by 2 percent when
compared with the teachers in the "other castes". The coefficient of the dummy variable for training viz., M.Ed increases the earnings of the teachers in the forward caste by 20 percent more than the teachers with no such training. In the "other castes" group, a teacher with an M.Ed degree earns only 13 percent more than those teachers with no training. The family background variables make only a marginal effect on the earnings of the teachers in both the caste-groups. A teacher in the forward caste earns 88 percent more wages if he/she worked in a public school whereas a teacher in the other community earns 67 percent more wages for being in the public school. The dummy variable for marital status adds 10 percent and 13 percent more wages to a teacher in the 'forward' and 'other caste' respectively over the unmarried teachers. The value of the constant term for the forward equation is 2.459 and for the other caste, it is 2.005 (both significant at 1 percent level). This shows that the wage differential by caste has taken place predominantly at the entry point.

The gross wage differential of one percent between the two caste-groups shows that the caste-discrimination has narrowed down. 10 percent of the gross differential was due to "forward" earnings advantage and 11 percent of the differential was due to 'other communities' earnings disadvantage. Therefore the total unexplained differential to gross differential is 21 percent. The most important variable that is responsible for the wage gap between the two caste groups the constant term or the intercept term. The differences in the constant terms between the two caste groups shows that the teachers who belong to the different communities are discriminated prior to their entry into the labour market. It should also be noted here, that the implementation of the reservation policy by the state government in the recruitment of the
secondary school teachers has resulted in reducing the wage differential by gender in the "forward" and "other community" groups.

The average hourly wages of male teachers in the "other caste" is Rs.54.23 and that of a female teacher is Rs.41.20. The difference of Rs.13.03 indicates that the wage gap between the male and female teacher in this community is very wide. For comparing the earnings function of male and female teachers, let us consider specification three.

Women teachers who are qualified as post graduate teachers earn 23 percent more wages than the undergraduate teachers. Men teachers, on the other hand earn relatively less 17 percent more than the undergraduate male teachers. Labour market experience brings 5 percent premium to both the caste groups. Women teachers are benefitted more as a result of acquiring higher levels of training. With an M.Ed degree they earn 11 percent and with B.Ed. degree they earn 2 percent more than the reference group, namely, "no training". The coefficient of the dummy variable for public sector is more favourable to women teachers: they earn 78 percent more than their colleagues at private school. Men teachers also earn 48 percent more than those in the private schools. Men teachers who are married, earns double the income of those women teachers who are married. The value of the constant term at one percent level significance for the male equation is 2.392 and for a female equation, it is 1.838 which shows the prevalence of gender discrimination among the teachers who belong to the "other caster" prior to their entry into the labour market.
The gross wage differential that can be attributed to "male earnings advantage" is 18 percent and to "female earnings disadvantage" is 11 percent, thus summing up the total unexplained differential to 29 percent. The explanatory variables that contribute significantly to "male earnings advantage" are: The M.Ed degree, the education of the mother, marital status dummy and the constant term. The women teachers are benefitted by the post graduate level of education, B.Ed training, Fathers education and the public sector dummy variable. The benefits that accrue to the women teachers are more than offset by the advantage gained by the male teachers in this community.

**Gender discrimination among the teachers in the forward community**

The gross earnings differential between the male and female teachers belonging to the forward caste is 31 percent. The post graduate dummy variable, labour market experience, the parental education, the marital status dummy and the constant term are the important variables that increase the earnings of the male teachers. On the other hand, the experience square term, the dummy variables for training, namely M.Ed and B.Ed, and the dummy variable for public school increased the earnings of the women teachers. The decomposition of the gross wage differential into explained and unexplained components show that 31 percent of the "male earnings advantage" and 15 percent of the "female earnings disadvantage" make the gross wage differential of 46 percent which may be attributed to wage discrimination against the women teachers.
The empirical analysis shows that the caste discrimination in the teachers labour market is very less, the gross wage differential between the forward and other caste is only one percent. But there is gender wage-gap among the teachers who belong to the forward and other caste.

Among the 'other caste' group, out of the gross earnings differential of 27 percent, 19 percent of the wage difference was due to productivity traits and the remaining 8 percent of the wage difference was due to discrimination against the female teachers.

Among the teachers who belong to the forward community, the gross wage differential is 31 percent. Out of this 31 percent, 16 percent of the wage difference was due to differences in the productivity factors and 18 percent was due to gender discrimination.

If we compare the two caste-groups, we find that discrimination against female teachers is more among the forward community than in the 'other' communities. The main reason for a smaller gender wage-gap in the 'other caste' group is that the majority of teachers who belong to this community work in public schools. Since the pay structure fixed by the government depends on the educational qualification and the experience of the teachers, there is bound to be less wage difference between a male and female teacher in the "other" community. In private schools, the private management do not adopt any reservation policy for the recruitment of teachers unlike the public schools and therefore the distribution of teachers in private schools on the basis of different caste is uneven. Therefore in private schools, the majority of the teachers are from the forward community with a relatively low salary per
month; which reduces the average salary of a teacher in the forward caste more than what it would have been, and we considered only the average wages of those working in public schools. Moreover the male teachers with a sound educational background and training do not wish to stay longer in private schools because of the low pay, lack of recognition etc. That is why, in private schools, the average years of experience of a male teacher is only 7 years, which is very much less when compared to the average years of experience of a male teacher in a public school which is 17 years. Therefore the gender wage-gap in more in the "forward caste", group than the other community" group.

8.3 LIMITATION OF THE STUDY

The results obtained from this study pertains only to the teachers working in the city of Chennai. Since the education policy of one state differs from that of other states, the inference that is drawn from this study cannot be generalised to all the cities in different states. There are large number of teachers in the rural areas to whom the results obtained from this study may not be applicable in toto. There may be other variables like the joint family, which may have more influence on the earnings of the teachers in the rural areas. Moreover, the teachers in the rural areas may have to forego some allowances like the city compensatory allowances, travel allowance etc. The cost of living in the rural area is also less compared to the cost of living in the urban areas. These factors may have some bearing on the salary of the teachers in the rural areas. Due to constraints on time and resources this could not be carried out in the present study which may be taken up for further research in future.