

## WOMEN, WAGES AND DISCRIMINATION: SOME EVIDENCE IN INDONESIA

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The study has illustrated that gender earnings differential exists in Indonesian labor market. Among the sectors of employment, the highest male female earnings differential was reported in agriculture sector and the lowest in formal job status. The differentials suggest that males receive an earnings premium in the form of constant mark up, which dominates all other factors contributing to wage discrimination. By using Oaxaca (1973) decomposition method we found that male - female earnings differentials that exist in Indonesian labor market is attributable to labor market discrimination rather than differences in endowment characteristics among workers. The study has demonstrated that education is one of the main determinants for the differentials between genders.

*Keywords :* Male- Female, Wages and Discrimination

### INTRODUCTION

#### Background of Study

In the last two decades, the role of women in the world, including Indonesia, increased sharply. Changes in both the supply of women workers and demand factors that draw them into the labour market account for the sharp increases. On the supply side, the most salient factors are the higher levels of human capital, increased financial responsibilities, and social norms supporting female employment. Rising levels of educational attainment allows women to enter a broader range of jobs particularly in occupations requiring college degrees and advanced training. The proportion of employed women holding college degrees rose from 4.6 percent in 1980's to 8.3 percent in 1990's.

From a demand perspective, changes in the industrial composition of employment and especially the growth of industrial economy have been

singularly important factors. Indonesia in the recent past had experienced rapid economic growth and far-reaching structural changes. Rapid economic growth in Indonesia has been based on significant inflows of foreign direct investment. Cheap labour force, large domestic market and a favourable enabling environment all contributed to attracting foreign direct investment into this economy, mainly from the United States and Japan.

Much of the earlier enthusiasm has diminished as negative effects of development on women become increasingly evident. Boserup's classic *Women's Role in Economic Development* (1970), was the first to provide empirical data critical of the modernization perspective and rapidly became the basis for alternative approaches to understanding women's role in economic development. 'Women in Development' studies proliferated and some recent research takes on an increasingly pessimistic view of the impact of modernization on women's lives (Greenhalgh, 1980).

Conceivably, the shift from agriculture economy to industrial economy could help reduce the gender gap in earnings if women gain access to job opportunities in high status, non-manual jobs in rapidly expanding manufacturing industries. The overall impact on earnings levels in the economy will depend upon a number of factors, such as: the rate of economic growth, changes in sectoral composition, entry of multinationals with higher capability to pay, and growth of export oriented industries. All these factors determine the aggregate demand for labour in the economy.

In this study, we examine the pattern of wage differentials separately for women and men in the Indonesian labour market. Based on the above discussion, the objectives of this study are to investigate the extent of discrimination against women that exists in Indonesian labour market, and to measure the magnitudes of the male - female earnings gap.

## Methodology

In order to determine whether gender has an effect on employment salaries, two empirical techniques are employed. The first is the standard log - linear regression, Mincer (1962) was first to employ this model. The second technique used in the this study is a Chow test. This procedure detects whether there is a significance difference between two sets of regression parameters, one set of male employees and one set of female employees; the variables must be identical in the compared equations. Rejecting a null hypothesis of equality would indicate that the two gender groups are subjected to different evaluation of their objective performance criteria; this would suggest wage discrimination on the basis of gender.

The data used in this study are taken from a survey run by Lembaga Demografi, Faculty of Economy, University of Indonesia in cooperation with RAND, which is undertaken periodically. The 1993 round, covered roughly 14,419 respondents over the age of ten. The study focuses on the 9,762 individuals who are employees, 30 percent of them are female.

### **Significance of the study**

In Indonesia this issue has become all the more important with the launching of *Garis Besar Haluan Negara* (GBHN). One of the principal objectives of the GBHN is to ensure equitable opportunities for women. In spite of this, government policies, for instance as reflected in the *Rencana Pembangunan Jangka Panjang Tahap II*, do not appear to be based on any detailed analysis of the difference in male female earnings.

The government is exploring the issues involved in the future ratification of the International Labour Organization (ILO) Equal Remuneration Convention, 1951; which is concerned with the question of non-discriminatory wages for female labour. An overall assessment of the status of female workers in the economy is thus timely.

## **LITERATURE REVIEW**

Mincer and Polachek (1974) have argued that women have fewer job skills than men because of household commitment and child raising responsibilities. They consequently develop different patterns in on-the-job-training to men. Women not only spend less time overall in the labour market than men, but they also are less likely to work continuously. They intersperse periods of paid market work with periods of labour force withdrawals for family responsibilities, particularly child rearing. This influences wages in three ways:

First, women will acquire less total experience, job tenure, and seniority than men. Second, women's human capital may actually depreciate during periods of labour force withdrawals for child rearing. Third, women who plan to leave the labour force to look after their family will postpone their on-the-job-training, until the time they reenter the labour market.

This result is consistent with the hypothesis that differences in wages can largely attribute to differences in expected labour force participation over the entire life cycle. Sawhill (1973) found that the 'return to experience' is much more limited for women than for men. Even women with a reasonably permanent commitment to the labour force fail to accumulate valuable work

skills on the job. It is well known that married women spend a smaller proportion of their lives in the labour force than men, and thus they have less time in which to accumulate work skills. Corcoran and Duncan (1979), have shown that differences in length of work experience account for very little of the pay gap between men and women. In any case, with a few exceptions, they will not expect workers in some occupations to become more productive with prolonged experience.

Using household registration data 1982, Gannicott (1986) has found that men have more education, and working in the better-paying technical fields. They have more work experience, both in the current firm and in previous jobs. They work in higher-paying industries and occupations. Furthermore, this study shows that discrimination takes place through experience, marital status, and firm size. Females receive lower earnings than men with the same experience, firm size, and marital status. It has become a noted feature of this type of study that marriage has different earnings implications for men and women. For women, marriage seems to be a signal to an employer that there will be greater absence and turnover. Marriage for men may mean stability and job attachment and perhaps also provide the rationalization for the payment of higher wages because of greater financial requirements.

Wellington (1994) uses estimates for the pooled sample, then, the percentage of the wage gap to explain why differences in the explanatory variables (such as highest grade of school completed, a set of employment history variables) increased slightly from 1976 to 1985. Most of the time it was due to differences between men and women in the employment history variables. Of the employment history variables, the years of training, the years of full-time employment, and the years spent out of the labour force since completing school accounted for the greatest amount of the wage gap.

Goldin and Polacheck (1987) claims that in the United States individual women historically tend to receive less training than men from employers even if they individually have a strong labour force attachment. The reason is that many women have less labour force attachment, partly due to child - birth and child care. Therefore, the employers are less likely to receive productivity gains from investing in women than from investing in men. Such statistical discrimination can result in lower training and lower wages for a woman who is equally attached to the labour force (and equally qualified in other respects) to a man. This condition may contribute to the gender gap in wages, cause gender inequalities, result in inefficient use of human resources, discourage women to invest in human resources, encourage women to be self-employed or work as unpaid family workers instead of as employees, and to be less involved in development process (Behrman J. R and Zhang. Z, 1995).

## FINDINGS AND DISCUSSIONS

### Equality of Wage Structure

#### A. Agriculture and Non Agriculture Sector

The data showed that in general, male and female workers in non-agriculture sector have higher level of education than their counterparts in the agriculture sector. It was understandable that non-agriculture sector assumed as non-traditional/modern sector need more higher skilled worker. This condition is brought about due to the fact that average workers in non-agriculture sector earned higher earnings compared to those who work in agriculture sector.

Males, who work in a non-agriculture sector on average earned in logarithm term 0.85 higher than their counterparts working in an agriculture sector. The mean log wage rate for women in the agriculture sector is 1.299 less than the mean log wage rate in non-agriculture sector. Part of this raw difference could be explained by inter-sector differences in the industrial composition of employment and in the observed characteristics of the average worker. Both in agriculture and non-agriculture sector the female log wage rates are lower than the male log wage rates.

Marriage rate for males in agriculture sector is higher than that in a non-agriculture sector, but for females working in non-agriculture sector the rate is higher than those working in the agriculture sector. Workers in non-agriculture sector on average are older than workers in agriculture ones.

More detail analysis for mean values for workers in agriculture sectors showed that there were more male workers that had completed primary and secondary levels of education, but there were 7.7 percent of females compared to 5.9 percent of male workers that had senior high school level of education. The mean values of all of the other individual variables (marriage, age, and working hours) are higher for males than that for females. Males earned wages in logarithmic terms higher than females did.

The analysis of mean values for workers in non-agriculture sectors indicated slightly the same condition as workers in agriculture sectors. On average there are more female workers that have higher level of education (EDUC 1). The mean value for females is 0.60573 and for males is 0.45312 respectively. But, for the lowest level of education (EDUC3), the mean values are higher for male workers. The other individual explanatory variables (marriage, age, working hours) indicated that the male mean values are higher than those of females. The mean log wage rate for males are higher than those

for females, that is 5.4117 compared to 5.0910 in logarithm term for males and females respectively.

*Using a Chow test, we found that the structure of wage determination does differ significantly between males and females in the agriculture and non-agriculture sectors. The statistical F value is 9.86 for agriculture sector and 22.13 for non-agriculture sector respectively. The Chow tests reject the hypothesis of equality of wage structure across gender.*

## B. Formal and Informal Job Status

The importance of the informal job status in Indonesian labour market emerges largely as a result of accelerated rural – urban migration and the labour surplus that is generated in the cities. The informal status is characterized by self – employed individuals (such as small traders, street vendors, tailors, carpenters, and bricklayers) or small privately owned enterprises, producing mainly services and other non – tradable goods. Activities in this sector rely mostly on the provision of labour services by owners and their families, but occasionally also on paid labourers without formal employment contracts. Job insecurity is pervasive, underemployment (as a result of low labour productivity) is high, wages are highly flexible, and workers get very few benefits from their employers. Legal minimum wage laws do not apply or are not enforced, and labour unions play a very limited role.

On the other hand, there is also formal sector, consisting of medium and large enterprises (including state – owned enterprise and public/civil service) producing both tradable and non -tradable goods using skilled and unskilled labourers. Employers tend to hire workers (at least the most qualified ones) on the basis of formal contracts. Workers and employers are subject to various labour market regulations: employers, in particular, must provide a variety of benefits (such as pension plan, health insurance, and relative job security) for their workers. Labour unions and productivity considerations often play an important role in the determination of wages, and legal minimum wage laws exist – albeit enforced with varying intensity across professional occupations and across countries.

It is interesting to find that both in formal and informal job status females have higher level of education compared to males. There are 48.5 percent of females in formal status that have EDUC 1 level of attainment compared to 30.2 percent of males. For informal job status, the data show 51.9 percent of males and 60.2 percent of females have EDUC 1 level of attainment. There are more males than females with lower level of education (EDUC 2 and EDUC 3) for both two job status. Male and female workers in

informal job status on average have longer work of experience and are older than those in formal job status.

*Using a Chow test for differences between estimated male and female earning function separately, this research rejected the null hypotheses of the equality of male and female wage structure in formal and informal job status. It means that the wage structure does differ significantly between male and female in each of the status.*

### C. Blue and White Collar Occupation

In order to get more detailed discussion on wages and entry discrimination between males and females in occupations, in this thesis respondents' occupations are categorized into two groups as follows:

- **Blue Collar Occupation:**

Occupations in this category are service worker, agriculture, production, transport operations and labourer.

- **White Collar Occupation:**

Occupations in this category are professional, administrative and managerial, clerical and sales worker.

On average more female employees have higher level of education attainment (EDUC1) than male worker either in blue or white - collar occupation. The mean values for male and female with the EDUC 2 level of education attainment both in blue and white - collar occupations are slightly the same. The large mean value differences occur when other respondents have the lowest education attainment. The mean values for marriage and age are higher for males than females in both occupation categories.

*Using Chow test for differences between estimated male and female earning functions, the Chow test rejected the null hypotheses of the equality wages structure between male and female earning functions for blue - collar occupation. Whereas, for white - collar occupation the null hypotheses is rejected at ten percent level of significance.*

### Male And Female Wages Discrimination

After investigating wage function of male and female workers in agriculture sector, non- agriculture sector, formal, informal, blue and white collar occupations, this section will investigate the male and female wages discrimination presence in these sectors of employment.

### A. Agriculture and Non-Agriculture Sector

The average wages received by female workers in agricultural sector is only 40.594 rupiahs, which is less than 50 percent of wages received by male workers. Discrimination in fixed wages still exists, even when the male's structure is imposed on female workers. Using the male structure, it was found that female worker will receive 88.720 rupiahs, more than doubled the average woman's wages. However, women still earned lower wages than males.

From the overall wage differentiation calculation it seems that in agriculture sector the endowment differences that occurs is 28.53 percent and the greatest is the residual discrimination of 71.47 percent.

The principal variables through which endowment differentials occur in agriculture sector. Those are the distribution of development of the economy of the region (showed by the positive sign for PDRB) and the distribution of employment in agriculture that is in favour of males.

*This study found that the null hypothesis were easily rejected at the .001 level of significance for over all wages differentials, endowment differentials and residual (discrimination). This test proved the hypothesis that there is a difference in wage between male and female in agriculture sector.*

By employing wages function for male workers and female workers separately in non -agriculture sector, it was found that the average wages earned by male workers in non - agriculture sector is almost equal to wages received in the agriculture sector. However, on average, the wages earned by female workers in non-agriculture sector are higher than the wages earned by female workers in the agriculture sector. This is supported by the data obtained earlier whereby the educational level of females who work in non-agriculture sector is higher than the educational level of those who work in the agriculture sector.

Furthermore, if the female workers in non-agriculture sector received wages by male's structure, they will still earn lower wages, but with a very small level of difference. Using the male's structure, the female will earn 96.311 rupiahs, which is only 8.65 percent less than those earned by male. This small difference is related to the endowment characteristics that are in favour of males. Wage discrimination presence in non-agriculture sector of 30.13 percent is caused by difference endowment and 69.87 percent is residual that could be categorized as discrimination.



With respect to the differences in endowments, the data showed that length of experience, marital status and working hours are the components advantage in favour of males. It is interesting that in non-agriculture sector, all level of education attainments (EDUC 1, EDUC 2, and EDUC 3) are an advantage in favour of females. The components that caused discrimination were the macro variables, which the distribution of the development of the economy in the region and the growth of industrial sector gave an advantage to male workers (with value each + 0.10657 and +0.1675 respectively). This finding supports the hypothesis that the economic development process in Indonesia concentrated more on jobs held by male. Working hour, as one of the individual variables is an advantage in favour of males. Males will earn more than female with the same working hours. The most obvious components that bring overall wage differentials of 30.263 rupiah in favour of males are the constant term, namely, working hours and age. The positive entry of the constant term indicates that men in non-agriculture sector receive earnings premium in the form of a constant mark up. Besides, males will earn more than females with the same working hours. The same condition will also occur when age is considered.

*The result of the test showed that all of the differentials, namely endowment differentials, residual, which are defined as discrimination, and overall differentials are significantly different from zero and reject the hypothesis that there is no difference in wages between male and female in non agriculture sector. The test confirmed that female in non -agriculture sector significantly earned less than males.*

On average, males in agriculture sector earn weekly almost the same amount as those in non-agriculture sector. On the contrary, females in agriculture sector earned 50 percent less than those in the non-agriculture sector. In general, the result of the analysis showed that the male and female wage differentials in agriculture and non - agriculture sector is approximately the same for both groups.

The dominant feature of the male -female earnings differentials in those two sectors is the relative importance of wage discrimination in favour of men. The contribution to the differential of the constant term suggests that men receive an earnings premium in the form of a constant mark up, which dominates all other factors contributing to wage discrimination. A second major contributor is the distribution of the development of the economy of the region that is an advantage in favour of males both in agriculture and non - agriculture sectors.

## B. Formal and Informal Job Status

In Indonesia, data from IFLS showed that in 1993 the raw male - female average weekly earnings differential was higher in informal job status than that in formal job status. Male respondents in formal job status earn 189.472 rupiahs weekly compared to 111.605 rupiahs of the female counterparts. In the informal job status the female - male wage ratio is 75.3, where female weekly earning is only 99.645 rupiahs.

What explains the difference between average weekly earnings of formal sector and informal sector employees? One possible explanation is that the rates of payment are higher in the formal job status than the informal job status. A formal job status employee is paid more than an informal job status employee with comparable skills and doing the same job.

The data showed that in the formal job status, on average, male workers earned weekly earning of 84.771 rupiahs, which is 13.4 percent higher than the average wages earned by female workers, who only earn 73.424 rupiahs. However, in this sector, if female workers are given wages which are equal to the male workers' wage structure, the wages earned by female workers are getting lower, that is 69.479 rupiahs. This situation shows that indeed in this sector the female workers have a peculiarity, that is to say the discrimination that occurs in favour of the female workers. This is showed by the negative residual value (-0.055229). This could be stated that the regulation of wage payment imposed in Indonesia has been much better in this job status.

The overall average weekly earnings advantage in favour of men is 0.14369 for formal status and 0.48357 for informal status in logarithm terms or 11.346 rupiahs and 29.999 rupiahs, respectively. These overall wages differentials are significantly different from zero with each statistical F value 10.51 for formal status and 21.43 for informal status.

All levels of education attainment, EDUC 1, EDUC 2 and EDUC 3, are an advantage in favour of females. Occupation distribution in stat 2, stat 3 and stat 4, which are categorized as white-collar occupation is in favour of females, while the occupation distribution of stat 5, stat 6, and stat 7, which is categorized as blue-collar occupation is in favour of males. These contribute to the endowment differentials in formal status in favour of males, with positive entry of 0.198925 in logarithm terms or 15.292 rupiahs. In contrast, the endowment differential in informal status is in favour of females with negative entry of 0.110049 in logarithm terms or 9.102 rupiahs. But, this differential is not significant.

The major contributions arise from female's high level education attainment (EDUC 1), experience, and the distribution of occupation in stat

5, stat 6, and stat 7, which are categorized as blue collar occupation. The economic development of the region indicator, which is PDRB and growth of industrial sector (PDBIND), the employment growth both in agriculture (PEKPT) and in industrial sector (PEKIND) are in favour to females as well. The lower level of education attainment (EDUC2 and EDUC3) and distribution of occupation that categorized as white-collar occupation, stat 1, 2, 3, and 4, and age are the obvious variables contributed to the positive entry to the endowment differences in informal status that is an advantage in favour of males. The dominant feature of male and female earnings differentials both in formal and informal status is the relative importance of wage discrimination in favour of males. The contribution to the differentials of the constant term, 1.6715 for formal and 0.231135 for informal status in logarithm terms respectively, is of great significance. The differentials suggest that males receive an earnings premium in the form of constant mark up, which dominates all other factors contributing to wage discrimination. It is interesting to note, that the development of the economy of the region indicator, except investment, are in favour of females in formal status, but are in favour of males in informal status. This indicates a significance difference in wage discrimination in formal and informal status. The wage discrimination in formal job status, is an advantage in favour of females with negative entry of 0.055229 in logarithm terms or 3.945 rupiahs. This discrimination is not significant with the statistical F value of 3.75.

In fact, in the Indonesian formal job status, especially the public sector, the most important variable in determining wages are level of education attainment and length of experience. In addition, the employee regulation allows that female workers maternity leave for three months with full regular wages (Peraturan Ketenaga Kerjaan Indonesia, Departemen Tenaga Kerja Indonesia, 1991). This may be the cause for discrimination advantage in favour of females in formal status, while the wage discrimination in informal status is in favour of male of 39.110 rupiahs. This occurs because of lower level of education attainment (EDUC2 and EDUC3), blue-collar occupation categorization (stat 7,8,9) and age.

The overall wage differential is in favour to male both for formal and informal status. The difference is 0.143695 in logarithm terms or 11.346 rupiahs in formal status and 0.483574 in logarithm terms or 30.000 rupiahs in informal status. The major contribution for the small amount of wage differential in formal status arises from the constant term. Certain practices or elements in a payment system in Indonesian formal - public sector may have a wage differentiating effect for male and female worker. For example, performance - related elements in pay may permit gender discrimination. Some

allowances may automatically be paid to men, inflating their measured earnings: for example, in the case of both spouses employed by formal-civil/public services, payment of a child allowances may be made only to the men workers. Man worker, however, are given allowance for wife, but female worker are not given any allowance for their husband. The occupation distribution of stat 2, stat 5, stat 6, and stat 7, is in favour of male as well. Age as an individual variable is in favour of males, indicates that males within the same age group as women, will get higher wages than the females.

The overall wage differential with the positive entry that occurs in formal status arises from the distribution of occupation in service, agriculture and production (stat 5, stat 6, and stat 7) and from age as the individual variable.

The overall wage differentials of 0.483574 in logarithm terms or 30.000 rupiahs in informal status, which is in favour of males, are contributed mostly by the distribution of the development of the economy of the region, except investment. The distribution of some occupations, stat 2 and stat 3 which is categorized as white collar occupation, and stat 7, stat 8 and stat 9 (blue collar occupation) is in favour of males. The blue collar occupation consists of respondents with level education attainment (EDUC2 and EDUC3), which is in favour of males as well.

All kinds of male and female differentials, namely endowment differentials, residual (defined as discrimination), and total differential both in formal and informal status easily reject the hypothesis of male and female wage similarity at one percent significant level. The results confirm the hypothesis that what females earning in formal and informal job status is significantly different from what males earn.

### **C. Blue and White Collar Occupation.**

It seems that on average, the wages earned by female workers are much more lower than male wages, that is to say only 58.33 percent of male worker average wages. Even though it is assumed that female workers have the same productivity as male workers. The wages received by female are workers still lower even when the male's earnings structure is used. Using the men's wage structure female will earn 65.364 rupiahs. It is still about 81.61 percent of male workers wages. From the overall wage differentials, 71.92 percent is the discrimination that causes disadvantages for female workers, and 28.08 percent is endowment discrimination.

Endowment differentials occur in blue-collar occupation because of the lower level of education attainment distribution (EDUC2 and EDUC3),

experience, age, marital status. Two of the macro economic variables that is PDRB and PEKPT, are in favour of male as well. Endowment differentials in blue-collar occupation, is an advantage in favour of males (0.203 in logarithm terms or 24.727 rupiahs). In terms of discrimination characteristics, the advantage to females in blue - collar occupation comes from all level of education attainment and some of the macro economic variables. The PDRB, which shows the development of the economy in the region, the distribution of employment in agriculture (PEKPT), and the development of agriculture sector are in favour of females. For the other macro economic variables, females do not have any substantial discrimination advantage. These factors contribute to residual (defined as discrimination) with positive entry that is an advantage in favour of male (1.3991 in logarithm terms or 18.647 rupiahs).

Assuming females were paid according to the male weekly earnings structure, we now examine the contribution of each of the independent variables to the overall weekly earnings differentials (0.4625 in logarithm terms or 45.560 rupiahs) that takes place in white collar occupation. A positive entry implies an advantage in favour of males, and vice - versa. In terms of the endowment characteristics, the most obvious advantage of the males comes from their more favourable variable of all independent variables, except educational level attainment. It is interesting that for all level of education attainment (EDUC1, EDUC2, EDUC3) female in this occupational category have substantial endowment advantage. This condition brings about the endowment differences advantage in favour of males of 0.2156 in logarithm terms or 23.863 rupiahs. This endowment differences is 52.37 percent of the overall differentials occurring in white-collar occupation. The residual is defined as discrimination 0,246911 in logarithm terms or 21.697 rupiahs. The major contributions come from variables development of industrial sector (PDRBIND) and the constant terms. Working hours has a positive sign, which indicates that with the same length of working hours, males earn more than those females do.

*The differences, overall differences, endowment differences and discrimination, are significantly different from zero at one percent level of significance for all two sets of sample means used in the computations. These results confirm the hypotheses that females in both formal and in informal status earned significantly different from those of males.*

## SUMMARY AND CONCLUSIONS

### Summary

The Chow test for differences between male and female earnings function in each group of sector employment, rejected the hypothesis of equality

of the wage structure for every case in the labour market at one percent level, except for white collar occupation at 10 percent level.

Using Blinder – Oaxaca decomposition method, the differences in average weekly earnings of each sectors of employment distinguished between a component attributable to gender differences in productivity – related characteristics and a residual component that is often taken as a measure of discrimination. The econometric specification of the wage equation follows the traditional human capital theory. The key variables included are the dummy variables for education attainment (EDUC1, EDUC2, EDUC3), labour market experience, marital status and age of respondent.

The dominant feature of the male – female earnings differential is the relative importance of wage discrimination in favour of male in all the three groups of sector employment. The contribution to the differential of the constant term is of great significance, which dominates all other factors contributing to wage discrimination. It suggests that in the Indonesian labour market men receive an earnings premium in the form of a constant mark – up over the female wages, even for approximately equal work for equal productivities. Certain practices or elements in a payment system in Indonesian formal – public sector may have a wage differentiating effect for male and female worker. For example, performance – related elements in pay may permit gender discrimination in their award or size. Some allowances may automatically be paid to men worker, inflating their measured earnings: for example, in the case of both spouses employed by formal – civil/public service, payment of a child allowances may be made only to the men worker. There is only allowance for wife given to the male worker, but there is no allowance given for husband to the female worker. Using *t* – values calculated from pooled regression standard errors, the overall differences, endowment differences and discrimination are significantly different from zero at one percent level of significance for all two sets of sample means for three groups of sector of employment used in the computations. These results confirmed the hypotheses that female in Indonesian labour market earned significantly less than that of male worker.

## Conclusion

The gender income inequality in the Indonesian labour markets however is not mainly determined by gender differences in human capital but is substantially related to gender differences in family role constraint.

Conventional views in the literature on gender predict that increasing human capital among women will reduce the gender gap. If rising human

capital is to reduce gender income inequality, human capital should play an important role in explaining the current gender income gap. Contrary to theoretical expectation, however, work experience seems to have played only a minor role in causing the gender wage gap in Indonesia. In fact, family role constraints appear to have a much larger independent effect on income than from sufficient for narrowing the gender income gap. A radical change in the household division of labour seems to be required to substantially reduce the gender gap in Indonesia.

A future increase in human capital among women is therefore far from sufficient to narrow the gender wage gap that exists. Thus, if an employee work status confers more choice, independence and greater bargaining power for females, as it often claimed, the importance of this status is likely to increase with general economic growth, more shifts of employment into manufacturing and out of agriculture, and increased female education (particularly relative to male education).

The use of occupational pay rather than average for broad groups of occupation allows a more detailed examination of differences in male and female pay for similar work, as it avoids complications arising from occupational distribution and the associated issues of aggregation, overcrowding and discrimination in hiring or promotion. Differences in the average pay of men and women in the same occupation can arise from a number of causes. Some may result from the use of different measures of pay. Women typically work fewer hours than men and are less likely to receive shift premium as they usually do less shift work than men.

While it is clear that many of the female dominated occupations are in lower income or status attributes, there may be some reluctance to argue for a policy of female entry into traditionally male occupations such as transport operation. The position is rather different, however, when entry to relatively modern occupations that have not yet been associated to gender within the value system of the society is considered.

### **Implications**

Certainly there are gender differences in employment and in characteristics employment in Indonesia, and more detailed analysis may well reveal more such differences. The study suggests that gender differences in activities or wages do not necessarily imply discrimination against women or that women receive lower returns on their human resources. In sectors and tasks that reward brawn and bursts of energy, men on the average, may have comparative advantages (that underlie part of the job segregation and wage dif-

ferential by gender), and even if wage differentials are substantial, the return to some of women's human resources may be as great or greater than the to men's (as describe in informal sector).

Quite possibly women are disadvantaged in some important respects in the Indonesian labour market. This may be the large differences in the age-wage, schooling-age-wage patterns. But more detailed analysis is needed to observe the gender differences in employment patterns and outcomes in order to ascertain that indeed there is evidence of gender discrimination in Indonesia. In addition, as long as there are gender differences in other aspects of society importantly (including child care and other dimension of household production), there are likely to be gender differences in human resources in employment patterns and employment outcomes even if there is no discrimination in the labour market and no gender differences in human resources at the time of entry into the labour force. In addition, particularly in poorer societies whereby brawn and bursts of energy are relatively important, there maybe gender differences in human resources that favour males (though women may have more stamina for many physical tasks).

Traditionally, Indonesian women on average, have less continuous attachment to the labour force. Therefore, the expected returns firm-specific training are lower for women than for men from the firm's perspective of firms. At times, an individual young women is not sure about the extent of their attachment to the labour force, moreover, they have less incentives to invest in their general training. Firms/employers discriminate against women because of this. This will induce the women not to invest in their own human resources development. This kind of discrimination is probably a major aspect in the Indonesian labour markets because of the inefficient use of women human resources.

Higher education for women is thought to be an important means of improving their situation in the labour markets. Though assessment of the impact of schooling on wages and other labour markets outcomes are plagued by the usual tendency to confuse association with causality because the failure to control for unobserved characteristics such as ability and motivation, by analyst and policy maker. It is shown that considerable returns to schooling are at least as high for women as for men. With the process of development, moreover, the dimensions of human resources that are rewarded in labour markets have shifted from physical strength and bursts of energy to those dimensions that are developed in schools. Thus, schooling will probably will increase in importance, with a concomitant shift in comparative advantage in labour markets from men toward gender neutrality. It is suggested that schooling substantially increased the women labour markets option, increas-



ingly so, as the traits developed in schools became increasingly important due to more rapid technological and market changes. Literacy attained largely from schooling is an observed characteristic that apparently has less uncertainty toward productivity of the individual workers and thereby less gender differential in labour markets.

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