DECIPHERING OF OCCUPATUINAL SEGREGATION: GENDER PERSPECTIVE IN THE SRI LANKAN LABOUR MARKET

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ABSTRACT: Gendered employment distribution in different occupations is a significant dimension of the gender equality. It is the most generic indicator of female economic disadvantage. Even though women have made substantial progress in economic sphere recently, sex segregation in the workplace remains a fact. Taking the importance of the research on industrial variation in occupational sex segregation as a case in point, this paper contributes to the study of occupational segregation by using a refined occupational classification while analytically studying the factors that shape occupational sex segregation in Sri Lankan labor market.

KEY WORDS: Occupational Sex Segregation, Gender, Discrimination, Labor

1. INTRODUCTION

Occupational sex segregation according to sex is widely prevalent in almost all countries and its magnitude, determinants and consequences are of concern to both policy makers and researchers. Therefore measuring overall levels of occupational segregation by sex is still a matter of great controversy (Hakim 1993, Jacobs 1993, Watts 1993, Charles and Grusky 1998). Segregation concerns the tendency for men and women to be employed in different occupations from each other across the entire spectrum of occupations under analysis. It is a concept that is inherently symmetrical. Concentration is concerned with the sex composition of the workforce in an occupation or set of occupations. Frequently segregation, in the stricter, narrower sense, is regarded as evidence of inequality, or even as directly measuring inequality(Janet, and etal 1995).

The reasons why occupational segregation by sex should be of critical concern to researchers and policy–makers extend well beyond the very important equity concerns and a desire to improve the situation for women. According to the Anker (1998), some importance aspects can be summerized as follows. Occupational segregation by sex has an important negative effect on how men see women as well how women see them selves by reinforcing and perpetuating gender stereotypes. This, in turn, negatively affects women's status and empowerment and consequently many social variables such as mortality and morbidity, poverty and income inequality.

Occupational segregation based on the sex of workers has a negative effect on labour market efficiency and labour market functioning, when most women are effectively excluded from most occupations, human resources are wasted and consequently income levels are reduced. As many of the best suited and most skilled people are excluded from working in the occupation where they would be the most productive.

Sex segregation is a major labour market rigidity, greatly reducing a labour market's ability to respond to change. In this regard, it is important to note that labour market rigidly caused by sex segregation of occupations includes not only the exclusion of women from male occupations but also the exclusion of men from "female occupations" (or perhaps an unwillingness of men to work in those occupations). When these labour market inefficiencies and rigidities are seen in the context of the recent large increases in female labour force participation rate throughout the world and need for labour markets to adjust to rapid economic changes. It is clear that countries can ill afford to ignore occupational segregation by sex and still remain competitive in today's global market-place. It is in different occupations negatively affects the education and training of future generations. Decisions by parents, youngsters and schools regarding how much education to provide girls and boys, as well as which fields of study they should peruse, are based to a significant extent on labour market opportunities. This means that women's restricted labour market opportunities and lower pay for female occupations help perpetuate women's inferior position in society and the labour market into the next generation, thereby also perpetuating this important source of labour market inefficiency and inequality.

Moreover it probably keeps many women out of wage employment altogether especially in developing countries where the informal sector is small. This has an undesirable effect of raising fertility rates ceteris paribus.since female wage employment especially in the formal sector, helps reduce fertility rates in developing countries (United Nations, 1985).Occupational segregation by sex is a major determinant of male–female wage differentials (Jacob and Lim,1992).The low pay and incomes for women workers that accompany occupational segregation are becoming an increasingly important contributor to poverty and inequality in society as a whole (Anker, 1995).Even though such a value with this current topic,studies of occupational sex segregation in industrialized countries have flourished, but few studies have examined levels of segregation in developing countries.³⁵

This study aims to fill this gap and analyze the available national data in order to conceptualize the Occupational sex segregation in national labor market in Sri Lanka. It investigates the trends in occupational sex segregation since the time 1963 using the Reports on Consumer Finances and Socio Economic Survey in Sri Lanka.

2. THEORETICAL OVER VIEW

Theories explaining the existence of occupational segregation by sex can be classified into three broad categories: neo-classical and human capital theories; institutional and labor market segmentation theories; and non-economic and feminist or gender theories. (Meewalaarchchi, 2007). Magnus (1992) argued that the most influential theories applied to the question of gender inequality in the labor market are either action-oriented theories such as the human capital theory, or theories with a more structural approach.

According to human capital theory, occupational choice and associated wage outcomes are viewed as the outcome of rational human capital investment decisions, based on the different roles of the sexes in social reproduction. It is argued that women engage in less training because they expect to work less and choose occupations for which interruptions to employment are not costly, as their skills do not depreciate greatly and earnings do not change greatly over a lifetime. Such an analysis can explain the tendency of women to locate in low-skill jobs but cannot justify why women are concentrated in a small number of female occupations at each skill level (Blau and Hendricks 1979). Human capital theory says that women who plan intermittent employment will maximize lifetime earnings if they choose occupations with low rates of appreciation and depreciation of human capital. Thus, it tends to emphasize sex differentials in family responsibilities, educational attainment, and labor force experience. Mincer and Polachek (1974) argue that given child-care responsibilities, women anticipate work interruptions and shorter working careers, and thus, have a smaller incentive to invest in education and training (given less time to recoup the benefits of the investment). Sex differentials in human capital investments leads, in turn, to occupational sex Along the same line, Polachek (1979) argues that women are segregation. attracted to jobs, which allow for career interruptions and do not penalize them for time spent at home and outside of the labor force, during which skill atrophy occurs. These jobs tend to be dominated by women.

In a developing country context like Sri Lanka, in order to explain the labor market gender aspects, institutional and labor market segmentation theories are much approachable than others. These theories also rely on well established economic thoughts and neo-classical logic. Anker(1997) explained that the staring pint is the assumption that institutions, such as unions and large enterprisesplay an important role in determining who ishired, fired and promoted, and how much they are to be paid.

The theory statistical discrimination theorywhich comes under the, institutional and labor market segmentation theories which is based on the assumption that there are differences, on average, in the productivity, skills, experience, etc., of distinct groups of workers (such as men and women), and high search and information costs associated with recruitment and promotion decisions. In such circumstances, Anker (1997) argued, that it is rational for employers to discriminate against groups of workers (such as women) when differences, on average, between the abilities of persons from different groups (e.g. women and men) cost less to sustain than the decision-making costs associated with identifying suitable individual workers of either sex. Statistical discrimination theory thus provides an explanation for how some occupations are male even though many individual women have greater ability, more education, etc. than many individual men do. The best known dual labor market theory and other labor market segmented theories also begin with the assumption that labor markets are segmented in certain ways as an example Guy Standing (1989) argues that labor market is segmented like "static" and "progressive " jobs. Dual labor market theory distinguishes between a primary and a secondary sector (Doeringer and Piore, 1971).

The alternative hypotheses for the effects of modernization for less developed nations proposed by Jacobs and Lim (1992) and they discuss the stagnation or loss of women's status that accompanies industrial development and consequently propose that sex segregation may increase in developing societies. Somewhat arbitrarily, they link this hypothesis to other "pessimistic" predictions about the persistence of sex segregation in industrial societies due to rigid labor market structures patriarchal institutions and ideologies (Hartmann, 1976 Reskin and Roos, 1990).

The size of the service sector is expected to be related to the higher representation of women in gender-typical occupations in developed nations and to increased female representation in low status service sector occupations, such as sales and service jobs, in less developed nations. Female labor force participation is expected

to increase women's representation in atypical occupations within industrialized nations, but may either increase or their representation in high-status occupations in less developed countries (Cartmil,1999).

There are some other literature those attest to the explaining about employers' personnel practices also affect the degree of occupational sex segregation in a work place. Personnel practices are the formal and informal procedures that comprise firm's external and internal labor markets. How employers recruit, workers for entry–level jobs affect the sex composition of those jobs. Reliance on informal net works through which employees tell acquaintances about openings tends to perpetuate segregation because social networks tend to be segregated (Braddock and Mcpartland, 1987).

3. METHODOLOGY

This study utilizes the four different kinds of occupational sex segregation measures for analysing the data. This section presents these different types of Inequality indices for measuring occupational segregation by sex. Most of indices are obtained from the manuel on methodology (Janet, and *etal* 1995). To analyse the macro view, national data were collected from thereport on on consumer finances and socio economic survey in Sri Lanka. This is an island wide representative survey gathered 6-9 years times using a multistage method.

3.1.Index of Dissimilarity (ID)

Index of Dissimilarity (ID) measure is the most widely used measure which is described in Duncan and Duncan (1995). The ID is usually defined as:

$$ID = 1/2\sum_{i=1}^{n} |F_i/F - M_i/M|$$

Where,

F = Number of women in the labour Force

M = Number of men in labour force

F_i = Number of women in ithoccupations

M_i = Number of men in ith occupations

n = total number of occupation

Any occupation can be catogorized into "female occupations" (j) if

$$F_i/F > N_i/N > Mj/M$$
.

Where,

N = Number of labour force

N_i = Number of labour force in the female occupations

 F_j = Number of women in the jth female occupation

 M_i = Number of men in the jth female occupation

And any occupation can be catogoaraized into "male occupations" (k) if

$$M_k/M > N_k/N > F_k/F$$

Where,

 N_K = Number of labour force in the male occupations

 F_k = Number of women in the k^{th} male occupation

 M_k = Number of men in the k^{th} male occupation.

Therefore, it can be shown that:

$$Fj/F > M_i/M > 0$$

and

$$M_K/M - F_k/F > 0$$
.

Thus

$$\mathsf{ID} = 1/2\{\sum [F_{j}/F - M_{j}/M] + \sum [M_{k}/M - F_{k}/F]\}.$$

It can be easily demonstrated as

$$1/2\{\sum [F_f/F - M_f/M] + \sum [M_m/M - F_m/F]\}$$

where,

F_f = Number of women in "female" occupations

M_f = Number of Men in "female" occupations

F_m = Number of women in "male" occupations

 M_m = Number of men in "male" occupations.

3.2. The Sex Ratio Index

The sex ration index (SR) is used by the Department of Employment in Great Britain in its study of trends over the twentieth century (Hakim, 1981). SR can be thought of as the ratio given by the actual number of women in "female" occupations divided by the number of women there would be in these occupations if there were no segregation, less the equalent ratio (actual:zero segregation) of women in "male" occupations. In statistical terms, this is the ratio of actual to expected frequencies, where "expected" refers to the number that would be found if the ratio of women to men in the occupation where the same as in the employed labour force as a whole. The index can be formally expressed as:

$$SR = N/F[F_f/N_f - F_m/N_m]$$

Where,

 N_f = Total number of workers in "female occupations"

 $N_{,,,}$ = Total number of workers in "male" occupations

3.3. The Women in Employment Index

The Women in Employment Index (WE) was first introduced by the Organization for Economic Cooperation and Development(OECD), in 1985. It has been defined as the weighted sum of deviations from unity of the propotion of women in each occupation divided by the propotion in the labour force. It is simpler to think of it as the sum of the differences between the observed and expected propotions of women in an occupation, all differences being measured positively. This is written as:

$$WE = \sum |F_i/F - N_i/N|.$$

With similar algebraic manipulations to those used for ID, it can be obtained that

$$WE = \frac{2\{(F+M)F_f - F(M_f + F_f)\}}{FN}$$

$$= \frac{2M}{N} \left[\frac{MF_{f-}FM_f}{FM} \right]$$
$$= \frac{2M}{N} \left[\frac{F_f}{F} - \frac{M_f}{M} \right]$$

$$WE = ID \times 2 \times M \times N$$

4. RESULTS AND DISCUSSION

Table 1 summarizes the authors computations based on sex segregation analysis for Sri Lankan labor market. Male percentage of total employed has declined form 73.4 % to 67.4% over the time from 1981 to 1996. ID and SR values has declined and SR value has increased with the time. Occupational sex segregation is much higher value in national labour market and it is around 40%. SR index shows that the trend of incresaing slightly while WE index was declining over the time period. The increasing SR ratioindicates female over reprentation of occupations over the time and it has a higher value when comparing to 1982. From this macro level analysis it is difficult to confirm female over-representaation exist in which types of occupations in the labour market. In generl the types of occupation categories are Nursing, Medical, Teachers, Stenographers, Office assistants, Housekeeping, Maids, Weavers, Food & Beverage Processors, Tailors, Production related Workers etc.WE value indicates the declining pattern and it has poved that over the time in some occupational groups female under representation has been reduced. That means female workers have entered into some jobs earleir known as typical for men jobs. Acording to Standing (1989) this is a one of character of the feminizion of labour in any kinds of economies. Recent survy information to calculte these indices is not availabe yet and this is a draw back of this study.

Table 1 Change of occupational sex segregation indices for Sri Lankan labor market for 1981.82 -1996/97

	Years			
Index	1981/1982	1986/1987	1996/1997	
Male Labor Force %	73.4	69.7	67.4	
ID	0.423	0.408	0.392	
SR	0.167	1.194	1.186	

WE	1.559	0.564	0.528

Source: Based on the Authors computations Data

5.CONCLUSION

Scholars and policy-makers increasingly treat occupational sex segregation as a generic indicator of female economic disadvantage. According to above results in Sri Lankan, situation discrimination may still prevent women from entering many traditionally male jobs, and cause them to "crowd" into those areas where, for whatever reason, the barriers have been lowered slightly. Women may also be attracted to jobs, which they know other women have successfully entered, assuming, perhaps erroneously, that an extremely low representation of women in an occupation signals that there is a high degree of discrimination, or that it is difficult for individuals with family responsibilities to work in those jobs. Analysis of occupation specific pattern of segregation reiterated the importance of government policies, demonstration how different types of policies have segregate and integrative effects throughout the occupational structure.

In assessing this above results, it is important to note the limitations of what can be learned in studies like these. First, calculations based on Census occupational categories are likely to underestimate the full extent of employment segregation of women, since employers' job categories are far more detailed than those used by the Census are. Thus, it is possible that some census listings combine individual job categories, which are predominantly male with some, which are predominantly female producing apparently integrated occupations.

A further limitation of what can be learned from the approach pursued above is that major occupation categories may differ in other characteristics that limit the scope for changes in sex composition within them. For example, it has been suggested that slow employment growth in blue-collar jobs is one reason for the lesser progress in integrating female occupations in these categories. Or, as another example, a relatively small contribution of male administrative support jobs could simply reflect that there are relatively few male occupations in the category. To address these types of questions, one should estimate a descriptive regression model of the change in percent female within occupations over the time.

6. REFERENCES

ANKER, R.(1998). Gender and Jobs Sex segregation of Occupations in the World. ILO: Geneva.

ANKER, M.(1995). Measuring female labor force with emphasis on Egypt in Khoury, N. and Moghadam (Eds) Women in the Arab World (London: Zed books, 1995)

ANKER, R. (1997). Theories of occupational segregation by sex: An overview. ILO:Geneva.

BLACKBURN, R.M., **JARMAN**, and B. **BROOKS** (2000) The puzzle of Gender segregation and Inequality: A cross country analysis. European Sociological Review 16:119-35

BLAU, FRANCINE D and **WALLECE** E **HENDRICKS**(1979) Occupational segregation by sex Trends and prospectus. Journal of human Resources 14 (2) 197-210

BRADDOCK, J.H., MCPARTLAND, J.M.,(1987). Social science evidence and affirmative action policies: A reply to commentators. Journal of Social Issues: 43:133–43

CARTMILL, M. (1999). The status of the race concept in physical anthropology. American Anthropologist, 100: 651-660.

Central Bank of Sri Lanka, (various years). The Consumer Finances and Socio Economic Survey Report 1978/79, 81/82/ 1986/87 2003/2004, Colombo: Central Bank

CHARLES, M., and GRUSKY, D. B. (1998). The Past, Present, and Future of Sex Segregation

DOERINGER, PETER; PIORE, MICHAEL.(1971) International labor market and labor analysis Lexington, MA, D.C. Health and Co.

HAKIM, C. (1993).Refocusing Research on Occupational Segregation: Reply to Watts. European Sociological Review, 9(3): 321-23.

HAKIM, C. (1981). Job segregation: trends in the 1970s. Employment Gazette, (December): 521-529.

HARTMANN, H.(1976).Capitalism, Patriarchy and Job Segregation by Sex in Women and the Workplace: the implications of occupational segregation M. Blaxall& B. Reagan, eds. Chicago: University of Chicago Press

JACOBS, J. A. (1993). Theoretical and Measurement Issues in the Study of Sex Segregation in the Workplace: Research Note. European Sociological Review, 9(3): 325-30.

JACOBS, J. A., and LIM, S. T. (1992). Trends in Occupational and Industrial Sex Segregation in 56 Countries, 1960-1980. Work and Occupations, 19(4) 450-86.

JANET, S., JENNIFER, J., ROBERT, M., and BLACKBURN, (1995). A manual on Methodology: Gender Inequality in the labor Market: Occupational Concentration and Segregation, ILO,

GENEVA.MAGNUS, N.(1996). Models of Cross–National Variation in Occupational Sex segregation. Sweeden: Stockholm University.

MEEWALAARCHCHI.S, M. (2007).Encountering Globalization: Export prmotion and the Occupational Sex segregation :(Evidence From a Firm Level Analysis in Sri Lanka ICBAR conference paper..

MINCER, J., and S **POLACHEK.** (1974). Family Investments in Human Capital: Earnings of Women. Journal of Political Economy,82:S76-S108.

Organization for Economic Co-operation and Development, (1985). The integration of women into the economy, Paris Organization for Economic Co-operation and Development.

POLACHEK, S.(1979) Occupational Segregation among Women: Theory, Evidence, and a Prognosis." pp. 137-157 in C.B. Lloyd, E.S. Andrews, and C.L. Gilroy (eds.), Women in the Labor Market. New York: Columbia University Press

RESKIN, B. F., and **Roos**, P.(1990). Job Queues, Gender Queues Philadelphia: Temple University Press.

STANDING, G.(1989). Global Feminization through Flexible Labor. World Development, 17(7):1077.-1095.

United Nations, (1995). Human Development Report, New York: UNDP

WATTS, M. (1993). Explaining Trends in Occupational Segregation: Some Comments. European Sociological Review, 9(3): 315-19.