The neoclassical model of labour leisure choice

In this society, not many people can afford goods and education without working. Since we are not all wealthy, most of us must work in order to cover our living costs and other expenses (Borjas, 2008). However, our decisions on whether to work or not are based on many factors that motivate or discourage us to enter the labour force, then we need to decide how many hours to work. The first and second part of the essay will discuss about an individual's work-leisure decision regarding to her decision to work or not, and the number of hours to work. In the third part, I will discuss about Clark's report on job satisfaction of men and women. Although women had higher levels of reported stress in their life, they appear to be happier in work than men. Finally, the results which are recently reported by Booth and van Ours (2007) also support Clark's conclusions.

The neoclassical model of labour-leisure choice is used to analyse labour supply behaviour and identify the factors in a person's work decision and her decision on how many hours to work (Borjas, 2008). In this model, individuals' satisfaction which is obtained from consumption of goods (denoted as C) and leisure (L) is presented by utility function (economists assume that both goods and leisure are normal goods):

We want to maximise our well-being by consuming as much goods and leisure as we can. However, there is a trade-off between consumption and leisure (Sparknotes, 2010). If we want to consume more leisure, then we have to give up goods and services because we cannot afford them since we work less (or do not work). In the other hand, if we spend more time to work, then we are wealthy enough to buy those goods and services; though we cannot consume as much leisure as before.

In order to understand an individual’s work-leisure decision, we use indifference curve analysis to explain their responses. Indifference curve analysis consists of two concepts: indifference curve and budget constraint (bized). A person will make her decision through the combination of the consumption of leisure and goods, in which we can analyse her work-leisure decision through a combination of her budget constraints and her indifference curves. The person’s budget constraint can be written as:

Where C: the value of expenditures on goods, wh: labour earning, and V: non-labour income (such as property income, lottery prises, medical insurance, disability insurance, dividends, retirements program)

The total time allocated to work and leisure must equal the total time available in the period, say T hours per week, so that:

Figure 1 illustrates the optimisation in utility of a person by combining her budget constraint and indifference curves. She will choose point P (as this is her optimal consumption of goods and leisure) because she is better off at point P. At point P, she will consume T1 hours of leisure and h1 hours of work per week. Note that in this figure, we assume that the indifference curves are convex to the origin, which is equivalent to assumption of diminishing marginal rate of substitution. It is the amount of consumption a person is willing to give up for an extra hour of leisure time diminishes as leisure time increases (lecture note).

We are interested in how many hours of work a person will choose when non-labour income (V) (may be because of higher investments return or inheritance money) or wage (w) increases. There are two types of effects

which dominate in this model: the income effect and the substitution effect. When non-labour income increases (holding the wage constant), the income effect reduce hours of work (as people tend to take more leisure as they feel wealthier)

The worker’s opportunity set expands as non-labour income increases, thus leads to a parallel shift in her budget line. An increase in non-labour income also means that when holding the wage constant and the income effect generates, the worker tend to reduce hours of work (assume that leisure is a normal good).

When the wage rate increases, its total effect is the sum of the income and substitution effects. A person will reduce her hours of work if the income effect dominates (in this case, a person is effected only if she is working); instead if the substitution effect dominates, she will increase her hours of work. If both effects are equal, then there will be no change on individual’s hours of work or hours of leisure. In Figure 3, as the wage rate increase, the income effect generates lead to a decrease in hours of work (movement from point A to B), however, as the substitution effect has equal effect, individual will increase her hours of work (movement from point B to C). As we can see, the hours of work are still the same.

A person makes her decision to work or not to work is based on the reservation wage. It is said that when the real wage exceed reservation wage, the workers will enter labour market. Therefore, if there is a high reservation wage, people are less likely to work.

However, if we hold the reservation wage constant, high-wage persons are more likely to work.

The neoclassical model of labour-leisure choice has some limitations such as: it considers only leisure and goods and ignores home production; it has simple linear budget constraints as in fact, the budget constraints are nonlinear due to taxes, government benefits; labour supply decision may be affected by other members' decision of a household; and finally, it is one-period model, whereas lifetime labour supply model is more complex and dynamic (lecture notes).

Women's participation rate in labour force has been increasing due to: rise in real wage (encourages women to enter the labour market), decline in birth rate since the costs of having one more child are very expensive, technological advances (which are the convenient products to help women in household activities), social and cultural factors (feminism, religion), expansion of service industries, and low unemployment (lecture notes). Mammen and Paxon (2000) state that education levels, for women themselves and their spouses, is an important factor in women's labour-decision. In a competitive labour market, women will consider the opportunity cost of her time and the income that " unearned" (non-labour income). A woman will withdraw from labour force if there is an increase in her non-labour income (may be because her husband's income has risen). However, when women's wage rises, it depends on whether substitution or income effect dominates.

One interesting finding which made by Andrew Clark (1997) is that women's job satisfaction levels are higher than men. Firstly, he introduced his theory of four possible explanations for women's higher levels of job satisfaction, which are: jobs and gender, work values, sample selection, and expectations. Clark used the individual and job characteristics as control variables in ordered probit regressions to test all the explanations, except for the sample selection explanation, in which he used Heckman sample correction in OLS regressions. His theory is presented as the utility function from working:

u = u(y, h, i, j) (1)

where y is income, h is hours of work, and i is individual's feature and j is job characteristics.

He concluded that gender (i variables) should not enter the equation (1), for example: " an identical man and woman in identical jobs should report the same job satisfaction score" (Clark, 1997).

The data in this paper were collected from the British Household Panel Survey (BHPS) which interviewed 10, 000 adults in 550 households in 1991. They were asked to rate their satisfaction levels (by the scale number from one to seven) with eight job aspects: promotion prospects, relations at work, job security, own initiative, total pay, the actual work itself, hours of work and something else.

Clark argued that job satisfaction has correlations with the gender's differences such as: age, education, health, and different job characteristics: establishment size, union membership and hours of work. He found that

good health has large positive effect on job satisfaction while renter, union membership, and hours of work have small negative effects (an increase in hours to 50 per week only reduces the predicted probability of reporting overall job satisfaction of 7 to 38% and 30% for women and men, respectively); moreover, higher levels of educations and longer hours of work are connected with lower satisfied workers. Especially, women's overall job satisfaction is largely determined by renter, union, marital status and managerial status. However, these findings only justify which types of workers are satisfied, not why women are more satisfied than men.

The second explanation of this paper is work values (as men and women consider the work aspects differently). Men choose promotion prospects, job security and pay, are the most important job's aspects; while women rank highly the aspects such as: relations at work and hours of work. Nevertheless, the results show that women who have same jobs, same personal characteristics and same work values, report a higher job satisfaction score than men do. Thus, work values do not explain why women are so happier at work.

The third explanation of women's higher job satisfaction (sample selection tests how the individual feel about working) is not effective since it relies on men and women's participation rate. Clark highlighted that men are more likely to be in employment than women; specifically, married women are less likely to be employed. Since the sample sizes are small (men's participation rate is higher than women)

Expectations are the last explanation for women's higher job satisfaction. Clark (1997) stated that women are happier at work than men, because they have lower expectations. Education and upbringing form a part of expectations. For the higher-educated workers, younger workers, those whose mothers had a professional job, those in professional positions, and those working at male-dominated workplaces are likely to have higher expectations about their job aspects. Clark suggested that there is only a temporary result in women's higher job satisfaction which is explained by improved position of women in the society and labour market. He predicted that women's expectations and job satisfaction would be the same as men, given that women's pay only rise at the same pay rates of men.

(gender) used the pooled ordered probit models to show that in the past decade, women's job satisfaction has indeed declined significantly (nearly by half), while men's job satisfaction has slightly changed. This paper results support the theory that women's higher job satisfaction is only transitory and Clark's prediction of gender differences in job satisfaction.

Furthermore, the results found by Booth and van Ours (2009) are indeed supportive to Clark's conclusions. Akerlof and Kranton (2000, cited by Booth and van Ours (2009)) stated that women's improved position in society (such as the female suffragette movement) has made it more tolerable for women to work. This paper examines the relationship between part-time jobs and family well-being by using fixed-effects ordered logit estimation method on the panel data from the Household, Income and Labour Dynamics in Australia (HILDA). Hours satisfaction is considered to be one aspect of both men and women's job satisfaction. Women's job satisfaction is said to be

increasing follow their partners' health. The results from pooled cross-sectional data indicate that men and women's job satisfaction is higher if their family income and health are high, which is consistent with Clark's findings. While full-time work reduces women's hours satisfaction and job satisfaction, it increases men's hours and job satisfaction. Booth and van Ours (20009) concluded that the male share of house work is always low even when the female spend enormous hours in marketplace. This finding proposes an explanation why women are happier with part-time work.

(developing) In contrast to Booth and van Ours' findings, Boo (2010) states that in developing countries (as in Honduras), women do not have higher job satisfaction refer to part-time job. Alternatively, both women and men are more satisfied when they are working full-time. For the fact that working full-time increases individuals' income, poorer women seems to value full-time jobs than non-poor women.