CHAPTER 4

DATA ANALYSIS

4.1 Introduction

The objective of this study is to analyse the female labour force participation and the factors that influence their work pattern. This Chapter describes the methodological approaches used in this study. The subsections within this Chapter are presented according to data collection, time period, method of analysis and hypothesis.

4.2 Data Collection

In order to study the factors influencing the changes in the female employment pattern and the trend in the female labour force participation in economy, direct comparisons are possible using secondary data. Therefore, data for this study were gathered, compiled and calculated from various secondary sources. The sources include reports from government department, ministries, journals and working papers of several distinguished writers and researchers.

The trend data for the labour force participation rate according to sector, occupation and education were obtained from the Population And Housing Census published for the years 1970, 1980, 1991 and 2001. Population census is the only source of data covering a

long time span to allow the measurement of change in employment. The other sources include:-

1. Labour Force Survey Report, various issues published by Department of Statistics Malaysia;
2. Annual Reports of the Ministry of Human Resource, published by the Ministry of Human Resource Malaysia;
3. Manufacturing Survey Report, published by Malaysian Institute of Manufacturers;
4. The Malaysian Five Years Plan Report;
5. Data compiled by individual researchers.

4.3 Time Period

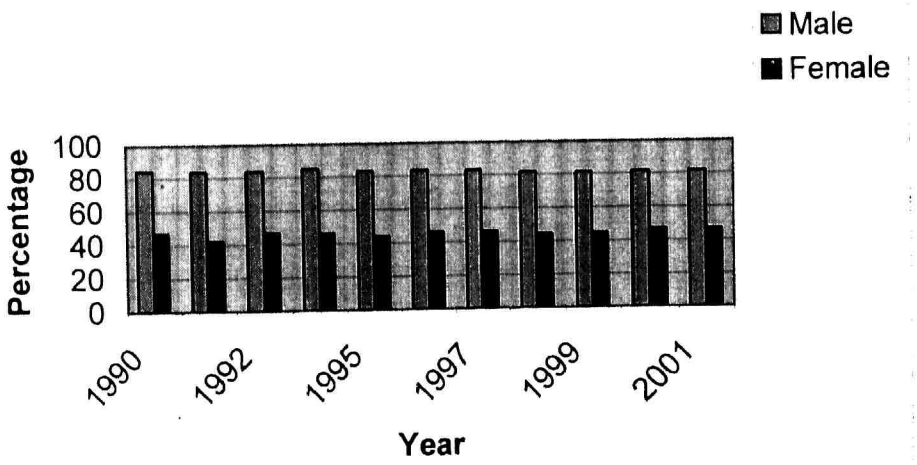
The time frame chosen for the trend analysis is within the period of 1990 to 2001. The data for labour force participation rates (%) by gender were compiled from 1990 to 2001 consecutively. The data for economically active population by industry and occupation were compiled from 1992 to 2000. Data for employed person by educational attainment were compiled from 1992 to 2001 and data for employment status were gathered from the year 1995 to 2000. The data on wage differential according to sex were gathered from the year 1980. Due to the limited published data on earnings and wages and if such data exist, no distinction between male and female could be made. This resulted in some inconsistency in the data selected for the analysis. The data on average earnings in hotel industry by occupation and sex were compiled for the year 1992 and finally the data on

average daily wage rates in the plantation sector were compiled for the years 1988 and 1992.

In the process of compiling data within this period, there were instances whereby the presented data were in different forms. In such situations, I have adopted the data through some tabulation.

4.4 TREND ANAYSIS 1990-2001

Figure 4.1: Labour Force Participation Rate (%) By Gender Peninsular Malaysia 1990-200



Source: Labour Force Survey Report, Malaysia, 2001.

As seen in figure 4.1, the labour force proportion of men has always been high and remained steady around 81.5 percent in 2001. The work rates or the employment rates for women were also fairly stable, at about 46.5 percent in the same year. However, a careful study on the table shows that the female labour force participation registered an increase from 44.2 percent in 1995 to 46.2 percent in 1997, but declined to 44.4 percent in 1998

due to the economic downturn. With the economic recovery, this rate subsequently increased to 46.5 percent in 2001.

The continuous steady increase in the female labour force participation in various fields of national development was due to the further operationalisation of the National Policy For Women and its Action Plan for the Advancement of Women.

For example, The Employment Act 1955 was amended in 1998, which provided for flexible working hours and empowered the Ministers of Human Resources to make rules on statutory benefit to be paid to part-time workers proportionate to full-time employees. This amendment permitted women, especially housewives, to be employed in part-time employment, while allowing them to meet the family obligations. In the public sector, maternity leave up to 60 days was allowed for a maximum of up to five children. In addition, provision for tax deductions were provided to employers for the establishment of child care centers near the work place.

4.5 Labour Force Participation by Age Group

From the T-test in Table 4.1, the T value is 7.579 and because ($P < 0.05$) we reject the Ho and conclude there is no significant difference between female and male in terms of employed person by age group stratum and gender in Peninsular Malaysia between the years 1992 to 2001. The table also indicates the means for Male employed person as being 426.411 and for the female employed person as being 229.943.

Table 4.1: ***Employed Persons By Age Group, Stratum And Gender Peninsular Malaysia, 1992-2001***

T-Test

Factor	*Mean*	*T-Value*	*P-Value*
(Between Gender)			
Male	*426.411*	*7.579*	*.000*
Female	*229.943*		

Source: Labour Force Survey Report, 1992-2001

Based on the ANOVA test in Table 4.2, the F value is 247.6 and since the P value is less than 0.05, we reject the Ho and conclude there is no significant difference between employed persons in terms of age group ranging from 15 years old to 64 years old.

Table 4.2 : ***Employed Persons By Age Group, Stratum And Gender Peninsular Malaysia, 1992-2000***

ANOVA

Factors	*F-Value*	*P-Value*
Between Age groups	*247.604*	*.000*

Source: Labour Force Survey Report, 1992-2001

Table 4.3 displays the means for various age groups in the homogenous subsets. The table proves that there is a clear difference between female employed persons in terms of age group. Previous studies showed that the female age-curve was bimodal, with the first peak at 20-24 years followed by a decline to the age group 30-34. The second, but lower

peak, is registered at the ages 40-44, after which the female participation declined. (Jamilah Ariffin, Paper No. 2 1983).

Table 4.3 : Female Employed Persons By Age Groups, 1992-2001

MEAN

Age Group	*Mean*
15-19	*169.400*
20-24	*448.156*
25-29	*399.178*
30-34	*333.767*
35-39	*300.711*
40-44	*251.822*
45-49	*183.578*
50-54	*115.056*
55-59	*62.878*
60-64	*34.889*

Source: Labour Force Survey Report, 1992-2001

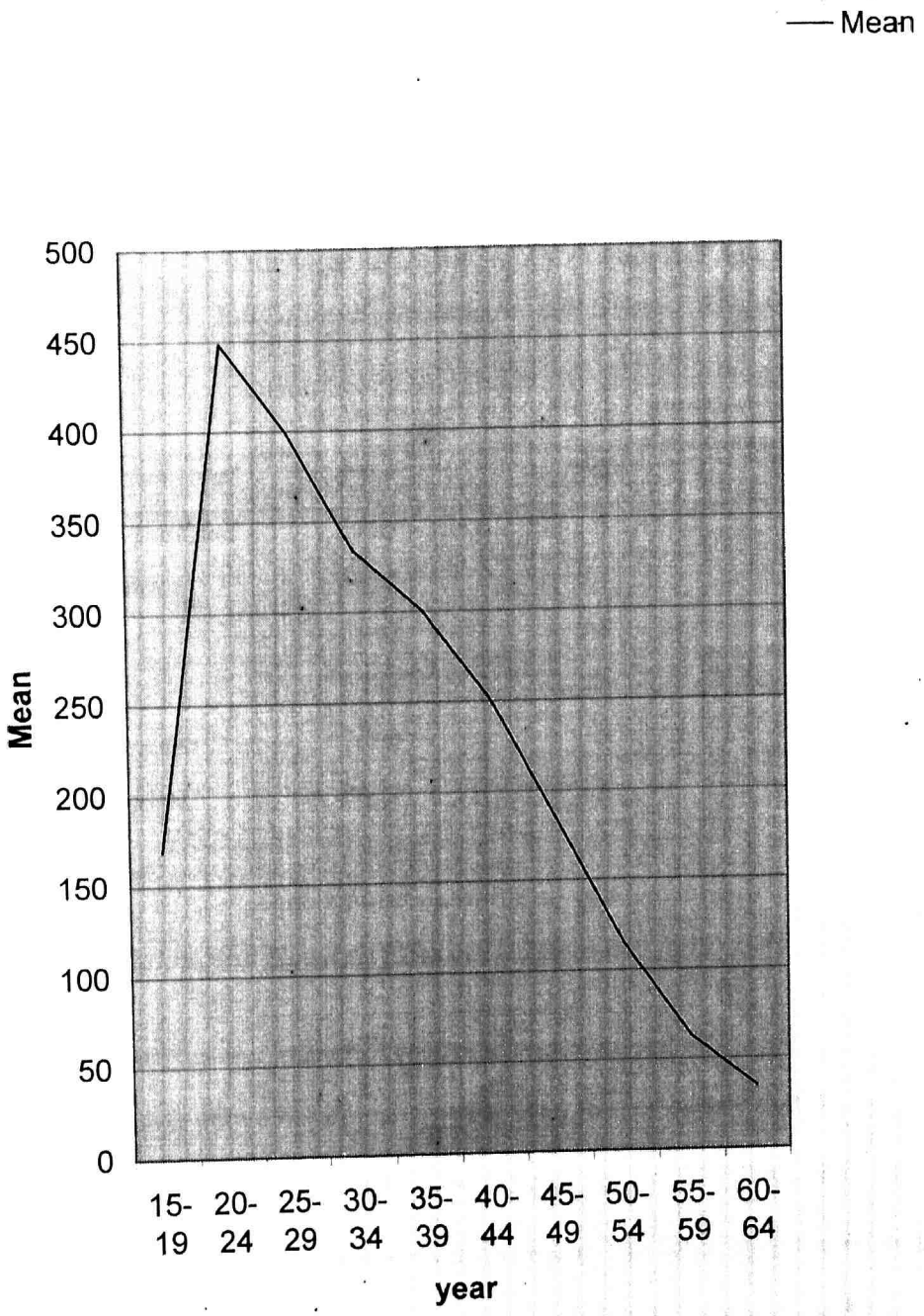
The existence of a bimodal age-curve for females in the industrialized countries has normally been explained by the re-entry of women into the labour force. This interpretation does not appear to be the explanation for Peninsular Malaysia since there are not many opportunities for older women to re-enter the labour force. However, between the year 1992 to 2001, changes can be seen when the participation rate of women by age group shows similar to that of unimodal curve (see Figure 4.2). The emergence of the unimodal work pattern means that the characteristics of the typical working women have changed substantially over the years. (Noor Rahamah, 2002).

Table 4.3 shows that the female labour force participation rate at its highest in the age group of 20-24 with the mean of 448.156 and start to decline after the age of 24. The increase in the **FLFPR** in the age group of 20-24 could be due to higher demand for single female workers in the labour market rather than the married woman especially in the manufacturing sector. The employment of a single woman represents an advantage to the employer, as they do not need to provide maternity benefits as prescribed by the Employment Act 1955. Apart from the above mentioned, the increase could also be due to the change in the attitude of the family and society towards women.

The decline in FLFPR after the age of 24 may be due to the higher opportunity cost of working. The unskilled married women with children and low wages are faced with the increasing cost of the childcare services. The decline could also be attributed to the fact that there are no additional incentives for women to re-enter the labour force at the later age, which is why the mean for female labour force participation declined sharply among women over the age of 40 in Peninsular Malaysia.

The mean for women participation in the labour force for the age group 15-19 years is 169.400, which is relatively low compared to the age group of 20-24. This is due to the fact that female between the age of 15-19 is still receiving formal education.

Figure 4.2 Unimodal Curve For Female Employed Person By Age Group, 1992-2000



4.6 Female Labour Force Participation by Level of Education

In Malaysia, it is generally believed that there exists a positive influence of education on female labour force participation. It is believed that education enhances employment opportunities and increases the opportunity cost of inactivity. The positive relationship between education and female participation is demonstrated in Table 4.4.

Table 4.4 : Percentage Distribution Of Population Age 6 And Above By Educational Attainment And Gender, Malaysia

Education level	*Year*	*Male*	*Female*
Never Attended school	*2000*	*7*	*12*
	1991	*12*	*20*
	1980	*16*	*29*
	1970	*36*	*51*
Attended School	*2000*	*93*	*88*
	1991	*88*	*80*
	1980	*84*	*71*
	1970	*64*	*49*

Source: Population And Housing Census Of Malaysia, 1970, 1980, 1991 and 2001

Based on the table above, it is clear that the total rate of labour that do not go to school had decreased from 43 percent in 1970 to 9.5 percent in 2000. This shows that the level of education had increased which could be due to the huge investment in educational facilities and the provision of equal access to educational opportunities. When comparing between genders, the percentage distribution of population who never attended school is

still high among the females in 1991. However, the percentage of female population attending school had been increasing from 49 percent in 1970 to 80 percent in 1991 and 88 percent in 2000.

Generally, the women's achievement in education had increased. Based on Table 4.5, their achievement at the no formal education and primary level had declined from 11 percent and 26.7 percent in 1998 to 5.4 percent and 19.9 percent respectively in 2001. The percentage of women having secondary education has increased marginally from 50 percent in 1992 to 54.3 percent in 2001. However those with tertiary education had increased significantly from 12.3 percent in 1992 to 20.2 percent in 2001.

Table 4.5 : Percentage Of Female Population By Educational Attainment Peninsular Malaysia, 1992-2001

Educational Attainment	*1992*	*1997*	*2001*
No Formal Education	*11*	*7.6*	*5.5*
Primary Education	*26.7*	*23.6*	*20*
Secondary Education	*50*	*52.5*	*54.3*
Tertiary Education	*12.3*	*16.3*	*20.2*
Total	*100*	*100*	*100*

Source : Labour Force Survey Report, 1992, 1997 and 2001.

We cannot deny the fact that education opportunity for women had increased but somehow there still exists disparity between the urban and rural sector in terms of educational attainment. From the T-test in the table 4.6 below, the T value is 2.786 and

because the ($P < 0.05$) we reject the Ho and conclude there is no significant difference between urban and rural sector in terms of educational attainment in Peninsular Malaysia between the years 1992 to 2001. The table also clearly shows that the mean for urban sector is higher than the rural sector.

Table 4.6 : ***Employed Persons By Educational Attainment Peninsular Malaysia, 1992-2001***

T-Test

Factor	*Mean*	*T-Value*	*P-Value*
Urban	*362.264*	*2.786*	*0.008*
Rural	*212.639*		

Source : ***Labour Force Survey Report, 1992, 1997 and 2001.***

In the urban sector, this could be because of the rise in the standard of living, which encourage women to work. The availability of better job opportunities and room for training and education to prepare themselves for skilled jobs and the prevailing erosion of social taboos against women's paid employment could also be a contributing factor.

In the rural sector, women are still engaged in the subsistence economic activity and they also tend to marry early compared to women in the urban sector. Apart from that, women's reproductive role has continued to be perceived as a stigma by rural community, which means women continuing their education after marriage is very unlikely.

Table 4.7 : ***Female Employed Persons By Educational Attainment Peninsular Malaysia, 1993-2001***

MEAN

Educational Level	*Mean*
No Formal Education	*182.422*
Tertiary	*368.933*
Primary	*535.767*
Secondary	*1212.522*

Source: Labour Force Survey Report, 1993-2001

.At the primary and secondary levels, enrolment of female students was about half of the total enrolment, while at the upper secondary level, female student accounted for about 66 percent (8th Malaysian Plan, 2001). From Table 4.7 it can be derived that the number of female student attending formal school had increased in Peninsular Malaysia. The secondary level recorded the highest mean followed by primary and tertiary. This could be due to the fact that secondary education is a criterion for the entry into a modern sector. One probable reason why tertiary level recorded a lower mean is probably because the number of female going to universities or colleges is still relatively small. However, in terms of discipline chosen by the students, female dominance in the arts stream continued to be prevalent accounting for total enrolment in the arts and humanities courses in 2000. Female also made further inroads into science and technical courses recording 60 percent and 30 percent respectively in 2000. (8th Malaysian Plan).

The future challenges and changes in the global environment would require efforts to be taken to provide women with skills and knowledge to cope with the twin responsibility of family and career. The continuous increasing trend in the female labour force participation means a continuous education and training opportunities for women to meet the demand of the knowledge based economy and to improve their upward mobility in the labour market.

Based on the ANOVA test in table 4.8, we can reject the Ho and conclude that there is no significant difference among employed person in terms of educational level.

Table 4.8: Female Employed Persons By Educational Attainment Peninsular Malaysia, 1993-2001

ANOVA

Factors	*F-Value*	*P-Value*
(Educational Level) Between group	*274.225*	*.000*

Source: Labour Force Survey Report, 1993-2001

Despite various government measures and policy to provide equal access to educational opportunities, there still exists disparity between male and female employed person in terms of educational attainment. Based on the T-test in table 4.9, we can reject the Ho and conclude that there is no significant difference between male and female in terms of educational level. This is probably due to the perception that the male is the household leader and therefore sending the male child to school and institutions of higher learning is very important compared to the female child. However on the whole, Malaysian women's participation in education is improving and there are numerous signs of potential growth.

Table 4.9: Employed Persons By Educational Attainment Peninsular Malaysia

T-Test

Factors	*Mean*	*T-Value*	*P-Value*
Male	*533.040*	*3.919*	*.000*
Female	*287.451*		

Source: Labour Force Survey Report, 1993-2001

4.7 Contribution of the Three Major Sector to GDP

In the last ten years, the manufacturing sector has overtaken the agricultural sector in terms of its contribution to Gross Domestic Product (GDP). Based on Table 4.10, in Malaysia, by 1995 the tertiary sector (the service sector) was leading the other sectors by contributing 51.2 percent to GDP. The secondary sector (manufacturing and construction) contributed 31.6 percent, while the primary sector (agriculture, mining and quarrying) contributed only 18.5 percent. In 2000, the contribution of the secondary sector rose to 36.7 percent of the expense of the primary sector, which contributed only 15.3 percent to the GDP. The tertiary sector increased its contribution marginally to 52.4 percent.

Table 4.10: Percentage Distribution To GDP By Three Major Sectors, 1995 and 2000

Sector	*1995*	*2000*
Primary sector	*18.5*	*15*
Secondary sector	*31.6*	*36*
Tertiary sector	*51.2*	*52*

Source: http://www.apo-tokyo.org

This trend of an increasing tertiary (service) sector contribution to GDP is parallel to the growth pattern in developed industrial nation. Malaysia is almost following this healthy trend. Table 4.11 indicates that the employment pattern is also following a similar trend, whereby service sector employment has risen from 46.5 percent of total employment in 1995 to 48.7 percent in 2000.

Table 4.11: Percentage Of Total Employment In Three Major Sectors, 1995 and 2000

Sector	*1995*	*2000*
Primary sector	*19.2*	*15*
Secondary sector	*34.3*	*35*
Tertiary sector	*46.5*	*48*

Source: ***http://www.apo-tokyo.org***

4.8 Gender Composition by Industrial Sector

Women and men seem to do different kind of work in the labour market. According to Noor Rahamah Hj. Abu Bakar (2002), women are concentrated in certain type of industries and occupations only. Changes in the gender composition can be seen from the changes that take place in the type of industry, occupation category and in employment status.

Table 4.12: ***Percentage Distribution Of Economically Active Population By Gender And Industry Peninsular Malaysia, 1985-2000***

Industry	*1985*		*1990*		*1995*		*2000*	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Agriculture, forestry, Livestock and Fishing	*28.6*	*33.7*	*28.9*	*28.2*	*21.6*	*16.9*	*20.2*	*14.1*
Mining and Quarrying	*1.1*	*0.2*	*0.7*	*0.2*	*0.5*	*0.2*	*0.4*	*0.1*
Manufacturing	*13.3*	*18.9*	*15.2*	*24.3*	*20.2*	*29.4*	*25.6*	*27.3*
Electricity, Gas and Water	*0.8*	*0.5*	*0.2*	*0.1*	*0.9*	*0.3*	*0.7*	*0.1*
Construction	*10.7*	*1.2*	*8.7*	*0.7*	*11.3*	*1.5*	*12.1*	*1.5*
Wholesale, Retail Trade, Hotel and restaurants	*16.8*	*19.1*	*16.9*	*19.7*	*16.6*	*20.5*	*18.1*	*22.3*
Transport and communication	*5.9*	*1.3*	*5.9*	*1.5*	*6.2*	*1.7*	*6.1*	*1.7*
Finance, Insurance, Real Estate, Business Service	*3.8*	*3.9*	*4.0*	*3.9*	*4.3*	*5.6*	*4.5*	*5.7*
Community, Personal and Social Services	*19.3*	*21.2*	*18.8*	*21.4*	*18.4*	*24.0*	*17.2*	*27.1*

Source: Sixth and Eight Malaysian Plan, 1996 and 2001

Referring to Table 4.12, the industrial groupings that were comprised mostly of women in 1985 were agriculture, forestry, livestock and fishing (33.7 percent) followed by community, social and personal services (21.2 percent) and manufacturing (18.9 percent). Women comprised the majority of workers in 1985, but in 1995 their proportionate role in agriculture had declined to 16.9 percent. However, an interesting scenario is clearly noticeable in the manufacturing sector.

The percentage distribution of female workers is higher than the male workers, i.e. 20.2 percent and 29.4 percent. In 2000, the percentage distribution in this sector is almost the same among the male and female employees, recording 25.6 percent and 27.3 percent respectively. This is consistent with the expanding opportunities in the sector.

Female employment in the mining and quarrying sector recorded a stable figure of 0.2 percent in 1990 and 1995 and 0.1 percent in 2000. In the construction sector, there seem to be a rise from 0.7 percent in 1990 to 1.5 percent in 2000.

Another sector that recorded highest female employment is the services sector. In the wholesale and retail trade, hotel and restaurant sub-sector, female employment increased from 19.7 percent in 1990 to 22.3 percent in 2000. The female participation in the community, social and personal services are also on the rise.

4.9 Factors Behind the Changing Work Patterns or Supply Resources of Women Workers

With regard to the ANOVA test in Table 4.13, we can reject the Ho and conclude that there is no significant difference among female employed person in terms of industry breakdown. This could be further supported by Table 4.14, which records the mean for every classified industry.

Table 4.13 : Female Employed Person By Industry
Peninsular Malaysia, 1992-2000

ANOVA

Factors	*F-Value*	*P-Value*
Employed by Industry (Between Group)	*48.118*	*.000*

Source: Labour Force Survey Report, 1992-2000

4.9.1 Manufacturing Sector

Based on Table 4.14, the mean for female employment in the manufacturing sector seems to be the highest. This could be due to various factors such as the belief that women have nimble finger and are patient and docile, suited for the tedious and relatively unskilled work. Other than that, there is a large percentage of foreign ownership in these industries and many are in the export processing zones and these employers want unorganized labour, therefore they have preference for women. Relatively clean working environment, attractive wages and the convenient transport facilities provided by the employers also encourages women. This has encouraged thousands of females including those who previously remained outside the labour force were drawn into employment.

Another important factor behind the supply response of female labour force could be the enhancement in education. Education of young girls has changed their life horizons beyond farm work and household. (Lim, 1993). The changing attitude and expectations of the society at large as a result of government policy on universal education and

modernization also generally had created willingness among women to work. Other than that, the dual income families, which are becoming a norm in Malaysia could be an attributing factor.

The structural transformation from an agriculturally based economy to industrialization and the various process of industrialization could be one probable reason for the female employee concentration. Factory work still remain the most favoured job for many young women especially those from rural areas because these jobs were considered to be better than jobs like rubber tapping and working as domestic helpers.

Table 4.14 : Female Employed Person By Industry Peninsular Malaysia, 1992-2000

MEAN

Classified Industry	*Mean*
Mining and Quarrying	*3.913*
Electricity, Gas and water	*4.688*
Construction	*37.037*
Transport, Storage and communication	*42.338*
Finance Insurance, real estate and Business Service	*148.775*
Agriculture, Forestry, Livestock and Fishing	*307.550*
Wholesale, Retail trade, Hotel and Restaurant	*457.550*
Community, Social and personal Service	*548.125*
Manufacturing	*746.000*

Source: Labour Force Survey Report, 1992-2000

4.9.2 Service Sector

The decline in the employment of women in the agriculture sector was accompanied by an increase in the manufacturing and services sector. The service sector comprises of four main sub-sectors, i.e. electricity, transport, commerce or trade and finance.

The increasing trend of female labour force participation in this sector could be due to the structural transformation. It is a common trend that the higher the level of economic development, the greater the size of the service sector. The pattern of women's participation shows a direct correlation with structural changes in the economy.

Continued improvement in the level of education has changed the attitude of the society towards work in that they do not categorize work as "women's work" and "men's work" and this has resulted in the influx of women in the service sectors occupying positions such as engineer, architect and lawyer.

The existence of feminised occupation such as nurses, teachers, social workers and community service has resulted in the extension of women's nurturing role into public domain. The public sector has been a major source of employment for women:

The other contributing factor could be the property boom during this period of time, which led to the increase in the percentage of people employed in the construction sector. The growth in this sector needed to be supported by the financial service sector, which explains the increase in the finance, insurance, real estate and business service sector.

4.9.3 Agriculture Sector

The agricultural sector has contributed significantly to the growth and development of the Malaysian economy even though the Malaysian economy has undergone significant structural changes over the past several decades. For the first three decades since independence, agriculture was the main contributor to the national economy. This sector laid the foundation and has been the driving force behind the economic growth of the country. Agriculture was used to finance the development of the country, which progressively led to the transformation of the economy toward industrialization. The rapid industrialization during the last decade led to a decline in the sector's relative contribution to national income, employment and investment. This explains why agriculture, including forestry, livestock and fishing, occupied the fourth position with a mean of 307.550 (Table 4.14).

Other than the above-mentioned factor, in agriculture, women probably have poorer access than men to land, financial service and government-provided facilities under agricultural development programs.

The limited availability of suitable land and increasing cost of production arising from intersectoral competition for resources as well as the intense competition in the global market resulting from trade liberalisation had caused the contribution of agriculture sector to the GDP and employment rate to decline.

The new agricultural technology and mechanism has reduced the demand for women's labour which was previously responsible for labour intensive task.

The other contributing factor definitely involves the change in the attitude, increased educational level, conducive working condition in the secondary and tertiary sector and the urbanization.

4.10 Gender Composition by Occupational Group

Table 4.15 shows the percentage distribution of employed persons by gender and major occupational group. In Peninsular Malaysia, between 1990 and 2000 the percentage of male and female workers increased in all types of occupation except in agriculture.

Table 4.15: ***Percentage Of All Employed Persons By Gender And Major Occupational Group, Peninsular Malaysia, 1990,1995 and 2000***

Occupational group	*1990*		*1995*		*2000*	
	Male	***Female***	***Male***	***Female***	***Male***	***Female***
Professional, Technical related work	*6.4*	*9.4*	*8.4*	*12.7*	*8.9*	*13.5*
Administrative and Managerial work	*2.8*	*0.6*	*3.9*	*1.8*	*4.7*	*2.2*
Clerical and related Worker	*7.0*	*14.1*	*7.5*	*17.5*	*7.1*	*17.5*
Sales Workers	*11.4*	*11.4*	*10.5*	*11.6*	*11.1*	*12.1*
Service workers	*9.9*	*14.1*	*9.4*	*14.4*	*9.5*	*17.4*
Agriculture, Animal Husbandry and Forestry Workers	*29.4*	*28.1*	*21.9*	*16.6*	*20.4*	*14.8*
Production and related Workers	*33.1*	*22.3*	*38.3*	*25.4*	*38.4*	*22.6*

Source: **Labour Force Survey Report 2000 and Sixth Malaysian Plan, 1996.**

The female workers recorded a drastic increase in the clerical and related workers and service workers, from 14.1 percent to 17.5 percent and 14.1 percent to 17.4 percent respectively. Concurrently, women also increased their share in professional, technical and related workers from 9.4 percent in 1990 to 13.5 percent in 2000. Other notable increase include among the administrative and managerial workers, from 0.6 percent in 1990 to 2.2 percent in 2000 and in production and related workers, transport equipment operators and labourers, from 22.3 percent to 22.6 percent in the same time frame. A notable decline occurred in the proportion of female workers in the agricultural, animal husbandry and forestry workers, from 28.1 percent in 1990 to 14.8 percent in 2000.

Since the occupational group is based on broad occupational grouping, it does not reveal the detailed occupational differences between women and men. Although women seem to be concentrated in professional and technical related occupation, most of these women were teachers and nurses. The professional men were in a much wider range of occupation, along with teachers, substantial proportion were architects, engineers, scientists, accountants and lawyers.

4.11 Factors Behind the Changing Work Pattern

Table 4.16: Female Employed Person By Occupation Peninsular Malaysia, 1992-2000

ANOVA

Factors	*F-Value*	*P-Value*
Employed Person by Occupation (Between Group)	*340.236*	*.000*

Source: Labour Force Survey Report 1992- 2000

In reference to the ANOVA test above, we can reject the Ho and conclude there is no significant difference among female employed person in terms of occupational breakdown. Table 4.17 could further support this, which record the mean for every occupational group.

Table 4.17 : Female Employed Person By Occupation Peninsular Malaysia, 1992-2001

MEAN

Types Of Occupation	*Mean*
Administrative and Managerial Workers	*275.267*
Professional, Technical and Related Workers	*670.333*
Sales Workers	*741.644*
Clerical and Related Workers	*764.056*
Service Workers	*815.633*
Agriculture, Animal and Forestry	*948.822*
Production and Related Workers, Transport, Equipment occupation	*2263.722*

Source: Labour Force Survey Report 1992- 2001

The government's role towards industrialization and the opening of more factories has created unprecedented employment opportunities for women to be involved in paid employment. The wage employment has given women access to independent incomes and enabled them to contribute significantly to family incomes, helping enhance their status and value within family. Based on Table 4.17, the production and related workers, transport, equipment occupation recorded the highest mean (2263.722) between 1992 to 2001.

However, the increasing employment of women in the manufacturing sector has been confined to a limited range of export-oriented and labour intensive industries. The bulk of the jobs created by these enterprises required only the provision of on-the-job training ranging from a few weeks to a few months. The employers provided their own training programs for the workers in order to enable them to acquire new skills for the skilled and highly skilled occupation, which related to new technologies introduced. The government also began to cater for the new skill demand pattern, which is emerging in the country through the introduction of new training courses through the local training institution (colleges, University and vocational schools). The mentioned above factors to a large extent had contributed to the concentration of women workers in the production related works.

Despite the high concentration, industrial or production related workers are often exposed to poor and sometimes exploitative working conditions and occupational safety and health problems. These problems are related to production or assembly line work carried out standing for long periods or sitting on stools without back support. Other than that, tension-filled working conditions related to pressure to upgrade productivity or meet production quotas, exposure to toxic substance at work, etc.

The women participation in the agriculture, forestry and animal husbandry seemed to be the second highest (See Table 4.17). They still choose to work in the agricultural industry but the percentage of involvement has declined from 1991 to 2000. This implies that even though Malaysia moves towards becoming a highly globalised K-economy, the agricultural sector remains significant among women. This could be due to the

implementation of two National Agricultural Policies (NAP). Since 1984, the high priority in national development planning and the agriculture continues to be an important source of income and livelihood to a majority of rural female employees.

From Table 4.17, women are also highly concentrated as service workers, clerical and related workers and as sales workers. This is probably because of four main factors, i.e. the changing structure of the economy, the level of formal education received, the attitude of the society and the division of domestic domain as to who has to do the house or the domestic work.

At the administrative and managerial level and at the professional, technical and related workers, women recorded a mean of (275.2667) and (670.333) respectively. This clearly shows that despite the educational attainment and skilled training, women are still concentrated in lower level occupational category. This could be because of the gender stereotype, for example, the narrow perception of the society towards work influences the type of work women choose.

4.12 Gender Composition by Employment Status

The employment status is classified into four categories, defined by the statistics department, that is employer, employee, own account worker and unpaid family worker. Based on the previous discussions above, the economic development in Malaysia had resulted in an increase of both male and female in the employee category.

Table 4.18 : ***Percentage Distribution Of Working Population By Gender And Employment Status Peninsular Malaysia, 1995 and 2000***

Employment Status	*1995*		*2000*	
	Male	*Female*	*Male*	*Female*
Employer	3.8	0.7	4.3	0.8
Employee	73.8	77.1	74.4	79.2
Own Account Worker	20.6	12.7	19.3	11.1
Unpaid Family Worker	1.8	9.5	2.0	8.9

Source : ***Labour Force Survey Report 1995 and 2000***

As shown in table 4.18, the rate in employee category for male workers has increased rather slowly from 73.8 percent in 1995 to 74.4 percent in 2000. For female employees, the change is slightly higher from 77.1 percent in 1995 to 79.2 percent in 2000. The rate for own account worker for both males and females had declined. For the employer category, the rate has increased marginally for both the gender group.

In reference to the T-test in Table 4.19, the T value is 2.013 and because the ($P<0.05$) we reject the Ho and conclude that there is no significant difference between the male and female in terms of employment status in Peninsular Malaysia between the period of 1992 and 2000. The table also clearly shows the mean for female is almost half of that for the male. This goes on to explain that there is gender differences in the employment status regardless of the improved education, training, support from the Government, employer, etc., because she is a woman.

Table 4.19: Distribution of Working Population By Gender And Employment Status Peninsular Malaysia, 1995 and 2000

T-Test

Factor	*Mean*	*T-Value*	*P-Value*
Male	*1065.239*	*2.013*	*0.049*
Female	*574.911*		

Source : Labour Force Survey Report 1995 and 2000

4.13 Factors Behind the Changing Employment Status

With reference to the ANOVA test in Table 4.20, we can reject the Ho and conclude that there is no significant difference among female workers in terms of employment status. This could be further supported by Table 4.21, which records the mean for the female employment status.

Table 4.20: Female Working Population And Employment Status Peninsular Malaysia, 1995-2000

ANOVA

Factors	*F-Value*	*P-Value*
Employed Person by Employment Status (Between Group)	*647.269*	*.000*

Source : Labour Force Survey Report 1995 and 2000

With reference to table 4.21, women as paid worker or employee recorded the highest mean (1780.322). This is in line with the process of urbanization and industrialization, which has encouraged women to move to wage employment. The increasing standard of living and the normal dual income also have led women to the wage employment. The own account worker and unpaid worker recorded a mean of (273.456) and (226.586) respectively. According to the Labour Force Survey Report, the unpaid family workers were more in the rural areas than in urban areas. Women as employers recorded the lowest mean. This goes on to explain that in the gender framework within which we operate, education and one's own capabilities are evidently not enough.

Table 4.21: ***Female Working Population And Employment Status***

Peninsular Malaysia, 1995-2000

MEAN

Employment Status	***Mean***
Employee	*1780.322*
Own account Worker	*273.456*
Unpaid Worker	*226.586*
Employer	*19.278*

Source: ***Labour Force Survey Report 1995 and 2000***

4.14 The Gender Wage Gap

The gender wage gap is a worldwide observable phenomenon regardless of developed or developing countries. According to Gunderson (1994), unlike female labour participation,

the gender wage gap does not seem to have an obvious relationship to economic development but rather relates closely to government policy and cultural influences. The economic theory suggests that gender gap may be caused by three factors:-

1. Gender labour productivity
2. Gender occupation segregation
3. Internal occupational gender discrimination

In Malaysia, there are no rules, regulations or law that governs the determination of wage rate. Therefore in fixing a wage rate the employer will exercise their discretion as to how much a potential employee's wage should be. The employer would consider various factors when they exercise that discretion, which normally can be explained in terms of discrimination. For example, sexual stereotyping of man as the main breadwinner in the family and the underlying implication that women are less capable than men. Certain jobs are considered as traditional male domain, so the low wage might serve as a deterrent to stop women from taking over men's job. The gender differences in mandated fringe benefits for workers have increased differences in the cost of male and female labour such as the maternity benefits. Under the Employment Act, women are entitled to 60 days paid maternity leave in private sector, which is paid entirely by the employer regardless of length of tenure or size of the firm. In the public sector women are entitled to only 45 days. While maternity leave is a benefit to the society, the cost is borne solely by the employer and this can act as a disincentive towards hiring female. Some employers may

consider women more expensive to employ than men and apply a downward wage adjustment.

In the public sector, there is no discrimination against women in employment, either in terms of recruitment or remuneration. It is the government policy to pay male and female civil servants according to the same pay scale but however discrimination in the public sector takes a more disguised and subtle form. For example, the man is favoured for promotions, in terms of medical benefits and family allowance, husband of government-employed wives are not eligible for such benefits.

In the private sector, the Equal Pay for Equal Work Act 1969 articulates that female workers should be given equal opportunities at all levels of employment and be integrated into the mainstream of development. Despite the above National Labour Policy, wage differential by gender persisted. The employment structure in Malaysia is still intensely segregated by gender in that women predominates areas, which portray low skill, low wages and little opportunities for career development. The Occupational Wage Survey carried out in 1980 clearly indicates that 87 percent of females were in the lowest category with a corresponding figure of 29 percent for males.

There are limited published data on earnings and wage rates and, if available, they are not differentiated by sex. Instead, all the categories are lumped together, rendering them quite inadequate in a study which is female specific. However there was some information on wages collected by the Ministry of Human Resources, Department of Statistics, The Malaysian Plan and by some distinguished researchers. These datas are used in my study

and it prevailed that there exist gender differences in wages within the same industry and for the same occupation although this gap is seen to be narrowing. The study will analyse the gender differences in wages in industrial sector, plantation sector and services sector.

Table 4.22 presents wage differential by major industrial sectors. In the industrial sector, gender differences in wages exist in favour of males especially as one approaches the managerial level. In the Electronic Industry, women received monthly salary of 38 percent less than men in Supervisory level, 12.4 percent less in the Clerical level and 2.6 percent less as production operators. The similar trend prevails for other industries as well, with an exception in Chemical product industry where women were paid more than men as general workers. From the table, no women are employed at the managerial level. Unless a differential in educational attainment are clearly indicated, this phenomenon can be explained in terms of discrimination. However, based on Table 4.23, over the years the gap has narrowed for male and female supervisors but the opposite trend appears between male and female clerks.

Table 4.22: ***Wage Differential According To Sex 1980***

Occupation position	***Motor Vehicle and parts Industry***		***Chemical product industry***		***Plywood and Particle Board***		***Electronic Industry***		***Tobacco Products***		***Rubber Products***	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Manager	*3120.*	*-*	*2772*	*-*	*1882*	*-*	*3142*	*-*	*3004*	*-*	*-*	*-*
Supervisor	*821*	*-*	*828*	*578*	*516*	*292*	*779*	*484*	*1557*	*-*	*652*	*342*
Clerk	*555*	*412*	*611*	*218*	*386*	*300*	*427*	*374*	*732*	*529*	*311*	*241*

General Workers	*261*	*179*	*252*	*339*	*193*	*160*	-	-	*327*	*227*	*343*	*171*
Product Operators	-	-	*419*	*372*	-	-	*228*	*222*	-	-	-	-

Source: Occupational And Wage Survey 1980,Ministry of Labour and Manpower

Table 4.23 presents the average daily wage rates for directly employed workers in selected occupation in rubber, coconut, oil palm, tea and cocoa estate for 1988 and 1992. The table clearly indicates that generally, in plantation sectors women received lower wages for the same occupation or work carried out by men. In 1988, a female rubber tapper received an average daily wage, which was 38 percent less than their male counterpart. However, in 1992, these differences narrowed significantly to almost zero. The female weeders wage gap was almost 8 percent in 1988 and increased slightly to 10 percent in 1992. In the same year, a female factory worker's wages were 18 percent less than a male's wage. However this gap narrowed to almost 3 percent in 1992.

Table 4.23: Gender Gap in Average Monthly Salary for Occupations in Selected Manufacturing Industries, Malaysia, 1980 and 1992.

Occupation	***1980***	***1992***
Manager	*Na*	*21.5*
Clerk	*45.7*	*19.2*
Production Operator	*2.3*	*-18.7*

Source: Aminah Ahmad 1999, Women and Work, Table 11

Table 4.24 presents the average earnings in the Hotel industry by occupation and sex for the year 1992. From the table, it is observed that male workers earned more than female

workers in all occupation with the exception of Bartender, Waitress, Room Boy and Reservation clerk. The wage gap is very distinct for Assistant Manager and Chief Cook. The female earnings as a percentage of male earnings for Assistant Manager and Chief Cook occupation are 77.6 percent and 66,2 percent respectively. This simply means the female employees in these occupations earned 22 percent and 34 percent less than a male occupying the same position.

Table 4.24: Average Earning in the Hotel Industry by Occupation and Sex, 1992

Occupation	*Male*	*Female*	*Female/Male Ratio (%)*
Manager	*2503*	*2412*	*93.6*
Assistant manager	*1453*	*1128*	*77.6*
Account Clerk	*644*	*634*	*98.4*
Reservation Clerk	*496*	*584*	*117.7*
Hotel receptionist	*435*	*434*	*99.7*
Chief Cook	*1479*	*979*	*66.2*
Cook	*667*	*659*	*98.8*
Kitchen Assistant	*536*	*477*	*89*
Waitress	*503*	*577*	*114.7*
Bartender	*472*	*573*	*121.4*
Room Boy	*447*	*460*	*103*
Chambermaid	*581*	*446*	*76.8*
Laundry maid	*534*	*488*	*91.4*

Source: Aminah Ahmad, Women and Work, Table 12

Table 4.25 further supports the view that wage stratification is still persistent in Malaysia. The female Professional Accountants in 1977 earned half of the income of their male

counterpart. Differential between male and female Laboratory technician, Typist, Bookkeeping clerk as well as general foreman is high. The wage differential between genders also exists at the bottom level of the job hierarchy. The female labourer in 1977 and 1980 earned half of the income earned by the male workers. The female Carpenters and lorry attendant also earned half the income earned by the male counterparts, as these jobs are considered as male domains. In 1980 and 1983 it is seen that the wage gap is narrowing in certain occupation, for example Bookkeeping clerk, General Foreman, labourers and clerk. However it can be noted that the gender gap still exists.

***Table 4.25** : Average Earnings and Ratios Of Earnings Of Males and Females in Selected Occupations, In Peninsular Malaysia 1977, 1980, and 1983*

Occupation	*Male*	*Female*	*F/M ratio (%)*
1977			
Office Clerk	*322*	*359*	*111.49*
General Foreman	*498*	*278*	*55.82*
Labourer	*294*	*125*	*42.52*
Laboratory Technician	*421*	*299*	*71.02*
Professional Accountant	*1760*	*750*	*42.61*
Bookkeeping Clerk	*399*	*332*	*83.21*
Typist	*572*	*288*	*50.35*
Carpenter	*271*	*124*	*45.76*
Lorry attendant	*329*	*135*	*41.03*

1980			
General Chemist	*1619*	*1507*	*93.08*
Office Clerk	*455*	*374*	*82.20*
General Foreman	*596*	*379*	*63.59*
Labourer	*265*	*185*	*69.81*
Bookkeeping Clerk	*516*	*441*	*85.47*
1983			
General Chemist	*2645*	*1927*	*72.85*
Office Clerk	*722*	*684*	*94.87*
General Foreman	*1000*	*980*	*98.0*
Labourer	*365*	*355*	*97.0*
Bookkeeping Clerk	*710*	*710*	*100.0*

Source: Shamsubahriah Ku Ahmad 1994 Stratification and Occupational Gender Segmentation in the Labour Force

4.15 Summary

The study to the recent trend in the female labour force participation indicated that the female labour force participation rate still remains at 46.5 percent, well below the 81.5 percent participation rate of men. In order to meet the challenges emerging from the ongoing economic crisis and to prepare for future economic growth, efforts should be directed towards providing training to the expanding unskilled female labour force

absorbed mainly by the manufacturing sector. Initiative should be taken to equip women with the necessary skills and know-how, especially in technical fields to improve their employment prospects in an increasingly technological society.

In reference to the female labour force participation by age group, it is noted that as Malaysia develops and aspires to achieve a developed nation status, the employment pattern seems to have evolved from the Bimodal to Unimodal characteristics a new typical working women. The Unimodal work pattern needed to be studied very carefully to retain women of the age above 24 in the labour force.

Referring to the objectives that aimed to find out the sectoral and occupational concentration of women at the present time, it can be derived that despite the expanding educational and training opportunities in the country, which means more avenues are available for women to prepare themselves to the challenging environment, the occurrence of gender imbalances in employment is still notable. The existence of inequality in employment pattern in terms of sector, occupation, position and wages are still prevalent.

Women in the labour force tend to be concentrated in certain sector of the economy, which is highly different from men. Women are seen to be highly concentrated in sectors, such as clerical work, nursing, teaching and other services while men work mostly in industries and hold technical related jobs. The study on the gender distribution of occupation confirms the above trend. Males are found to be predominant in the higher job hierarchies, while majority of women are still at the lower level, which means women are

still trapped in jobs of low economic value. The findings also clearly indicated there exist gender differences in wages within the same industry and for the same occupation in the private sector.