THE CHANGING FEMALE LABOUR FORCE IN SINGAPORE

Cheng Siok-Hwa

Introduction

The data used in this study are taken from the two Population Censuses held in 1957 and 1970, the Sample Household Survey conducted in 1966, and the annual Labour Force Survey conducted in 1974 to 1976.[1] In all these sources the labour force approach was utilized to identify and collect the labour force statistics, thus providing comparability among all the series of data included in this paper. Briefly, in this approach all persons aged 10 and over were asked to state whether they were working and, if not, whether they were actively looking for work during the reference week. Those returned as working or as not working but looking for work during the reference week were included in the economically active population. Those who were working constituted the employed and those who were not working but looking for work, the unemployed. The former group included persons who were actually working as well as persons who had jobs but were absent from work during the reference week because of sickness, leave, strike, bad weather, etc. and would be returning to work in good time. The unemployed group comprised persons who had worked previously and were looking for a job as well as those who had never worked before and were looking for a job for the first time.

In attempting to evaluate the changes in the female labour force, it is important to bear in mind that the pool of manpower available in a country for the production of goods and services is determined by a variety of demographic, social and economic factors. The size of the total population and its composition with respect to sex and age set the maximum limits to the number of persons who can participate in economic activities. Other factors such as the race composition of the population, the degree of urbanization, the proportion of married women, and traditional attitudes towards working women and working children have a considerable influence on the proportion of the population that will, in practice, be represented in the labour force. Among the more important economic factors are the industrial pattern of the economy, the mode and organization of production, and income per head of population. By and large, demographic factors are the major determinants of the size of the male labour force since by convention and for economic reasons nearly all men are engaged in some form of gainful work from the time they reach adulthood until retirement age. On the other hand, socio-economic factors seem to have a more varying influence on the size of the female labour force.

---

[1]The reports containing these data are (a) S.C. Chua, *State of Singapore: Report on the Census of Population 1957,* Singapore: Government Press, 1964, (b) P. Arumainathan, *Singapore: Report on the Census of Population, 1970,* Vols. I and II, Singapore: Department of Statistics, 1973, (c) Ministry of National Development, *Singapore Sample Household Survey,* 1966 Singapore: Government Printer, 1967, and (d) Ministry of Labour, *Report on the Labour Force Survey of Singapore, 1974-1976,* Singapore: Government Printer, 1977.

General Trends

The female labour force in Singapore has been particularly affected by the double-digit economic growth rates registered in the late 1960's and early 1970's. Average annual GNP growth rates for the years 1966 to 1973 was 13 percent at constant 1968 prices. The recent world recession caused by the oil crisis did not adversely affect the economy of Singapore as much as those of some countries since modest growth rates of 6.3 percent in 1974 and 3.9 percent in 1975 were recorded. Economic recovery in late 1975 continued into 1976 which managed to register a growth rate of 6.8 percent. However, economic performance in recent years has only a minor effect on the female labour force which has by now undergone radical changes brought about by the high growth rates of the earlier years through mainly development of the manufacturing sector. It was this particular development strategy that provided great employment opportunities to women workers, enhanced in some ways by the introduction of national service for boys in 1968 which kept boys aged about 18 to 21 temporarily out of the labour market. In fact, just prior to the oil crisis the economy had experienced a critical shortage of labour which was solved partly by various measures encouraging more women to work and partly by utilizing immigrant labour from Peninsular Malaysia.

The above points should be borne in mind in interpreting the general trends in the female labour force presented in Table 1. The proportion of women in the labour force increased slowly during the nine years from 18.0 percent in 1957 to 23.1 percent in 1966, after which it increased somewhat faster to 25.8 percent in 1970. In the next four years the proportion of women increased even faster to reach the peak of 32.2 percent in 1974. The retrenchment of some women workers from mainly the textile and electronics factories during the worst recessionary year caused the proportion to dip to 30.2 percent in 1975. As the

Table 1

Distribution of total and female population aged 10 years and over by economic activity status, 1957-1976

Activity status	*1957*	*1966*	*1970*	*1974*	*1975*	*1976*
Economically active						
Both sexes	480,267	576,666	726,676	858,393	878,977	910,929
Females	86,470	133,174	187,453	276,094	263,772	286,433
% female	18.0	23.1	25.8	32.2	30.2	31.4
Economically inactive						
Both sexes	428,838	785,555	831,842	910,213	910,423	946,004
Females	362,617	540,315	573,903	605,173	627,715	633,888
%female	75.1	68.8	69.0	66.5	67.5	67.0

economy recovered the proportion went up again to 31.4 percent in 1976. The upward trend over the long-term is clear enough. In fact, between 1957 and 1976, the number of women in the labour force increased by 231 percent whereas the number of men increased by only 59 percent. At the same time, the proportion of women among the economically inactive population declined from 75.1 percent in 1957 to 68.8 percent in 1966, around which figure it hovered by a couple of percentage points in subsequent years.

Participation by Age

From Table 2 it can be seen that the female labour force is made up of a large proportion of young women. The younger age groups increased in importance over the years while at the same time the older age groups decreased proportionately. This is partly a reflection of the comparatively young population in Singapore.

Table 2

Distribution of female labour force by broad age group, 1957-1976

Age group	*1957*		*1966*		*1970*		*1976*	
	No.	%	No.	%	No.	%	No.	%
10—19	18,765	21.7	29,221	21.9	55,621	29.7	65,586	22.9
20—29	21,856	25.3	45,038	33.8	74,279	39.6	135,151	47.2
30—39	14,392	16.6	22,412	16.8	25,954	13.8	41,017	14.3
40—49	17,429	20.2	15,725	11.8	14,943	8.0	25,895	9.0
50 & over	14,028	16.2	20,778	15.6	16,656	8.9	18,784	6.6
Total	86,470	100.0	133,174	100.0	187,453	100.0	286,433	100.0

The most important age group is the 20-29 age group which accounted for about a quarter of the female labour force in 1957, and increased its proportion steadily and by 1976 accounted for almost half. The two age groups under the age of 30 accounted for an increasing proportion of the female labour force beginning with 47.0 percent in 1957, rising to 55.7 percent in 1966, 69.3 percent in 1970 and 70.1 percent in 1976. The youthfulness of the female labour force reflects the greater tendency to work or to look for work among the young females on the one hand and the greater availability of jobs for younger women on the other.

The trend towards increasing female participation in the labour force is again brought out in Table 3 which shows that in 1957 19.3 percent of all females aged 10 years and over were economically active. The proportion rose to 19.8 percent in 1966, 24.6 percent in 1970, and 31.1 percent in 1976.

On the whole, the age groups below the age of 40, except for the first age group of 10-14 years comprising mainly of schoolgirls, experienced increases in economic participation rates during the years under consideration. But the age groups over the age of 40 experienced a decline in participation rates, usually reaching a low point in 1970 before rising again in 1976, except for the age groups between 50 and 64 years which did not recover in 1976. The rise in participation rates is most marked in the 20-24 age group where the rates rose by almost three times from 1957 to 1976, that is, from 22.9 percent to 67.4 percent.

Table 3

Age-specific female activity rates, 1957-1976

Age group	*1957*	*1966*	*1970*	*1976*
10 — 14	5.2	1.9	2.8	1.8
15 — 19	23.4	25.5	43.0	42.2
20 — 24	22.9	40.9	53.6	67.4
25 — 29	16.5	25.9	30.8	48.2
30 — 34	17.3	21.0	22.7	32.9
35 — 39	20.8	19.2	19.3	29.1
40 — 44	26.3	21.9	17.8	26.6
45 — 49	30.1	20.4	17.5	20.6
50 — 54	28.8	24.4	17.5	17.3
55 — 59	24.7	23.2	16.2	12.1
60 — 64	17.1	18.5	13.4	11.1
65 — 69	10.5	11:7	9.8	12.0
70 — 74	4.7	6.4	5.7	5.7
75 & over	2.1	1.9	2.1	3.8
Total	19.3	19.8	24.6	31.1

In 1957, the most active age group was the 45-49 age group, whereas in the three later years under study the emphasis shifted to the 20-24 age group. In 1957 (see Figure 1) the age-specific activity rates show a bimodial structure with the first peak at the 15-19 age group, and the second and higher peak at the 45-49 age group, and a dip in between reaching its lowest point at the 25-29 age group. This bimodial characteristic became less obvious in 1966 when the 20-24 age group peak was higher than the later peak at the 50-54 age group. The 1970 graph shows a sharp rise to a high peak at the 20-24 age group and a sharp fall to the 30-34 age group after which the fall was more gradual; the later second peak, however, was no longer present. In 1976 the 20-24 age group rose to an even higher peak, followed by a sharp fall at first and then a gradual fall.

Several inferences may be drawn from a close examination of Table 3 and Figure 1. Firstly, there is a rapidly rising tendency for

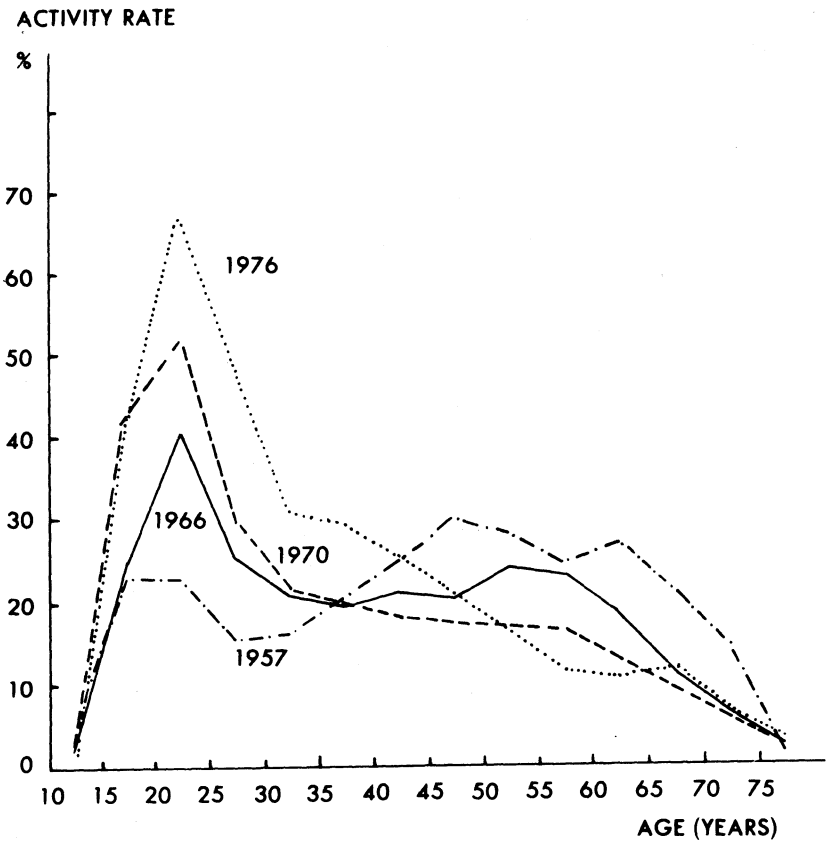

Figure 1: Age-specific female activity rates, 1957-1976 (Based on table 3)

young women to seek employment immediately after stopping formal education but significant numbers withdraw on getting married or on becoming mothers. Secondly, women of all age groups from 15 years to 34 years of age are increasingly engaged in work or looking for work. Thirdly, the tendency to return to work, or to start work, by older women became less evident from 1957 to 1966 and was no longer discernible in 1970 and in 1976. Perhaps this is due to a change in the economy from a more backward, trade-centered, less developed economy where age is of less consequence, to a more industrialized, higher-technology economy where the vast majority of job opportunities for girls lie in the relatively new textile and electronics factories which prefer young single girls who could be housed in dormitories and paid low wages. Younger women are also preferred in shops, offices and hotels so that job opportunities for older women, unless well-qualified and with relevant experience, are quite limited. Participation rates for older

women from about 40 to 49 years of age declined from 1957 to 1970 but rose in 1976. Women in their fifties had steadily declining participation rates, while the rates of still older women did not vary very much. The increase in overall participation rates for women in recent years is due therefore to the very rapid increase in activity rates of the younger women.

Participation by Marital Status

It is to be noted from Table 4 that there has always been more single than married women in the labour force. Single women in the labour force outnumbered married women by 12.4 percent in 1957, 52.7 percent in 1966 and 157.3 percent in 1970 when there were about 2½ times more single than married economically active women. The gap narrowed between 1970 and 1976 when the number of single women was about double that of married women in the labour force.

The proportion of single women to total female labour force rose

Table 4

Distribution of female labour force by marital status, 1957-1976

Marital status	*1957*	*1966*	*1970*	*1976*
			Number	
Single	37,465	69,076	125,570	183,756
Married	33,326	45,239	48,812	91,693
Widowed	14,875	15,749	11,029	9,392
Divorced	774	3,110	2,042	1,592
Total	86,470	133,174	187,453	286,433
			Percent	
Single	43.3	51.9	67.0	64.2
Married	38.5	34.0	26.0	32.0
Widowed	17.2	11.9	5.9	3.3
Divorced	0.9	2.3	1.1	0.6
Total	100.0	100.0	100.0	100.0
			Activity Rate	
Single	24.8	23.4	35.6	42.4
Married	14.0	15.3	14.7	21.6
Widowed	25.8	20.8	15.5	15.6
Divorced	46.5	49.5	47.6	53.6
Total	19.3	19.8	24.6	31.1

from 43.3 percent in 1957 to 51.9 percent in 1966 and 67.0 percent in 1970, after which it fell slightly to 64.2 percent. On the other hand, while economically active married women increased numerically, their proportion to the female labour force fell from 38.5 percent in 1957 to 34.0 percent in 1966 and 26.0 percent in 1970, but rose to 32.0 percent in 1976. The proportion of widows decreased steadily from 17.2 percent in 1957 to 3.3 percent in 1976 while the proportion of divorces remained insignificant throughout.

In all four years single women had higher economic participation rates than married women. The rates for single women, after a slight fall from 1957 to 1966, rose from 23.4 percent in 1966 to 42.4 percent in 1976 but that of married women fluctuated around 14 to 15 percent in the three earlier years before rising to 21.6 percent in 1976. The activity rates for widows decreased steadily. This may be linked to the declining female participation rates at older ages. The rates for divorces, a numerically insignificant group however, hovered around 50 percent.

Table 5 shows the distribution of the economically active females by broad age group and marital status. The data show that in 1966, 1970, and 1976, single women greatly outnumbered married women in the age groups below the age of 30, but in the age groups above the age of 30, married women predominated.

In 1966, 88.7 percent of the economically active single women were below the age of 30; in 1970, 91.5 percent; in 1976, 92.4 percent. Economically active married women below the age of 30 also increased in importance from 26.6 percent in 1966 to 29.5 percent in 1970 and 33.3 percent in 1976. Again the increasingly youthful nature of the female labour force is indicated.

Table 6 presents age-specific female activity rates by marital status for 1966, 1970 and 1976. Comparable figures for 1957 are not available. Economic activity rates for single women are much higher than those for married women for every age group for all three years. Married women are such less economically active because of a variety of reasons. First and foremost, it is generally taken for granted that a married woman's first duty is to her family and home. It is only when these can be taken care of by suitable substitutes or by alternative arrangements that she may consider working or continuing to work. She may not work if her husband does not want her to either because he feels that it reflects unfavourably on his own earning capacity or that it inconveniences him in one way or another. Generally speaking, husbands in Singapore, as in most Asian societies, are expected to do far less housework than in western countries. In rich and poor homes alike the usual practice is for women to be entirely responsible for the household chores either directly or indirectly through servants, while the men are seldom expected to take part in a normal day's housework. At the same time, men generally occupy a more dominant position in the family than is the case in western societies due to the greater prevalence of traditional values and practices. As a result, there is less

Table 5

Distribution of female labour force by broad age group and marital status, 1966-1976

Age group	Single		Married	
	Number	%	Number	%
			1966	
10 — 19	28,832	41.7	385	0.9
20 — 29	32,461	47.0	11,632	25.7
30 — 39	3,659	5.3	15,806	34.9
40 — 49	1,427	2.1	10,096	22.3
50 & over	2,697	3.9	7,320	16.2
Total	69,076	100.0	45,239	100.0
			1970	
10 — 19	55,073	43.9	522	1.1
20 — 29	59,792	47.6	13,888	18.7
30 — 39	6,113	4.9	17,612	36.1
40 — 49	1,570	1.3	9,923	20.3
50 & over	3,022	2.4	6,867	14.3
Total	125,570	100.0	48,812	100.0
			1976	
10 — 19	64,843	35.3	743	0.8
20 — 29	104,853	57.1	29,768	32.5
30 — 39	9,922	5.4	29,344	32.0
40 — 49	1,963	1.1	20,854	22.7
50 & over	2,175	1.2	10,984	12.0
Total	183,756	100.0	91,693	100.0

willingness on the part of the men to put up with the inconvenience of having working wives and with the need to be involved in some housework on a regular basis.

Women with small children cannot work unless they can get grandmothers, other relatives, servants, or workers in creches and nurseries to substitute for them. If the substitute proves to be unsatisfactory, the woman may have to stop working. Women with little formal education and no marketable skill often give up their jobs on marriage or upon the arrival of children as the pay they get does not compensate sufficiently for the drudgery and the extra effort required to continue working. Occasionally, at the other end of the social scale, wives of men prominent in the government, the professions or business, may not

work because they are required to take part in a variety of social functions and recreational activities involving their husbands. Besides, in such cases there is less need for the additional income.

Despite these obstacles to working, the economic participation rates of married women have increased quite markedly especially for the younger age groups. Between 1966 and 1976, all age groups below the age of 50 showed increases. At the earlier ages, the increases may be attributed to increasing participation by married women who have yet to have their first child. Other factors contributing to the rise in the participation rates are the higher levels of formal education attained by women in recent years, the trend towards a smaller family size, the increasing use of labour-saving appliances, the widespread use and availability of processed and pre-cooked food and the greater desire for the additional income to raise the family's standard of living.

Table 6

Female age-specific activity rates by marital status, 1966-1976

Age group	*Single*			*Married*		
	1966	*1970*	*1976*	*1966*	*1970*	*1976*
10 — 14	2.0	2.8	1.8	—	6.0	—
15 — 19	26.6	44.7	42.6	6.5	8.9	22.6
20 — 24	63.6	75.1	83.2	12.1	14.1	28.0
25 — 29	64.6	73.5	85.0	15.1	17.8	28.9
30 — 34	62.3	66.7	80.8	16.5	17.0	25.0
35 — 39	51.4	62.4	66.7	15.1	15.3	25.4
40 — 44	58.4	56.2	65.7	17.1	14.2	24.1
45 — 49	73.1	59.8	66.7	15.9	13.6	18.0
50 — 54	77.8	64.6	45.5	17.9	13.1	15.0
55 — 59	57.8	57.5	56.3	16.9	11.9	10.7
60 — 64	48.7	45.7	64.7	12.7	9.8	8.4
65 — 69	28.7	30.3	39.9	8.6	7.7	8.5
70 — 74	23.1	21.1	14.3	7.7	4.5	8.3
75 & over	14.4	11.2	36.4	4.8	2.9	1.0
Total	23.4	35.6	42.4	15.3	14.7	22.6

Married women in advanced countries tend to join the labour force after finishing school but to leave it in droves following marriage or the arrival of the first child. Large numbers of these women then rejoin the labour force or enter it for the first time after a period of about 10 to 15 years when the children have become quite independent.[2] This

[2]Evelyne Sullerot, *Women, Society and Change*, London: World University Library, 1971, pp. 91-97.

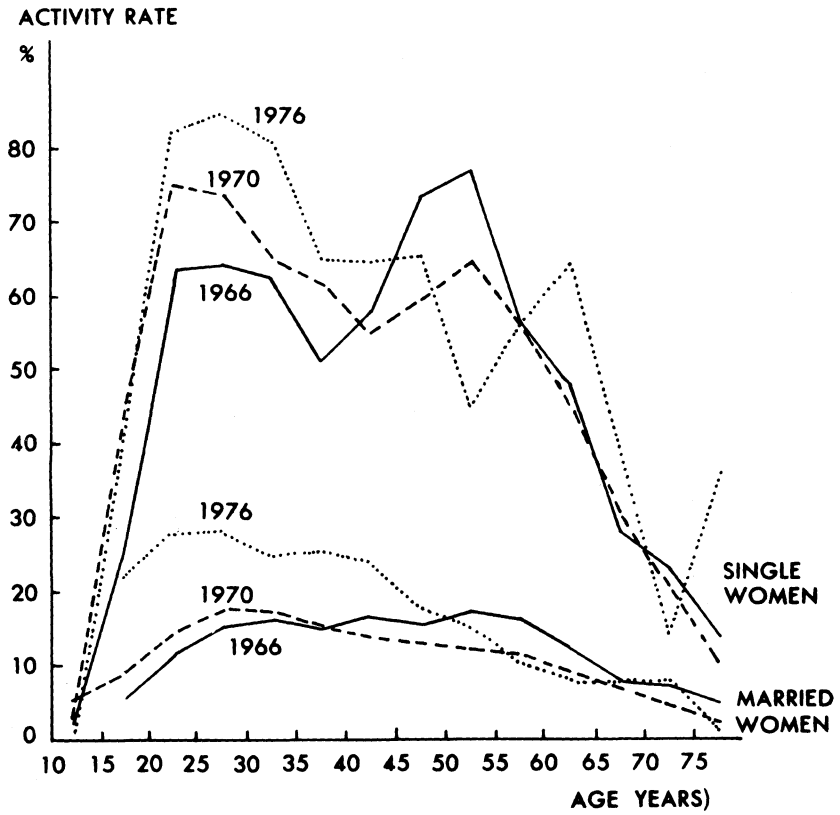

Figure 2: Age-specific female activity rates by marital status, 1966, 1970, and 1976 (Based on table 6)

behavioural pattern is not noticeable among married women in Singapore. Although there is a trend towards greater participation at the younger ages before the arrival of the first and subsequent children, there is no marked withdrawal from the labour force, only a gradual withdrawal, as can be seen for 1970 and 1976 but not for 1966. There is no re-entry in large numbers either. In Singapore, women often do not have to give up their jobs on the arrival of children because of the availability of domestic servants. Though domestic service is increasingly disliked and avoided as a means of earning a living by the least educated and qualified younger women who still can get jobs in factories, offices and shops, this is not the case with the poorly qualified older women who, however, must still resort to domestic service to earn a living. Besides full-time domestic help, there is also a big pool of part-time help. Grandmothers and other relatives, government-run creches and privately-run day-time and full-time care centres all play a part in enabling mothers to continue working. As a result married women in Singapore do not leave the labour force as soon as the first baby is expected as a matter of course, but leave it at various

points in the life of the family when substitutes prove to be either unsatisfactory or not available.

These changes in the pattern of family life may occur as a result of the arrival of the first baby, or an additional baby, illness in the family, departure of substitutes, and inability to arrive at a satisfactory re-arrangement, or the need to supervise school-age children more closely with regard to school work and leisure activities. Other reasons for married women quitting the labour force may lie outside the family such as dissatisfaction with working life. The gradual decline in participation rates among married women in Singapore therefore reflects a greater variety of reasons leading to withdrawal from the labour force instead of one predominant factor—the arrival of the first baby—which leads to a sharp fall in participation rates in countries where substitutes are far less available.

The lack of re-entry into the labour force in large numbers in later years may be associated with the paucity of jobs for older women and for women who have stopped working for some time. There are no retraining schemes for older women either by the government or by the private sector. Part-time jobs with hours arranged in such a way as to fit in with domestic and family duties are hard to come by. Most of the new job opportunities in factories, shops, hotels and offices are meant for young girls who sometimes live in dormitories and work long hours or in shifts. Older women are at a disadvantage when competing with younger women for most of the available jobs. Earlier retirement age for women in certain occupations, such as retirement at age 45 for some categories of teachers, also militate against re-entry into the labour force.

Another reason for the lack of re-entry into the labour force at older ages is related to the observation that the age at which children leave the parental home is much higher in Singapore than in western countries. Adult children normally live with their parents, contributing fairly substantially to household expenses on becoming employed, and generally do not leave till marriage or the arrival of their children when they will then set up their own nuclear families. There is thus a greater need for the mother to stay home and keep house, while, at the same time, since the children contribute to the family income, there is less need for the mother to seek outside employment.

Single women, free from the responsibilities faced by married women, are more economically active. But the peculiarity of the economic activity rates of single women as revealed in Figure 2 is the bimodial graphs for all three years. For 1966, the dip in the activity rates occurred in the 35-39 age group; for 1970, 40-44 age group; and for 1976, 50-54 age group. The main reason for the dip, I think, is the severe disruption in education and training caused by the Japanese Occupation. This inference is drawn because the dip is experienced by approximately the same group of women who were born in the late 1920's and were of secondary-school age during the 1942-45 Japanese Occupation period. Due to the disruption caused by the Occupation, many women were deprived of a secondary or post secondary

education and therefore were unable or, found it very difficult to obtain higher-level employment. The age groups below and above this age cohort were also affected but not to the same extent. But this leads to the question of why married women were not similarly affected. There was a corresponding but very slight dip in the participation rates of married women in 1966 but not in 1970 and 1976. Perhaps this is because the participation rates were so low for married women especially of the older age groups in 1970 and 1976 that the effect of the Occupation was no longer discernible.

The second peak may also be due to the re-entry of some older single women who joined the labour force after the death of a parent or parents either through the necessity to earn a living or through release from nursing and housekeeping duties.

Participation by Literacy

Table 7 presents data on female economic participation rates in relation to literacy for the population census years 1957 and 1970. Participation rates did not seem to be much influenced by literacy one way or the other in 1957 since literate and illiterate women had the very similar activity rates of 19.0 and 19.5 percent, respectively. In fact, illiterate women had a slight edge over literate ones. But in 1970, after a period of rapid economic growth, literate women showed a much higher level of economic participation. Between 1957 and 1970, the participation rates for illiterate women declined from 19.5 percent to 15.6 percent while rates for literate women rose from 19.0 to 30.6 percent. However, due to the steady rise in school enrolment for girls in the last few decades, younger women tend to be more literate than older ones. The higher activity rates for literate women are therefore also an indication of the higher activity rates of younger women.

Table 7

Females aged 10 years & over and female labour force by literacy, 1957 and 1970

Literacy	*Female Population*		*Female labour force*		*Activity rates*	
	1957	*1970*	*1957*	*1970*	*1957*	*1970*
Total	449,087	761,356	86,470	187,453	19.3	24.6
Not literate	296,271	304,143	57,797	47,560	19.5	15.6
Literate	150,892	457,213	28,625	139,893	19.0	30.6
Literate in English	62,265	216,994	14,630	75,756	23.5	34.9
Literate in languages other than English	88,627	240,219	13,995	64,139	15.8	26.7

The rates for females literate in English were higher in both years than the rates for females in languages other than English. The most economically active group were the females literate in English. This reflects the greater job opportunities available to this group.

Table 8 illustates the relationship between economic activity status and highest qualification attained. Between 1966 and 1977, there was a change in the composition of the female labour force in terms of educational qualifications following a rise in educational attainments of the entire female population aged 10 years and over. The first two categories of 'never attended school' and 'no qualifications' together accounted for 71.8 percent in 1966 but fell to 50.1 percent in 1976.

Table 8

Females aged 10 years & over and female labour force by highest qualification attained, 1966 and 1976

Highest qualification attained	*Female population*		*Female labour force*		*Activity rates*
	No.	%	*No.*	%	
		1966			
Never attended school	269,928	40.1	48,568	36.5	18.0
No qualifications	213,627	31.7	29,214	21.9	9.9
Primary and post primary	145,079	21.5	27,165	20.4	18.7
Secondary and post secondary	37,098	5.5	21,664	16.3	58.4
Tertiary	7,755	1.2	6,561	4.9	84.6
Qualifications not elsewhere classified	2	0.0	2	0.0	—
Total	673,487	100.0	133,174	100.0	19.8
		1976			
Never attended school	288,874	31.4	52,055	18.2	18.0
No qualifications	171,711	18.7	27,487	9.6	16.0
Primary and post primary	262,343	28.5	73,916	25.8	28.2
Secondary and post secondary	185,932	20.2	125,547	43.8	67.5
Tertiary	10,347	1.1	7,110	2.5	68.7
Qualifications not elsewhere classified	1,114	0.1	318	0.1	—
Total	920,321	100.0	286,433	100.0	31.1

Among the economically active females, these two categories registered an even greater fall from 58.4 percent in 1966 to 27.8 percent in 1976. The economically active females with the next two categories of 'primary and post primary' and 'secondary and post secondary' qualifications rose from 36.7 percent in 1966 to 69.6 percent in 1976. The only category which went against the trend was the group with tertiary qualifications which declined from 4.9 percent in 1966 to 2.5 percent in 1976 among the economically active females. One major cause of this decline is the increasing difficulty of getting domestic servants and baby *amahs* (servants specializing in the care of babies and small children) due to the diminishing supply as younger women tend to enter domestic service only as a last resort. Another contributing factor is the declining popularity of the extended family system in which grandparents help in looking after the children and keeping house.[3]

As in other countries, women in Singapore tend to be more economically active if they have undergone some formal education, with the exception that females with 'no qualifications' were less active than females who had 'never attended school'. The latter came from the poorest homes and many worked out of sheer economic necessity. Table 8 shows clearly that the activity rates rose with each higher level of qualification attained for both 1966 and 1976 until the highest rate of 84.6 percent was reached in 1966 and 68.7 percent in 1976 for those who had obtained tertiary qualifications.

Participation by Race

Table 9 shows the distribution of the female labour force by race. while the Chinese females have the highest economic participation rates in all the four years under consideration, Malays have shown the greatest increase, followed closely by the Indians during the period 1957 to 1976. In that period economically active Chinese females increased by 198 percent; Malay females by 869 percent; Indian females by 853 percent. These high percentage increases show the remarkable strides made by Malay and Indian in becoming economically active particularly between 1970 and 1976.

The lower rates of economic participation by Malay and Indian women compared with Chinese women may be attributed to the more conservative attitudes and practices of the two communities especially with regard to what they consider are the proper roles and functions of women. For all three major communities in Singapore tradition dictates that a woman's place is in the home except in circumstances of dire economic necessity. This traditional attitude is reinforced by religious injunctions and practices to a great extent among the Malays and Indians, but religion is less effective in upholding this aspect of

[3]The percentage of persons living in extended households (i.e. with more than one family nucleus) fell from 22.1 percent in 1957 to 20.6 percent in 1970, while, at the same time, the percentage of persons living in nuclear households rose from 70.0 to 75.0 percent. *Report on the Census of Population 1970, Singapore*, Singapore: Department of Statistics, 1973, Vol. 1, p. 207.

tradition among the Chinese. As a result Chinese women are on the whole much less tradition-bound and more open to the forces of industrialization and modernization.

Table 9

Distribution of female labour force by race 1957-1976

Race	*1957*	*1966*	*1970*	*1976*
		Number		
Chinese	78,103	122,195	162,658	232,840
Malays	3,629	4,949	14,941	35,181
Indians	1,542	2,731	6,465	14,698
Others	3,196	3,305	3,389	3,714
Total	86,470	133,180	187,453	286,433
		Percent female		
Chinese	22.6	26.4	28.7	32.5
Malays	6.3	9.4	17.1	29.2
Indians	2.4	6.1	11.0	25.2
Others	23.1	20.9	23.0	23.3
Total	18.0	23.1	25.8	31.4
		Activity rate		
Chinese	21.8	22.2	20.8	32.4
Malays	6.3	6.8	9.8	26.6
Indians	7.1	8.1	11.2	28.6
Others	27.2	19.3	18.4	21.9
Total	19.3	19.8	18.5	31.1

The much lower activity rates of Malay and Indian women in the earlier years are due also to the greater difficulty encountered by these women in seeking employment compared with the Chinese who form the majority ethnic group in Singapore[4] and who dominate locally-owned or locally-managed enterprises, in particular, the smaller business establishments. It is only in recent years that job opportunities in the larger establishments, which tend to have a multi-racial labour force whether foreign-owned or locally-owned, have multiplied and in the process increased the access to employment for all ethnic groups.

[4]The racial composition of Singapore's 2.3 million people is 76 percent Chinese, 15 percent Malay and 7 percent Indian.

Industrial Pattern

Table 10 shows the distribution of employed females by major industries. In all three years more than 60 percent of employed females were in two sectors of industry, viz. manufacturing and community, social and personal services. But there was a marked shift from the latter which accounted for 47.0 percent in 1957 and 38.5 percent in 1970 to manufacturing which accounted for 35.0 percent in 1976. In 1976, community, social and personal services took second place after dropping to 25.6 percent and commerce third with 22.6 percent. This reflects the rapid industrialization of Singapore between 1957 and 1976 during which women, especially young girls, were employed in the proliferating factories manufacturing 'fabricated metal products, machinery and equipment,' (mainly electronics components) which accounted for 46.2 percent of all females employed in manufacturing in 1976 and in 'textile, wearing apparel and leather industries' which accounted for 27.0 percent. The greatest increase was therefore registered by manufacturing. Smaller increases were made in 'commerce,' 'finance, insurance and business services' and 'transport and communications.' Declines in proportion but not in number were recorded in 'community, social and personal services' and 'construction.' 'Agriculture, forestry and fishing' declined proportionately as well as absolutely.

Table 10

Female labour force by industry, 1957-1976

Industry	*1957*		*1970*		*1976*	
	Number	%	*Number*	%	*Number*	%
Agriculture, forestry and fishing	9,819	11.7	4,796	3.1	4,723	1.7
Mining and quarrying	165	0.2	205	0.1	478	0.2
Manufacturing	16,301	19.4	48,121	31.3	94,611	35.0
Electricity, gas and water	77	—	533	0.4	743	0.3
Construction	1,761	2.1	2,817	1.8	3,874	1.4
Commerce	13,246	15.7	28,986	18.9	60,969	22.6
Transport and communications	1,112	1.3	3,943	2.6	15,123	5.6
Finance, insurance and business services	2,013	2.4	5,305	3.5	20,588	7.6
Community, social and personal services	39,551	47.0	58,843	38.5	68,610	25.4
Activities not adequately defined	165	0.2	63	—	371	0.1
Total	84,210	100.0	153,612	100.0	270,090	100.0

Occupational Pattern

Table 11 shows the distribution of female workers among the major occupational groups in 1957 and 1976. In 1957, the category with the largest number of female workers were 'service workers' but in 1976 the emphasis shifted to 'production and related workers, transport equipment operators and labourers' of which 33.2 percent were electrical fitters and related electrical and electronics workers, and 21.2 percent were 'tailors, dressmakers, sewers, upholsterers and related workers.' The predominant position of this group in 1976 is related to the importance of the manufacturing sector. In 1957, this group was second in importance.

Table 11

Female labour force by major occupational group, 1957 and 1976

Occupation	*1957*			*1976*		
	Number	*%*	*Percent female*	*Number*	*%*	*Percent female*
Professional, technical and related workers	8,328	9.9	34.5	32,952	12.2	37.9
Administrative and managerial workers	259	0.3	3.3	1,910	0.7	6.9
Clerical and related workers	5,616	6.7	10.3	73,014	27.0	53.1
Sales workers	8,630	10.2	10.0	32,581	12.1	23.9
Service workers	30,112	35.7	42.3	41,920	15.5	45.2
Agricultural and animal husbandry workers and fishermen	10,057	11.9	27.1	5,094	1.9	21.2
Production and related workers, transport equipment operators and labourers	21,098	25.1	11.6	81,823	30.3	26.3
Workers not classified by occupation	110	0.2	1.2	796	0.3	1.5
Total	84,210	100.0	17.8	270,090	100.0	31.0

In 1976, the second in importance was the 'clerical and related workers' group which accounted for 27.0 percent of all female workers. Of this group 22.6 percent were 'stenographers, typists and card-and-tape-punching machine operators' and 21.3 percent were 'bookkeepers, financial records clerks, cashiers and related workers.' This group accounted for only 6.7 percent of female workers in 1957.

Men outnumbered women in all occupational groups in 1957 but in 1976, there was one occupational group where women outnumbered

men, i.e., 'clerical and related workers.' This group includes the telephone and telegraph operators, stenographers, typists and teletypists, machine operators and receptionists who hold jobs generally regarded as "women's work."

In 1957, the highest proportion of female to total workers was accounted for by 'service workers' followed by 'professional, technical and related workers' but the highest proportion of female to total workers in 1976 was accounted for by 'clerical and related workes' followed by 'service workers'. The female proportion increased for all occupational groups except that of 'agricultural and animal husbandry workers and fishermen.' The greatest increase in the proportion of women between 1957 and 1976 occurred in the 'clerical and related workers' group.

Table 12 gives the occupational sub-groups with more than 2,000 female workers each in 1957, and sub-groups with more than 10,000 female workers each in 1976. Together the enumerated sub-groups accounted for 65.8 percent of all female workers in 1957 and 49.9 percent in 1976. Though women continued to converge on jobs traditionally regarded as "women's work", this convergence was becoming less marked. In 1957, the largest group comprised of workers in 'domestic service, hospitals, hotels, clubs, restaurants, etc'., which accounted for 30.3 percent of all female workers. But if only 'amahs, cooks and chefs' are considered, the number is 23,172 which is 27.5 percent of all female workers. This is still a significantly high figure.

As in other countries, until recently, the majority of women who were obliged to work in order to make a living, had to work as domestic servants. Other job opportunities were few especially since Singapore does not have a large agricultural sector. Most of the women were not well educated and were untrained. But with industrialization and modernization job opportunities in other occupations became increasingly available, in particular, in the industrial and commercial sectors. At the same time, literacy rates for women rose as did the level of educational attainment. By the late 1960's, about half of the pupils in primary and secondary schools were girls while about a quarter of the students in the institutions of tertiary education (the University of Singapore, Nanyang University, the Singapore Polytechnic and the Teacher's Training College) were girls. In 1976 the proportion of girls to the total student population in the four institutions and Ngee Ann Technical College rose to one-third.[5]

It is not surprising, therefore, that the number of working women in domestic service did not rise despite a trebling of the female labour force from 1957 to 1976. In 1957, female 'amahs, cooks and chefs' accounted for 27.5 percent of the female labour force but in 1976 'domestic service workers' accounted for only 6.0 percent. These two categories are not strictly comparable, however. Chefs are not included

[5]Cheng Siok-Hwa, "Singapore women: legal status, educational attainment, and employment patterns," *Asian Survey*, Vol. XVII, No. 4, April 1977, p. 363.

Table 12

Employed females by selected occupations (2 digits) in which there were more than 2,000 female workers in 1957 and more than 10,000 female workers in 1976

Selected occupations (2 digits)	*Number*	*% of total employed*	*Percent female*
		1957	
1 Workers in domestic service, hospitals, hotels, clubs, restaurants, etc.	25,545	30.3	54.7
2 Owners and other workers on small-holdings and market gardens	8,584	10.2	35.3
3 Tailors, dressmakers and related workers	4,882	5.8	46.3
4 Teachers	4,525	5.4	46.8
5 Hawkers and street vendors	4,040	4.8	14.0
6 Salesmen and shop assistants	2,953	3.5	9.8
7 Stenographers, personal secretaries and typists	2,458	2.9	52.9
8 Nurses and midwives	2,402	2.9	76.4
Total	55,389	65.8	35.0
		1976	
1 Salesmen, shop assistants and related workers	26,176	10.4	30.9
2 Electrical fitters and related electrical and electronics workers	27,168	10.1	64.5
3 Tailors, dressmakers, sewers, upholsterers and related workers	17,405	6.4	77.9
4 Stenographers, typists and card-and-tape-punching machine operators	16,503	6.1	91.5
5 Domestic service workers	16,237	6.0	97.8
6 Bookkeepers, financial records clerks, cashiers and related workers	15,547	5.8	58.8
7 Teachers	13,743	5.1	57.7
Total	134,779	49.9	56.0

Note: The classification systems used for the two years are slightly different.

in 'domestic service workers' but the number of female chefs is very small. 'Domestic service workers' as presently defined was first used in the 1970 Census which enumerated 22,968 such persons of whom 21,826 were females. Between 1970 and 1976 the number declined from 21,826 to 16,237 females or from 14.2 percent of the female labour force to 6.0 percent. The decrease is even more marked among the men who numbered 1,142 in 1970, and only 371 in 1976.

The next largest number of female workers in 1957 were 'owners and other workers on smallholdings and market gardens.' With industrialization and urbanization, this category has lost much of its importance.

In 1976, the largest number was accounted for by 'salesmen, shop assistants and related workers' and a close second by 'electrical fitters and related electrical and electronics workers' both sub-groups reflecting the importance of the commercial and industrial sectors in female employment in recent times.

In 1957, females outnumbered males in only 3 out of the 8 selected occupational sub-groups with more than 2,000 females workers each. In 1976, females outnumbered males in all except one of the 7 occupations with more than 10,000 female workers each. Though 65.8 percent of the total female labour force was working in the listed occupations, women accounted for only 35.0 percent of the work force in these occupations in 1957. In 1976, about half of the women were found in occupations where women accounted for 56.0 percent of the work force.

In 1976, most of the occupations which attracted large numbers of women were predominantly filled with women. In other words, men were not attracted to these occupations to the same extent. Of particular interest as "female ghettos" are 'domestic service workers' in which females accounted for 97.8 percent and 'stenographers, typists and card-and-tape-punching machine operators' in which females accounted for 91.5 percent. It can be seen from the Table that women converged on jobs which did not attract men to the same extent. The implications are bound to be significant for it has been observed in other countries that wages and salaries in female-intensive occupations tend to be depressed in relation to the general wage structure.[6]

Unemployment

Unemployment for females rose from 1957 to 1970 but dropped in 1976. It can be seen from Table 13 that female unemployment rates were higher than male unemployment rates for all four years under consideration. The female proportion of the unemployed rose from 21.5 percent in 1957 to over 40 percent for the three later years. These percentages were higher than the female proportion of the labour force (see Table 1), for example, in 1976, females accounted for 31.4 percent of the labour force but comprised 40.4 percent of the unemployed. The higher unemployment rates for women are particularly noticeable for the 'never previously worked' category of females who accounted for an increasing proportion of all unemployed persons in this category. This can be interpreted to mean that there was greater difficulty in getting

[6]It is interesting to note that doctors in the Soviet Union, where about three-quarters of the medical practitioners are women, receive mediocre pay and are accorded a lower status in society than doctors in western countries where the vast majority of medical practitioners are women and where they enjoy considerable pay and prestige. Evelyne Sullerot, *Women, Society and Change*, London: World University Library, 1971, pp. 151-154.

jobs by female entrants into the labour market than males seeking jobs for the first time. Except for 1957, there were more unemployed female new entrants into the labour market than unemployed females who had previous working experience. Women with no previous working experience therefore faced the most difficulty in getting employment.

Table 13

Unemployment by sex and by 'previously worked' and 'never previously worked' groups, 1957-1976

Year	Unemployment rates		Unemployed females		Previously worked		Never previously worked	
	Female	Male	Number	% female	Number	% female	Number	% female
1957	6.2	5.0	5,392	21.5	3,132	18.8	2,260	27.1
1966	15.8	7.1	21,096	40.1	6,118	25.6	14,978	52.0
1970	18.1	7.8	33,841	44.7	23,520	29.7	23,920	56.5
1976	5.7	3.9	16,343	40.4	7,429	28.5	8,915	61.8

Income

In relation to wages there is no law which stipulates equal pay for work of equal value without sex discrimination. But since 1962, women employed in the civil service have enjoyed equal pay as their male counterparts doing similar jobs. This is also true of statutory bodies, institutions of higher learning and some of the bigger firms. But, on the whole, in the private sector, women do not get equal pay.

Table 14 shows the distribution of male and female workers by gross monthly income for 1974, 1975 and 1976. Comparable data for earlier years are not available. Table 14 shows that women earn very much less than men. With regard to percentage distribution of women among the different income categories, the largest proportion of male workers earned $200-399 per month but the largest proportion of female workers earned the lowest category of less than $200 per month. For this lowest category there is a noticeable percentage decline for both males and females with the latter registering a more significant drop from 60.8 percent in 1974 to 43.2 percent in 1976. Despite this drop it is still clear that women earned far lower incomes compared with men.

The last column reveals that almost half of all workers in the lowest category of incomes were females—47.5 percent in 1974 and 1975 and 49.1 percent in 1976. The proportion of female workers earning $200-399 per month rose from 23.0 percent in 1974 to 23.9 percent in 1975 and 28.6 percent in 1976. Increases were also made in the female proportion of workers earning incomes of $800-999 per month and incomes of $1,000-1,499 per month. For the highest category of $1,500 and over the female proportion rose from 6.4 percent in 1974 to 7.4 percent in 1975 but fell to 6.0 percent in 1976. For this highest category of

incomes, therefore, 94 percent of the workers in 1976 were men and only 6 percent were women.

Table 14

Employed persons by gross monthly income and sex, 1974-76

Gross monthly income (in U.S. $)	Male		Female		Percent female
	Number	%	Number	%	
		1974			
Under 200	175,224	31.2	159,343	60.8	47.6
200 — 399	234,959	41.8	70,226	26.8	23.0
400 — 599	78,045	13.9	20,252	7.7	20.6
600 — 799	27,245	4.8	6,799	2.6	20.0
800 — 999	13,647	2.4	2,283	0.9	10.4
1,000 — 1,499	20,932	3.7	2,428	0.9	10.4
1,500 & over	12,141	2.2	826	0.3	6.4
Total	526,193	100.0	262,156	100.0	31.8
		1975			
Under 200	138,109	23.5	125,283	50.7	47.6
200 — 399	270,915	46.2	85,073	34.4	23.9
400 — 599	90,215	15.4	19,699	8.0	17.9
600 — 799	29,711	5.1	8,659	3.5	22.6
800 — 999	25,099	2.6	3,518	1.4	18.9
1,000 — 1,499	22,242	3.8	3,139	1.3	12.4
1,500 & over	20,240	3.5	1,624	0.7	7.4
Total	586,531	100.0	246,995	100.0	29.6
		1976			
Under 200	121,142	20.2	116,791	43.2	49.1
200 — 399	261,706	43.6	104,852	38.8	28.6
400 — 599	113,289	18.9	24,886	9.2	18.0
600 — 799	39,903	6.6	10,984	4.1	21.6
800 — 999	18,254	3.0	5,784	2.1	24.1
1,000 — 1,499	24,462	4.1	5,412	2.0	18.1
1,500 & over	21,597	3.6	1,380	0.5	6.0
Total	600,353	100.0	270,090	100.0	31.0

Over the three years, women seemed to be worse off since the female proportion of the lowest category had increased while the female proportion of the highest category had declined. But the female proportion of all income categories over $800 per month in fact rose from 10.6 percent in 1974 to 12.6 percent in 1975 and 16.4 percent in 1976, and the female proportion of all income categories over $600 per

month rose from 14.3 percent in 1974 to 16.3 percent in 1975 and 18.4 percent in 1976. In comparison with male workers, therefore, female workers are very slowly narrowing the difference.[7] There is still a very long way to go, however.

The main reasons for the lower incomes earned by women as a group compared with men are: lower levels of education and training attained; fewer years of working experience; lower pay scales compared with male counterparts doing similar work; very low wages in certain jobs with exclusively or predominantly women workers such as domestic service and nursing; shorter working hours;[8] and obstacles women faced at point of entry into certain jobs, promotions while on the job, and opportunities for training and acquiring additional qualifications and experience.

Conclusion

Female labour force participation in Singapore is moving towards the patterns prevalent in the more industrially advanced countries. This is to be expected with increasing industrialization promoted in no small way by a government which places economic development very high on its list of priorities. There is every likelihood of further increases in the overall female participation rates as it has yet to reach the levels attained by some of the more advanced countries. Calculated as a percentage of the total population (not of the population ten years and above, as has been done in this paper) female economic activity rates, as given by the *ILO Yearbook of Labour Statistics, 1975,* are: Singapore—25.1 percent (1974); Hong Kong—28.8 percent (1971); the United States—33.1 percent (1974); Japan—35.7 percent (1974). Though the figures are not strictly comparable due to the use of different dates and differing definitions of economic activity, there is no doubt that the Singapore rate still has some way to go.

The already high participation rates of younger women will be further accentuated as it becomes an even more generally accepted practice for young girls to work on completing their formal education. Other factors are a higher level of educational attainment and further development of the economy. Participation rates of older women will also rise as the difference in educational attainment becomes less marked between the older and younger women, and as job opportunities for older women become increasingly available through successive reductions in the number of women reaching 20 years of age, following the steady fall in the number of births from a peak of 62,495 in 1958 to 39,948 in 1975.[9] The declining fertility in recent years will also lead to an increase in participation rates as smaller families become the norm.

---

[7]Saw Swee-Hock, "Wage indices for Singapore", *Securities Industry Review,* Vol. 1, No. 1, September 1975.

[8]In 1976, while 50.6 percent of male workers worked 45 or more hours per week, only 40.6 percent of the female workers did so. Calculated from statistics given in *Report on the Labour Force Survey of Singapore, 1976,* Singapore: Ministry of Labour, November, 1976, p. 101.

[9]Republic of Singapore, *Report on the Registration of Births and Deaths and Marriages,* 1975, Singapore: Government Printing Office, 1976, p. 31.

With the passing years the dip caused by the Japanese Occupation in the activity rates of single women will disappear. On the other hand, based on the experience in developed countries, a dip in the activity rates of married women will appear. With the diminishing supply of domestic servants and the declining popularity of the extended family, more and more married women will have to leave the labour force on the arrival of the first baby. Though many government-operated creches and privately-run nurseries will be set up, provision of such facilities on a massive scale is unlikely in a non-totalitarian state such as Singapore. However, the availability and popularity of such facilities will undoubtedly influence the extent to which mothers will refrain from withdrawing from the labour force.

Again based on experience in advanced countries, one would expect older married women to join or rejoin the labour force after an absence of 10 to 15 years. But re-entry would be on a much smaller scale because of the greater prevalence of traditional ideas and attitudes which give women with families less opportunity as well as less need to work outside the home.

With regard to the racial differences in female labour force participation rates, the trend is towards a narrowing of the differences but the Chinese females will continue to lead, followed by the Indians and the Malays. The reason lies in the prevalence and strength of traditional attitudes based largely on religious beliefs and practices on the one hand and the relatively greater difficulty in getting jobs by Malay and Indian women on the other.

In the foreseeable future women will still be found mainly in occupations which have been termed "women's jobs" or jobs suited to women. This is due to stereotyped ideas of what constitutes a man's job and what constitutes a woman's job. Also certain training facilities such as those for certain classes of technicians, are open only to boys. But the trend towards a greater dispersion of the female labour force is already discernible so that the concentration on a few occupations will become less marked. Together with this trend will be the trend towards a gradual narrowing of the wage differentials between the sexes, as has been inferred earlier from the wage data for 1974 to 1976. But the differentials will remain for as long as men are accorded the higher social status which they have enjoyed in Asian societies for so long in the past.

BIBLIOGRAPHY

Arumainathan, P. *Singapore: Report of the Census of Population, 1970,* 2 vols., Singapore: Department of Statistics, [1973].

Cheng Siok-Hwa. "Singapore Women: legal status, educational attainment and employment patterns". *Asian Survey,* Vol. XVIII, No. 4 (April 1977): 363

Chua, S.C. *State of Singapore: Report on the Census of Population, 1957.* Singapore: Government Press, [1964].

Saw Swee-Hock. "Wages indices for Singapore." *Securities Industry Review,* Vol. 1, No. 1 (September 1975).

Singapore, Department of Statistics, *Report on the Census of Population 1970, Singapore.* Singapore: Government Printer, 1971.

_____, Ministry of Labour. *Report on the Labour Force Survey of Singapore, 1974-1976.* Singapore: Government Printer, 1976.

_____, Ministry of National Development. *Singapore Sample Household Survey, 1966.* Singapore: Government Printer, 1967.

_____, *Report on the Registration of Births and Deaths and Marriages, 1975.* Singapore: Government Printing Office, 1976.