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# The Changing Demographic Landscape of the Chinese Community of Malaysia Since 1970

**TEY Nai Peng * and LAI Siow Li ****

## Abstract

After the Second World War, natural increase has been the predominant determinant of population growth of the Chinese community of Malaysia. This paper discusses the changes in the demographic landscape of the Chinese after 1970. A discussion of the historical perspectives of the growth of the Chinese population is followed by a brief discussion of the socio-economic conditions of the community to obtain a better understanding of the reasons behind the demographic transition. The focus of this study is on the demographic changes affecting the Chinese after 1970 in terms of the population size, rate of growth, and subsequently on mortality and fertility trends that determine population growth and age structural changes, and the shrinking share of the Chinese community to the total population. Rapid socio-economic changes in Malaysia have resulted in the continuing decline in fertility, especially among the Chinese with an ultra-low fertility of 1.4 children per woman in 2015. The postponement of marriage or non-marriage and the widespread use of contraception are the two main proximate determinants of fertility. With relatively longer life expectancy and lower fertility, the population of the Chinese is also ageing rapidly, a phenomenon with profound ramifications on the care and support of the elderly. The shrinking share of the Chinese to the total population of the country has resulted in the erosion of their political power and roles.

**Key words:** Chinese population, the percentage share of the Chinese, demographic changes, fertility, age structure and ageing, socio-economic factors

## Introduction

Large-scale immigration from China and India in the nineteenth century up to the outbreak of the Second World War contributed to rapid population growth in Peninsular Malaysia, then known as the Federation of Malaya. By the beginning of the twentieth century, the Chinese were the largest and economically the most important community, dominating trade and commerce and other urban

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occupations in major towns (Purcell, 1965). They were also actively involved in tin mining, rubber cultivation, and commercial agriculture in the rural areas (Leete, 2007).

Between 1911 and 1947, the number of Chinese in Peninsular Malaysia increased almost threefold from 693,228 to 1,884,647 and continued to grow rapidly to 3, 273, 834 in 1970. The Chinese population in Peninsular Malaysia grew at between 2.1 per cent and 2.4 per cent per annum for most of the period 1911-1970 except during 1921-1931 when the average annual growth rate reached 4.1 per cent per annum. The relative share of the Chinese to the total population rose from about 29 per cent in 1911-1921 to 34 per cent in 1931, reaching its peak at 38 per cent in 1947, before falling slightly to around 36 per cent during the 1957-1970 period (Table 1). With the cessation of large-scale immigration after the Second World War, natural increase has been the main determinant of population growth of the Chinese.

Table 1. Chinese Population in Peninsular Malaysia, 1911-1970

| Year | Total population | Chinese | Chinese as % of the total population | The rate of growth of the total population | The rate of growth of Chinese population |
|---|---|---|---|---|---|
| 1911 | 2,385,000 | 693,228 | 29.1 | - | - |
| 1921 | 2,907,000 | 855,863 | 29.4 | 1.98 | 2.11 |
| 1931 | 3,788,000 | 1,284,888 | 33.9 | 2.65 | 4.06 |
| 1947 | 4,908,000 | 1,884,647 | 38.4 | 1.62 | 2.39 |
| 1957 | 6,379,000 | 2,333,756 | 36.6 | 2.62 | 2.14 |
| 1963 | 7,614,248 | 2, 782,345 | 36.5 | 2.95 | 2.93 |
| 1970 | 9,146,681 | 3,273,834 | 35.8 | 2.62 | 2.32 |

Source: Various population censuses, cited in Saw, 1988

Over the past century, virtually all Chinese populations in different parts of the world have witnessed drastic demographic changes especially in the sharp decline in death rates followed by falling birth rates. The Chinese community in Malaysia has also experienced the demographic transition. Its fertility has dipped below replacement level since 2002, about 10 to 30 years behind China and its territories of Hong Kong and Taiwan, and that of Singapore where the Chinese form the majority of its population. The crude rate of natural increase of 1.5 per thousand population in Taiwan and 4.5 per thousand population among the Chinese in Malaysia translate into rates of growth of 0.15 per cent and 0.45 per cent per annum respectively.

The primary sources of demographic data on the Chinese in Malaysia are the population census reports and vital statistics reports published by the Department of Statistics of Malaysia and the decennial Population and Family Surveys conducted by National Population and Family Development Board since 1966. Multi-ethnic Malaysia provides an interesting setting for the study of demographic changes of different ethnic and cultural groups under conditions of rapid socio-economic changes. Apart from the official reports, several studies have examined ethnic differentials in demographic changes in Malaysia (Chan and Tey, 2000;

Govindasamy and DaVanzo, 1992; Leete, 1989, 1996, 2007; Leete and Tan, 1993; Saw, 1988, 1999, 2005, 2007; Tey, 2002a, 2002b, 2007, 2009; Tey *et al*., 2012).

This paper presents the demographic trends and patterns of the Chinese in Malaysia since 1970 when comparable data for Peninsular Malaysia, Sabah, and Sarawak became available. The discussion will cover aspects of population size, the rate of growth, the relative share of Chinese to the total population, age-sex structure and population ageing, mortality and fertility trends. An analysis of the proximate and socio-economic determinants of fertility will also be presented, and relevant data for the Bumiputera and Indians will be used for purposes of comparison.

## Socio-economic Conditions of Chinese Malaysians

Demographic dynamics and socio-economic development are closely related. The initial massive increase in the populations of the Chinese in Peninsular Malaysia prior to the Second World War was due to large-scale immigration, driven by abject poverty in China and the prospects for economic advancement in the Malay Peninsula. With the cessation of Chinese immigration after the Second World War, urbanization, improvements in education and income, increased female labour force participation and medical advances have become the main determinants of demographic changes of the community (Bollen *et al*., 2007; Bratti, 2003; Ghannam, 2005; Gubhaju, 2007; Hull, 2003; Mturi and Hinde, 2001; Veron *et al*., 2008). A brief survey of the socio-economic conditions of the Chinese will serve as a useful background to a better understanding of the reasons behind the demographic changes that are taking place in the community.

The Chinese are a highly urbanized community. The proportion of urban Chinese has risen steadily from 47 per cent in 1970 to more than 90 per cent today. The Indians are also highly urbanized while the proportion of Malays living in urban areas was 66.7 per cent in 2010, though it was only 15 per cent in 1970. The urbanization of the Chinese Malaysians is inseparable from their involvement in the manufacturing and services sectors. In 2010 employment in the rural sector accounted for only 6 per cent the Chinese workforce. The 2008 Labour Force Survey characterized the Chinese as being over-represented in management and professional occupations (46 per cent) and under-represented as unskilled workers (15.6 per cent) (*Ninth Malaysia Plan*, 2006).

The government places great emphasis on raising the education standard and human development of the country. Primary education is nearly universal and secondary and tertiary enrolment ratios have increased from 55 per cent and 7.2 per cent to 67 per cent and 36 per cent respectively between 1990 and 2011 (World Bank, 2017). The Chinese have shown a general improvement in education. There has been a sharp rise in the percentage of the population with at least secondary education among males and females born after the 1970s (Figure 1). More significantly, the females have outnumbered the males in educational attainment, and this has

important implications on future trends of marriage as, traditionally, women tend to marry men who have at least the same level of education.

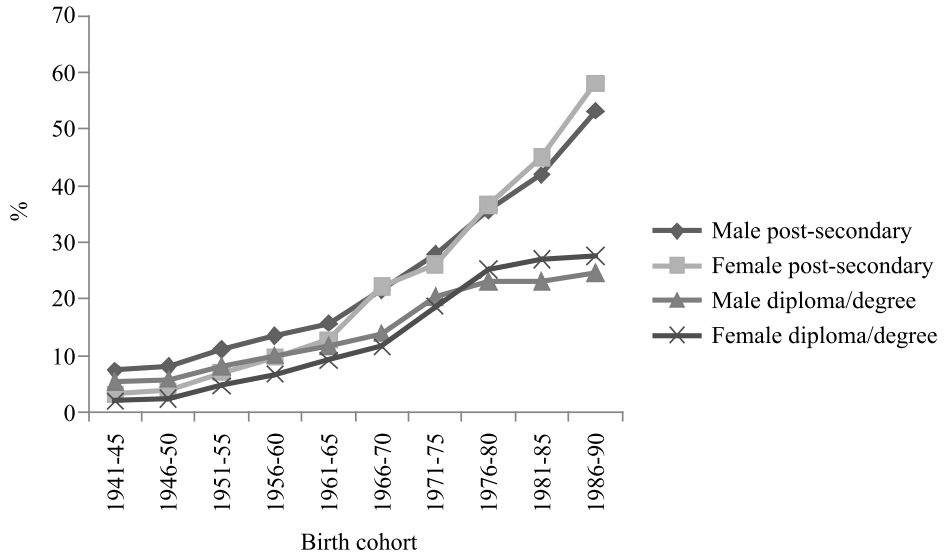


Figure 1. Percentage of Chinese with Post-Secondary Education, and Diploma/ Degree by Gender and Birth Cohort

The mean monthly household income of the Chinese has improved progressively from RM2,890 in 1995, to RM3,456 in 1999, and RM4,854 in 2007. The average household income of the Chinese is higher than those of the other ethnic groups, but the disparity is narrowing. The *Tenth Malaysia Plan* indicates that income disparity ratio of Bumiputera to Chinese has narrowed from 1: 2.29 in 1970 to 1:1.74 in 1989-1999 and 1:1.38 in 2009.

Table 2. Mean Monthly Household Income by Ethnic Group, 1995, 1999, 2004 and 2007

| Ethnic Group | 1995 | 1999 | 2004 | 2007 |
|---|---|---|---|---|
| Bumiputera | 1,604 | 1,984 | 2,711 | 3,156 |
| Chinese | 2,890 | 3,456 | 4,437 | 4,854 |
| Indians | 2,140 | 2,702 | 3,456 | 3,799 |
| Malaysia | 2,020 | 2,472 | 3,249 | 3,686 |

Sources: *Malaysia Plans*, 1996, 2001 and 2006

## Population Size, Rate of Growth and Ethnic Composition, 1970-2040

The population of the Chinese in Malaysia rose from about 3.7 million in 1970 to 6.4 million in 2010 and projected to reach 6.8 million in 2020 and 7.1 million in 2040. However, the annual rate of growth has declined rather dramatically from about 1.8 per cent in 1970-1980 to 0.9 per cent in the 1990s. One of the main causes of this decline may be attributed to the heavy

emigration in the 1980s. An estimated 391, 801 Chinese left the country, representing a net out-migration rate of 10.1 per cent. Interestingly, the estimated number of emigrants fell to just 3,100 during the 1991-2000 intercensal period (Chan and Tey, 2000). The result was a rebound in the rate of population growth to about 1.6 per cent per annum which was almost equal to the rate of natural increase. The rate of growth of the Chinese population resumed its downward trend to about 1.2 per cent during the last intercensal period 2000-2010. With a total fertility rate of 1.4 children per woman in 2015, the Chinese population in Malaysia will cease to grow by 2040 and will begin to decline thereafter.

A characteristic of demographic changes in Malaysia is that emerging trends such as increasing urbanization or falling birth rates often began with the Chinese community. Accelerated urbanization and greater access to education among the Chinese have brought about rates of growth in number that have always been lower than those of other ethnic groups, especially the Bumiputera. The inevitable consequence has been the declining share of the Chinese to the total population, from 34.3 per cent in 1970 to 22.6 per cent in 2010. This figure is projected to drop further to 18.4 per cent in 2040. This phenomenon is witnessed in all the states. In 1970, Chinese accounted for more than half the population of Pulau Pinang and Kuala Lumpur, and more than a third of the population of Johor, Melaka, Negeri Sembilan and Perak. By 2010, the figures for Pulau Pinang and Kuala Lumpur were 45.6 per cent and 43.2 per cent respectively, while that for Johor was 33.6 per cent. In Malaysia's race-based politics, the shrinking share of the Chinese population has resulted in the erosion of the political power and roles.

While the immigration of Chinese has virtually ceased since the end of Second World War, there were substantial outflows in the 1980s (Chan and Tey, 2000). Reliable data on the emigration of the Chinese are not available. However, United Nations report indicates that the migrant stock of Malaysians living in other countries, most of whom were of Chinese descent, increased from 490,482 persons in 1990 to 1,835,252 in 2015. In 2015, about 61 per cent of these Malaysian migrants were in Singapore.

Table 3. Actual and Projected Population by Ethnic Group, Malaysia, 1970-2040 ('000)

| Year | Bumiputera | Chinese | Indians | Others | Non-citizens | Total population |
|---|---|---|---|---|---|---|
| | Number | | | | | |
| 1970 | 6,094.00 | 3,737.20 | 977.90 | 72.7 | - | 10,881.80 |
| 1980 | 7,926.70 | 4,460.10 | 1,189.80 | 302.7 | - | 13,879.30 |
| 1991 | 10,646.50 | 4,945.00 | 1,394.00 | 588.9 | 805.40 | 18,379.70 |
| 2000 | 14,248.20 | 5,691.90 | 1,680.10 | 269.7 | 1,384.80 | 23,274.70 |
| 2010 | 17,523.50 | 6,392.60 | 1,907.80 | 189.4 | 2,320.80 | 28,334.10 |
| 2020 | 20,722.70 | 6,827.10 | 2,096.50 | 306.1 | 2,488.80 | 32,441.20 |
| 2030 | 23,731.10 | 7,042.20 | 2,220.90 | 389.8 | 2,581.70 | 35,965.70 |
| 2040 | 26,032.20 | 7,098.90 | 2,257.80 | 477.3 | 2,691.60 | 38,557.80 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Percentage Distribution | | | | | | |
| 1970 | 56.0 | 34.3 | 9.0 | 0.7 | - | 100.0 |
| 1980 | 57.1 | 32.1 | 8.6 | 2.2 | - | 100.0 |
| 1991 | 59.7 | 26.9 | 7.6 | 3.2 | 4.4 | 100.0 |
| 2000 | 61.2 | 24.5 | 7.2 | 1.2 | 5.9 | 100.0 |
| 2010 | 61.8 | 22.6 | 6.7 | 0.7 | 8.2 | 100.0 |
| 2020 | 63.9 | 21.0 | 6.5 | 0.9 | 7.7 | 100.0 |
| 2030 | 66.0 | 19.6 | 6.2 | 1.1 | 7.2 | 100.0 |
| 2040 | 67.5 | 18.4 | 5.9 | 1.2 | 7.0 | 100.0 |
| Average Annual Rate of Population Growth | | | | | | |
| 1970-1980 | 2.63 | 1.77 | 1.96 | 14.26 | - | 2.43 |
| 1980-1991 | 2.68 | 0.94 | 1.44 | 6.05 | - | 2.55 |
| 1991-2000 | 3.24 | 1.56 | 2.07 | -8.68 | 6.02 | 2.62 |
| 2000-2010 | 2.07 | 1.16 | 1.27 | -3.54 | 5.16 | 1.97 |
| 2010-2020 | 1.68 | 0.66 | 0.94 | 4.80 | 0.70 | 1.35 |
| 2020-2030 | 1.36 | 0.31 | 0.58 | 2.42 | 0.37 | 1.03 |
| 2030-2040 | 0.93 | 0.08 | 0.16 | 2.03 | 0.42 | 0.70 |

Sources: DSM, Population census reports for various years, and *Population Projection Malaysia*, *2010-2040*, 2012

Table 4. The Chinese Population as Percentages of Malaysian Citizens by State,1970-2010

| State | 1970 | 1980 | 1991 | 2000 | 2010 |
|---|---|---|---|---|---|
| Johor | 39.3 | 37.1 | 36.1 | 35.4 | 33.6 |
| Kedah | 20.2 | 18.9 | 16.6 | 14.9 | 13.6 |
| Kelantan | 6.0 | 6.2 | 4.6 | 3.8 | 3.4 |
| Melaka | 39.2 | 38.5 | 33.7 | 29.1 | 26.4 |
| Negeri Sembilan | 36.8 | 36.0 | 29.7 | 25.6 | 23.2 |
| Pahang | 26.0 | 16.6 | 19.0 | 17.7 | 16.2 |
| Perak | 42.6 | 40.1 | 36.0 | 32.0 | 30.4 |
| Perlis | 18.3 | 14.2 | 12.3 | 10.3 | 8.0 |
| Pulau Pinang | 56.8 | 54.4 | 50.1 | 46.5 | 45.6 |
| Sabah | 21.0 | 16.2 | 11.7 | 13.2 | 12.8 |
| Sarawak | 30.6 | 29.2 | 27.7 | 26.7 | 24.5 |
| Selangor | 35.5 | 37.2 | 32.4 | 30.7 | 28.6 |
| Terengganu | 5.6 | 5.2 | 3.7 | 2.8 | 2.6 |
| Kuala Lumpur | 57.7 | 53.9 | 47.5 | 43.5 | 43.2 |
| Peninsular Malaysia | 35.8 | 33.9 | 28.8 | 27.5 | 26.1 |
| Malaysia | 34.3 | 32.1 | 28.1 | 26.0 | 24.6 |

Sources: DSM, Population census reports for various years

Massive inflows of Malays into urban centres since the 1970s have altered the ethnic composition of these centres. The outcome has been the progressive erosion of the Chinese dominance of the urban landscape. The Chinese share of the urban population has seen a secular decline in proportionate share from 50 per cent in 1980, to 41 per cent in 1991, 34 per cent in 2000, and 29 per cent in 2010.

## Changes in Age Structure and Ageing

A glaring trend of demographic change among the Chinese is its rapidly changing age structure. From a young population in the 1970s, the Chinese are outpacing other ethnic groups in its progress towards an aged society. The period 1970-2010 saw their median age rising from about 19 to 31 years, and projected to reach 41 years by 2040. Up to 2010, the evolving age scenario was marked by the declining proportion of the young in the population, a corresponding increase in the proportion of the working age group (15-59) and those aged 60 years and above. Inevitably, the proportion of the prime working age group will henceforth begin to decline while the proportion of the aged will increase rapidly (Figures 2 and 3 and Table 5).

The striking changes in the age structure of the Chinese between 1970 and 2010 saw a sharp downward trend in the relative share of those below the age of 15 (from 42 per cent to 22.1 per cent) and rising trends of the shares among the working age groups of 15-59 years (from 50.7 per cent to 65.7 per cent) and the 60 and above (from 6.9 per cent to 12.2 per cent). Children below 15 years will be decreasing rapidly, and they will make up only 14 per cent of the Chinese population in 2040. At the same time, one in four Chinese will be a senior citizen aged 60 years and above, while the working age group will fall to 60 per cent. Within the next 10 years, there will be as many old persons as there young ones. By 2040, there will be two older persons to each young one (Table 5 and Figure 3). The ageing index, which saw a dramatic increase from 16.1 per cent in 1970 to 55 per cent in 2010, will exceed 100 per cent by 2025, and projected to accelerate to 188 per cent in 2040.

The changing age structure will alter the age dependency of the Chinese in the coming decades. As the youth dependency ratio decreases over the years, there will be a corresponding increase in old dependency ratio. The overall dependency ratio declined from 97 per cent in 1970 to 52 per cent in 2010, but it will be rising steadily to about 67 per cent in 2040 due to the increase in old dependency burden, which is projected to rise to about 44 per cent.

The Chinese Malaysians will continue to enjoy the benefits of a demographic dividend for a limited time with an increasing proportion of its population entering the working age groups. But the window of opportunities will narrow soon as the population ages further. However, as the society becomes more affluent, people tend to be motivated to accumulate greater personal wealth, in what is known as the second demographic dividend, which operates in two ways. Firstly, with smaller family size and longer life expectancy, people tend to be in a better position and more motivated to accumulate wealth to support themselves in old age. Secondly,

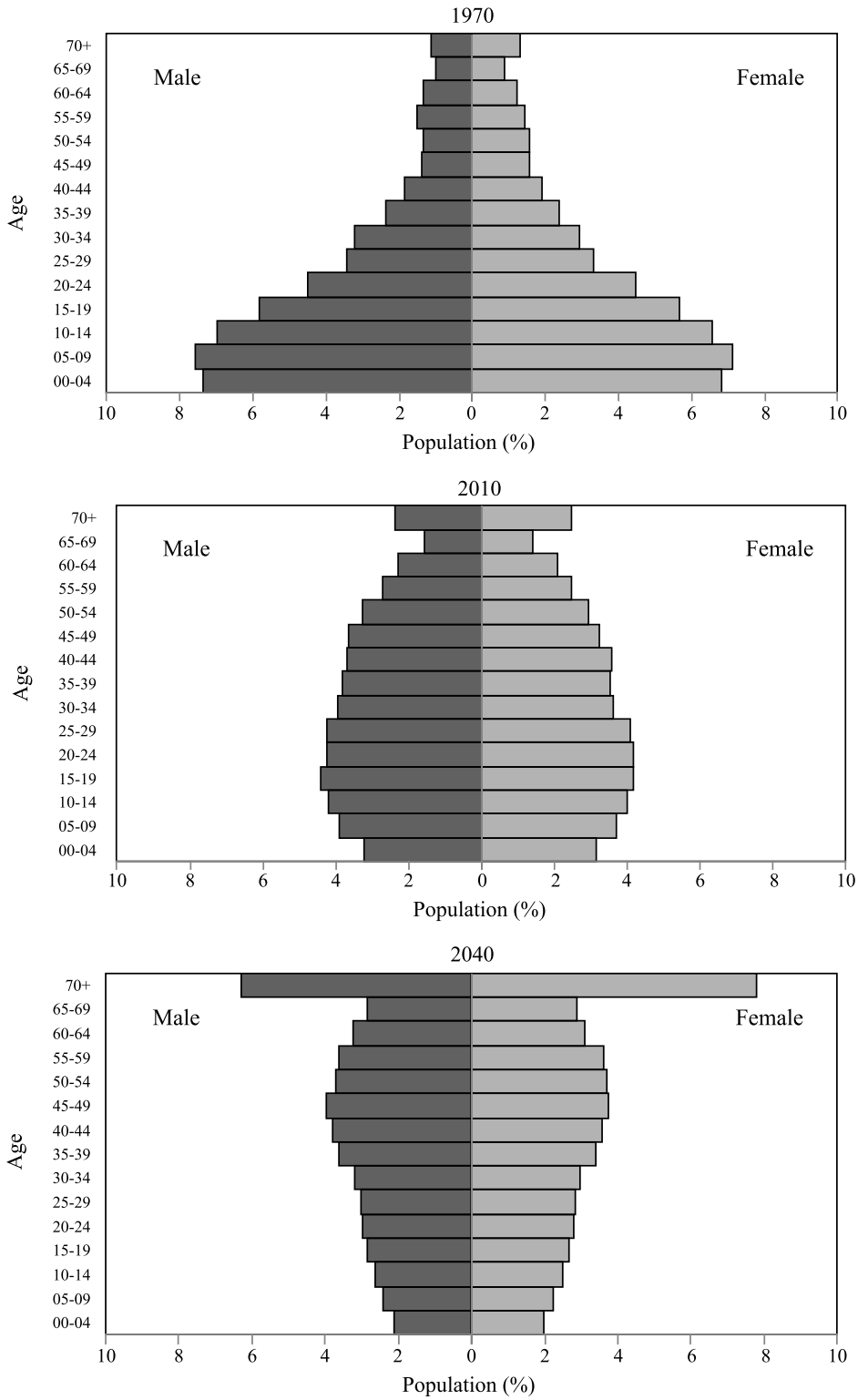


Figure 2. Population Pyramids of the Chinese Population of Malaysia, 1970, 2010, 2040

with increased wealth and fewer young dependents, people are more likely to invest more in the health and education of their children. Nevertheless, it must be mentioned that these demographic dividends should not be taken for granted. Both the government and the community must take the necessary measures to utilize the human and financial resources to reap the second demographic dividend.

Table 5. Changes in Age Structure, Dependency Ratio and Ageing Index of the Chinese Population, 1970-2040

| Age structure (%) | 1970 | 1980 | 1991 | 2000 | 2010 | 2020 | 2030 | 2040 |
|---|---|---|---|---|---|---|---|---|
| 0-15 (%) | 42.4 | 37.5 | 30.4 | 26.2 | 22.1 | 18.2 | 16.3 | 13.9 |
| 15-59 (%) | 50.7 | 55.5 | 62.2 | 65.0 | 65.7 | 64.9 | 61.8 | 60.0 |
| 60+ (%) | 6.9 | 7.0 | 7.4 | 8.8 | 12.2 | 16.9 | 21.9 | 26.1 |
| Young dependency | 83.7 | 67.6 | 48.9 | 40.2 | 33.7 | 28.1 | 26.4 | 23.1 |
| Old dependency | 13.5 | 12.6 | 11.9 | 13.5 | 18.5 | 26.1 | 35.4 | 43.5 |
| Total dependency | 97.2 | 80.1 | 60.9 | 53.8 | 52.2 | 54.2 | 61.8 | 66.7 |
| Ageing index | 16.1 | 18.6 | 24.4 | 33.6 | 55.0 | 92.6 | 134 | 188.3 |

Sources: DSM, Population census reports for various years and *Population Projection Malaysia, 2010-2040*, 2012

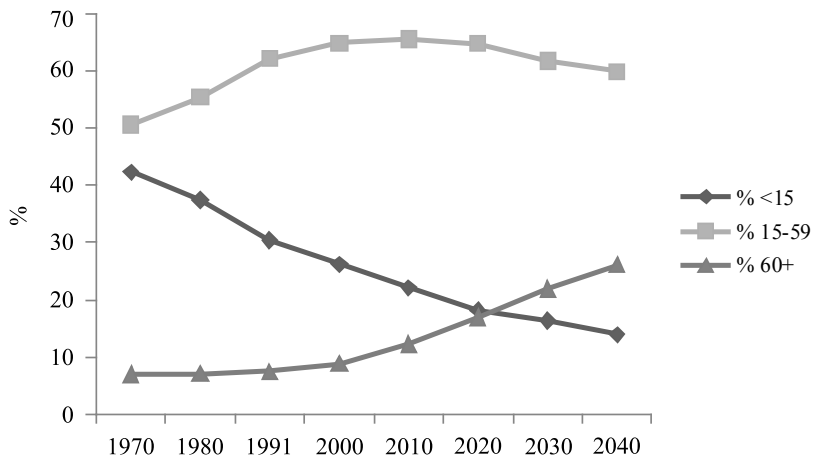


Figure 3. Age Structural Changes, 1970-2040
Source: From Table 5

## Changes in Mortality and Life Expectancy

Improved overall hygiene and medical care have brought about the lowering of the mortality rate of Malaysians to a low level as early as 1970. Firstly, the infant mortality rate (IMR), a commonly used indicator of the health status of a population, has been declining rather rapidly. The Chinese IMR has always been the lowest among the major ethnic groups in

Malaysia, having fallen sharply to 27.4 per thousand births in 1970 to 4.1 in 2010 (Figure 4). On the other hand, the crude death rate (CDR) of the Chinese had also been reduced from 6.1 per thousand population in 1970 to 4.9 in 2000. As the community ages, more deaths begin to occur, causing a rise in the mortality rate from 5.4 in 2010 and 6.1 in 2015 (Figure 4). For relatively younger groups such as the Bumiputera, the mortality rate has remained slightly lower than that of the ageing Chinese community. Mortality decline results in gains in life expectancy. Between 1970 and 2010, the average lifespan of Chinese females and males extended from 71.3 years and 64.0 years to 79.8 years and 74.4 years respectively, the highest among the ethnic groups in Malaysia (Table 6).

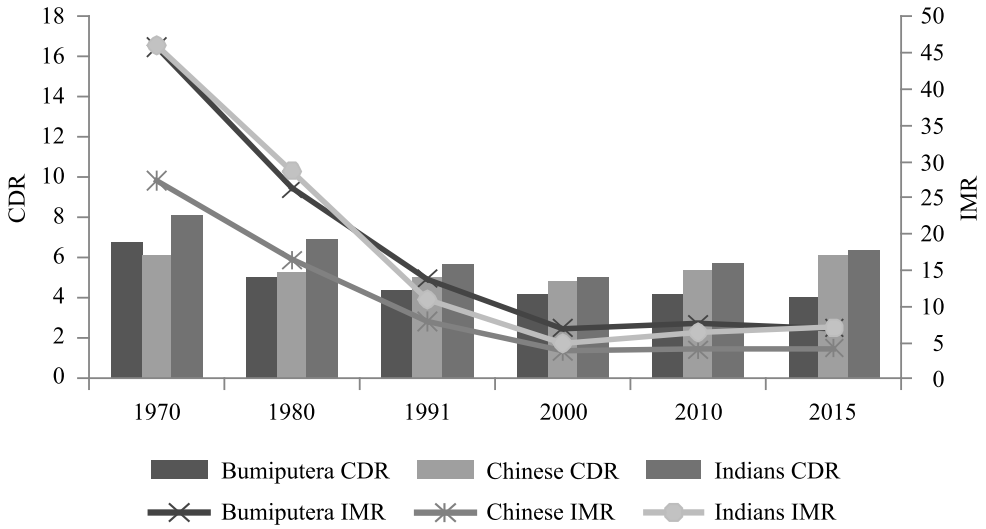


Figure 4. Crude Death Rate (CDR) and Infant Mortality Rate (IMR) by Ethnic Group, 1970-2015
Sources: DSM, vital statistics reports, various years

Table 6. Life Expectancy at Birth by Gender and Ethnic Group, Malaysia, 1970-2010

| Year | Bumiputera | | Chinese | | Indians | |
|---|---|---|---|---|---|---|
| | Female | Male | Female | Male | Female | Male |
| 1970 | 62.7 | 60.8 | 71.3 | 64.0 | 61.3 | 59.0 |
| 1980 | 68.9 | 66.5 | 74.0 | 68.0 | 67.0 | 62.1 |
| 1991 | 71.9 | 68.8 | 76.4 | 70.7 | 71.4 | 64.2 |
| 2000 | 73.3 | 69.0 | 77.6 | 72.4 | 73.5 | 65.7 |
| 2010 | 75.3 | 70.5 | 79.8 | 74.4 | 76.2 | 68.0 |

Sources: Abridged life tables, Malaysia (DSM, 2011)

## Fertility Trends, 1970-2015

The national family planning programme was launched in 1966 to curb the rapid rate of population growth. The fertility rate of the Chinese, however, had already begun to slow down by then. The total fertility rate (TFR) had fallen from 6.3 children per woman in 1960 to 5.9 in 1965 and declined further to 4.6 in 1970 and 3.7 in 1975. By 1990, it was only 2.3, or half that of the 1970 rate. In terms of the actual number of births per thousand population, there were 31 in 1970 but only 21 in 1990.

The Chinese fertility rate stabilized between 1990 and 2000 but soon resumed its downtrend towards an ultra-low level, reaching a CBR of 10.6 per thousand population and a TFR of just 1.4 children per woman in 2015 (Figure 5). The fertility rate of the Chinese is now on par with the levels recorded by Singapore, Hong Kong, and other East Asian countries.

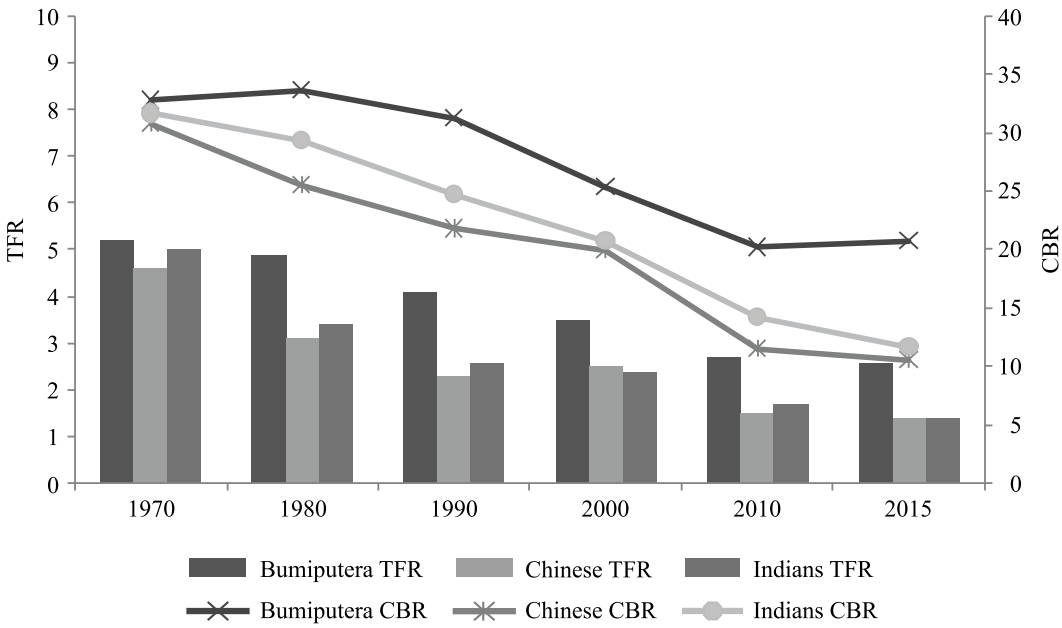


Figure 5. Crude Birth Rate (CBR) and Total Fertility Rate (TFR) by Ethnic Group, 1970-2015
Source: DSM, vital statistics reports, various years

The fertility decline occurred across all reproductive age groups. Discounting the births of a few teenagers and women above the age of 40, it was among the prime reproductive age groups that the decline was most pronounced. Among the 20-24 and 25-29 age groups, fertility fell from 147 births and 218 births per thousand women in 1980 to 28 and 73 respectively in 2015.

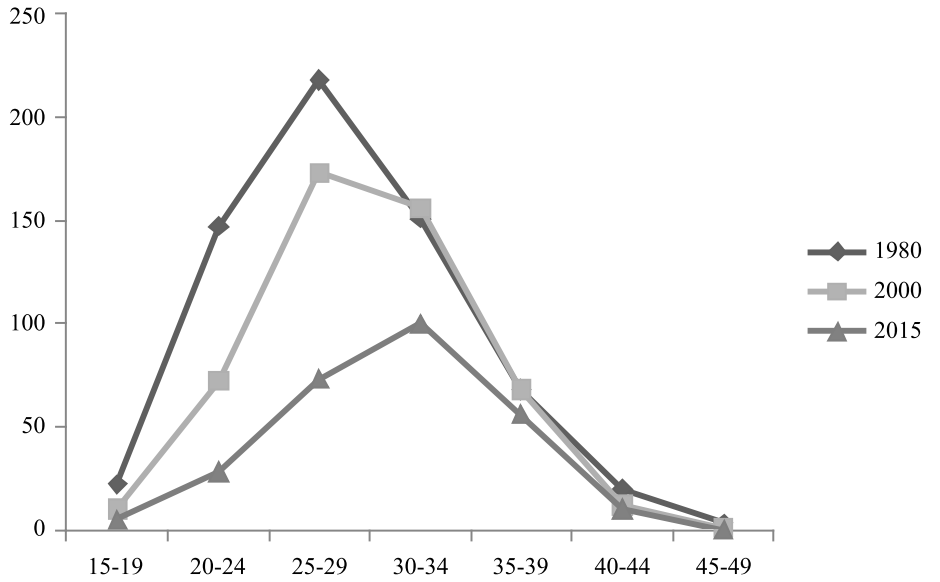


Figure 6. Age Specific Fertility Rate (ASFR) of the Chinese Malaysians, 1980-2015
Source: DSM, vital statistics reports, various years

The small increase in population size among the Chinese has not been able to stamp the general trend of decline in the number of births. The decline has been particularly evident since 2000. The number of Chinese births had fallen to 69,985 in 2015, or a drop of 40 per cent from the number in 2000. The Indian community has similarly registered an appreciable decline in the number of births from 35,329 in 2000 to 23,224 in 2015. In contrast, the number of births of the Bumiputera has been increasing steadily from about 200,000 in 1970 to close to 400,000 in 2015 (Table 7).

Table 7. Number of Births by Ethnic Group, 1970-2015

| Year | Bumiputera | Chinese | Indians | Total |
|---|---|---|---|---|
| 1970 | 200,056 | 115,175 | 30,106 | 352,383 |
| 1980 | 274,169 | 114,001 | 34,936 | 425,282 |
| 1991 | 340,917 | 102,732 | 35,382 | 511,527 |
| 2000 | 364,280 | 115,429 | 35,329 | 537,853 |
| 2010 | 358,744 | 74,068 | 27,556 | 491,239 |
| 2015 | 399,276 | 69,985 | 23,224 | 521,136 |

Source: DSM, vital statistics reports, various years

## Socio-economic and Proximate Determinants of Fertility

The demographic trends of the Chinese population are compatible with those experienced by societies that have completed the demographic transition. The early stage of the transition is marked by high mortality and fertility levels. Improved standards of living and advances in medical technology soon subdue high mortality rates while the fertility of the population continues at a high level. As the gap in the number of births and deaths widens, the population undergoes rapid growth. Over time, changes in family norms consequent upon modernization and socio-economic development, aided by the availability of contraceptive methods and devices, would bring about a reduction in fertility rates, eventually to replacement level or even lower.

The level of fertility is subjected to the influence of various distal and proximate determinants. Among these are urbanization, education, female employment, age at marriage, and contraceptive use. Urbanization is closely associated with lower fertility rates. Women in urban areas have fewer children (2.6) compared with their rural counterparts (3.0). Higher educated women are more likely to be engaged in the modern sector where maternal roles tend to be incompatible with work, and hence higher opportunity cost of having children. Moreover, higher educated women are more exposed to modernization and have better knowledge of birth control. Data from the 2014 Malaysian Population and Family Survey show that while women with primary education have 3.5 children, those with secondary and tertiary education have 2.6 and 1.9 respectively. Non-working women and those earning less than RM1,000 had 2.9 children while women who earn RM2,000 or more a month have an average of only two children.

The age at marriage is a major proximate determinant of the number of births. Statistics show that women who marry before age 20 years have an average of 3.6 children, compared with 1.4 children for those who marry at age 30 years and above (Table 8). Delayed and non-marriage also exerts a strong influence on fertility. An analysis by Tey *et al*. (2012) found that marriage postponement had the most pronounced fertility inhibiting effect (0.32), followed by contraceptive use (0.38), induced abortion (0.87) and breastfeeding (0.96). The singulate mean age at marriage among Malaysian Chinese women had increased from 24 years in 1970 to 27 years in 2000. The proportion of Chinese women aged 30-34 years who had never been married rose from 13 per cent in 1980 to 26 per cent in 2010. Among tertiary educated women, almost one in three was still single at age 30-34 years (Tey, 2007).

Increasingly too the widening gender gap in higher education in favour of females will almost certainly delay or discourage marriage and to exert a direct impact on fertility. Higher education encourages the pursuit of professional careers among women who tend to prioritize career over family formation and childbearing. Moreover, the rising cost of living and lack of childcare support are also powerful disincentives for having children. The 2014 Malaysian Population and Family Survey found that one-quarter of childless Chinese women did not want to have any child, and a little more than half wanted to stop childbearing after the first child.

Table 8. Mean Number of Children by Stratum, Educational Level, Income and Age at Marriage among Chinese Women, 2014

| | n | Mean | S.D. |
|---|---|---|---|
| All women | 848 | 2.7 | 1.45 |
| Stratum | | | |
| Urban | 735 | 2.6 | 1.45 |
| Rural | 113 | 3.0 | 1.41 |
| Education | | | |
| Primary | 150 | 3.5 | 1.48 |
| Secondary | 535 | 2.6 | 1.39 |
| Tertiary | 165 | 1.9 | 1.15 |
| Income | | | |
| Not working | 479 | 2.9 | 1.41 |
| <RM1,000 | 106 | 2.9 | 1.56 |
| RM1,000-1,999 | 84 | 2.4 | 1.5 |
| RM2,000-2,999 | 61 | 2.0 | 1.3 |
| RM3,000-3,999 | 42 | 2.1 | 1.34 |
| RM4,000+ | 76 | 2.0 | 1.19 |
| Age at marriage | | | |
| Below 20 | 98 | 3.6 | 1.75 |
| 20-24 | 334 | 3.1 | 1.33 |
| 25-29 | 293 | 2.4 | 1.09 |
| 30+ | 123 | 1.4 | 1.45 |

Source: Authors' own computation based on 2014 Malaysian Population and Family Survey

The reduction of fertility is also induced by the use of contraceptive methods. The Chinese have generally been in the forefront in the adoption of birth control. The contraceptive prevalence rate (CPR) among the Chinese has always been the highest among the ethnic groups, being as high as 72.8 per cent in 1994 and remaining at 60.1 per cent in 2014. In contrast, the corresponding percentages for the Malays and Indians were much lower (Table 9).

Table 9. Contraceptive Prevalence Rate (CPR) by Ethnic Group, Peninsular Malaysia, 1988-2014

| Ethnic Group | Any method | | | | Modern method | | | |
|---|---|---|---|---|---|---|---|---|
| | 1988 | 1994 | 2004 | 2014 | 1988 | 1994 | 2004 | 2014 |
| Peninsular Malaysia | 49.8 | 54.8 | 48.1 | 51.5 | 33.5 | 30.2 | 31.8 | 33.6 |
| Malays | 39.8 | 45.9 | 39.3 | 51.0 | 24.8 | 22.4 | 25.7 | 33.0 |
| Chinese | 67.2 | 72.8 | 64.3 | 60.1 | 49.6 | 47.0 | 43.6 | 45.6 |
| Indians | 57.7 | 64.1 | 51.0 | 47.1 | 39.0 | 33.2 | 30.2 | 24.7 |

Sources: Tey (2008) and authors' own computation

## Conclusion

The Chinese community in Malaysia is at the forefront of demographic transition in the country. Fertility of the Chinese community in Malaysia has reached an ultra-low level. This phenomenon corroborates the demographer dictum (Kirk, 1996) that once fertility has fallen by 10 per cent, it is likely to continue to fall until replacement levels are reached. The pattern of Chinese fertility decline follows the demographic trends that had occurred earlier among the Chinese in Taiwan, Hong Kong, and Singapore. Although Malaysians are free to decide on the number of children they want to have, it is remarkable that the fertility level of the Chinese Malaysians is at par or even lower than that of Mainland China, where the one-child policy of the last 35 years has depressed fertility rates to similarly low levels. Many socio-economic factors have strongly influenced the flight from marriage and the adoption of birth control which result in continuing fertility decline. The government's affirmative policies which were seen as disadvantaging the non-Bumiputera has probably contributed partly as a disincentive to have more children as couples opt to invest more on each child to prepare him/her for a more competitive world. The emigration of the young has also depleted the pool of men and women in the reproductive age groups. The recent demographic trends of the Chinese Malaysians and those of other Chinese populations point to the fact that the fertility of these population will remain at a very low level, barring significant changes in the norms and values toward childbearing.

The secular decline in fertility of the Chinese in Malaysia has brought significant changes in the demographic scenario of Malaysia. One of the most obvious, as well as a serious cause for concern to the Chinese, is the reshuffling of the ethnic composition of the national population. Between 1970 and 2010, the percentage share of the Chinese to the national population has declined from 34 to 23 per cent. This proportion is projected to drop further to 18 per cent in 2040. With the influx of foreign migrants continuing unabated, will the Chinese community be able to maintain its position as the second largest group in the country in the more distant future? Given the inevitable demographic scenario, the Chinese community will have to adapt to their minority group status as other overseas Chinese.

Other worrying trends include the shrinking of the family size and the rapid ageing of the Chinese population. Social and economic problems that will accompany these changes will pose tremendous challenges to the community especially in the provision of physical and health care as well as attention to financial needs of the elderly. The urgency to put in place appropriate strategies and programmes to meet future problems is itself a major challenge that has to be faced by the community and the nation. In light of the demographic and social changes, there is a need to promote and strengthen community participation in the care and support of the elderly and other needy segments of the population.

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