# SINGAPORE CENSUS OF POPULATION, 2000 ADVANCE DATA RELEASE NO. 7 

## HOUSEHOLD INCOME GROWTH AND DISTRIBUTION

## HOUSEHOLD INCOME GROWTH

1 Resident households in Singapore enjoyed good, steady growth in income from work between 1990 and 2000. The average household income increased from $\$ 3,080$ to $\$ 4,940$ at an average annual rate of 4.9 per cent. The income growth was not uniform over the last decade. From 1990 to 1998, the average household income grew by 5.8 per cent per annum. In 1999, there was a drop of 2.7 per cent, due to the lagged effects of the 1998 economic slowdown (Table 1). By 2000, income growth had resumed with the recovery of the economy ( 5.4 per cent).

TABLE 1 HOUSEHOLD INCOME FROM WORK

|  | Average <br> Income <br> $\mathbf{( \$ )}$ | Average <br> Annual Change <br> $(\%)$ | Median <br> Income <br> $\mathbf{( \$ )}$ | Average <br> Annual Change <br> $(\%)$ |
| :---: | :---: | :---: | :---: | :---: |
| 1990 |  |  |  |  |
| 1995 | 3,076 | - | 2,296 | - |
| 1997 | 4,107 | $6.0^{1}$ | 3,135 | $6.4^{1}$ |
| 1998 | 4,745 | $7.5^{2}$ | 3,617 | $7.4^{2}$ |
| 1999 | 4,822 | 1.6 | 3,692 | 2.1 |
| 2000 | 4,691 | -2.7 | 3,500 | -5.2 |
|  | 4,943 | 5.4 | 3,607 | 3.1 |

1 Refers to the period 1990-1995.
2 Refers to the period 1995-1997.

2 Household income has increased in real terms, given the low inflationary environment. Measured in 1990 dollars, the average household income rose from $\$ 3,080$ in 1990 to $\$ 4,170$ in 2000 by 3.1 per cent per annum (Table 2). The median household income rose by 2.8 per cent per annum in real terms.

TABLE 2 HOUSEHOLD INCOME FROM WORK IN CURRENT AND 1990 DOLLARS

|  | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ | Average Annual <br> Change, 1990-2000 <br> $(\%)$ |
| :---: | :---: | :---: | :---: |
| Average Household Income (\$) | $\mathbf{3 , 0 7 6}$ | $\mathbf{4 , 9 4 3}$ | $\mathbf{4 . 9}$ |
| In 1990 Dollars | 3,076 | 4,166 | 3.1 |
| Median Household Income (\$) | $\mathbf{2 , 2 9 6}$ | $\mathbf{3 , 6 0 7}$ | $\mathbf{4 . 6}$ |
| $\quad$ In 1990 Dollars | 2,296 | 3,040 | 2.8 |
| Consumer Price Index |  |  | $\mathbf{1 . 7}$ |

## More Households in Higher Income Brackets

3 Half of the households earned at least \$3,600 per month in 2000 (Table 3). In comparison, the median income in 1990 was $\$ 2,300$ per month. Households earning at least $\$ 5,000$ had increased from 16 per cent to 35 per cent of the population. Households with $\$ 10,000$ or more showed the largest increase from 2.8 per cent to 10 per cent.

TABLE 3 RESIDENT HOUSEHOLDS BY INCOME FROM WORK

| Monthly Household Income (\$) | Number ('000) |  | Per Cent |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 2000 | 1990 | 2000 |
| Total | 661.7 | 923.3 | 100.0 | 100.0 |
| Below 1,000 | 105.7 | 116.3 | 16.0 | 12.6 |
| 1,000-1,999 | 179.3 | 128.9 | 27.1 | 14.0 |
| 2,000-2,999 | 133.3 | 136.1 | 20.1 | 14.7 |
| 3,000-3,999 | 86.1 | 121.3 | 13.0 | 13.1 |
| 4,000-4,999 | 54.0 | 95.2 | 8.2 | 10.3 |
| 5,000-5,999 | 33.5 | 75.4 | 5.1 | 8.2 |
| 6,000-6,999 | 21.7 | 57.5 | 3.3 | 6.2 |
| 7,000-7,999 | 13.8 | 42.2 | 2.1 | 4.6 |
| 8,000-8,999 | 9.5 | 32.4 | 1.4 | 3.5 |
| 9,000-9,999 | 6.5 | 23.4 | 1.0 | 2.5 |
| 10,000 \& Over | 18.3 | 94.6 | 2.8 | 10.3 |
| Average Household Income (\$) | 3,076 | 4,943 |  |  |
| Median Household Income (\$) | 2,296 | 3,607 |  |  |

## Improvement Across All Ethnic Groups

4 All ethnic groups enjoyed good income growth in the last decade. Between 1990 and 2000, the median household income from work rose from $\$ 2,400$ to $\$ 3,850$ (4.8 per cent per annum) for the Chinese, from $\$ 1,880$ to $\$ 2,710$ ( 3.7 per cent) for the Malays and from $\$ 2,170$ to $\$ 3,390$ ( 4.5 per cent) for the Indians (Table 4).

TABLE 4 HOUSEHOLD INCOME FROM WORK BY ETHNIC GROUP OF HEAD

|  |  |  | Dollars |  |
| :--- | :---: | :---: | :---: | :---: |
| Ethnic Group | Average Household Income |  | Median Household Income |  |
|  | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ |
|  |  |  |  |  |
| Total | $\mathbf{3 , 0 7 6}$ | $\mathbf{4 , 9 4 3}$ | $\mathbf{2 , 2 9 6}$ | $\mathbf{3 , 6 0 7}$ |
| Chinese | 3,213 | 5,219 | 2,400 | 3,848 |
| Malays | 2,246 | 3,148 | 1,880 | 2,708 |
| Indians | 2,859 | 4,556 | 2,174 | 3,387 |
| Others | 3,885 | 7,250 | 2,782 | 4,775 |
|  |  |  |  |  |

## Higher Income for Graduate Households

5 There is a positive correlation between the level of education attained and household income. Graduate households (those with at least one university or polytechnic graduate) tend to have higher household income (Table 5). In 2000, the median income was $\$ 7,930$ for university graduate households and $\$ 5,320$ for polytechnic graduate households. This was 5.5 times and 3.7 times respectively the median income of $\$ 1,440$ for households without any secondary-educated members.

TABLE 5 HOUSEHOLD INCOME FROM WORK BY EDUCATIONAL ATTAINMENT OF HOUSEHOLD

| Educational Attainment of Household | Average Household Income |  | Median Household Income |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 2000 | 1990 | 2000 |
| Total | 3,076 | 4,943 | 2,296 | 3,607 |
| Graduate Households |  |  |  |  |
| University Graduate Households | 7,118 | 9,827 | 6,056 | 7,929 |
| Polytechnic Graduate Households | 4,529 | 5,932 | 4,061 | 5,324 |
| Non-Graduate Households |  |  |  |  |
| At Least One Member with Secondary or Upper Secondary Qualification | 3,066 | 4,105 | 2,603 | 3,467 |
| Others | 1,504 | 1,667 | 1,304 | 1,443 |

[^0]
## INCOME DISTRIBUTION

## Growth in Household Income from Work by Decile

6 With recovery from the 1998 economic slowdown, household income growth had resumed for the majority of households in 2000 (Table 6). In analysing income growth of households in different income strata, the total resident households (including those without income earner) were ranked by the size of their total household income from work and divided into ten equal groups or deciles. For the lowest two deciles, the average household income in 2000 had declined compared with 1999. This was mainly due to the increase in the proportion of households with no income earner from 75 per cent in 1999 to 87 per cent in 2000 for the lowest $10 \%$.

7 Within the lowest $10 \%$ of households, there was still a decline of 14 per cent in average household income for those with income earners - from \$531 in 1999 to $\$ 459$ in 2000. Such comparison, however, must be viewed in context, as the proportion of households with income in the lowest $10 \%$ had become much smaller, from 25 per cent in 1999 to 13 per cent in 2000. This means that average household income in 2000 is computed for a smaller pool of incomeearning households, who are more concentrated at the lowest extreme of the income distribution.

TABLE 6 AVERAGE HOUSEHOLD INCOME FROM WORK BY DECILE AMONG ALL RESIDENT HOUSEHOLDS

|  | Average Household Income from Work (\$) |  |  |  |  | Annual Change (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 1997 | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 |
| Total | 3,076 | 4,745 | 4,822 | 4,691 | 4,943 | 1.6 | -2.7 | 5.4 |
| Lowest 10\% | 370 | 327 | 258 | 133 | 61 | -21.1 | -48.4 | -54.1 |
| Excluding Households with No Income Earner | 620 | 716 | 681 | 531 | 459 | -4.9 | -22.0 | -13.6 |
| Next 10\% | 934 | 1,352 | 1,332 | 1,172 | 1,145 | -1.5 | -12.0 | -2.3 |
| Next 10\% | 1,321 | 2,002 | 2,005 | 1,853 | 1,862 | 0.1 | -7.6 | 0.5 |
| Next 10\% | 1,686 | 2,613 | 2,647 | 2,470 | 2,535 | 1.3 | -6.7 | 2.6 |
| Next 10\% | 2,076 | 3,254 | 3,305 | 3,137 | 3,237 | 1.6 | -5.1 | 3.2 |
| Next 10\% | 2,541 | 4,019 | 4,097 | 3,900 | 4,036 | 1.9 | -4.8 | 3.5 |
| Next 10\% | 3,116 | 4,938 | 5,034 | 4,828 | 5,017 | 1.9 | -4.1 | 3.9 |
| Next 10\% | 3,897 | 6,093 | 6,271 | 6,023 | 6,316 | 2.9 | -4.0 | 4.9 |
| Next 10\% | 5,152 | 7,965 | 8,221 | 7,937 | 8,419 | 3.2 | -3.5 | 6.1 |
| Top 10\% | 9,671 | 14,890 | 15,053 | 15,451 | 16,804 | 1.1 | 2.6 | 8.8 |

[^1]
## Income Growth among Households with Income Earners

8 In Table 7, only the resident households with income earner were ranked by the size of their total household income from work. Since the household income data cover only income from work, it is pertinent to analyse the household income growth among all households with at least one working person. This is done in some developed countries with a large proportion of retiree households.

9 For the income-earning households, the average household income from work had increased in every decile group between 1999 and 2000, reflecting the economic recovery. The lowest $10 \%$ had an income increase of 6.8 per cent. The top $10 \%$ households had larger increase in income among all groups at 9.4 per cent. For the decade from 1990 to 2000, there were across-the-board increases in household income in all decile groups.

TABLE 7 AVERAGE HOUSEHOLD INCOME FROM WORK BY DECILE AMONG RESIDENT HOUSEHOLDS WITH INCOME EARNERS

|  | Average Household Income from Work (\$) |  |  |  | Annual Change (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 1998 | 1999 | 2000 | 1990-2000 | 1999 | 2000 |
| Total | 3,205 | 5,142 | 5,070 | 5,413 | 5.4 | -1.4 | 6.8 |
| Lowest 10\% | 694 | 971 | 907 | 969 | 3.4 | -6.6 | 6.8 |
| Next 10\% | 1,065 | 1,712 | 1,625 | 1,692 | 4.7 | -5.1 | 4.1 |
| Next 10\% | 1,433 | 2,290 | 2,200 | 2,292 | 4.8 | -3.9 | 4.2 |
| Next 10\% | 1,782 | 2,904 | 2,785 | 2,927 | 5.1 | -4.1 | 5.1 |
| Next 10\% | 2,171 | 3,564 | 3,430 | 3,600 | 5.2 | -3.8 | 5.0 |
| Next 10\% | 2,634 | 4,338 | 4,195 | 4,391 | 5.2 | -3.3 | 4.7 |
| Next 10\% | 3,209 | 5,268 | 5,105 | 5,365 | 5.3 | -3.1 | 5.1 |
| Next 10\% | 3,992 | 6,505 | 6,295 | 6,666 | 5.3 | -3.2 | 5.9 |
| Next 10\% | 5,254 | 8,472 | 8,242 | 8,801 | 5.3 | -2.7 | 6.8 |
| Top 10\% | 9,816 | 15,393 | 15,920 | 17,424 | 5.9 | 3.4 | 9.4 |

Note: Deciles are based on ranking of resident households with income earners.

## Household Income Disparity

10 Reflecting the faster income growth for higher-income households, the disparity in household income had widened in 2000. The Gini coefficient, which is a summary measure of income inequality among all resident
households, rose from 0.467 in 1999 to 0.481 in 2000 (Table 8). The coefficient had remained relatively stable during the period 1990-1998, at between 0.436 and 0.446.

TABLE 8 MEASURES OF HOUSEHOLD INCOME DISPARITY

|  | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| Gini Coefficient | $\mathbf{0 . 4 3 6}$ | $\mathbf{0 . 4 4 3}$ | $\mathbf{0 . 4 4 4}$ | $\mathbf{0 . 4 4 6}$ | $\mathbf{0 . 4 6 7}$ | $\mathbf{0 . 4 8 1}$ |
| Excluding Households with No Income Earner | 0.412 | 0.409 | 0.412 | 0.410 | 0.424 | 0.432 |
|  |  |  |  |  |  |  |
| Ratio of Average Income | 11.4 | 13.8 | 13.6 | 14.6 | 17.9 | 20.9 |
| Top 20\% to Lowest 20\% | 5.5 | 6.1 | 5.9 | 6.2 | 6.8 | 7.4 |
| 9th decile to 2nd decile |  |  |  |  |  |  |

11 The same trend was shown when households with no income earner were excluded, with the Gini coefficient increasing from around 0.410 during 1990-1998 to 0.424 in 1999 and 0.432 in 2000.

12 Other measures of income inequality indicated similar trend towards greater disparity in household income. The ratio of the average income of households in the top $20 \%$ to that of households in the lowest $20 \%$ rose from 18 in 1999 to 21 in 2000. After discounting households with very high and very low incomes, households in the 9th decile still earned 7.4 times the income of those in the 2nd decile, up from 5.5 in 1990.

## Effect of Retiree Households on Income Distribution

13 The increase in households with no income earner contributed to the greater household income disparity. Households with no income earner comprised 8.7 per cent of total resident households in 2000 , up from 7.5 per cent in 1999 and 4.0 per cent in 1990. This was mainly due to the increase in households with retired elderly persons and unemployed members. As household income from work would shrink when household members retire or become unemployed, such households would tend to fall into the lowest decile (Table 9).

TABLE 9 LOWEST 10\% HOUSEHOLDS BY ECONOMIC ACTIVITY STATUS

|  | Per Cent |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 1997 | 1998 | 1999 | 2000 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Households with No Income Earner | 40.4 | 54.3 | 62.1 | 74.9 | 86.8 |
| "Retiree" Households | 15.8 | 27.0 | 31.6 | 35.4 | 36.7 |
| Households with At Least <br> One Unemployed Person Below 60 Years* | 4.3 | 6.5 | 10.4 | 16.1 | 21.5 |
| Households with Only Economically Inactive Persons Below 60 Years | 20.4 | 20.8 | 20.1 | 23.5 | 28.5 |
| Households with Income Earners | 59.6 | 45.7 | 37.9 | 25.1 | 13.2 |

Note : "Retiree" households refer to those comprising only non-working persons aged 60 years and over.

* Includes households with both retirees and unemployed persons below 60 years.


## Lowest $\mathbf{1 0 \%}$ Not Necessarily Poor

14 Although a high proportion of households in lowest $10 \%$ had no income from work, they were not necessarily poor. More households in this group were living in bigger dwelling units in 2000. About 78 per cent lived in HDB 3-room and larger flats or private properties, up from 68 per cent in 1990 (Table 10). Furthermore, 78 per cent of households owned their homes in 2000, up from 69 per cent in 1990.

TABLE 10 RESIDENT HOUSEHOLDS BY TYPE OF DWELLING AND HOME OWNERSHIP RATE

|  |  |  | Per Cent |  |
| :--- | :---: | :---: | :---: | :---: |
| Type of Dwelling | Lowest $\mathbf{1 0 \%}$ (Households | All Households |  |  |
|  | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ |
|  |  |  |  |  |
| HDB 1- \& 2-Room Flats | 24.3 | 20.6 | 8.2 | 5.0 |
| HDB 3-Room Flats | 41.1 | 37.7 | 35.4 | 25.7 |
| HDB 4-Room \& Larger Flats | 18.0 | 29.8 | 40.4 | 56.9 |
| Private Houses \& Flats | 9.0 | 10.6 | 11.1 | 11.1 |
| Home Ownership Rate | $\mathbf{6 9 . 4}$ | $\mathbf{7 8 . 3}$ | $\mathbf{8 7 . 5}$ | $\mathbf{9 2 . 3}$ |
| Number of Households | $(\mathbf{0 0 0})$ | $\mathbf{6 6 . 2}$ | $\mathbf{9 2 . 3}$ | $\mathbf{6 6 1 . 7}$ |


[^0]:    Note : Households with both university and polytechnic graduates are classified under 'University Graduate Households'.

[^1]:    Note : Deciles are based on ranking of all resident households.

