## Population features in the Cayman Islands

There are at least three striking features in the population statistics of Cayman Islands:

- The rapid growth rate since around 1970 with about $4 \%$ average annual growth. With a growth rate of $4 \%$ the population will double in 18 years.
- The population composition by age with a high dominance of persons in the ages 30-49 years. The median age is 35 years.
- The high percentage of persons with Non-Caymanian status in the population, about 44\%.


## Population growth rate

There are only four components of change in the total population; births (B), deaths (D), immigration (I) and emigration (E):
$\mathrm{P}_{\mathrm{n}}=\mathrm{P}_{0}+(\mathrm{B}-\mathrm{D})+(\mathrm{I}-\mathrm{E})$
$P_{n}$ is the population at the end of the period and $P_{0}$ is the population at the beginning of the period. B-D is called natural growth. Normally it is natural increase, but natural decrease can occur, of course. I-E is called net migration.

| 1989 <br> Population | 1999 <br> Population | 2007 <br> Population $^{\mathrm{R}}$ | Annual growth <br> $1989-1999, \%$ | Annual growth <br> $1999-2007, \%$ |
| :---: | :---: | :---: | :---: | :---: |
| 25,000 | 39,000 | 55,000 | 4.4 | 4.2 |

Source: Population census 1989, 1999 and LFS 2007
The annual growth rate is calculated from the formula for geometric growth.
With a population annual growth at $4.4 \%$, the population in Cayman Islands will double in 16 years. A growth rate above $4 \%$ is very unusual. If the growth rate is $3 \%$ the population will double in 23 years. Also a growth rate of $3 \%$ must be regarded as high.

The rapid growth of the population in Cayman Islands from around 1970 until now is mainly due to a high number of net migration from Non-Caymanians. The Caymanians mainly contributed to the natural growth.

Natural growth is at present about 600 per year ( 800 births and 200 deaths) in the Cayman Islands. Then a net migration of about 1,700 per year is needed in the coming years to obtain a growth rate of $4.4 \%$. In the long run a population growth rate over $4 \%$ is not probable. It would result in an unreasonable large population in a rather short term.

A more realistic judgment of the future population development is that the population growth follows a logistic curve. This means that you first have a period of low growth
rate, then a period of high growth rate followed by a new period of low population growth but now on a higher level. This is sometimes called the "demographic transition" and is probably most applicable to countries where the natural growth is much more important than net migration for population growth, which is not the case in the Cayman Islands.

The problem in Cayman Islands is the assumption on when the exponential growth will slow down. As this will depend more on the decline in net migration and not so much on changes in the natural growth it is very difficult to make "realistic" assumptions. Forecasting natural growth is easier than forecasting net immigration. Fertility and mortality do not normally change rapidly but net migration can change quickly due to e.g. political decisions or an economic crisis.


There are signs that the rapid population growth in the Cayman Islands is declining. The population count in the coming 2010 Population Census will be very important. There is currently no official population projection in the Cayman Islands mainly due to small resources at ESO and lack of data. ESO is trying to carry out some rough future population estimates based on incomplete data. However, it will be possible to do "proper' population projections based on the 2010 census results.


## Household size

Average number of persons per household 1960 - 2008:

| Year | Average number |
| :--- | ---: |
| 1960 | 4.5 |
| 1970 | 4.1 |
| 1979 | 3.8 |
| 1989 | 3.1 |
| 1999 | 2.6 |
| 2006 | 2.6 |
| 2007 | 2.5 |
| 2008 | 2.5 |

Source: Population censuses 1960-1999 and LFS 2006-2008
The household size has decreased considerably since 1960. More than 75 percent of the households in the Cayman Islands now have one - three household members. About 25 percent of the households are one-person households.

## Population composition by age

The age distribution is given in the tables below:

Population by age groups 1960-1999

| Age group | $\mathbf{1 9 6 0}$ | $\mathbf{1 9 7 0}$ | $\mathbf{1 9 7 9}$ | $\mathbf{1 9 8 9}$ | $\mathbf{1 9 9 9}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| $0-4$ | 1,191 | 1,383 | 1,468 | 2,017 | 2,740 |
| $5-9$ | 1,087 | 1,349 | 1,766 | 1,925 | 2,713 |
| $10-14$ | 742 | 1,150 | 1,620 | 1,816 | 2,147 |
| $15-19$ | 664 | 959 | 1,600 | 2,053 | 1,950 |
| $20-24$ | 718 | 661 | 1,533 | 2,274 | 2,393 |
| $25-29$ | 670 | 651 | 1,449 | 2,867 | 4,361 |
| $30-34$ | 548 | 621 | 1,328 | 2,711 | 4,895 |
| $35-39$ | 501 | 558 | 1,055 | 2,357 | 4,543 |
| $40-44$ | 414 | 498 | 1,031 | 1,717 | 3,585 |
| $45-49$ | 432 | 402 | 846 | 1,327 | 2,944 |
| $50-54$ | 342 | 390 | 758 | 1,126 | 2,091 |
| $55-59$ | 278 | 372 | 584 | 878 | 1,356 |
| $60-64$ | 279 | 316 | 476 | 686 | 1,038 |
| $65-69$ | 201 | 252 | 439 | 521 | 797 |
| $70-74$ | 183 | 205 | 299 | 412 | 563 |
| $75-79$ | 124 | 138 | 213 | 307 | 377 |
| $80-84$ | 81 | 94 | 118 | 191 | 255 |
| $85+$ | 56 | 69 | 94 | 170 | 202 |
| NS |  |  |  |  | 70 |
| TOTAL | $\mathbf{8 , 5 1 1}$ | $\mathbf{1 0 , 0 6 8}$ | $\mathbf{1 6 , 6 7 7}$ | $\mathbf{2 5 , 3 5 5}$ | $\mathbf{3 9 , 0 2 0}$ |
|  |  |  |  |  |  |
| 15 | 3,020 | 3,882 | 4,854 | 5,758 | 7,600 |
| $15-64$ | 4,846 | 5,428 | 10,660 | 17,996 | 29,156 |
| $65+$ | 645 | 758 | 1,163 | 1,601 | 2,264 |
|  |  |  |  |  |  |
| Dependency ratio $\%$ | 75.6 | 85.5 | 56.4 | 40.9 | 33.8 |

Note: The dependency ratio is the number of persons under the age of 15 and over the age of 64 divided by the number of persons in the age group 15-64 years inclusive, in per cent

Source: Population censuses 1960-1999

The dependency ratio in Cayman Islands is very low compared to most other countries. Around year 2000 this was around 40 percent in Bermuda and about 67 percent in Jamaica. The average in CARICOM countries was about 60 per cent. A low dependency rate is regarded to be favorable to economic development. The dependency ratio can be interpreted as the ratio of persons that are not normally economic active to the population
of working age/productive ages. A high dependency ratio implies that there are fewer persons in the productive ages.

Population by broad age groups 1960-2008, per cen

| Broad age | $\mathbf{1 9 6 0}$ | $\mathbf{1 9 7 0}$ | $\mathbf{1 9 7 9}$ | $\mathbf{1 9 8 9}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $<15$ | 35.5 | 38.5 | 29.1 | 22.8 | 19.5 | 17.2 | 18.7 |
| $15-64$ | 57 | 53.9 | 64 | 71 | 74.7 | 75.8 | 76.3 |
| $65+$ | 7.8 | 7.5 | 7.0 | 6.4 | 5.8 | 7.0 | 5.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Population census 1960-1999, LFS 2007 and 2008
As can be seen from the table above the percentage of young (less than 15 years of age) persons has decreased significantly and has been halved from 1960 to 2008. At the same time the percentage of people between 15 and 64 has increased substantially. The dependency ratio is about $30 \%$ in 2007 compared to about $34 \%$ in 1999. The median age was 33 years in 1999. The median age has since 1999 increased to 36 years in 2007 according to LFS 2007. In LFS 2008 the median age was estimated to 35 years of age.

## Sex distribution

Population by Age and Sex 1999

|  | All | Females |  |  |  |  | Males |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age group distribution |  |  |  |  |  |  |  |  |
| Number | Percent | Number | Percent | Number | Percent | Females | Males |  |
| All Ages | 39,020 | 100 | 19,988 | 100 | 19,032 | 100 | 51 | 49 |
| Under 15 | 7,599 | 19.5 | 3,768 | 18.9 | 3,831 | 20.1 | 50 | 50 |
| $15-29$ | 8,705 | 22.3 | 4,488 | 22.5 | 4,217 | 22.2 | 52 | 48 |
| $30-49$ | 15,967 | 40.9 | 8,264 | 41.3 | 7,703 | 40.5 | 52 | 48 |
| $50-64$ | 4,485 | 11.5 | 2,217 | 11.1 | 2,268 | 11.9 | 49 | 51 |
| 65 or over | 2,194 | 5.6 | 1,215 | 6.1 | 979 | 5.1 | 55 | 45 |
| NS | 70 | 0.2 | 36 | 0.2 | 34 | 0.2 | 51 | 49 |

Source: Population census 1999
As can be seen from the table above the sex distribution in Cayman Islands was rather even in 1999 and it still is. Recent Labour Force Surveys (LFS) estimate about 50 percent women and 50 percent men in Cayman Islands. As in almost all other countries there are more women than men in the oldest age groups.

Population Pyramid - Cayman Islands (LFS 2006)


Population Pyramid - Cayman Islands (LFS 2007)


Note that the number in each five year group by sex is small and thus these are uncertain estimates. However, the big picture with a very high dominance of persons in the ages 30-49 years are correct. As pointed out before, the median age is about 35 years. The Cayman Islands have a middle-aged population.

## Status

The percentage of Caymanians has decreased steadily. In 1970, the proportion of Caymanians was 85 percent; in 197981 percent; and in 198967 percent. In 1999, the proportion was as low as 53 percent. Around 2003, there was an increase due to grants of Caymanian status by the Cabinet and the proportion of persons with Caymanian status is now estimated to about 56 percent.

## Union Status

Population 15 years and over by Union Status, 2007

| Union Status | Percent |
| :--- | ---: |
| Legally Married | 47.8 |
| Common Law Union | 10.6 |
| Visiting Partner | 2.9 |
| Married But Not in Union | 2.5 |
| Legally Separated and Not in Union | 0.9 |
| Widowed and Not in Union | 2.3 |
| Divorced and Not in Union | 3.5 |
| Not in Union | 22.5 |
| Don't know/Not Stated | 6.9 |
| Total | 100 |

Source: Survey of Living Conditions (SLC) 2007

More information can be found on the ESO website, www.eso.ky.

