

Aspects of the Elderly Population in Macao

Findings from the 2001 Population Census of Macao

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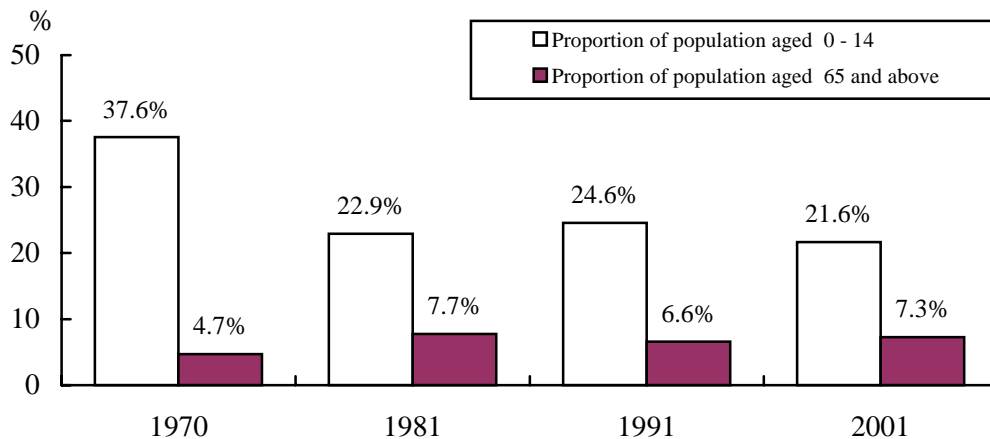
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Population ageing is becoming a global concern. It is perceived that the scenario presents both as challenges and as opportunities to government agencies and private investors. In fact, population ageing has been yielding public and private concerns over a wide spectrum of demographic, social and economic issues, viz. medical care, social welfare, housing, labour supply, investment and consumption, etc.

Macao is no exception to this phenomenon. In light of the developments and based on the latest census results, this report attempts to provide a brief account of the major socio-economic characteristics of the elderly population in Macao.

Results from the past four censuses depicted an apparent trend of an ageing population in Macao. Over the last three decades, the elderly population (people aged 65 year and above) has been increasing at an annual rate of 3.3%, when the average growth rate for the entire population was just 1.8%.

Proportion of the elderly surged from 6.6% in 1991 to 7.3% in 2001. On the contrary, respective share of the population aged below 15 dropped from 24.6% to 21.6%. Meanwhile, median age of the general population jumped from 28.8 in 1991 to 33.3 in 2001.



Evolution of the age structure of Macao's population

Geographical distribution

Macao, with a land area of 25.8 km² in 2001, consists of a peninsula and two islands. Similar to many other places, divergence of geographic conditions and economic developments resulted in dispersion of population groups in the territory. In this paper, our focus refers to the elderly population.

Coloane Island, despite of its evolvement from a fishing and farming village into a tourist spot in recent years, is still considered as less developed in comparison with other parishes in Macao. The lack of a sound economic prospect urges the younger generation moving out for better job opportunities, leaving behind those who are economically inactive, consist mainly of housewives, children and the elderly. Proportionally speaking, Coloane Island has the largest share (11.7%) of elderly population.

On the contrary, continuous developments in the last decades have changed Taipa Island into a commercialized urban district filled with respectable residential buildings. Consequently, the Island is more attractive to newly established families and younger generation in setting up residence there. Hence, Taipa Island has the lowest ratio (4.1%) of elderly population in Macao.

With respect to the level of internal migration, the majority of the elderly was less interested in changing residence. Results showed that 73.4% of them have stayed in the same address during the past five years, compared with 55.7% for the whole population.

Age and sex composition

Recent census data indicated that the number of elderly grew in both sexes. Elderly males and females registered notable increases of 40.1% and 31.4% respectively over 1991. Share of the elderly males, relative to the overall male population, increased from 5.4% in 1991 to 6.3% in 2001. For the elderly females, the relative proportion rose from 7.7% in 1991 to 8.2% in 2001. Meanwhile, the elderly sex ratio gap has been narrowing from 667 males per 1,000 females in 1991 to 711 males per 1,000 females in 2001.

With respect to the distribution by age group for the elderly, proportion of those aged 65 - 69 reduced from 36.7% in 1991 to 31.2% in 2001; on the contrary, respective share of those aged 80 and above increased from 17.6% to 20.5%. In fact, the scenario illustrates that in Macao, apart from having an ageing population, the elderly is likely to live longer overtime.

Place of birth

The population of Macao comprises immigrants who were born in different parts of the world. The majority (56.1%) of the population was born outside Macao, namely, Mainland China, Hong Kong and the Philippines; for the elderly population, the proportion was more apparent, with 81.6%.

Among the elderly population, an analysis of their place of birth showed that 73.8% of

them were born in Mainland China. They were immigrants from Mainland China who came to Macao half a century ago and grew old along with the passage of time.

Educational attainment

Results from 2001 Census revealed that 41.3% of the elderly had no schooling or pre-primary education only, and merely 4.1% had tertiary education, compared with 9.9% and 7.4% respectively for the population aged 3 and above. In addition, 43.8% of the elderly were illiterate; the respective share for the population aged 15 and above was just 8.7%. The principal reasons were the lack of a developed education system, coupled with harsh economic conditions in older times, which had impeded the opportunities of the younger generation in getting better education.

Although the elderly had a lower level of education attainment compared with the population in general, the situation has been improved over the last 10 years. Proportion of the elderly who had no schooling or pre-primary education only, dropped notably from 56.5% in 1991 to 41.3% in 2001. Meanwhile, respective share of those who had tertiary education increased from 2.8% in 1991 to 4.1% in 2001.

Marital status

With regard to the marital status, among the elderly males, 78.4% were married and 14.6% were widower, while elderly females shared 44.0% and 51.8% respectively. The higher percentage of elderly females in widowhood was resulted from younger brides who usually out-live the spouse.

It is obvious that the proportion of the widowed elderly rises when the population gets older. In 2001, the widowed elderly took up 20.7% of the population aged 65-69 and soared to 64.4% of those aged 85 and above.

Labour force

Census results indicated that the elderly accounted for 1.4% of the total labour force (economically active population) in Macao; down from 2.1% in 1991. Among the elderly workforce, 99.7% were employed.

Labour force participation rate was 66.1% for the population aged 14 and above. As for the elderly, however, the rate plunged from 18.1% in 1991 to 10.2% in 2001, denoting a reduction of elderly workforce in the labour market over the last 10 years.

An analysis by detailed age group showed that for labour force participation rate was 18.9% for the elderly aged 65-69, down to 10% for those aged 70-74 and only 2.1% for those aged 85 and above. With respect to the status in employment, over 30% of the employed elderly were either employers or own-account workers, revealing the fact that some were working for financial reasons, others were running own businesses or keeping social contacts.

In general, the employed elderly had lower monthly median employment earnings (MOP3 402) compared with the total employed population (MOP5 144). Furthermore, it is worth notice that 5.3% of the employed elderly earned more than MOP20 000, while the respective share was 5.6% for the total employed population.

Living arrangements

According to the results of Census 2001, among the elderly population, 3.7% were living in institutions, compared with only 0.7% for the total population. In terms of the living arrangements of the other elderly population, the majority (77.6%) was staying with spouse or children, 15.1% of them were living alone and 7.2% were living with other relatives or non-relatives.

For the lone elderly, the proportion jumped from 12.2 in 1991 to 15.1% in 2001. Besides, the percentage increased as age grew, up from 10.7% for those aged 65-69 to 19.8% for those aged 85 and above.

Analyzed by type of housing, 64.1% of the lone elderly stayed in domestic living quarters that were “rent-free” or “owner-occupier without mortgage”, compared with 40.2% for all lone households. It was conceivable that these lone elderly were either owner of the living quarters they were staying or provided to them free-of-charge.

Concluding remarks

This report presents some of major socio-economic characteristics of the elderly population in Macao. Primarily, population ageing is resulted from rapid medical advancements, which help in achieving longer life expectancy and reducing mortality rate, especially among the elderly population.

Secondly, continuous economic progress in the past decades has open up the doors for women in receiving higher education, participating in economic activities and competing in the labour market. Consequently, more working females opt to delay their age of marriage

and child bearing period, choose to have less number of children or even childless, which resulted in sharp declines in birth rate in Macao.

A recent study on the population projection showed an unprecedented trend that, by 2021, proportion of the elderly would surpass the population aged below 15, sharing 15% of the total population.

Census allows the society to obtain a comprehensive picture of the population and, when necessary, profile of a specific population group. This report on the elderly population of Macao is one of the target groups that a census can portray, which provides important reference for our government in formulating policies in meeting the challenges brought about by an ageing population. At the same time, a detailed account of the elderly offers a wide array of opportunities for private service providers whose clientele is targeted at this population group.

Table 1: Population by age group and sex

| Age group | Sex | 1970 | | 1981 | | 1991 | | 2001 | |
|-----------|-----|---------|----------------|---------|----------------|---------|----------------|---------|----------------|
| | | No. | Proportion (%) | No. | Proportion (%) | No. | Proportion (%) | No. | Proportion (%) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Total | MF | 248 636 | 100.0 | 241 729 | 100.0 | 355 693 | 100.0 | 435 235 | 100.0 |
| | M | 127 703 | 100.0 | 122 990 | 100.0 | 172 492 | 100.0 | 208 865 | 100.0 |
| | F | 120 933 | 100.0 | 118 739 | 100.0 | 183 201 | 100.0 | 226 370 | 100.0 |
| 0-14 | MF | 93 398 | 37.6 | 55 464 | 22.9 | 87 333 | 24.6 | 94 221 | 21.6 |
| | M | 49 223 | 38.5 | 28 716 | 23.3 | 44 927 | 26.0 | 48 824 | 23.4 |
| | F | 44 175 | 36.5 | 26 748 | 22.5 | 42 406 | 23.1 | 45 397 | 20.1 |
| 15-64 | MF | 143 597 | 57.8 | 167 553 | 69.3 | 244 863 | 68.8 | 309 326 | 71.1 |
| | M | 73 717 | 57.7 | 86 909 | 70.7 | 118 165 | 68.5 | 146 876 | 70.3 |
| | F | 69 880 | 57.8 | 80 644 | 67.9 | 126 698 | 69.2 | 162 450 | 71.8 |
| ≥ 65 | MF | 11 641 | 4.7 | 18 712 | 7.7 | 23 497 | 6.6 | 31 688 | 7.3 |
| | M | 4 763 | 3.7 | 7 365 | 6.0 | 9 400 | 5.4 | 13 165 | 6.3 |
| | F | 6 878 | 5.7 | 11 347 | 9.6 | 14 097 | 7.7 | 18 523 | 8.2 |

Table 2: Elderly population by Parish

| Parish | % | |
|-------------------------|------------|------------|
| | 1991 | 2001 |
| 1 | 2 | 3 |
| Macao Peninsula | 6.6 | 7.6 |
| Santo António | 7.0 | 9.0 |
| São Lázaro | 7.6 | 10.5 |
| São Lourenço | 8.2 | 9.9 |
| Sé | 10.1 | 10.6 |
| N.S. de Fátima | 4.5 | 5.3 |
| Islands | 8.9 | 4.6 |
| Taipa | 7.5 | 4.1 |
| Coloane | 12.1 | 11.7 |
| Maritime area | 1.3 | 0.8 |
| <i>Total population</i> | <i>6.6</i> | <i>7.3</i> |

Table 3: Elderly population by place of birth and sex, 2001

%

| Population | Sex | Place of birth | | | | | | | |
|-------------------------|-----------|----------------|----------------|------------|------------|------------|-------------|------------|------------|
| | | Macao | Mainland China | Hong Kong | Taiwan | Portugal | Philippines | Thailand | Others |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Elderly population | MF | 18.4 | 73.8 | 2.4 | 0.1 | 0.4 | 0.2 | 0.1 | 4.6 |
| | M | 19.3 | 72.3 | 2.7 | 0.1 | 0.7 | 0.2 | - | 4.7 |
| | F | 17.8 | 74.9 | 2.3 | 0.1 | 0.2 | 0.1 | 0.1 | 4.5 |
| <i>Total population</i> | <i>MF</i> | <i>43.9</i> | <i>47.4</i> | <i>3.3</i> | <i>0.2</i> | <i>0.4</i> | <i>1.2</i> | <i>0.2</i> | <i>3.4</i> |
| | <i>M</i> | <i>47.1</i> | <i>43.7</i> | <i>3.9</i> | <i>0.2</i> | <i>0.5</i> | <i>0.9</i> | <i>0.1</i> | <i>3.7</i> |
| | <i>F</i> | <i>41.0</i> | <i>50.9</i> | <i>2.8</i> | <i>0.1</i> | <i>0.3</i> | <i>1.5</i> | <i>0.3</i> | <i>3.0</i> |

Table 4: Elderly population by age group and sex

%

| Age group | Sex | 1991 | 2001 | |
|--------------------|-------|-------|-------|------|
| 1 | 2 | 3 | 4 | |
| Elderly population | MF | 100.0 | 100.0 | |
| | M | 40.0 | 41.5 | |
| | F | 60.0 | 58.5 | |
| Of which: | 65-69 | MF | 36.7 | 31.2 |
| | | M | 15.4 | 14.2 |
| | | F | 21.2 | 16.9 |
| | 70-74 | MF | 28.1 | 28.3 |
| | | M | 11.7 | 12.1 |
| | | F | 16.4 | 16.2 |
| | 75-79 | MF | 17.7 | 20.0 |
| | | M | 7.1 | 7.8 |
| | | F | 10.6 | 12.2 |
| ≥ 80 | MF | 17.6 | 20.5 | |
| | M | 5.8 | 7.4 | |
| | F | 11.8 | 13.1 | |

Table 5: Elderly population by educational attainment

| | | | % |
|--|-----------|--------------|--------------|
| Educational attainment | Sex | 1991 | 2001 |
| 1 | 2 | 3 | 4 |
| Elderly population | MF | 100.0 | 100.0 |
| | M | 40.0 | 41.5 |
| | F | 60.0 | 58.5 |
| No schooling/pre-primary | MF | 56.5 | 41.3 |
| | M | 14.3 | 8.1 |
| | F | 42.2 | 33.1 |
| Primary education | MF | 32.7 | 43.1 |
| | M | 18.6 | 23.0 |
| | F | 14.1 | 20.0 |
| Secondary education | MF | 8.0 | 11.5 |
| | M | 5.0 | 7.4 |
| | F | 3.0 | 4.1 |
| Tertiary education | MF | 2.8 | 4.1 |
| | M | 2.0 | 3.0 |
| | F | 0.8 | 1.1 |
| <hr/> | | | |
| <i>Population aged 3 years and above</i> | <i>MF</i> | <i>100.0</i> | <i>100.0</i> |
| <i>No schooling/ pre-primary</i> | <i>MF</i> | <i>17.0</i> | <i>9.9</i> |
| <i>Primary education</i> | <i>MF</i> | <i>47.7</i> | <i>44.8</i> |
| <i>Secondary education</i> | <i>MF</i> | <i>31.0</i> | <i>37.9</i> |
| <i>Tertiary education</i> | <i>MF</i> | <i>4.4</i> | <i>7.4</i> |
| <i>Special education</i> | <i>MF</i> | <i>...</i> | <i>0.1</i> |

Table 6: Illiteracy rate, 2001

| | | | % |
|---|-----------|-----------------|---|
| Age group | Sex | Illiteracy rate | |
| 1 | 2 | 3 | |
| Elderly population | MF | 43.8 | |
| | M | 20.3 | |
| | F | 60.5 | |
| <hr/> | | | |
| <i>Population aged 15 years and above</i> | <i>MF</i> | <i>8.7</i> | |
| | <i>M</i> | <i>4.7</i> | |
| | <i>F</i> | <i>12.2</i> | |

Table 7: Elderly population by marital status, age group and sex

| | | % | | | | | | | |
|--------------------|-----|---------------|---------|--------------------|---------|---------------|---------|--------------------|---------|
| Age group | Sex | 1991 | | | | 2001 | | | |
| | | Never married | Married | Separated/divorced | Widowed | Never married | Married | Separated/divorced | Widowed |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Elderly population | MF | 3.3 | 56.9 | 1.4 | 38.4 | 3.9 | 58.2 | 1.6 | 36.3 |
| | M | 3.8 | 78.2 | 1.3 | 16.7 | 5.2 | 78.4 | 1.8 | 14.6 |
| | F | 3.0 | 42.7 | 1.5 | 52.8 | 2.9 | 44.0 | 1.4 | 51.8 |
| Of which: | | | | | | | | | |
| 65-69 | MF | 3.0 | 68.4 | 1.6 | 27.0 | 3.8 | 73.3 | 2.2 | 20.7 |
| | M | 4.4 | 83.4 | 1.7 | 10.4 | 5.5 | 86.8 | 1.8 | 5.9 |
| | F | 2.0 | 57.5 | 1.4 | 39.0 | 2.5 | 61.9 | 2.6 | 33.1 |
| 70-74 | MF | 3.8 | 59.6 | 1.4 | 35.2 | 2.6 | 62.8 | 1.7 | 32.8 |
| | M | 4.7 | 78.8 | 1.2 | 15.3 | 4.0 | 81.3 | 2.3 | 12.4 |
| | F | 3.2 | 45.9 | 1.5 | 49.4 | 1.6 | 49.0 | 1.3 | 48.0 |
| 75-79 | MF | 2.6 | 50.6 | 1.6 | 45.2 | 4.3 | 49.8 | 1.4 | 44.5 |
| | M | 2.3 | 76.3 | 1.6 | 19.8 | 6.4 | 72.0 | 1.5 | 20.2 |
| | F | 2.9 | 33.4 | 1.5 | 62.2 | 3.0 | 35.5 | 1.4 | 60.1 |
| 80-84 | MF | 4.3 | 38.6 | 1.4 | 55.7 | 4.3 | 42.9 | 0.8 | 52.1 |
| | M | 3.3 | 69.0 | - | 27.6 | 4.4 | 68.3 | 2.0 | 25.4 |
| | F | 4.8 | 21.3 | 2.3 | 71.6 | 4.2 | 27.3 | - | 68.5 |
| ≥ 85 | MF | 2.7 | 29.0 | 0.8 | 67.5 | 6.3 | 29.2 | - | 64.4 |
| | M | - | 58.1 | - | 41.9 | 7.2 | 56.9 | 0.1 | 35.7 |
| | F | 3.8 | 18.1 | 1.0 | 77.1 | 5.9 | 15.6 | - | 78.5 |

Table 8: Labour force participation rate by age group

| | | % | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|--|
| Age group | 1991 | | | 2001 | | | |
| | MF | M | F | MF | M | F | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 14-19 | 53.1 | 53.2 | 53.0 | 23.7 | 24.5 | 22.9 | |
| 20-24 | 88.7 | 92.1 | 86.6 | 79.0 | 78.6 | 79.3 | |
| 25-29 | 86.1 | 97.9 | 77.0 | 89.1 | 93.1 | 86.1 | |
| 30-34 | 83.6 | 98.0 | 69.5 | 83.4 | 95.3 | 75.0 | |
| 35-39 | 85.6 | 98.1 | 71.5 | 81.6 | 94.8 | 71.2 | |
| 40-44 | 87.6 | 97.2 | 75.4 | 83.4 | 94.7 | 72.1 | |
| 45-49 | 82.8 | 95.5 | 66.9 | 81.5 | 92.8 | 69.3 | |
| 50-54 | 70.7 | 86.9 | 51.5 | 75.0 | 89.0 | 58.6 | |
| 55-59 | 56.5 | 78.1 | 36.5 | 61.0 | 79.6 | 39.8 | |
| 60-64 | 37.4 | 57.6 | 21.0 | 39.5 | 54.4 | 23.6 | |
| ≥ 65 | 18.1 | 29.3 | 10.6 | 10.2 | 18.4 | 4.3 | |
| 65-69 | 26.6 | 40.6 | 16.3 | 18.9 | 30.1 | 9.4 | |
| 70-74 | 17.8 | 30.0 | 9.1 | 10.0 | 17.9 | 4.1 | |
| 75-79 | 11.9 | 17.7 | 8.1 | 5.0 | 10.7 | 1.3 | |
| 80-84 | 7.8 | 12.9 | 4.9 | 2.4 | 4.5 | 1.1 | |
| ≥ 85 | 5.8 | 9.0 | 4.5 | 2.1 | 5.0 | 0.7 | |
| <i>Population aged 14 years and above</i> | <i>73.0</i> | <i>84.7</i> | <i>62.2</i> | <i>66.1</i> | <i>75.1</i> | <i>58.1</i> | |

Table 9: Employed elderly population by employment earnings in July 2001

| Employed population | Employment earnings (MOP) | | | | | | |
|---|---------------------------|-------------|-------------|-------------|-------------|------------|----------------------|
| | Median | <4000 | 4000-7999 | 8000-11999 | 12000-19999 | ≥ 20000 | Unpaid family worker |
| | MOP | % | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Employed population aged 65 years and above | 3 402 | 55.4 | 23.0 | 9.0 | 4.8 | 5.3 | 2.6 |
| <i>Total employed population</i> | <i>5 144</i> | <i>35.0</i> | <i>35.9</i> | <i>14.3</i> | <i>8.1</i> | <i>5.6</i> | <i>1.1</i> |

Table 10: Living arrangement of the elderly population, 2001

| Lone households | Living with spouse or children | | | | | | | Living with other relatives | Living with non-relatives | |
|-----------------|--------------------------------|--------|----------|---------------------|----------------------------|------------------------------|--------------------------------------|-----------------------------|---------------------------|-----|
| | Sub-total | Spouse | Children | Spouse and children | Spouse and other relatives | Children and other relatives | Spouse, children and other relatives | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 8 |
| | 15.1 | 77.6 | 19.9 | 10.0 | 13.7 | 3.5 | 21.4 | 9.2 | 5.8 | 1.4 |

Table 11: Elderly population living alone by age group and sex

| Age group | Sex | 1991 | 2001 |
|--------------------|-----|------|------|
| 1 | 2 | 3 | 4 |
| Elderly population | MF | 12.2 | 15.1 |
| | M | 10.6 | 13.0 |
| | F | 13.2 | 16.6 |
| Of which: | | | |
| 65-69 | MF | 9.1 | 10.7 |
| | M | 10.3 | 9.0 |
| | F | 8.1 | 12.2 |
| 70-74 | MF | 11.6 | 14.2 |
| | M | 11.5 | 13.2 |
| | F | 11.6 | 14.9 |
| 75-79 | MF | 14.9 | 19.3 |
| | M | 9.4 | 18.0 |
| | F | 18.6 | 20.2 |
| 80-84 | MF | 16.3 | 18.4 |
| | M | 10.7 | 16.5 |
| | F | 19.5 | 19.5 |
| ≥ 85 | MF | 18.0 | 19.8 |
| | M | 12.0 | 12.8 |
| | F | 20.2 | 23.3 |

