The National Transfer Account (NTA) for Malaysia
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MALAYSIAN DEMOGRAPHIC PATTERNS

Fertility, Mortality & Total Fertility Rate, Malaysia, 1950 - 2050

Pro-natalist policy (1980’s)

Source: UN, 2013, World Population Prospects (The 2012 Revision)
MALAYSIAN DEMOGRAPHIC PATTERNS

Age-Sex Pyramid for Malaysia, 1970, 2010, 2040

Source: UN, 2013, World Population Prospects (The 2012 Revision)
## MALAYSIAN DEMOGRAPHIC PATTERNS

### TFR, Median Age and Life Expectancy for Malaysia, 1970 - 2050

<table>
<thead>
<tr>
<th>Year</th>
<th>TFR (children per women)</th>
<th>Life expectancy at birth (yr)</th>
<th>Life expectancy at 60 (yr)</th>
<th>Median age (yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>1970</td>
<td>5.94</td>
<td>57.8</td>
<td>61.0</td>
<td>14.3</td>
</tr>
<tr>
<td>1980</td>
<td>4.16</td>
<td>63.5</td>
<td>67.1</td>
<td>15.5</td>
</tr>
<tr>
<td>1990</td>
<td>4.00</td>
<td>67.5</td>
<td>71.6</td>
<td>16.1</td>
</tr>
<tr>
<td>2000</td>
<td>3.10</td>
<td>69.6</td>
<td>74.5</td>
<td>16.7</td>
</tr>
<tr>
<td>2010</td>
<td>2.14</td>
<td>71.9</td>
<td>76.6</td>
<td>17.9</td>
</tr>
<tr>
<td>2015</td>
<td>1.91</td>
<td>73.5</td>
<td>78.2</td>
<td>n/a</td>
</tr>
<tr>
<td>2020</td>
<td>1.85</td>
<td>74.4</td>
<td>79.0</td>
<td>n/a</td>
</tr>
<tr>
<td>2030</td>
<td>1.78</td>
<td>76.2</td>
<td>80.5</td>
<td>n/a</td>
</tr>
<tr>
<td>2040</td>
<td>1.76</td>
<td>78.2</td>
<td>81.9</td>
<td>n/a</td>
</tr>
<tr>
<td>2050</td>
<td>1.77</td>
<td>80.0</td>
<td>83.2</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: DOSM, various years; United Nation (2013); Saw, 1988
# Age Composition of Malaysian Population, 1970 - 2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Persons (million)</th>
<th>Percentage of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-14</td>
<td>15-59</td>
</tr>
<tr>
<td>1970</td>
<td>4.89</td>
<td>5.44</td>
</tr>
<tr>
<td>1980</td>
<td>5.39</td>
<td>7.66</td>
</tr>
<tr>
<td>1990</td>
<td>6.76</td>
<td>10.43</td>
</tr>
<tr>
<td>2000</td>
<td>7.80</td>
<td>14.17</td>
</tr>
<tr>
<td>2010</td>
<td>7.83</td>
<td>18.26</td>
</tr>
<tr>
<td>2015</td>
<td>7.74</td>
<td>20.14</td>
</tr>
<tr>
<td>2020</td>
<td>7.82</td>
<td>21.52</td>
</tr>
<tr>
<td>2030</td>
<td>8.17</td>
<td>23.46</td>
</tr>
<tr>
<td>2040</td>
<td>7.67</td>
<td>25.18</td>
</tr>
<tr>
<td>2050</td>
<td>7.32</td>
<td>25.05</td>
</tr>
</tbody>
</table>

Source: United Nation (2013)
MALAYSIAN DEMOGRAPHIC PATTERNS

The Speed of Ageing

Developed countries

- France (1865 - 1980) 115 years
- Sweden (1890 - 1975) 85 years
- Australia (1938 - 2011) 73 years
- United States (1944 - 2021) 69 years
- Hungary (1941 - 1994) 53 years
- United Kingdom (1930 - 2020) 45 years
- Japan (1970 - 1996) 26 years

Developing countries

- Azerbaijian (2004 - 2037) 33 years
- China (2000 - 2026) 26 years
- Sri Lanka (2002 - 2026) 24 years
- Malaysia (2020 - 2043) 23 years
- Thailand (2002 - 2024) 22 years
- Columbia (2017 - 2036) 19 years
- Singapore (2000 - 2019) 19 years
- South Korea (2000 - 2018) 18 years

Source: Kinsella and He, 2009; U.S. Census Bureau, International Data Base, accessed on October 20, 2014.
Per Capita Consumption Profiles for Malaysia, 2009

- **Public Education**
- **Public other**
- **Public Health**
- **Private Education**
- **Private Health**

Per Capita, Ringgit (RM)

- Private other
- Private Health
- Private Education
- Public Health
- Public Education
- Public other
Per Capita Labour Income for Malaysia, 2009

**Phase 1:** Sharp increase (19-33)

**Phase 2:** Slow growth (Peak=44)

**Phase 3:** Sharp decline till around 60

**Phase 4:** Gradual dissipation till around 90

- The self-employed continued to work even after age 70s.
- Many shifted from wage-based to self-employment upon retirement—self-employment peak around age 57/58
- Small proportion of employee continued working after 70

Note:
Small proportion of total LC income earned was contributed by those under 20 (1.4%) and over 60 (4.38%)
The Most Important Graph for Malaysia, 2009

- Labor Income
- Consumption

Per Capita Ringgit (RM)
The Life Cycle Deficit for Malaysia, 2009

**DEFICIT:**
Child dependency: the first 26 years of life; Older person dependency started at 57 and over

**SURPLUS:**
A productive/surplus period of 31 years (between 26 to 57 years old)
Most critical issues on **financing the lifecycle deficits**:

- **Planning:** How the inter-temporal re-allocation can benefit the economy with good investment.

- **Choice of system:** Efficient public transfers consider the efficient re-allocation system from the public taxes to the government services that can benefit development of human capital, reducing poverty or inequality.

- **Choice of Institution:** Private transfer from family is critical, especially if there is no other means of the elderly to finance their consumption.
The productive/surplus period is **31 years** (26 to 57 years old)

1. The average duration of education is relatively long;
2. A relatively high number of persons aged 55 and over are outside the labour force.

Recent extension of the retirement age to 60 has improved the lifetime income for **wealth accumulation**.

But, what is our wealth accumulation trend/behaviour during productive years? Is it worrying?

EPF fears that many Malaysians in retirement will be in poverty due to insufficient saving (The Malay Mail, 5 October 2014) which mainly caused by:

1. Premature withdrawal for housing, health and education;
2. The relatively low income of the employees which affects the amount that could be saved for their old age.
## NTA APPLICATION: DEMOGRAPHIC DIVIDEND

- Changes in population age structure interact with the economic lifecycle, affecting economic growth – Thus, taking the advantage of demographic change to achieve rapid economic growth

### First Demographic Dividend

<table>
<thead>
<tr>
<th>Changes in the economic support ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining fertility leads to a larger share of effective producers, (More production and higher economic growth)</td>
</tr>
<tr>
<td>Transitory: Continual decline in fertility leads to population aging (Smaller share of labor force, lower production, slower economic growth)</td>
</tr>
</tbody>
</table>

### Second Demographic Dividend

<table>
<thead>
<tr>
<th>Changes in lifecycle wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>The growth in productivity induced by an increase in the demand for lifecycle wealth.</td>
</tr>
<tr>
<td>Compositional effect: population is concentrated at older, high wealth ages</td>
</tr>
<tr>
<td>Behavioral effect: increase in duration of life and retirement lead to greater accumulation of wealth</td>
</tr>
</tbody>
</table>

- Countries in the later stage of demographic transition: changes in age structure is not favorable as the share of working age population declines
- Countries that rely on transfers (both public and familial): in meeting the retirement needs of the elderly, the 2nd demographic dividend may not emerge (Ogawa, Maliki & Matsukura, 2006).
By 2015, Malaysia has about 23 years to prepare by taking advantage of the first demographic dividend.

Note: Growth rate of the support ratio is the demographic dividend.
Demographic changes that brought economic growth is approaching the **end of the (1st dividend) period**

The **second demographic** is:

- **More important** to the economic growth than the 1st dividend
- **Not automatic**; it requires policy that encourages **capital accumulation** rather than relies on pension wealth to finance consumption during the retirement ages

Thus, declining fertility and population aging could lead to a **higher economic growth** if there are policies that

- **Encourage capital accumulation** during working ages to support retirement consumption
- **Stimulate human capital investment** so as to raise productivity of the future labor force
The Malaysian Government is heavily investing in its people through public expenditure on health and education:

The amount of both deficit and surplus (LCD) raised these questions:

1. The possibility of **bad financial behaviours** and lack of preparedness of Malaysian for their retirement. Thus, the need to intensify financial education intervention programmes for all ages to rectify the financial misbehaviour and improve the financial wellbeing of Malaysians

2. The sufficiency of efforts in **capturing the second demographic dividend**

3. The **sustainability** of public expenditure on health and education

4. The **adequacy and effectiveness** of the current social protection system in Malaysia.
TERIMA KASIH/THANK YOU
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