Population Ageing, Economy and Well-being

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Stakeholder Consultations for the Asia-Pacific Intergovernmental Meeting on the Fourth Review and Appraisal of the Madrid International Plan of Action on Ageing
Older persons and development
ESCAP 7 April 2022
Opening Session
The general perception

• Rapidly aging population slower economic growth and strained government budget

• Shortage of labor supply, changes in patterns of saving and investment and lower productivity lead to slower economic growth

• Population ageing rises the government expenditure and deteriorating fiscal balance.

• However, the path toward population ageing is not homogenous among Asian and Pacific Countries.
Differences in path toward population ageing

• Stages of demographic transition determine the path, the scale and time of the impact of ageing on economic growth and fiscal conditions of each country (Yoshino et al. Mach 2019)

• Rapid decline in fertility together with rapid increase in life expectancy beyond age 60 resulted in rapid increase of population ageing.

• The speed of fertility decline and the increase in life expectancy changes countries’ age structure and eventually heading toward population ageing
Challenges and Opportunities

• Strategic challenges for Asia: a see-saw game.
  – sustaining growth in the face of less favorable population structures; and
  – delivering affordable, adequate and sustainable old-age income support for population ageing

• With respect to sustaining growth, a youthful population structure contributed substantially to Asia’s rapid economic growth in the past (Asian Economic Miracle)

• Benign demographics structure implied a working-age population and hence workforce which is large relative to the population.

• A long-term view, a see-saw game, a choice between pressing fertility – rapid ageing vs high fertility low ageing process
Stages of population ageing is indicated by the % share age 65+ and GDP per capita, selected countries 2020

- **High Income Countries - super ageing**
  - **Middle Income Countries, aging still growing**
  - **Low middle Income Countries, start the ageing process**

- Stages of demographic transition is in line with economic development
- High Income Countries: End of ageing process
- Middle Income Countries: Growing old before getting rich
- Lowest Income Countries: Start the process of aging.
- Each stage of population ageing poses different characters and needs of the population hence needs different policy responses.
Why does population age structure matter?

• Working-age adults produce more through their labor than they consume, while children and the elderly consume more than they produce.
• In the early demographic transition, the main challenge was to provide for the resource needs of children (high proportion of total population).
• In the late demographic transition, meeting the resource needs of the elderly becomes more challenging (high proportion of people age 60+).
• Among the middle income economy, populations have become increasingly concentrated in the prime working ages—**the period of life during which more is being produced than consumed**.
• This has potentially favorable implications for standards of living and economic growth.
National Transfer Account (NTA) explains how population aging impacted economy

Report on a Technical Policy Seminar
NTA Bulletin December 2011 number 3
Coordinated by Ronald Lee and Andrew Mason
Children and Elderly consume more than they can produce
Workers earn more than they consume and expected to compensate the lifecycle deficit
Labour Income

• Labor income is a broad measure that reflects variation across age in labor force participation, unemployment rates, hours worked, and wages.

• NTA defines labor income comprehensively to include the value of most productive work: the earnings of employees, employer-provided benefits, taxes paid to the government by employers on behalf of employees, the proportion of entrepreneurial income that is a return to labor, and the estimated value of unpaid family labor.
Consumption

• Consumption in NTA includes goods and services from both public and private sources
• Separate estimates of public and private consumption are constructed for every NTA economy in three categories—education, health, and other goods and services.
• This provides comprehensive estimates of human-capital spending by age for economies at widely varying levels of development—estimates that are not available from other sources.
Labor Supply, Productivity and Economic Growth

• The direct effect of population ageing on economic growth is the support ratio—the effective number of producers relative to the effective number of consumers.

• It is the sum of the population in each one-year age group weighted to incorporate estimated age differences in labor force participation, hours worked, unemployment, and productivity.

• The effective number of consumers is the population in each age group weighted to incorporate age differences in consumption.
Aggregate Measure: The support ratio

• Changes in age structure affect support ratios – the number of workers per person. Population ageing reduce the support ratios.

• Bangladesh, India, Indonesia, Pakistan, and the Philippines, their working-age populations is still growing relative to their dependent populations.

• But these will become increasingly concentrated at older ages where in all cases labor income is quite modest. The impact is on low levels of employment at older ages, low wages and productivity for older people.
The working age population will shrink over coming decades in richer East Asian and Pacific Economies

Percentage change and change in percentage, ages 15–64, in selected economies, 2010–40

Percentage change and change in absolute terms in population, ages 15–64, in selected economies, 2010–40
FIGURE 3.2 Aging’s influence on GDP per capita is the product of the employment rate, the working-age share of the population, and GDP per employed worker

<table>
<thead>
<tr>
<th>Country</th>
<th>a. GDP per employed worker</th>
<th>b. Share of the working-age population ages 15–64 who are employed</th>
<th>c. Share of total population who are 15–64</th>
<th>d. Labor productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>53,160</td>
<td>73%</td>
<td>74%</td>
<td>98,792</td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
<td>42,556</td>
<td>67%</td>
<td>75%</td>
<td>85,129</td>
</tr>
<tr>
<td>Japan</td>
<td>31,409</td>
<td>67%</td>
<td>73%</td>
<td>63,435</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>26,830</td>
<td>57%</td>
<td>64%</td>
<td>55,133</td>
</tr>
<tr>
<td>Malaysia</td>
<td>13,793</td>
<td>61%</td>
<td>67%</td>
<td>33,402</td>
</tr>
<tr>
<td>Thailand</td>
<td>7,982</td>
<td>81%</td>
<td>72%</td>
<td>13,800</td>
</tr>
<tr>
<td>China</td>
<td>6,692</td>
<td>76%</td>
<td>74%</td>
<td>12,058</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3,864</td>
<td>68%</td>
<td>65%</td>
<td>8,741</td>
</tr>
<tr>
<td>Mongolia</td>
<td>3,686</td>
<td>60%</td>
<td>69%</td>
<td>8,823</td>
</tr>
<tr>
<td>Philippines</td>
<td>3,532</td>
<td>64%</td>
<td>61%</td>
<td>9,095</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2,920</td>
<td>82%</td>
<td>70%</td>
<td>5,095</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2,189</td>
<td>81%</td>
<td>59%</td>
<td>4,529</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>2,187</td>
<td>74%</td>
<td>58%</td>
<td>5,076</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1,949</td>
<td>88%</td>
<td>63%</td>
<td>3,526</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>1,482</td>
<td>39%</td>
<td>50%</td>
<td>7,585</td>
</tr>
<tr>
<td>Myanmar</td>
<td>(missing data)</td>
<td>81%</td>
<td>69%</td>
<td></td>
</tr>
</tbody>
</table>


Note: PPP = purchasing power parity.
Population Aging and its Impact on Fiscal Balance
Economic Growth and Fiscal Balance

• Sustaining rapid economic growth into the medium term is required to generate the fiscal resources necessary to provide economic security for the elderly.

• Public transfers to the elderly are underdeveloped in Asia relative to both advanced economies.

• In the absence of rapid growth, expansion of public transfers to the elderly is likely to generate a great deal of resistance from the younger generation.
The impact of population aging on pensions and healthcare systems

• The stages of population aging influence the pension and healthcare systems, the design and coverage.

• But, in part, this maybe offset by some saving in healthcare and education as the proportion of children shrinking.

• As for the workers, in any stages of population aging, many economies will face fiscal pressure as the number of taxpayers who fund public programs declines relative to the number of elderly who rely on pensions and healthcare benefits.

• It is expected that the combined cost of pensions and healthcare are increasing, in particular the high and middle income economies (Rob Vos).

• Economic growth generally leads to increases in tax revenues that can be used to support pension and healthcare programs. But program costs are also likely to rise with economic development.
Pension coverage

• Expanding elderly populations will increase fiscal pressure on government-sponsored pension and healthcare systems.

• In lower economic growth, policymakers will face challenges of expanding elderly populations in a more difficult context—with weaker financial institutions and at lower levels of economic development.

• One of the most important public-policy challenges of this century is to provide pensions and healthcare for rapidly growing elderly populations without placing unacceptable burdens on other age groups or jeopardizing economic growth.
Population Ageing and Wellbeing


Ronald Lee and Andrew Mason
Per capita output matters

• Individual well-being depends **not** on aggregate, but on per capita growth.
• Slower population growth also leads to rising output and wages per worker
• Is the higher output per worker will be translated into higher per capita income?
• It depends on how much, as the population ages, **increased productivity offsets the rise in the number of dependents (old and young) per worker.**
Paying for elderly consumption

• Elderly resources to pay for consumption: earn from continuing to work, rely on saving and investment, assets reallocation and businesses.

• Private transfer or support from the families

• Public transfer from the government in the form of cash such as pensions and in-kind public transfers such as health care and long-term care.

• These public transfers are paid for by taxes, mostly those paid by the prime-age adult population. (if the size of the workforce is shrinking?)
Example: Sources of income to support elderly’s expenses

Chart 3
Old-age wallets
The sources of support for elderly consumption vary by region.
(percent of consumption)

Asia
Europe
Latin America
United States

-20 0 20 40 60 80 100 120

Labor income Public transfers Private transfers Asset-based flows

Note: Asia - Australia, Cambodia, China, India, Japan, Korea, Lao P.D.R., the Philippines, Taiwan Province of China, Thailand. Europe - Austria, Finland, France, Germany, Hungary, Italy, Slovenia, Spain, Sweden, the United Kingdom. Latin America - Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Uruguay. Labor income includes earnings, benefits, labor income of the self-employed, and an estimate of the value of labor supplied by unpaid family workers. Public and private transfers are net (transfers received minus transfers provided). Asset-based flows are defined as asset income minus interest expense minus saving.
Indonesia, source of expenses of elderly households, 2020

Main sources to cover expenses:
1. From WORK: by the YOLD esp men
2. Transfer, esp women and older men
3. Pension, very minimal
4. Investment, negligible

Work is the most source, even by the oldest old.

Source: Susenas 2020

@smadioetomo/ilo_income_security_older_persons
Old age income security

- Traditional/family based support – transfers from children to parents, played a major role in Asia’s old-age income security. But, it is weakening.
- Current workers (the younger generations) prefer to rely on government, former employers or by themselves for old age income security.
- In middle/low income countries, it is the government that are expected to be responsible for old-age income security. In the high income countries, workers belief they should be able to finance their retirement through savings accumulated during productive works (The Future Retirement Survey 2016).
3. FISCAL

- Public sector transfers for pensions, health care, and long-term care are a particular problem as populations age, because these payments, even after subtracting the portion funded by tax payments from the elderly, absorb a large portion of public budgets.

- Fiscal support ratios are a way to look at the problem. Like support ratios, except they relate taxpayers to beneficiaries rather than workers to consumers.

- This means that to balance tax revenues and expenditures in the public budget (federal, state, and local combined) in 2050, tax revenues will have to be 11 percent higher or expenditures 11 percent lower, or some combination of the two, just to offset the increased costs from the aging population.
The opportunity

• On the other hand, if the elderly are able to support their living through saving, investment and sufficient income from work, this will affect economic growth.

• An old-age support system which is based to some extent on private savings is more conducive for capital accumulation and growth than a system based disproportionately on public transfers.

• But, allocating more resources to the elderly implies fewer resources for the rest of the population, so it necessarily involves a trade off.
Conclusion

Do not grow old before getting rich

Countries undergoing rapid ageing and slow ageing process should start to develop policy measures for ageing readiness. Whether it is in aggregate term or changes in individual behavior.
Thank you
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