

# *Using Different Measure of aging: Country Case Studies*

## Aging in Thailand

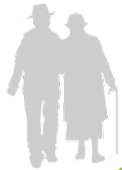
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# Outline



Conventional Measures of Aging



New Measures of Aging



Conclusion and Suggestions

## Conventional Measures of Population Aging

- Over the past 30 years, scholars and policy analysts have used conventional measures that rely on chronological age to examine trends in Thailand's population aging.
- According to these conventional measures (such as proportion of older persons, median age, old age dependency ratio), Thailand is considered one of the world's rapidly aged societies.

**The number of persons aged 60 and older is projected to double between 2015-2050.**

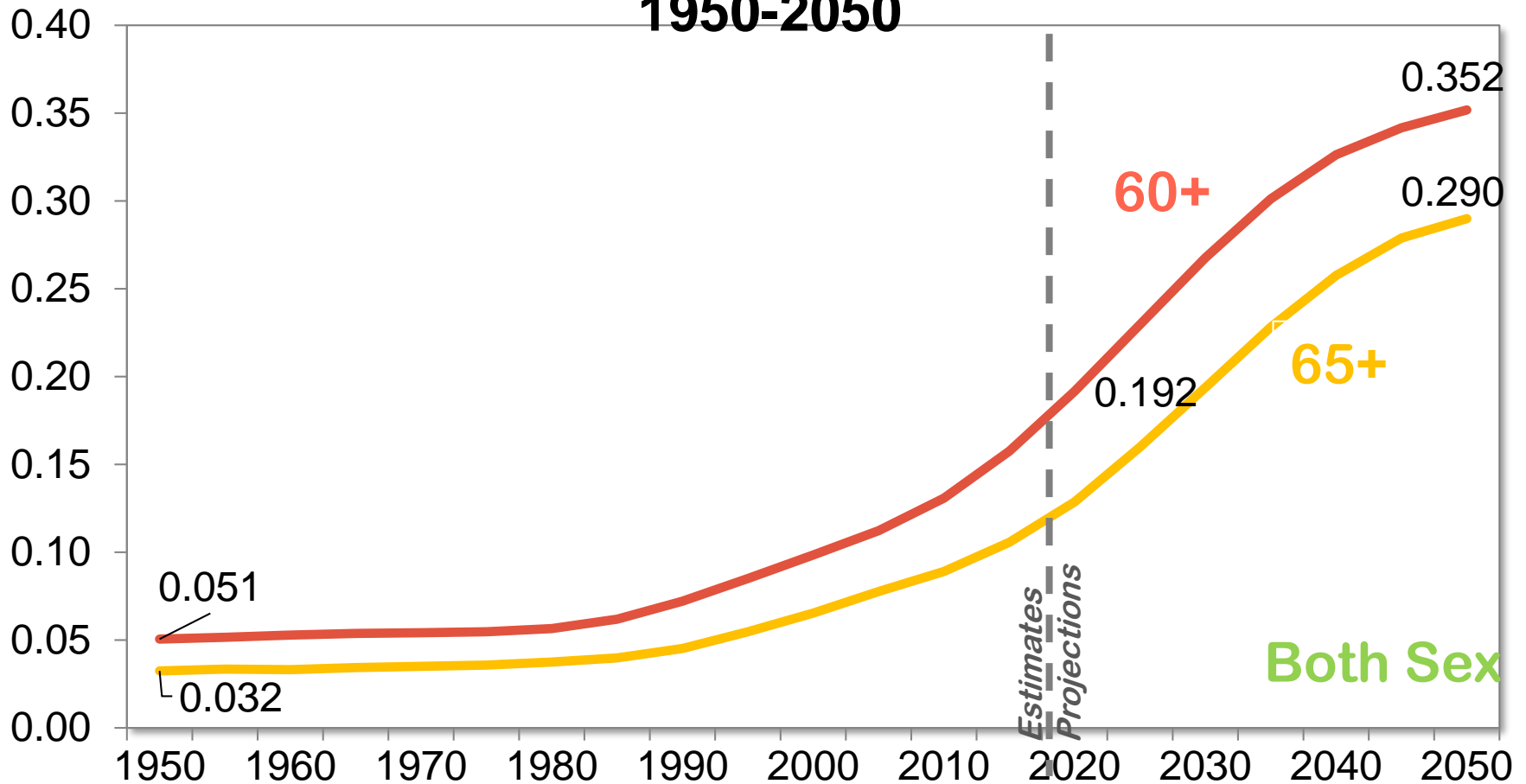
**Table 1 Population aged 60 and older according to United Nations projections, 2015-2050**

	2015	2020	2025	2030	2035	2040	2045	2050
Number in 1000s (medium fertility variant projection)	11,690	13,278	15,988	18,687	20,913	22,403	22,970	22,953
Ratio to 2015	1.00	1.14	1.37	1.60	1.79	1.92	1.96	1.96

Source: *United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision*

The share of the population age 60 and older is about 20% at present and is projected to constitute 30% by 2050.

## Proportion of older person, Thailand 1950-2050



**Very fast speed of population aging:** Thailand will become super aged society within the next 15 years. Changing from rank 10<sup>th</sup> in 2015 to 6<sup>th</sup> in 2035 among all Asia.

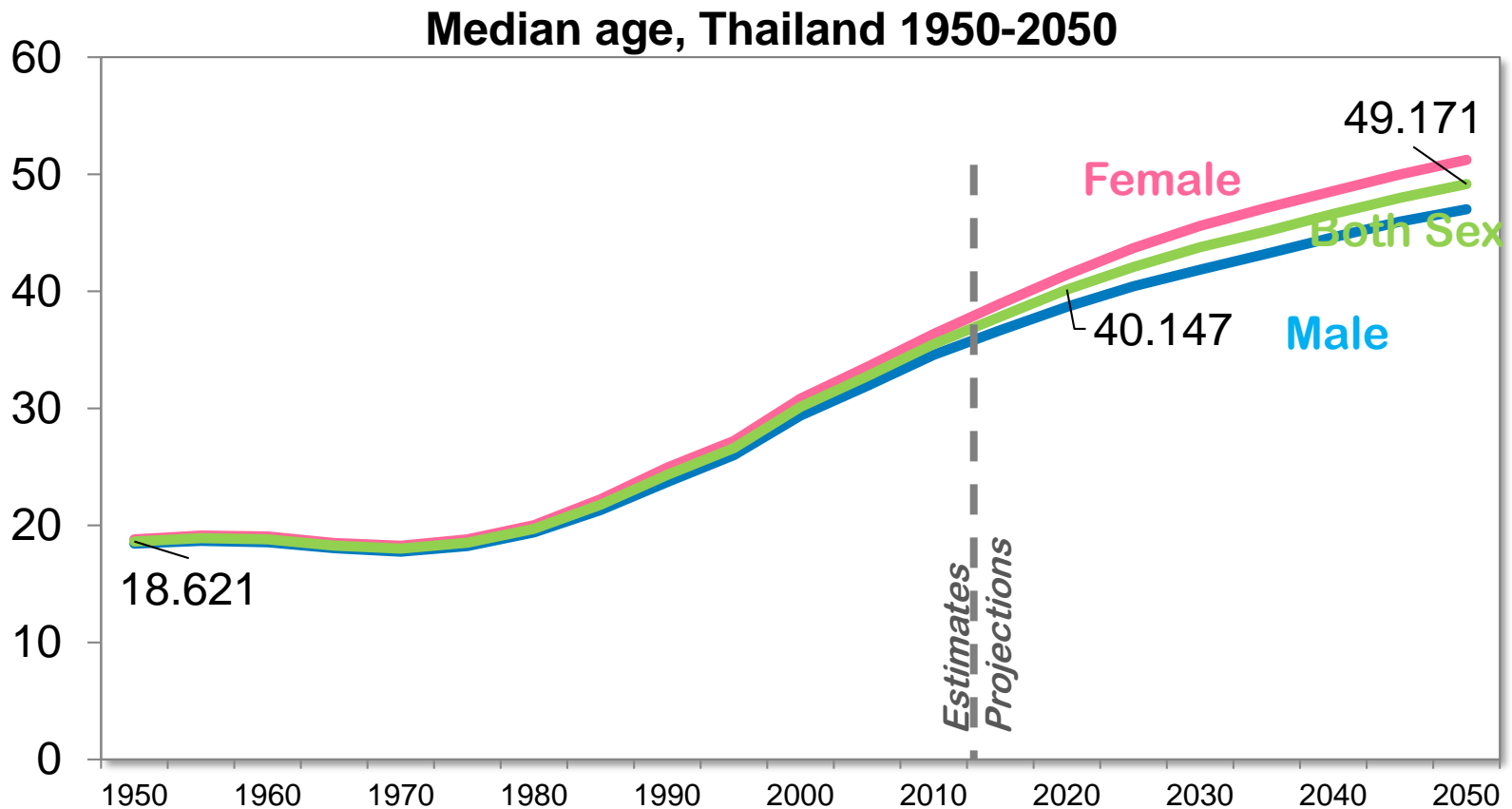


**Proportion of Population age 60+ in Asia**

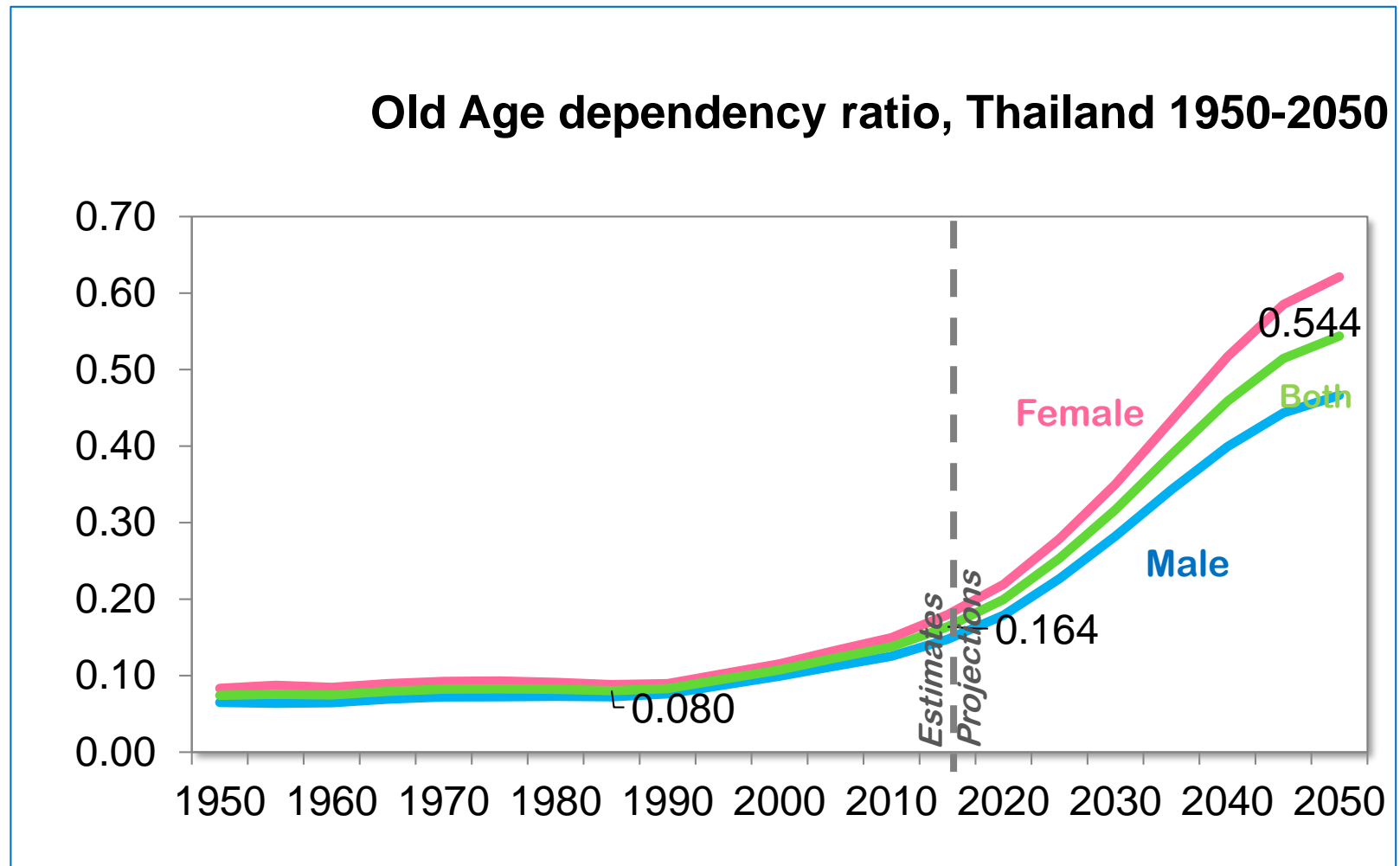
	2015	%	2035	%
1	Japan	32.8	Japan	39.9
2	Hong Kong, China	21.8	Korea	35.5
3	Georgia	20.3	Hong Kong, China	35.3
4	Chinese Taipei	18.6	Singapore	34.1
5	Korea	18.4	Chinese Taipei	33.1
6	Singapore	17.9	<b>Thailand</b>	<b>30.2</b>
7	Cyprus	17.7	Macao	28.8
8	Israel	15.8	China	28.5
9	Arminian	15.8	Cyprus	26
10	<b>Thailand</b>	<b>15.6</b>	Georgia	25.9

Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision

- Looking at another conventional measure, median age or the age that divides a population into two equal numerically groups.
- The median age has been rising sharply from about 18 years old in 1950 to about 40 years old at present, and is projected to be nearly 50 years old by the mid of 21st century



- Changes in age structure that are taking place in Thailand translate into changes in dependency ratios defined in terms of age groups. The old-age dependency ratio has steadily increased since 1990. This means that fewer younger cohorts to support old adults.





## Increasing burden place on working population:

Steady declines of the **potential support ratio** reflects a shrinking support base of economically productive persons upon whom older persons can depend.



Note: **Potential Support Ratio** = Population 15-64/65+

Source: *United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision*

- These conventional measures, especially proportion of OPs and potential support ratio make government and public seriously concerns about population aging. Recently, Thai government has been giving very serious attention to ageing issues.



- **National Agenda for Aging Society**



- **Thailand's National Strategy (2018-2037)**



- **Mater Plan on Aging Society**



- **National Plan for Older Person (2002-2020)**

● These conventional measures do not account for health and social aspects of aging that may impact on the wellbeing and social inclusion of the older persons and the nation's sustainable development.

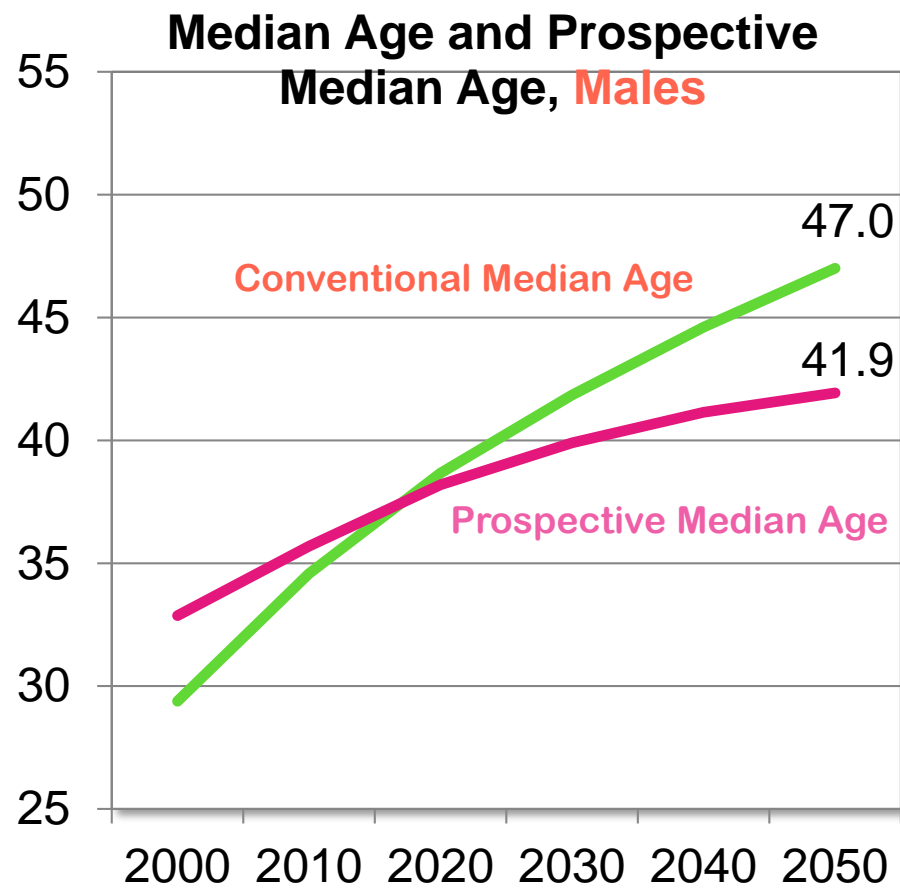
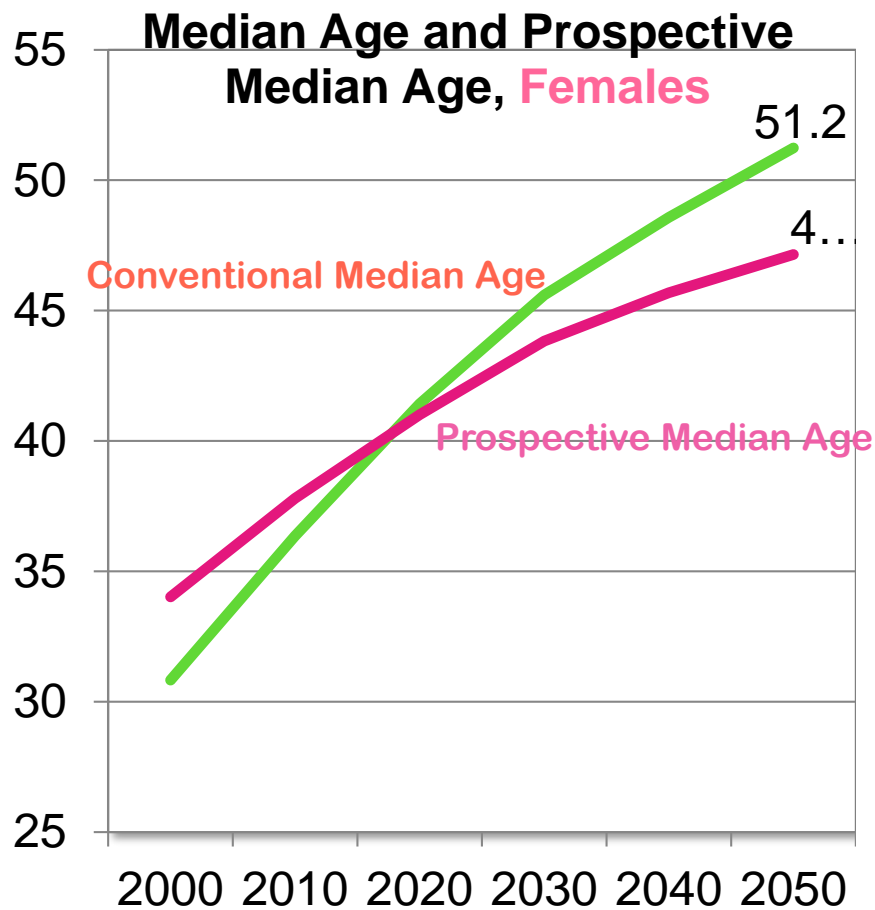
● Therefore, we need multidimensional approaches to better measure and understand the aging process and provide more informed aging policy and programs.

● Recently, Scherbov and Sanderson have introduced the new way to remeasure population aging by taking into account life expectancy instead of chronological age.

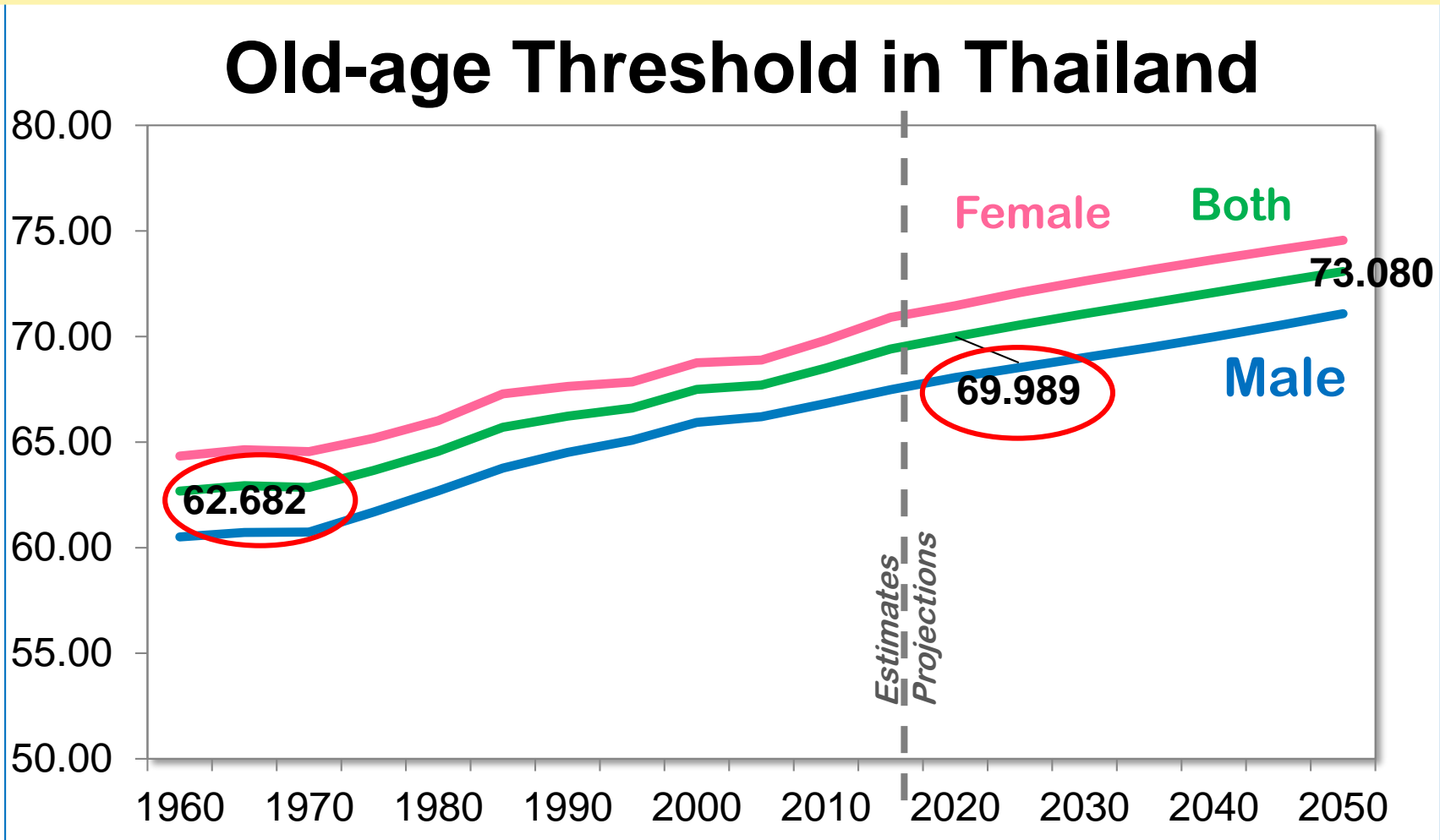
● “**Prospective age**” measures how old people, not only from the date of their birth, but also in relation to their lengthening life expectancies.



- The **prospective median age** is a median age accounting for the expected remaining years of life.
- Although the Thai population will grow older as projected by both the conventional and prospective median age, the latter measure shows a slower pace of population aging. Female has a higher median age due longer life expectancy.

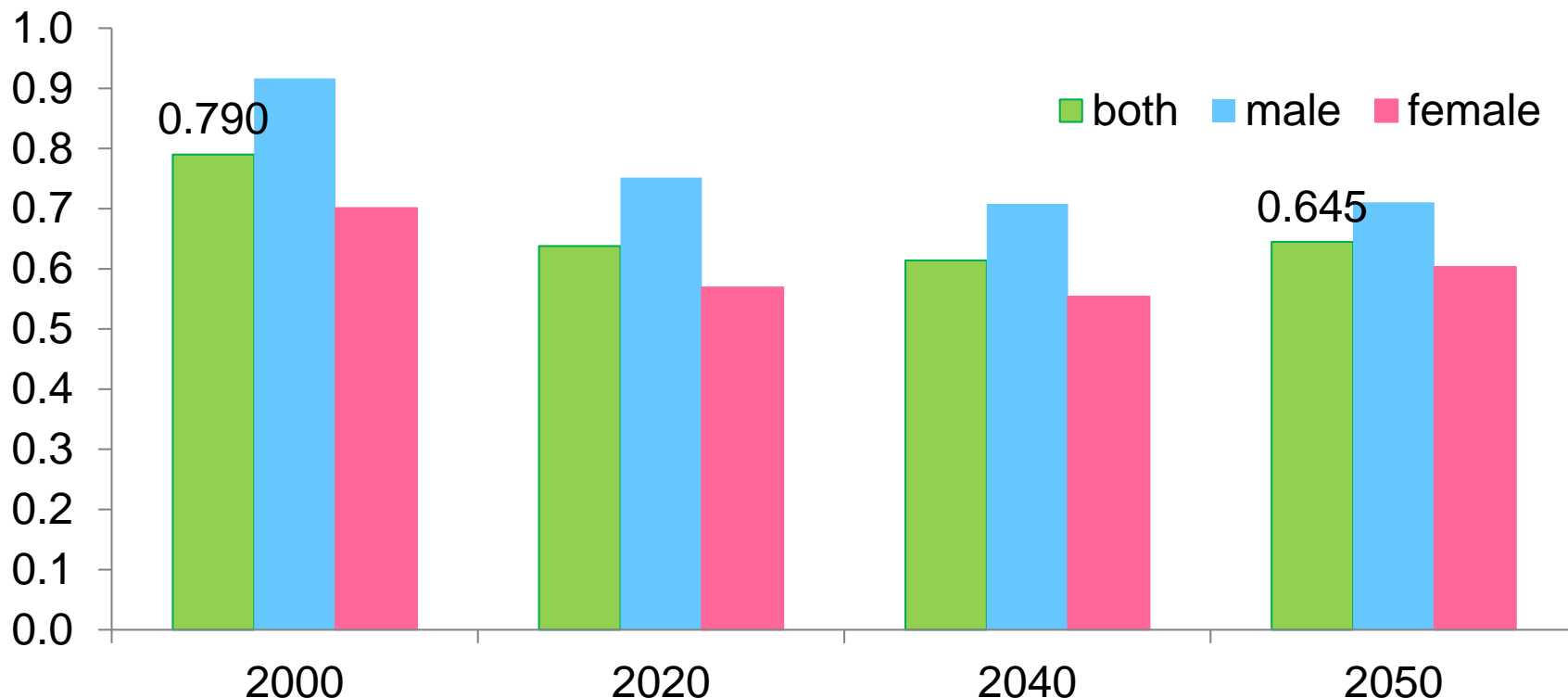


- Another new measure is **old-age threshold** or age when remaining year of life is 15 years or less.
- According to this graph, someone in 1960 in Thailand is considered old at the age of 62, but by 2020 someone at aged 70 would be considered old.



- The proportion of the population aged 65 and older that is above old-age threshold (age when remaining years of life are  $\leq 15$  years) is projected to decrease from 80 % in 2000 to 65 % in 2050.
- Base on this measure that accounting for increasing life expectancy, so it capture the declining trend in the proportion of people with  $\leq 15$  years of life remaining at the age 65.

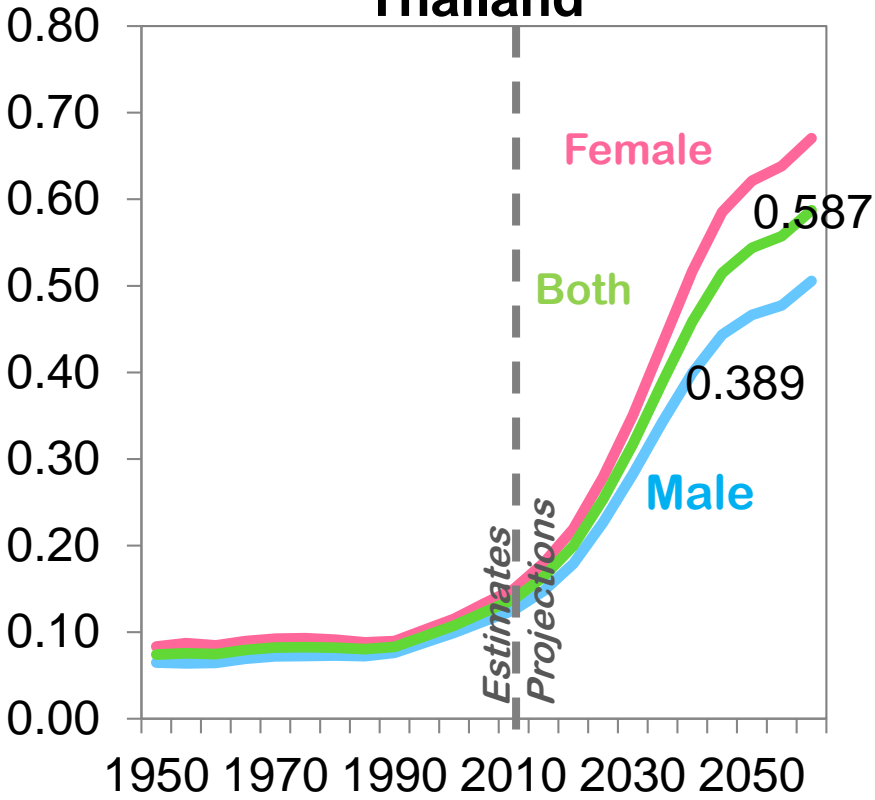
### Proportion of people above old-age threshold among population 65+, Thailand 2000-2050



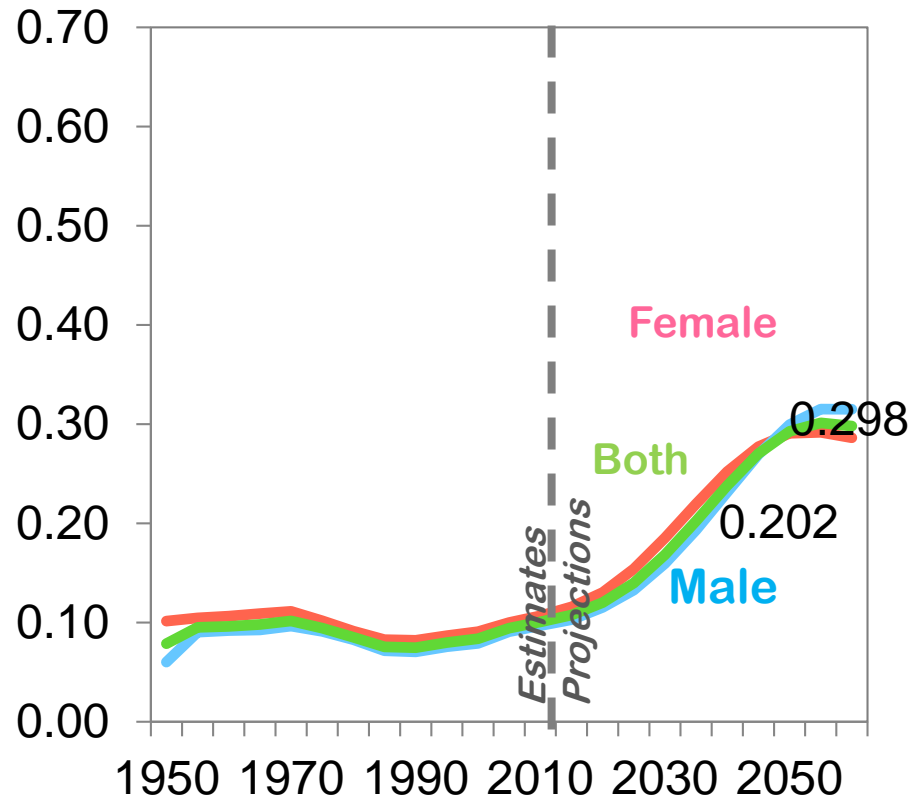
Both the conventional and prospective old age dependency ratios show the trend of increasing population aging.

The prospective old age dependency ratio show a slower increase.

Conventional old age dependency ratio, Thailand



Prospective old age dependency ratio, Thailand



Prospective old age dependency = the number of people at least 20 year old in age group with life expectancies 15 or fewer years divided by the number of people at least twenty years old in age groups with life expectancies greater than 15 years.

# Conclusion and Suggestions

- These new measures seem to offer a ray of hope for successful aging in Thailand. However, “healthy, productive, and happy aging” can happen only on the following conditions:

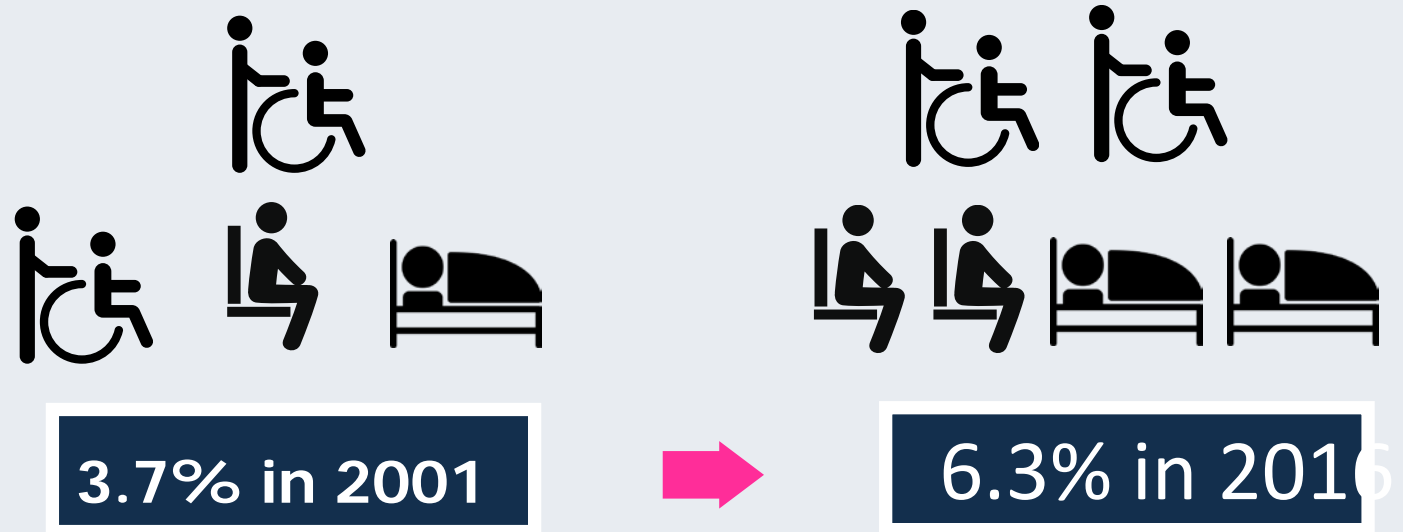
**1) Thailand has to make older persons live longer and healthier.** At present, it looks like there is a tendency toward expansion of morbidity and higher prevalence of disability as life expectancy increases;





There is a tendency toward expansion of morbidity and a higher prevalence of disability as life expectancy increases.

Percentage of Population age 60 having difficulties with ADLs

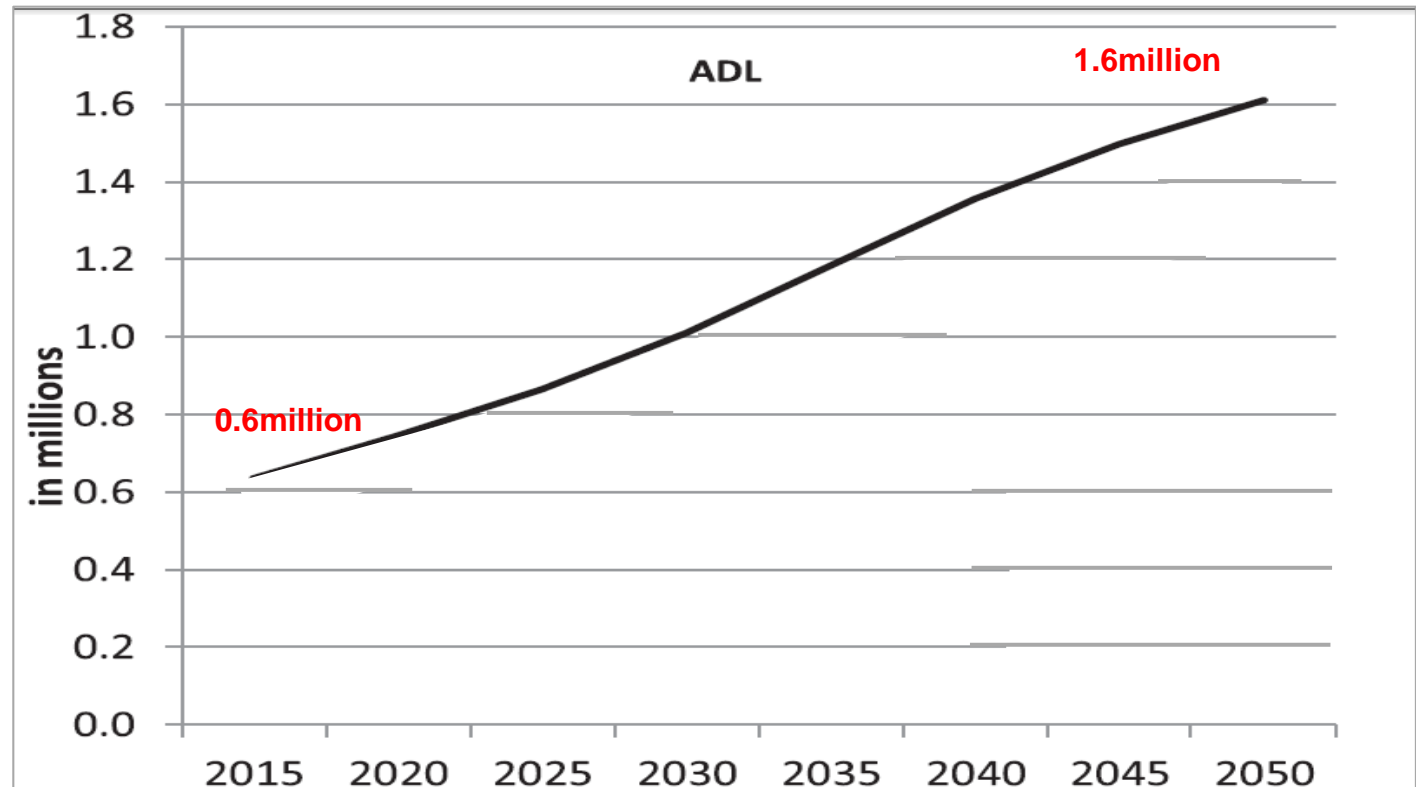


Source: 1) Prachuabmoh, V. and others. 2011. The Project on Monitoring and Evaluation of the Second National Plan for Older Person (2002-2021) Round 2.  
2) Pothisiri, W. and others. 2016. The Project on Monitoring and Evaluation of the Second National Plan for Older Persons (2002-2021) Round 3.

## Per cent of OPs with ADL in Thailand, 2001 and 2016

	2011	2016
Total	3.7	6.4
Age		
60-64	1.4	2.4
65-69	2.0	3.5
70-74	2.6	4.7
75-79	4.8	9.4
80+	15.4	20.7
Sex		
Male	3.0	4.1
Female	4.1	7.1

- The number of persons aged 50+ with ADL is at projected to more than double between 2015-2050.



Source: Elke Loichinger & Wiraporn Pothisiri (2018) Health prospects of older persons in Thailand: the role of education, Asian Population Studies.

**2) Thailand needs to reduce inequality in human capital investment. Differences in Education attainment are strongly associated with differences in productive and healthy aging.**



**Table 4.**

Unadjusted and adjusted proportions working in prior year, proportions providing assistance to family members and proportions of caregiving among older persons aged 60 and over in Thailand.

	No education	Some primary	Complete primary	Beyond primary
<b><i>Working</i></b>				
Unadjusted	0.27	0.35	0.48	0.30
Adjusted*	0.35	<b>0.40</b>	<b>0.42</b>	<b>0.18</b>
<b><i>Financial provision for children</i></b>				
Unadjusted	0.12	0.12	0.15	0.25
Adjusted*	0.13	0.12	0.13	<b>0.25</b>
<b><i>Household chores</i></b>				
Unadjusted	0.74	0.77	0.83	0.86
Adjusted*	0.84	0.84	<b>0.86</b>	<b>0.90</b>
<b><i>Grandchild care</i></b> (care for grandchild<10, past year)				
Unadjusted	0.27	0.23	0.31	0.21
Adjusted*	0.29	<b>0.24</b>	0.29	<b>0.22</b>
<b><i>Care for adult household members</i></b>				
Unadjusted	0.09	0.09	0.12	0.13
Adjusted*	0.09	0.09	<b>0.11</b>	<b>0.12</b>

Source: Teerawichitchainan, Prachuabmoh, Knodel, Social Science & Medicine,

\*Adjusted proportions are calculated based on binary logistic regression models that control for gender, age, marital status, number of children, location of residence, work status, and the Human Development Index. <https://doi.org/10.1016/j.socscimed.2018.09.053>



- **Chronological age represents only one dimension of the population aging. In order to better measure aging, we need to measure different characteristics of people. The multidimensional measures would provide better information for policy options.**
- **To make this multidimensional measures more informative in Thailand, we need to collect and disaggregate data on population characteristics such as education attainment, objective health status (including disability, frailty, chronic conditions), area of residence, technological literacy and access, etc.**
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- In addition, Thailand needs to collect longitudinal data in order to:
  - monitor demographic trends especially morbidity and mortality.
  - to identify the determinants of older person's well-being and productive aging.
  - provide clearer evidence for future policy formation and evaluation.