

Population Momentum and
Population Aging in Asia and
Near-East Countries
Indonesia Emphasis

East-West Center

The Policy Project

Office of Strategic Planning, Operations, and
Technical Support, Asia/Near East Bureau,
USAID

Project Number:

936-3078

Prime Contract:

CCP-C-00-95-00023-04

Subcontract No:

5402.50E.EWC.01

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Objectives

- Document the rapid growth of elderly populations
- Describe important sources of uncertainty
- Assess the implications for programs and policies: health, old-age security, and macroeconomic policy

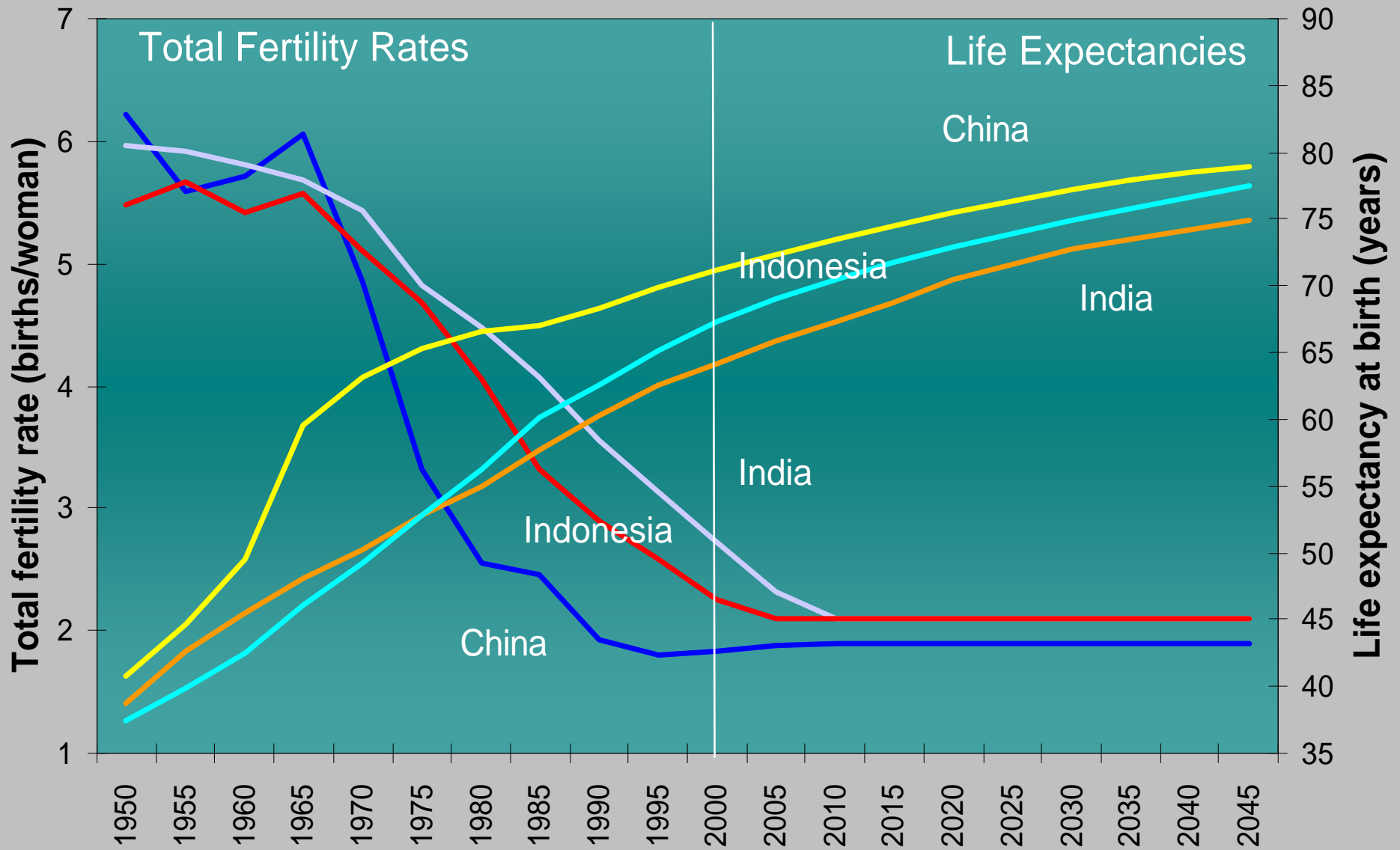
Countries and sub-regions included

- Philippines
- Thailand
- Indonesia
- South Korea
- India
- Bangladesh
- Egypt
- East Asia
- Southeast Asia
- South Asia

Demographic Change in Indonesia

- Increased life expectancy and lower fertility
- Slower population growth
 - Number of children is no longer increasing
 - Older populations continue to grow rapidly
- Age transition
 - Large but transitory increase in the working age population
 - Shift in dependency from youth to old age

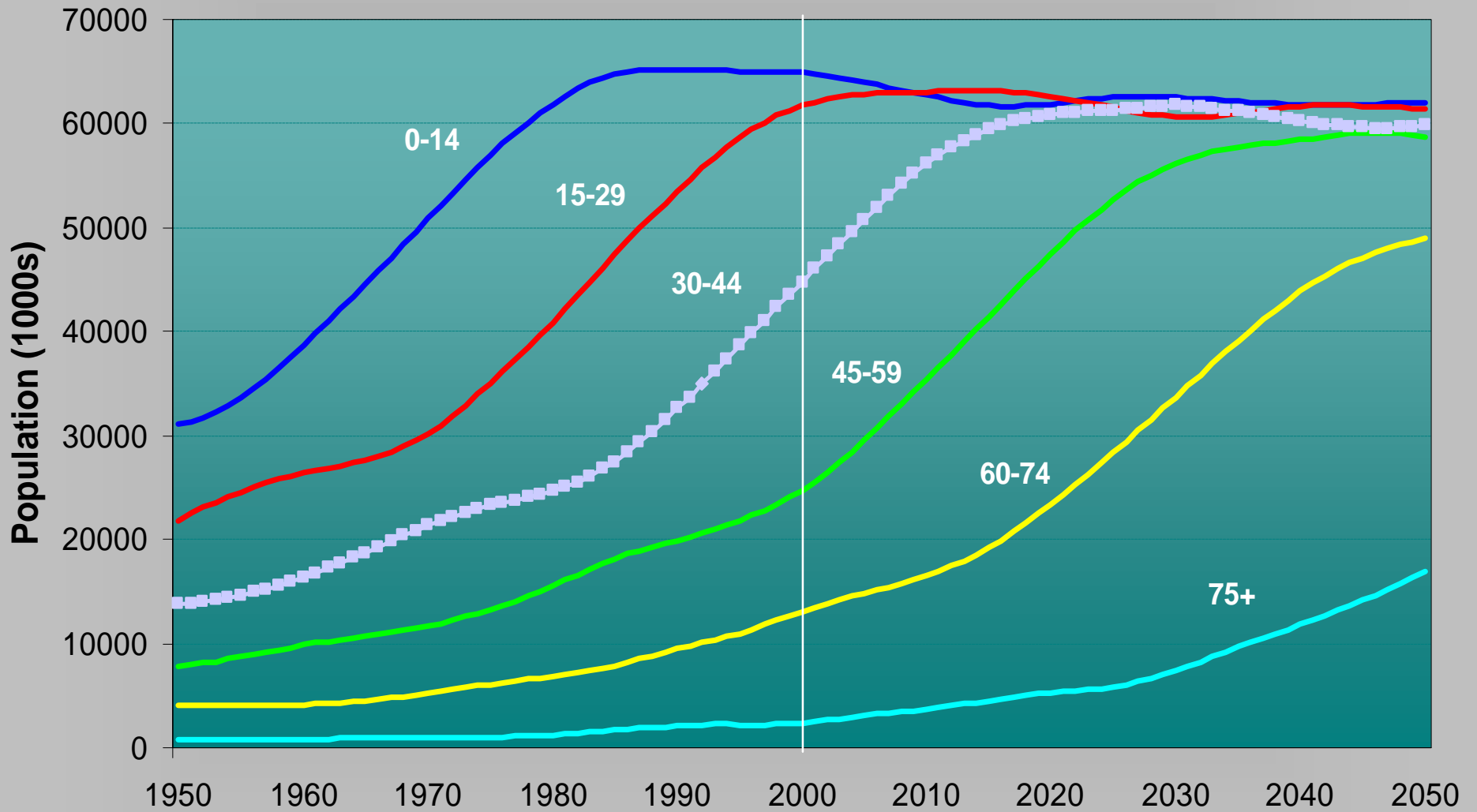
Fertility and Mortality Trends China, India and Indonesia



Source: United Nations Population Division, 1999.

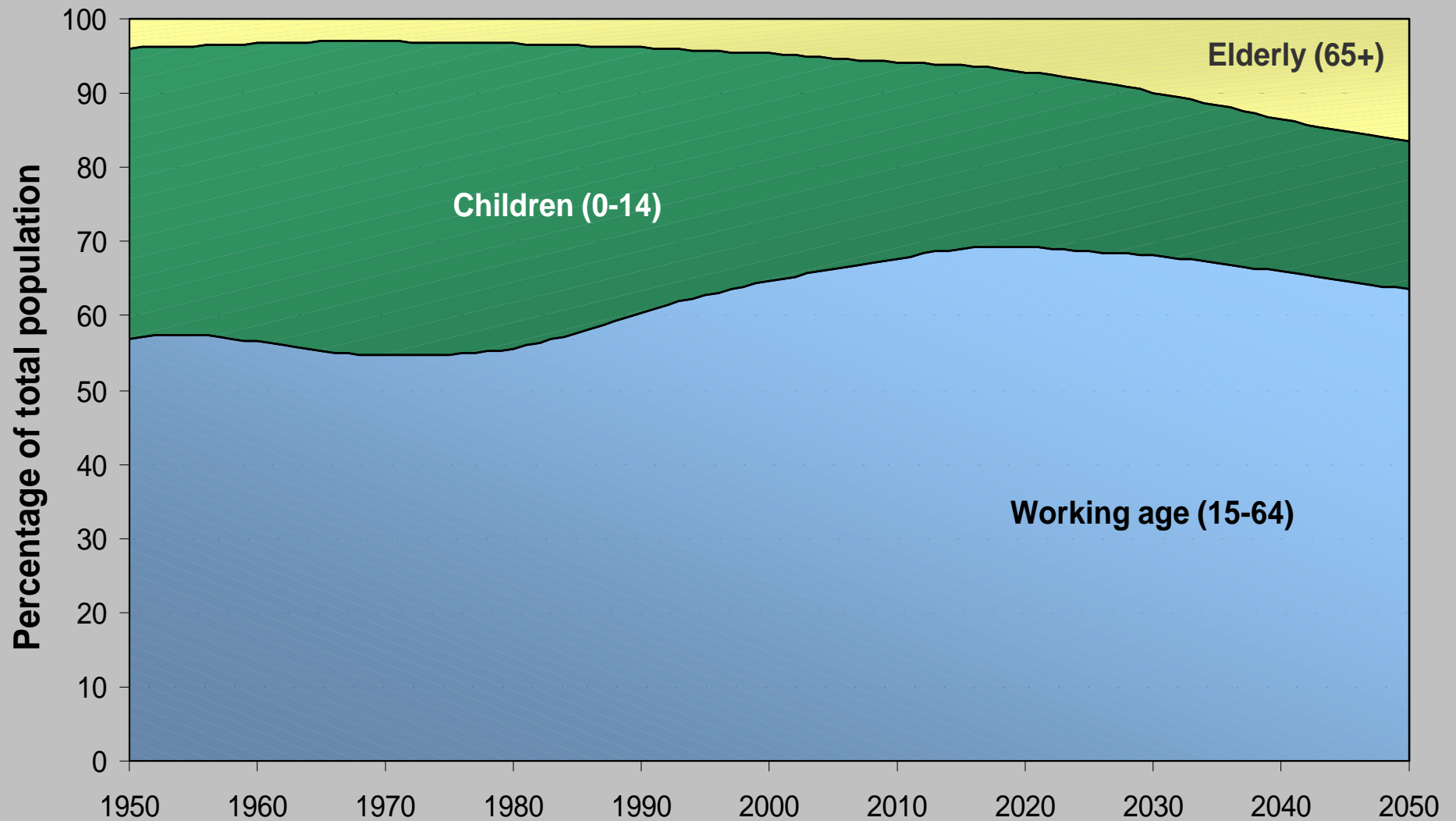
Population of Indonesia

Fifteen year age groups, 1950-2050



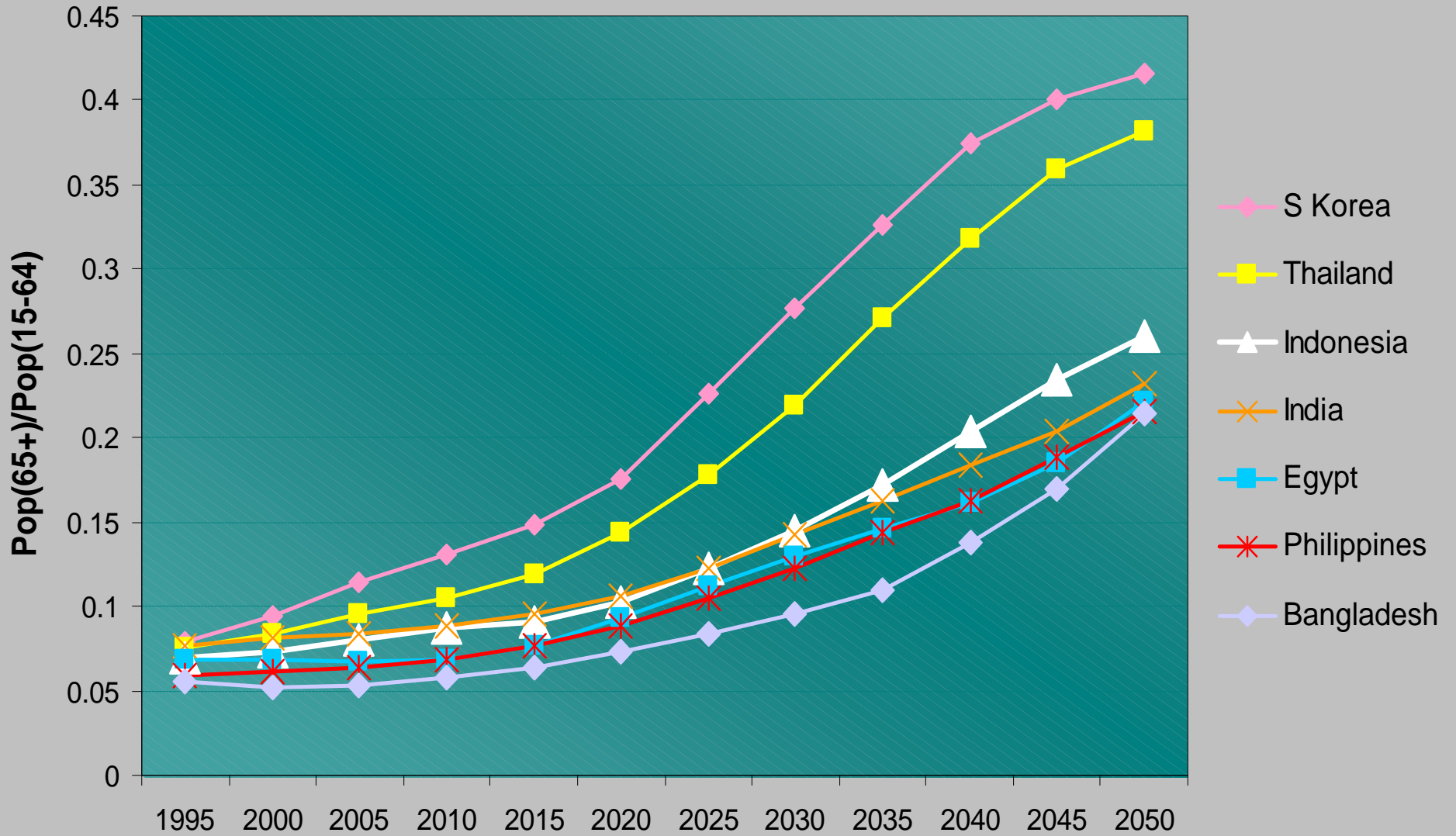
Source: United Nations Population Division, 1999.

Age Transition Indonesia, 1950-2050



Source : United Nations Population Division, 1999.

Aging varies among ANE Countries



Source : United Nations Population Division, 1999.

Sources of Uncertainty

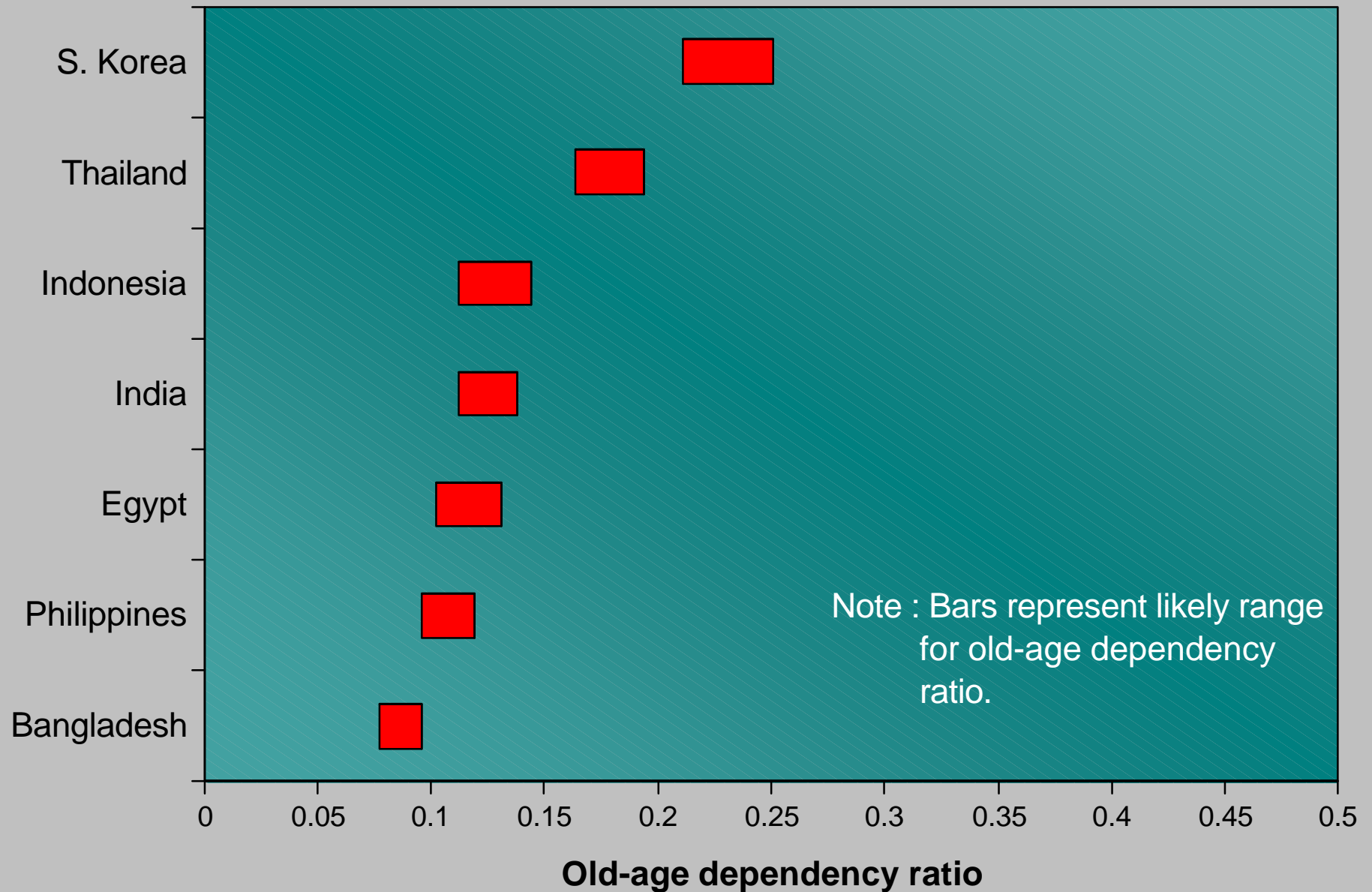
Future trends in fertility and mortality are unknown and potentially important

HIV/AIDS and other infectious diseases:
Impact currently localized, potentially devastating

Uncertainty about labor migration and refugee movements

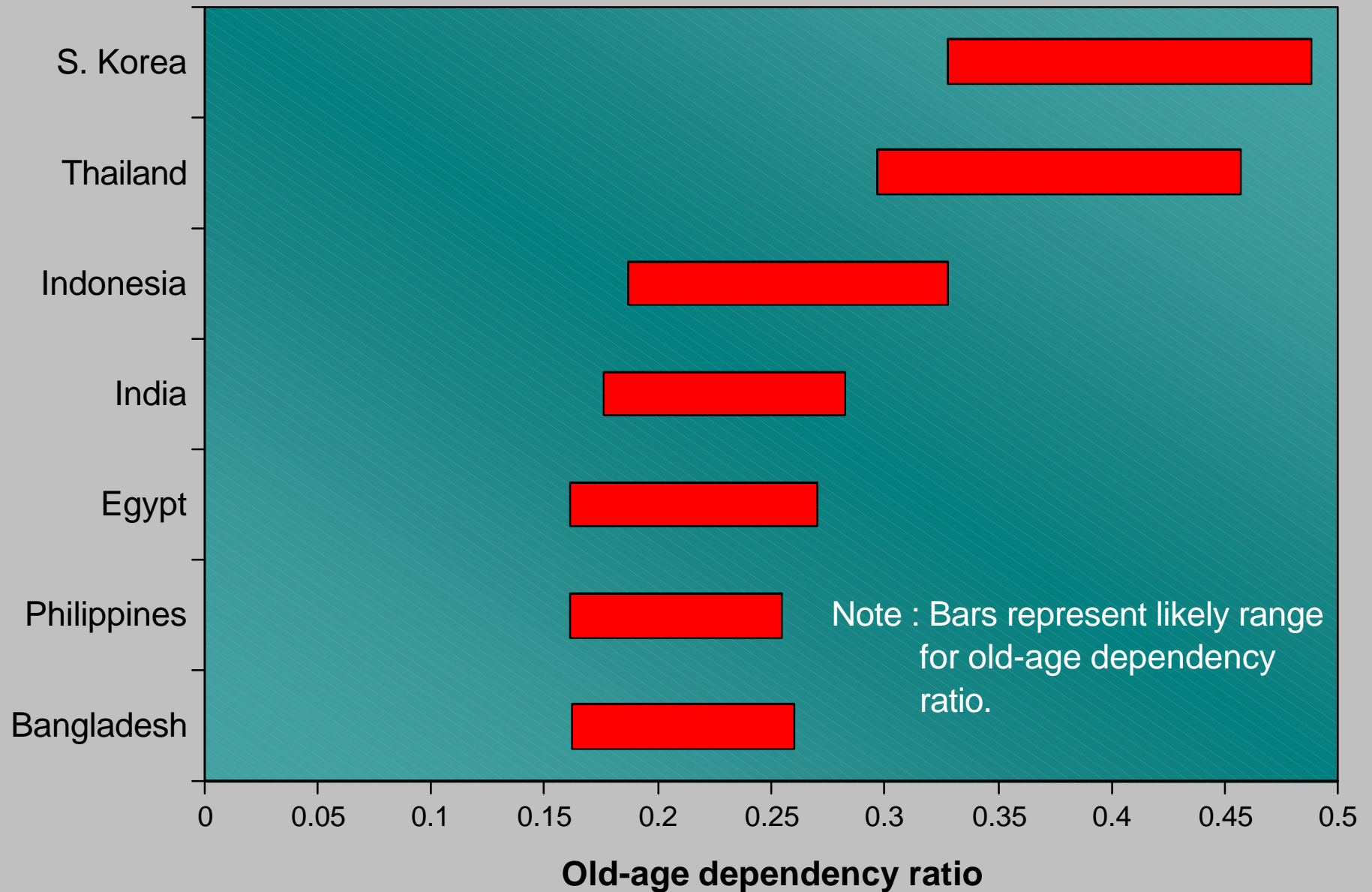
Demographic response to economic crisis may be short-lived

Projected Range for Old-age Dependency Ratio in 2025



Source : Authors' calculations.

Projected Range for Old-age Dependency ratio in 2050



Source : Authors' calculations.

Total dependency ratios of Indonesia, 2025

Total dependency ratios of Indonesia, 2025

Variants	Fertility			
	High	Med	Low	
Mortality	High	0.520	0.454	0.385
	Med	0.521	0.456	0.388
	Low	0.542	0.464	0.396

Total dependency ratios of Indonesia, 2050

Variants	Fertility			
	High	Med	Low	
Mortality	High	0.595	0.545	0.510
	Med	0.614	0.573	0.548

Uncertainty and total dependency

- High fertility and low mortality produce the most rapid increase in total dependency
- Trend between 2000 and 2025 is uncertain
- All scenarios produce higher total dependency in 2050

Old-age dependency ratios of Indonesia, 2025

Old-age dependency ratios of Indonesia, 2025

Variants	Fertility			
	High	Med	Low	
Mortality	High	0.112	0.117	0.124
	Med	0.117	0.123	0.130
	Low	0.131	0.135	0.139

Old-age dependency ratios of Indonesia, 2050

Variants	Fertility			
	High	Med	Low	
Mortality	High	0.185	0.225	0.284
	Med	0.213	0.260	0.328

Uncertainty and old-age dependency

- Low fertility and low mortality produce the most rapid increase in old-age dependency
- All scenarios produce substantial aging
- Differences in old-age dependency among scenarios is modest in 2025, very large in 2050

Summary of Demographic Analysis

- Both the working-age and elderly populations are growing rapidly
- The elderly population is increasing relative to the working-age population
- Aging is moderate
- Extent of aging by 2050 is uncertain

Aging and Health Policy

- Trends in health and health systems
- Role of population aging
- Implications for health policy

Health Expenditure Varies among Countries

Health Expenditure (% of GDP)

	Total	Public	Private
Japan	7.1	5.7	1.4
South Korea	6.7	2.5	4.2
Thailand	5.7	1.9	3.8
Philippines	3.4	1.6	1.8
Indonesia	1.7	0.6	1.1
India	5.2	0.7	4.5
Bangladesh	4.9	2.3	2.6
Egypt	3.7	1.0	2.7

Possible Cause of Rising Health Expenditure

- A reflection of preferences
 - Consumers can afford more health services
 - Technology has increased the possibilities
- Changes in population characteristics
 - High cost at end of life
 - Epidemiologic transition results in high-cost diseases
- Waste and inefficiency by consumers and/or producers

Income elasticity estimates

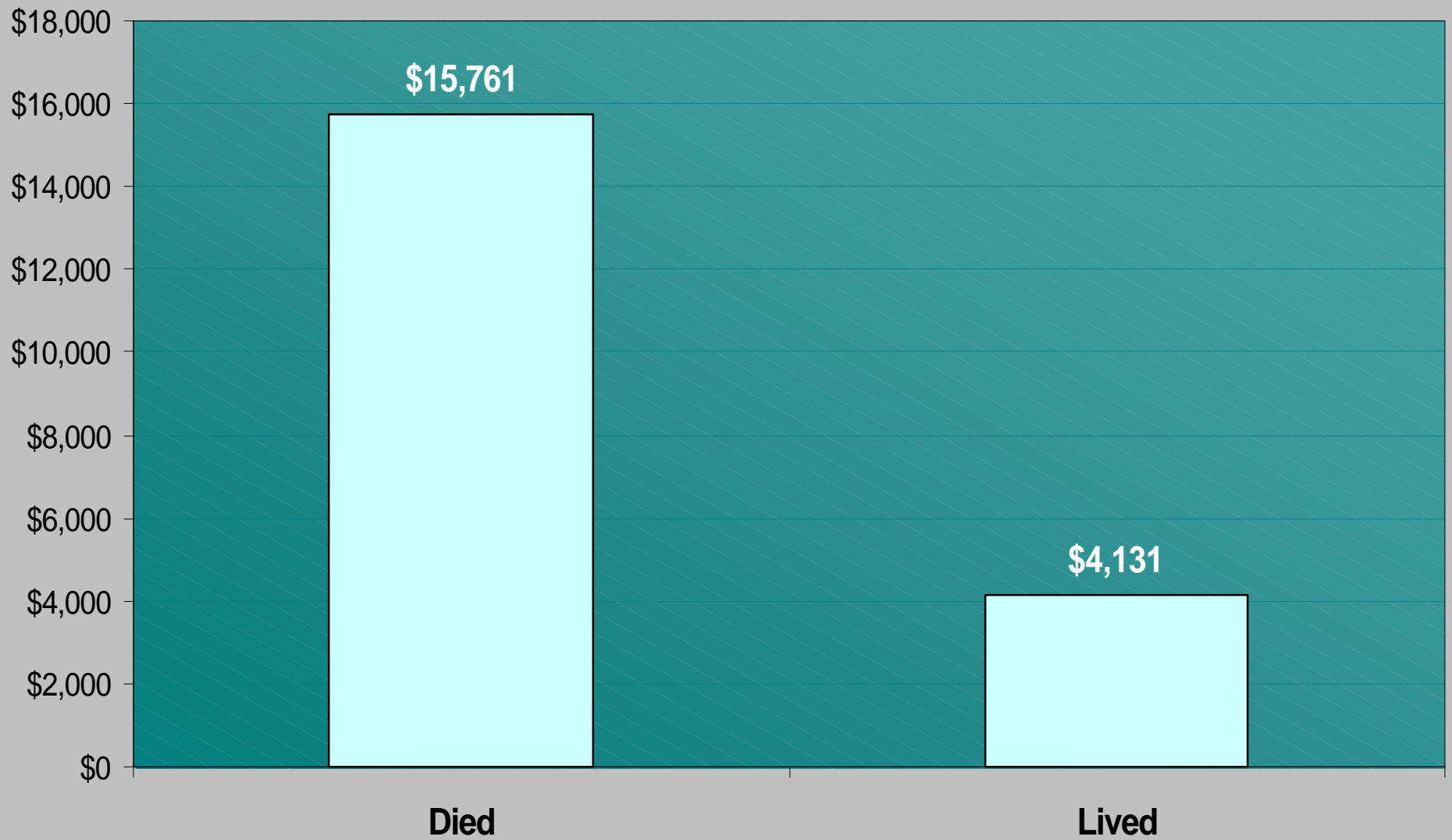
Macro Studies

13 developed countries	1972	1.31
130 countries	1994	1.33
United States	1875-1995	1.60
10 OECD countries	1960-1990	1.00

Micro Studies

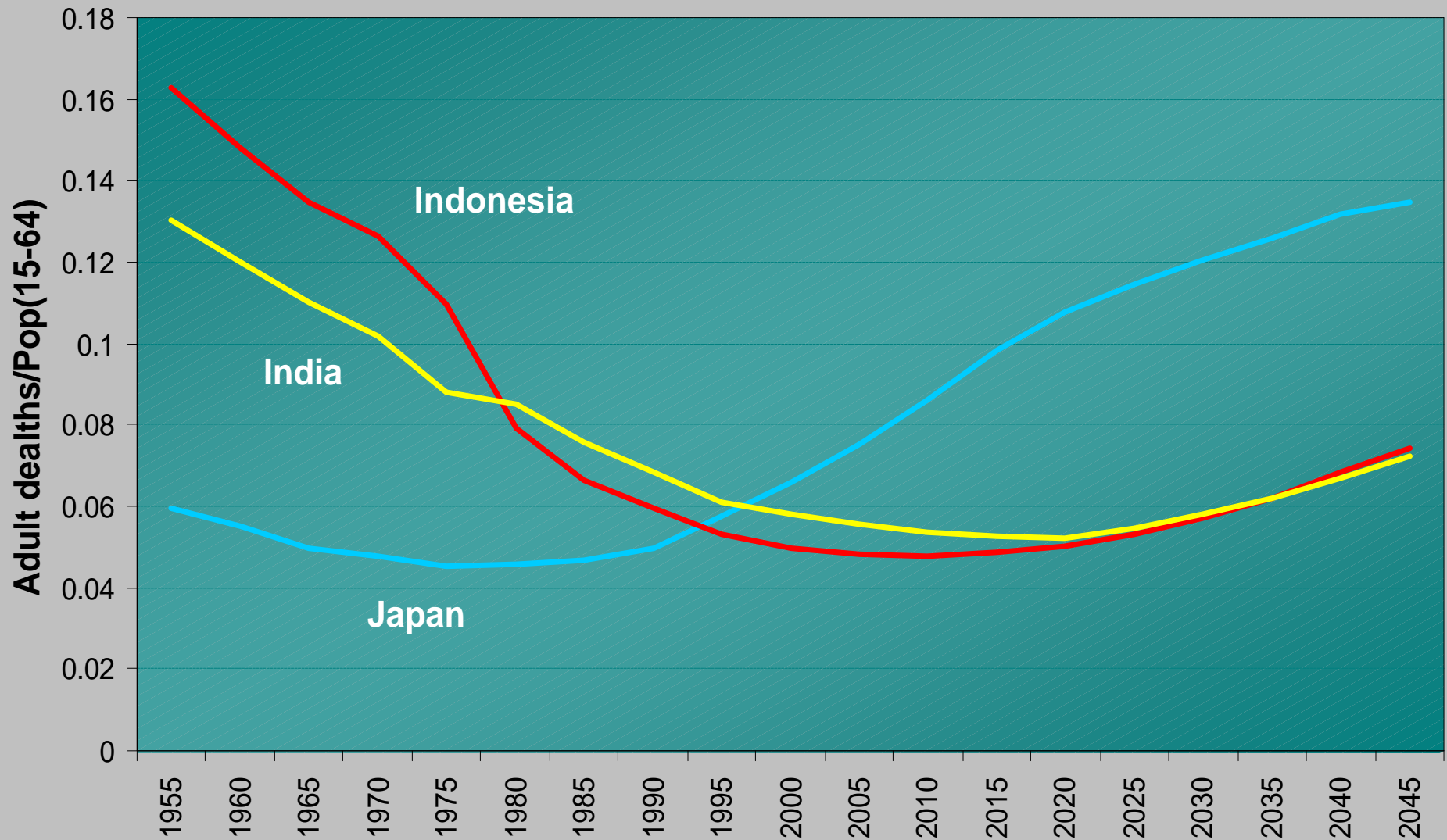
Indonesia	1987	1.65
Philippines	1985	1.36
Thailand	1988	1.86

The High Cost of Death US Estimates, 1994



Source : HCFA, 1998.

Trend in Adult deaths per Working Age Adults, 3 Countries



Source : United Nations Population Division, 1999.

Health Care Finance: Policy Issues

- Balancing efficiency and equity
- Public goods and externalities
- Risk sharing
- Informational imperfections
 - Moral hazard
 - Adverse selection
- Funded or transfer programs?

Old Age Security Challenge

- Rapid increase in old age dependency
- Decline in age at retirement
- Support systems
 - That are in a state of flux
 - That are inadequate to meet the needs of the elderly
 - That may adversely affect development efforts

Support System Framework

Responsibility	Method of Finance	
	Transfer	Funded
Personal	Family	Employment and saving
Public	Pay-as-you-go social security	Central provident fund

Source : Ronald Lee, 2000

Family Support System

- Asia's family support system is very strong
- Great majority of elderly live with and depend on their children
- Women are especially dependent on children
- Co-residence with children is declining in more developed Asian economies
- Percentage with surviving spouse is rising

Factors Affecting Age at Retirement

- Labor supply
 - Greater income and wealth
 - Tax and pension policies
- Labor demand
 - Economic recession
 - Discrimination
- Labor market rigidities
 - Mandatory retirement ages
 - Seniority wage system
 - Inflexible working conditions

Statutory Retirement Age

	Men	Women
Japan	65	65
Singapore	55	55
South Korea	60	60
China	60	55
Thailand
Indonesia	55	55
Philippines	60	60
Vietnam	60	55
Bangladesh
India	55	55
Pakistan	60	55
Sri Lanka	55	50

Source : SSA(1999) and UN(1999).

Public Pension Programs

- Nearly all Asian countries have public pension programs
- Approach is varied
- Coverage is often limited to government employees or employees of large firms
- Benefits are modest

Percentage of Social Security Expenditure in GDP, circa 1993

	Total	Pension	Other social security
Japan	17.88	8.06	9.82
Singapore	1.78	1.31	0.47
South Korea	2.18	0.14	2.04
China	2.55	1.63	0.92
Malaysia	0.15	0.00	0.15
Thailand	0.12	0.00	0.12
Philippines	3.01	0.78	2.23
Indonesia	0.06	0.01	0.05
India	0.32	0.22	0.10
Bangladesh	0.02	0.00	0.02
Egypt	1.20	na	na

Source : ILO. Social Security Department database.

Issues in Assessing Old-age Security

- Distributional objectives
- Effect on economic development
- Risk pooling
- Administrative efficiency

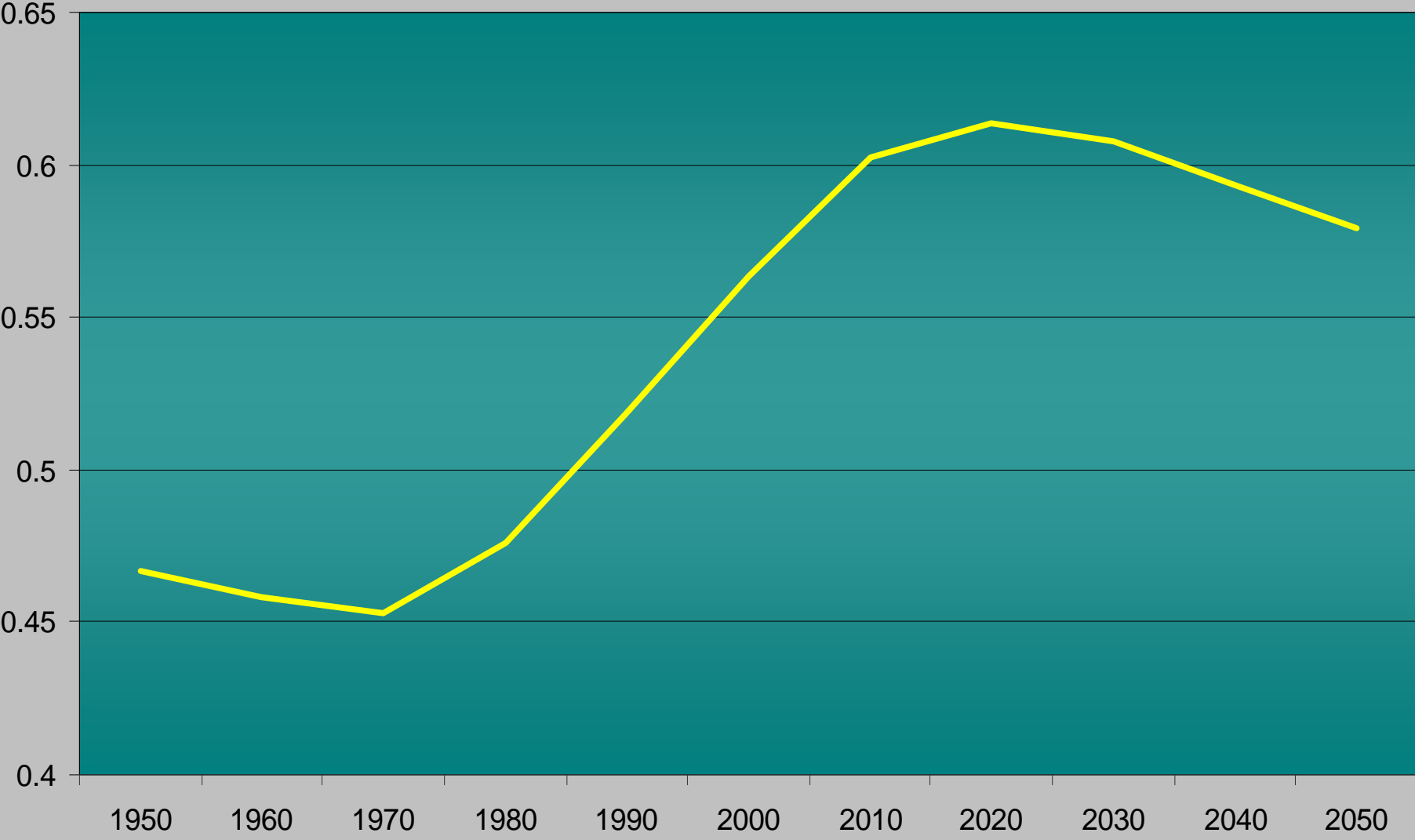
Aging and Economic Growth

- Changes in support ratio are favorable except in Japan
- Support ratio is beginning to erode
- Changing support ratio may have an unfavorable impact on labor force and investment rates

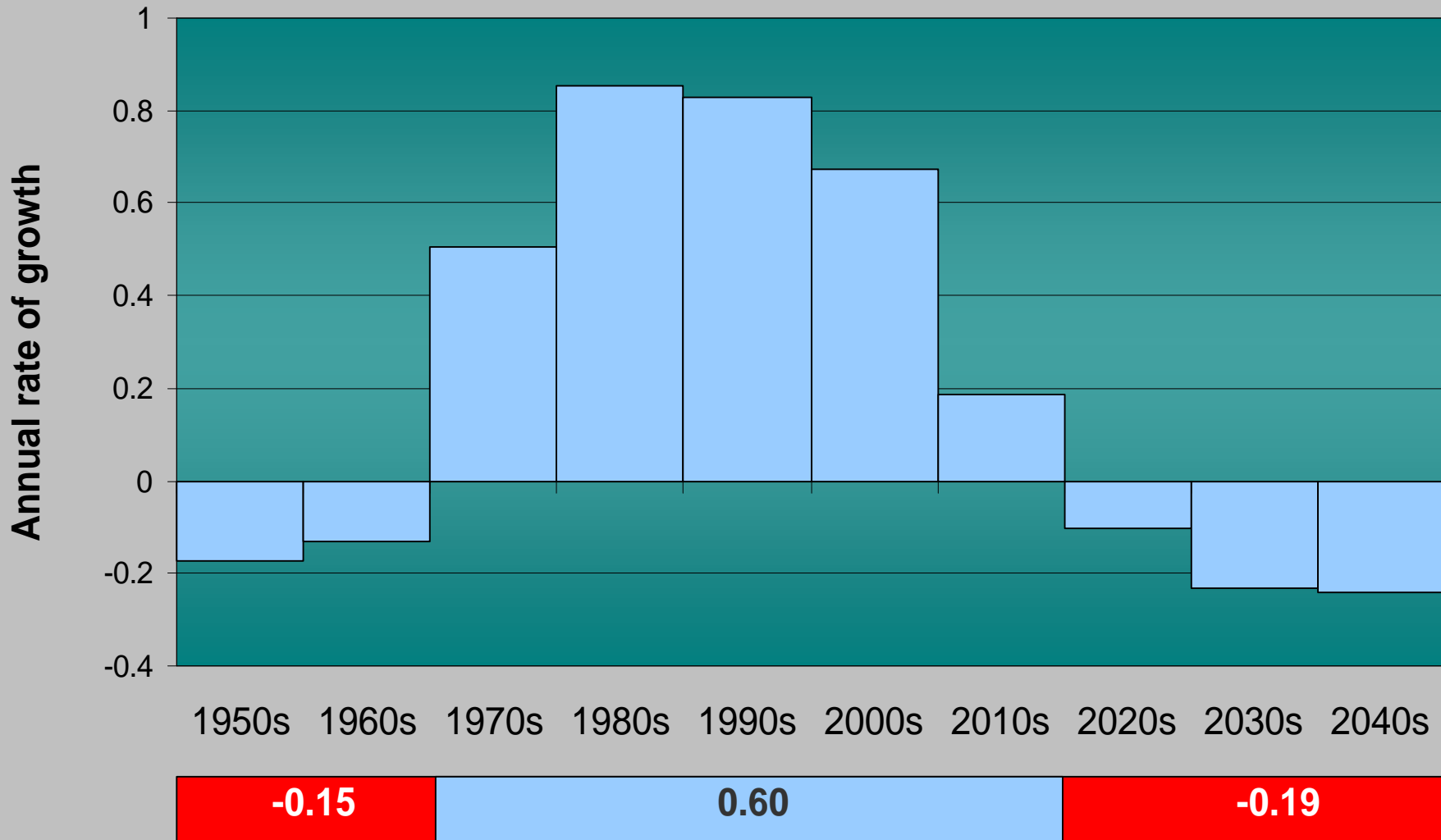
Economic Support Ratio

Definition : The economic support ratio is the number of workers, adjusted for productivity differences, per consumer, adjusted for age-related consumption needs.

Indonesia's Economic Support Ratio



Summary of Changes in Support Ratio of Indonesia



Aging and economic policies

- Rely on funded strategies for old age support
 - Personal saving for retirement
 - Funded public programs
- Eliminate barriers and disincentives to work
 - Mandatory retirement programs
 - Discriminatory practices
- Strengthen financial sector
- Create a favorable investment environment

The End