The Population-Poverty Nexus

The Philippines in Comparative East Asian Context

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Presented at the Book Launch cum Lecture of "The Ties That Bind: Population and Development in the Philippines"

Manila Peninsula Hotel, Makati City

10 August 2004

Based on the Study

The Population-Economy-Poverty Links: A Quantitative Assessment

by

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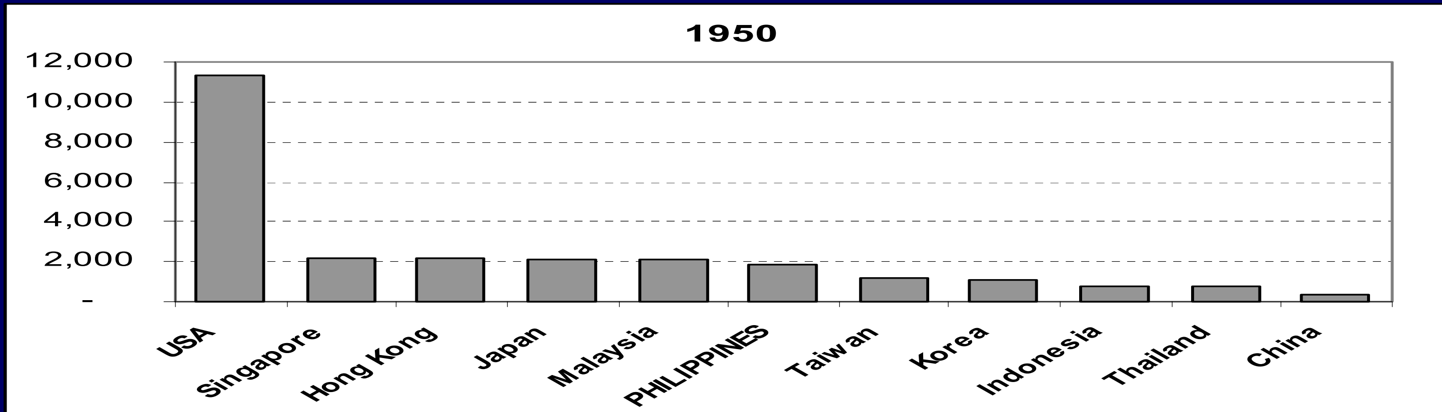
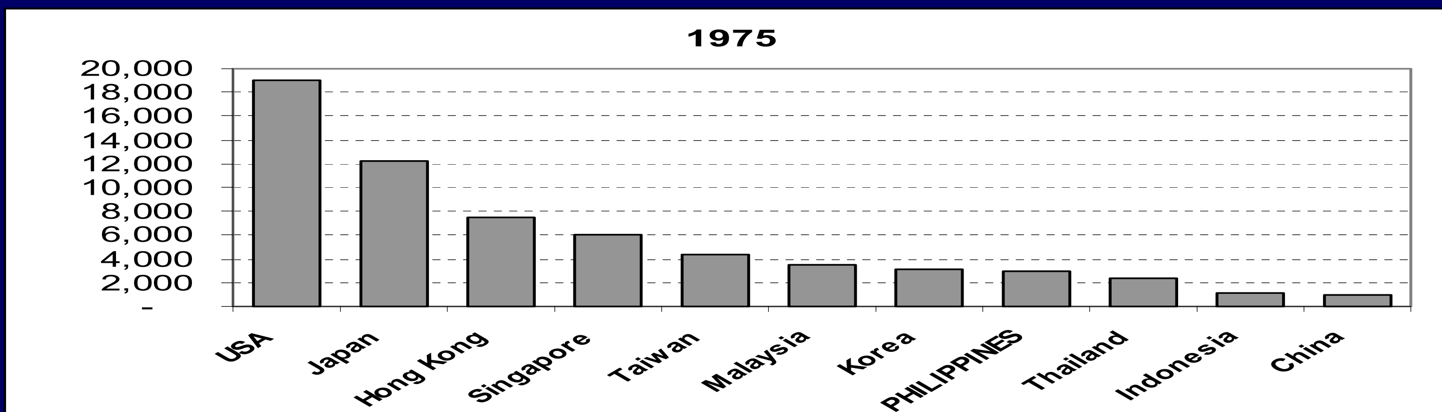
Final Report prepared for the Philippine Center for Population and Development, 2003

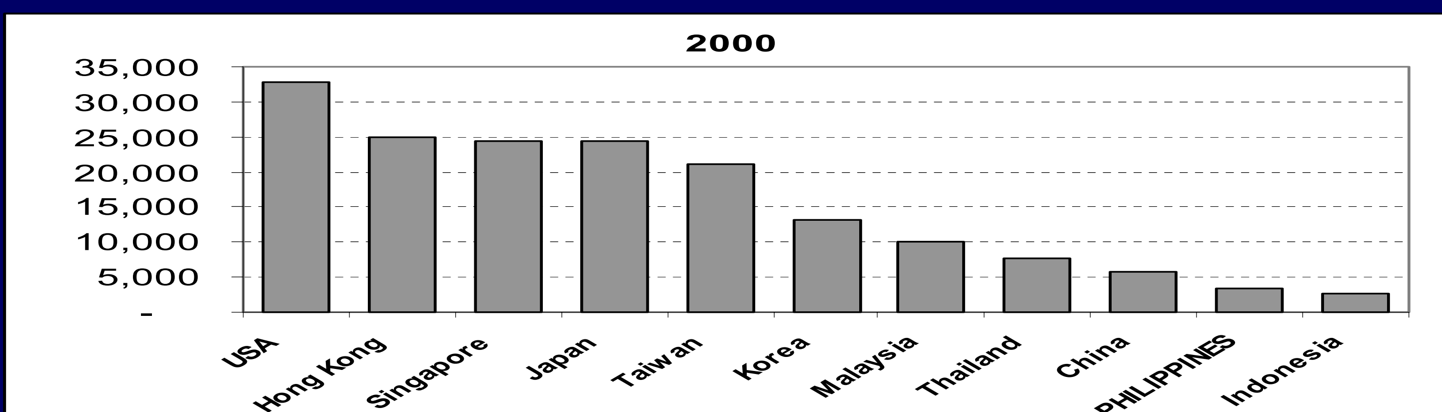
Organization

- Comparison of key economic indicators of selected Asian countries
- The population debate and the demographic transition
- Studies on the population-economy-poverty nexus
- Estimates from the econometric model
- Simulation results
- Conclusions

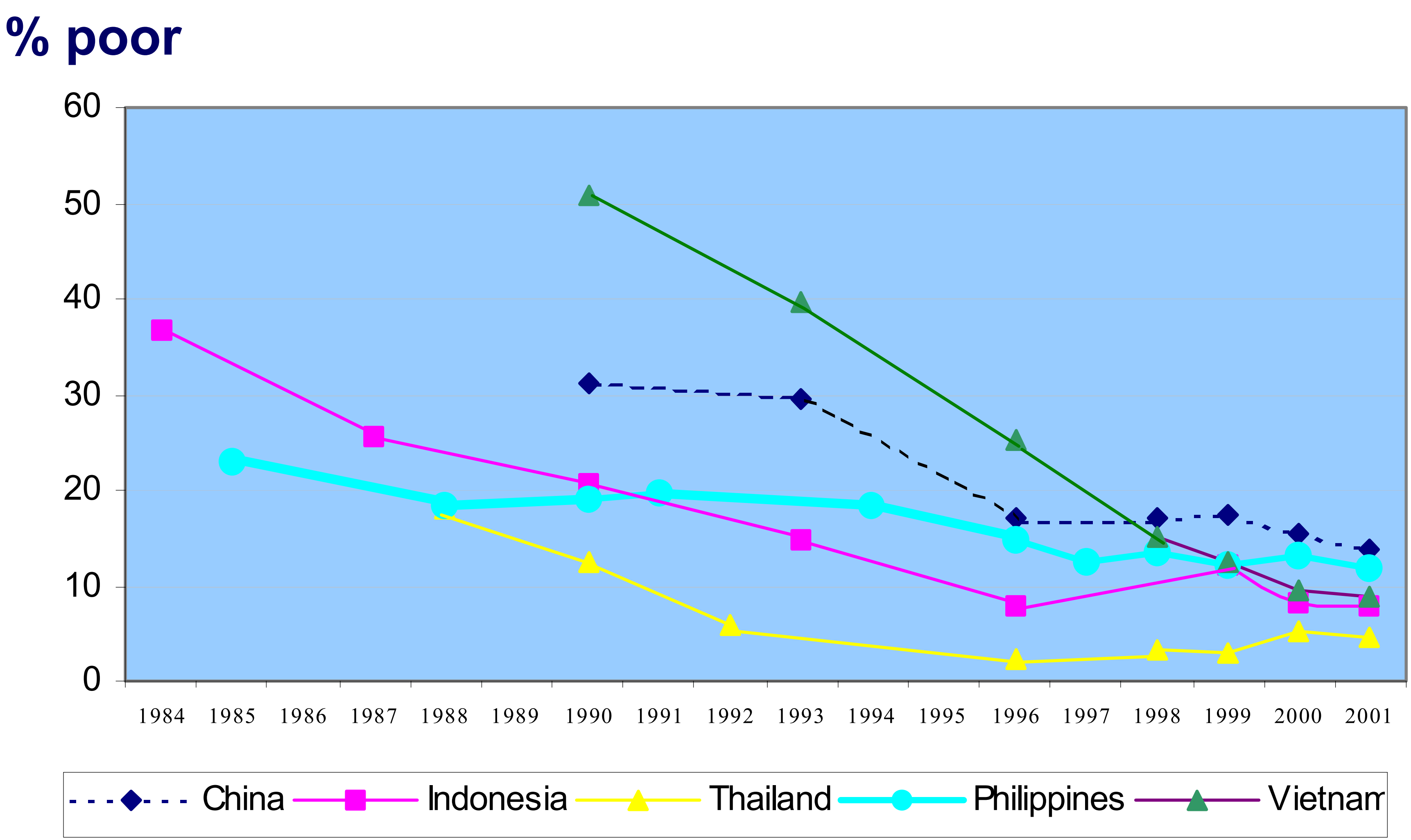
The Philippines in East Asia… GDP per capita





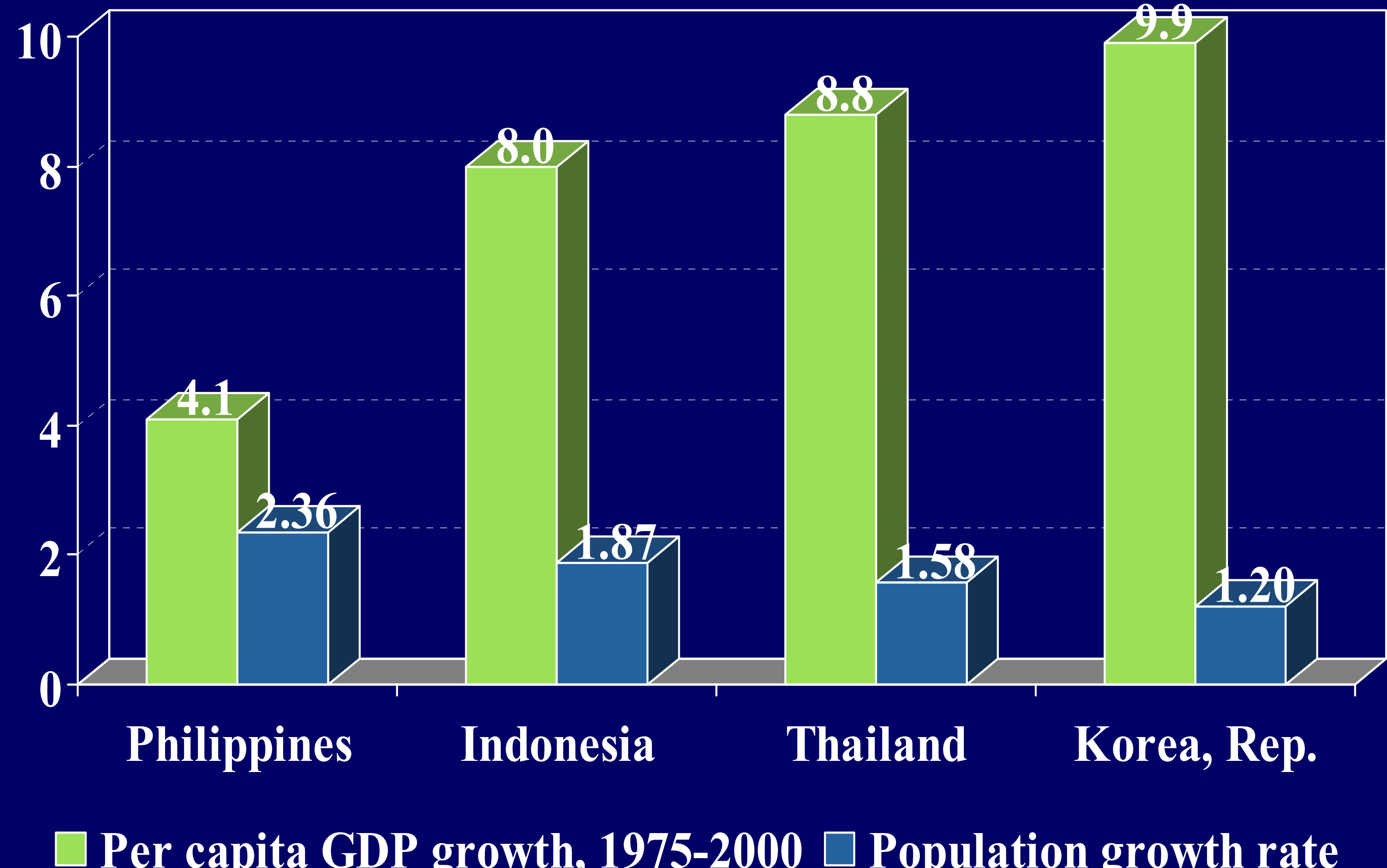


Poverty reduction in East Asia

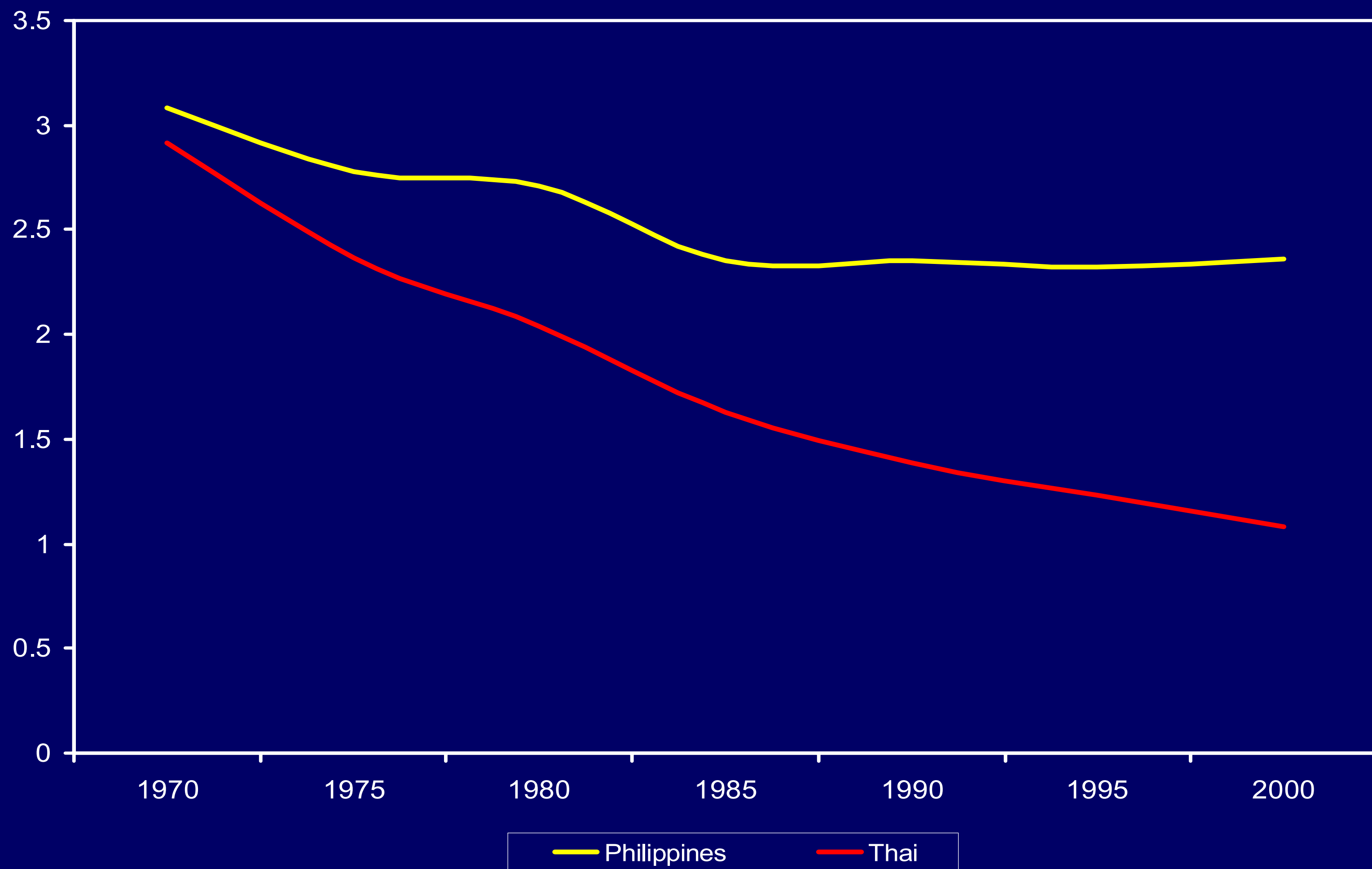


Note: Poverty estimates based on a poverty line of US$1/day per person.

GDP & Population Growth Rates for Select Countries, % per year



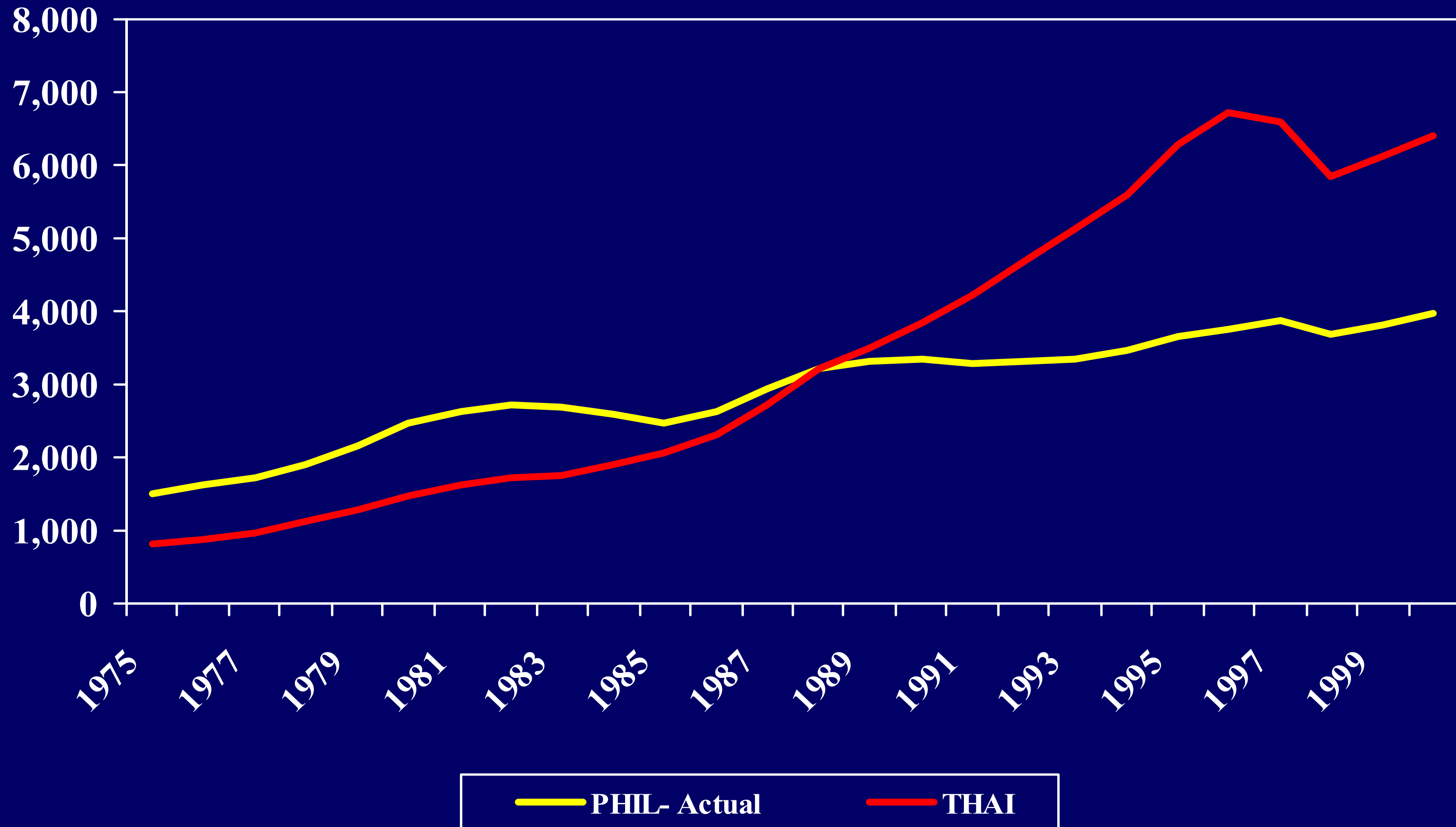
Population Growth Rates: Thailand vs Philippines



Comparison of Key Indicators

	Philippines	Thailand
Total Population Growth	2.4	1.6
Workers Population Growth	2.8	2.5
Youth Population Growth	1.7	-0.3
Elderly Population Growth	3.0	3.6

Income per Person: Thailand vs Philippines (in US$ PPP)



The Population Debate

- Dynamic and contentious
- Consequences of population growth on economic development
- Does population growth curtail or promote economic growth? Or is it independent from economic growth?

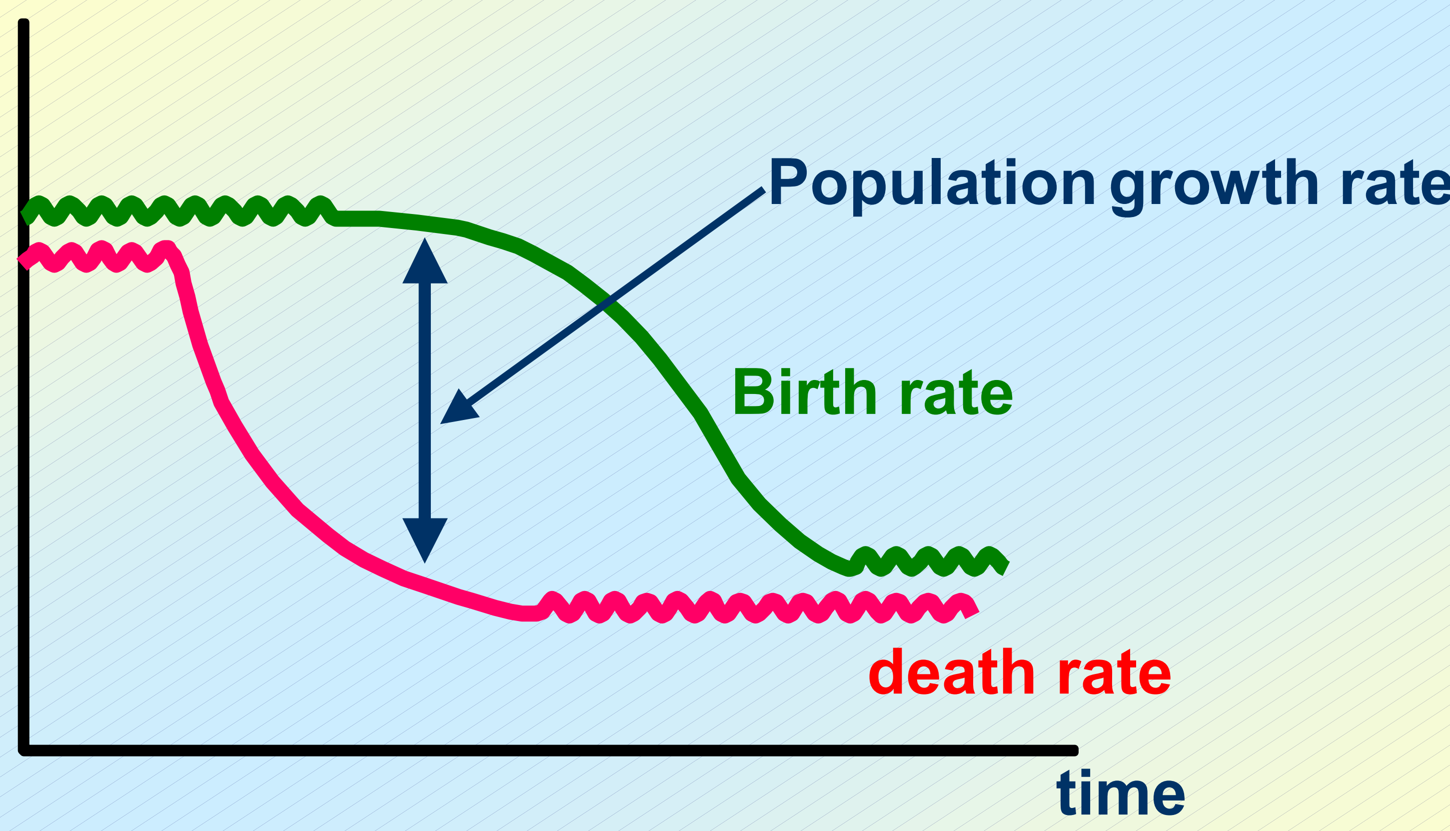
The Population Debate

- In the 1990s, the population debate shifted from the issue of population growth to the age structure of the population.
- Individuals have varied economic behaviors at different stages in life.
- The young require intensive investment in health and education, prime-age adults supply labor and savings, the aged require health care and retirement income.
- The nation’s age structure has an important impact on its economic performance.

Demographic Transition

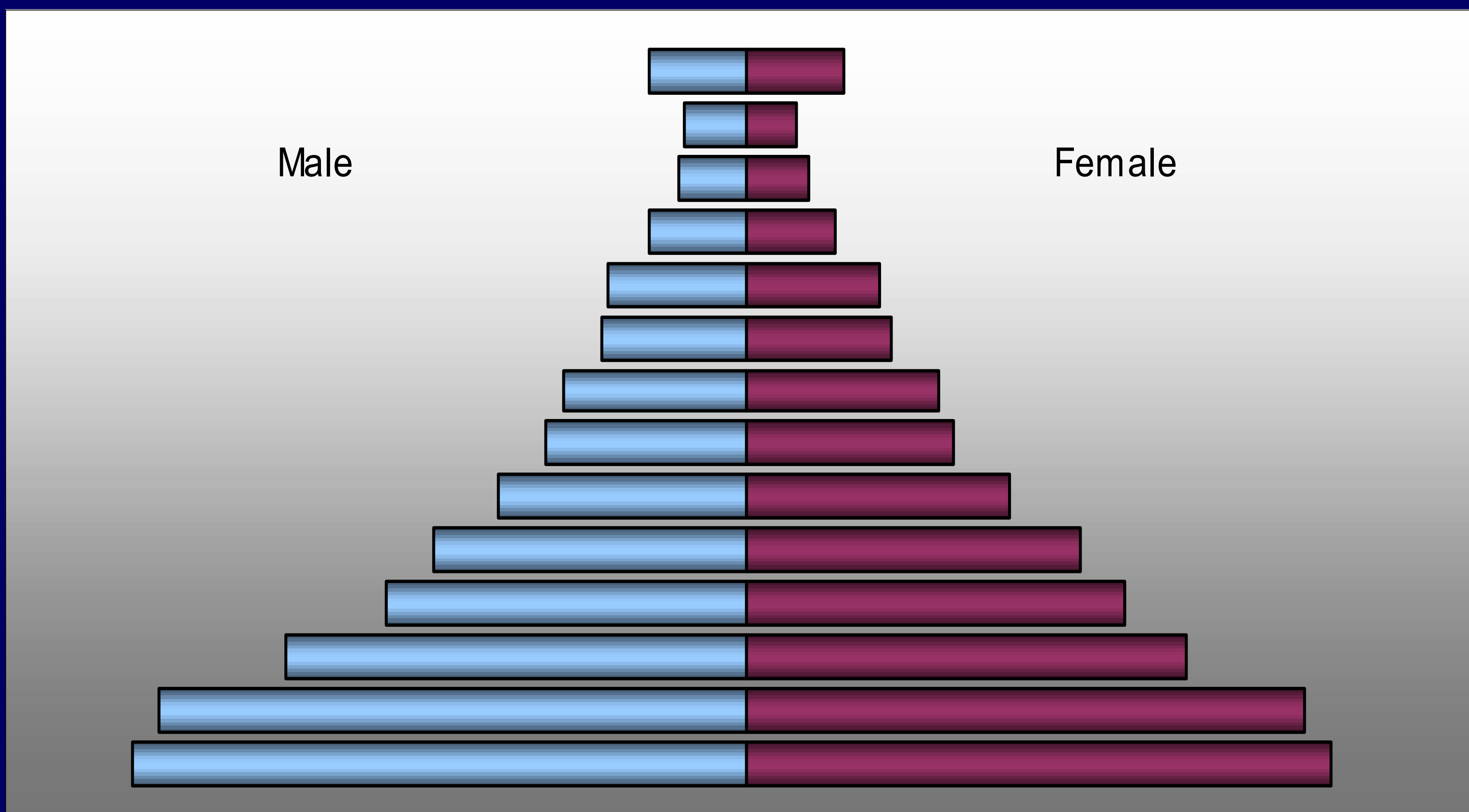
"… is a change from a situation of high fertility and high mortality to one of low fertility and low mortality. "

The Demographic Transition

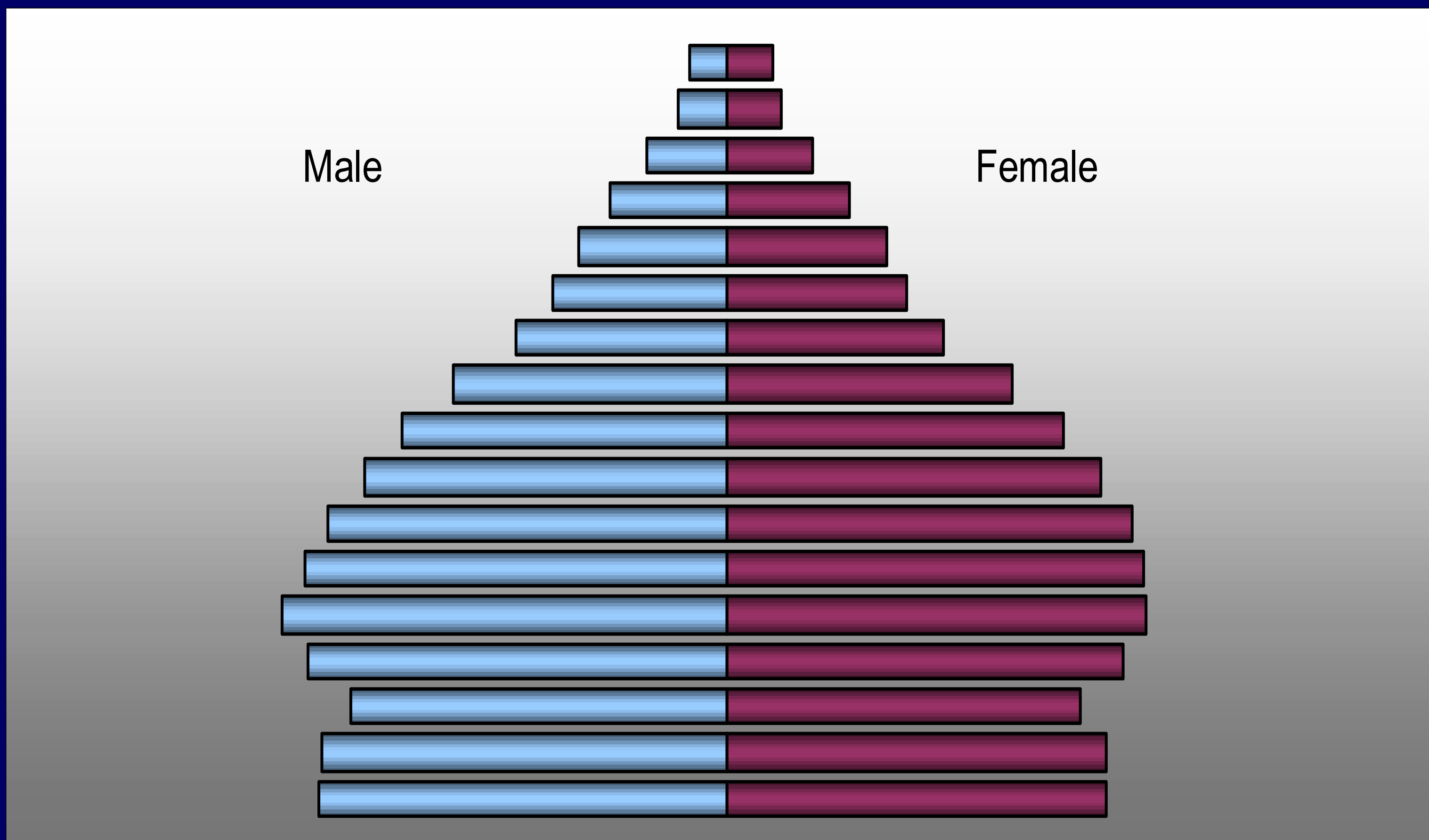


Phases of the Demographic Transition

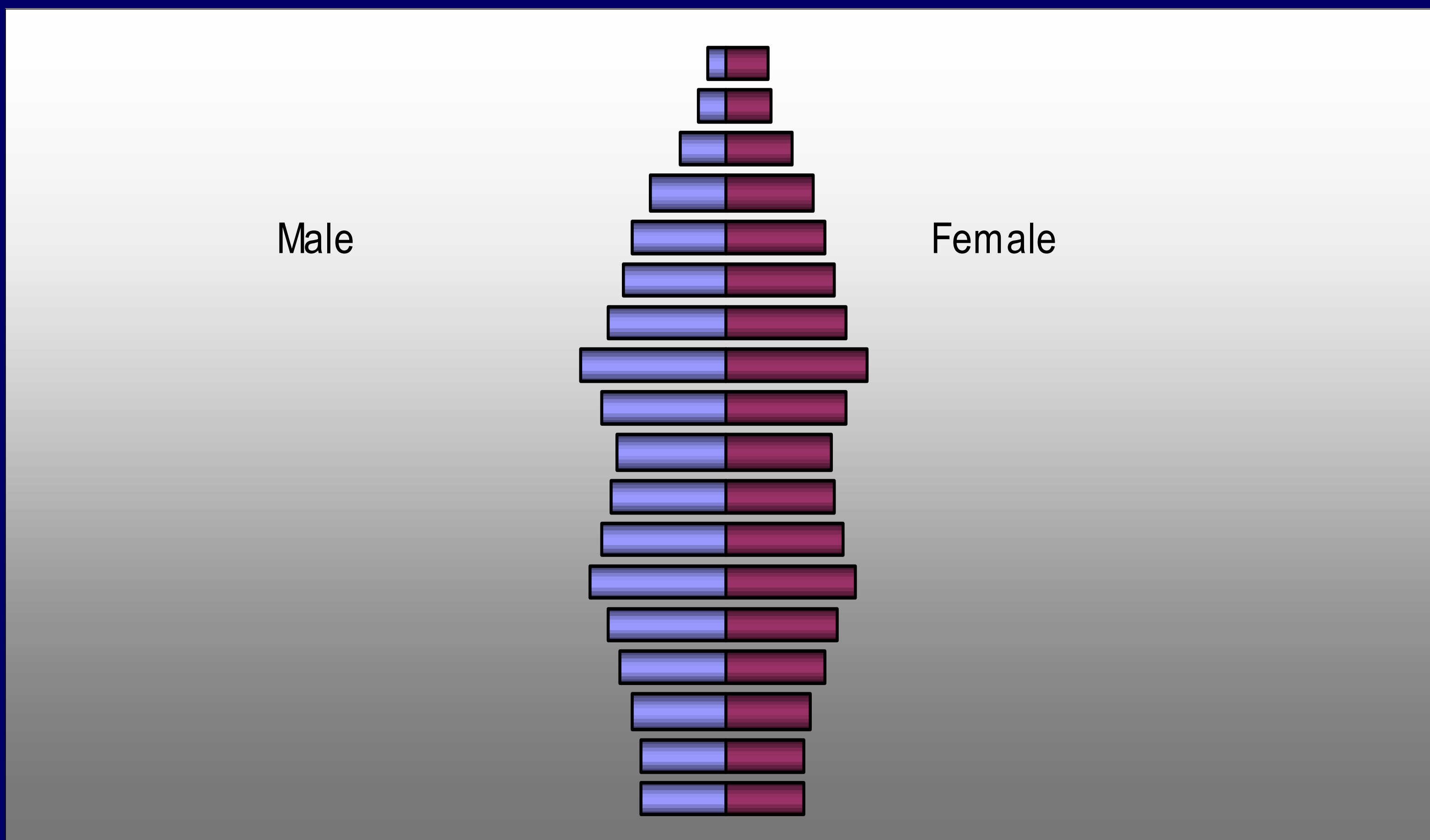
Phase 1. Triggered by initial decline in infant mortality, the youth dependency group swells.



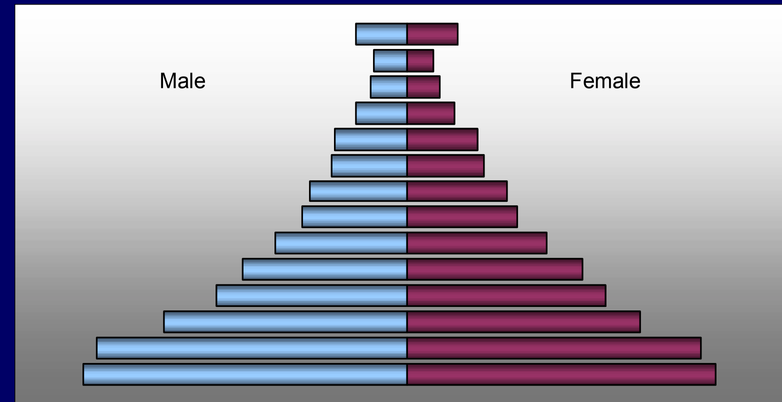
Phase 2. Economic growth promoted about 20 years later when the youth enters the working age group.



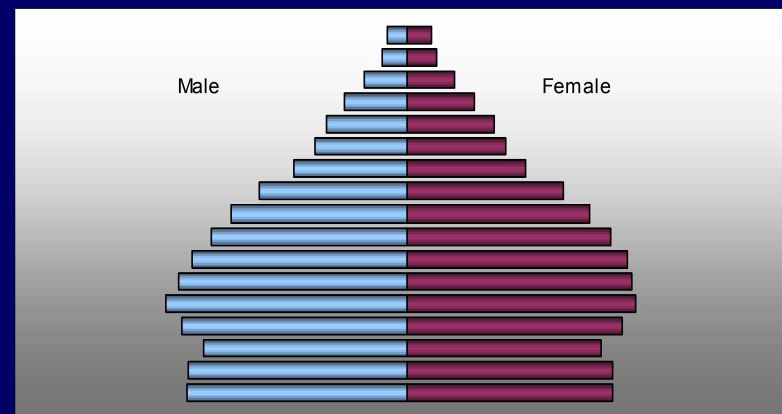
Phase 3. Economic growth may or may not be impeded as the elderly cohort swells. It appears that a rising elderly share does not depress nor elevate the rate of economic growth.



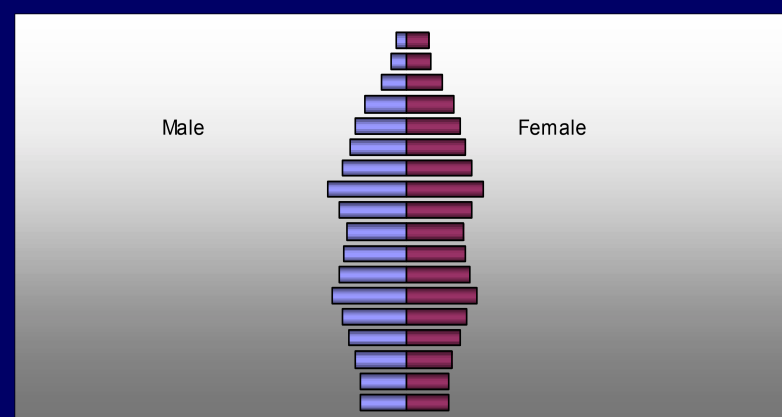
Phase 1 - Philippines



Phase 2 - Thailand



Phase 3 – Japan



Findings from Earlier Studies

- **Demographic changes following World War II worked in favor of more rapid growth in East Asian countries.[1]**
- **About one-third of East Asia's economic growth is attributable to demographic influences.[2]**
- **Had all countries reduced net fertility by five births per thousand women in the 1980s, the poverty incidence would have been reduced by a third, from 18.9 percent (one in every five) to 12.6 percent (one in every eight).[3]**

[1] Sachs et. al. (1997), *Economic Growth in Asia (1965-1990).*

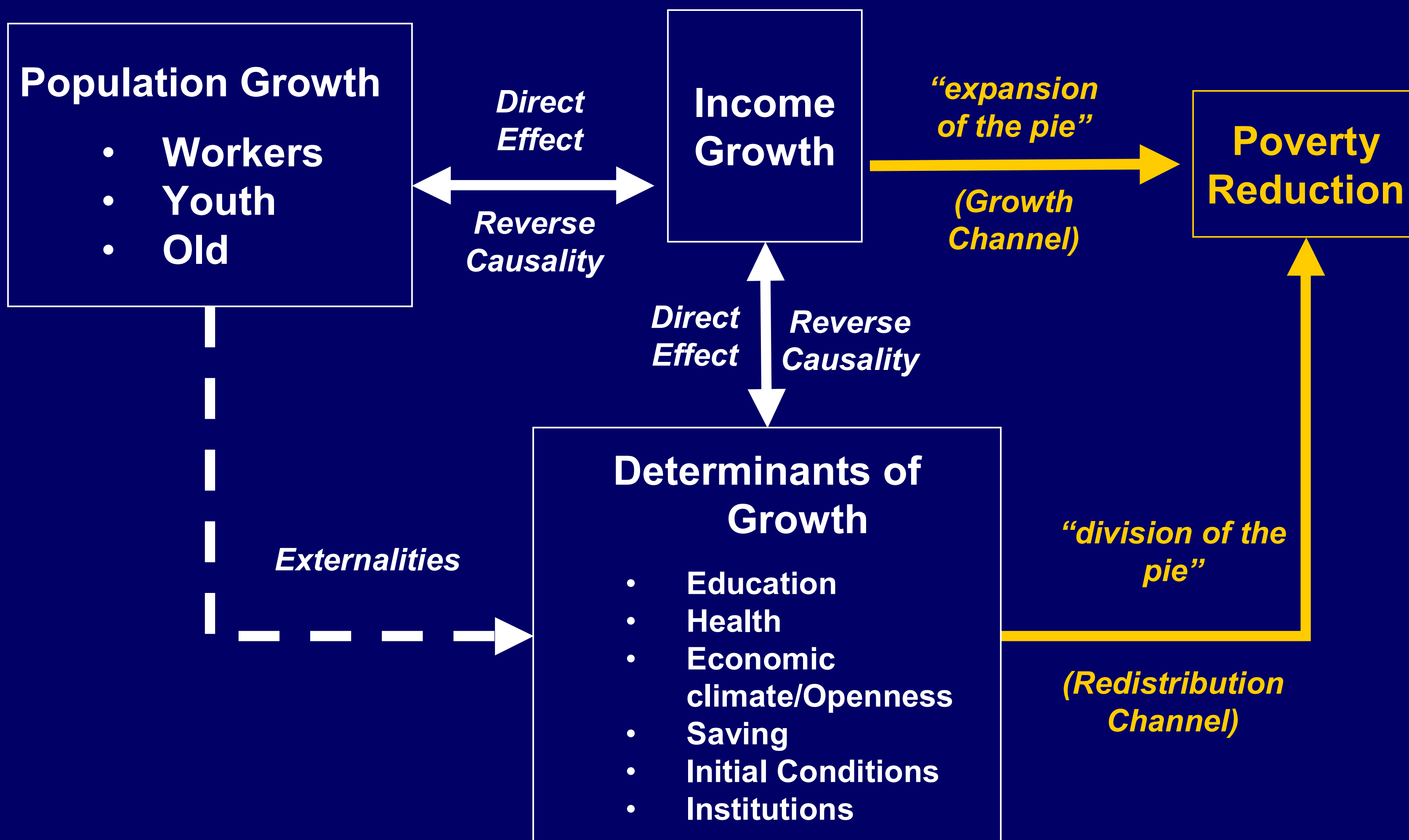
[2] Bloom and Williamson (1997) and Bloom, Canning and Malaney (1998) on *Population Dynamics and Economic Growth in Asia (1965-1990).*

[3] Eastwood and Lipton (2000).

The Cross-Country Econometric Model

- Investigated the relationship between population growth and the demographic transition, on the one hand, and economic growth and poverty, on the other, using cross-country data from 1975 to 2000 and Philippine provincial panel data from 1985 to 2000.
- Simulation techniques were used to quantify the contribution of population growth to the observed difference between the Philippines' GDP per person and Thailand's.
- The data set consisted of 80 developed and developing economies.

The Econometric Model



Contribution of Population Dynamics to Economic Growth

Country	Average Growth (GDP per person, %)	Net Contribution of Population (%)
Philippines	4.10	1.06
Thailand	8.84	1.83
Indonesia	7.98	1.27
South Korea	9.90	1.66

Note: Estimates of GDP per person are in purchasing power parity (PPP).

Some Highlights of the Study

- Total Population Growth Rate has a negative and significant impact on economic growth.
- Workers' Population Growth has a positive and significant impact on economic growth.
- Average Life Expectancy at Birth (a proxy for health) has a positive and significant impact on economic growth.
- Openness to trade has a positive and significant impact on economic growth.
- Quality of Public Institutions has a positive and significant impact on economic growth.

Why the Philippines Grew Slow…

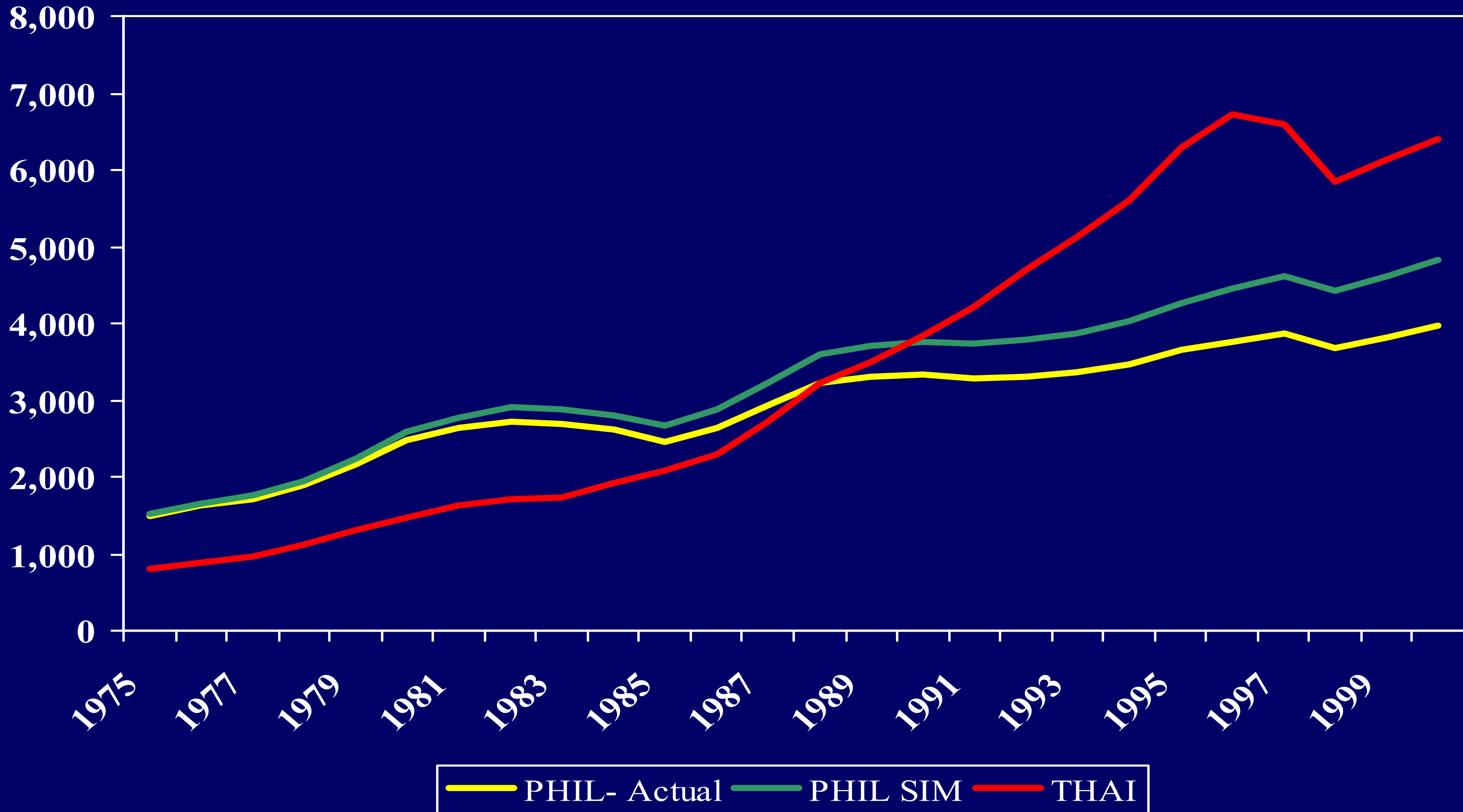
Variable	Philippines	Thailand	Foregone Growth (%)
Initial Conditions			**1.072**
GDP per person, 1975	1502	805	
Ratio of Workers to Total Population	53.76	52.12	
Population Growth			**0.768**
Total	2.36	1.58	
Workers	2.85	2.53	
OPENNESS	64.30	67.96	**0.028**
SAVING RATE	22.03	28.02	**0.206**
Human Capital I:			
Average LEB (1976 – 2000)	64.39	66.11	**0.072**
Human Capital II:			
Illiteracy Rate (Average, 1976 -2000)	7.93	5.58	**0.116**
INSTITUTION	2.97	6.26	**0.574**
TROPIC	1	1	**0.000**
Total Growth Differential			
(Accounted by Model)			**2.836**
Actual GDP per capita growth			
(average in percent, 1975-2000)	**4.100**	**8.840**	**4.740**

What if the Philippines followed Thailand's Population Growth Path from 1975 to 2000?

What is the Impact on Economic Growth?

- Additional increase of at least 0.76% per year, for the period 1975 to 2000, on the average income per person
- Cumulative increase of about 22% on the average income per person in the year 2000
- Increase on the average income per person in the year 2000 to US$ 4,839.00 from US$ 3,971.00 (in PPP)

Actual and Simulated Income per Person



What is the Impact on Poverty?

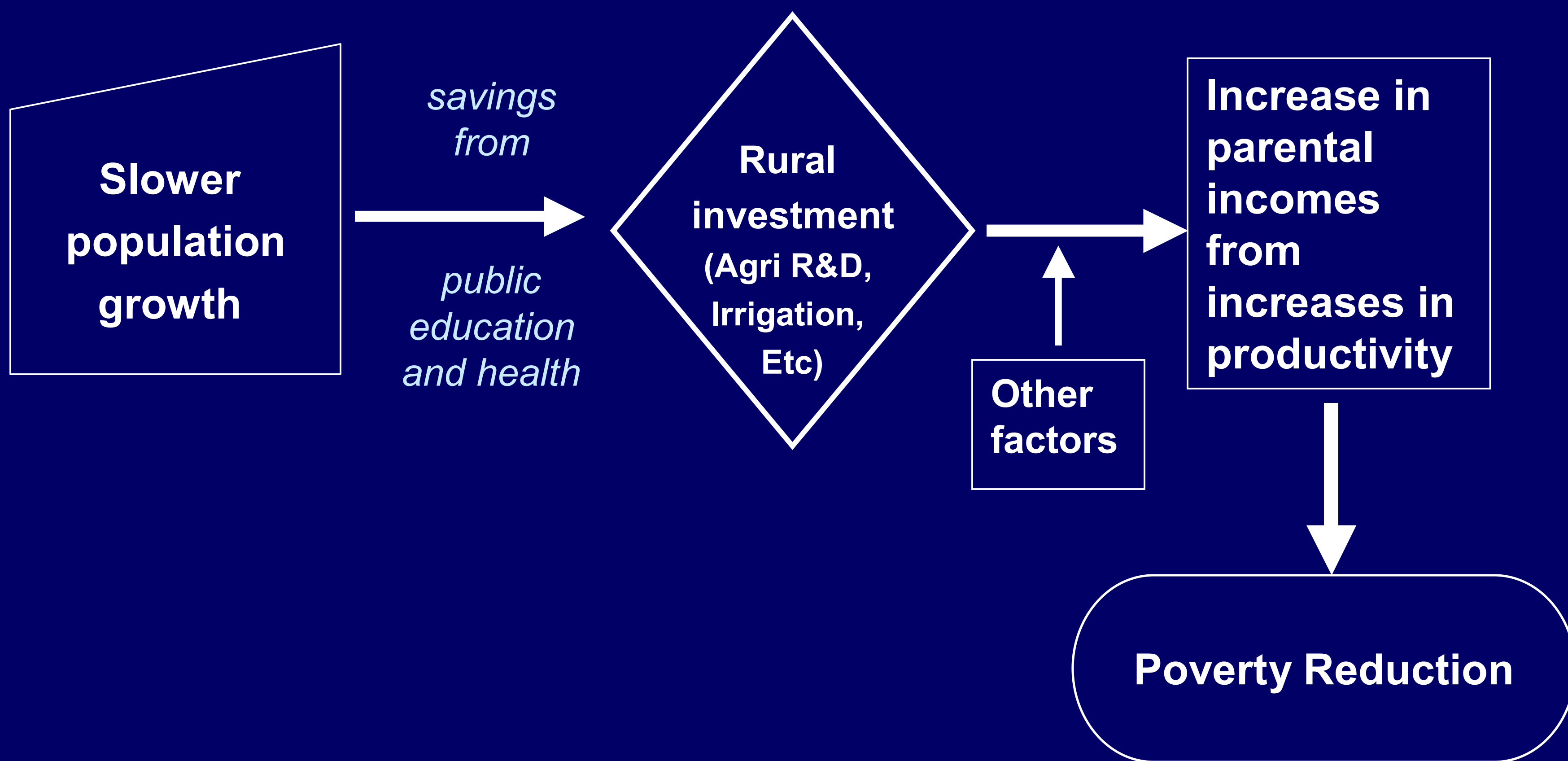
If the Philippines had Thailand’s population growth:

- Poverty incidence would have been 5.5 percentage points less
- More people would have been brought out of poverty, about 3.6 million more

Extending the Simulation to Focus on Rural Areas…

- Why rural areas?
  - 2 of every 3 poor persons are located in rural areas; dependent mainly on agriculture for incomes.
  - Even urban poverty is largely spillover effects of rural poverty.
- Savings from provision of basic education and health services because of slower population growth rates
- These savings will be channeled to the rural sector, particularly agriculture

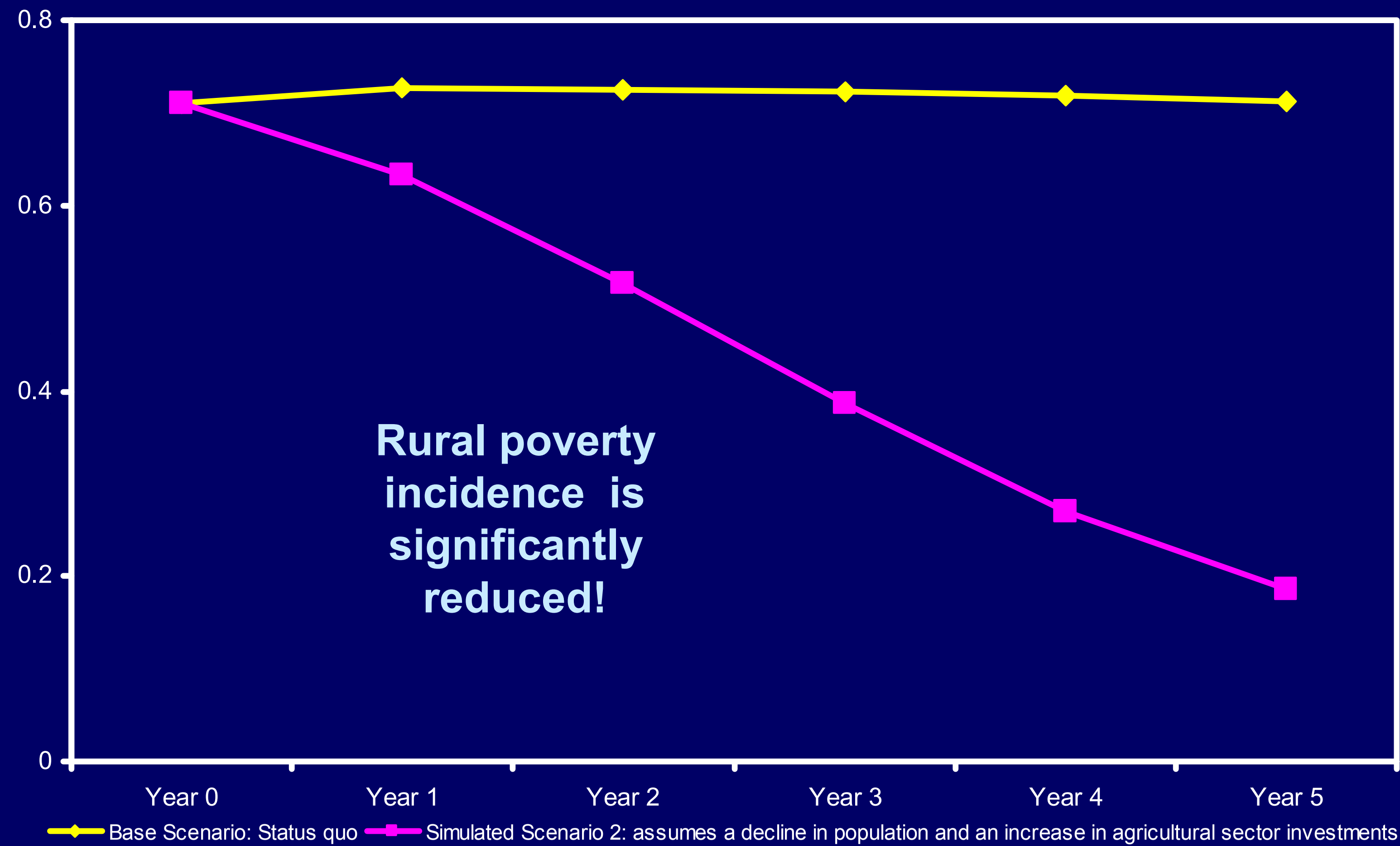
Slower Population Growth in the Rural Areas…



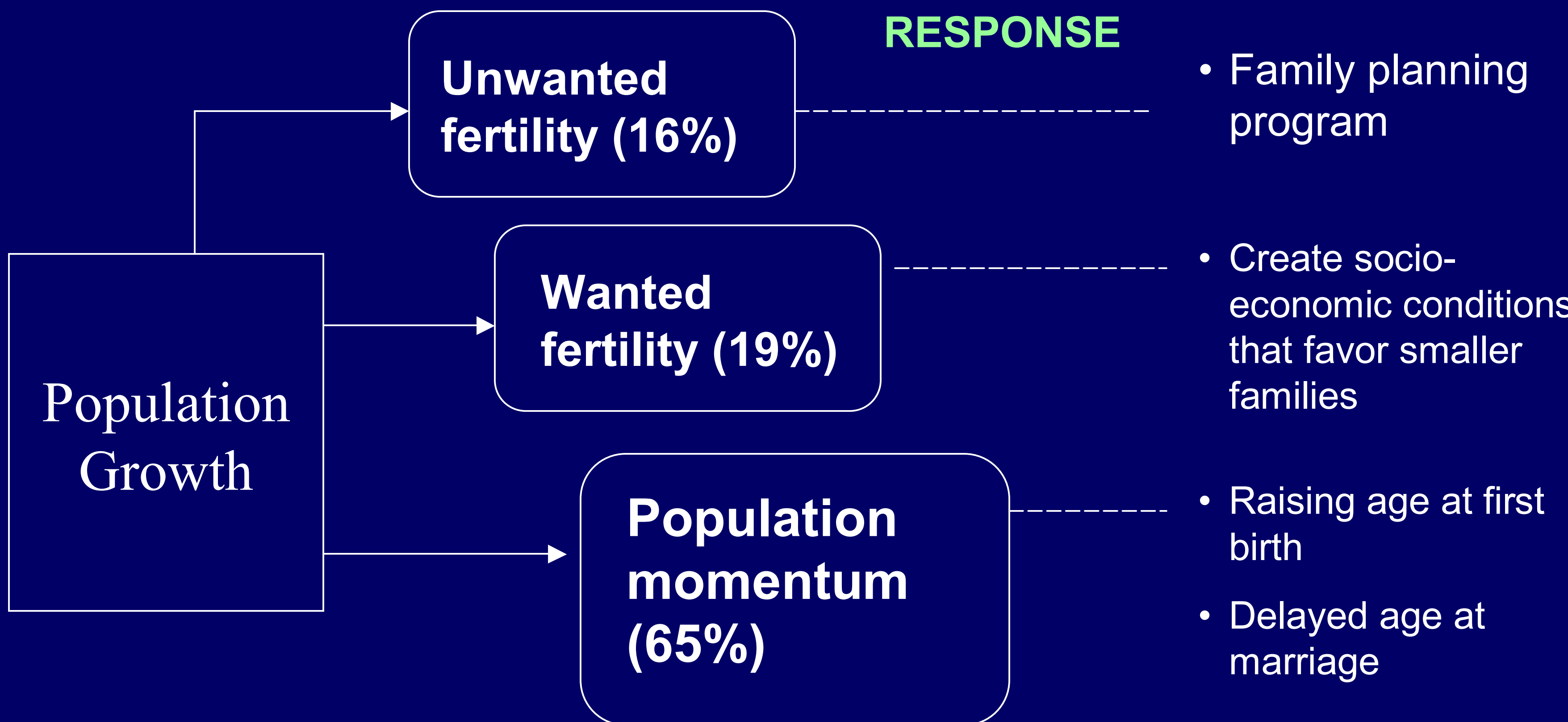
Potential savings

- Estimated savings from basic education: Php 128 billion over a period of 10 years
- Estimated savings from basic health: Php 52 billion
- Very conservative estimates

Poverty incidence in the agri sector



Sources of Future Population growth



In conclusion…

- Population growth matters in the economic performance and poverty of nations.
  - *Economic growth would have been much faster and poverty reduction quicker if the Philippines had Thailand's population growth path.*
- High population growth is not the sole culprit to the dismal performance of the Philippine economy during the last 25 years, but it is a key factor.
- Need for a clear population policy backed by strong government support.

Thank you