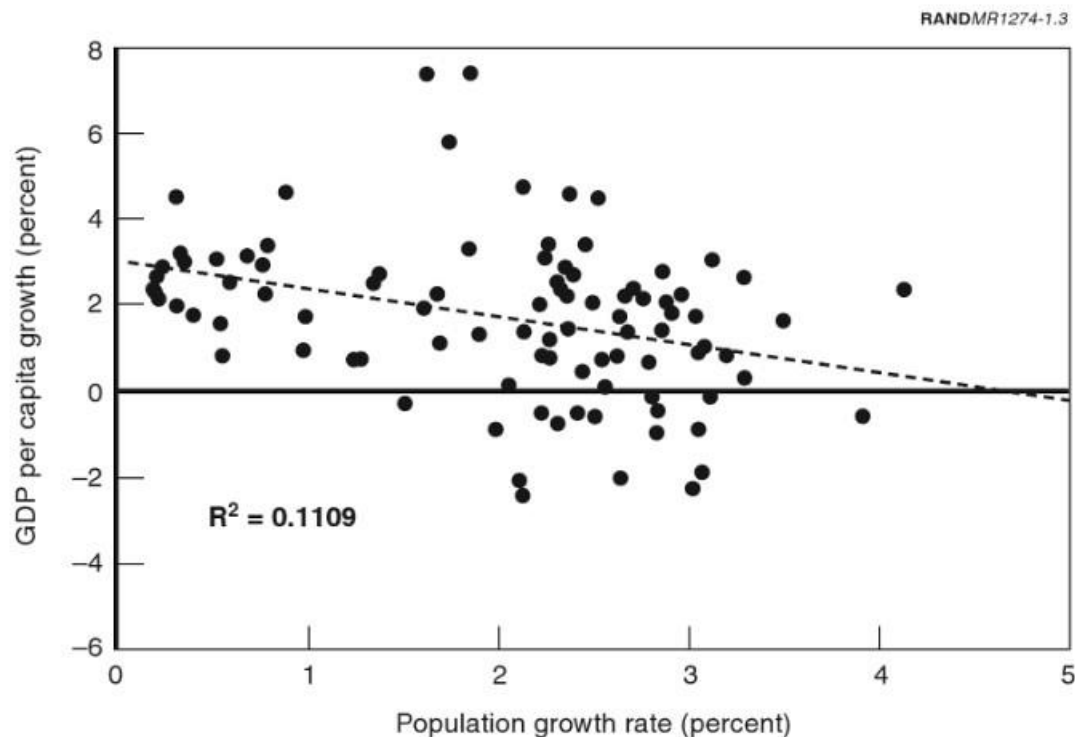


## Economic Growth and the Demographic Dividend



When holding other factors fixed, there is little cross-country evidence that population growth impedes or promotes economic growth. Population growth alone cannot significantly explain economic growth, however certain aspects of the demographic dividend can. My paper will aim to explore which aspects of the demographic dividend affect economic growth through observing regional macroeconomic case studies. Furthermore, I will present how nations with different dividends proceed in exploiting their demographics to maximize their economic growth.

One important aspect is a nation's evolving age structures. Each age group in a population behaves differently, causing different economic consequences.

- Young: Require investment in health and education
- Middle Aged: Supply the labor market. Supply savings.
- Elderly: Requirement healthcare and retirement income.

This age structure is dependent on mortality rate, fertility rate, immigration rate, and policy.

Policy: Health, education, family planning, economics policies.

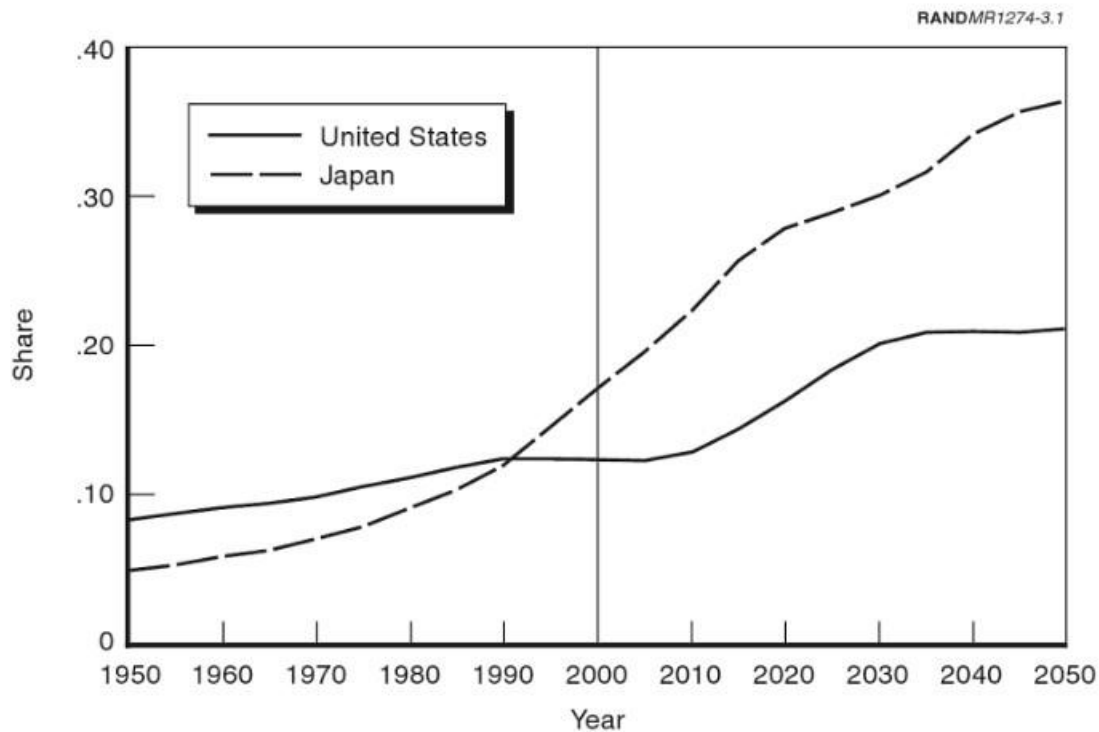
Region case studies and projections:

Japan: Example of too much elderly.

average age is 40 with life expectancy at 81. Extremely low fertility rate.

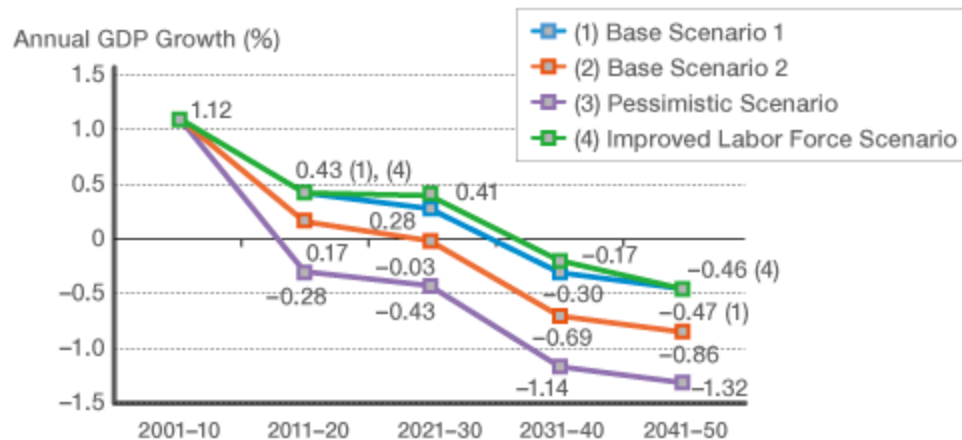
Breakdown of extended families. 40% of elderly population lives alone with no extended family to provide for them. Government will have to step in to fill the gap.

Projected Share of 65+ population graph



Japan's labor force projected to fall by 13% in 2050.

## GDP Growth Rates for Japan



### Middle East

High fertility rates and large growth in working age population. This decreases dependency rate.

Egypt benefitted from this demographic dividend. 1/6 of their economic growth from 1965 to 1990 is attributed to this increase in the working age population.

The problem the middle east faces may be eventual overpopulation due to extremely high fertility rate. They also lack funding in education, and foreign and internal investment. Lack of policy to exploit these demographic trends.

### The West

Increased optimism after WW2 slightly increased fertility rate, however it is falling now.

Same situation as Japan in terms of demographic shift towards a greater dependency rate.

Immigration however is much more prevalent in the west than in Japan. They aim to stabilize the working age population and sustain economic growth.

Rapid population growth has adverse effects on the environment. May not affect economic growth but has unsustainable long term consequences.

- Energy usage and greenhouse gas emissions.
- Urban crowding and falling standard of living.
- Deforestation and decline in biodiversity.

Europe's population is expected to decline by 6%.

USA is expected to grow by 21%.