

---

## CASE STUDIES

---

“Case Studies” presents a case pertinent to contemporary issues and events in investment management. Insightful and provocative questions are posed at the end of each case to challenge the reader. Each case is an invitation to the critical thinking and pragmatic problem solving that are so fundamental to the practice of investment management.

*Jack L. Treynor*



### MALE LIFE EXPECTANCY GRAPH

#### Introduction

The graph has data points for 66 countries. We think the horizontal axis is a proxy for their wealth, and the vertical axis is a proxy for the quality of life. We suspect many readers will share our surprise at the correlation. The data is from the 2015 edition of the *Pocket World in Figures*, published by the London *Economist*. The *Economist's* sample industries include some countries in South America, Sub-Saharan Africa, Eastern Europe, as well as many important industrial countries. It also includes data for the Euro Zone and for the world, which the author has excluded from his graph.

“*Gross Domestic Product*: The value of consumption, investment and government spending produced within a country’s borders. National income accounts are essential for studying why some countries are rich—that is, have a high level of GDP relative to population size—while some are poor.”

p. 303, Third Edition *International Economics; Theory and Policy*, Krugman and Obstfeld (Harper Collins).

We think the authors would approve our use of GDP per capita as a measure of whether a country is rich or poor. Life expectancy of the great mass of workers reflects not only merely their health, but also the degree to which the quality of life is fun and rewarding.

#### The graph

The correlation could reflect

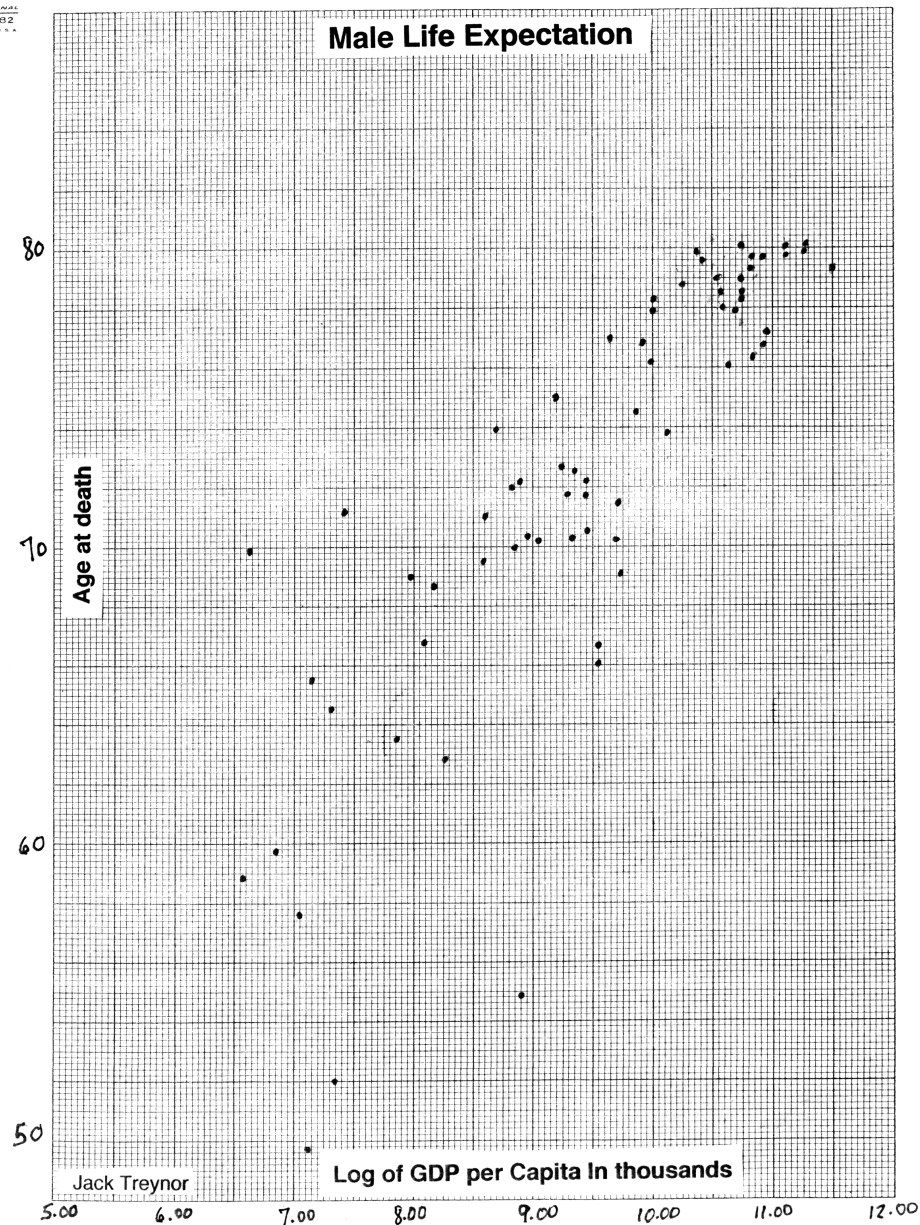
- (1) life expectancy affecting wealth
- (2) some third macro factor affecting both
- (3) wealth affecting life expectancy

#### Life expectancy affecting wealth

When workers die young, business has to incur the expense of training new workers.

Business has to spend more on medical care.

NATIONAL  
12-282  
© 1999-2012 J. R. R.



People don't live long enough to accumulate significant savings.

Unrest and violence interferes with productive work.

### Macro factors affecting both

Corrupt, oppressive government challenges both employers and employees.

Inept central banking causes persistent, repeated demand failure.

### Wealth affecting life expectancy

Life is more rewarding in the rich countries. This would be the case, for example, if, in industry, labor and capital are complements, with

each type of machine representing a certain number of jobs—and machines often so expensive that they require substantial investment—and the saving of households with a low marginal propensity to consume. When we tax these households we are taxing saving and job creation—not consumption.

The prejudices of the author favor the third explanation: will reducing a country's wealth reduce its life expectancy?

But he doesn't know which explanation is right. He would like to think the policy implications are important enough to warrant serious research.

### **Questions for male life expectancy graph**

Wouldn't the real wage, translated into a common currency, be a better measure for the worker than GDP per capita?

Isn't it easier to appreciate the correlation between GDP per capita and life expectancy with the log version of the graph?

Why is Russia's life expectancy so much worse than Poland's? than Pakistan's? than Malaysia's?

How important is a country's investment in improving its GDP per capita?

Can countries with comparable fertility rates emulate China's investment rate?