LIFE EXPECTANCY IN THE UNITED STATES AT BIRTH
(IN YEARS)

1789*	35.4
1850*	39.4
1900	49.7
1950	68.1
1980	73.7
2000	76.9

*MA ONLY

How do we explain the increase in life Expectancy?

   A. Movement along a fixed life expectancy curve due primarily to economic growth?
   B. Shift in the function due to technological change?

   Go with B.

Plots LEx and economic growth—in the West long lag in the upturn in LEx and then LEx grows faster.

Economic growth had mixed effects—more food, etc. but more crowding.

Technological change and LEx.?

   A. prevent transmission
   B. New vaccines—mostly starting in 1890s
   C. New drugs to cure—1930s

   See Table on discoveries.

Role of the Market?

   A. Not much (directly)
   B. Market failures
   C. Collective action

   Sources of Technological change
   Institutional Innovation

Table 5. *Discoveries in the control of major fatal infectious diseases since around 1800: vaccines and drugs.*

A. Vaccines			B. Drugs		
Date	Disease	Developer	Date	Drug	Developer
1798	Smallpox	Jenner	1908	Salvarsan	Ehrlich
1881	Anthrax	Pasteur	1935	Sulfanomides	Domagk
1885	Rabies	Pasteur	1941	Penicillin	Fleming, Florey, Chain
1892	Diphtheria	von Behring	1944	Streptomycin	Waksman
1896	Cholera	Kolle	1947 on	Broad spectrum antibiotics[a]	
1906	Pertussis	Bordet-Gengou			
1921	Tuberculosis	Calmette, Guerin			
1927	Tetanus	Ramon, Zoeller			
1930	Yellow fever	Theiler			
	Typhoid fever	Weigl			
1948	DTP	(Multiple)			
1950	Polio	Salk			
1954	Measles	Enders, Peebles			

Note: [a]Lappé (1982, pp. 22–4) provides a lengthy tabulation of major antibiotics in use during 1975–81 in the United States. See also Brumfitt and Hamilton-Miller (1988).
Sources: Panel A: Parish (1965), Plotkin and Mortimer (1988).
Panel B: Baldry (1976).
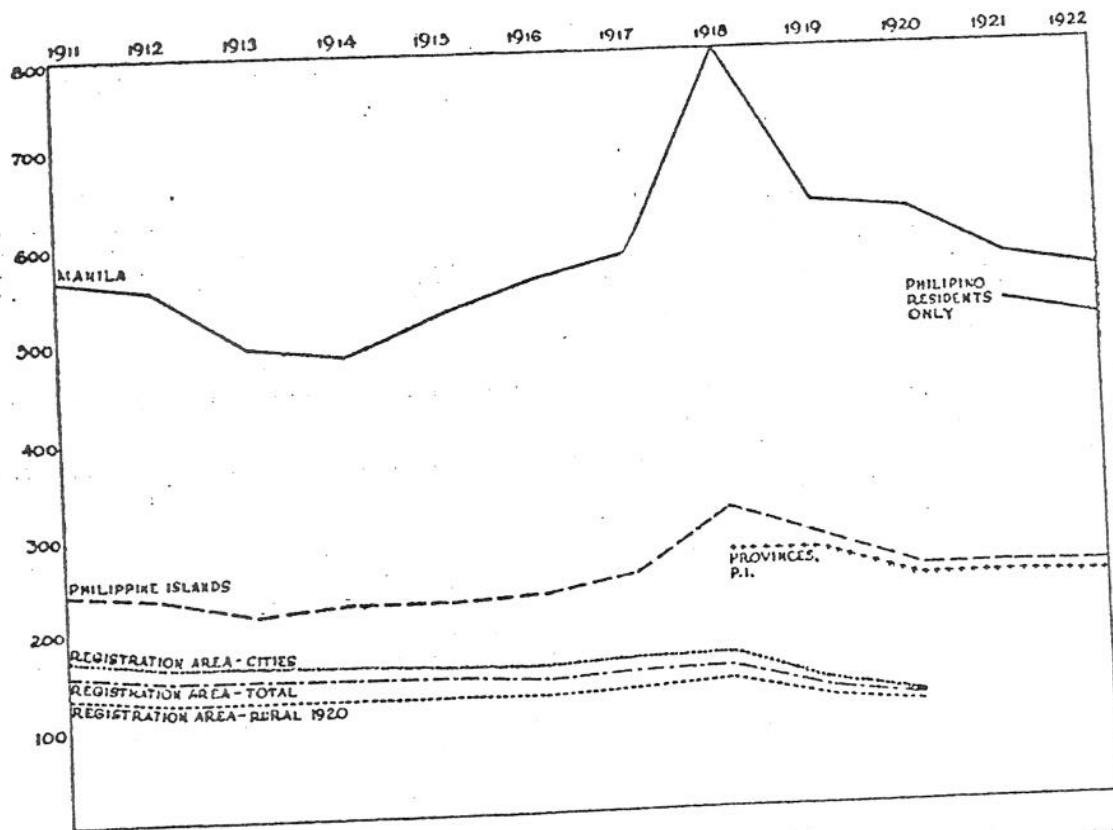
CHART 1. COMPARISON OF DEATH RATES PER 100,000 FOR TUBERCULOSIS (ALL) BY YEARS, SHOWING MANILA, PHILIPPINE ISLANDS AND UNITED STATES TOTAL REGISTRATION AREA