

Economic progress: virtues of growth

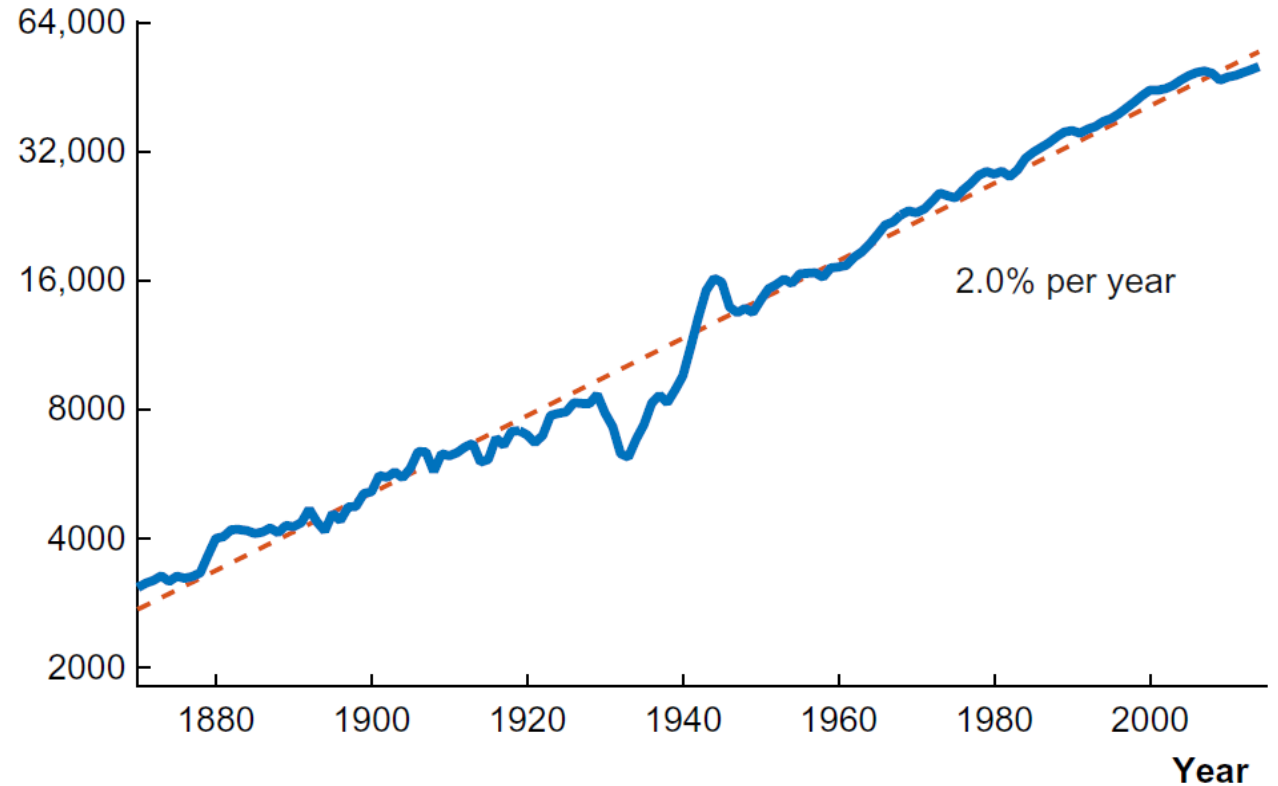
- Sure, there is a downside
 - Example pollution
 - As in Pittsburgh 1908
 - Also disruption
 - Political, social
- But overall people are much better off
 - Evidence? Migration
- Let's see why



Consider economic growth in the USA

- Real GDP/capita \uparrow 2%/year since 1870
 - From Jones, *Handbook Macro*
- But what does this mean in everyday life?
- Technology changes; average person far better off

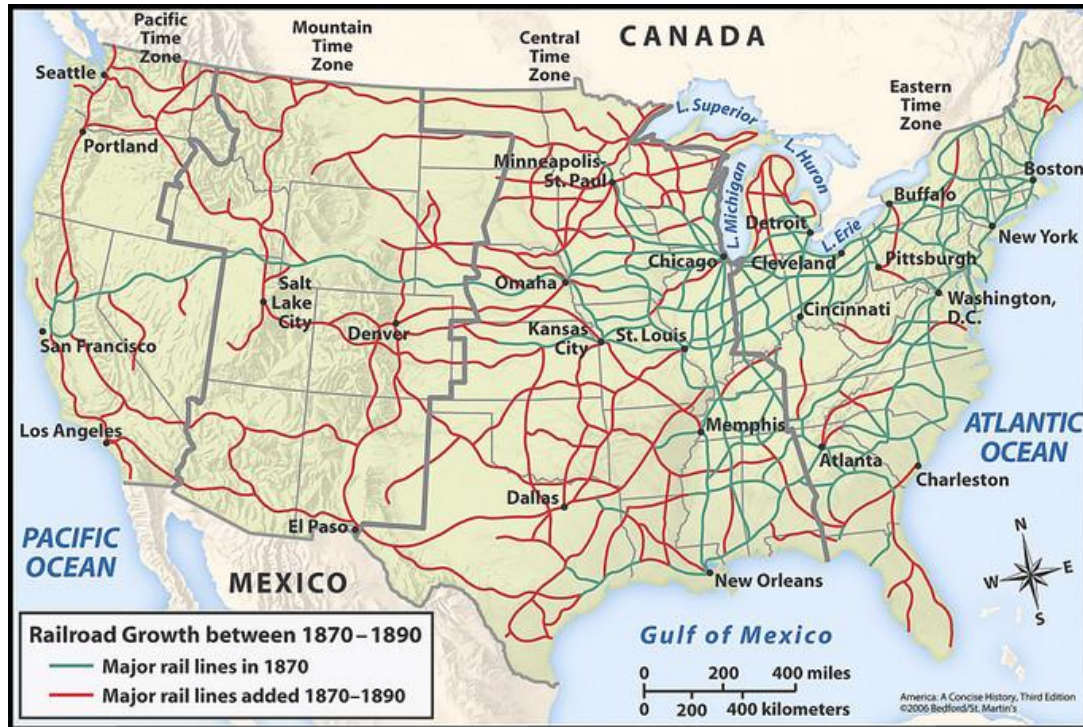
Log scale, chained 2009 dollars



How better off? Consider transportation 1870

Yes there were now railroads
but not everywhere

Otherwise you went overland by
horseback, wagon, or walking



Or washing clothes: time consuming in 1870

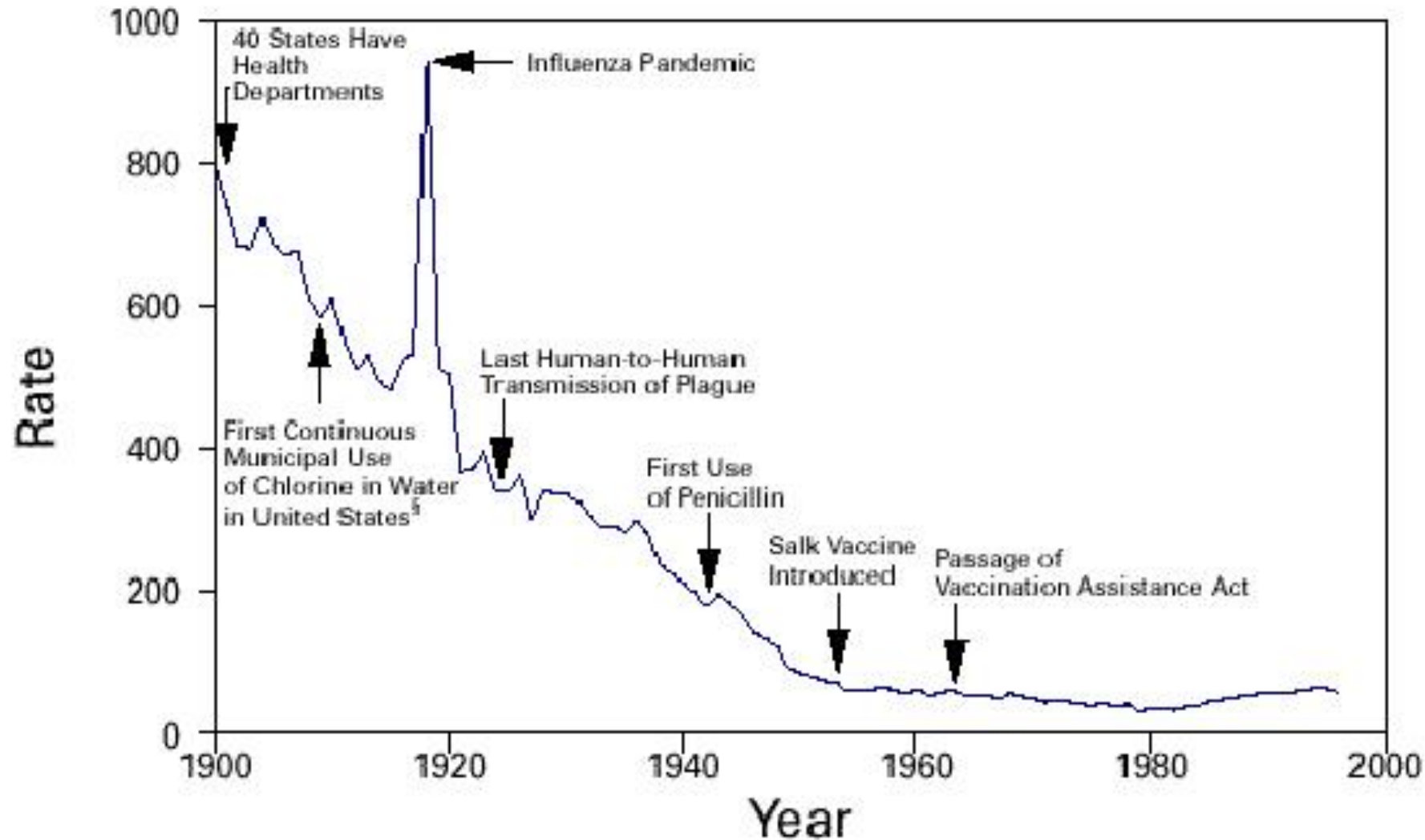
In 1868 NY Times calls washboard (patent in 1833) “a great American invention)



Use tub or eventually something even better—the deluxe laundry sink



Or how about public health? US death rate from infectious diseases (per 100K people)



Or computation

From slide rule (1620s), tables, & adding machine, to computer

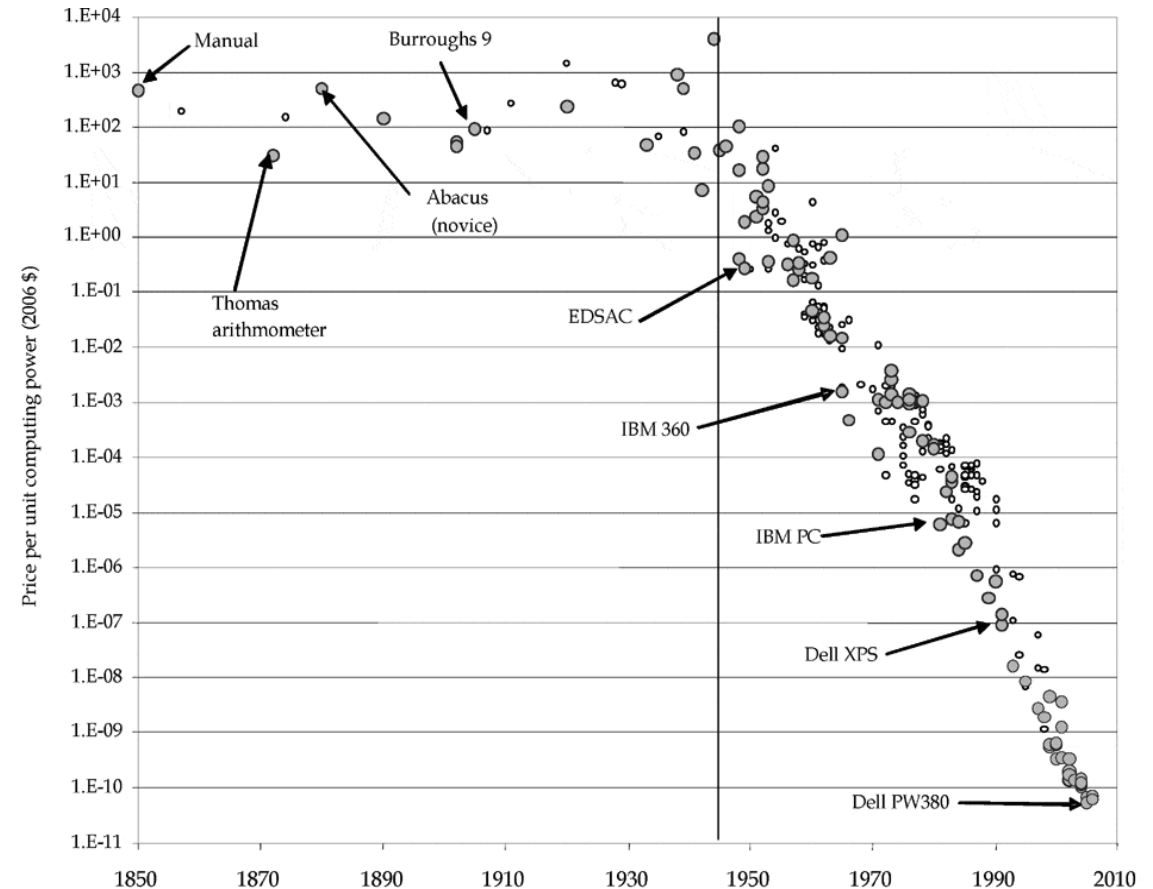
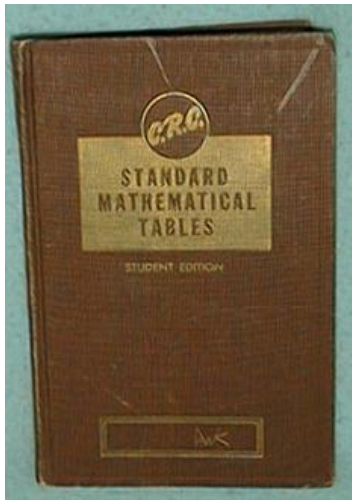
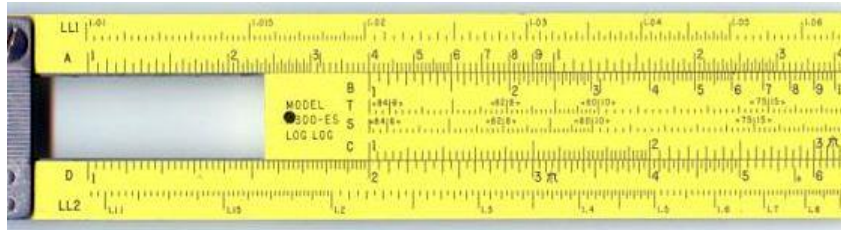


FIGURE 3
THE PROGRESS OF COMPUTING MEASURED IN COST PER COMPUTATION PER SECOND DEFLATED BY THE PRICE INDEX FOR GDP IN 2006 PRICES

Notes: The larger circles are estimates that have been judged relatively reliable, while the small circles are estimates in the literature that have not been independently verified. The vertical line is placed at 1944, which is the estimated breakpoint in productivity growth.

Source: As described in the text.

Source: Nordhaus, JEH (2007). Y-axis price/ 10^6 computations/second.

Or taking notes in class: from handwriting to mimeos to photocopies to download



Lecture 1920 for MD's and med students Central Hospital IN



Mimeo



Xerox 914 (1959)

Big question: how to explain economic growth?

- Why no sustained economic growth until > 1700 ?
- Why thereafter only in some places?
 - Western Europe, USA, Canada, Japan
 - At least until recently
- Why have other economies lagged behind?
- And what explains rate of growth even in advanced economies?
 - Rapid 1870-1970 in US and Europe, slower since 1970
- And precisely who benefits from growth?