Economic Growth: Crucial but Uncertain

David R. Henderson Emeritus Professor of Economics, Naval Postgraduate School And Research Fellow, Hoover Institution, Stanford University

How to Reach Me

davidrhenderson1950@gmail.com

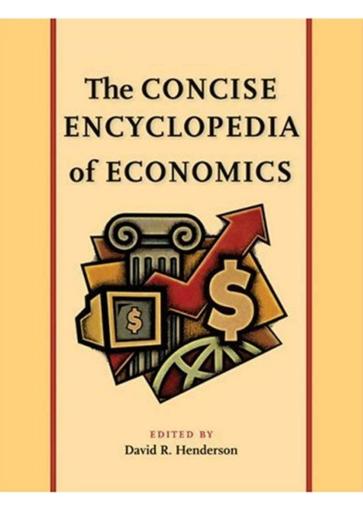
Notice the "r" between "David" and "Henderson"

1982 to 1984: Senior Economist for Health Policy 1983 to 1984: Senior Economist for Energy Policy

President Reagan's Council of Economic Advisers



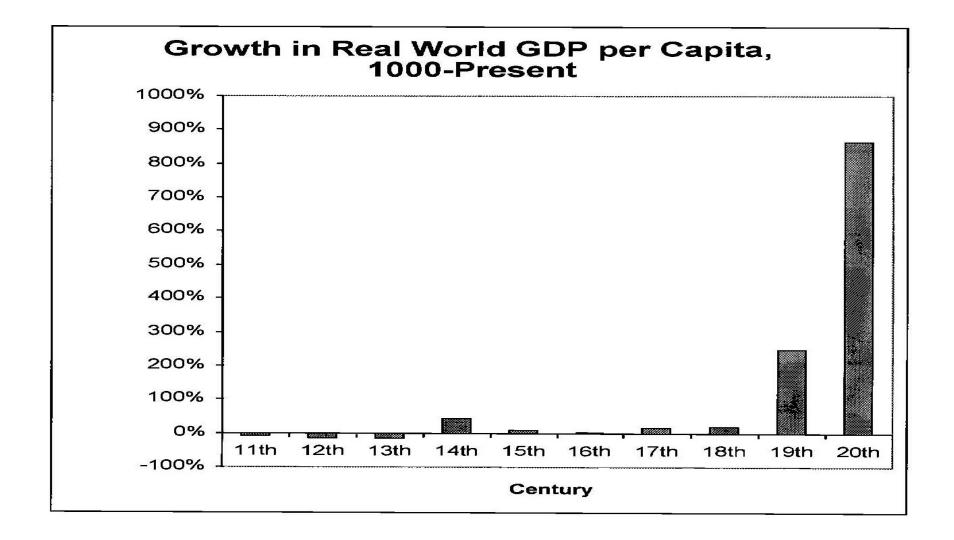
What I am most likely to be remembered for



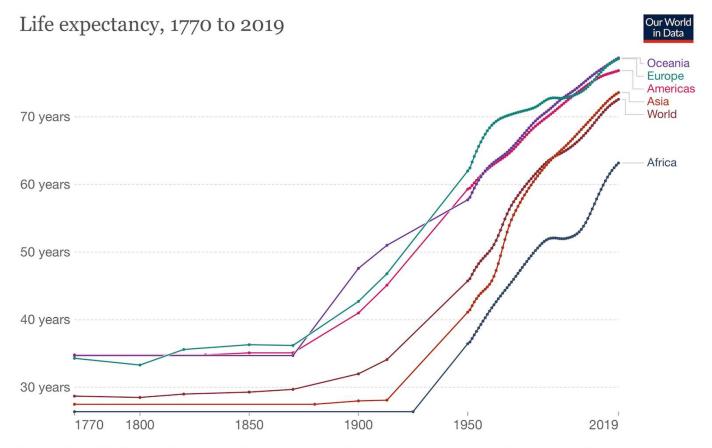
South Royalton, Vermont, June 1975



The Amazing 20th Century



Life Expectancy 1770 to 2019



Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019) OurWorldInData.org/life-expectancy • CC BN Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

Cornucopia

Multiplication of Productivity 1895-2000

Time Needed for an Average Worker to Earn the Purchase Price of Various Commodities

Commodity	Time-to-Earn in 1895 (Hours)	Time-to-Earn in 2000 (Hours)	Productivity Multiple
Horatio Alger (6 vols.)	21	0.6	35.0
One-speed bicycle	260	7.2	36.1
Cushioned office chair	24	2.0	12.0
100-piece dinner set	44	3.6	12.2
Hair brush	16	2.0	8.0
Cane rocking chair	8	1.6	5.0
Solid gold locket	28	6.0	4.7
Encyclopedia Britannica	140	33.8	4.1
Steinway piano	2400	1107.6	2.2
Sterling silver teaspoon	26	34.0	0.8

lource: 1895 Montgomery Ward Catalogue⁷

Topics Today

The power of compound interest The worldwide decline in poverty What are the main causes of growth?

2% growth versus 3% growth

Einstein

The power of compounding. (1 + 0.02)^20 = 1.49 So GDP is 49% higher

(1 + 0.03)²⁰ = 1.81 So GDP is 81% higher

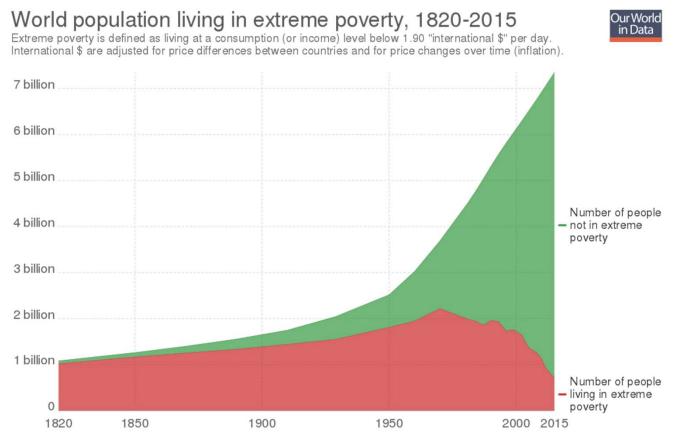
(1 + 0.04)²⁰ = 2.19 So GDP is 119% higher.

Effects of Worldwide Economic Growth

UN goal in 1990 for extreme poverty by 2015: Cut by 50% the percent of people in extreme poverty.

<u>https://www.un.org/millenniumgoals/poverty.s</u> <u>html</u>

What was achieved?

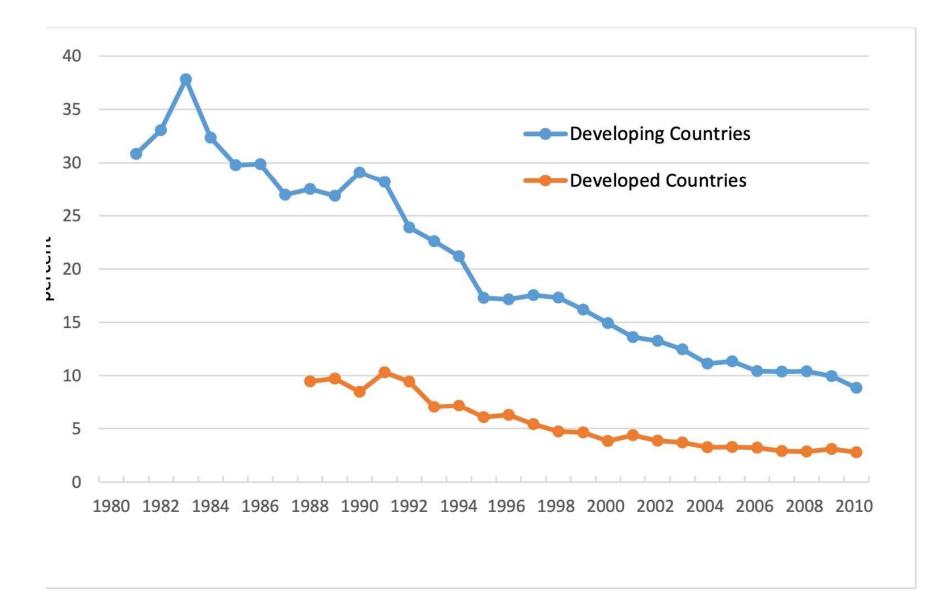


Source: World Poverty in absolute numbers - OWID based on World Bank (2016) and Bourguignon and Morrisson (2002) •

How Did This Happen?

Relatively free trade with other countries Why free trade matters.

2 Average unweighted tariff rate in developed and developing countries, 1980-2010

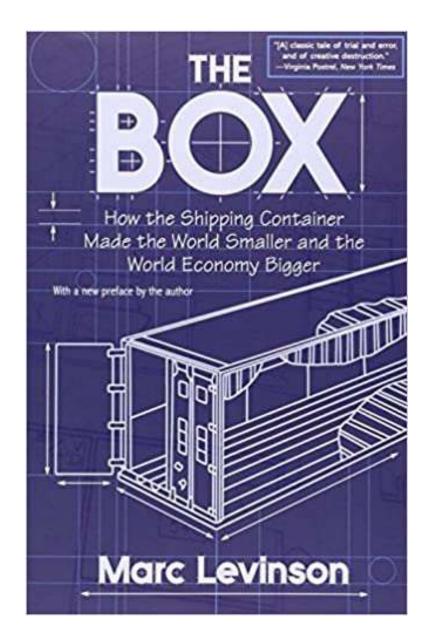


2: World Bank Data on Trade and Import Barriers,

Evidence of Free Trade's Effects

Douglas Irwin, Dartmouth

Effect on annual growth of GDP: **1 to 2.7** percentage point increase



Adam Smith



Little else is required to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice.

--Adam Smith, 1755

South Korea vs. North Korea

1953 GDP in 2004 \$ North Korea: \$11 billion South Korea: \$13 billion

2004 GDP in 2004 \$ North Korea: **\$40 billion** South Korea: **\$925 billion**



North and South Korea at night

East Germany vs. West Germany

1950 GDP in 1990 \$ East Germany: \$51.4 billion West Germany: \$214 billion

1990 GDP in 1990 \$ East Germany: \$86 billion West Germany: \$1.24 trillion

Innovation

Washing machine ("Sad Irons")

Zoom (my talk at Club for Growth) Eric Yuan, immigrant from China

"The Prosperity Pool" Donald Boudreaux

Wisdom from Tyler Cowen?

"most cars in operation today are not much better than cars from 1969, and they perform more or less the same functions, albeit more safely."

--Cowen, October 2018

1969 Chevrolet Impala



2019 Civic



Who Gets Gains from Innovation?

Only a minuscule fraction of the social returns from technological advances over the 1948-2001 period was captured by producers, indicating that most of the benefits of technological change are passed on to consumers rather than captured by producers. --William D. Nordhaus, "Schumpeterian Profits in the American Economy: Theory and Measurement," National Bureau of Economic Research, April 2004.

(co-winner of Nobel Prize in Economics, 2018)

How Miniscule?

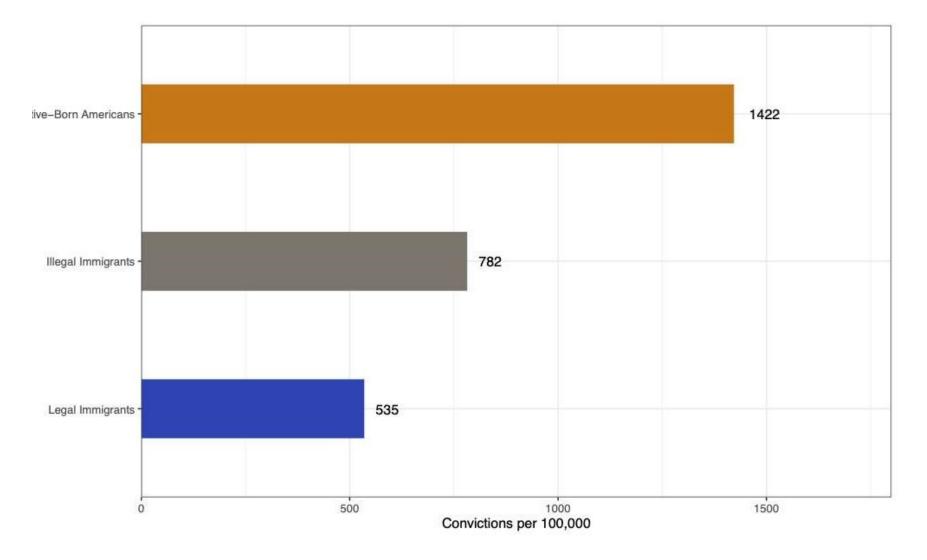
2.2%

Are You Richer than Rockefeller?

Immigration

Trillion Dollar Bills on the Sidewalk (Michael Clemens)





Low Taxes and Low Government Spending

Coda