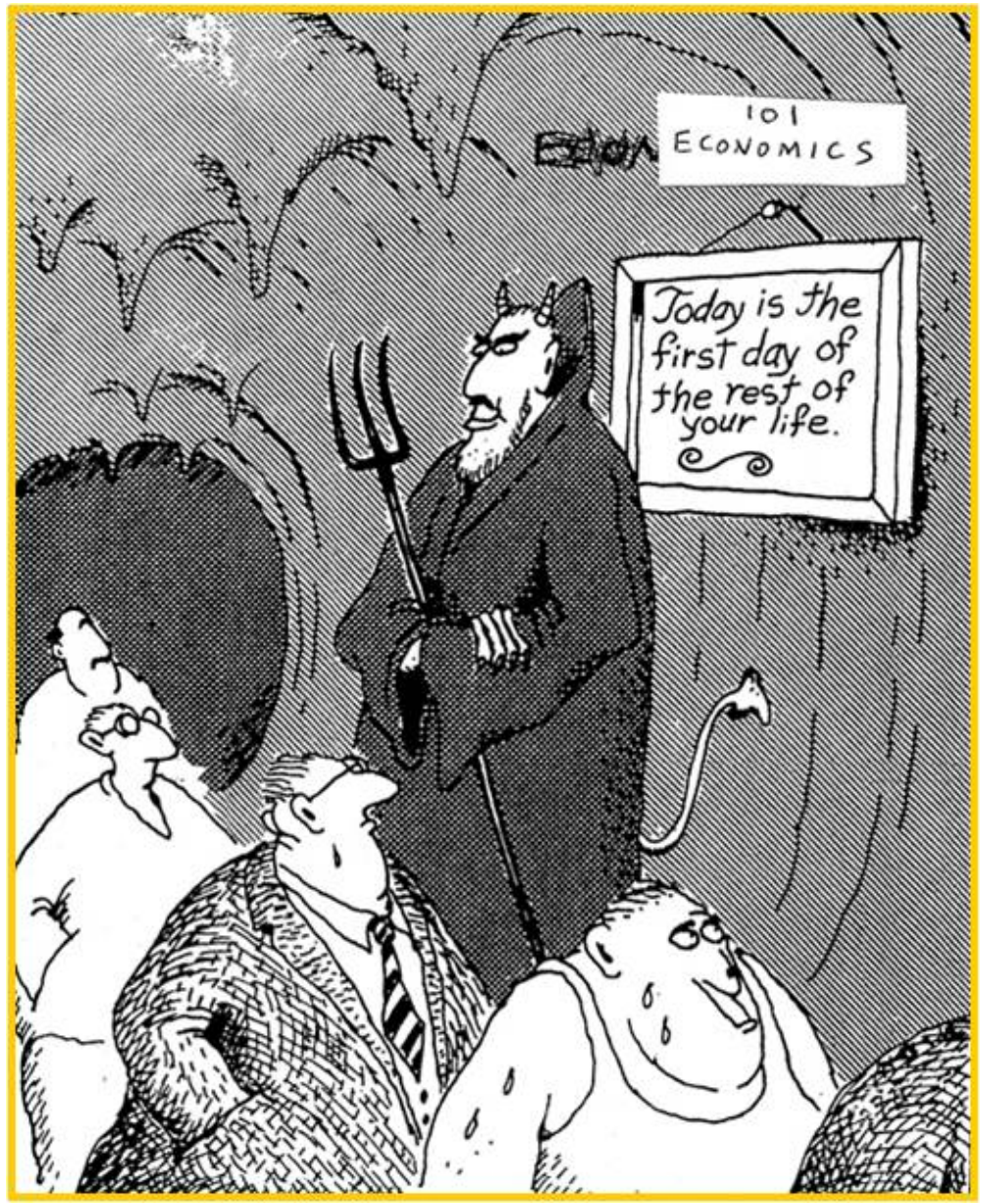

101
ECONOMICS
Today is the first day of the rest of your life.

Ausgewhlte Anwendungen der Volkswirtschaftslehre

HS 2019

A Field Trip to Economo-Land

Harris Dellas

U of Bern

Unknown to most historians, William Tell had an older and less fortunate son named Warren.

What do economists do?

Study human behavior in the economic sphere of affairs

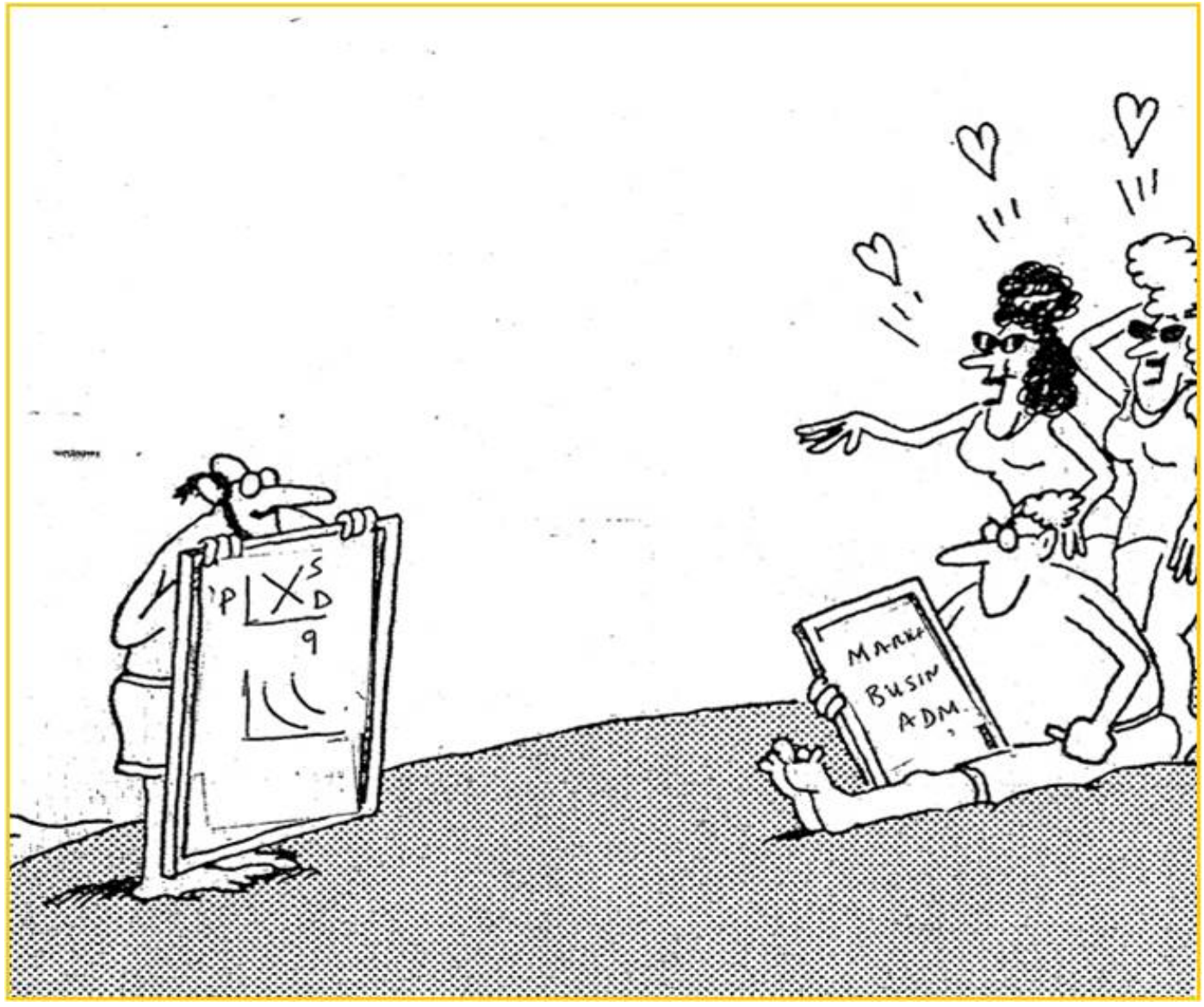
- Private decisions
  - Go to college or not?
  - Work full or part time?
  - Buy or rent a house?
  - Become a drug dealer?
  - Cheat on an exam?
  - If, when and whom to marry? How many children to have? When?
- Public decisions
  - Join the Euro
  - Raise taxes
  - Default on public debt

Diverse questions, but the same, simple economic principles apply (cost-benefit, opportunity cost)

"Dear Henry: Where were you? We waited and waited but finally decided that . . ."

Why do we care about economic questions?

- Useful
  - Practical usefulness: Helps to make better personal decisions
  - *Examples*
  - How to sell your house: auction or post a sale price
  - Flexible or fixed rate mortgage
  - How, when and how much to save for retirement
  - General usefulness: Helps to understand the world we live in
  - Judge politics and social issues better
- FUN - It is a lot of fun to know how things work!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How do they do it ?

By building small replicas of the real world (models), and using them as laboratories for experiments

Models that simplify the real world are necessary. The world is too vast and complicated to be understood without any abstraction!

Examples of models

Question: Why are tigers threatened with extinction while cows are not?
Model: A world that consists only of tigers, cows and men

Another example: Road maps

What are the key elements of economic models?

- The economic agents: **Who** is present in the model (firms, workers, government, etc.)
- **What** they do: Pursue objectives (money, free time, status, etc.) while facing constraints (financial, ethical, etc.)
- **How** they do it (mode of behavior)?
  Purposeful, rational pursuit of objectives subject to constraints.
- Alternative assumptions are hard to defend!

"C'mon, Sylvia . . . where's your spirit of adventure?"

Economics is not easy! Einstein's ignorance

Technological innovation as the source of unemployment

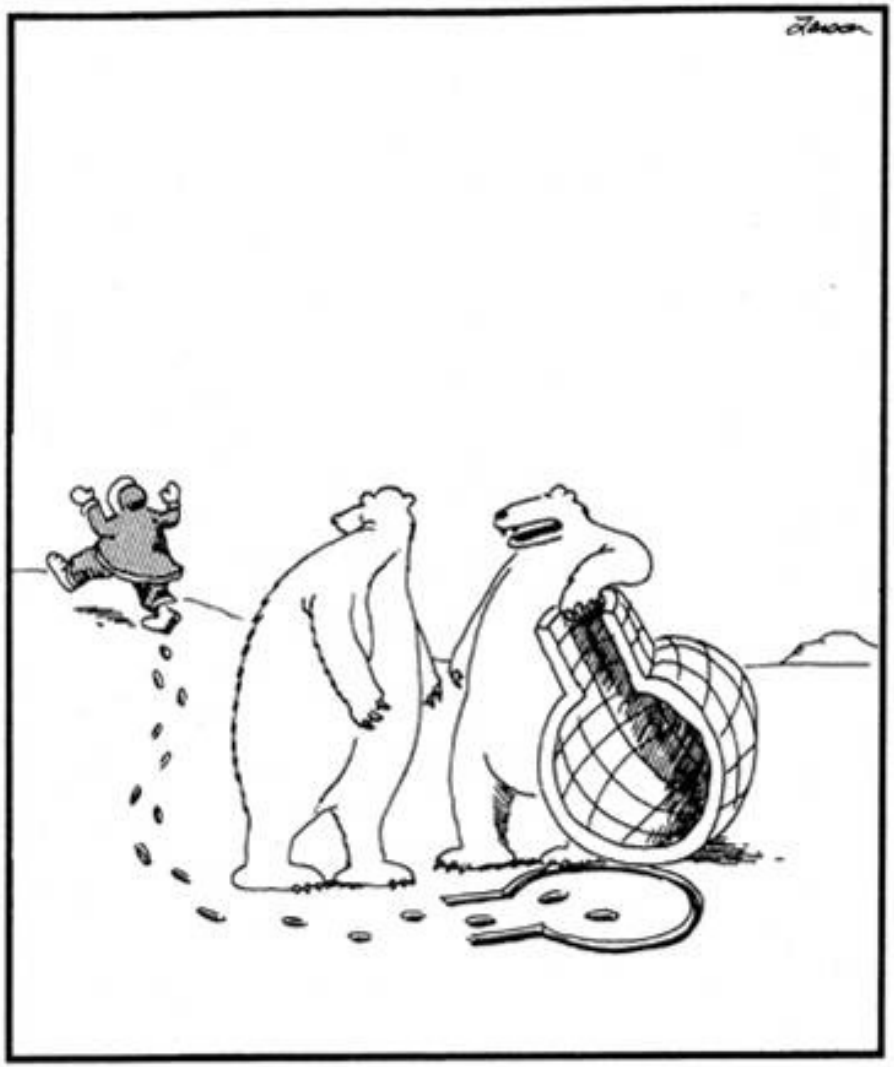
... The fundamental trouble seems to me to be the almost unlimited freedom of the labor market combined with extraordinary progress in the methods of production. To satisfy the needs of the world today, nothing like all the available labor is wanted. The result is unemployment... [Einstein, 1934]

Productivity (and average income) is many times what it was two hundred years ago (or, since the 30s), but employment has increased manifold! (See Hazlit)

Why: The higher incomes/profits from technological progress generate demand for more/new goods/services, boosting employment in other sectors
The types of jobs today are completely unimaginable as of 100 years ago. Relatedly, things that were available only to kings in the past (holiday on the beach in another country) are mass consumption items now

An example: Silicon valley. Restaurants, entertainment, personal services,..in the area all being boosted by the higher incomes of the silicon entrepreneurs, engineers,..

Higher productivity translates into higher income into higher spending into new products ...



"I lift, you grab . . . was that concept just a little too complex, ~~Carl~~?"

Albert

Economics is not easy!

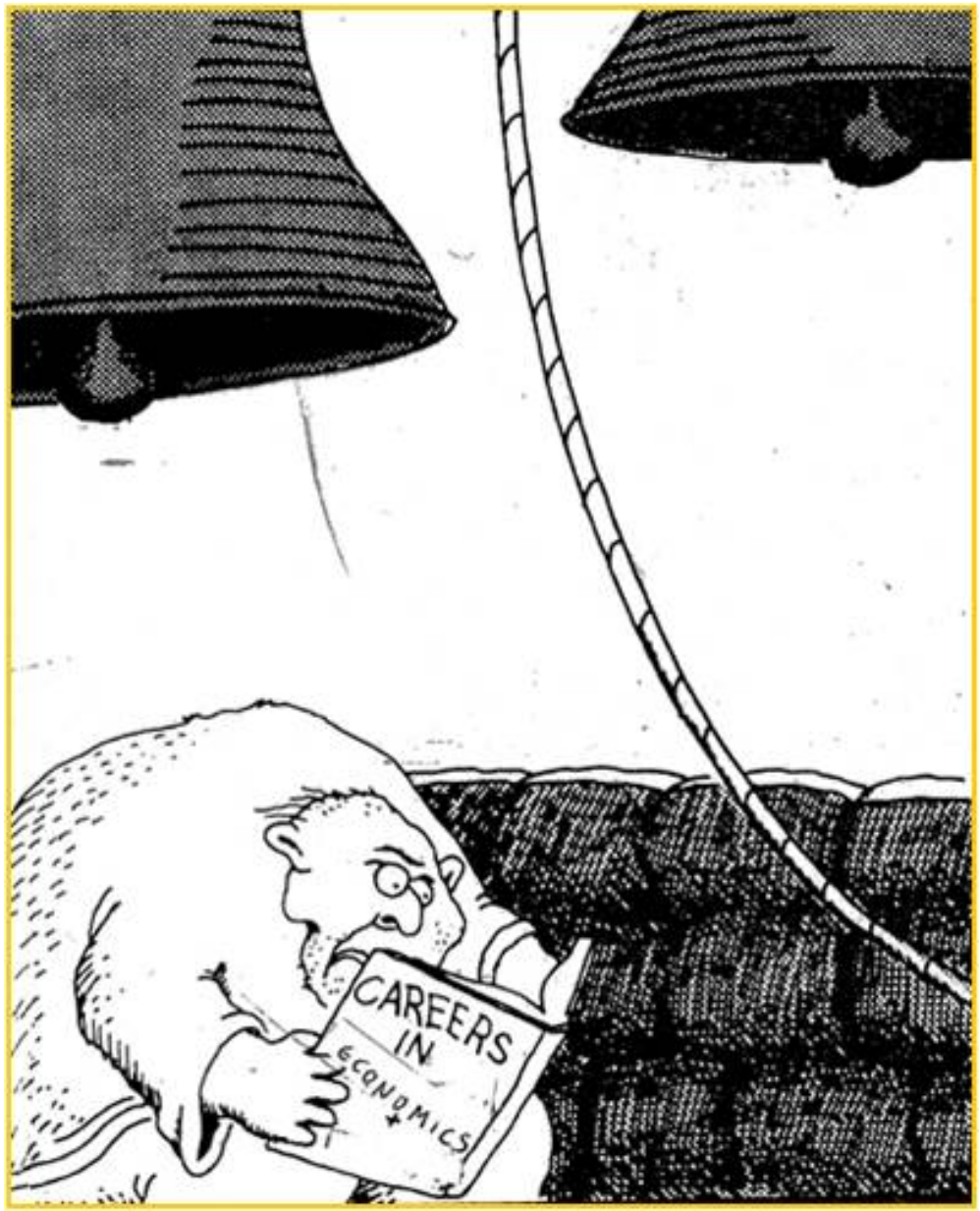
"..The obvious cure for the tragic shortcomings of human intuition in a high tech world is education. And this offers priorities for educational policy: to provide students with the cognitive tools that are most important for grasping the modern world and that are most unlike the cognitive tools that they are born with. The perilous fallacies we have seen in this chapter, for example, would give high priority to **economics**, evolutionary biology, and probability and statistics in any high school and college curriculum. Unfortunately, most curricula have barely changed since medieval times.." ["The Blank Slate", by Steven Pinker, Professor of Psychology, Harvard University]

We have been around for millions of years but economic activities are organized around institutions that are very recent.

Walking is an extremely complicated physical process but nobody needs to be taught how to do it. Millions of years of evolution have made it possible.

Markets involve simpler processes but few manage to understand and appreciate their role and significance. Did primitive people use credit cards? Did they have stock markets? Did they borrow from banks? Did they do the work now and get paid later?

Very hard for non-economist to understand how things work and their implications. To have a concept of fairness in exchange, ...


CAREERS
IN
ECONOMICS

An example of a simple but quite useful macroeconomic model: A Robinson Crusoe Economy

The economic environment: Who (Crusoe), doing what (max. utility), how (through rational actions and subject to constraints e.g. his fishing skills and equipment)

- Objectives $U(C_t, H_t)$
- Opportunities (Constraints)

$$Y_t = F(K_t, H_t, A_t)$$

$$Y_t = C_t + I_t$$

$$K_{t+1} = (1 - d)K_t + I_t$$

U: Utility, C: Consumption, H: Employment (hours worked), Y: GDP, K: Capital stock, A: Technology, I: Investment, d: Capital Depreciation, t: Time

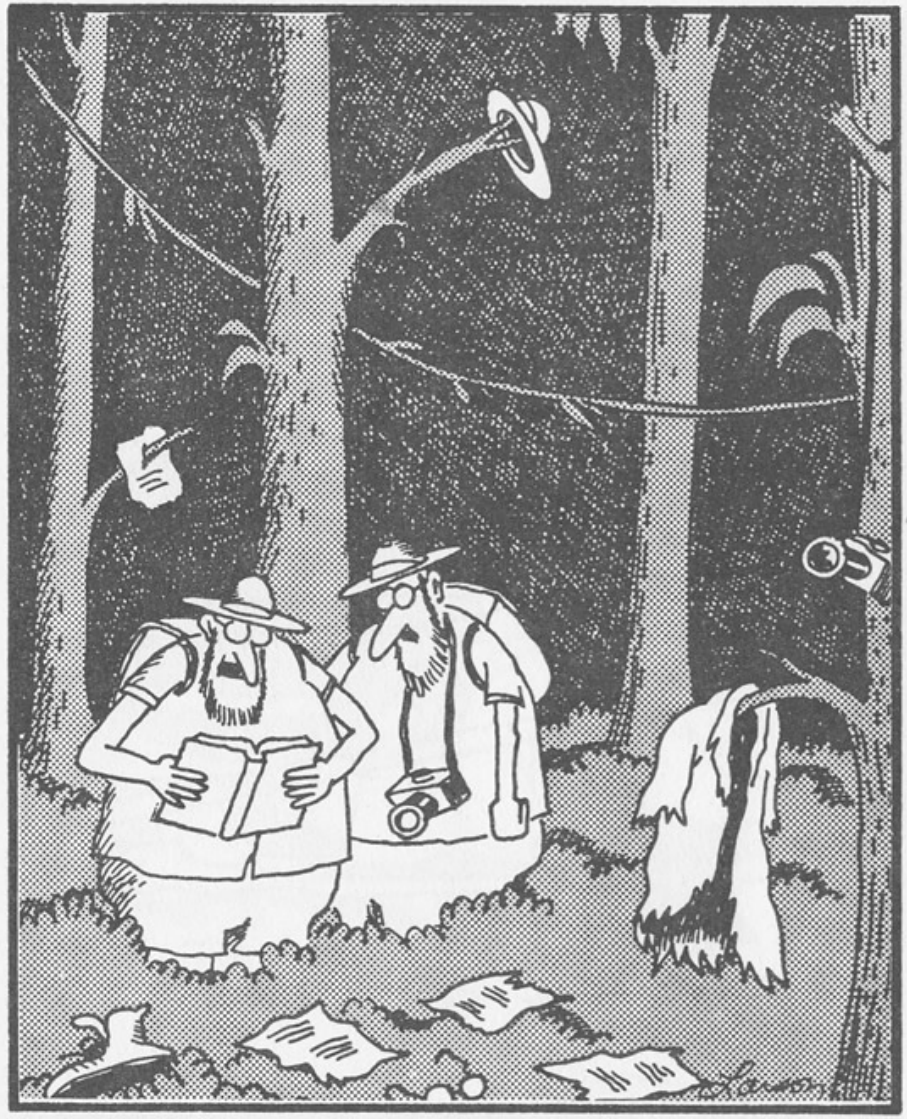
Robinson Crusoe Economy (continued)

Behavior (Goal): Get the highest U(C,H) allowed by production opportunities F(H,K,A)

Solving this problem determines GDP, employment, investment and consumption in this simple economy. Their properties are remarkably similar to those of their empirical counterparts in market economies.

- The effects of bad weather
- An exceptional opportunity (a big flock of birds)
- Breaking an arm
- Feeling pessimistic about fruit available
- Training a monkey: Time/resources trade offs

Key insight: Business cycles arise from exogenous shocks and people's response to them



"Here's the last entry in Carlson's journal: 'Having won their confidence, tomorrow I shall test the humor of these giant but gentle primates with a simple joy-buzzer handshake.'"

Understanding economic growth and relative incomes

For a long time, little growth

TABLE 5.1

Economic Growth through Deep Time

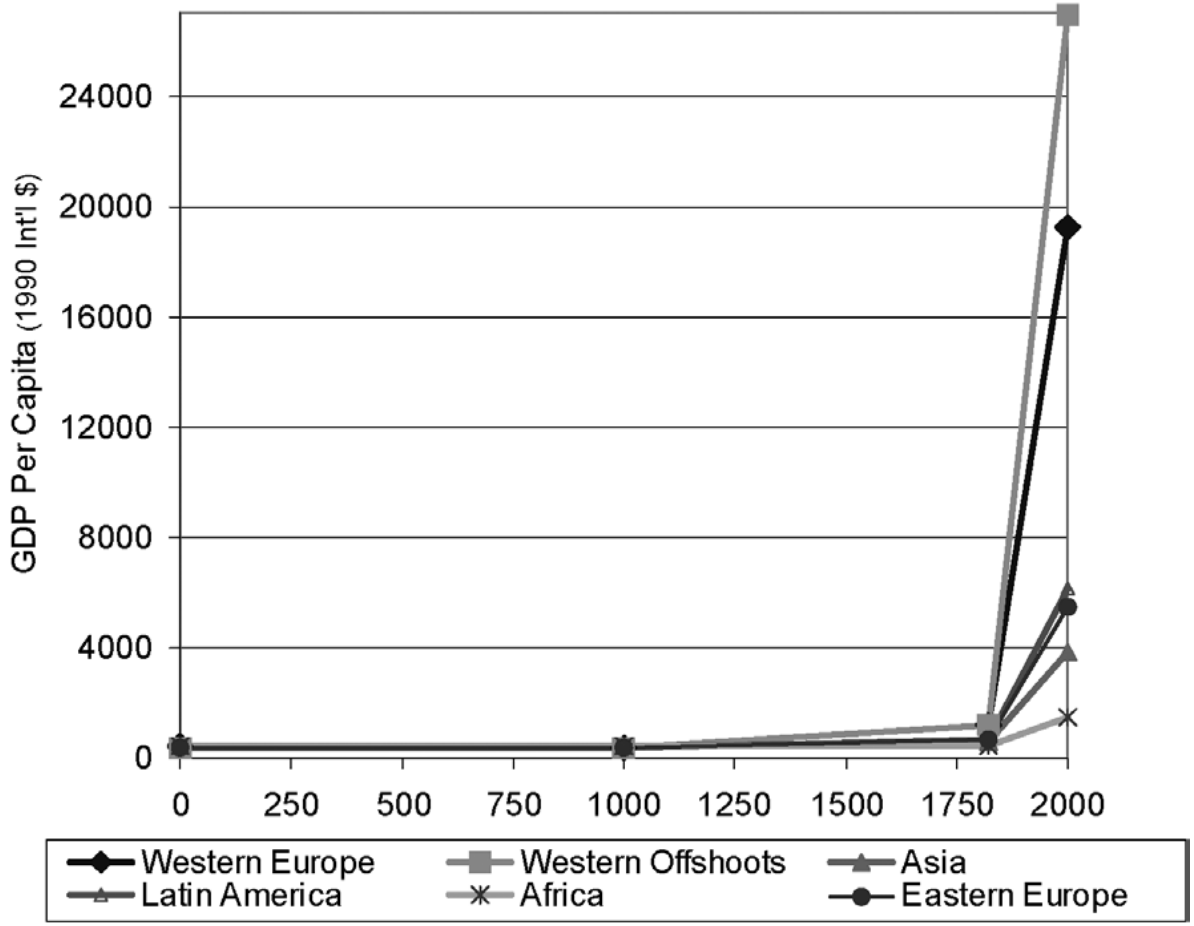
Year	Population*	GDP per Capita†
–5000	5	$ 130
–1000	50	160
1	170	135
1000	265	165
1500	425	175
1800	900	250
1900	1625	850
1950	2515	2030
1975	4080	4640
2000	6120	8175

* Millions.

† In year-2000 international dollars.

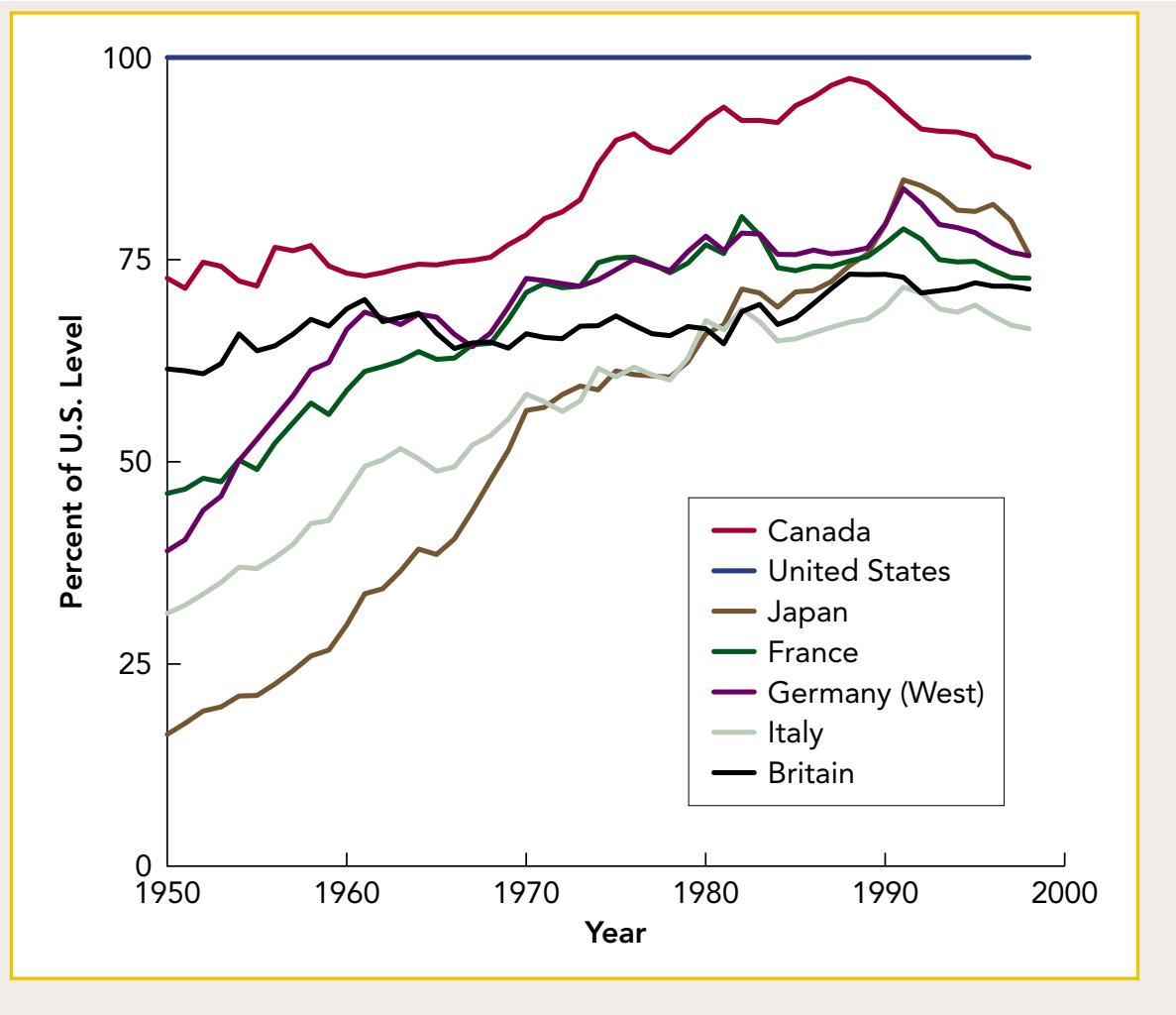
Source: Joel Cohen, *How Many People Can the Earth Support?* (New York: Norton, 1995).

And when systematic growth arrived, it was uneven, both across countries and over time



e evolution of regional income per capita over the years 1–2000. Source: Maddison (2003)

There has been some convergence within the developed countries but differences remain large



Relative country positions in the world have not changed much

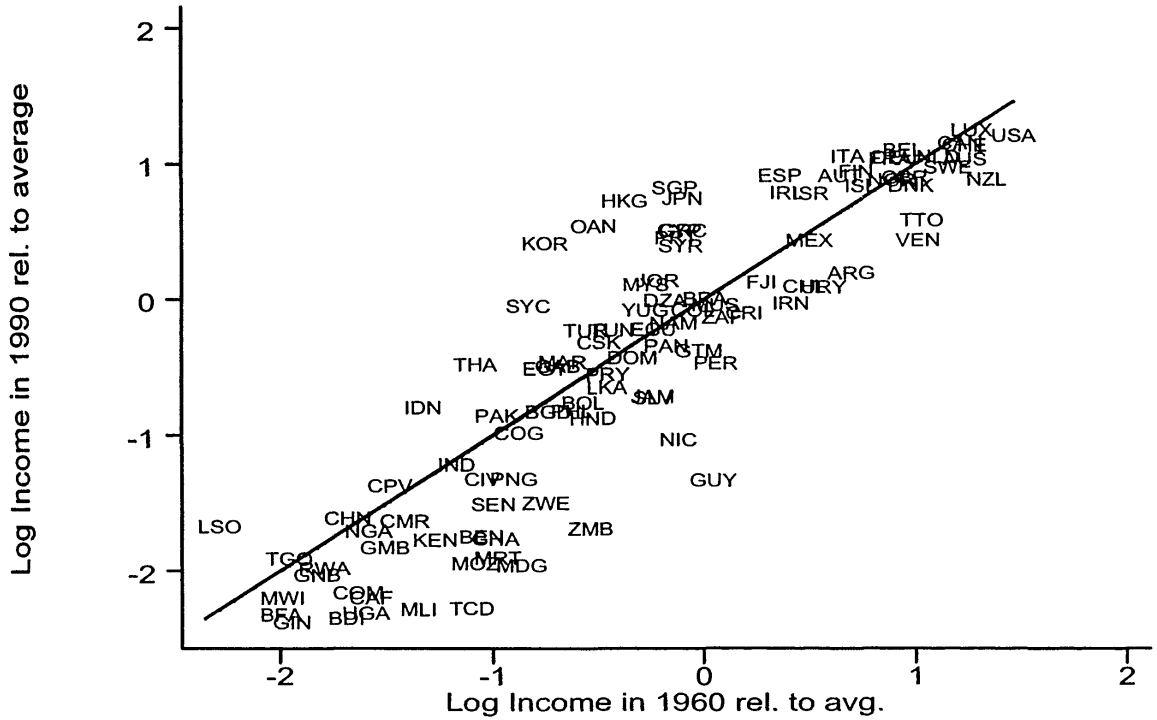
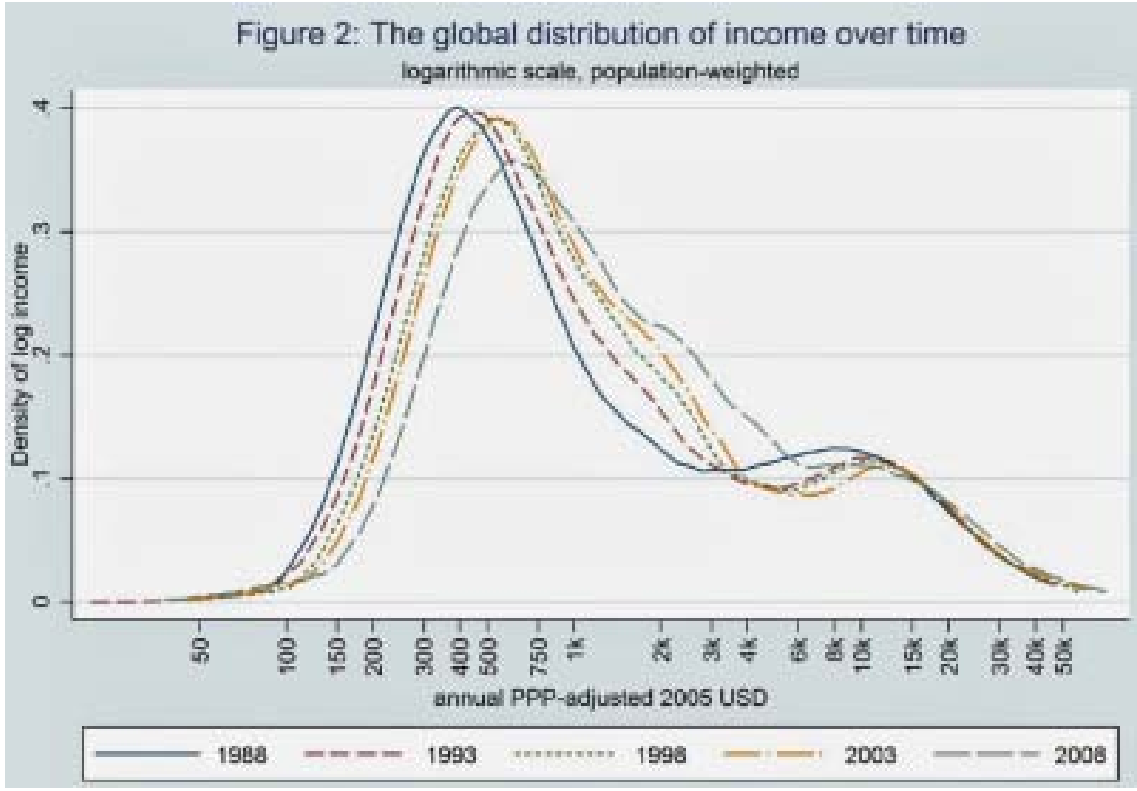


FIGURE I

Log of Income per Worker in 1990 and 1960 Relative to World Average from the Summers and Heston [1991] Data Set

The thick line is the 45 degree line.

The world income distribution remains quite unequal



Why? Sometimes it is immediate to understand poor growth, e.g. communism

TABLE 5.4

The Iron Curtain: GDP-per-Capita Levels of Matched Pairs of Countries

East-Bloc Country	GDP per Capita	Matched West-Bloc Country	GDP per Capita	Relative Gap (%)
North Korea	$ 700	South Korea	$13,590	94
China	3,130	Taiwan	14,170	78
Vietnam	1,630	Philippines	3,520	54
Cambodia	1,290	Thailand	6,690	81
FSR Georgia	1,960	Turkey	6,350	69
Russia	4,370	Finland	20,150	78
Bulgaria	4,010	Greece	12,769	69
Slovenia	11,800	Italy	20,290	42
Hungary	7,200	Austria	22,070	67
Czech Republic	10,510	Germany	21,260	51
Poland	6,520	Sweden	19,790	67
Cuba	3,100	Mexico	8,370	63

Source: Author's calculations from Alan Heston's and Robert Summer's Penn World Table, www.nber.org

A framework for studying income (= GDP) and its growth rate

- Production function $Y = F(A, K, L \cdot H)$
- or, in per capita terms: $y = AF(K/L, H/L, ..)$
- $'A'$ contains not just types of computers and info systems (tech), but rule of law (property rights), degree of competition, country openness and trade opportunities, taxes and regulations, etc..
- An economy becomes rich if it uses good technology, has a lot of human capital and lots of capital per worker. It will grow fast if all these variables grow fast. They are all endogenous!

Q. When and how did the world start becoming rich?

A. In the late 1700 with the industrial revolution (use of machines, manufacturing, steam power, machine tools)

Q. Why did it happen in England?

A. A plausible theory: Institutions favorable to innovation (A). Political competition (removal of monopoly of power) allowed innovators to overcome entrenched interests. Contrast England to France and China

This observation may hold the key to understanding world poverty (low A and H (K $= f(A, H..)$). . Governments in cahoots with entrenched interests preventing the adoption of best technologies-best business practices. And not only in Africa !!

A -not so funny- example: Automatic check outs in Washington supermarkets.

Q. Are all sources of output growth (labor, capital, technology) equally good?

No

A is by far the best

The Soviet Union, Switzerland, Singapore

Country	Code	Departure below U.S. log Y/L	Contribution from: log K/L	log H/L	log A
U.S.A.	USA	0.000	0.000	0.000	0.000
Luxembourg	LUX	-0.014	0.107	-0.103	-0.018
Canada	CAN	-0.061	0.001	-0.049	-0.013
Switzerland	CHE	-0.146	0.098	-0.108	-0.136
Australia	AUS	-0.171	0.003	-0.067	-0.108
Belgium	BEL	-0.179	-0.028	-0.099	-0.053
Italy	ITA	-0.182	-0.011	-0.260	0.089
Germany, West	DEU	-0.201	0.031	-0.127	-0.105
France	FRA	-0.201	0.013	-0.244	0.029
Netherlands	NLD	-0.216	-0.015	-0.124	-0.077
Sweden	SWE	-0.240	-0.059	-0.089	-0.093
Norway	NOR	-0.276	0.036	-0.063	-0.249
Finland	FIN	-0.309	0.008	-0.094	-0.223
U.K.	GBR	-0.318	-0.168	-0.112	-0.039
New Zealand	NZL	-0.333	-0.051	0.000	-0.282
Iceland	ISL	-0.338	-0.076	-0.156	-0.106
Puerto Rico	PRI	-0.341	-0.458	-0.392	0.509
Austria	AUT	-0.344	-0.064	-0.237	-0.043
Denmark	DNK	-0.371	-0.062	-0.058	-0.251
Spain	ESP	-0.383	-0.072	-0.294	-0.017
Israel	ISR	-0.417	-0.159	-0.084	-0.174
Hong Kong	HKG	-0.498	-0.435	-0.150	0.086
Singapore	SGP	-0.501	-0.165	-0.363	0.027
Japan	JPN	-0.533	-0.107	-0.130	-0.296
Ireland	IRL	-0.550	-0.141	-0.148	-0.261
Saudi Arabia	SAU	-0.640	-0.376	-0.331	0.068
Trinidad/Tobago	TTO	-0.697	-0.284	-0.231	-0.182
Venezuela	VEN	-0.704	-0.259	-0.309	-0.136
Greece	GRC	-0.758	-0.229	-0.231	-0.298

So while economists do not have definitive, consensus answers to the question of high income and growth, they do have some ideas about what is -quantitatively– important

A well functioning market system is key that allocates resources in the best possible way (satisfies needs efficiently)

Applying economic reasoning to public policy

The fundamental principle

Most of economics can be summarized in four words: "People respond to incentives." The rest is commentary

(Steve Landsburg, The armchair Economist)

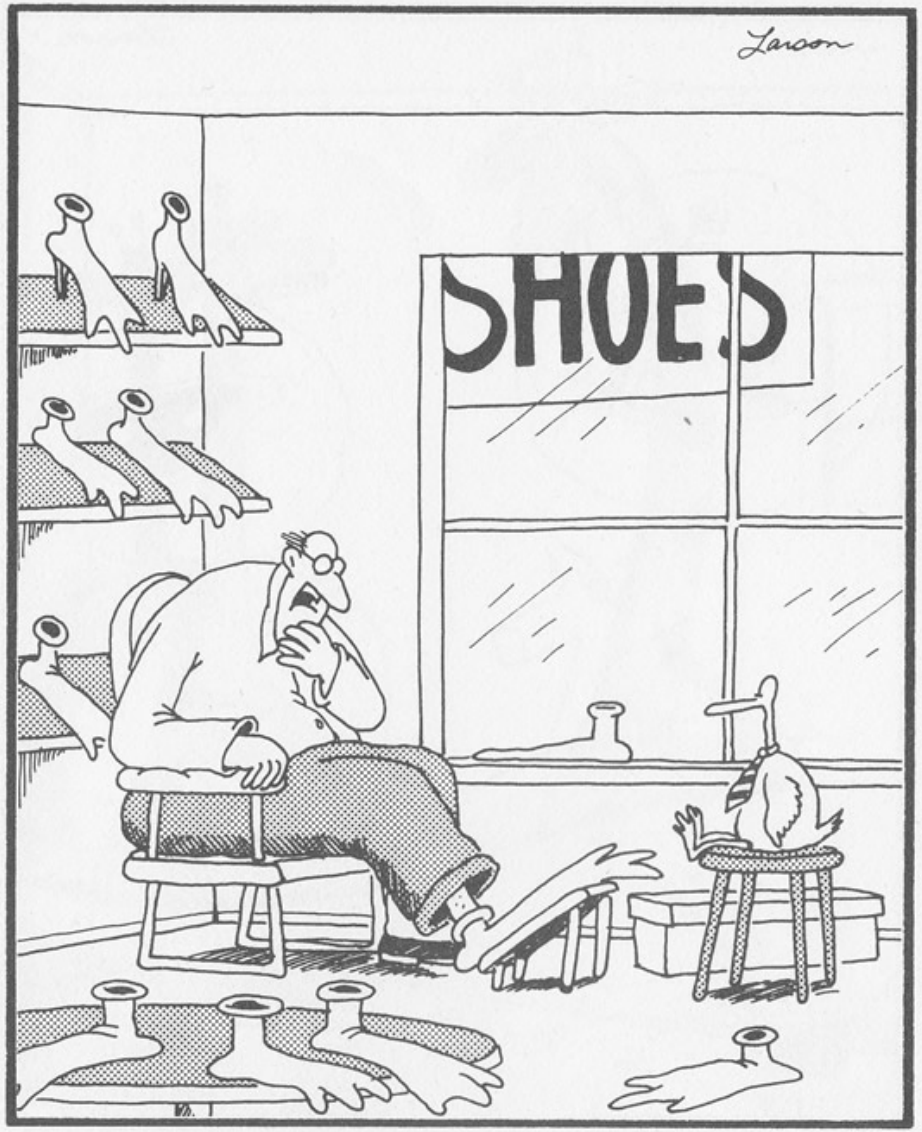
Polizei

Explosion der Krankmeldungen

Bei der Bundespolizei hat die Zahl der Kurzzeiterkrankungen dramatisch zugenommen. Allein in der Polizeidirektion Bad Bramstedt, die zuständig für die Bundesländer Schleswig-Holstein, Mecklenburg-Vorpommern sowie Nord- und Ostsee ist, stieg die Zahl der Krankmeldungen seit dem 1. August 2014 um 59 Prozent. Insider vermuten einen Zusammenhang mit einer Änderung der Dienstvorschriften. Das Bundesinnenministerium in Berlin hatte kurz zuvor angekündigt, dass Polizeivollzugsbeamte fortan nicht mehr ab dem ersten Tag ihrer Krankmeldung eine ärztliche Bescheinigung vorlegen müssten, sondern erst – wie in den meisten Unternehmen ab dem dritten Tag. aul

Some examples

- (a) Do mandatory seat belt laws save lives?
- Seat belts make accidents less costly because they reduce the likelihood of injury or death.
- People feel safer and drive faster when they have better protection
- Result of mandatory seat belt laws: More accidents, fewer driver deaths per accident. The net result was no change in the number of driver deaths and an increase in the number of pedestrian deaths.



"Well, I'm not sure. ... You don't carry any other styles?"

(b) Crime as an occupation

- They say: Crime does not pay, but the real question is: Does not pay whom and compared to what?
- Dangers (Gun ownership and burglary rates: 13% in the US when the home is occupied vs. 40% in the UK, Canada).
- Risk and terms of imprisonment: Legal reforms in the US in the 70s contributed to a doubling of murder rate between 1960 and 1975. The probability of becoming the victim of a violent crime tripled

Giorgio Armani at home

(c) Why are tigers threatened by extinction but cows are not?

Property rights!

(d) The implications of polygamy: Anti-polygamy laws as mens cartel device. Women might be better off if polygamy were allowed (with free choice)

(e) Bike helmets, smoking and insurance

Smoking as a revelation of risk attitudes

(f) School choice: How to make public schools better

Same planet, different worlds

(h) Rent control (or other restrictions as in Geneva)

- Supply of housing declines
- Housing shortages
- Quality of housing declines as maintenance declines
- Rents of non-rent controlled units decreases
- A more efficient situation would involve directly subsidizing low-income people and letting the market do its job

Sources:

F. Bastiat, 1998, The Law, NY: FEE
H. Hazlit, 1946, Economics in one lesson, SF: Laissez faire Books.
S. Landsburg, 1993, The armchair economist, Free Press.
Levitt and S. Dubner, 2005, Freakonomics.
T. Sowell, 2004, Applied Economics, NY: Basic Books

Required readings for the EXAM

1. Class slides
2. F. Bastiat, A Petition (4 pages)
3. D. Barry, Farm security (2 pages)
4. H. Hazlitt, "Economics in one lesson," ch.i (4 pages), ch. xix (6 pages)
5. Deirdre Nansen McCloskey, The myth of technological unemployment, Reason, July 11, 2017 (4 pages)

The class material is available at
http://harrisdellas.net/teaching.html