

Lifting the Veil: The American Standard of Living Since the Civil War: Portions of Two Chapters

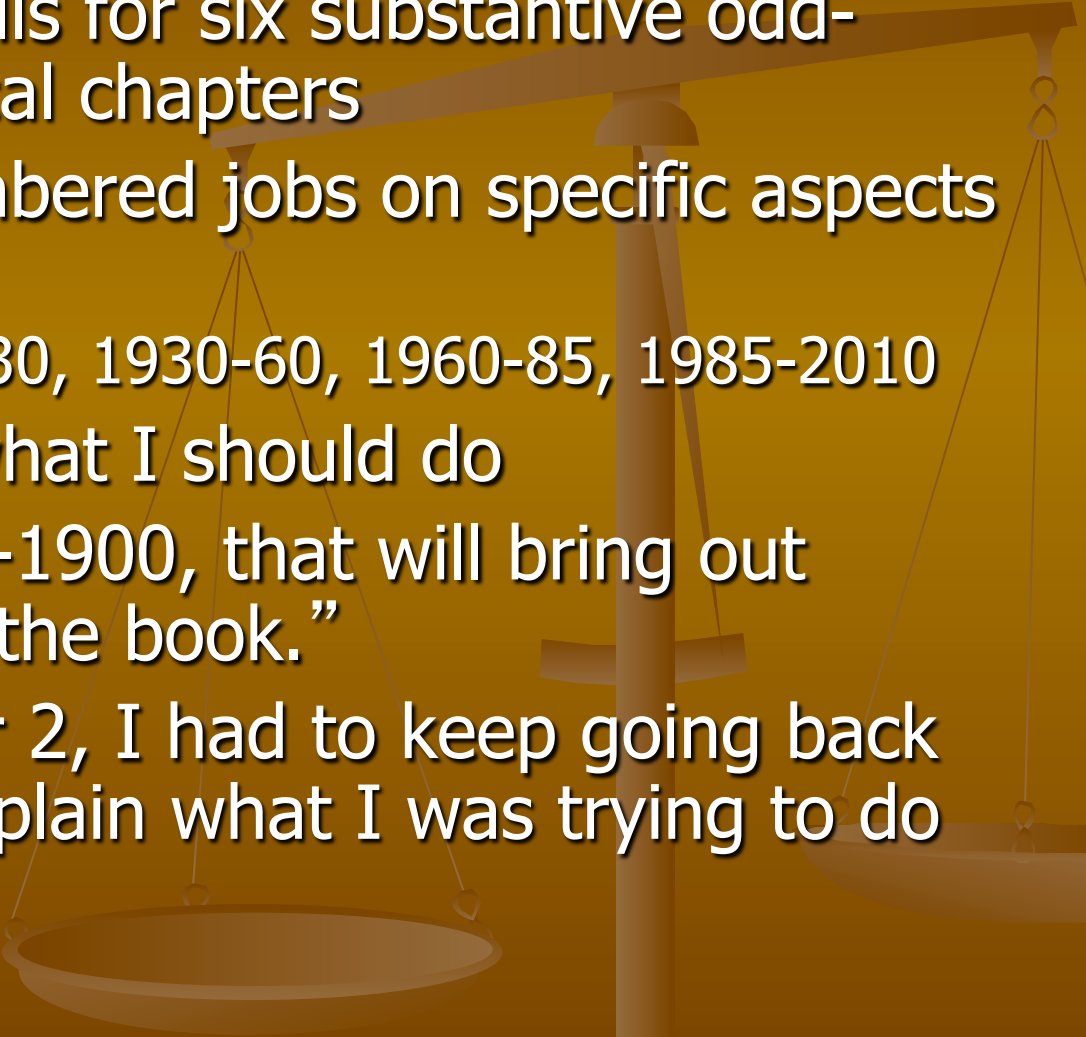
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Cornucopia Quantified Conference

May 21-22, 2010, Barcelona

Why Part of Two Chapters Instead of All of One Chapter?

- The prospectus calls for six substantive odd-numbered analytical chapters
 - And five even numbered jobs on specific aspects of five periods:
 - 1869-1900, 1900-30, 1930-60, 1960-85, 1985-2010
 - I asked Joachim what I should do
 - He said, “do 1869-1900, that will bring out unique aspects of the book.”
 - But within Chapter 2, I had to keep going back to Chapter 1 to explain what I was trying to do
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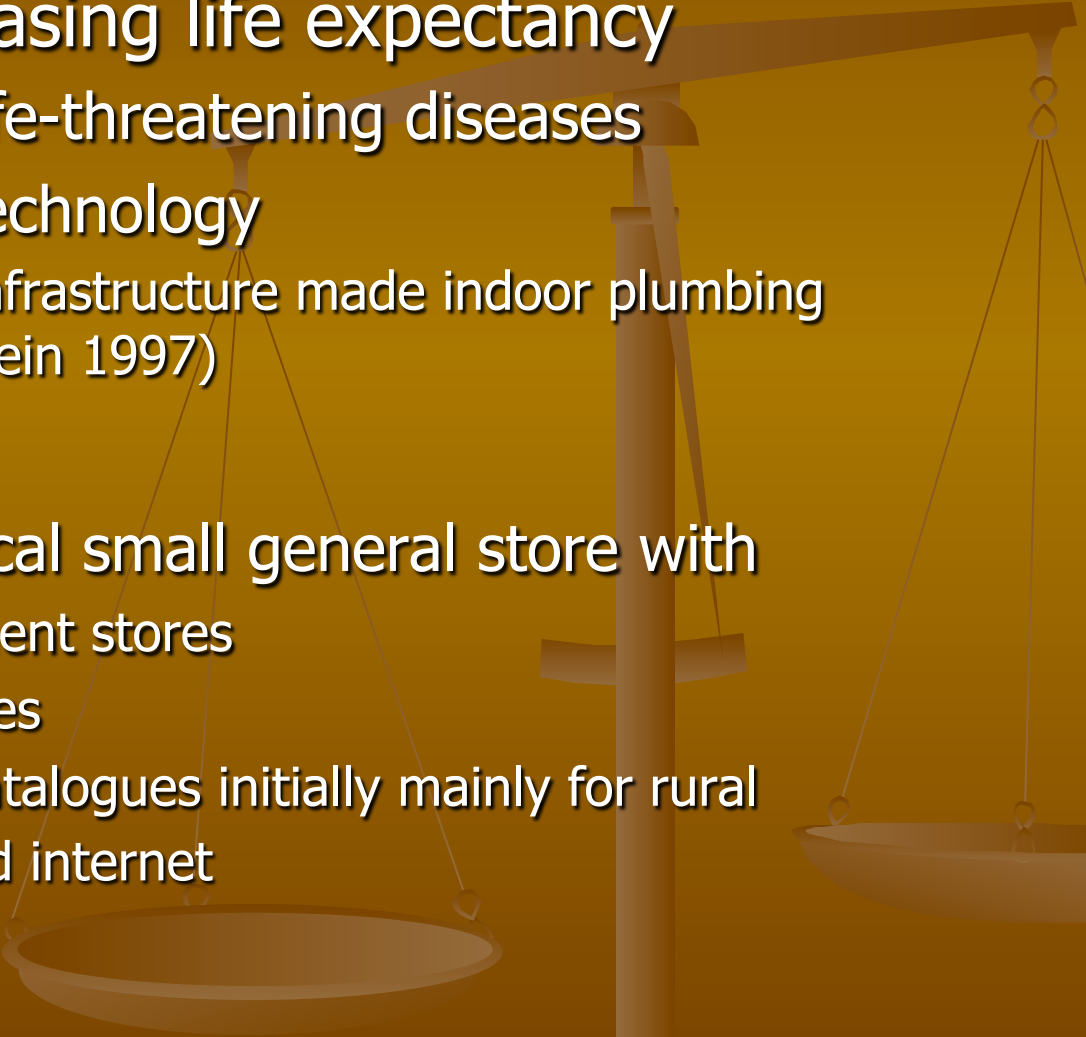
Chapter 1. Introduction

Expanding the Concept of the SoL

- CPI Problems
 - Missing new goods
 - Introducing them years or decades late
 - Bias after introduction (not all CPI bias is upward)
- Improvements excluded from GDP start with #1 housing
 - Indoor plumbing
 - Central heating
 - Electrification

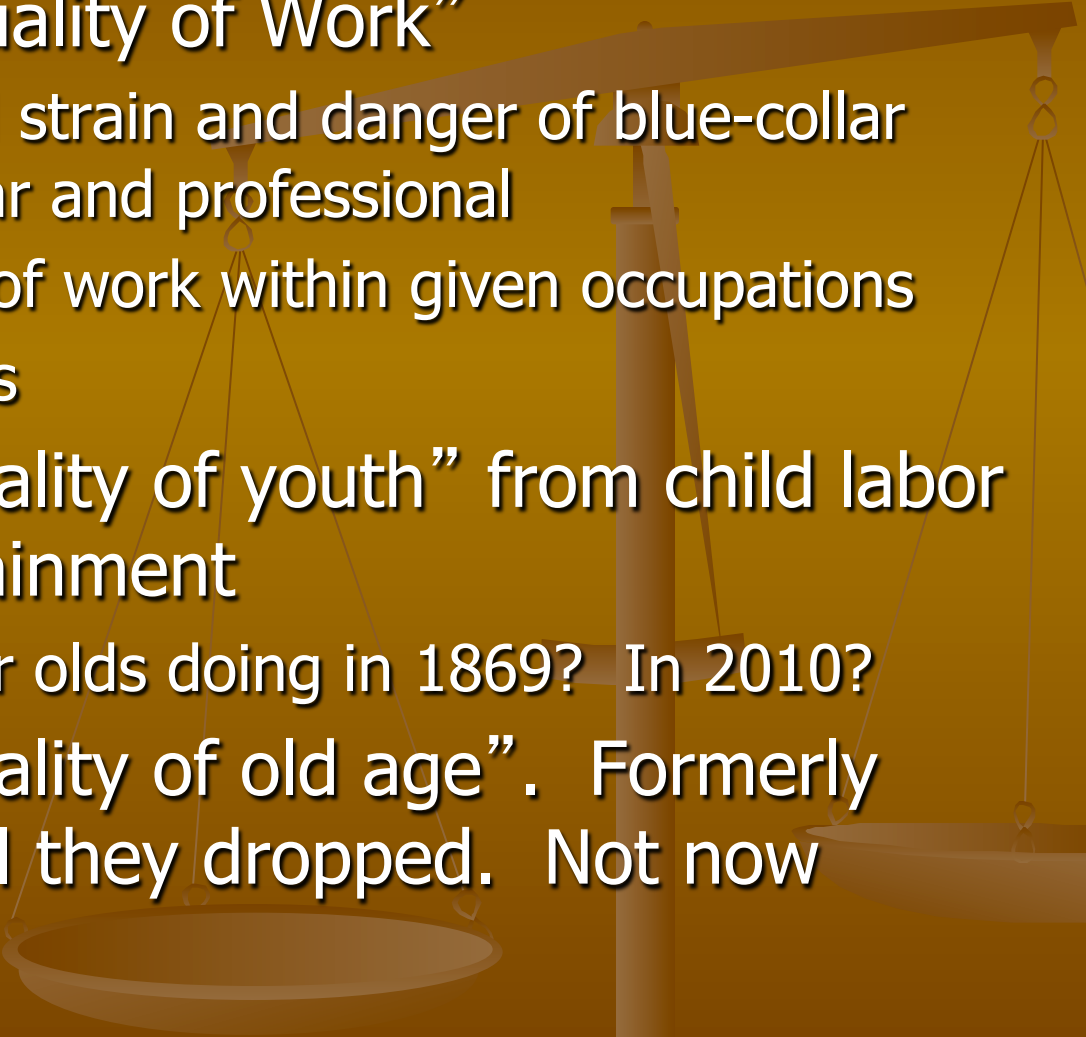


Further Dimensions of Improvement

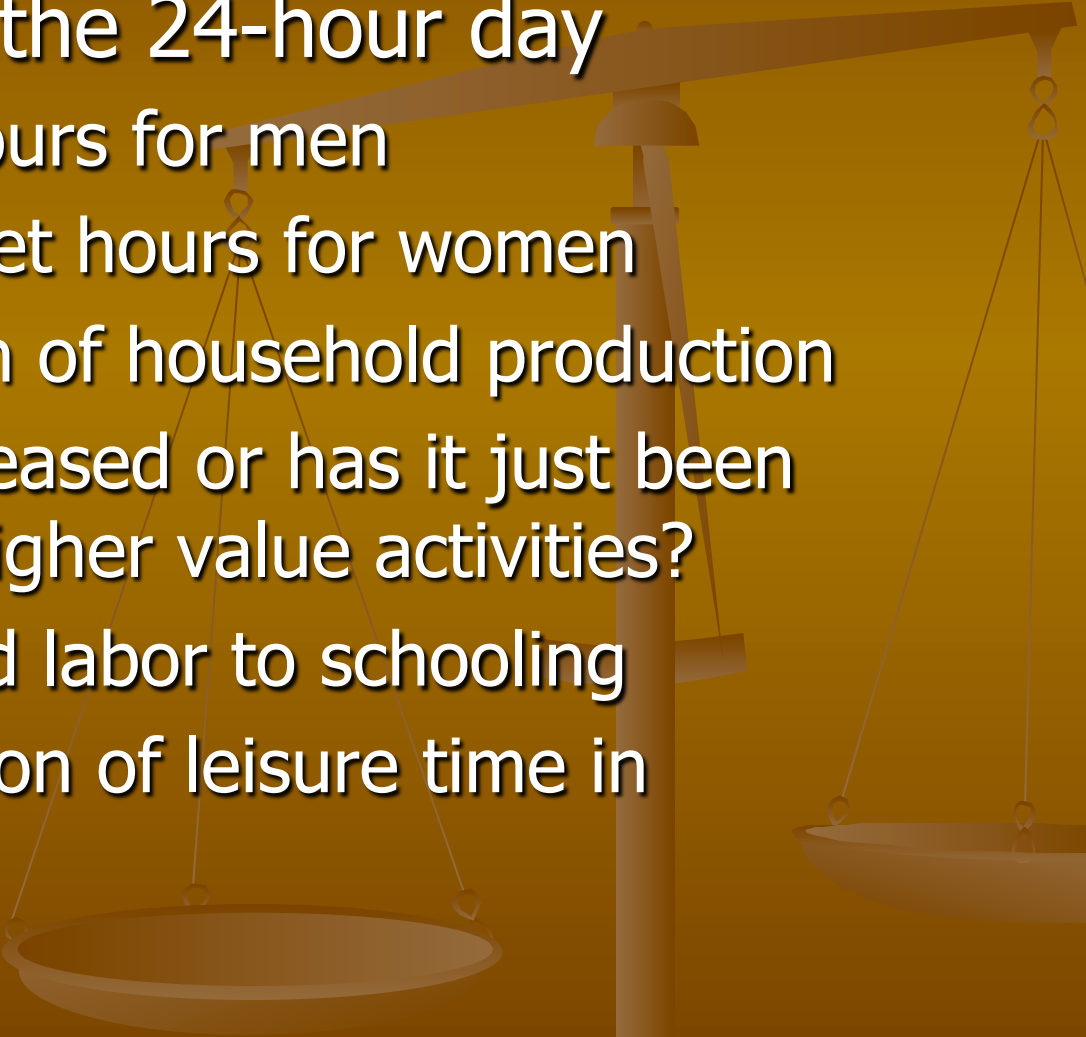


- #2 Health: Increasing life expectancy
 - Infant mortality, life-threatening diseases
 - Not just medical technology
 - Urban sanitation infrastructure made indoor plumbing possible (Mokyr-Stein 1997)
- #3 Marketing
 - Replacement of local small general store with
 - Big urban department stores
 - Grocery chain stores
 - Sears and M&W catalogues initially mainly for rural
 - Later Wal-Mart and internet

Life is About Working, not just Consuming

- #4 Increased “Quality of Work”
 - Shift from physical strain and danger of blue-collar work to white collar and professional
 - Decline in danger of work within given occupations
 - Shorter work hours
 - #5 Improved “quality of youth” from child labor to educational attainment
 - What were 16 year olds doing in 1869? In 2010?
 - #6 Improved “quality of old age”. Formerly males worked until they dropped. Not now
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The Use of Time

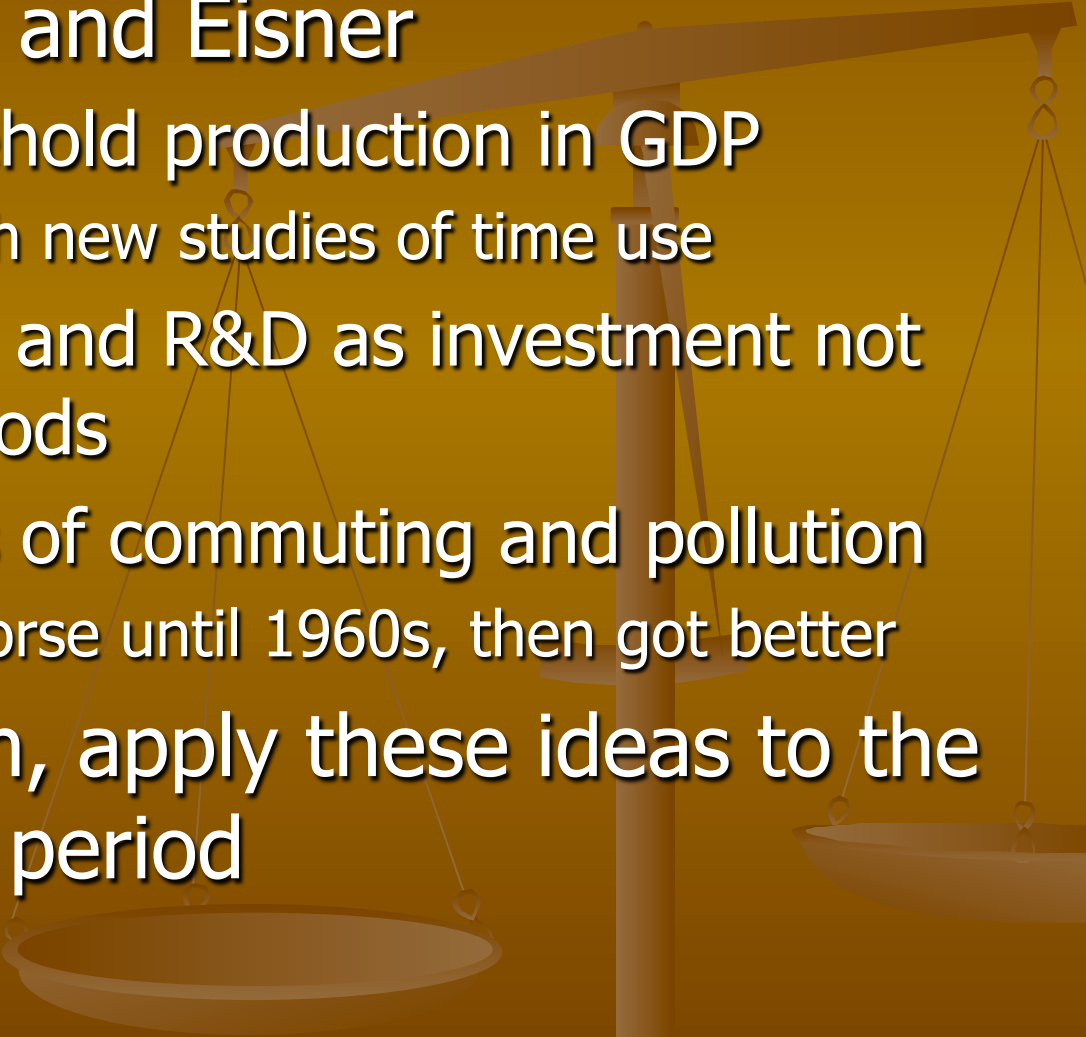
- Shifting uses of the 24-hour day
 - Shorter work hours for men
 - Increased market hours for women
 - Reduced burden of household production
 - Has leisure increased or has it just been reallocated to higher value activities?
 - Youth from child labor to schooling
 - New phenomenon of leisure time in retirement
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The Nature of Innovation

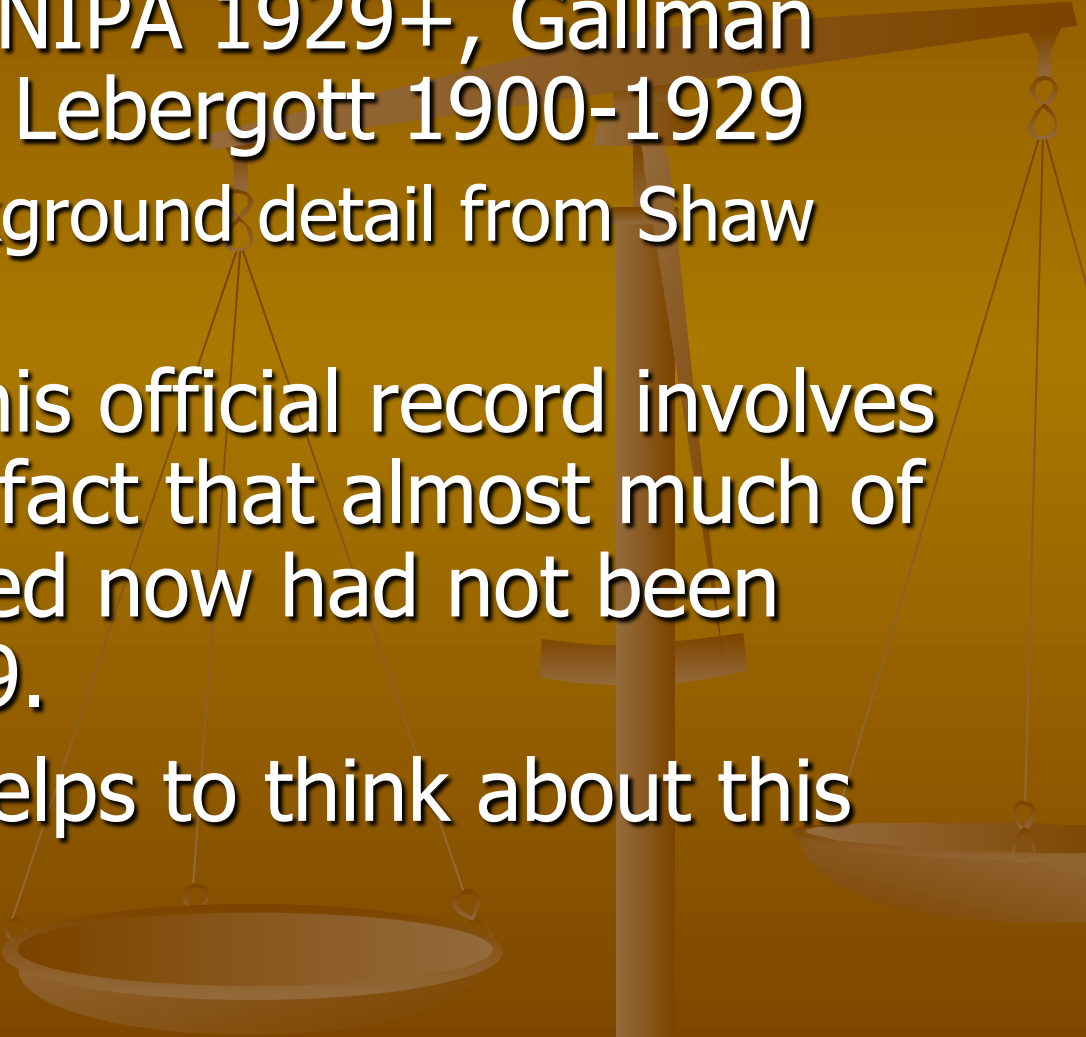


- Self-employed entrepreneurs (Edison) vs. large corporate R&D departments
- Some improvements did not involve innovations
 - Higher income spills over to larger houses, from 500 sq ft tenements to 2000 sq ft houses
 - Society can now afford urban sanitation infrastructure
 - Improved life expectancy in first half of 20th century as much clean water as medical R&D
 - Post-1962 dangers of tobacco as much a matter of public education as organized corporate or govt R&D

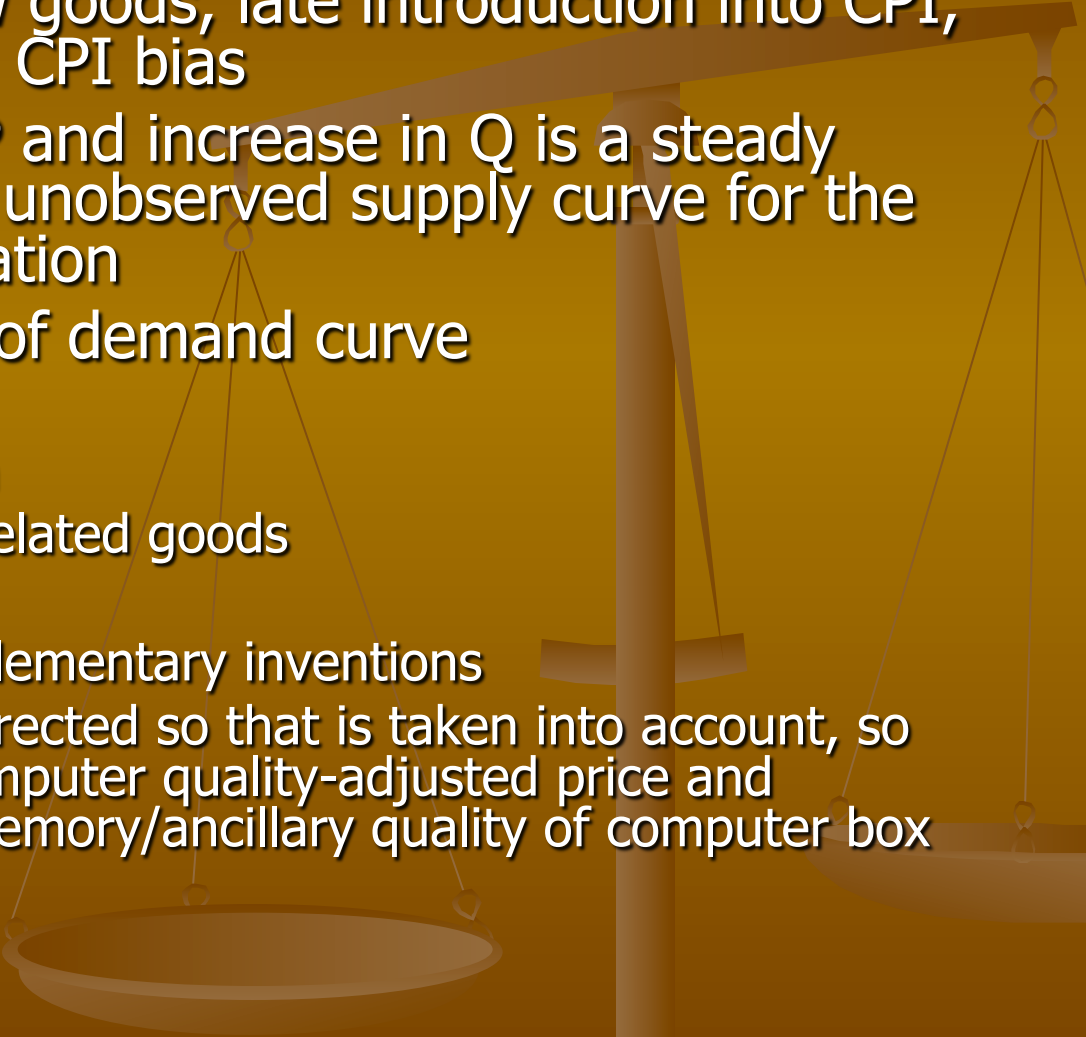
The Book will not Duplicate Previous Research

- Nordhaus-Tobin and Eisner
 - Including household production in GDP
 - Can update with new studies of time use
 - Treat education and R&D as investment not intermediate goods
 - Deducting costs of commuting and pollution
 - Pollution got worse until 1960s, then got better
 - No new research, apply these ideas to the long 1869-2010 period
- 

The Current “Consensus” Record on Real Per-capita Consumption

- This consists of NIPA 1929+, Gallman 1869-1909, and Lebergott 1900-1929
 - With some background detail from Shaw 1869-1919
 - Going beyond this official record involves coping with the fact that almost much of what is consumed now had not been invented in 1869.
 - A static graph helps to think about this
- 

Simplifications in the Consumer Surplus Diagram

- Takes account of new goods, late introduction into CPI, and post-introduction CPI bias
 - Source of decline in P and increase in Q is a steady rightward shift in the unobserved supply curve for the product due to innovation
 - Abstracts from shifts of demand curve
 - Changes of income
 - Changes in population
 - Changes in prices of related goods
 - Changes in tastes
 - Development of complementary inventions
 - Quantity is quality-corrected so that is taken into account, so think of vertical as computer quality-adjusted price and horizontal as speed/memory/ancillary quality of computer box
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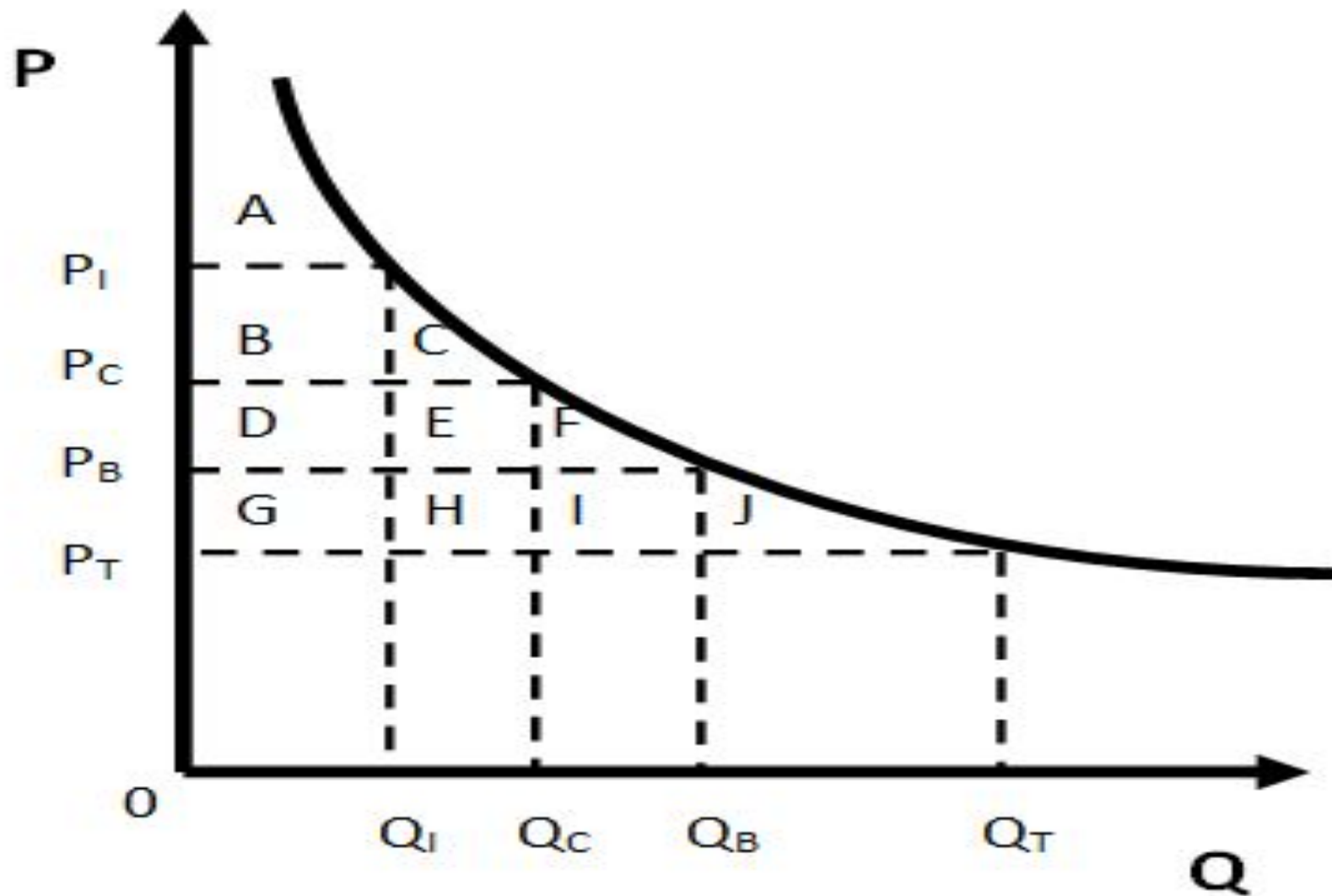


Figure 1-1

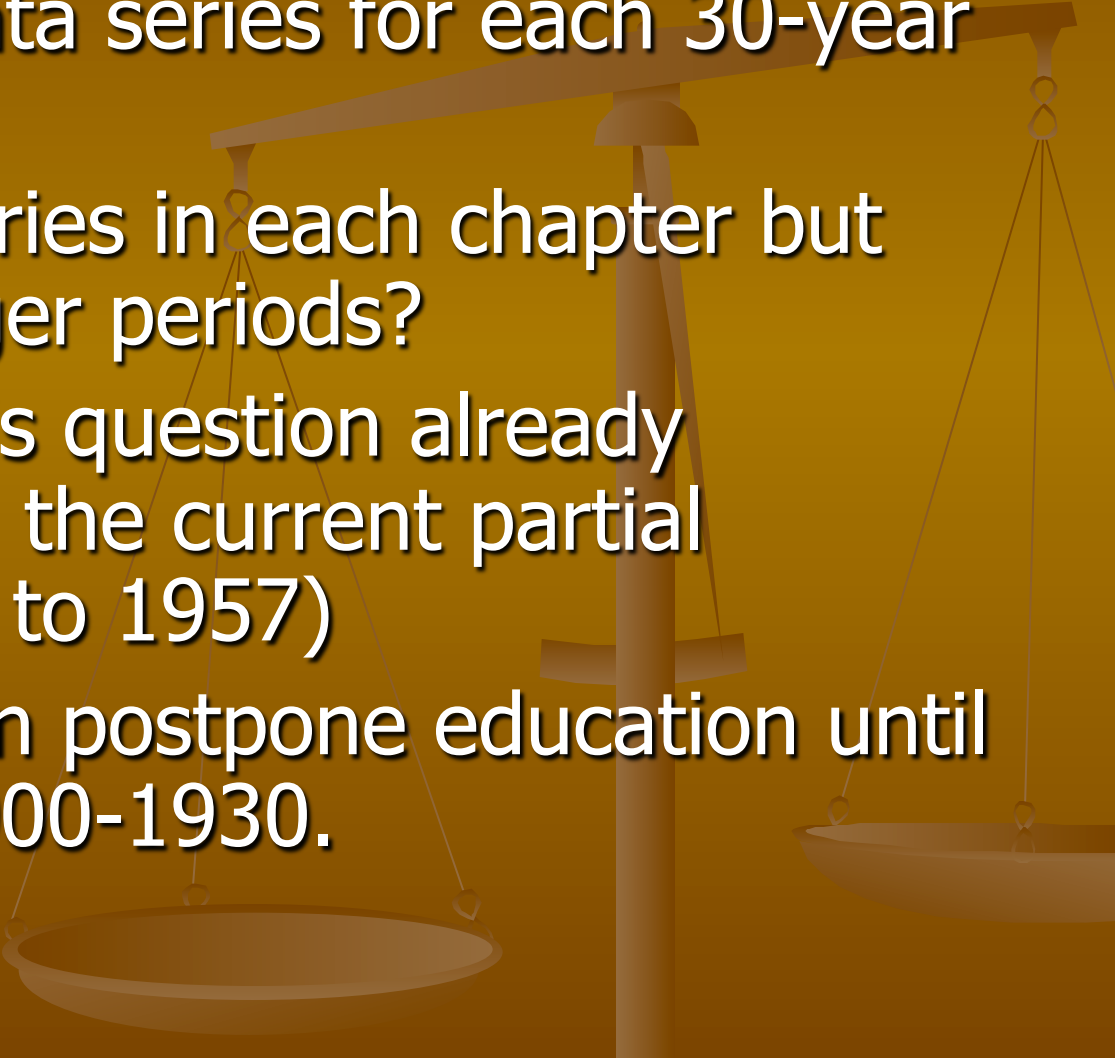
**Mismeasurement of Consumer Surplus
Created by a Newly Invented Product**

How Broadly Can This Be Applied?



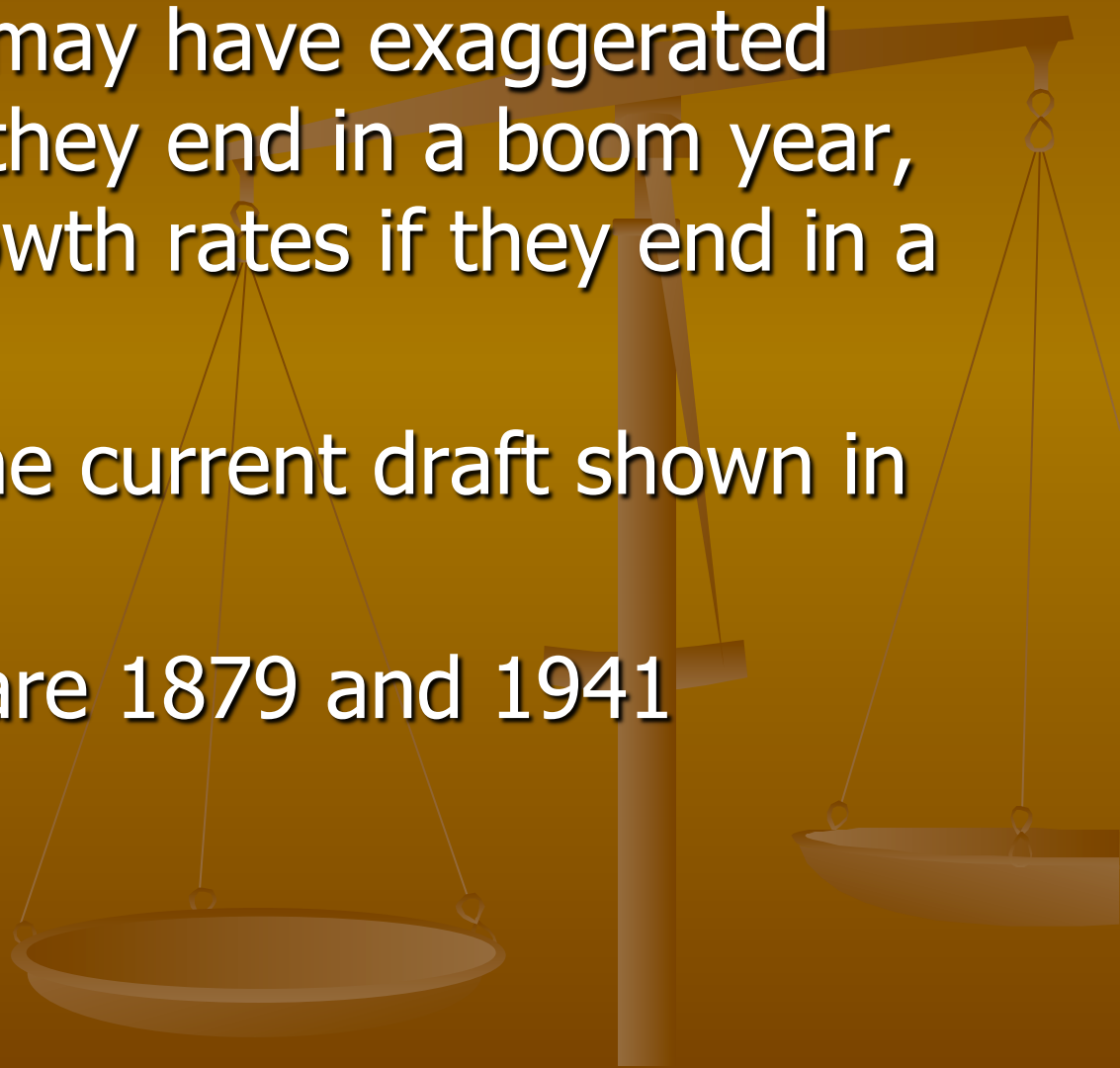
- This conference features applications of the Greenwood-Kopeccky and Hausman
- Required data are prices, expenditure shares, and price elasticities of demand
- Price data are there not just in Sears catalogues but published budget studies, e.g., Chapin (1909) and Clair Brown's book (1994)
- Previous papers on apparel and housing, Chapin on food (1909) is a gold mine
- All three necessities CPI biased downward?

Organizational Issues about the Descriptive Chapters

- Repeat every data series for each 30-year interval?
 - Repeat some series in each chapter but others over longer periods?
 - For instance, this question already answers itself in the current partial Chapter 2 (food to 1957)
 - For instance, can postpone education until Chapter 4 on 1900-1930.
- 

Comparisons over shorter intervals, is there a business cycle problem?

- Some intervals may have exaggerated growth rates if they end in a boom year, understated growth rates if they end in a recession year
- Years used in the current draft shown in next slide.
- Only problems are 1879 and 1941



1870s
Puzzle
To come

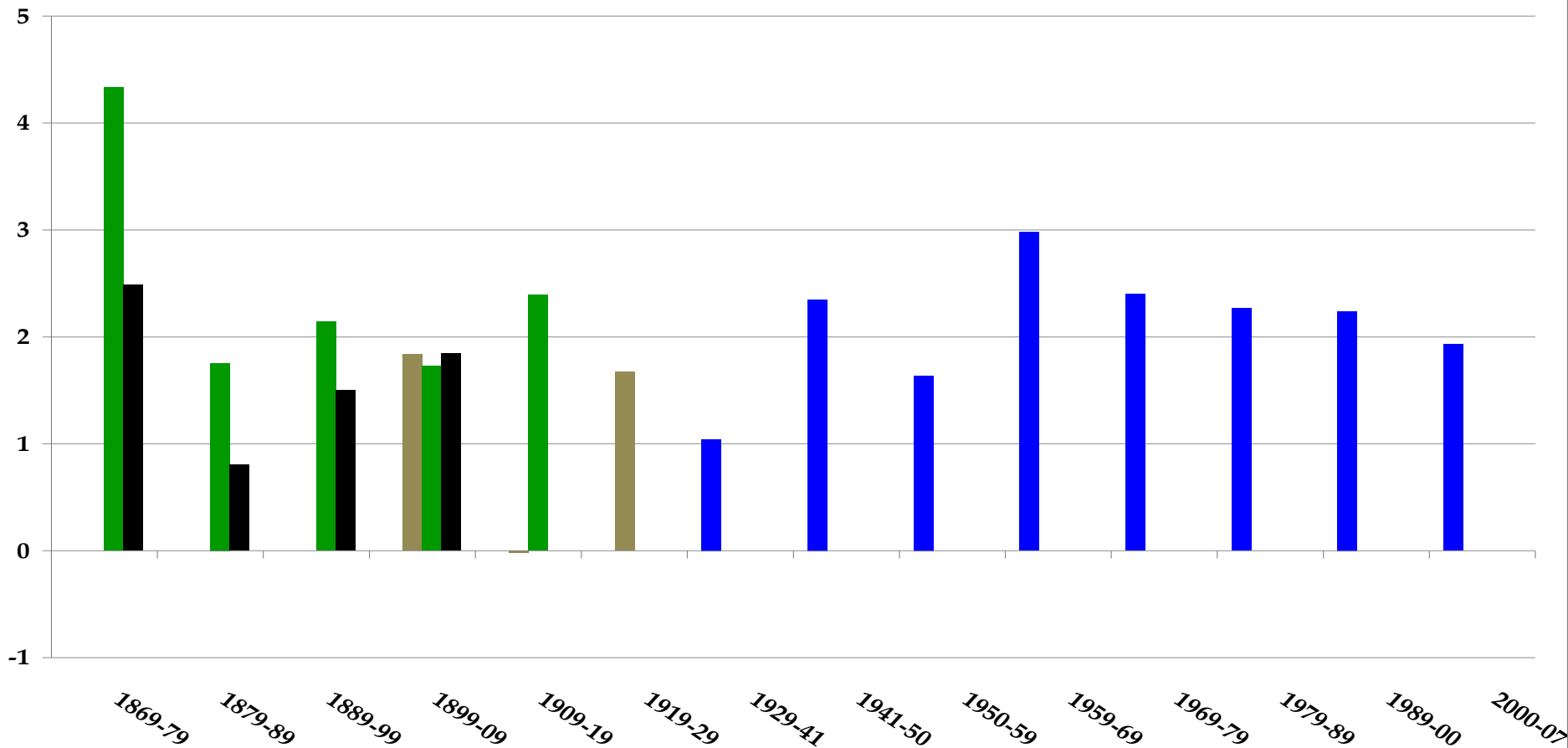
Why we
Can't
Replace
1941

| Year | Gap |
|-------------|------------|
| 1879 | -5.2 |
| 1889 | 1.4 |
| 1899 | 1.9 |
| 1909 | 2.2 |
| 1919 | -2.2 |
| 1929 | 2.7 |
| 1941 | -6.4 |
| 1950 | 0.0 |
| 1959 | -0.5 |
| 1969 | 2.8 |
| 1979 | 1.3 |
| 1989 | 1.4 |
| 2000 | 2.8 |
| 2007 | -0.2 |

Source: Gordon (2009b, Appendix Table A-1)

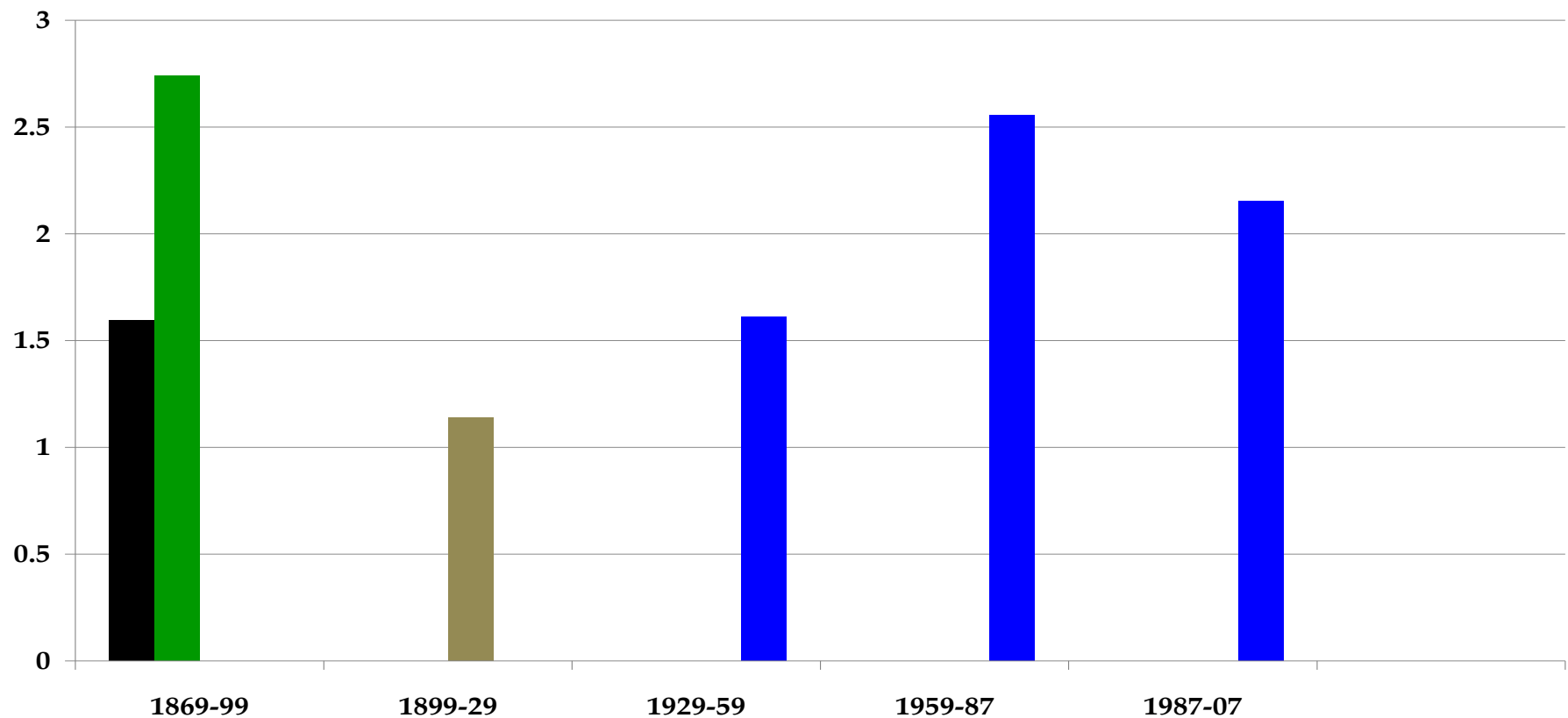
Conventional Growth Rates, 1869-2007 by ~ Decade

Figure 1-2 Real Consumption Per Capita in Annualized Annual Growth Rates for Selected 10 year Intervals, 1869-2007 (Shaw's goods destined for consumption, NIPA PCE, Gallman, Lebergott)



Puzzles Clearer over 30-year Intervals

Figure 1-3. Real Consumption Per Capita in Annualized Annual Growth Rates, Selected 30 year Intervals, 1869-2007 (Shaw's goods destined for consumption, NIPA PCE, Gallman, Lebergott)



Questions from Data

- Why is measured Cons pc so low 1900-29?
 - Could most of the social benefits in this period have taken the form of unmeasured consumer surplus from new products?
 - Example: automobile ubiquitous by 1929 but not introduced into the CPI until 1935
 - We'll get help from Raff-Trajtenberg (1997)
- 1869-1900?
 - Rees 1890-1914 vs. black box 1869-90 and 1914-29
 - Which price indexes are actually in the background of the Gallman GDP estimates 1869-1909?

Quality of Work, Youth, and Old Age

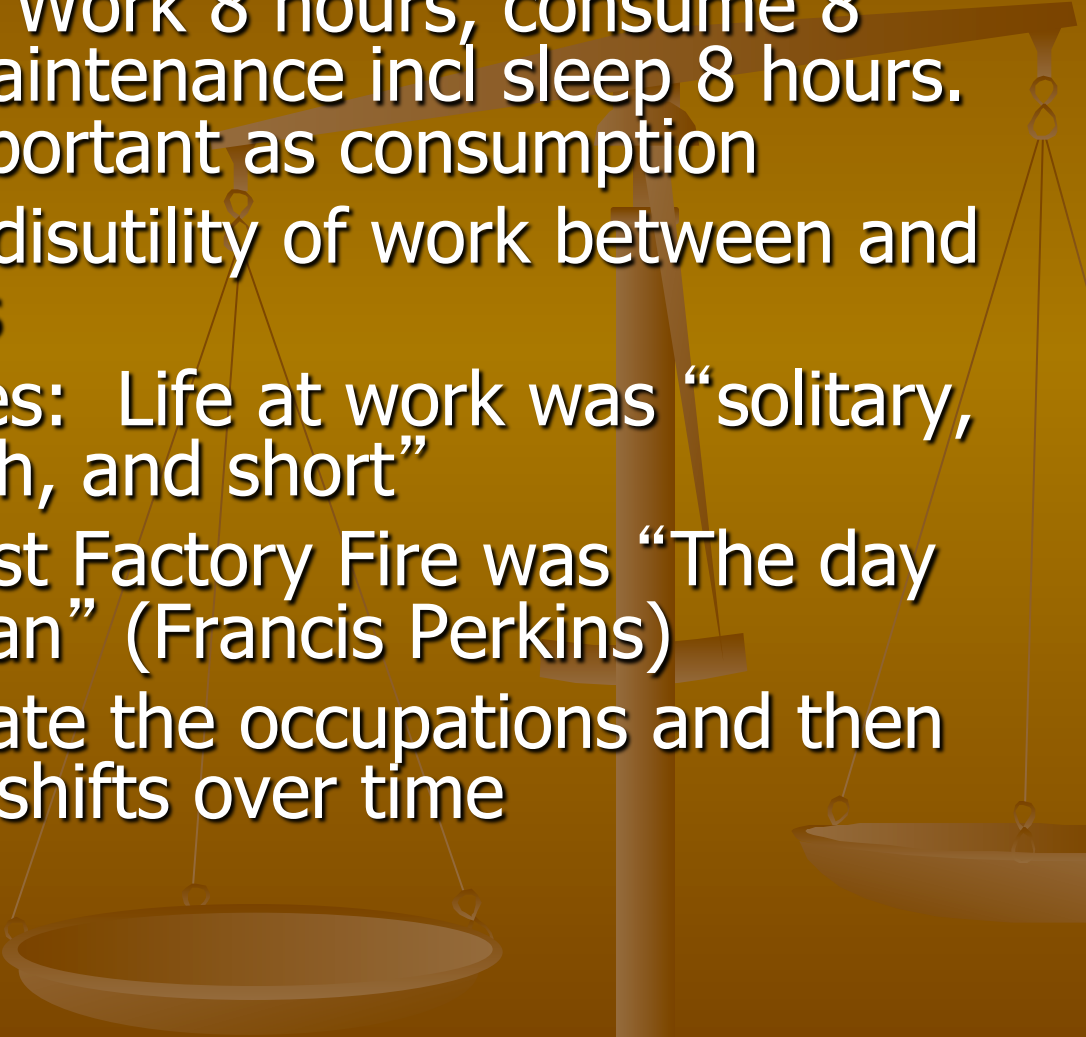
- Hypothetical day: Work 8 hours, consume 8 hours, personal maintenance incl sleep 8 hours. Work is just as important as consumption
 - Shifts in marginal disutility of work between and within occupations
 - Stolen from Hobbes: Life at work was “solitary, poor, nasty, brutish, and short”
 - The 1913 Shirtwaist Factory Fire was “The day the New Deal Began” (Francis Perkins)
 - First, let’s aggregate the occupations and then further aggregate shifts over time
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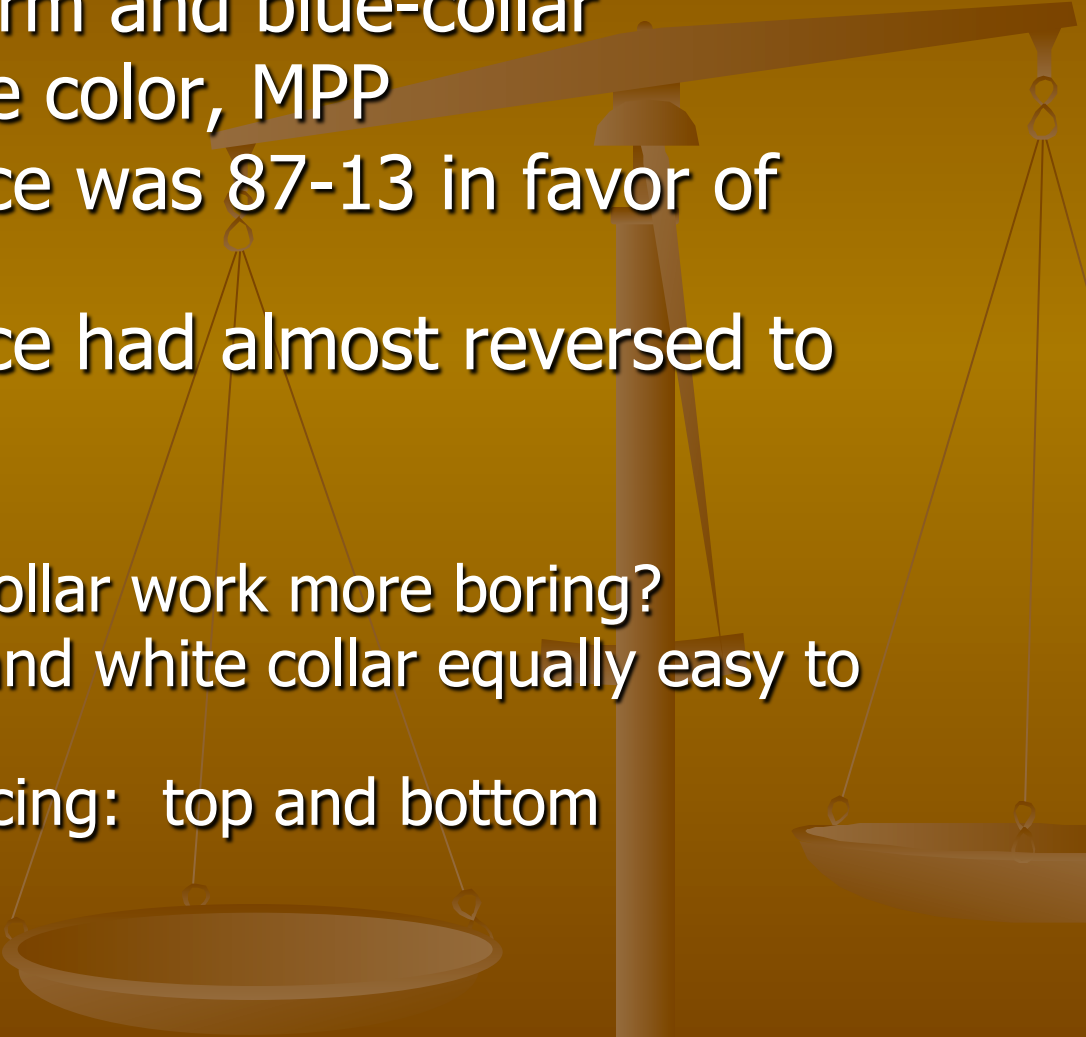
Table 1-3
Occupational Distribution of All Persons, 1860-1990

| | Total Number | Percentage Distribution | | | | Total |
|------|-----------------|---------------------------------|------------------------|----------------------------|---|--------|
| | | Farmers and farm laborers | Blue-Collar Workers | White Collar Workers | Professionals, Managers & Proprietors | |
| 1860 | 8160752 | 44.7% | 42.4% | 4.1% | 8.8% | 100.0% |
| 1870 | 12004238 | 45.9% | 41.2% | 4.8% | 8.0% | 100.0% |
| 1880 | 16478917 | 42.7% | 42.8% | 5.9% | 8.5% | 100.0% |
| 1900 | 27554085 | 33.7% | 45.6% | 10.6% | 10.0% | 100.0% |
| 1910 | 36236003 | 30.7% | 43.7% | 14.1% | 11.6% | 100.0% |
| 1920 | 40113274 | 24.9% | 45.2% | 17.6% | 12.4% | 100.0% |
| 1940 | 47584238 | 17.3% | 43.2% | 23.7% | 15.1% | 99.2% |
| 1950 | 56973749 | 11.7% | 42.8% | 27.3% | 17.8% | 99.6% |
| 1960 | 63870595 | 6.0% | 39.5% | 30.0% | 19.7% | 95.2% |
| 1970 | 76270515 | 3.1% | 37.3% | 36.2% | 23.4% | 100.0% |
| 1980 | 97378407 | 2.2% | 31.7% | 38.3% | 27.8% | 100.0% |
| 1990 | 115083094 | 1.6% | 26.8% | 38.4% | 33.2% | 100.0% |

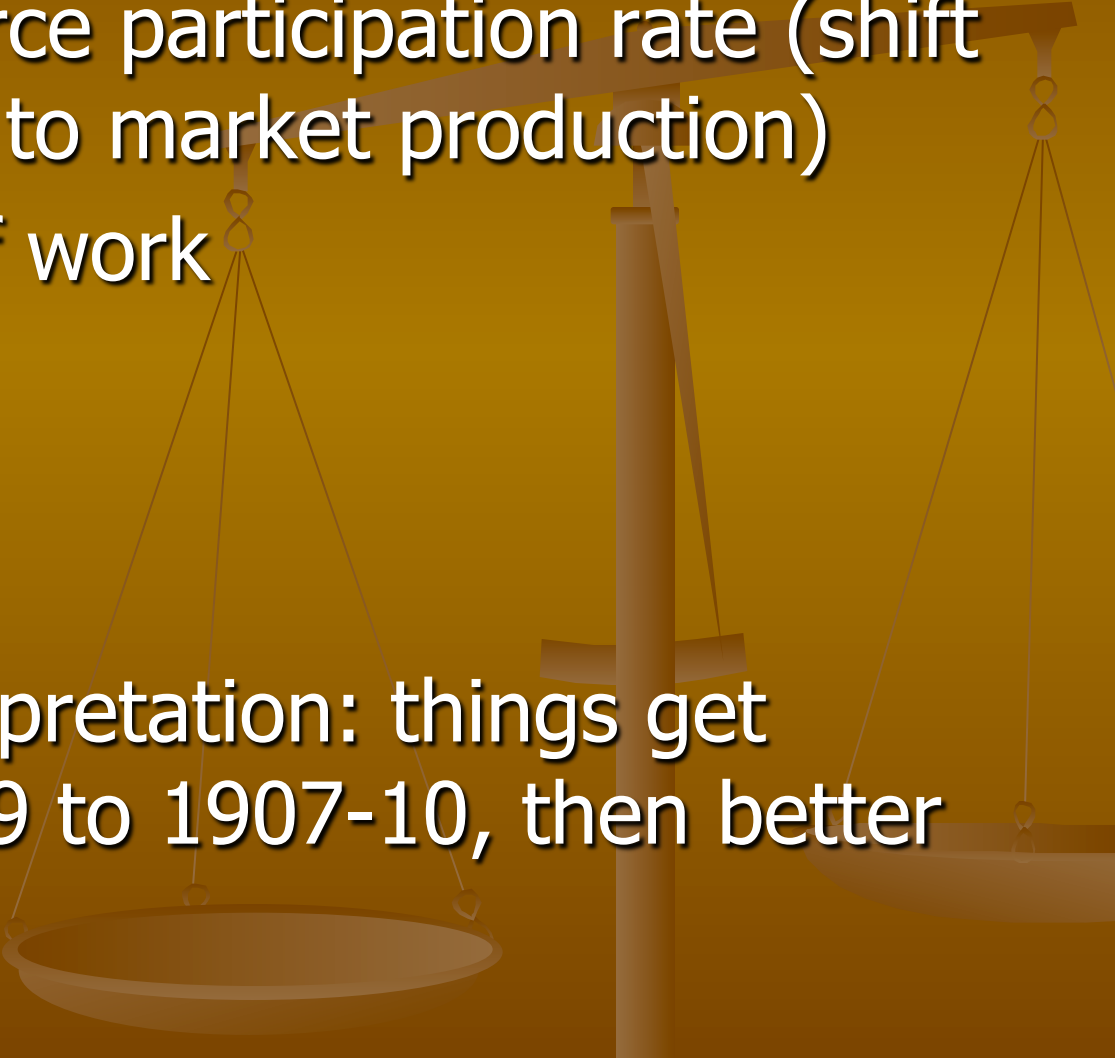
Source: HSUS Series Ba1033-B1046

Definitions: Blue Collar is the sum of craft workers, operatives, laborers,
 And domestic service workers
 White Collar is the sum of clerical, sales, and other service workers

Bottom Line on Occupational Distribution

- “Unpleasant” = farm and blue-collar
 - “Pleasant” = white color, MPP
 - In 1860 the balance was 87-13 in favor of unpleasant
 - In 1990 the balance had almost reversed to 28-72
 - Other dimensions:
 - Is modern white-collar work more boring?
 - Middle-level blue and white collar equally easy to outsource
 - Safe from outsourcing: top and bottom
- 

Remaining Dimensions of Work Quality Cited so Far

- Female labor force participation rate (shift from household to market production)
 - Weekly hours of work
 - Fatality rates
 - Coal mining
 - Railroads
 - A plausible interpretation: things get worse from 1869 to 1907-10, then better
- 

Four Dimensions, 1870-1990

Table 1-4
Data Relevant to Working Conditions, 1870-1990

| | White Female Labor Force Partic. Rate | Weekly Male Hours of Work in Private Nonfarm Economy | Death Rates per 1,000 Employees | |
|------|--|--|---------------------------------|-----------------------|
| | | | Coal Mining | Railroad Employees |
| 1870 | 12.4 | | 5.9 | |
| 1880 | 13.4 | | 2.2 | |
| 1890 | | | 2.5 | 3.3 |
| 1900 | 19.4 | 58.5 | 3.4 | 2.5 |
| 1910 | 22.1 | 55.6 | 3.9 | 2.0 |
| 1920 | 21.9 | 50.6 | 2.9 | 1.2 |
| 1930 | | 48.7 | 3.2 | 0.6 |
| 1940 | 25.7 | 40.6 | 2.6 | 0.6 |
| 1950 | 29.3 | 41.1 | 1.3 | 0.3 |
| 1960 | 35.1 | 41.0 | 1.7 | 0.2 |
| 1970 | 41.2 | 42.0 | 1.9 | 0.3 |
| 1980 | 50.0 | 40.8 | | 0.2 |
| 1990 | 67.1 | | | |

Source by Column: HSUS Series Ba423, Ba4575, Ba4731, Ba4772

Temporary Conclusion to Ch. 1: Bettman on late 19th C. Railroads

- Dangerous to employees but unpleasant to passengers:
- The middle class made up the bulk of passenger traffic, and the conditions they endured were closer to the emigrant carriages than to the private railroad car. The old wood-burning locomotives belched cinders that pattered overhead like a hailstorm, and their smoke and steam engulfed the train until, at journey's end, the traveler found himself "begrimed like a man who has worked all day in a blacksmith's. . . . The alternative was to close the windows and suffer the stench of whiskey, tobacco, and closely packed bodies, stench which remained imprisoned in the cars despite ceiling grills installed to ventilate them.

Chapter 2: Dimensions of Change, 1869-1900

- This book starts in 1869 because that's when the data start, but something else happened in 1869
- May 10, 1869, Promontory Point Utah
- Because of the transcontinental telegraph and the first undersea cable, for the first time the nation had instant communication, and people heard the message in Canada as in the UK
- The golden spike! The nation was united by the transcontinental railroad

Never before was there so much celebration by so many about the accomplishments of so few

- “Across the nation, bells pealed. Even the venerable Liberty Bell in Philadelphia was rung. Then came the boom of cannons, 220 of them in San Francisco . . . , a hundred in Washington, D. C., countless fired off elsewhere. It was said that more cannons were fired in celebration than ever took part in the Battle of Gettysburg A correspondent in Chicago caught exactly the spirit that had brought the whole country together. The festivity was . . . `was free from the atmosphere of warlike energy and the suggestions of suffering, danger, and death which threw their oppressive shadow over the celebrations of our victories during the war for the Union.” (Ambrose, 2000, p. 366).

Thus 1869 Represents a Starting Place . . .

- By which time enormous progress had taken place
 - Railroad, steamship, instant communication
- Big themes about 1869-1900
 - Unparalleled burst of inventive energy
 - Hardly anything had penetrated into the home by 1900
 - So what's left to represent the rise in the standard of living 1869-1900?

Many dimensions behind the scenes

- 1869-1900: people read by oil lamps, went to privies outside, were heated by stoves not central heat, and the city and the farm were driven by the horse rather than the motor (altho the RR connected them)
- Dimensions of expansion of RR and telegraph
 - Population 2x
 - RR track 5x
 - Telegrams sent 7x
 - Postal stamps sold 10x

By 1869, a revolution of the information available to local business

- Before the RR, commerce to the northern midwest went by rivers which were frozen for 3-4 months per year. Here's Cronon's depiction of an Iowa general store:
- “the immediate implications of the rails pointing back toward the eastern horizon should by now be so familiar that they barely need repeating. The railroad meant speed. It meant regular, predictable schedules. It meant year-round movement, even in winter. It meant escaping the river. It meant the East, and not the South. It meant Chicago, and not St. Louis. It meant the future.” (Cronon, 1991, p. 325).
- We haven't even dipped below the tip of the iceberg on the social value of the invention of railroads.

Key developments of 1869-1900

- Manufacturing
 - Preserved food. Borden's, Heinz
 - Refrigerated RR cars carried meat from centralized stockyards
 - Market-sold apparel replaces home-made apparel
- Marketing: the twin revolutions
 - Central city, the grand department stores
 - For rural America, the MW and SR catalogues
- Chicago! The heart of it all, the fastest growing city in the world from 1871 to 1929
 - Start at Marshall Field's, it's 4.2 miles west to the enormous 1909 Sears central warehouse at Homan & Arthington, MW is 1.5 miles NW at Chicago Ave and the Chicago River N branch

Powerful forces that lowered prices and increased welfare

- Not just more efficient retailing but
 - Ending monopoly of the isolated general store
 - New attributes: guaranteed cash refunds
- Background infrastructure
 - Catalogues made possible by postal service infrastructure
 - Even before electricity reached the home, people reached the central city by electric trolleys and subways
- Manufacturing
 - Shift from craft trades to mass manufacturing, e.g., furniture

But with all this, after 31 years life around 1900 was still dismal

■ NYC 1907

- 1.5 persons per room
- 1/3 of rooms “dark” with no windows
- 20% with bathrooms, 31% with toilets
- 0% electricity

■ Big problem, unsettled here

- What percent of population were urban upper class, middle class, working class, northern rural, and southern rural?

Aggregate Consumption from Gallman vs. Shaw

Table 2-1

Annual Per Capita Growth Rates of Consumption Components, 1869-99

Personal Consumption Expenditures

Goods

GDP Total Total Perishable Semidur Durable Services

Gallman

| | | | | | | | |
|-----------|------|------|------|------|------|------|-------|
| 1869-1879 | 2.22 | 2.49 | 2.49 | 2.30 | 3.22 | 2.18 | 2.48 |
| 1879-1889 | 1.64 | 0.80 | 1.34 | 0.76 | 1.25 | 4.54 | -1.14 |
| 1889-1899 | 1.57 | 1.50 | 1.48 | 1.72 | 1.29 | 0.65 | 1.59 |
| 1869-1899 | 1.81 | 1.60 | 1.77 | 1.60 | 1.92 | 2.46 | 0.98 |

Shaw

| | | | | | | | |
|-----------|--|--|------|------|------|------|--|
| 1869-1899 | | | 2.71 | 2.82 | 2.47 | 2.53 | |
|-----------|--|--|------|------|------|------|--|

Sources: Gallman from HSUS series Ca193 – Ca199. Shaw from HSUS series Ca175 – Ca178

Research Agenda

- Where did Gallman get the numbers that differ from Shaw?
 - 1869-1899 Agreement on durables, not on perishables nor semidurables
 - Gallman allowed for transition for food/apparel made at home to market universe covered by Shaw
- Are the price deflators different and if so why?

The Early Budget Studies, 1874 to 1907

Table 2-2
Four Consumer Budget Studies, 1874-75 to 1907

| | Massachusetts Wage Earners 1874-75 | Workers in Nine Cities in U.S., 1888- 91 | Working Families in 1901 | Working Families in NYC in 1907 |
|-----------------------------|---|---|---|--|
| Sample Size | 397 | 2562 | 11156 | 383 |
| Average Family Size | 5.1 | 3.9 | 4.0 | 5.0 |
| Income before Taxes | 763 | 573 | 651 | 843 |
| Expenditures | | | | |
| Total | 738 | 534 | 618 | 823 |
| Food | 427 | 219 | 266 | 364 |
| Clothing | 108 | 82 | 80 | 116 |
| Rent | 118 | 80 | 112 | 170 |
| Fuel | 44 | 32 | 35 | 42 |
| Sundries | 44 | 121 | 124 | 131 |
| Percent Expenditures | | | | |
| Food | 57.9 | 41.0 | 43.0 | 44.3 |
| Clothing | 14.4 | 15.4 | 12.9 | 14.1 |
| Rent | 15.8 | 15.0 | 18.1 | 20.7 |
| Fuel | 6.0 | 6.0 | 5.7 | 5.1 |
| Sundries | 6.0 | 22.7 | 20.1 | 15.9 |

Source: First three columns from HSUS series Cd456-Cd482,
fourth column from Chapin (1909, Table 15, p. 70)

Change in Food Consumption, 1869 to 2007?

- Gallman perishables = total = 1.60% pc
- America overturned Engel's Law
- The hidden numbers on apparent food consumption, not in Millennial HSUS but in HSUS (1960)
- Production minus feed, seed, industrial, exports
- Pounds per capita per year
- Little available prior to 1909. This is an example of a table going beyond 1869-1900 that does not need to be repeated in Chaps 4 and 6.

Table 2-3
Apparent Per Capita Consumption of Foods, 1869-1957
(in pounds per person, except eggs)

| | 1869 | 1899 | 1909 | 1919 | 1929 | 1957 |
|-----------------------|------|-------|-------|-------|-------|-------|
| Meat | | 150.7 | 155.2 | 138.9 | 131.2 | 159.1 |
| Beef and veal | | 72.4 | 81.5 | 69.3 | 56 | 93.4 |
| Pork excl lard | | 71.8 | 67 | 63.9 | 69.6 | 61.5 |
| Lamb and mutton | | 6.5 | 6.7 | 5.7 | 5.6 | 4.2 |
| Chicken and turkey | | | 14.7 | 14.2 | 15.7 | 31.4 |
| Fats and oils | | 33.8 | 31.5 | 29.1 | 33.2 | 26.5 |
| Lard | | 12.8 | 12.5 | 10.7 | 12.7 | 9.5 |
| Margarine | | 1.4 | 1.2 | 3.2 | 2.9 | 8.6 |
| Butter | 13.6 | 19.6 | 17.8 | 15.2 | 17.6 | 8.4 |
| Fruits | | | | | | |
| Fresh total | | | 138.2 | 125 | 143.1 | 98.3 |
| of which citrus | | | 16.2 | 23.5 | 29.8 | 37 |
| Canned fruit | | | 3 | 9.7 | 12.3 | 22.4 |
| Canned fruit juice | | | 0.5 | 0.3 | 0.3 | 12.2 |
| Dried fruit | | | 4.2 | 6.9 | 5.3 | 3.6 |
| Frozen fruit | | | | | 0.6 | 9 |
| Vegetables | | | | | | |
| Potatoes, incl. sweet | | | 213.2 | 181.3 | 181.4 | 112.2 |
| Other Fresh | | | | 76.6 | 112.6 | 104.6 |
| Canned | | | | 21.3 | 25.9 | 43.9 |
| Frozen | | | | | | 7.5 |
| Melons | | | | 24.8 | 32.1 | 25.7 |
| Dry beans | | | 6.8 | 5.4 | 7.8 | 7.5 |
| Dairy (milk weight) | | | 770 | 733 | 811 | 691 |
| Fluid milk | | | 343 | 335 | 340 | 350 |
| Cheese | 3 | 3.7 | 3.8 | 4.2 | 4.7 | 7.7 |
| Ice Cream | | | 1.6 | 6.8 | 10.7 | 17.9 |
| Eggs (numbers) | | | 293 | 303 | 334 | 358 |
| Sugar | 40.3 | 62.6 | 73.7 | 86.6 | 96.9 | 97.1 |
| Flour | | | 270 | 227.4 | 207.5 | 127.4 |
| Wheat | | | 217 | 192 | 177 | 119 |
| Corn | | | 53 | 35.4 | 30.5 | 8.4 |
| Coffee | | | 9.2 | 11.8 | 12.2 | 15.8 |

Source: HSUS (1960) series G552-584.

Big Transition 1869-1900 to Manufactured Food (Shaw)

- See next chart
- Notice faster increase in manufactured food vs. nonmanufactured food

Table 2-4
Value of Food Destined for Domestic
Consumption,
per capita, 1913 Prices

| | Manu- factured | Non Manu- factured | Total |
|----------------------------|-------------------|--------------------------|-------|
| 1869 | 12.0 | 12.5 | 24.5 |
| 1879 | 23.0 | 17.1 | 40.1 |
| 1889 | 25.9 | 17.3 | 43.2 |
| 1899 | 35.2 | 20.9 | 56.1 |
| <i>Annual Growth Rates</i> | | | |
| 1869-79 | 6.48 | 3.15 | 4.92 |
| 1879-89 | 1.19 | 0.08 | 0.73 |
| 1889-99 | 3.06 | 1.91 | 2.62 |
| 1869-99 | 3.58 | 1.71 | 2.76 |

Source: Shaw (1947), Table I-3, pp. 70-71

First, a check for consistency with big 1901 budget survey

- 4.0 people per household, so Shaw 1899 \$56 per capita food consumption translates to \$224 per HH, less than \$266 in the 1901 survey.
- A sample family's food consumption in NYC 1907 survey reveals the range of manufactured food by that time:
 - Canned salmon, bread, rolls, dairy products, crackers, flour, breakfast food, jelly, tea, coffee, cocoa, sugar, whiskey, and wine
 - Excluding meat 55% of total food
 - Including meat 83%
- Iceboxes in 81% < \$800, 90% > \$800
- Sears catalogue 1902 page on iceboxes is titled "Refrigerators"
- % of bread by commercial bakeries – 10% in 1850, only up to 25% 1900 (but they all bought bread in NYC 1907)

Marketing of Food

- Chain food stores
- Working class clung to local merchants for credit, vs. chain stores requiring cash
- “The people who paid the most for food were those least able to afford it”
 - Déjà vu, same true in 1960-2010 inner city
 - Today’s Chicago and NYC boycott of Wal-Mart

Contamination and Adulteration of Food

- Local dairymen driven out of business by distant firms which transported raw milk in unrefrigerated box cars
- A major cause of infant mortality was “bottle feeding”
- Bettman on adulteration of milk: “all the dealers required was a water pump”
- Bettman on beef reaching the city “on the hoof” .

Clothing

- The third most important commodity in the 1874-1907 budget studies
- Almost an exact match between Shaw's implied 1899 consumption figure per HH and 1901 budget study (role of clothes made at home?)
- Notice on the table
 - Rapid growth 1869-79
 - Rapid growth clothing compared to dry goods and shoes

Shaw's Real Growth Rates

Table 2-5
Value of Dry Goods, Clothing, and Shoes Destined for
Domestic Consumption, per capita, 1869-1899

| | Dry Goods & Notions | Clothing | Shoes | Total |
|----------------------------|--|-----------------|--------------|--------------|
| 1869 | 2.6 | 3.3 | 4.5 | 10.4 |
| 1879 | 5.0 | 6.8 | 3.9 | 15.7 |
| 1889 | 4.2 | 8.9 | 5.1 | 18.2 |
| 1899 | 4.0 | 11.8 | 5.5 | 21.3 |
| <i>Annual Growth Rates</i> | | | | |
| 1869-79 | 6.70 | 7.14 | -1.38 | 4.13 |
| 1879-89 | -1.71 | 2.73 | 2.49 | 1.46 |
| 1889-99 | -0.48 | 2.78 | 0.88 | 1.59 |
| 1869-99 | 1.50 | 4.22 | 0.66 | 2.39 |

Source: Shaw (1947), Table I-3, p. 72

Catalysts to Store-Bought Clothing

- Grand Emporiums in the Central City, model borrowed from Paris included:
 - Fixed prices with no haggling
 - Money-back guarantee
 - Philosophy of low prices and high volumes instead of the reverse
 - Welcome to browse without any obligation to buy
- Development and build-out fully happened from 1860 to 1910

The Other Catalyst, the Catalogues

- Overlap with Tim's paper
- 1902 catalogue: 1162 pages of which 200 were apparel and shoes, not to mention hats and wigs
- 1890-1914, the Rees demolition of Douglas's result of slow real wage growth
 - Here's Chicago again, both Rees and Douglas did their work at U Chicago
 - Rees based his apparel and furniture price indexes on Sears catalogue.
- Next slide, the steady downward movement of the Rees index for Sears apparel

Table 2-6
Alternative Price Indexes for Apparel,
1913 or 1914 = 100, 1869-1914

| | Shaw from WPI | BLS WPI | Rees Sears Catalog | Rees/Shaw |
|----------------------------|------------------------------|--------------------|-----------------------------------|------------------|
| 1869 | 177.1 | | | |
| 1879 | 106.7 | | | |
| 1890 | 101.7 | 94.0 | 133.0 | 130.8 |
| 1900 | 91.0 | 88.0 | 107.0 | 117.6 |
| 1914 | 96.3 | 98.0 | 99.0 | 102.8 |
| <i>Annual Growth Rates</i> | | | | |
| 1869-79 | -5.07 | | | |
| 1879-90 | -0.44 | | | |
| 1890- 1900 | -1.11 | -0.66 | -2.18 | -1.06 |
| 1900- 1914 | 0.40 | 0.77 | -0.56 | -0.96 |
| 1890- 1914 | -0.23 | 0.17 | -1.23 | -1.00 |

Sources: Shaw (1947), Table IV-1, pp. 290-1,
WPI and Rees from Rees (1961), Table 29, p. 91.

Questions Raised by Rees Apparel Results

- Can the 1% annual rate of relative decline be interpreted as a measure of shrinkage of retail/ wholesale margins, increased efficiency of retail?
- What's going on with Shaw price indexes and resulting deflated real values in 1869-79?
- Further work needs to be done on other sources of CPI for 1860-90 surveyed by Officer (2009)

Housing and the Urban Environment

- Quality of working class urban housing may have deteriorated 1869-1900
- Increased residential segregation made possible by commuter RR and electric streetcars
- The rich were able to move away from the stench and air pollution of the mills; the workers had to live near them

Streighton (1911) on working class urban housing

- In most large cities, and in many smaller ones, the more poorly recompensed laborers inhabit tenements. They pay exorbitant rents for dark or dingy rooms lacking in proper toilet and bathing facilities. High rentals make it necessary to accommodate boarders and lodgers, thus fearfully overcrowding the small apartments. . . . Workmen can no longer generally own their homes—thus they lose the steadying effect of proprietorship, they have less incentive to thrift, and they are less likely to be such reliable citizens as of old” (84-85).

Drawing into Question Field's Lebergott Indoor Plumbing %

- 1900 only $\frac{1}{4}$ of Pittsburgh streets had sewers
- Working class families had to share toilet facilities, some of which had to be emptied
- Most working class families had to obtain water outside the house
- Only $\frac{1}{5}$ of all premises had a bathtub
- A typical housing unit is quoted at 500 sq ft and often housed a 4-person family and one or more boarders
- Tenants weren't at the bottom of the ladder, boarders were

The Cheerful Poem from the *National Labor Tribune* ~ 1900

- In cellars chill and dingy, oft
- In alleys with foul filthy ground
- Or crowded to a lonely loft
- These toiling ones are mostly found;
- An ancient stove, with sooty scrap
- A box, a bench a broken chair;
- A few patched duds in which to wrap
- Their weary limbs, fed on scant fare.

Problems with Interpretation of Home Ownership Percentage

- ~ 45 percent of American families were in an owner-occupied dwelling in 1890
- But in 1890 65 percent of the population was classified as “rural”
- Consistent with most of the bottom 2/3 of urban dwellers as tenants

Still to Come, Chapter 2

- Distinction between urban and rural, north and west rural vs. the south
- Aspects of farm life: homesteading, sod houses
- Health: diseases and urban sanitation
- Since conditions of work and youth look to be as bad in 1900 as 1869, there's a case to defer these to a subsequent chapter

This Presentation is (Obviously!) Partial and Preliminary, and I Invite You to Comment on:

- Overall Architecture
 - Breadth
 - Depth
 - Organization by topic and time period
- Accuracy of Interpretations so far
 - In the large
 - In the small
- Too many numbers, too many anecdotes,
what's the right balance?