

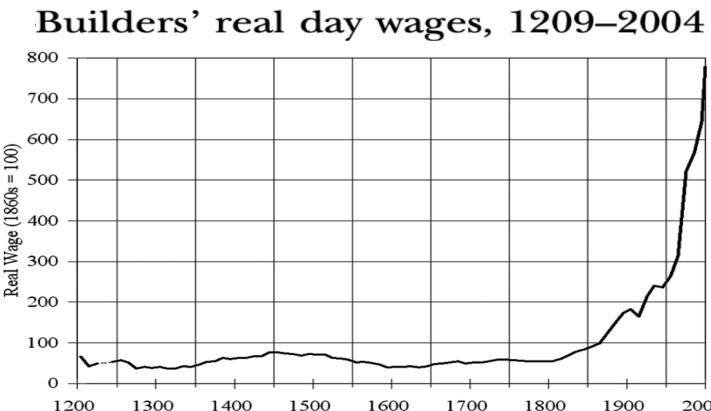
# Lecture: 1.3.1. Grand Narrative

## Five lecture components:

- The Grand Narrative
- Themes 1-3: History economic, wealth explosion, technological cornucopia
- Themes 4-6: Feminism, demography, inclusion
- Themes 7-9: Tyrannies, wealth gulfs, mismanagement
- Slouching Towards Utopia?

## Orienting yourself:

- When do I say the Long 20th Century really started?
- Why then?
- When do I say the Long 20th Century really ended?
- Why then?
- What was the typical human standard of living back in 1870?
- What is the typical human standard of living today?
- Is there a typical human standard of living today?
- Is the world today a utopia?
- Is greater San Francisco today a utopia?



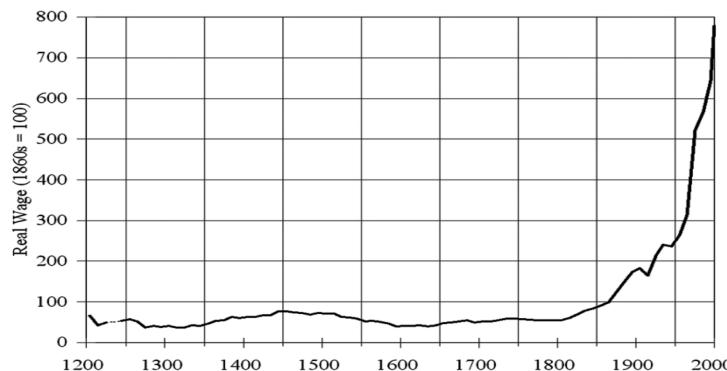
# Orientation

## Chronology:

- When do I say the Long 20th Century really started? **1870**
- Why then? **The third watershed—the third step-up in the global pace of economic growth—globalization, and the start of the American century**
- When do I say the Long 20th Century really ended? **2016**.
- Why then? **Three reasons: (1) end of the American century, slowdown in global north growth, failure of economic management.**

## Quantities:

- What was the typical human standard of living back in 1870? **Perhaps \$4/day—\$1300/year**
- What is the typical human standard of living today? **Perhaps \$35/day—\$12000/year**
- Is there a typical human standard of living today? **Maybe not: inequality is much greater than it was in 1870, and even more so in 1800. A global north of 800 million with a typical standard of living of \$50000/year—\$150/day; a global south of 6.8 billion with a typical standard of living of \$7000/year—\$20/day**
- Is the world today a utopia? **Definitely not...**
- Is greater San Francisco today a utopia? **What do you think?**



# Knowledge & Resources

## Why pre-1870 poverty?:

- Overwhelmingly: Malthusian factors
- Population outran means of subsistence produced by limited resources & slowly-growing technological knowledge
- Why was technological knowledge slowly growing?
  - Few heads?
  - Entrepreneurship directed toward exploitation?
  - Absence of routinization?
  - The industrial research lab and the modern corporation

Date	ideas Level H	Total Real World Income Y (billions)	Total Human Population L (millions)	Average Real Income per Capita y (per year)
-68000	0.20	\$0.12	0.10	\$1,200
-8000	1.00	\$3.0	2.5	\$1,200
-6000	1.25	\$6.3	7	\$900
-3000	1.84	\$13.5	15	\$900
-1000	3.35	\$45	50	\$900
0	6.18	\$153	170	\$900
800	8.22	\$270	300	\$900
1500	10.6	\$450	500	\$900
1770	15.9	\$825	750	\$1,100
1870	24.7	\$1,690	1300	\$1,300
2020	544	\$90,000	7600	\$11,842

Period	Rate of Population and Labor Force Growth n	Rate of Efficiency-of-Labor Growth g	Rate of Ideas-Stock Growth h
-68000 to -8000	0.005%	0.000%	0.003%
8000 to -6000	0.051%	-0.014%	0.011%
-6000 to -3000	0.025%	0.000%	0.013%
-3000 to -1000	0.060%	0.000%	0.030%
-1000 to 1	0.122%	0.000%	0.061%
1 to 800	0.071%	0.000%	0.035%
800 to 1500	0.073%	0.000%	0.036%
1500 to 1770	0.150%	0.074%	0.149%
1770 to 1870	0.550%	0.167%	0.442%
1870 to 2020	1.177%	1.473%	2.061%

# Rough Numbers

## Quantities:

- Probable fall in living standards with the coming of the agrarian age
- Typical agrarian age rate of ideas growth of 0.035%/year
- Watershed 1: the 1500 commercial revolution—quadrupling of ideas growth to 0.15%/year
- Watershed 2: the 1770 industrial revolution—tripling of ideas growth to 0.44%/year
- Watershed 3: the 1870 coming of modern economic growth—near-quintupling of ideas growth to 2.1%/year
- Only the last banishes the Malthusian Devil...

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# **Let's Recap: Why Wasn't the World Richer in 1870?**

**There was substantial technological progress between the end of agrarian stagnation in 1500 and 1870.**

- So why didn't these first and second modern watersheds make a big difference?
- Overwhelmingly, because of Malthusian pressures: population growth meant that average farm sizes in 1870 were but 2/5 of what they had been in 1500.

# Let's Recap: The Long 20th Century's Economic Revolution

## What was its principal source?

- Predominantly, the transformation and routinization of invention, via the creation of the industrial research labs to develop and the communities of engineering practice to understand and the corporations to deploy—these were the things that supercharged economic growth
- Secondarily, cheap ocean and rail transport that destroyed distance as a cost and brought economies all over the world cheek-by-jowl: this greatly amplified the division of labor, and prosperity depends primarily on a fine division of labor.
- Only tertiary, the existence of a market economy: rapid modern economic growth is not inevitable once you have a stable market economy with secure property rights. But it does help.
- And if I were leftier than I were, I would stress the ability to greatly ramp up the rate of exploitation, and so devote much more of society's production to investment and capital accumulation.

# **What Is the Average Global Rate of Economic Growth over the Long 20th Century?**

**What is the single number you should hold in your head?**

- A.0.15% per year
- B.1.5% per year.
- C.8% per year.
- D.2.1% per year
- E.None of the above.

# **Shadows...**

**How many people today are still living  
on less than \$2 a day?**

- A.70 million
- B.230 million
- C.700 million
- D.2.3 billion
- E.None of the above.

# Catch Our Breath...

- Ask a couple of questions?
- Make a couple of comments?
- Any more readings to recommend?

