



# Lecture: Inequality

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Slides: <<https://github.com/braddelong/public-files/blob/master/lecture-inequality.pptx>> <<https://github.com/braddelong/public-files/blob/master/lecture-inequality.pdf>>

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html: <<http://www.bradford-delong.com/2016/10/inequality-brown-university-janus-forum.html>>  
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14565 words

## I. Inequality at the Dawn of Civilization<sup>1</sup>

### A. Farmers Cannot Run from Thugs

**I**nequality has surely ruled the human world since at least shortly after the invention of agriculture. Once people began to farm, they become relatively stationary. This opened up the possibility of relatively dense populations.

And so society changes.

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<sup>1</sup> Brown University Janus Forum Lecture: Inequality: Is America Becoming a Two-Tiered Society? N. Gregory Mankiw and J. Bradford DeLong Faculty Club at Brown University :: 5:30 PM - 8:00 PM :: October 17, 2016 <<http://www.brown.edu/>> <<https://www.brown.edu/academics/political-theory-project/janus>> <<https://www.facebook.com/events/803302536473621/>>

First, there are much denser populations: hunter-gatherers appear to have a population density of perhaps 5 people per square mile.<sup>2</sup> This then brings larger social groups: bigger and then much bigger than the hundred-or-so maximum of the previous hunter gatherer era.

More important than density, perhaps, is the fact that agriculturalists cannot carry their resources away with them. Their wealth is in their land and the crops they are growing, rather than in their heads and in the tools they carry. Thus farmers cannot run away when thugs with spears show up and demand half their crop.

And, of course, once they have half your crop on which to live, the thugs-with-spears can *professionalize*.<sup>3</sup> They can spend time training with their spears, thus become professional rather than amateur practitioners of coercive violence, and so any form of resistance by farmers then becomes much more hazardous.

Farmers also found themselves confronted with another caste of human parasites: not so much thugs as grifters—those who claimed privileged access to the minds of the gods, and who would also demand to be fed out of the farmers' crops.

These grifters could indeed prove that they understood the mind of the gods. They would watch the stars. And so they could, with high probability predict when the last freeze had passed, or when the rains would begin, or when the first freeze would come. In this ability, at least, the grifters who claimed privileged access to the will of the gods were at least useful—or so I believe, given the number of days I stumble into the

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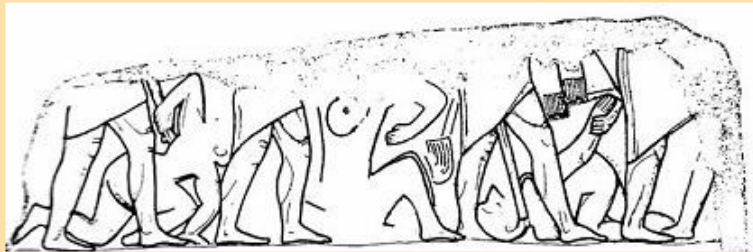
<sup>2</sup> Marcus J. Hamilton et al. (2007): Nonlinear scaling of space use in human hunter-gatherers <<http://www.pnas.org/content/104/11/4765.full.pdf>>

<sup>3</sup> Jerald Jack Starr (2013): Sargon's Victory Stele <<http://sumerianshakespeare.com/56801/>>

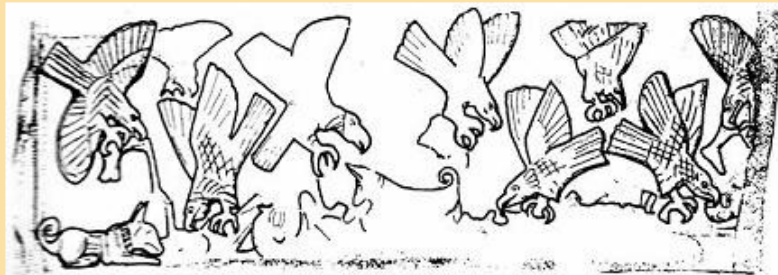
## Sargon of Akkad's Victory Stele



**Sargon leads the victory procession.** He carries a mace. The man behind him holds a parasol to shade Sargon from the sun and to symbolize his high rank. The other men carry battleaxes. The drawings on this page are by Lorenzo Nigro.



**Prisoners are bound and placed into neck stocks . . .**



**. . . while vultures and war dogs feed on the dead.** The vulture on the right carries off a human leg. The scene is a grim reminder to everyone that resistance to Sargon is futile.

Source: Sumerian Shakespeare: <http://sumerianshakespeare.com/56801/>

kitchen not knowing whether it is Tuesday or Wednesday.<sup>4</sup>

(The thugs with spears could also claim to be “useful”, in that they could say they spent much time protecting the farmers from *other* thugs with *other* spears.)

Thus we were off and running, with grossly unequal societies.

Note that having to provide half your crop to the thugs with spears and the grifters who claim to know the mind of the gods is in no sense “functional” for a human society. At least, it is in no sense “functional” from the perspective of those of us who take it for granted that the point of a human society is to achieve the utilitarian greatest good of the greatest number. In agrarian societies, this kind of inequality is not “productive” but rather “extractive”.

## **B. No Leaky Bucket**

**M**ore than a generation ago, the strongly egalitarian Brookings Institution economist Arthur Okun warned against too vigorous a pursuit of inequality. He wrote of a “leaky bucket” transferring income from rich to poor transferred less to the poor than it took from the rich, equalizing but impoverishing society, hence it shouldn't be pushed too far.<sup>5</sup> The “leaky bucket” of Arthur Okun remains a famous metaphor that shapes the discussion about inequality today.

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<sup>4</sup> William Calvin (1991): How the Shaman Stole the Moon: In Search of Ancient Prophet-Scientists from Stonehenge to the Grand Canyon <<http://amzn.to/2k7JSOB>>

<sup>5</sup> Arthur Okun (1975): Equality and Efficiency: The Big Tradeoff <<http://amzn.to/2jDb9p6>>

Whether or not and to what extent if it does apply to modern industrial societies, the leaky bucket of Arthur Okun does not apply to pre-industrial agrarian-age *extractive* inequality at all.

### **C. The Man Who Saw the Deep**

**H**ow pronounced was this agrarian age extractive inequality, relative to either what went on before the agrarian age or what goes on in our post-industrial societies today?

What happens when one thug with a spear meets another thug with a spear? It can get ugly. So sooner or later the thugs with spears organize themselves, with marked out and assigned territories. It still gets ugly among them. But it gets ugly less often. However, when it does get ugly it can get very ugly indeed: we have what we now call the social practice of "war".

Moreover, within the group of these expert practitioners of coercive violence—plus those who predict the actions of nature and the gods by watching the stars—there arises a problem: how they are going to distribute the crops that they have taken from the farmers at the point of the spear? Internal hierarchy develops among the elite. And, perhaps around the year -3000, these internal hierarchies begin coming to a very sharp point at the top.

We see it deep in the roots of human literature. The first piece of human literature that has survived to us and thus is accessible to us is a Mesopotamian story: *The Man Who Saw the Deep*—what we call the *Epic of Gilgamesh*.<sup>6</sup> Its protagonist is, well, Gilgamesh, here portrayed holding a lion cub. The epic describes Gilgamesh in his setting: king of the city of Uruk, in Mesopotamia. The statue shows how at least later generations

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<sup>6</sup> Wikipedia: The Epic of Gilgamesh <[https://en.wikipedia.org/wiki/Epic\\_of\\_Gilgamesh](https://en.wikipedia.org/wiki/Epic_of_Gilgamesh)>

# Gilgamesh



remembered Gilgamesh's physique: buff, swoll, mighty-thewed, and does his face look wise, and perhaps even fair? The lion cub looks remarkably placid—perhaps drugged, or perhaps acknowledging that Gilgamesh is even lord of lions.

It begins thus:

Surpassing all other kings, heroic in stature, brave scion of Uruk, wild bull on the rampage! Going at the fore he was the vanguard, going at the rear, one his comrades could trust!... Who is there can rival his kingly standing, and say like Gilgamesh, 'It is I am the king'? Gilgamesh was his name from the day he was born, two-thirds of him god and one third human....

The young men of Uruk he harries without warrant, Gilgamesh lets no son go free to his father. By day and by night his tyranny grows harsher, Gilgamesh, the guide of the teeming people! It is he who is shepherd of Uruk-the-Sheepfold, but Gilgamesh lets no daughter go free to her mother...

Inequality—gross inequality—is at the heart of the story.

Gilgamesh is the great and glorious king of Uruk. He is two-thirds god and one-third man. Yet the author of Gilgamesh here tells us that there is enormous tension in Uruk.

He dominates and oppresses the people of the city. Husbands, mothers, even warriors have to watch Gilgamesh sexually possess their wives, daughters, and brides-to-be. He disrupts the dance of sex and matrimony. Fathers no longer have their sons and mothers no longer have their daughters to aid them in their work, for Gilgamesh has taken them all and assigned them to serve him and accomplish his tasks. He forces the men to work on his construction projects and drill in his army.

How is Gilgamesh able to do this? He is, after all, only one man in an entire city—buff, swoll, mighty-thewed, perhaps even wise as he is. At one level, he is able to do this because he is at the top of an organized pyramid of thugs with spears who know how to use them and are willing to make a bloody example of anyone not sufficiently deferential. And he may not be able to do this for long: cf. the story of Dionysius of Syrakusa and the sword of Damokles.

But there is another level: people are telling and listening to stories—Gilgamesh is telling stories, the warriors and priests are telling and listening to stories, the farmers and craftsmen are listening to and perhaps telling stories—that say that the way things are, with Gilgamesh as king and tyrant, is the way things should be. For after all, "is Gilgamesh not the

shepherd of his people?" Is Gilgamesh not "magnificent and glorious"? Is Gilgamesh not only 1/3 man, but 2/3 god?

People seek to form mental models of reality in order to understand the world, and they vastly prefer mental models that make sense of the world, in terms of logical and appropriate cause-and-effect.

The people of Uruk are unhappy.

They do not, however, seek to overthrow their king. They do not, however, rise up, turn their pruning hooks into spears and their plowshares into swords, slaughter Gilgamesh and his warriors, and establish a utopian socialist egalitarian commune.

That would be a very dangerous and probably unsuccessful thing to attempt.

Gilgamesh is, after all, fit and worthy to be king, and rightfully king: he is, after all, two-thirds God and one-third man. And it is good to be the king. So they do not try themselves to overthrow Gilgamesh, or even ask the gods to strike Gilgamesh down.

However, they do ask for help. They appeal to an entity more powerful than Gilgamesh and beg for that entity to help them and fix the situation:

The women voiced their troubles to the goddesses.... "Gilgamesh lets no girl go free to her bridegroom".... The warrior's daughter, the young man's bride, to their complaint the goddesses paid heed...

So the goddesses and gods take counsel, and then go to the paramount lord of Uruk, Anu the god:

The gods of heaven, the lords of initiative, to the god Anu they spoke....:



A savage wild bull you have bred in Uruk-the-Sheepfold, he has no equal when his weapons are brandished. 'His companions are kept on their feet by his contests, the young men of Uruk he harries without warrant. Gilgamesh lets no son go free to his father, by day and by night his tyranny grows harsher. Yet he is the shepherd of Uruk-the-Sheepfold, Gilgamesh, the guide of the teeming people. Though he is their shepherd and their protector, powerful, pre-eminent, expert and mighty, Gilgamesh lets no girl go free to her bridegroom'...

The warrior's daughter, the young man's bride: to their complaint the god Anu paid heed...

Anu, father of the gods, decides to *distract* Gilgamesh: to give him something more interesting to do than force the young men to work and drill, and force the girls, daughters, and mothers of Uruk to be his servants and his sex objects. Anu decides to devise... *adventures* for Gilgamesh:

"Let them summon Aruru, the great one, she it was created them, mankind so numerous."... The goddess Aruru, she washed her hands, took a pinch of clay, threw it...

The gods improve the lot of the people in Uruk by giving Gilgamesh other things to do, so that he will leave the people of Uruk alone and not oppress them. So Aruru creates a friend—Enkidu—for Gilgamesh. Gilgamesh and Enkidu fight, and then they bond, and then they become best friends, and then they have adventures and go on quests. And our first male-bonding buddy story in literature is off and running.

By the end of the story Enkidu has died, Gilgamesh has learned about how humanity survived the great worldwide flood, a barmaid has given him lessons in Epicurean philosophy, the serpent has taken something immensely valuable away from humanity, and Gilgamesh has experienced personal growth: he is a much wiser—and much better—king.

Read it. It is a great story.

But Gilgamesh remains king: Uruk remains a polity of gross inequality.

## **II. Dimensions of Inequality**

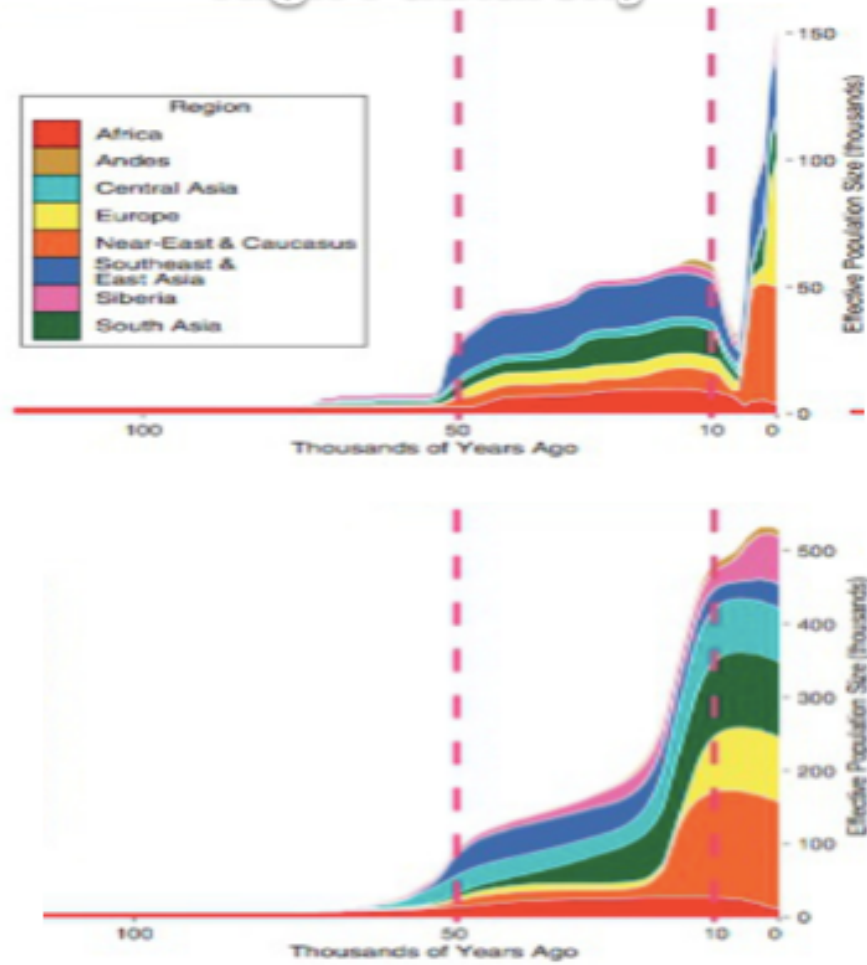
### **A. Economic vs. Status Inequality**

**W**hen economists think of inequality, they almost invariably think of it terms of incomes, spending, and prices—all as measured by the yardstick of money and prices, and thus by what goods and services the rich guy can consume or command the use of. An unequal society is one in which those at the bottom get to make use of a small share of society's resources. It is one in which the work they must do to gain access to that small amount and share is lengthy and burdensome.

A great deal of inequality, however, is not just work, income, spending, and prices. A great deal is simply things that you are not allowed to do, or are expected and required to do, by virtue of what we might as well call your status-group, your estate, your caste. Women. Minorities. Serfs. Slaves.

This is always present as a background in economic analysis. But this is usually much more than a background factor in human societies. I am not a great fan of those who try to distinguish wealth from freedom—power to command resources from autonomy—positive from negative liberty—in human societies. If you are locked in a cage, it matters a little to you whether you could buy a key if only you had the more money which you do not. So never take a distribution of wealth or income as in any sense a set of sufficient statistics for inequality.

# High Patriarchy



<https://logarithmichistory.wordpress.com/2015/09/27/the-patriarchal-age/>  
<http://genome.cshlp.org/content/early/2015/03/13/gr.186684.114.full.pdf>

## **B. Super-Patriarchy**

**I**, at least, I think that this can be seen most strongly and strikingly in the agrarian human societies that flourished between 5000 and 2000 BC. There is a very close and intimate connection in the agrarian age between gross inequality and high patriarchy. Agrarian age inequality is literally inscribed in our genes.

It is an elementary fact of our genetics that there is a small proportion of our genome—the mitochondrial DNA genome—that we inherit only from our mothers. Thus we can trace descent back through the exclusively female line, and by looking at the amount of mutations and genetic divergence in a human population today in that portion of the genome, determine the effective female population size of the human race back in the past all the way back to mitochondrial Eve: the woman who is the mother's mother's mother's... mother's mother's mother of us all.

And It is an elementary fact of our genetics that there is a small proportion of every male's genome—the y-chromosome genome—that we inherit only from our fathers. Thus we can trace descent of males back through the exclusively male line, and by looking at the amount of mutations and genetic divergence in a human population today in that portion of the genome, determine the effective male population size of the human race back in the past all the way back to y-chromosome Adam: the father who is our father's father's father's... father's father's father of us all.

When we do this, we find something going on between the years -5000 and -2000 according to our calendar.

Those who study the evolution of the genome see rough balance in the survival of mitochondrial and Y chromosomal lineages up to 5000 BC. They see rough balance in the survival of mitochondrial and Y chromosomal lineages since 2000 BC. But from 5000 BC to 2000 BC,

however, they see 15 female mitochondrial lineages survive for every single male Y chromosomal lineage that survives.

The effective female population size becomes much much much much larger than the effective male population size, and then they resume the rough equality that they had had before the year -5000 and since the year -2000. But in between, well, the overwhelming bulk of women are having daughters who have daughters... whose daughters' daughters' daughters are among us. A smaller percentage of men are. Only a small proportion of men breed, and then their sons breed and their sons breed, so that the chain is such that their sons'... son's sons are among us.

This would seem to mean that 5000 to 2000 BC saw substantial polygyny for a few men, and non-reproduction for others. It also means the inheritance of male reproductive advantage: that if your great-grandfather had the resources to have more than one wife, the odds were higher that you were at the top of the inequality pyramid and had the resources more than one wife as well. Patriarchal reproductive inequality was in that age both substantial and inherited.

This is polygyny: one man, many wives—and lots of men with no wives and little sexual access to women. This is the Biblical Patriarch Jacob: 13 children with two wives and two concubines. Jacob and Leah's children were Reuben, Simeon, Levi, Judah Issachar, Zebulun, and Dina; Jacob and Rachel's children were Joseph and Benjamin; Jacob and Zilpah's children were Gad and Asher, and Jacob and Bilhah's children were Dan and Naphtali. And somewhere in the neighborhood there were three men—unnamed—who were without wives, and without children. Leah, Rachel, Zilpah, and Bilhah's mitochondrial DNA lineages were passed down. The three nameless men's y-chromosome lineages were not: only Jacob's was.

Maintaining polygyny for a number of generations requires great social pressure and great societal inequality among men. It also requires a great

deal of subservience among women. Back in the age -5000 to -2000, women were, to a substantial degree, property: the property of their fathers, and then of those in the patriarchal polygynous network who gained control over them. And back in the age -5000 to -2000, a great many men were without resources, for the overwhelming majority of men would, if they had resources to deploy to attain any form of social power, would have chosen to use those resources to marry. And yet many of them could not do so.

This age of super-patriarchy stands out in our genetic record. The social structures and institutions to support it are not there before 5000 BC, and do not persist since 2000 BC.

What was human life and human inequality like back in this patriarchal age? What brought it on? What made it come to an end?

What was life like for women in those 3000 years?<sup>7</sup>

### **III. Gini Coefficients and Bad Philosophy**

#### **A. Understanding Gini Coefficients**

**A** parenthesis: when you listen to a discussion of inequality, you may hear lots of references to something called the "Gini Coefficient". A great deal of economists and sociologists studies of inequality presents its results in the form of "Gini coefficients".<sup>8</sup>

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<sup>7</sup> Doug Jones (2015): The Patriarchal Age <<https://logarithmichistory.wordpress.com/2015/09/27/the-patriarchal-age/>>; Monika Karmin et al. (2015): A Recent Bottleneck of Y Chromosome Diversity Coincides with a Global Change in Culture <<http://genome.cshlp.org/content/early/2015/03/13/gr.186684.114.full.pdf>>

<sup>8</sup> Wikipedia: Gini Coefficients <[https://en.wikipedia.org/wiki/Gini\\_coefficient](https://en.wikipedia.org/wiki/Gini_coefficient)>

I do not know why.

What is this Gini Coefficient?

The Gini coefficient is not a terribly intuitive measure. In fact, very few people have a sense of what it means. It is a number describing and summarizing a society's inequality—a number that I find I have a very hard time grasping, a hard time understanding what saying "this society's Gini is X" really means. It is not intuitive to me. So let me try to anchor it in a way to make it more familiar:

- If the bottom three quarters of the population were to get one quarter of the income, the top quarter to get the rest, and were income to be evenly distributed within the top quarter and the bottom three quarters, then the Gini coefficient would be 0.5.
- If the bottom two-thirds of the population were to get one-third of the income and the top third the rest, once again evenly distributed within the top third and the rest, then the Gini coefficient would be 0.33.

Suppose that we decide to be bad philosophers: suppose that we decide to think like early 19th century British utilitarian Jeremy Bentham.<sup>9</sup> Bentham believed that the obvious point of society was to maximize utility: to attain the greatest good of the greatest number. And he saw no reason why utility, or happiness, or well-being, should not with sufficient progress of a society be susceptible to objective quantitative measurement just as natural philosophers had figured out how to quantitatively measure something as subjective as heat and cold. Bentham further thought the people were pretty good judges of their own utility and were highly motivated to make choices that increased it. And it seemed much more than reasonable to Bentham to believe in diminishing marginal utility: that

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<sup>9</sup> Wikipedia: Jeremy Bentham <[https://en.wikipedia.org/wiki/Jeremy\\_Bentham](https://en.wikipedia.org/wiki/Jeremy_Bentham)>

each doubling of the resources you could command to devote to increasing your utility would add the same amount to your well-being.

If all that were to be the case, then a move of society from a Gini of 0.5 to 0.33 would have the same effect on total societal well-being—provide the same increment to the social welfare function—as a 30% boost to everyone's income. By such a yardstick, a reduction in the Gini from 0.5 to 0.33 would be an advance in societal well-being and an increase from 0.33 to 0.5 a retardation equivalent to what we get in an average 15 years of economic growth, at the pace economic growth has proceeded since 1870.

That means that shifts in inequality of the type we have seen recently are substantial. They are big deals in this particular assessment of how well our society is doing. Shifts in inequality are, however, a much smaller deal than the extraordinary rising tide of economic growth over the past 150 years which has given us 10 successive such increments. But they are not something that you want to ignore—even if you put to one side the consequences of the distribution of wealth for politics and sociology.

A few cautions: The Gini is income, not status or power: the 4 million slaves in the United States in 1860 would have objected most strongly to claims that the United States was then no more unequal than Britain. Yet that is what the Gini coefficient calculated from the income distribution shows.

## **B. The Utility of Bad Philosophy**

**P**hilosophers, of course, if there are any in the audience here, will have winced by now. Perhaps they will have done more than winced—although I did not see any philosophers rise and run, screaming, from the room.



I have drawn strong conclusions about how high and important a priority reducing inequality should be for making a good society by being a bad philosopher. Philosophers would presumably say that I should first be a good philosopher. They would say that only after having reached good philosophical conclusions should I then use those conclusions as a springboard to derive “oughts” for political economy.

The problem, of course, is that there is no agreement on what the good philosophical conclusions are.

I maintain that my bad philosophy is a very useful middle ground. I draw conclusions for society from it. As you decide on what your view of good philosophy is, you move from my bad philosophy to yours, and that movement will carry with it a move of your political economy conclusions from the baseline I have established to those that you will think best. You will start with my conclusions, and adjust them in light of the difference between my bad and your good moral philosophy. My bad philosophy thus provides you with a convenient basecamp from which you—with your good philosophy—can begin your climb of the mountain of truth.

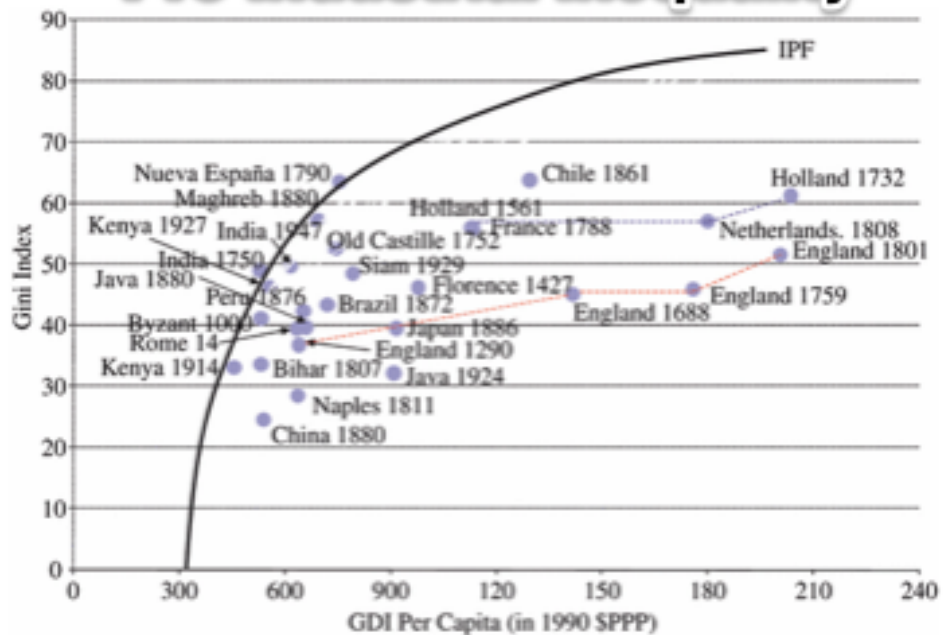
## **IV. Pre-Industrial Extractive Inequality**

### **A. Inequality Pressure**

**T**here is another dimension to inequality, in addition to what we see as the distribution of income and wealth on the one hand and the effects of caste and status group on the other.

This third dimension is: how is the income extracted? How much social pressure—and what kind—do we see to actually transfer income from those who work to those who eat? How nasty is the stick used to beat compliance out of the farmers who must supply the thugs-with-spears and the grifters-with-astrolabes with part of their crop? Branko Milanovic,

# Pre-Industrial Inequality



Branko Milanovic, Peter Lindert, and Jeffrey Williamson (2010): Pre-Industrial Inequality <<http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2010.02403.x/full>>

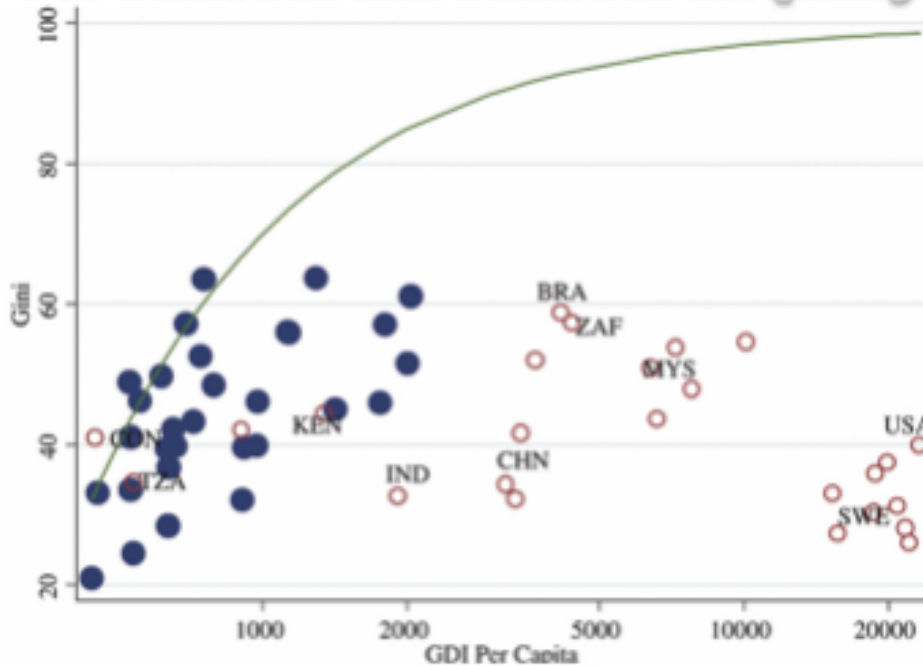
Peter Lindert, and Jeffrey Williamson have estimated some numbers and drawn some graphs.<sup>10</sup>

Back in the agrarian age—that is, from 8000 B.C.E. to 1750 or so—it looks as though societies were by and large about as an equal as they could possibly be.

Let me explain:

<sup>10</sup> Branko Milanovic, Peter Lindert, and Jeffrey Williamson (2010): Pre-Industrial Inequality <<http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2010.02403.x/full>>

## Pre-Industrial and Industrial Inequality



Branko Milanovic, Peter Lindert, and Jeffrey Williamson  
(2010): Pre-Industrial Inequality <<http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2010.02403.x/full>>

### B. Near-Malthusian Societies

An agrarian age society will almost inevitably be a poor society. Technological progress is slow. Human fecundity is great. In the absence of reliable artificial birth control and in the presence of sufficient resources, human populations tend to at least double in every half century. Rigid biosociological tyranny can slow the rate of population increase. Fathers who refuse to let daughters marry until their potential husbands are well-established, uncles who refuse to let nephews marry until the lineage is more prosperous, large scale female infanticide, priests who

convince people that making love outside of marriage ensures their damnation—we all know the drill here. But, eventually, in an agrarian age society, population will rise to reach a rough and stable equilibrium proportion to slowly growing technology.

What will be true at the rough and stable equilibrium?

Women will be so skinny that they will be on the edge of failing to reliably ovulate. Children will be so malnourished that their compromised immune systems will leave them easy prey to the common cold. A Malthusian catastrophe. Life, for the bulk of the population, will be nasty brutish and short.

In such a society, in which paying higher taxes or higher rents or higher tithes may indeed mean that your children will die, extracting more of your wealth from you too steep in the inequality pyramid is not an easy thing for an elite comprised of thugs with swords and grifters with fancy sacred headdresses to accomplish. People do not want their children to die—even if in so doing the “decrease the surplus population”.

Thus inequality in poor agrarian age economies cannot have been too great. Our societies have much more headroom, and can sustain much more inequality than they could.

### **C. Nearly as Much Inequality as Possible**

**A**nd yet agrarian age economies looked at have been on average about 80% as unequal as possible.

Pre-industrial economies were not that much more unequal than modern economies. But the pressure to extract resources from the productive class for the benefit of the upper class must have been much stronger in a sociological and political sense than ours for that to be accomplished. And

so our modern societies are, typically, as unequal or more unequal than agrarian age societies.

Should this surprise us? Our rich today have enormous opportunities to spend their wealth on things that please and delight them. But back in the old days—well, consider Gilgamesh. 2/3 god and 1/3 man. Magnificent and glorious shepherd of his people. Yet his wealth could be used pretty much to eat meat, drink beer, ensure that the wool he wore was made soft. For him to even have cedarwood planks to use in construction for his royal apartments required a major military expedition, and the slaying of a monster.

Thus they must have been societies characterized not by much greater inequality than ours, but by much greater domination.

But is this valuing income and valuing the amount of resources people consume the right way to look at it? The poor were under awful a lot of societal pressure. The poor were, after all, the producers: the farmers and the craftsman. Those who extracted surplus from them had no immediate place in the process of production from which they could divert the product. It was not that the poor worked for the rich on materials provided by the rich that the rich then sold before paying wages. It was that the farmers and the craftsmen did the work, by themselves, on their farms or in their shops.

The thugs-with-spears then had to tax it, or collect it in rent.

To get people to give up enough of their crop when they know that if they do so they will be hungry all the time—that is difficult.

To get people to give up enough of their crop when they know that if they do their children will be malnourished and crying all the time—that is difficult.

Counting and comparing commodity values when some of the people from whom surplus is being extracted are at the margin of subsistence is what we do. But consider that the poor back then had their minds concentrated on how awful it would be for them to allow extraction without attempting every expedient to prevent it. The societal power gradient is a separate thing from the economic gradient, and may be a different thing. So simply counting and valuing commodities may just be the wrong thing to do if we want to understand what agrarian age inequality in near-subsistence poor cultures really meant.

And, note, once again, here we are seeing economic inequality measured via income and consumption. These numbers do not see the various forms of status group inequality: women, slaves, subordinate castes, and all the other things that drive a wedge between the resources disposed by or for you and your well-being. American slaves in the cotton fields back before the Civil War had a very high calorie high-protein high-fat high taste diet that the overwhelming majority of people in the preindustrial world would have greatly envied—and this in an age in which food consumption was at least two thirds of your standard of living.

But were American slaves in the cotton fields under the lash envied, and “rich”? No.

## **V. Shifts in North Atlantic Inequality since 1725**

### **A. The Ideologues of Inequality**

**N**ow let us move on from the agrarian age to the modern world, the world that we in the North Atlantic began to live in in 1725 or so. And let us focus on the United States.

Starting in 1725 or so we begin to see, for the first time, claims that inequality is actually functional, and makes some sense for society as a whole. We may have seen this once or twice before—Aristotle’s justification of slavery for example.<sup>11</sup> But that the industrious need to be properly incentivized to work hard by the prospect of the coming rich and this becoming rich redounds to the benefit of society as a whole—that is something we first see in full flower in the 18th century.

Probably the reason is that it only becomes a question in the 18th century. Before the 18th century there were not enough poor people who could read for inequality to need justification. There were certainly justifications for why my group should be on the top of the socio-economic pyramid. But needing to justify inequality as a whole on the basis of some idea that it was good for everyone? Aristotle, and maybe Shakespeare.<sup>12</sup> But very few others.

We do, however, see this ideological line—that my very large share of society’s income and wealth is actually good for you—in the eighteenth century. And this ideological line has continued, uninterrupted, ever since.

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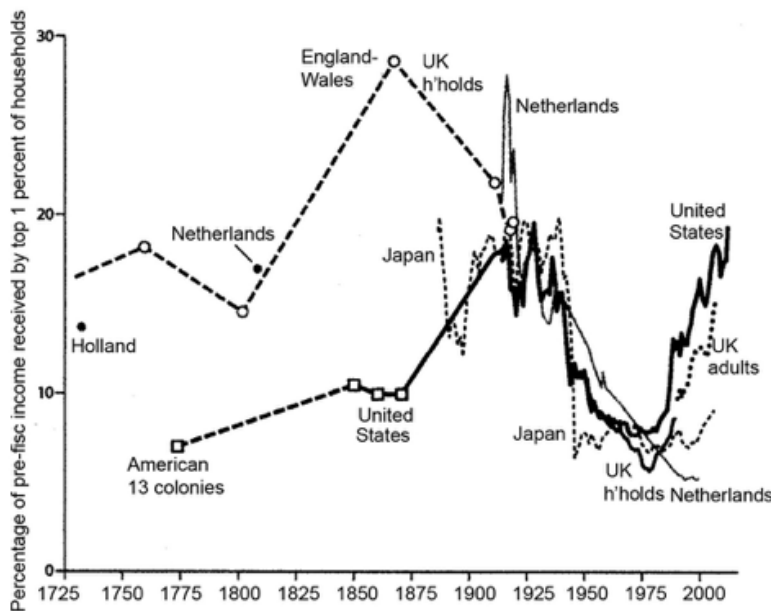
<sup>11</sup> Aristotle (340 BC): Politics <<http://www.perseus.tufts.edu/hopper/text?doc=Aristot.%20Pol.%201.1253b&lang=original>>: “We must next consider... whether it is advantageous and just for anyone to be a slave.... It is not difficult either to discern the answer by theory or to learn it empirically. Authority and subordination are conditions not only inevitable but also expedient; in some cases things are marked out from the moment of birth to rule or to be ruled...”

<sup>12</sup> William Shakespeare (1602): Troilus and Cressida <[http://shakespeare.mit.edu/troilus\\_cressida/index.html](http://shakespeare.mit.edu/troilus_cressida/index.html)>: Ulysses: “How could communities,/Degrees in schools and brotherhoods in cities,/Peaceful commerce from dividable shores,/The primogenitive and due of birth,/Prerogative of age, crowns, sceptres, laurels,/But by degree, stand in authentic place?/Take but degree away, untune that string,/And, hark, what discord follows!”

## B. New vs. Old-World Inequality

The latest historical inequality numbers—even more recent than those of Thomas Piketty—come from Peter Lindert and Jeffrey Williamson.<sup>13</sup> Here we see their best estimates of the income share of the richest 1% since the eighteenth century in Britain, in the Netherlands, in America, and—since the late nineteenth century—in Japan.

**Figure 3** Income share received by the top 1%, four countries over two centuries



They tell us that America in the 1600s and 1700s was a relatively equal place (for non-slaves) (and for non-women) (and for non-Indians), as far as pre-industrial and early industrial economies were concerned. In America the top 1% had 8-10 times the average income, rather than the

<sup>13</sup> Peter Lindert and Jeffrey Williamson (2016): *Unequal Gains: American Growth and Inequality since 1700* (Princeton: Princeton University Press: 0691170495) <<http://amzn.to/2mexyP2>>



15-30 times average income found in northwest Europe. Today in the U.S., the top 1%—roughly those households with incomes more than \$500K/year—receive (I don't want to say "earn") 20 times the average.

Of course all of this is for white males, as pretty much the only people who fully counted. Slaves were unequal. Women were unequal. Amerindians—if they had survived the plagues and the wars and the forced migrations—were unequal. Even among white men, non-slaveholders in the slave south had very little societal power: If they ran their own farms, they had to sell their produce into a market in which slave-grown corn and slave-raised pigs were determining the prices that they could get. If they sought to work for others, they had to sell their labor into a market in which their potential employers' competitors would be using and driving their slaves with the whip, and thus pushing down the wages that their own employers could afford to pay.

Note, however, that the top 1% are overwhelmingly 40 to 60 years old. A significant part—maybe 4%-points?—of the greater income share of the top 1% is simply the age gradient of income. My household dances between the top 1% and the top 2% of the American income distribution. But in 1984 we were at the 25%-ile of the income distribution, living on \$5,000 in a studio apartment in Somerville, MA, across the street from a junkyard. Think of the top 1% in colonial America (of male, white, non-Amerindians) as having not 8-10 but 4-6 times average income—and figure their counterparts in the Old World as then having 11-26 times average.

And also note that, once again, this is income, not status and caste.

It is, throughout human history, very important not to lose sight of status and caste.

Simple income accounts tend to record the United States on the eve of the Civil War as an extraordinarily equal society with its top 1% white non-Amerindian guys having 4-6 times the lifetime income of the average white, male, non-Amerindian.

But there were four million slaves among the 30 million inhabitants of the U.S. in 1860. They had the strongest possible objections to that claim that the U.S. was then significantly less unequal than Britain.

From their perspective—and, I would hope, from ours—the fact that the richest white male non-Amerindian had only 5 rather than the then-European 25 times the lifetime income of the average white male non-Amerindian is not the most important feature of American inequality on the eve of the Civil War. The most important fact is, as Abraham Lincoln said in 1858 at the end of his speech at Ottawa, IL.<sup>14</sup> He was softening his words in order to appeal to the non-abolitionist white male electorate of Illinois. And he said that even though:

I have no purpose to introduce political and social equality between the white and the black races.... Inasmuch as it becomes a necessity that there must be a difference, I, as well as Judge Douglas, am in favor of the race to which I belong having the superior position. I have never said anything to the contrary...

Nevertheless:

I hold that, notwithstanding all this, there is no reason in the world why the negro is not entitled to all the natural rights enumerated in the Declaration of Independence, the right to life, liberty, and the pursuit of happiness. [Loud cheers.] I hold that he is as much entitled to these as the white man. I agree with Judge Douglas he is not my equal in many respects—certainly not in color, perhaps not in moral or intellectual endowment. But in the right to eat the bread, without the leave of

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<sup>14</sup> Abraham Lincoln (1858): Speech at Ottawa, IL <[http://mason.gmu.edu/~zschrag/hist120spring05/lincoln\\_ottawa.htm](http://mason.gmu.edu/~zschrag/hist120spring05/lincoln_ottawa.htm)>

anybody else, which his own hand earns, he is my equal and the equal of Judge Douglas, and the equal of every living man.

No. The Pre-Civil War United States was not a low inequality society. The coming of emancipation in 1863 and 1865 was a huge thing for economic and social equality. The coming of feminism, even early feminism, was a substantial thing for social equality if not for economic.

Pre-industrial northwest Europe, by contrast, was a slavery-free but an income-inequality abundant society. The top 1% (of males) at any point in time had 15-20 times the income of the average—figure 10-15 times the lifetime inequality. In both the Netherlands and Britain, figure that at any point in time from 1860 to 1930 the top 1% had incomes 20-30 times the average.

### C. Inequality Waves

Here we can clearly see the eras of American history separating into three great inequality waves:

1. **The First Gilded Age:** The first Gilded Age: rising inequality in the U.S., slightly falling in Europe.
2. **The Age of Social Democracy:** The age of social democracy, the Great Compression—in these data coming at the start of World War II—and then the 40 years of the-social democratic middle-class society.
3. **The Second Gilded Age:** We are now in a second Gilded Age: the shift to which Began with Ronald Reagan's inauguration. It has seen our attainment today of previously unseen levels of American inequality <<http://voxeu.org/article/american-growth-and-inequality-1700>>.

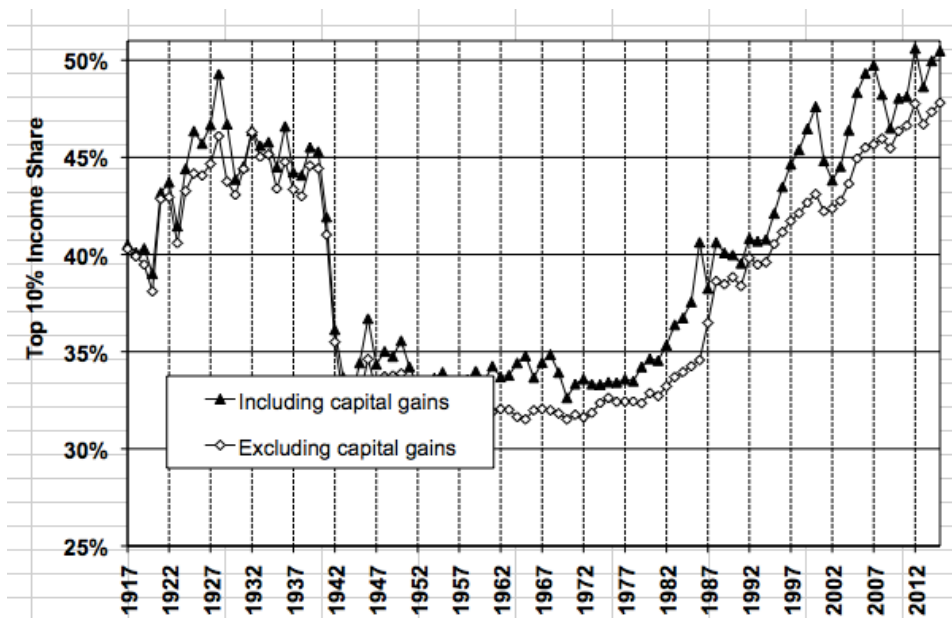
Note that in the later stages of the social-democratic era and throughout the coming of the Second Gilded Age, societal and economic equality has been increasing substantially along the dimensions of race and gender. Women make a lot more today than they did in the 1960s, and have much greater job opportunities. The gap at any particular income percentile between native-born whites on the one hand and African-Americans and Hispanic-Americans on the other has also shrunk substantially. It is the income percentiles, both within groups and for the country as a whole, that have pulled themselves much further apart.

#### **D. Mobility: Within a Generation, and Between Generations**

The “tenth” are not a constant group: roughly speaking, a quarter of any population will spend at least two years in the top tenth. These annual income numbers are not the income numbers we would really want to have for studying inequality. We have to correct inequality at any point in time for income mobility over the course of people's lifetimes. We would want inequality in life chances beforehand and in life outcomes afterwards, looking over lifespans as a whole.

And we are, presumably, much more worried about inequality that persists across generations—inequality by which not just the original money-getter but his (overwhelmingly his) descendants and inlaws are filthy rich down the generations. Few make, but some do, the claim that one has a nature right to buy inequality? Most think that property is in some sense and to some degree a social trust.

We do know that social and economic mobility within groups has fallen considerably since the 1960s, as well as the income gradient steepening massively.



**FIGURE 1**  
The Top Decile Income Share, 1917-2015

## VI. Slices at the Top

### A. The Top Tenth

Here we see the income shares of the top tenth of Americans. These are taxpaying household units, as calculated by Thomas Piketty and Emmanuel Saez from United States Internal Revenue Service records. Now the top 10th is not a constant group: over their lives a quarter of people will spend at least two years in the top 10th. My wife and I did not hit the top 10th of household incomes until we were 28—but we have not been out of it since, and do not expect to be out of the top 10th as far as incomes are concerned until we hit our 70s, and then if we do fall out of the top 10th it will probably be because we have delayed realization of our capital gains on our assets.

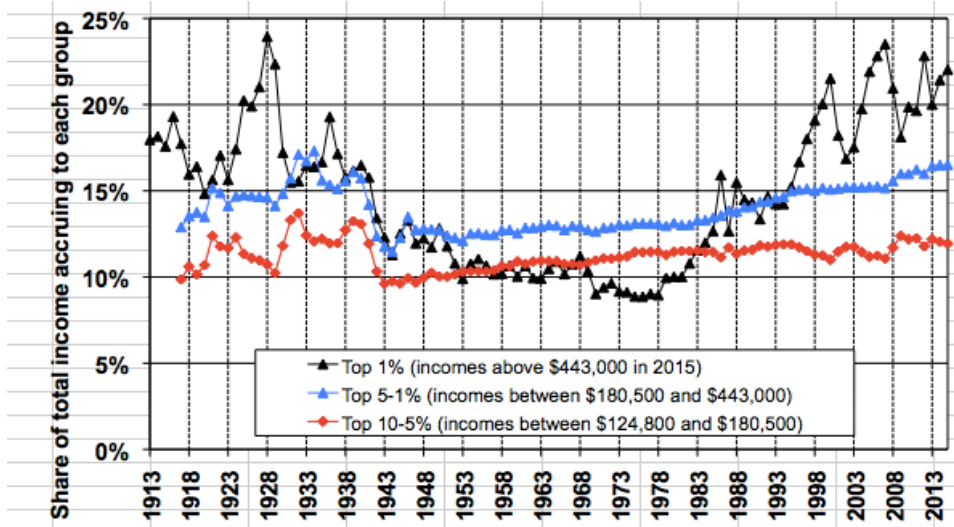


FIGURE 2

Decomposing the Top Decile US Income Share into 3 Groups, 1913-2015

## B. Dividing the Top Tenth

Here we see, in the Piketty-Saez dataset, the division of the top 10th into three groups: the top 1%, from the 1st to the 5th percentile, and from the 5th to the 10th percentile.

There is very little action in the relative income share of the group between percentiles 5 and 10—what we might as well call our upper-middle-class. They tend to have gotten about 12% of income throughout the years since the end of World War I. That is about 2.4 times the average. Big movements in inequality have neither improved nor lessened their relative economic status and economic societal power over the past hundred years.

There is a little more action in what we might call the lower-upper-class: the people from percentile 1 to percentile 5. They received 15% of income—about 3.8 times average—back before World War II and they receive

about 15 times today. They lost about 1/6 of their relative income position during the social democratic era.

The action within the top 10% is almost all in the top 1%: our upper class. Today the upper class receives about 22% of national income: a potential standard of living and a level of economic societal power 22 times the average. Back in the social democratic era they received only 10% of national income. And back before World War II, back in the First Gilded Age, they appear to have received about 16% of national income—3/4 of their current share—save in the high boom and then bubble years of the Roaring 20s.

For our upper class of the top 1%, the years since the neoliberal era started, since the Second Gilded Age began with Ronald Reagan's inauguration, have been extraordinary years. Their relative and their absolute incomes and thus their societal power and their ability to command nature have grown at rates previously unprecedented for any upper class, anytime, any where. No wonder that you sometimes hear people talk about booms in the past 40 years! But that is not the average or of the typical experience.

One way to conceptualize what has happened in the Second Gilded Age is to note that the rest of us used to pay 10% for the privilege of being bossed around by the top 1%, who did indeed provide us with services, managerial and also technical and professional expertise-based, that the market has always valued very highly. Back then we paid 10%. Now we pay 22%. The natural questions to ask are then: Are we now getting our money's worth? Were we back then getting a major bargain by exploiting our rich?

### C. The Overclass

And now we come to our overclass: the top 0.01%. These are 15,000 households in the United States of America. Their incomes average 60 million a year. Today, we pay five times as much to the overclass for them to perform the services for society that they do. What do the rest of us get in return? And how is it that it is this category of income that has been so greatly amplified in the Second Gilded age: the overclass share is now 2/3 greater than it was even back in the first Gilded Age.

## The Overclass

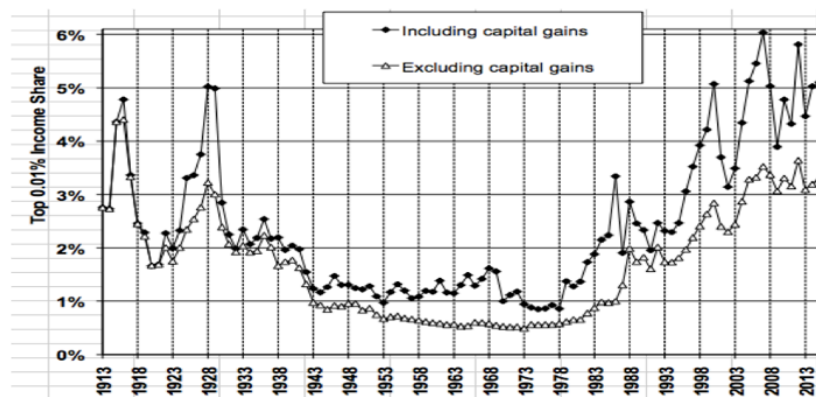


FIGURE 3  
The Top 0.01% Income Share, 1913-2015

- And the top 0.01%? We pay 5x as great a share of income now as in the 1970s for whatever they do. 15K households. \$750B/year. \$60M/year each...

5% of national income for 0.01% of the population means that these 15,000 households collectively have 500 times average income. Back in 1970 their counterparts had only 100 times average income. What has happened to our market economy and our system of property ownership to generate this change?



## VII. Why the Rise in Inequality?

There have, at least so far, been six important sources and causes of rising inequality in the Second Gilded Age. And there are three things that are often blamed for rising inequality that are simply not so.

The six factors that matter are:

1. The race between education and technology, which education has lost over the past 40 years.
2. The rise of a dissipative sector: finance. It consumes a huge amount of national income, yet it is hard to see what services it provides us that its much cheaper predecessor sector two generations ago did.
3. The rise of healthcare as a dissipative sector as well. Everyone believes we get enormous value from our health care sector. The problem is that our peer nations get the same value, or better value, from a health care sector that costs them one-third as much.
4. The collapse of worker bargaining power with the decline of the union movement
5. A low pressure high unemployment economy has been typical of the past 40 years.
6. Changes in technology have created more winner-take-all markets, in which those who have or are thought to have special skills and expertise profit mightily.

The three factors that do not matter are:

1. "Bad trade deals".
2. Low-education immigration—save for the effects of low-skill immigration on earlier waves of immigrants still not fully proficient in English, with whom they do compete and whose wages they push down. But otherwise? Low-skill and low-education immigrants take jobs for which English proficiency is not a requirement, and native-

born who would have taken those jobs otherwise find equivalently paid jobs for which English proficiency is a requirement.

3. Affirmative action—often blamed, but simply not a thing.

## **A. The Race Between Education and Technology**

**T**he first important source of rising inequality is the race between education and technology.

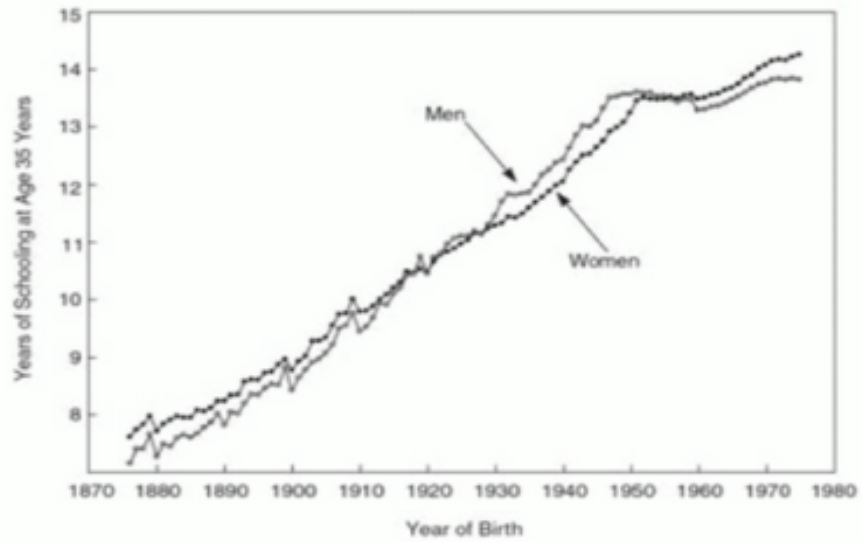
Starting in 1970, you see, education begin to lose in its race with technology. That was when America begin charging for public colleges.

This was initially a good government move: college graduates are going to be rich, and making them pay something seemed a progressive reform that took pressure off of state budgets and promised to make America a less unequal and more fair place.

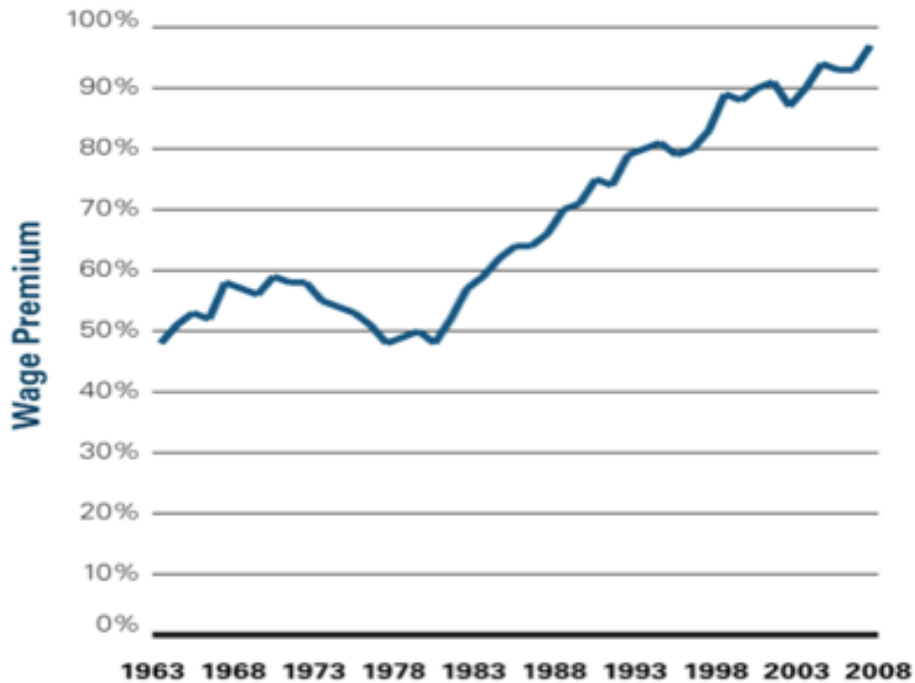
But it had unanticipated consequences.

As college became expensive, lots of people who ought to have gone to college did not. They feared the student loan burdens that they were taking on. They did not trust those who promised them that with college they could get a high-paying job that would easily allow them to pay off the loans. The shift to a low pressure economy with relatively high unemployment reinforced that unwillingness to go to college—even to relatively cheap public universities—on the part of those whose parents were not rich.

Thus we lost the race between education and technology. The skill requirements that technology imposed on the labor force kept growing. But the supply of workers did not keep pace. The growth rate of the number of workers who had a high level of formal education slowed way down. As a result, supply and demand pushed the wages of highly



*Figure 1.5. Years of Schooling by Birth Cohorts, U.S. Native-Born, by Sex: 1876 to 1975. This figure plots the mean years of completed schooling for U.S. native-born residents by birth cohort and sex, adjusted to age 35 using the approach described in the notes to Figure 1.4. Sources: 1940 to 2000 IPUMS.*



educated workers way up, and pushed the wages of workers who did not have get much education way down.

We could fix this with a commitment to offering free public college education. That would rebalance young people's life choices. But that would require political will. And inasmuch as the problem has taken generations to grow, it would take such a policy change generations to reverse it.

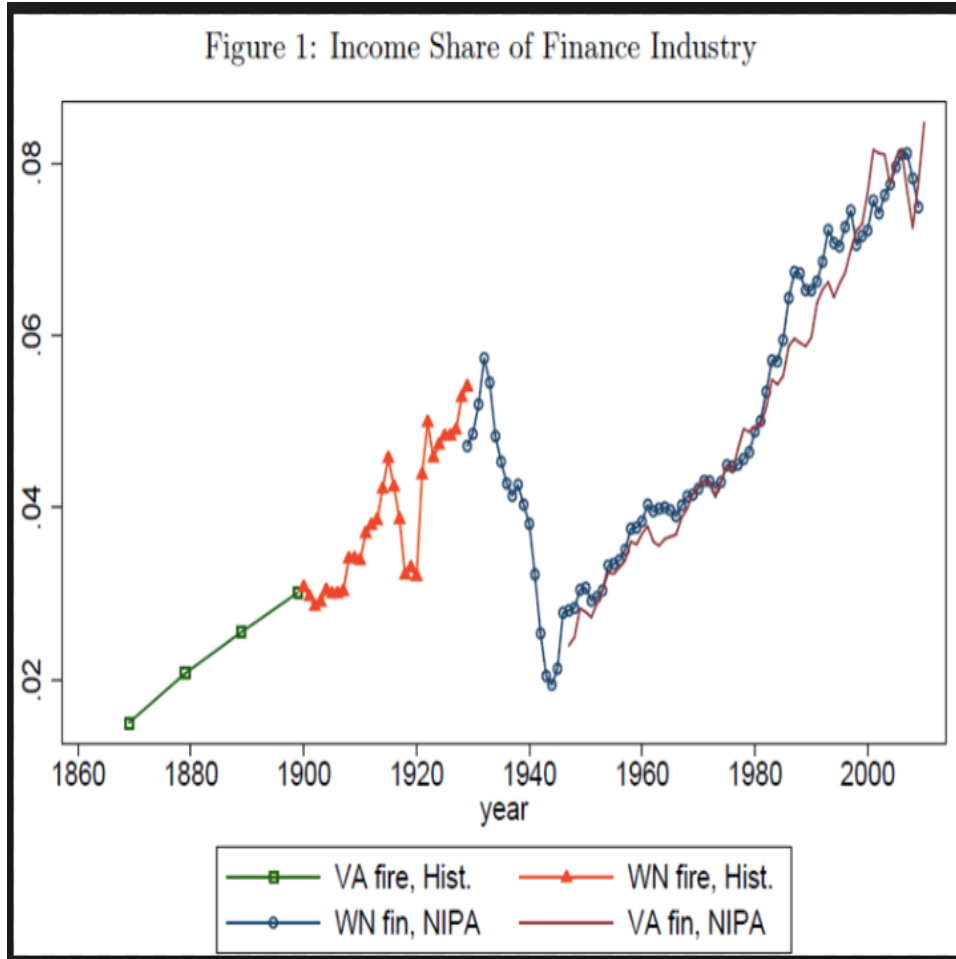
## **B. Dissipative Sectors: Finance**

**A** second source of rising inequality is the rise of American finance as a dissipative sector.

What do I mean by a "dissipative sector"? I mean a sector that collects huge rents off of the rest of the economy, and then distribute them to its workers in an extremely unequal way.

Back in the 1960s, American finance absorbed 3% of national income. In return for that 3%, it (1) greased all of our transactions as we bought and sold; (2) allowed us to invest for the future in the companies and real estate trusts of America; (3) tried to discover via market prices the values of investing in the future and then to transmit those values to the real economy, so savers and businesses could make their savings and investment decisions rationally, thus peering through the veil of time and ignorance; and (4) providing a degree of monitoring of corporate executives—executives thought to be performing poorly would see the prices of the stocks of the companies they ran fall, and then the scent of profit would trigger a proxy fight or an acquisition to try to get a more competent and more efficient management in place.

Today, however, we pay not 3% but 9% of national income for American finance.



Does it perform any of its four functions better than it did half a century ago? I see no evidence that it does—and I have looked, hard.

Moreover, the distribution of income from finance is much much more steeply peaked than it was in the 1960s: the coming of the Second Gilded Age has brought large scale financial superincomes with it.

Both parts of this are a puzzle: both the rise in the finance share of national income from 3% to 9%, and the increasing peakedness of the distribution of income within finance. Finance is much more competitive now than it was back in the 1960s. People pay financiers voluntarily. And yet I cannot help but feel that finance is extracting 6% of national income from the economy as a whole and distributing it to the overclass and to the upper class as some weird form of behavioral and informational economic rent.

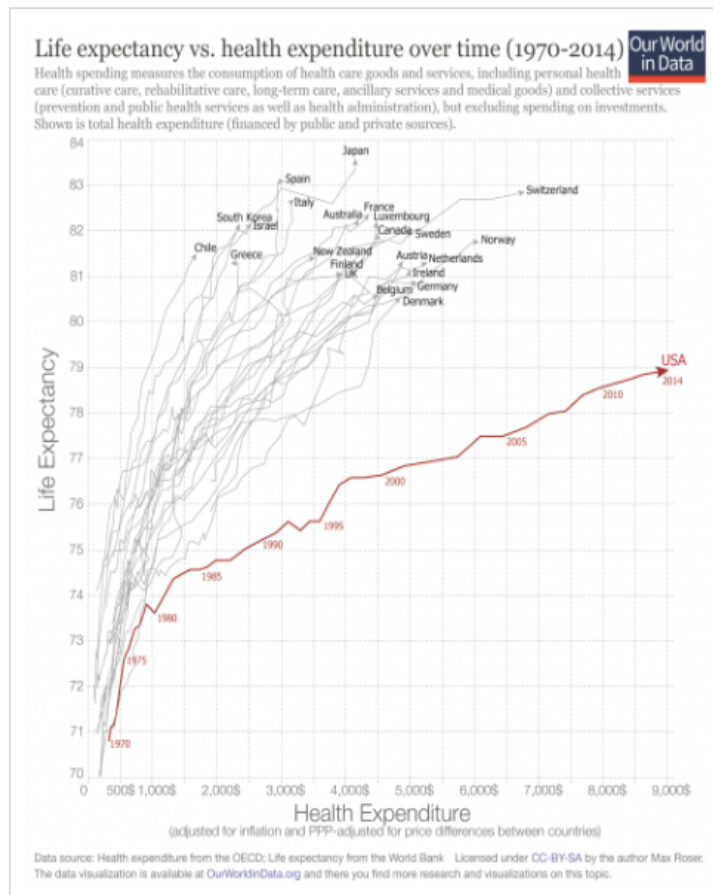
### **C. Dissipative Sectors: Healthcare Financing**

**U**.S. health care financing becomes dysfunctional starting with the Reagan administration, for a number of reasons that I do not have time to go into.

There were attempts at reform. The 1993 HilaryCare effort was blocked by Republicans: at the last moment Republican Senate minority leader and Kansas Senator Bob Dole decided he would rather go into full opposition to Bill Clinton to prepare to run for president in 1996 rather than have a substantial legislative accomplishment as the capstone to his Senate career. Then, after 17 wasted years, during which healthcare financing became increasingly dysfunctional, the Democrats passed Republican leader Mitt Romney's healthcare plan—and the Republicans then universally denounced it as the work of the devil, and set about trying to kneecap what had been their own plan. Even crippled, Obamacare did a great deal: it bent the rising cost curve of healthcare spending to a considerable degree, and significantly improved health coverage and access for Americans. But while it kept America's relative health care situation from getting worse, it did not repair the damage.

The result is our situation today. Elsewhere in the developed world, doctors are well-paid—not superpaid, as are especially our specialists. Elsewhere in the developed world, the sick are treated—not sent home for

## 2 Life expectancy vs. health expenditure over time, 1970-2014



a check for insurance approval, and then told that their care has been denied by insurance. Thus as a result our care is both uniquely expensive and uniquely wasteful: huge expenditures on the rich, inadequate care for the poor sick. And our employer-sponsored insurance system guarantees that many of the sick will be poor

Bottom line: WE SPEND THREE TIMES AS MUCH ON HEALTH CARE AS DO OUR PEER NATIONS, AND WE GET WORSE RESULTS.

The distribution of income within the health care sector is also steeply peaked (although not as steeply peaked as in finance). Perhaps 5% of national income is dissipated in health care: an overpayment relative to what our peer nations accomplish, that is then transferred straight to the pockets of our upper class—although not, save for some pharmaceutical hospital chain, and other health care executives, to the overclass.

#### **D. Collapse of Worker Bargaining Power**

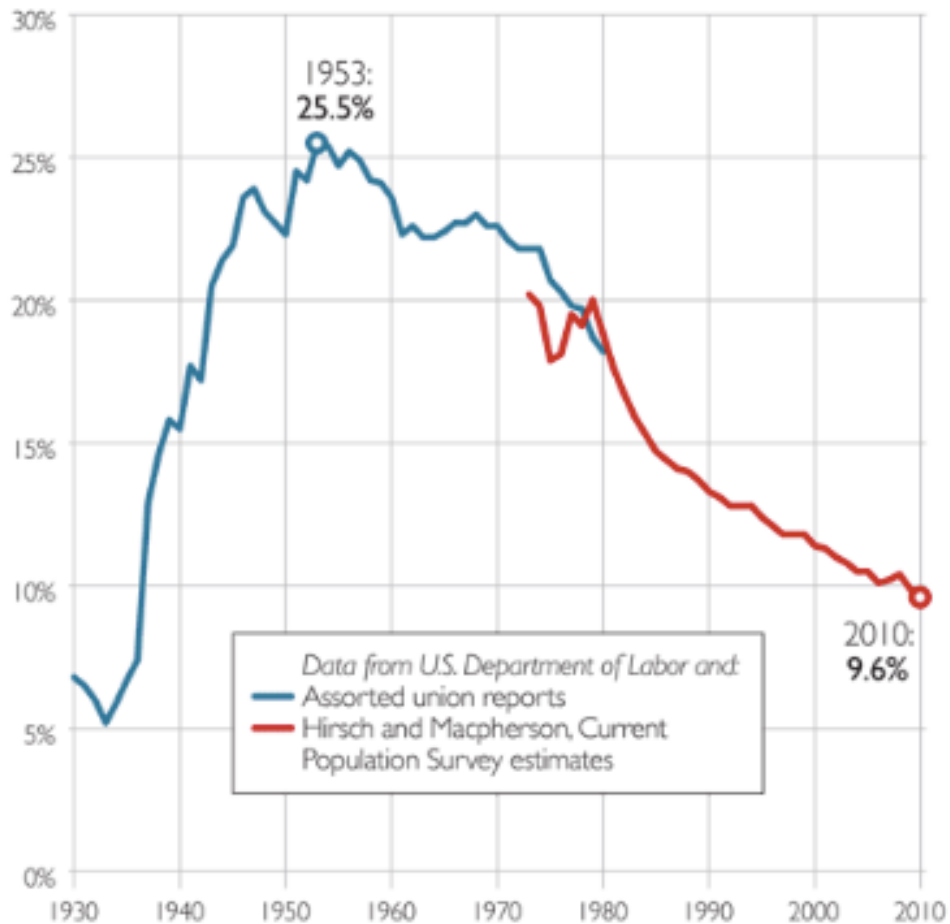
The fourth of the important sources of rising inequality in the U.S. in the Second Gilded Age is the collapse of worker bargaining power. There has now been a 70-year-long war waged against the union movement and the Roosevelt Era labor relations settlement, primarily on the state but also, when Republicans have been in power since 1980, on the federal level. It has been very successful. And it has removed the countervailing worker-organization power that from 1935 into the 1980s checked the labor-market monopsony bargaining power of employers.

Unions have a hard time making the case for themselves in an economy committed to individualism and the market. The monopsony bargaining power that employers have when they deal with individual workers is for some reason harder to see than the monopoly power unions exercise. And unions have never been very good at tuning their strikes so that they motivate employers to settle and bargain while not inconveniencing the public.

And unions have not been good at selling themselves as important sources of knowledge and information channels—as not so much "monopoly" as "voice" institutions, that make powerful contributions to higher



## Union Membership as Percentage of Labor Force



**Note:** This chart shows union membership as a percentage of the labor force, which includes the employed and unemployed. These figures are somewhat smaller than the traditional union membership rate, which shows union membership as a percentage of all employed workers.

productivity and better workplaces, which they do. Deunionization has been a significant negative for productivity. And deunionization has produced a significant transfer away from the true middle class and the

working class to the upper middle class, the lower upper class, the upper class, and the overclass.

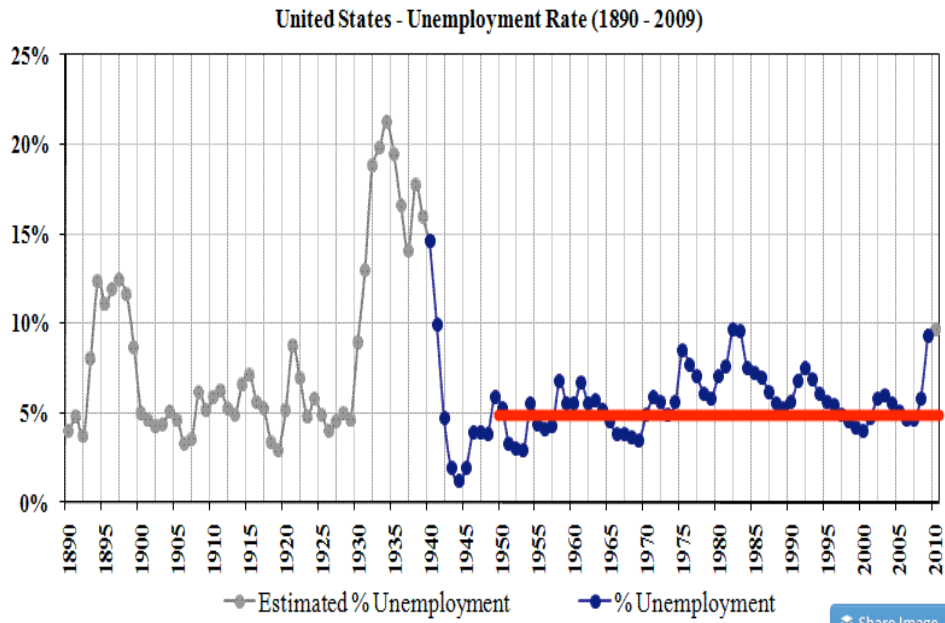
To what extent is the fall in unionization the cause, and to what extent is it the effect of other economic changes—globalization, value chains, &c.—that have weakened worker bargaining power since 1980? My take: globalization and wages were not a thing in the 1980s and 1990s. Competition then was more likely to be from high-wage than low-wage countries.

Globalization and wages became a huge regional thing in the first half of the 2000s—globalization boosted blue-collar wages in expanding regions though its financing of expanded construction and investment, while it lowered them in contracting regions that saw manufacturing come under pressure. Of course, the major reason that manufacturing came under pressure was first the Reagan and then the Bush budget deficits: tax cuts for the rich that raise the value of the dollar have a powerful negative effect on manufacturing and on blue-collar wages in manufacturing-heavy regions.

Globalization and a low-pressure economy then became a thing from 2008 on.

But up until 2008, the decline in worker bargaining power is (a) regional, and (b) political and cultural. Ronald Reagan ran for office to, among other things, kneecap unions as part of the process of putting the moochers in their place. The majority of UAW members in Michigan voted for Ronald Reagan in 1980.

They thought that they were anti-moocher first and pro-union second—and they somehow overlooked the fact that the presidential candidate that they were voting for took them to be among the chief moochers.



### E. The Low-Pressure Economy

And this brings us to the fifth of the important sources of rising inequality in America with the coming of the second Gilded Age: the low pressure economy.

Until the mid-1970s, the priority of economic policy was to maintain full employment, and control of inflation took a backseat. After 1978 and the installation of Paul Volcker as chair of the Federal Reserve, the priority of American economic policy was to control inflation, with maintaining high employment distinctly secondary.

Thus until the last few years the only other time since 1980 in which the unemployment rate has been less than 5% was a short period of time during the boom of the 1990s. And the policymaker who pushed unemployment that low in the late 1990s, Federal Reserve chair Alan

Greenspan, found that his policy was opposed by most of his colleagues on the Federal Reserve Open Market Committee. He only managed to push it through and hold the course by strength of will.

In an economy in which people think it unlikely that they will easily be able to find another job as good as the one they currently have, there is going to be a lot of downward pressure on wages and upward pressure on profits over the generations.

## **F. Winner Take All**

**T**he last of our six important sources of rising inequality in America in the Second Gilded Age is the coming of the winner-take-all economy. People feel that is somehow related to the rise of information technology, and perhaps globalization, but the links remain obscure.

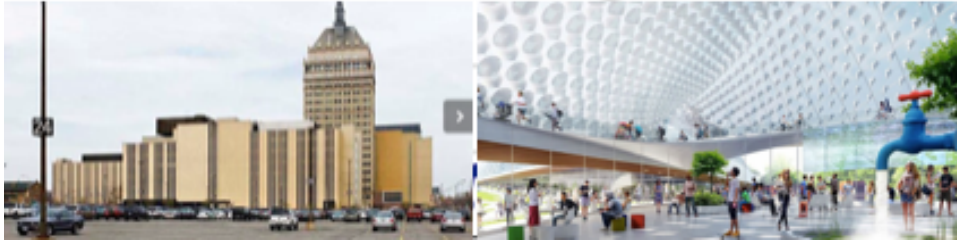
One of the high-tech industries of previous centuries was photography. George Eastman was a great engineer and innovator who build Kodak into a high-tech industrial powerhouse. Kodak was located primarily in the city of Rochester, New York. The fact that Kodak was located in Rochester generated middle-class prosperity for an entire region fueled by a critical mass of well-paying engineering and technical jobs employed in inventing, developing, and deploying Kodak's high-tech products into the American economy.

Kodak was not a winner-take-all operation.

By contrast, consider Google, which locates its headquarters in Mountain View, CA, in Silicon Valley.

Google has produced a few winner-take-all billionaires and a substantial number of 100 and 10 millionaires. It has provided very well-paying jobs

## Kodak vs. Google



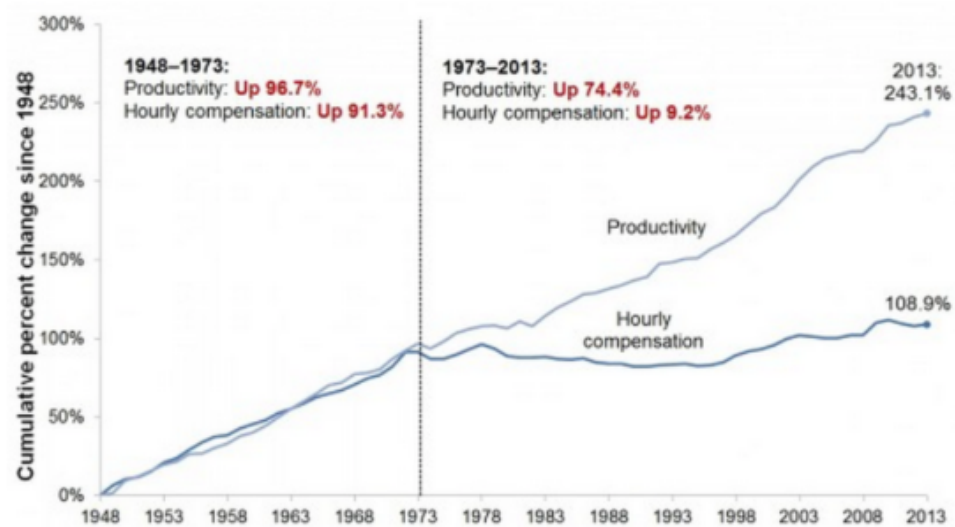
for a relatively small number of engineers. It has had nothing like the regional reach of Kodak, in terms of triggering general prosperity.

Why not? Why now do we have more of a winner-take-all economy? Why are the rewards from intellectual property now so much more concentrated, while back before they were spread out over a larger number of engineers and technical professionals, who would use that intellectual property as they deployed it in their daily work?

It would be very valuable if we understood why our economy works this way. But I do not think that we know.

### G. Three Factors that Do Not Matter

1. **“Bad trade deals”**: not a contributor to overall inequality.
2. **Low-education immigration**: Low-education immigration—save for the effects of low-skill immigration on earlier waves of immigrants still not fully proficient in English, with whom they do compete and whose wages they push down. But otherwise? Low-skill and low-education immigrants take jobs for which English proficiency is not a requirement, and native-born who would have taken those jobs otherwise find equivalently paid jobs for which English proficiency is a requirement.
3. **Affirmative action**—often blamed, but simply not a thing.



## VIII. The Difference the Rise in Inequality since 1980 Has Made

How much difference do these six factors make? They make an enormous difference. The result of all six of these factors has been to drive an enormous wedge over the past half century between what has happened to average productivity in the American economy and what has happened to the incomes of hourly-wage workers.

Thus the wages of the typical working class and lower middle class worker have stagnated for the past half-century. Moreover, the real wages of native-born white male hourly workers have fallen, as minorities and women's wages have grown because of reduced discrimination.

And so the American working and lower middle class are pissed: they think—not unreasonably—that America's elite has failed them, as they see increasing prosperity on the part of the upper middle class and those

higher up that they are not sharing. In America, you are supposed to live better than your parents lived. Native-born white male working and lower middle class workers do not believe that they do.

Moreover, the true middle class—which has seen some income gains—and the upper middle class—which has done rather well—are pissed too. They see the lower upper class, the upper class, and the overclass, for whom the coming of the Second Gilded Age has been a bonanza. They know they have not shared in that prosperity. They feel that they deserve to. So they think America has failed them as well.

Even the lower upper class is envious of those who have won in the winner-take-all economy.

Only the upper class is happy. And the overclass is ecstatic: for it, the U.S. economy in the Second Gilded Age is the greatest thing the world has ever seen. And when you talk to them, you find them surprised that others do not see and do not agree on how great the American economy is.

## **IX. What Happens Next?**

### **A. Further Sources of Rising Inequality: Thomas Piketty's Argument**

**S**o what is going to happen next with respect to income and wealth inequality here in the global north, both in America and in western Europe?

The most interesting recent argument I have seen is the one made by Thomas Piketty, in his book *Capital in the 21st Century*. It is a long book. It is a rich book. Let me try to give you the two-minute summary for you to memorize so that you can fake having read it.

At the bottom of Piketty's argument, I think, is his belief that the business class—call it "capital"—has lots of political and economic power. They will almost invariably be able to use the power to keep the rate of profit on invested wealth, in whatever form, at about 5% per year. If it goes higher, investment and competition will push it down. If it goes lower, there will be institutional and other reforms to strengthen the rights of property to push it back up to the level that the business class thinks says "fair".

Now let's look at Old Money. Old Money receives that 5% real rate of return on its wealth. It then spends some of that on conspicuous consumption, and some on philanthropy. Some of it is then taxed away. In the age of social democracy, about 3% of all wealth each year is spent on conspicuous consumption and philanthropy and taxes, leaving 2% to add to the stock of Old Money.

Also, in the age of social democracy, that is up until the 1980s, the population of the global north grew at about 2% per year and productivity in the global north grew at about 2% per year, for a total rate of growth of the economy of 4% per year. With the stock of Old Money growing at 2% per year, while the economy was growing at 4% per year, as the years passed Old Money would become less salient in the economy.

Thus plutocrats would be few, and most of the superrich who existed would be those who have made their money recently through innovation, entrepreneurship, and creative destruction. They would view the future and they would view societal change as, by and large, good things.

Now let's consider what happened after 1980. Population growth slowed in the global north to more like 0.5% per year. Productivity growth slowed as well, to 1% per year or so. And taxes on the rich were reduced in order to incentivize the "job creators". Philanthropy became a smaller proportion of total wealth as the "greed is good" philosophy spread through the overclass. In the Second Gilded Age, with conspicuous consumption and



philanthropy and taxes at 2% per year, and with the rate of profit at 5% per year, Old Money is growing at 3% per year. But the economy is growing at only 1.5% per year.

So every year Old Money becomes more and more salient in the economy.

Plutocrats become abundant. Increasing numbers of the superrich are those who have inherited their money. They are hostile to creative destruction and societal change: after all, they think they will be the ones who will be creatively destroyed. It was their ancestors who had surfed the waves of change, not themselves. With the increasing economic salience of Old Money comes increasing the political power of wealth, and increasing fear of the future.

Now here is the kicker: according to Piketty's simulations, this process is ongoing. It is not even half complete. So, in Piketty's estimation, we need to do a lot to change things and put Old Money on a downward trajectory in its salience. If not, we then have to look forward to a bigger and more vicious intensification of the Second Gilded Age.

## **B. Criticisms of Piketty's Argument**

**T**here have been many criticisms of Piketty's argument. I think most of them have been made in bad faith, by people who have not read or did not understand the book because they did not want to understand it—or by people who have employers or patrons that they want to please.

But there are some real criticisms. Let me run through two them:

First, can “capital” keep the real rate of profit at 5%? You would think that more capital would compete with itself for the services of workers to operate it, and so the rate of profit would fall. You would think that in a low interest rate economy you would see what Keynes called “the

euthanasia of the rentier”—that Old Money seeking safety for its wealth would be forced into low-yielding government bonds that paid little, and so fail to get the 5% rate of profit. Old Money would decline in salience.

But if you look at the portfolios of Old Money these days, you find they do not seek safety. Sometimes they are well diversified. Sometimes they are concentrated in their historical or ancestral industries and firms. In the first case, the fact that even well diversified risk bearing is rewarded in our modern economy means that the return on Old Money is indeed the 5% rate of profit rather than the -1% real safe rate of interest on government bonds.

In the second case, the fact that the portfolios of Old Money are not diversified means that many of them suffer great losses because they are on the downside of creative destruction, but an equal amount of Old Money experiences windfall gains. Old Money thus churns itself. Some of the ancestral names drop out of the plutocracy. But their wealth is transferred to those of Old Money who were lucky in their undiversified investments, and the salience of Old Money continues to grow.

Thus I regard this criticism as largely off-base.

Second, isn't this more a story about Europe than about America? Europe is the place with ZPG. Europe is the place with less dynamic growth and less creative destruction. America's rich are overwhelmingly entrepreneurs and superincome earners—not heirs and heiresses.

But consider the Waltons, the Kochs, Donald Trump himself. Piketty may be painting a picture of western Europe's present, but he is also painting a picture of America's future.

Thus I think this criticism is off base as well.



Piketty's argument looks reasonably strong to me.

### C. The “Leaky Bucket” and the Limits to Egalitarianism

There is one very common critique you see here in the global north and elsewhere about proposals to redistribute or to pre-distribute income and wealth in order to make society more equal: it is that any such move would wind up crippling economic growth.

The underlying idea is this: the rich need to be offered low taxes and have a high rate of profits on their creative, entrepreneurial, and investment

activities in order to incentivize them to undertake the innovation and creative destruction that creates economic growth, rather than kick back on their sailboats drinking margaritas. Moreover, the work effort of the poor will be very low if life when you are unemployed or cannot hold a stable job is "too easy".

But on a macro scale there is no evidence at all that this kind of thing is true.

Across the decades, we see no pattern, either in the United States or elsewhere, with respect to any relationship between growth on the one hand and inequality and the amount of redistribution on the other.

America's growth was fastest in the 1940s and 1950s and 1960s, in which income inequality was low and redistribution through progressive taxes was relatively intense. Thereafter growth was lowest in the 1970s, when income inequality was low. It was second lowest in the 1980s, when income inequality was low but rising. It was also low in the 2000s, when income inequality was high. Growth had a recovery in the 1990s, and back then income inequality was moderate but rising.

Earlier, growth was fast in the 1920s when income inequality was high. But the 1930s, in which income inequality was also high, were a disaster.

Thinking that redistributing income either way is going to unleash a boom that will carry us to previously unseen heights of prosperity is simply wrong. There is no strong reason to believe that the government redistributing less will incentivize job creators and innovators to do their work better. There is no strong reason to believe that a government redistributing more will provide the poor with the resources to boost their investment in education and so unleash a boom.

My conclusion from this is in the end: why not do the utilitarian thing? Since there is no reason to believe that the amount of redistribution either retards or speeds growth significantly, why not look at the effect of the rise and fall of income inequality on people's happiness, and shape policy accordingly?

What happens next with respect to income and wealth equality? What happens next is on our hands.

Two generations ago Brookings Institution economist Art Okun set out the metaphor of the "leaky bucket": the government can transfer water from the deep pool of the rich to the shallow pool of the poor, but the bucket is leaky. If the bucket were completely leaky, so that all it did was reduce the depth of the pool of the rich, there would be no point to redistribution: it would simply be a losing game. If the bucket were not leaking at all, so that every drop taken out of the rich's pool was transferred to the poor's, you would want to do a great deal of redistribution. How much redistribution you want to do thus depends on how leaky the bucket is: how much do the institutions and policies of social democracy reduce the incentives of the non-rich and rich to work, and so reduce the size of the total economic pie? That was what Arthur Okun thought the proper size of redistribution, the social insurance state, and social democracy depended on.

But it has never been clear to me that the bucket is leaky. Or, perhaps, what I should say is that perhaps the bucket is leaking the other way. Does social democracy reduce the incentives of the non-rich to work and of the rich to engage in their "job creating" innovation? Or does the absence of social democracy and higher inequality give the rich more power and more of a stake in rent seeking? Do the rich actually want economic growth, with the creative destruction it brings? Who after all is destroyed by creative destruction?

Isn't there at least a stronger case for redistribution to curb the power of rent-seekers and so boost growth as opposed to the case against redistribution on the grounds that it erodes incentives? Here I wish we had more data. Here I think that all we have had is ideology. And I think that Okun's metaphor of the leaky bucket plays into one particular pro-plutocratic strain of ideology.

We seek equitable growth, and we have no reason to presume that even the growth part is encouraged by inequality and plutocracy.

#### **D. Ending Capitalism?**

**T**here is one set of egalitarian and equalizing policies for which what I said on the previous slide is false: there is an extraordinary correlation between more redistribution and lower growth when the redistribution takes the form of really existing socialism as we saw it in the countries behind the Iron Curtain between 1917 and 1991. Stalinist or Maoist redistribution is absolutely poisonous.

It was associated, you see, with Stalinist central planning. High Stalinist central planning was generated by Marx's grave suspicion of markets. He saw them as surplus extraction devices alone, and not as societal calculating mechanisms for crowdsourcing solutions to social problems.

Hence, the communists said, because we are suspicious of markets we will not have any. We will, instead, run the economy by reproducing the Rathenau-Ludendorff World War I imperial German war economy. We will have agricultural communes and collective farms. We will build the largest possible factories so they have enormous economies of scale. We will have a large bureaucracy to tell people what they will produce, how, and for whom. Etc.

## Communist Leaders and Dnepropetrovsk Dam



The net effect of this was to throw away 80% of the potential wealth of the societies behind the Iron Curtain. Their central planning systems were extraordinarily inefficient—so inefficient I can hardly believe it.

And it may well be that they did not produce very equal societies either. Yes, consumption inequality was relatively low. But, in a manner analogous to what was going on in the agrarian age, this was because society was poor. There were a lot of social status and power differences—and a lot of social pressure exerted to create and maintain the inequality in income and material wealth that existed—back under really existing socialism.

## X. Walking Away from Omelas?

### A. What Should We Aim For?

And then there are the philosophical questions: What should we aim for? What does a good society do?

Should we say that the key is to have democratic politics, and then let democratic politics decide on distributional questions? In that case it would then be the business of economists to maximize production to boost

average incomes—and economists should then leave distributional questions alone to the philosophers and the political scientists.

Should we go for something like a utilitarian view, in which inequalities are justified when they lead to a positive average percentage change in income? In that case our social welfare function would be something like the geometric mean of incomes or consumption. Or should we be Rawlsian? In a Rawlsian framework, inequalities are justified only when they lead to a better life for the worst off.

Then there are people who think inequalities are justified when they reward the worthy, for some definition of worthy. Then we have the people—Aristotle—who think that inequalities are justified when they allow for philosophy.

I have adopted, throughout this talk, The economist-utilitarian “bad philosopher” perspective. I have assumed that human well-being which is something when problematic that we can, at least conceptually, measure. I have assumed that humans that are good judges of their own well-being and thus that they should be left to spend their incomes as they see fit. I have assumed that the well beings of different humans can be added up unproblematically. And that is contestable: people want “fairness”: they like inequality when it is the result of the fact that people are unequals in a way that means that they deserve to be treated unequally

And then there are those who think that inequalities are justified when they are the result of a "fair" system. But what could a "fair" system possibly be?



## XI. Good Moral Philosophy?

One can try to stop the argument by saying: “What the actual distribution of wealth, income, power, status, capabilities, and liberty is does not matter; The distribution of wealth is just if it is arrived at by a ‘fair’ system.” But trying to stop the argument there simply does not work—even though this “a fair system is all you need” theory is a very old one.

In fact, we do not know of a time in which philosophers did not at least consider “a fair system is all you need”. We see it near the very start of the written record what we call the “western” (actually middle-eastern) intellectual tradition. We see it in the opening of the dialogue that is Plato’s *Republic*. It is the position advanced by the elderly Kephalos:

Sokrates: Well said, Kephalos; but as concerning justice, what is it?

Kephalos: To speak the truth and to pay your debts.

*Not defrauding people and not cheating them*—and, presumably, not being defrauded or cheated in turn.

But all of the other participants in Plato’s dialogue, led by Sokrates, disagree. They conclude relatively quickly that Kephalos’s argument—taken up by his son Polymarkhos—is unphilosophical. It is thus unworthy of consideration by those who want to gain a deep and true understanding of the subject.

And so for the entire rest of the lengthy dialogue, Kephalos’s position—that justice consists of getting one’s just deserts: not injuring or cheating people, and not being injured or cheated—is abandoned. The live positions adopted are, instead:

1. That “justice” does not really exist: it is merely a rhetorical weapon with which the strong control the weak.

2. That justice is an intermediate and instrumental good that consists of the right arrangement of human society, because a rightly arranged human society produces many many benefits.
3. That justice is good in itself and consists of the right arrangement of human society, a good and worthwhile thing both very much worth having in itself and because of the other benefits it brings.
4. The (far from completely successful) attempt to set forth what that right arrangement of human society would be—to draw a picture of the Just City.

And ever since Plato, moral philosophers have followed his lead (or, rather, the lead of the characters in his dialogue). They have dismissed “justice is neither cheating nor being cheated”.

But, as Obama CEA Chair Jason Furman pointed out to me, that cannot be completely right.

First, justice as what Greg Mankiw calls “just deserts” has enormous psychological resonance for human beings. To the extent that moral philosophy exists to account for an help us understand the morality we human beings do have, dismissing a very large chunk of our moral intuitions as wrong *simpliciter* is not very helpful.

Second, given that human beings have a strong tropism toward Kephalos’s “just deserts” position—that justice consists of not injuring or cheating people, and not being injured or cheated, but rather in balance in one’s multiple reciprocal gift-exchange relationships with others—anyone who tries to set out what a rightly arranged society is without taking account of this strong human psychological tropism will almost surely fail.

So let me end with my tentative ideas on this. They are unfinished. And they are probably wrong. But they may (or may not) be worth something:

First, I would suggest that we might think about the fact that humans are, at a very deep and basic level, gift-exchange animals. We create and reinforce our social bonds by establishing patterns of "owing" other people and by "being owed". We want to enter into reciprocal gift-exchange relationships. We create and reinforce social bonds by giving each other presents. We like to give. We like to receive. We like neither to feel like cheaters nor to feel cheated. We like, instead, to feel embedded in networks of mutual reciprocal obligation. We don't like being too much on the downside of the gift exchange: to have received much more than we have given in return makes us feel very small. We don't like being too much on the upside of the gift exchange either: to give and give and give and never receive makes us feel like suckers.

Thus, second, we want to be neither cheaters nor saps. It is, psychologically, very difficult for most of us to feel like we are being takers: that we are consuming more than we are contributing, and are in some way dependent on and recipients of the charity of others. We thus need in a just society to find some way to convince ourselves that we are playing some essential productive and helpful role in society. It is also, psychologically, very hard for most of us to feel like we are being saps: that others are laughing at us as they toil not yet consume what we have produced. We thus also need in a just society to find some way to convince ourselves that we are receiving our fair share.

Third, there is the extremely knotty question: is it just important that we convince ourselves that these are true, or is it important that they be true? In Plato's *Republic*, Plato's Sokrates argues very strongly for the second: His Guardians convince the other citizens of the Noble Lie that explains why the Just City is organized as it is.

Fourth, on top of this evopsych propensity to be gift-exchange animals—what Adam Smith called our "natural propensity to truck, barter, and exchange"—we have built our complex economic division of labor. We

construct property and market exchange—what Adam Smith called our natural propensity "to truck, barter, and exchange" to set and regulate expectations of what the fair, non-cheater non-sap terms of gift-exchange over time are.

Fifth is the fact that in building our complex economy we face a problem: How do we enter into a gift-exchange relationship with somebody we will never see again? And we have a solution: a cash-on-the-barrelhead exchange. We devise money as a substitute for the trust that in this transaction one is indeed in a gift-exchange relationship, rather than a sap being taken by a grifter. And on top of this we have constructed a largely-peaceful global 7.4B-strong highly-productive societal division of labor, built on:

- assigning things to owners—who thus have both the responsibility for stewardship and the incentive to be good stewards...
- on very large-scale webs of win-win exchange...
- mediated and regulated by market prices...

There are enormous benefits to arranging things this way. As soon as we enter into a gift-exchange relationship with someone or something we will see again—perhaps often—it will automatically shade over into the friend zone. This is just who we are. And as soon as we think about entering into a gift-exchange relationship with someone, we think better of them. Thus a large and extended division of labor mediated by the market version of gift-exchange is a ver powerful creator of social harmony. This is what the wise Albert Hirschman called the *\*doux commerce\** thesis.

Now it is certainly true that economists do not talk about this much. For example, in Books I and II of his *\_Wealth of Nations\_*, Adam Smith definitely does write as if self-interest mediated by exchange is at the foundation of the social order. But Adam Smith the moral philosopher (as opposed to Adam Smith the proto-economist attempting to disrupt the 18th

century discipline of "political oeconomy") does not believe that. And it is not true.

Thus, sixth, people as economists conceive them—people as they must be in order to have a peaceful exchange economy rather than an anarchic war of all against all—must be not "Hobbesians" focusing on their narrow personal self-interest, but rather "Lockeians": believers in live-and-let live, respecting others and their spheres of autonomy, and eager to enter into reciprocal gift-exchange relationships—both one-offs mediated by cash alone and longer-run ones as well.

In an economist's imagination, people do not enter a butcher's shop only when armed cap-a-pie and only with armed guards. People entering a butcher's shop are confident that the butcher will sell them meat for money. They do not fear that, rather, the butcher will knock them unconscious, take their money, slaughter them, smoke them, and sell them as long pig.

There is a presumed underlying order of property and ownership supported by mutual respect and concern that is largely self-enforcing, and that requires only a "night watchman" to keep it stable and secure.

This extended pattern of independence is a very valuable piece of our societal capital.

Thus, seventh, given these psychological and institutional facts-on-the-ground, in my view any rightly arranged society has to successfully do all of:

- setting up a framework for the production of stuff...
- setting up a framework for the distribution of stuff...
- creating a very dense reciprocal network of interdependencies to create and reinforce our belief that we are all one society...

- and doing so in such a way that:
  - people do not see themselves, are not seen as, and are not *saps*— people who are systematically and persistently taken advantage of by others in their societal and market gift-exchange relationships.
  - people do not see themselves, are not seen as, and are not *moochers*— people who systematically persistently take advantage of others in their societal and market gift-exchange relationships.

Achieving these results is complicated and difficult, for reasons that I believe are related to the famous and old [the water-diamonds paradox]. As Friedrich von Hayek noted, a market economy cannot do it alone because what a market economy does is the antithesis of “fair”.

And this gets us into a thorny thicket of issues that I associate with early 20th century Hungarian-Jewish political economist Karl Polanyi.

But that is another lecture.

But were I to expand further on this I would need at least twice my time. So thank you, and goodnight.

### **Notes, etc.**

Presentation file: <<https://github.com/braddelong/public-files/blob/master/lecture-inequality.pptx>>

