# income inequality

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# outline

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intuition

income inequality and redistribution in the U.S.

redistribution and welfare

inequality of what ?

income inequality and well-being

other stuff

Krueger's graphs (and talk)

# NECESSARY READINGS

- ◇http://www.economist.com/node/21564556
- ◇https://www.city-journal.org/html/war-work-and-how-end-it-15250.html

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# income inequality

- ◇ income inequality is one of my areas of research
- ◇ and i am happy to chat about it–let me know if you know something interesting–a book, an article, data, an idea, etc...
- ◇ in my opinion, income inequality is the root of all problems
  - (broadly understood, incl poverty)
  - [Wilkinson and Pickett (2010) have a similar opinion]

## income inequality is the root of all problems

- ◇ segregation (everyone can segrgeate as they wish if people have money)
- ◇ gentrification (if people more equal then really no gentry displacing poor)
- ◇ crime (almost everyone would commit crime if you have no food; and there are rich people at the same time)
- ◇ and so on and so on; eg see Wilkinson and Pickett (2010) for more
- ◇ and if less inequality (no poverty): don't need housing programs, food stamps, community engagement, urban studies, etc–they don't remove the problems, but treat or manage them
- ◇ and all we need is redistribution and problems solved!

## this is not new

◇ "I am now convinced that the simplest approach will prove to be the most effective–the solution to poverty is to abolish it directly by a now widely discussed measure: the guaranteed income" Martin Luther King, cited in Brynjolfsson and McAfee (p.233 2014)

◇ a. see Thomas Paine, Bertrand Russell (p.233 Brynjolfsson and McAfee, 2014)

◇ i argue the same, eg $1.5k for everyone! + strings attached

- (have to work even for small wage eg $6*250hrs/mo=1.5k; if unable to find work, have to work in one that govt provides, eg cleaning streets, picking tomatoes, etc)

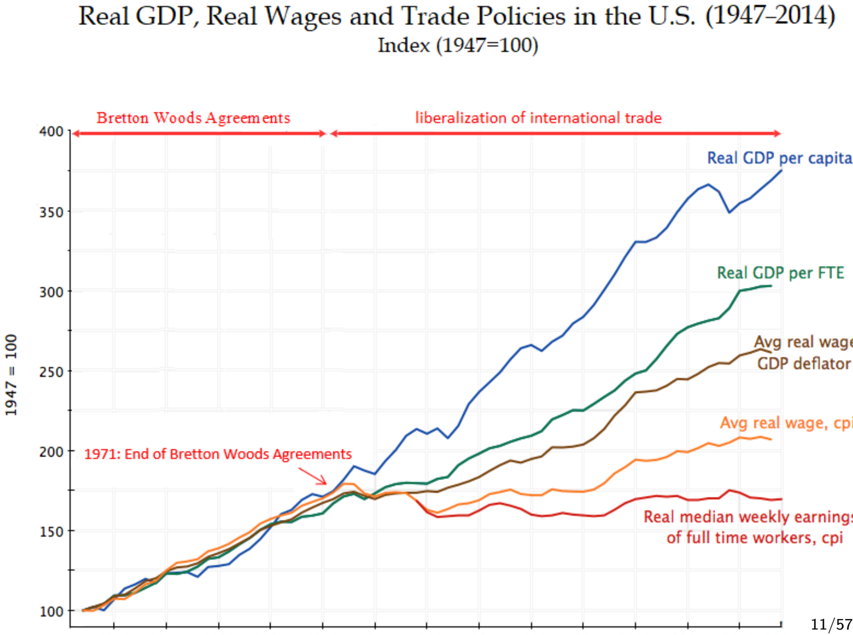
# income inequality in my book!

- ◇ expand vastly EITC and dump all welfare programs?
- ◇ the goal of welfare: no welfare?
- ◇ tax income>200k at 80%?
- ◇ and redistribute with strings attached:
  - · have to work
  - · or accept a job that govt found you
  - · otherwise no welfare?

# outline

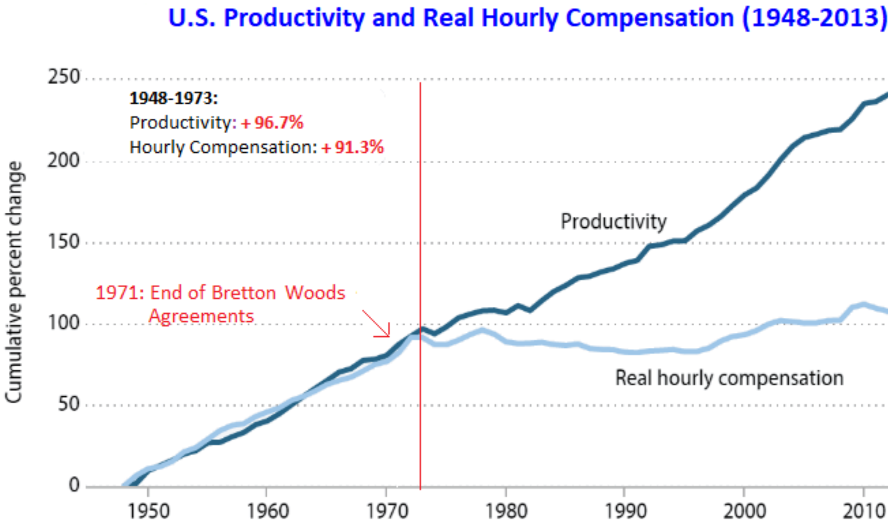
# cool wikipedia graphs

◇



# cool wikipedia graphs

◇




**Note:** Data are for average hourly compensation of production/nonsupervisory workers in private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

## a relevant topic

- there is more inequality over time since 70s
- but also interesting to look across space: poorest and richest areas are very close, eg Camden and Cherry Hill
- it's everywhere, news, politics 99 vs 1 percent
- great topic to study: there is a surge of interest in it now
- write a paper
- easy to get data even at neighb level

# depressed social capital

- income inequality depresses social capital
- if you drive a Corrola, you don't have friends who drive Porsche or ride a Greyhound

# income inequality and quality of life

- ◇ Americans work more than Europeans (Okulicz-Kozaryn, 2011) and yet they have less mobility than Europeans (Economist, 2012)
- ◇ then if you were to maximize your happiness/utility assuming that $utility = f(work, leisure/free\ time, income, relative\ income, tax, welfare, income\ mobility)$
- ◇ then you should move to Europe unless you are rich
- ◇ relative income, income mobility, welfare, leisure and free time are higher in Europe
- ◇ but taxes are higher, too

## the standard of living

◇ yes, the standard of living is increasing for everybody !

· the 10th percentile (poorer than 90% of people) has a better standard of living today than 90th percentile hundred years ago (Bok, 2010)

· this is huge

◇ think how miserable was life hundred years ago

· few people owned dwellings

· nobody had a car

· nobody flew anywhere

· no TV, cell phone, computer, etc

◇ Camden median household income is $26k

· you can buy new chromebook for $200

## poor

- ◇ so there is no doubt that poor are better off today than a century or several centuries ago in ABSOLUTE terms
- ◇ the long-term historical trend: less poverty and inequality
- ◇ but the RELATIVE terms are worrying
- ◇ you may be better off than your grand-grand-grand-father riding a bike; yet worse off, because he was an average guy and you are poor
  - you are relatively deprived as compared to Johnses
  - and you cannot have a good life, because good life is defined "as compared to others" NOW, not 100 years ago

# Sen's functionings and capabilities

- ◇ by being relatively deprived you cannot have the capability to chose the functionings you'd like: eg being happy, having self-respect
  - how can i be happy and have self respect if I make less than a tenth of what many people in my family make ?
  - so what that my real income is more than ten times the median 100 years ago in the US or now in Bostwana ?
- ◇ functionings/capabilities depend on local relative income

# public goods' inequality

- ◇ lots of talk about household/personal income inequality
- ◇ note also public goods inequality
- ◇ we are all equal (according to the Constitution, Declaration of Independence, etc)
- ◇ so equal citizens should get equal public goods from the government
- ◇ public goods: safety, education, health care
  - · compare those between Camden and Cherry Hill
  - · and keep in mind that it cripples equality of opportunity

## market forces don't work (right away)

- ◇ according to market forces, places that are getting poor
  - · are also getting cheap
- ◇ in addition to that, they are also close to markets (central cities)
- ◇ and that would attract entrepreneurs that would turn them around
- ◇ yet there is also another force: business clusters and agglomeration economies that in virtuous (vicious) cycle attracts business and people to already great places: NYC, San Francisco, Boston
- ◇ but they are getting expensive so people should go to cheaper places...

# market forces don't work (right away)

- now people go to the Sun Belt: Texas, Arizona, Georgia, but as these places are getting more expensive, i think, people will start coming back to Rust Belt– it may take several years
- but even now there are some signs – for the first time in decades, Philadelphia is adding population
- it would be an interesting paper...

# other forces that may block progress

- political ineptitude, corruption, overly strict regulations, etc.
  - those would block market forces even further
- so even if the market forces would promote growth
  - those other forces may inhibit it

## market forces don't work (right away)

- same with sprawl
- people are moving to suburbs/exurbs
- farther and farther from the core
- but at some point, it's getting too far...
- and the advantages of living away from the city are getting overwhelmed by disadvantages (commute, etc)
- ... and we do observe redevelopment, and racial desegregation

# location, location

- ◇ it appears that much of the literature cites as a root problem of poor areas the flight of the energetic people
- ◇ so the major goal should be then to mix people of different socio-economic status; and not for instance just throw money at school districts
- ◇ then the 15k Camden policy may be a good idea...

## why do we have inequality ?

◇ technology/computers/bots are killing the jobs: pilots/drones, cashiers/machines, blockbuster/redbox, cars/google car, accountants/turbo tax, professors/youtube

- and they are increasing competition for usual jobs: e.g callcenters in India, medical consultation/services in India, etc etc

- but they are also magnifying the success of top performers: if you are outstandingly good at something, you can sell it to the whole world: architects, software developers, academics, etc

## why do we have inequality ?

- winner takes it all; the very best makes way more than the second best
- again, be a friend of technology, learn a programming language etc
- find your niche (eg per Christensen, many universities' problem is that they try to be Harvard, and they never will; instead, they should find a niche)

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## (Economist, 2012, p.9)

- ◇ if you consider all taxes, US hardly redistributes anything
- ◇ progressive and inefficient (deductions, loopholes)
- ◇ many deductions and loopholes that benefit the rich
  - · more than 60% of all tax preferences flow to the wealthiest 20 % of Americans !, only 3% to the bottom fifth
  - · the government subsidizes big houses, expensive health care and retirement savings

# (Economist, 2012, p.9)

- ◇ only 30% of entitlement spending goes to the poorest fifth
- ◇ US spends 4x more on subsidizing housing for richest 20% than for public housing for the poorest fifth
- ◇ outrageous! what's the point of subsidizing the rich?

# more rescent studies, much based on LIS

- (Luxembourg Income Study)
- (eg see http://www.nytimes.com/2014/11/17/opinion/inequality-unbelievably-gets-worse.html
- strikingly, not much inequality before taxes as compared to other countries
  - gini of about .6 –even Sweden and Finland are less equal!
- but after taxes, US shines in terms of inequality

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## why?

- ◇ health and happiness are concave in income
  - if you are utilitarian "the greatest happiness for the greatest number", you want to redistribute
- ◇ the rich and the poor don't deserve to be there
  - it's not their achievement/fault
  - but ecological/environmental factors: eg good/bad family; good/bad neighborhood; good/bad country
  - also "internal luck": their skills/talents
- ◇ "you can judge a society by how it treats its poor"

# why?

- ◇ we should spend more on the poor and the young
- ◇ because they can contribute most
  - the young will live long, so if you can improve them it will give benefits for many years
  - also per poor: it's the biggest bang for the buck
  - an extra \$10k a year makes a huge difference (health-wise, happiness-wise etc)for somebody making \$10k a year and is not noticeable for somebody making \$250k

## why not?

- we won't advance if we take away from the most able/productive/smart, the fittest and give the resources to those on the other end
- pervasive incentives (punish success/reward idleness):
  - why would i work hard, if govt is going to take it away
  - why do i need to work anyway if i get welfare
- correct, but as I argue: people's lot is only in small part determined by their effort, most of it is "internal" and "external" luck

# True Progressivism

- what do you think of Economist's True Progressivism ?
  "attack cronyism/support meritocracy, invest in young"
- http://www.economist.com/node/21564556

# outline

# many inequalities

- ◇ we mostly focus on income inequality but there are many inequalities
- ◇ first, are we interested in equality of outcomes or chances
- ◇ outcomes: income, wealth, happiness
- ◇ chances: opportunity, freedom to chose
- ◇ and there are Sen's functionings (Sen, 2000, 1992)
- ◇ some interesting relationships...

## people are <u>not</u> equal

- For instance, the declaration of independence says "All men are created equal"
- but if you take it literary, of course, it is not correct
- we differ in about anything: skills, physical attributes, motives, etc

## people are not equal

- ◇ then it is difficult to achieve equality of outcomes given that we are unequal
  - · for instance, it would be a nonsense to give everybody the same education (can everybody get PhD?), or exactly the same house or income
- ◇ it is easier to ensure equality of opportunity
- ◇ “people are equal” should be read implicitly: we should not discriminate against others because they are different

# hippies and early retires

- ◇ people have different lifestyles...
- ◇ is there anything wrong with being a hippie or early retiree
- ◇ of course not!
- ◇ they may have less money but maybe more well-being than others

## hard work and success

◇ not so simple !

◇ why do we have income inequality?

◇ of course, that hard work brings success is not enough of an explanation

· you may work 100 hours per week as a janitor and be poor

· and you may work 10 hours per week as professor and be rich

· or don't work at all and get income from rents (eg you own buildings)

◇ and success is a matter of luck

◇ if you think about it, your skills/talents are due to luck as well ! did you work hard on your genome?

## taxing skills and talents (Frank, 2012)

- ◇ again, people are born unequal: some have great skills/talents; some don't
- ◇ and it's purely luck, (well maybe your ancestors smart genes mixing–the elders know best who you should marry)
- ◇ I have some friends from India and Pakistan: their families arranged the marriages...

## taxing skills and talents (Frank, 2012)

- ◇ without going into discussion about what is fair and what isn't
  - · let's only assume that you need to pay for goods/services
- ◇ rich people enjoy more power and prestige than others
  - · and so they should pay for it
  - · especially, that hard work is only a part of that
  - · it is not only "external luck", but also "internal lack" that they have skills and talents that made it possible for them to be successful

# Sen's functionings (Sen, 2000, 1992)

- thse are based on Aristotle
- there are some qualities that make life "good"
- so called "human flourishing"
- eg: lack of hunger and illness, shelter, etc
- you need to have those functionings to be happy
- but how do you rank them ?
- and I don't like Aristotle telling me what are my functionings

# A danger of using happiness measures

◇ per (Sen, 1992): even if you do not have basic functionings

◇ you may still be relatively happy

◇ it is due a human self-defense mechanism

· otherwise all unsuccessful people would fall into despair and commit suicide

· yet, most people enjoy small things, eg blue sky
  you can be happy about blue sky even if you are homeless

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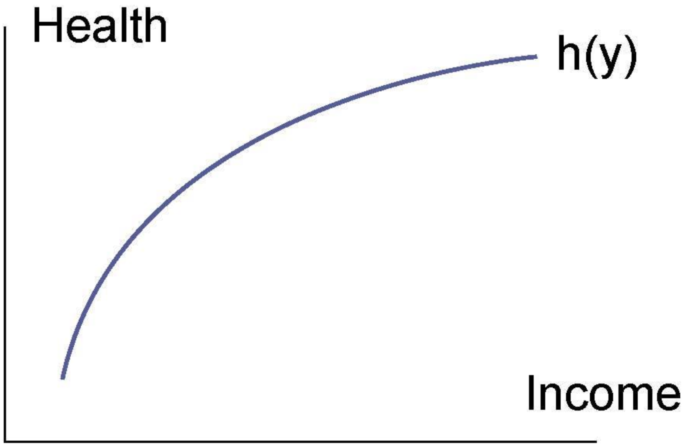
## let's take an utilitarian perspective

- ◇ Jeremy Bentham
- ◇ "the greatest happiness for the greatest number"
- ◇ can paraphrase it:
- ◇ the greatest health for the greatest number
- ◇ it makes sense, doesn't it ?
- ◇ very clean and simple
- ◇ produce policies that would result in outcome that produce greatest increase in overall well-being
- ◇ that often means that we should focus on the poorest

## what is good just and fair?

- people have very different notions
- difficult to agree on that
- but most people agree that fundamentally we are all equal
- then everybody should matter the same to the public policy makers
- and then our goal should be to make everybody better off
- and resources are scarce (a basic economic principle)
- so we should we use resources in such a way that they produce most desirable outcomes
- and the desirable outcome is health broadly understood (mental and physical) and well-being

# concave relationship




◇

## concave

- ◇ diminishing marginal returns
- ◇ both health and well-being
- ◇ hence inequalities; we should help the poorest
- ◇ eg adding $10k to $50k salary creates more wellbeing than adding $10k to $100k
- ◇ i would even say that doubling salary from 50 to 100 creates more wellbeing than doubling 100 to 200
- ◇ although Wolfers and Stevenson argue that doubling always produces same increase in well-being (I disagree)
  - · even if so, you need to spend 100k to double 100k and only 50k to double 50k

# concave

- people are loss averse (Kahneman): so taking away from you is worse than giving to you: in that respect redistribution is bad
- but i think it is offset by diminishing marginal returns

# another problem

- ◇ inequality depresses well-being
- ◇ suicide in rural China among women (NYT)
- ◇ neighborhood dissatisfaction in Camden close to transportation (my interpretation is seeing more inequality)
- ◇ want to get upset with your lot: go to a fancy university campus or a fancy neighborhood

# preferences for redistribution

- ◇ one of my favorite topics
- ◇ it is about how much redistribution/welfare people prefer
- ◇ Americans are less upset about inequality than Europeans (Alesina et al., 2001, 2004, Alesina and Glaeser, 2004)
  - · One reason for that may be that American believe, which is less true in the US than in many European countries, that hard work brings success/American Dream/ social ladder advancement (Okulicz-Kozaryn, 2011)

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## preferences for redistribution

- lots of fascinating work done by Alberto Alesina
- one interesting finding is that minorities favor redistribution controlling for their income
  - would be interesting to control for wealth as well–minorities have less income, but even less wealth
- another interesting finding is that people like to redistribute to people like them (eg same race)–the more heterogeneous state the less redistribution (Luttmer, 2001)

# how the rich got rich

- hard work ? in some cases...
- social capital: knowing other rich people helps getting rich
  - inheritance
  - an ugly form of social capital is cronyism (Economist, 2012)
- bonding vs bridging social capital...

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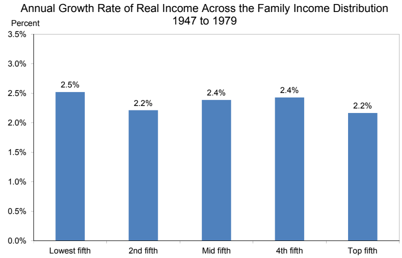
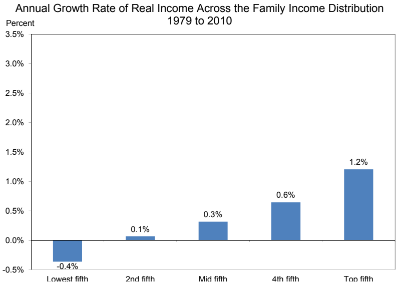
# The Rise and Consequences of Inequality

**Alan B. Krueger**
**Chairman**
**Council of Economic Advisers**

**January 12, 2012**

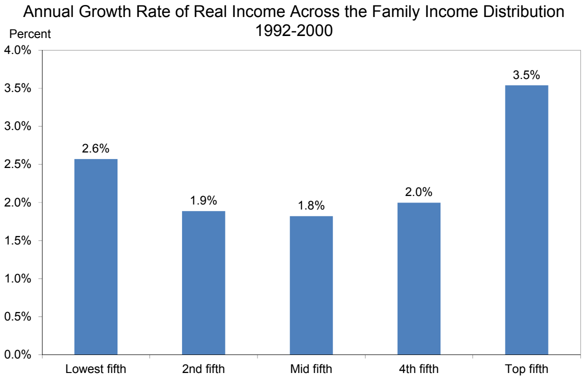
# Figure 1: Growing Together, Growing Apart
## Income Growth by Quintile, Various Periods



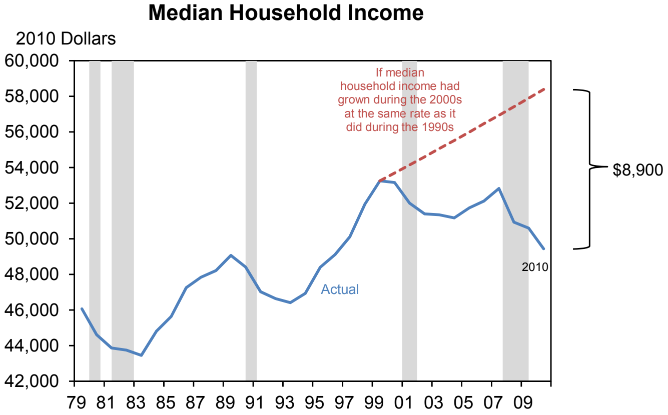

Source: Census Bureau

# Figure 2: Growing Together Again 1992-2000



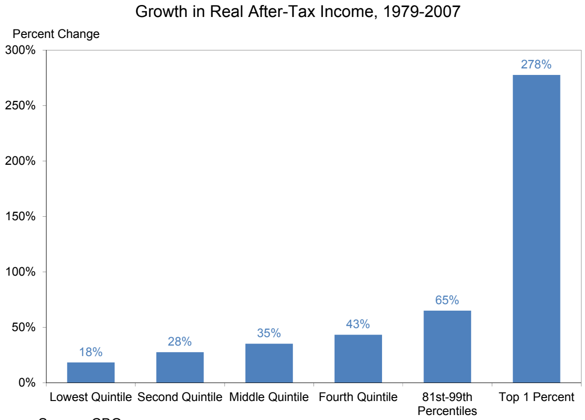

Source: Census Bureau

# Figure 3: If Real Incomes Had Grown During the 2000s as They Did During the 1990s, the Median Household Would Have an Extra $8,900 in Annual Income in 2010



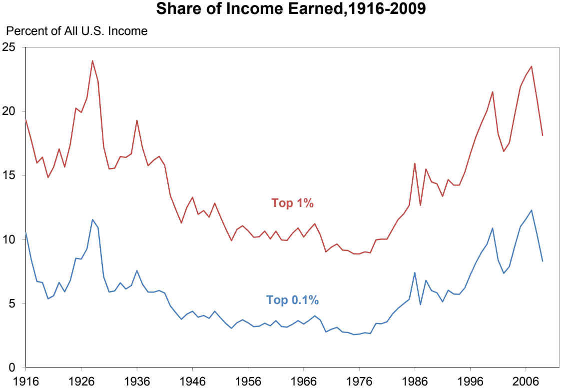

Note: Shading denotes recession.
Source: Census Bureau; CEA calculations

# Figure 4: CBO Estimates Show Much Faster Income Growth for the Top 1%



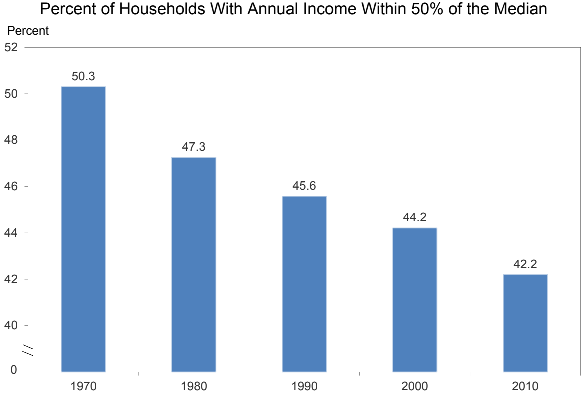

Source: CBO

# Figure 5: Income Inequality Near Record High




Source: 2010 update to Piketty and Saez (2006)

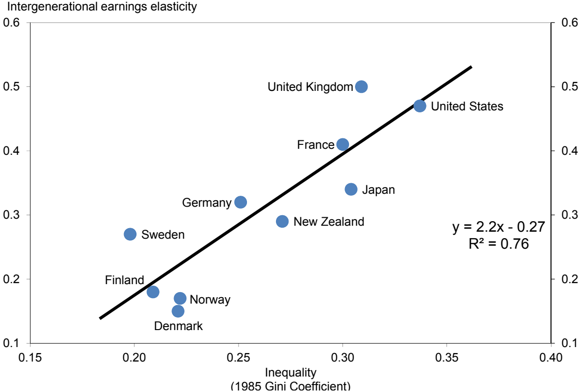
# Figure 6: The Size of the Middle-Class has Fallen




Source: CEA Calculations from Current Population Survey

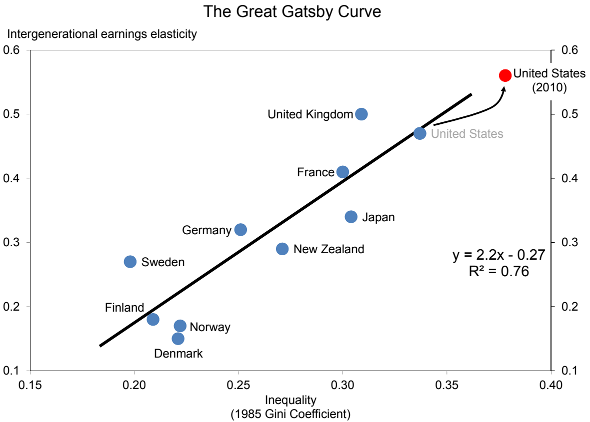
# Figure 7: "The Great Gatsby Curve"

## Higher income inequality associated with lower intergenerational mobility



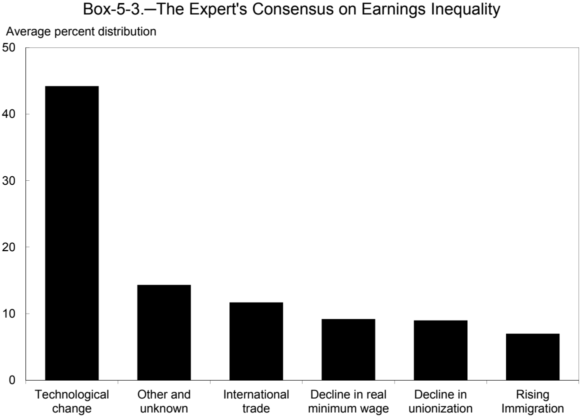

Source: Corak (2011), OECD, CEA estimates

# Figure 8: "The Great Gatsby Curve": Projection



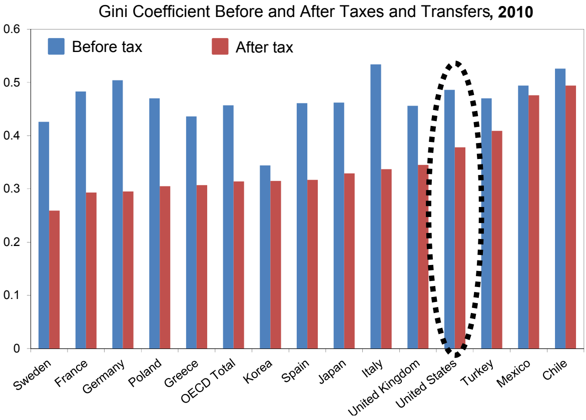

Source: Corak (2011), OECD, CEA estimates

# Figure 9: Causes of Higher Inequality



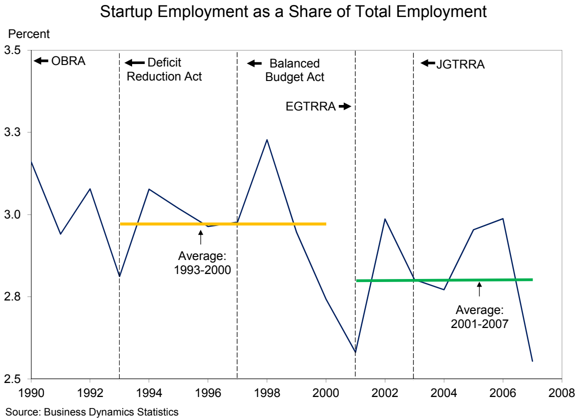

Source: Economic Report of the President, 1997

# Figure 10: U.S. Tax Code is Less Progressive than Most Other OECD Countries




Source: OECD

# Figure 11: Despite large tax cuts, less dynamism



# Consequences

- Intergenerational Mobility
- Consumption
  - Aggregate demand and excess leverage.
- Economic Growth
- Morale and Productivity

# The Rise and Consequences of Inequality

**Alan B. Krueger**
**Chairman**
**Council of Economic Advisers**

**January 12, 2012**

**The Rise and Consequences of Inequality in the United States**
**Alan B. Krueger**
**Chairman, Council of Economic Advisers**
**January 12, 2012**

***Remarks as Prepared for Delivery***

I want to thank Neera Tanden for inviting me to the Center for American Progress (CAP) today. I also want to congratulate her for becoming the president of CAP. Following in John Podesta's footsteps is not easy, but if anyone is up to the task, I am sure Neera is. Neera and I worked closely together for many long hours on the historic health care reform bill that President Obama signed into law in March 2010. What I remember most is how cheerful Neera was at every meeting, and how dedicated she was to the goal of expanding access to health insurance for all those who couldn't afford coverage or who had been denied coverage for reasons of pre-existing conditions. I'll return to this issue toward the end of my remarks.

The topic I will address today is inequality. As you may know, I am a labor economist. Labor economics is the study of work and pay. It occurred to me that the field of labor economics can also be described as an attempt to understand inequalities related to the job market. Although I have done much research in my career on inequality, I used to have an aversion to using the term inequality. The *Wall Street Journal* ran an article in the mid-1990s that noted that I prefer to use the term "dispersion". But the rise in income dispersion – along so many dimensions – has gotten to be so high, that I now think that inequality is a more appropriate term.

My theme in this talk is that the rise in inequality in the United States over the last three decades has reached the point that inequality in incomes is causing an unhealthy division in opportunities, and is a threat to our economic growth. Restoring a greater degree of fairness to the U.S. job market would be good for businesses, good for the economy, and good for the country.

## Dimensions of Rising Income Inequality

President Obama summarized the rise of inequality very succinctly in his Osawatomie, Kansas speech, when he said, "over the last few decades, the rungs on the ladder of opportunity have grown farther and farther apart, and the middle class has shrunk."

These trends are well documented but worth reviewing to understand the nature of the phenomenon. My first figure shows the annualized growth rate of real income for families in each fifth of the income distribution over two periods [Figure 1]. The figure shows that all quintiles (fifths) of the income distribution grew together from the end of World War II to the late 1970s, but since the 1970s income has grown more for families at the top of the income distribution than in the middle, and it has shrunk for those at the bottom. We were growing together for the first three decades after World War II, but for the last three decades we have been growing apart. Here at CAP, I should point out that the pattern in the post-1970s period is not monolithic. As this next chart shows, the period from 1992 to 2000 was an exception, when strong economic growth and the policies of the Clinton Administration led *all* quintiles to grow together again [Figure 2]. Indeed, *all* income groups experienced their fastest income growth in years.

I could also note, parenthetically, that there is no sign in these data that the tax increases in the early 1990s had an adverse effect on income growth.

This next chart shows the level of income earned by the median household each year, after adjusting for inflation [Figure 3]. Half of all households earn more than the median and half earn less. You can see that the median household saw a decline in real income in the 2000s. If in the first decade of the 2000s the income of the median household had grown at the same rate as it did in the 1990s, middle class households would have an extra $8,900 a year to spend on their mortgages, rent, cars, food, and clothing, or to add to their savings.

The next chart shows how much after-tax income has grown for different parts of the income distribution since 1979, after adjusting for inflation [Figure 4]. As the Congressional Budget Office noted in a recent report, the top 1% of families saw a 278 percent increase in their real after-tax income from 1979 to 2007, while the middle 60% had an increase of less than 40 percent.

Because of these trends, the very top income earners have pulled much further ahead of everyone else. The following chart shows the share of all income earned by the top 1 percent and 0.1 percent of households [Figure 5]. Not since the Roaring Twenties has the share of income going to the very top reached such high levels.

The magnitude of these shifts is mindboggling. The share of all income accruing to the top 1% increased by 13.5 percentage points from 1979 to 2007. This is the equivalent of shifting $1.1 trillion of *annual* income to the top 1 percent of families. Put another way, the increase in the share of income going to the top 1% over this period exceeds the total amount of income that the entire bottom 40 percent of households receives.

A consequence of the momentous shifts in the income distribution that I have just documented is that the middle class has shrunk. The next chart illustrates this development by showing the percentage of households whose income falls within 50 percent of the median [Figure 6]. That is, we place a +/-50% band around the household that is exactly in the middle, and then we see what fraction of all households fall within this band each decade. We have gone from having just over 50 percent of households with incomes within 50 percent of the median in 1970 to 44 percent in 2000, and 42.2 percent last year.

Larry Katz has used the term "polarization" to describe what is going on in the income distribution – we have more families falling into either extreme end of the distribution, and fewer in the middle. The statistical word for this is "kurtosis". I can see why the term polarization has caught on.

**Income Mobility**

Higher income inequality would be less of a concern if low-income earners became high-income earners at some point in their career, or if children of low-income parents had a good chance of climbing up the income scales when they grow up. In other words, if we had a high degree of income mobility we would be less concerned about the degree of inequality in any given year. But we do not. Moreover, as inequality has increased, evidence suggests that year-to-year or generation-to-generation economic mobility has decreased.

Recent work finds that a worker's initial position in the income distribution is highly predictive of how much he or she earns later in the career. Studying tax data on individuals' earnings since 1937, for example, Wojciech Kopczuk, Emmanuel Saez and Jae Song find that income mobility over the career has been stable since the 1970s, when all workers are considered as a whole. For men, however, there has been a decline in income mobility over the career since the 1970s. This decline has been offset by an increase for women, but the different pattern for women is probably a result of changes in labor force attachment over the career, rather than an increase in career mobility due to a fundamental change in the labor market.

More research has been done on intergenerational income mobility. Studies find that your parent's income is a good predictor of your subsequent income. Studies that use income data averaged over longer periods of time for parents and children tend to find higher correlations between parental and children's income. A reasonable summary is that the correlation between parents' and their children's income is around 0.50. This is remarkably similar to the correlation that Sir Francis Galton found between parents' height and their children's height over 100 years ago. This fact helps to put in context what a correlation of 0.50 implies. The chance of a person who was born to a family in the bottom 10 percent of the income distribution rising to the top 10 percent as an adult is about the same as the chance that a dad who is 5'6" tall having a son who grows up to be over 6'1" tall. It happens, but not often.

Another handy statistic for summarizing the connection between parents' and children's income is the Intergenerational Income Elasticity (IGE). Recent studies put the IGE for the U.S. around 0.4. This means that if someone's parents earned 50 percent more than the average, their child can be expected to earn 20 percent above the average in their generation. As Jason DeParle recently highlighted in the *New York Times*, parental income matters more for children's success in the U.S. than it does in other economically developed countries.

Recent work by Miles Corak finds an intriguing link between the IGE and income inequality at a point in time. Countries that have a high degree of inequality also tend to have less economic mobility across generations. We have extended this work using OECD data on after-tax income inequality, as measured by the Gini coefficient. This next figure shows a scatter diagram of the relationship between income mobility across generations on the Y-axis (measured by IGE) and inequality in the mid-1980s, as measured by the Gini coefficient for after-tax income, on the X-axis [Figure 7]. Each point represents a country. Higher values along the X-axis reflect greater inequality in family resources roughly around the time that the children were growing up. Higher values on the Y-axis indicate a *lower* degree of economic mobility across generations. I call this the "Great Gatsby Curve." The points cluster around an upward sloping line, indicating that countries that had more inequality across households also had more persistence in income from one generation to the next.

As I documented in the beginning of my talk, the U.S. has had a sharp rise in inequality since the 1980s. If the cross-sectional relationship displayed in this figure holds in the future, we would expect to see a rise in the persistence in income across generations in the U.S. as well.[1] While we will not know for sure whether, and how much, income mobility across generations has been exacerbated by the rise in inequality in the U.S. until today's children have grown up and completed their careers, we can use the Great Gatsby Curve to make a rough forecast. The next figure displays this projection [Figure 8]. The IGE for the U.S. is predicted to rise from .47 to .56. In other words, the persistence in the advantages and disadvantages of income passed from parents to the children is predicted to rise by about a quarter for the next generation as a result of the rise in inequality that the U.S. has seen in the last 25 years. It is hard to look at these figures and not be concerned that rising inequality is jeopardizing our tradition of equality of opportunity. The fortunes of one's parents seem to matter increasingly in American society.

Children of wealthy parents already have much more access to opportunities to succeed than children of poor families, and this is likely to be increasingly the case in the future unless we take steps to ensure that all children have access to quality education, health care, a safe environment and other opportunities that are necessary to have a fair shot at economic success.

**Causes**

As a labor economist, I am compelled to comment at least briefly on the causes of the rise in inequality. In a mechanical sense, much of the rise in household income variability in the U.S. can be traced to a rise in the variability in hourly earnings. Other factors, such as the number of

[1] There are statistical reasons why the relationship might not hold (e.g., omitted variables), but there are also many reasons to suspect that it will hold. For example, families with higher incomes can pass on more advantages to their children through providing more educational opportunities, and the reward to education and skills has increased.

workers per family and family labor supply decisions also matter, but understanding why the dispersion in wage rates has changed is key to understanding the rise in inequality in America.

There is considerable professional disagreement about the causes of increased dispersion in wage rates. Nonetheless, the economics literature has coalesced around some key hypotheses.

In the mid-1990s, I did a poll of a nonrandom group of professional economists attending a conference at the New York Fed. I asked them the extent to which various factors contributed to the rise in inequality. This survey took on a life of its own, as it was reprinted in the *Economic Report of the President* in 1997, and then in *The New Yorker*. This poll is clearly an oversimplification of a complicated dynamic that has changed the U.S. labor market, but here is a summary of the findings [Figure 9].

The most important factor according to respondents was skill-biased technical change. A lot of activities people do at work have become automated as a result of computers and information technology, and much of this automation has favored people with the analytical skills to get the most out of the technology. This is one reason why the wage gap between those with a college education or higher and those with less than college education has soared in the last three decades. Attributing so much of the rise in skill differentials to shifts in demand across skill groups resulting from technological change alone may be a little misleading, however, as there also has been a slowdown in the growth of the supply of relatively highly educated workers in the U.S. in this period.

Showing the humility of economists, a distant second in this poll was other and unknown factors. I think we have come to know a little more about these factors since the poll was conducted. In particular, it is clear that the proliferation of high salaries earned in the financial sector has contributed to the rise in income inequality. The proportion of people in the top 1% who were from the finance and real estate industry nearly doubled from 1979 to 2005. And in 2005, executives from the finance and real estate sector made one quarter of the income in the top 0.1 percent.

Another factor that was cited in my poll that may matter more now than in the 1990s was increased globalization. The number of workers against whom the American labor force competes has jumped. Some have benefited as demand for the goods and services they provide has risen, but other workers have been left behind by globalization—they have seen their plant close with few new jobs available to replace it. The 2000s saw the worst record of job creation in 50 years, even before the recession that started in 2007. Recent research by David Autor, David Dorn and Gordon Hanson suggests that China's very rapid adoption of cutting edge technology in many industries has had an even more profound effect on labor demand in the U.S. in the 2000s than in the 1990s.

There have also been important institutional changes that have contributed to the rise in income inequality. Union membership in the U.S. declined from 20% of employees in 1983 to 12%

today.   This is important because David Card and others have shown that unions affect the wage structure primarily by raising the wages of lower middle class workers so they can make it to the middle class.  In addition, the decline in the real value of the minimum wage in the 1980s contributed to the rise in inequality, as David Lee and others have pointed out.

Lastly, tax policy has played a role in rising inequality.  Although our tax code is still progressive, tax changes in the early 2000s benefited the very wealthy by much more than other taxpayers, compounding the widening gap in pre-tax earnings.  As a result of reduced progressivity, the wealthy are paying some of the lowest tax rates in the history of the U.S.; average tax rates for the wealthiest 0.1 percent have been in decline for five decades.

Our income tax system is less progressive than that in other countries.  This chart shows the Gini coefficient for OECD countries, with the blue bars indicating inequality in before-tax income and the red bars inequality in after-tax income [Figure 10].  The difference in the height between the bars is a measure of how much the tax code reduces inequality.  Of all the OECD countries, only Chile, Korea, and Switzerland have tax systems that reduce inequality by *less* than the U.S.

Now, I could see why someone could support tax cuts for top income earners if they had materially benefited the U.S. economy, but the macro evidence is clear that the economy did not perform better after last decade's tax cuts than it did after taxes were increased on top earners in the early 1990s.  I already showed you evidence that income growth was stronger for lower and middle income families in the 1990s than it was in the last 40 years overall.  This next chart shows that there was more job growth in start-ups in the 1990s than in the 2001-2007 period [Figure 11].  Across all businesses, job growth was much weaker in the 2000s than in the 1990s.  So there is little empirical support for the claim that reducing the progressivity of the tax code has spurred income growth, business formation or job growth.

**Consequences**

Next, I will discuss three potential consequences of rising inequality for the economy.

I have already presented evidence suggesting that as inequality rises, the prospects for intergenerational mobility fall.  Support for equality of opportunity should be a nonpartisan issue.  It is hard not to bemoan the fact that because of rising inequality the happenstance of having been born to poor parents makes it harder to climb the ladder of economic success.  There is a cost to the economy and society if children from low-income families do not have anything close to the opportunities to develop and use their talents as the more fortunate kin from better off families who can attend better schools, receive college prep tutoring, and draw on a network of family connections in the job market.

One would think it inexcusable that public policy has exacerbated this trend. But that is exactly what has happened over the last decade. As I mentioned, income tax changes have made the distribution of after-tax income more unequal, not less. Moreover, the drastic cut in the estate tax will reduce economic mobility in the U.S. going forward, as the tremendous resources accrued by the wealthy can now be transferred to their heirs at much lower tax cost.

Raghuram Rajan and Robert Reich have suggested a second way in which rising inequality and slow income growth for the vast middle class have harmed the U.S. economy – namely, by encouraging many families to borrow beyond their means to try to maintain their consumption, and by reducing aggregate consumption. In his book *Fault Lines*, Rajan goes so far as to argue that this overleveraging as a result of increased inequality was a significant cause of the financial crisis in 2008.[2] In the spirit of Nicholas Kaldor from an earlier era, Reich argues that increased inequality has reduced aggregate demand because the well-off have a lower marginal propensity to consume than everyone else. While one could reasonably expect all families to consume their (permanent) income over their lifetimes, studies have found that the marginal propensity to consume is lower at higher income levels in the short run. And one might expect the reduction in the estate tax to prolong the short run today because the cost of saving for the next generation for the wealthy is considerably reduced since inheritances will be taxed at a much lower rate.

While the potential drag on aggregate demand from the shifts in the income distribution are hard to document, the following back-of-the envelope calculation makes clear that it could be substantial. As I mentioned, the share of income going to the top 1 percent increased by 13.5 percentage points between 1979 and 2007, the equivalent of about $1.1 trillion a year in 2007 income. Research on the saving behavior of families at the top of the income distribution is scarce, but according to research by Karen Dynan and coauthors, the top 1 percent of households saves about half of the increases in their wealth, while the population at large had a general savings rate of about 10%. This implies that if another $1.1 trillion had been earned by the bottom 99% instead of the top 1%, annual consumption would be about $440 billion higher. This would be a 5% boost to aggregate consumption.

There are many caveats to this calculation since estimates of the marginal propensity to save by income are not well known for the extreme upper end of the income distribution. And this does not say that the rise in inequality cut aggregate demand by $440 billion, because households could have (and probably did) borrowed to make up for weak income growth. But the scope for such borrowing has come to an end, so this calculation indicates the kind of latent pressure that could be placed on aggregate demand as a result of changes in the income distribution. Now that we are in a period with excess capacity, I think these calculations make clear that the economy

[2] Dirk Krueger and Fabrizio Perri have found that rising income inequality has not been accompanied by rising consumption inequality, which suggests that some households accumulated debt at an unsustainable rate to maintain their consumption. Other studies have found that consumption inequality increased along with income inequality.

would be in better shape and aggregate demand would be stronger if the size of the middle class had not dwindled as a result of rising inequality.

President Obama made this point very clearly in his Kansas speech: "When middle class families can no longer afford to buy the goods and services that businesses are selling, it drags down the entire economy, from top to bottom."

Third, I want to mention that an active line of research examines the connection between inequality and longer term economic growth. In a seminal paper, Torsten Persson and Guido Tabellini argued that in a society where income inequality is greater, political decisions are likely to result in policies that lead to less growth. They provided evidence supporting this conclusion. A new IMF paper also finds that more equality in the income distribution is associated with more stable economic growth.

Historically, a growing middle class has led to new markets, supported economic growth and built stronger communities. The studies on inequality and growth may have found an inverse relationship between the two for the reasons that Kaldor pointed to decades ago – because the top income earners tend to save rather than spend their incomes.

While research on the macroeconomic consequences of inequality is controversial, there is much microeconomic evidence that convincingly finds that wage discrepancies can be bad for employee morale and productivity. In one recent randomized field experiment, for example, Ernst Fehr and his coauthors found that raising pay for workers who felt that they were underpaid substantially increased their productivity, but raising pay for those who did not feel underpaid had no effect on productivity.[3] In another experiment, he found that increasing the disparity in pay between pairs of workers decreased the productivity of the two workers combined.[4] These studies and others suggest that a more fair distribution of wages would be good for business because it would raise morale and productivity. This is in addition to any effect that an increase in the size of the middle class would have on the demand for the businesses' products.

**Conclusion**

My theme that rising inequality has been bad for the U.S. economy was nicely anticipated by CAP's Heather Boushey. Heather recently wrote, and I quote: "What we now know is that a strong middle class creates stable markets for businesses to invest. The decline of America's

[3] Alain Cohn, Ernst Fehr and Lorenz Goette, "Fairness and Effort - Evidence from a Field Experiment," October 2008.
[4] Alain Cohn, Ernst Fehr, Benedikt Herrmann, and Frederic Schneider, "Social Comparison in the Workplace: Evidence from a Field Experiment," IZA Working Paper 5550, March 2011.

middle class entails real hardships for families and limits opportunity. But it also appears that the demise of our middle class is a part of what ails our economy overall."[5]

The next question to ask is what should be done to bring back more fairness to the U.S. economy, to ensure that hard work and responsibility are rewarded by a good shot at making it to the middle class, regardless of where you start out? While this could be the subject of another CAP lecture, let me highlight a few significant areas of public policy.

First, the Affordable Care Act is already helping middle class families. It has been well publicized that an estimated 2.5 million additional young people age 19-25 have obtained health insurance because the ACA allowed them to stay on their parent's health insurance plan. What is less well known is that these young adults overwhelmingly come from lower middle class families. Health insurance coverage did not rise for full-time students because they already had access to health insurance coverage. But it did rise for young adults who were not enrolled in school and who had parents with health insurance coverage. These are overwhelmingly responsible families who are working to maintain their position in the economy despite economic forces that have been working against them for decades.

Moreover, when it is fully implemented the ACA will help the middle class and those struggling to get into the middle class by lowering the growth of health care costs, by preventing those with pre-existing conditions from being denied health insurance coverage, by creating exchanges for small businesses and lower income families to obtain health insurance at competitive rates, and by providing tax subsidies to small businesses and lower income workers to purchase insurance.

Second, it is critical to take the steps necessary to ensure that the current economic recovery continues. Economic slumps tend to hit those struggling to get into the middle class the hardest. Although the economy has been expanding for 10 straight quarters, the right policy actions would strengthen economic growth. President Obama proposed the American Jobs Act in September to strengthen the recovery and speed job growth. Among many measures to support the recovery, the American Jobs Act included an extension of the payroll tax cut for the rest of this year, which would put an extra $1,000 in the hands of a typical middle class family, and the continuation of extended unemployment insurance benefits. Although Congress has extended these measures until the end of next month, it is critical for the recovery that they are extended for the rest of the year. The American Jobs Act also called for expanded reemployment services and a "Pathways Back to Work" fund that states could use to help less skilled job seekers find jobs. Creating these opportunities for less skilled workers would get them back to work right away and help expand their opportunities in the future.

Third, I think it is clear that we can't go back to the type of policies that exacerbated the rise in inequality and threatened economic mobility in the first place if we want an economy that builds

[5] Heather Boushey, "The Endangered Middle Class: Is the American Dream Slipping out of Reach for American Families?," May 2011.

the middle class. This means that we must adequately regulate excess risk-taking and corrupt practices in financial markets. It also means that we can't go back to tax policies that didn't generate faster economic growth or jobs, but rather increased inequality. Instead of going backwards, we should adhere to principles like the Buffett Rule, which states that those making more than $1 million should not pay a lower share of their income in taxes than middle class families. We should also end unnecessary tax cuts for the wealthy, and return the estate tax to what it was in 2009. And we should ensure that all children have adequate nutrition, access to health care and a secure environment, and a fair shot at a good education, regardless of their parents' income.

Lastly, I want to emphasize that restoring more fairness to the economy would be good for all parts of American society. This is not a zero-sum game. The evidence suggests that a growing middle class is good for the economy, and that a more fair distribution of income would hasten economic growth. Businesses would benefit from restoring more fairness to the economy by having more middle class customers, more stable markets, and improved employee morale and productivity.

President Obama said this much better than I ever could: "This isn't about class warfare. This is about the nation's welfare. It's about making choices that benefit not just the people who've done fantastically well over the last few decades, but that benefits the middle class, and those fighting to get to the middle class, and the economy as a whole."

Thank you very much.