

## **Perspectives on Median Income Stagnation in America, 1973 to Today**

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**ABSTRACT:** Since 1973 the US economy has doubled in per capita terms, yet wages have declined by 20% for the average 30-year-old and poverty is up (even when measured according to 1960s standards of living). All the while marginal income taxes on high-income Americans have come down from 90% in the 1950s to 35% today. Income taxes on corporations and unearned income are even lower, often less than half that. In short, America has shifted from being a relatively progressive modern welfare state to having an income structure more typical of the middle-income countries Latin America. This paper documents these shifts in American income distribution, frames them in comparative and historical perspective, and suggests causes and remedies. Especially indicative of the relative decline of working America has been the rapid de-unionization of the American private sector workforce. While the disintegration of American unions may be both cause and consequence of American median income stagnation, it is also a sign of the disintegration of America's social contract.

This paper highlights just how far rising inequality has transformed America from a country characterized by income security for most citizens to one that overwhelmingly rewards its most elite citizens.

The American economy has done well over the past forty years. America's national income per person has almost exactly doubled since 1970.<sup>1</sup> The United States has been the richest major country in the world for over 100 years now, and it remains the richest major country in the world today.<sup>2</sup> The American economy in 2010 generated \$47,436 for every man, woman, and child living in the country.<sup>3</sup> On current projections, this figure will rise by a further \$1000 per year for the next several years.<sup>4</sup>

That's a lot of money for a lot of people. Unfortunately, all of that money doesn't go directly into ordinary Americans' paychecks. Some of it goes into corporate profits, payroll taxes, and other expenses. The remaining personal income actually paid out to Americans through their paychecks and profits came to \$40,094 per person in 2010.<sup>5</sup> That's still over \$40,000 for every man, woman, and child living in America.

Of course, that doesn't mean that a family of two adults with eight children will make \$400,000 a year. Most children don't work, and when they do work they don't earn very much. Spreading total US personal income out among just the adult population<sup>6</sup> would give an average of income of \$52,952 for every American adult.

In other words, if America's total personal income were evenly distributed, the typical married couple would be making over \$100,000 a year.

If the typical single person in America were making \$52,952 a year and the typical married couple were making \$105,904 a year, the United States really would be a very rich country. The problem is that most people actually make much less than this. The typical American adult makes just \$26,134.<sup>7</sup> Half of all Americans make less than this.

How can it be that the typical American adult makes just \$26,134 when America is the richest nation on Earth? The answer is that a few high-income Americans gain the lion's share of America's national income. In 2009, the top 5% of American households made as much money as the entire bottom 50% combined.<sup>8</sup> That's amazing. Out of about 120 million households in America today, the richest 6 million make as much money as the poorest 60 million.

Put a slightly different way, the same data show that the richest 20% of households take home more income than the other 80% combined. There really are two Americas: the top 20%, and everybody else. By definition, most Americans fall into the category of "everybody else."

It wasn't always like this, and it doesn't have to be like this. America used to be one of the most equal countries in the free world, a place where anybody could make a decent living, support a family, and retire well. Such simple dreams are increasingly out of reach for ordinary Americans who fall in the middle of the country's income distribution.

This paper tells the story of America's middle and how it's changed over time. It's a story of steadily rising living standards over eleven decades, followed by a wobbly decline at the end of the twentieth century. It's a story about rising inequality and the increasing demands put on people -- mainly women -- to try to make ends meet. It's a story about how the success of American business is increasingly based on the failure of American people. In the end, though, it's a story of hope.

If America could be the greatest country on Earth forty years ago, surely it can be again.

## THE DEATH OF THE GREAT AMERICAN WORKING CLASS

In 1959 Dwight D. Eisenhower was the President of the United States. That summer there was a trade exhibition of US products being held in Moscow. Moscow was the capital of America's Communist arch-enemy, the Soviet Union. Presidents don't go to trade fairs, especially not trade fairs in enemy territory, so Eisenhower sent his vice president, one Richard Milhous Nixon.

Nixon was famous at the time as one of the country's greatest debaters. On his visit to Moscow Nixon quickly found himself trading points and counterpoints with Soviet leader Nikita Khrushchev as they walked through the fair. A young William Safire, representing the American building industry, steered Nixon and Khrushchev toward a walk-through mock-up of the typical American home.<sup>9</sup> The debate came to a climax in the kitchen, and so it went down in history as the "kitchen debate."

Khrushchev argued that the Soviet Union had surpassed America in rockets and high technology. Nixon responded by showing Khrushchev around the model American kitchen on display, with all its modern 1950s appliances. Nixon told Khrushchev how any ordinary

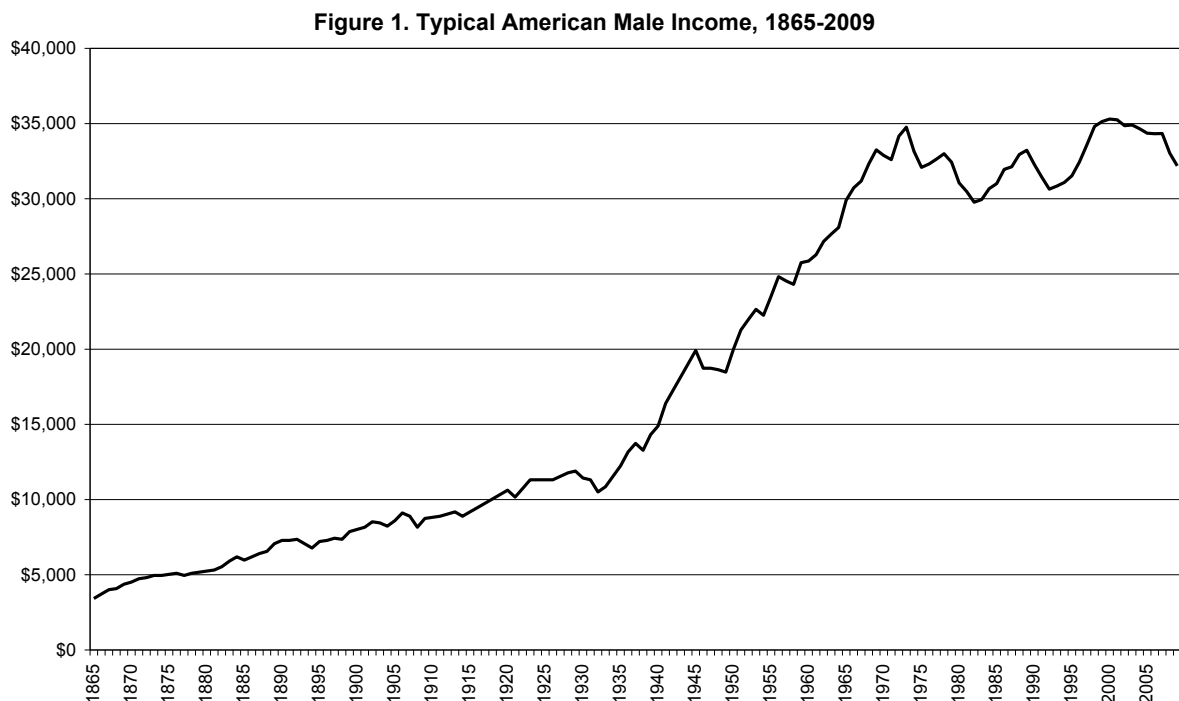
American, a military veteran or a steelworker earning \$3 an hour (worth \$22.48 today<sup>10</sup>) could afford a brand-new home with modern appliances. And he was right.

Back when Richard Nixon was vice president, ordinary working Americans could afford to buy new homes -- without taking out risky subprime mortgages. In the 1950s the typical American got married at 21 or 22 years old<sup>11</sup> and bought inexpensive houses on fixed-rate mortgage.<sup>12</sup> In the 1950s, builders were still building modest 1200 square foot houses for ordinary people, not just "super-luxury" McMansions for rich professionals.<sup>13</sup>

Working Americans in the 1950s could stretch to buy the most expensive houses they could afford because they could expect their incomes to rise year after year as they got older. If they could barely afford their 30-year fixed-rate mortgage payments at 20 or 25, by the age of 30 or 40 they could comfortably afford their mortgages, and they could count on retiring with fully-paid houses to fall back on.

Post-war American workers weren't stupid to expect their incomes to keep rising. Their expectations were based on historical experience. In the 1950s and 1960s no one could remember a time when incomes didn't go up. Incomes had gone up year after year, decade after decade for their parents, their grandparents, and their great-grandparents. Incomes had been going up since colonial times. Incomes even rose during the Great Depression.

Figure 1 charts the median male income for American men since the end of the Civil War in 1865.<sup>14</sup> The median income is the income of the average or typical person. Men's incomes are used because the proportion of women working outside the home has changed dramatically over the years. Trends in women's incomes will be examined in detail later in the paper.



It's obvious from Figure 1 that typical male incomes rose continuously from the 1860s through the 1960s. Between 1865 to 1973 typical male incomes rose by a factor of 10, from

\$3425 a year to \$34,762 a year. Male incomes rose in every single decade for more than a century.

It's also obvious from Figure 1 that this growth ended in the 1970s. Since the 1970s there has been no increase in male median incomes -- at all. None. In fact, since 1973 typical male incomes have fallen by 7.4%, from \$34,762 a year to \$32,184 a year. Typical male incomes fell slightly in the 1970s, rose slightly in the 1980s and 1990s, then fell again in the 2000s.

That's remarkable, considering that American national income per person has doubled over the same period. But it gets worse. For American men of any given age, incomes have fallen dramatically since 1973. For American men aged 45-54 years old incomes have fallen by 11.1%; for men 35-44 years old incomes have fallen by 18.7% since 1973, and for men aged 25-34 years old incomes have dropped by an astounding 26.7%.<sup>15</sup>

Yes, the average American young man in 2009 makes one-quarter less than the average American young man did in 1973. American men today are -- literally -- worse off than their fathers were. The typical young male Americans made \$43,530 in 1973, compared with just \$31,914 today.<sup>16</sup> No wonder young adults can't afford to move out on their own these days.

How it is possible that the US economy has doubled in size without helping the average working man at all? The answer can be divided into three parts. First, more and more women work outside the home. This boosts the overall size of the economy without boosting the wages paid by any particular job. Second, the population is getting older as baby boomers mature. Older people are more experienced and thus earn more (on average), even though incomes for people of any particular age haven't changed.

The third part, however, is the biggest. It's rising inequality. Pretty much all of the economic gains of the past forty years have gone to the top half of American workers. Most of those gains have gone to the top 1%. It has been estimated that 58% of all the income growth in the US economy between 1976 and 2007 went to the top 1% of households in America.<sup>17</sup> To get into that top 1% a household has to be bringing in over \$405,000 a year.<sup>18</sup>

For the 99% of Americans whose household incomes are well under \$400,000 a year, there has been very little improvement since the 1970s. For individual Americans in the middle of the income distribution, there has been no improvement at all.<sup>19</sup> For Americans at the bottom, things have actually gotten worse since the 1970s.<sup>20</sup>

It sounds like the same old story: the rich get richer and the poor get poorer. But as Figure 1 shows, that's not really true. For at least a century from 1870 to 1970 it was the people in the middle -- or at least the working men in the middle -- who got richer.

## THE MIDDLE SIXTY AT HOME AND ABROAD

According to a recent survey, 91% of American adults identify themselves as "middle class."<sup>21</sup> Of these, 53% identify themselves as falling in the middle of the middle class, 18% in the upper middle, and 18% in the lower middle class. Taking the middle of the middle as a benchmark, over half of all Americans seem to feel like they live pretty typical lives. They're probably right.

On surveys and in actual incomes there's a bulge of Americans who fall somewhere in the middle of the distribution. They're more than half the population, but far short of the whole population. They're the Middle Sixty. Above them are the Top Twenty -- lawyers, doctors, investment bankers, and business executives. Below them are the Bottom Twenty -- the poor. The Middle Sixty, Top Twenty, and Bottom Twenty roughly correspond to normative ideas of well-off, middle-class, and poor.

The "Middle Sixty" are the roughly 60% of Americans who live lives of plenty, but not lives of luxury. They never go hungry, but they can't afford to hire kitchen help. They're not homeless, but they have one home, not two or three. Their kids don't go to private prep schools, but their kids can go to college if they work hard and get the grades. The Middle Sixty live ordinary, typical American lives.

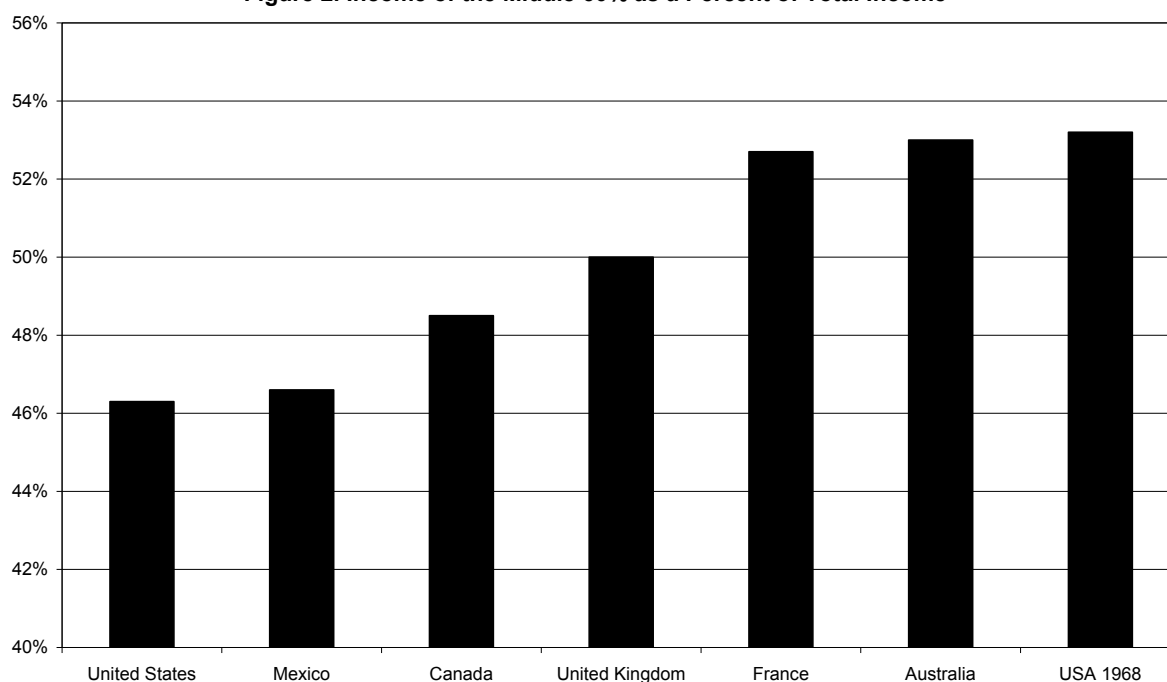
A good way to think about what it means to be a member of the Middle Sixty is to think about owning a car. Most Americans own a car. It might be a Hyundai or it might be a Hummer, but either way it's one car for each adult driver. Only poor Americans can't afford their own cars. Only rich Americans can afford to have collections of cars. For the vast majority of Americans in the middle, one car per driver is enough.

People at the high end of the Middle Sixty might drive expensive new cars while people at the low end of the Middle Sixty drive cheap used cars, but life is pretty similar either way. They all drive their cars on the same roads and park in the same spaces at the same supermarkets. They all have kids in carseats and pump their own gas. When the car needs service, they have to get up early and drop it off before work. Some of the Middle Sixty have nicer lifestyles than others, but they all have pretty much the same lifestyle.

A good indicator of the strength of the middle class in a country is the proportion of all the income in that country that goes to the Middle Sixty. For example, one problem in Mexico is the lack of a strong middle class. In Mexico, the Middle Sixty take home just 46.6% of Mexico's income, even though they make up 60% of Mexico's households.<sup>22</sup> In Mexico, so much of the nation's income goes to the Top Twenty that there's very little left for the Middle Sixty, or for the poor.

The amazing thing is, by this measure even Mexico has a stronger middle class than the United States. The Middle Sixty in America take home just 46.3% of America's income.<sup>23</sup> This is by far the lowest figure of any major developed country. Figure 2 reports Middle Sixty income levels for the United States, Mexico, and four other countries.<sup>24</sup> The United States scores at the rock bottom of the league for the economic strength of its middle class.

Figure 2. Income of the Middle 60% as a Percent of Total Income



It might be even worse than this. The data used to calculate the official US Census Bureau income statistics don't accurately measure incomes over about \$100,000. As a result, they don't adequately capture the recent rise in the incomes of the super-wealthy. To address this gap, the Federal Reserve conducts a survey every three years that is specifically designed to measure the incomes of people earning over \$100,000 a year.<sup>25</sup>

The latest data available from that Federal Reserve study are for 2007. The results suggest that the income share of the Middle Sixty is actually just 35.8%.<sup>26</sup> To put that number in context, a 35.8% income share is literally "off the chart" of Figure 2. Using that same Federal Reserve data, the Middle Sixty income share was 44.6% in 1982, the first year that the survey was conducted.<sup>27</sup>

For those who don't remember 1982, it was a tough year for the middle class. Since then, though, the income share of the Middle Sixty has dropped to nearly 11 points below Mexican levels. And that was in 2007, which was a good year for most Americans. The latest Federal Reserve survey was conducted in 2010, but the data have not yet been released. Considering the state of the economy in 2010, it's likely to be a bloodbath for the Middle Sixty.

The United States didn't always have the world's weakest middle class. Back in 1968 the US Middle Sixty took home 52.3% of all the nation's income (based on the official statistics).<sup>28</sup> That implies that in 1968 the US middle class was stronger than any middle class in the world is today. The US Middle Sixty might have been even stronger in the 1950s, but unfortunately data are not available to tell. The data start in 1968, and it's been all downhill from there.

## EQUALITY AND INEQUALITY OF OPPORTUNITY

It's one thing to say that young people today are worse off than their parents were in the 1970s. It's another thing to say that particular Americans are worse off than their own

parents. People determine their own destinies. People can either work hard to make their lives better or work less and take what comes. Some people have talent; others don't. Some people are just luckier than others.

The phenomenon that some poor children grow up to be rich (and some rich children grow up to be poor) is called intergenerational mobility. The Italian economist and sociologist Vilfredo Pareto argued a hundred years ago that intergenerational mobility is necessary for the long-term success of a society.<sup>29</sup> Societies where children are forced to follow in the footsteps of their parents waste the energies and talents of their people.

Research shows that societies need regular infusions of new blood and new ideas among their leaders to stay vibrant and keep growing -- especially in times of major technological change.<sup>30</sup> Unfortunately, to find space for new leaders at the top of society, some of the old leaders have to fall down the ranks. For one's child to make it into the Top Twenty, someone else's child has to fall out of the Top Twenty. By definition, only 20% of the population can be in the top 20% of the population at any one time.

Intergenerational mobility means that children's incomes aren't predetermined based on their parents' incomes. In the United States, the consensus view among economists and sociologists has long been that somewhere between 40%<sup>31</sup> and 45%<sup>32</sup> of family-to-family income differences are transmitted from one generation to the next. This is about twice as high as the equivalent figures for the Scandinavian countries (13-28%)<sup>33</sup> and Australia (around 20%).<sup>34</sup>

Comparative figures like these are available for only a few countries. Most studies don't report a summary figure for the stickiness in incomes across generations. More scientific (but less easily explained) measures of mobility similarly rank the United States as one of the least mobile countries in the world. The most detailed cross-national analysis ever conducted placed the United States at the bottom of a group of countries that included the United Kingdom, Denmark, Finland, Norway, and Sweden.<sup>35</sup>

The 40-45% consensus estimate for the intergenerational stickiness in the transmission of income in America implies that just under half of children's incomes are determined by their family origins and just over half are determined by their own efforts.<sup>36</sup> Fifty-fifty is a psychologically important threshold. It means that at least half of children's economic destinies are in their own hands.

Unfortunately, the consensus estimate is wrong. The latest data show that the American class system is actually much more rigid. A recent study by the Federal Reserve Bank of Chicago shows that prior researchers have seriously underestimated the intergenerational transmission of income in the United States. The new best estimate is that the intergenerational stickiness in income is around 60%.<sup>37</sup> In other words, well over half of a person's economic success in life is predetermined.

This Federal Reserve study puts the 60% intergenerational transmission figure in context using a concrete example of income mobility. According to this study, for a family that lives right at the US poverty line (roughly speaking, a Bottom 20 family), it would take on average 5 or 6 generations for their descendants to reach middle income levels.<sup>38</sup> That is to say, their great great great great grandchildren would finally have typical income levels.

This doesn't mean that all of a poor family's descendants will be poor for six generations, but it does illustrate just how slowly family incomes change in America.

As with inequality, income stickiness in America is getting worse every year. Another study from the Federal Reserve Bank of Chicago showed that intergenerational income mobility increased continuously from 1940 to 1980.<sup>39</sup> Then it started to fall. By the year 2000 (the final year of the study) intergenerational mobility was lower than it was in 1940 -- lower than at the end of the Great Depression.

For most Americans today, the fable of America as the land of opportunity is just that: a fable. For most Americans today, birth is destiny. Even immigrants coming to America from abroad may want to think twice. For example, Mexican immigrants make on average 45.1% less than non-immigrant Americans, and under the best-case scenario their children and grandchildren can only expect to catch up at a rate of 5-10% per generation.<sup>40</sup> Maybe that's why as many as 70% of Mexican immigrants to the United States leave within ten years.<sup>41</sup>

The lack of intergenerational mobility in America means that most people end up in roughly the same economic positions as their parents. Most of the children of the rich are rich and most of the children of the poor are poor. Most of the children of the Middle Sixty find themselves in the Middle Sixty as well. So are they really worse off than their own parents were, or are they doing about the same?

Most of the children of the middle are still in the middle -- that's a good start. The trick is that the middle has moved. For working-age men today, the middle is much lower than it was in the 1960s and 1970s. For working-age women it is higher, not because their jobs pay better but because more of them are working. As a result, the typical American family today has a higher total income than the typical family did in forty years ago, but only due to additional working members, not any increase in wages paid to each worker.

## THE REASONS BEHIND THE TRENDS

Total US national income per person rose by 99.3% over the 30 years from 1969 to 2009.<sup>42</sup> Why then have incomes for most Americans been stagnant or falling? Why do American families now need two incomes to have the standard of living they used to have with just one? Why aren't today's young adults making twice as much as their parents did were when they first entered the labor market thirty years before?

The answer is that all of the growth in the American economy over the past forty years has gone to the top half of Americans. Most of it has gone to the Top Twenty. If the US income distribution today had remained unchanged from 1969, by 2009 the average American household would have had an income of \$86,479 instead of \$49,777.<sup>43</sup> If the US income distribution had become more equal in the four decades after 1969 -- as it did in the four decades before 1969 -- the average American household would be doing even better.

The fact that the average American household today has an income of \$50,000 instead of \$100,000 can be attributed entirely to rising instead of declining inequality over the past four decades. America has far greater income than ever before in its history, but that income is concentrated in fewer and fewer hands. Rising inequality is killing middle America.



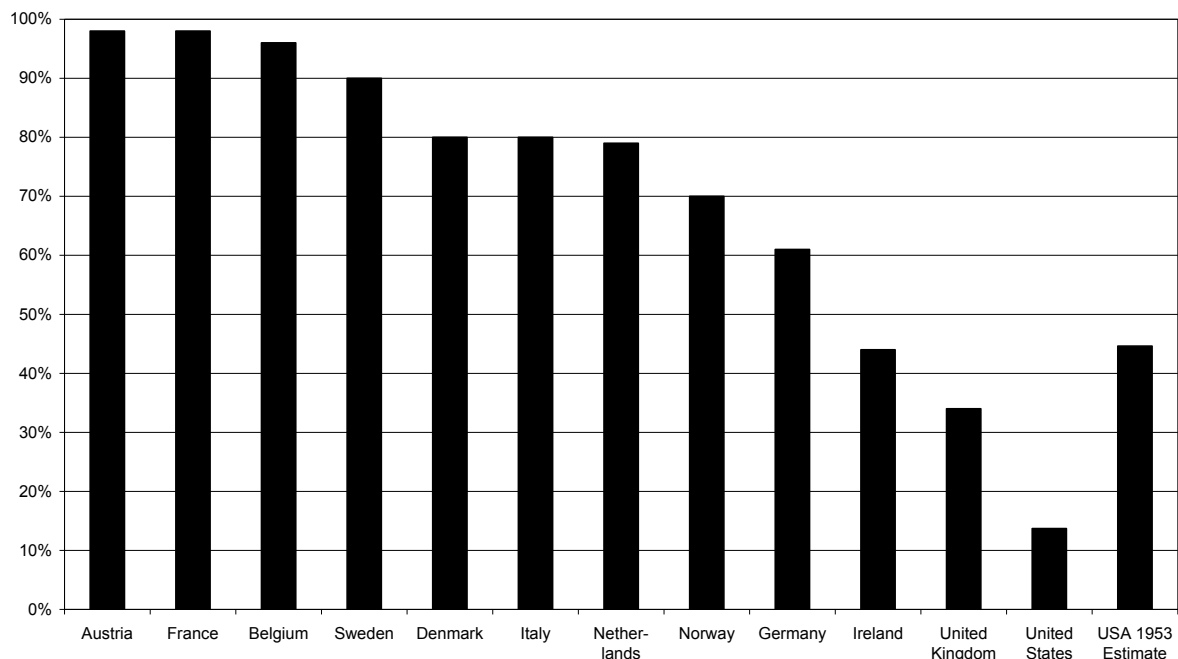
Sociologists and economists have been conducting detailed quantitative analyses of rising inequality for more than a quarter century now. It's no mystery why inequality has been rising in America. As a recent 11-country comparative study concluded, the main factors that determine whether a country is equal or unequal in its income distribution are "union density, the strictness of employment protection law, unemployment benefit duration, unemployment benefit generosity, and the size of the minimum wage."<sup>44</sup>

By far the most important of these is union density: the percentage of workers who are covered by a union contract or collective bargaining agreement.<sup>45</sup> Around the world, wherever workers have unions, they get better pay.<sup>46</sup> The most recent estimates suggest that unionization increases an individual worker's pay by about 17%,<sup>47</sup> but some argue that the effect on total pay (including benefits) could be as high as 43%.<sup>48</sup> Though researchers argue over the exact figure, research consistently shows that unions increase workers' wages.

In the end the key issue is bargaining power. Obviously, workers who bargain as part of a union are in a better bargaining position than workers who don't have a union. But it's not just a matter of unions. Where unemployment benefits are generous, workers can bargain harder, since it's not catastrophic if they lose their jobs. And having a good minimum wage means that when unemployed workers run out of insurance payments they can be sure of earning at least a living wage when they do go back to work.

So how does America compare on union coverage? As Figure 3 makes clear, the United States has just about the lowest level of union coverage in the world.<sup>49</sup> Figure 3 compares the proportion of workers who are covered by union-type collective bargaining contracts across the United States and 11 western European countries. Union coverage in the United States is now lower (by far) than anywhere in western Europe. Even at its height in 1953, US union coverage was low by European standards. Today it is absolutely in the basement.

**Figure 3. Proportion of All Workers Covered by Collective Bargaining, 2008**



At the union peak in 1953 well over 40% of American workers were covered by collective bargaining agreements. Considering that union workers were never very poor and never very

rich, that 40% accounts for the majority of the Middle Sixty. In other words, it used to be normal for Americans to be in a union. Ralph Kramden, Archie Bunker, and Fred Flintstone were all union members. Ronald Reagan was a six-term union president before he became a politician. In 1960 even called his union out on strike!

Of course, the decline of unions isn't the only reason why inequality is rising in America. There is some evidence that America is pulling apart along regional lines, with New York and Los Angeles pulling away from the rest of the country.<sup>50</sup> There's also some evidence that technological change is creating situations in which the top-ranked people in any industry (like sports and movie stars) end up taking home more and more of the available pay.<sup>51</sup> After-tax inequality is also affected by changes in the tax system.

To some degree the decline in union membership is also just a symptom of a much broader trend: the decline of society and the rise of individualism. This trend is associated with increased consumerism and free market economics. People place their own interests above the common good. In particular, American businesspeople increasingly ask not what's good for their employees, their customers, or their coworkers, but what's good for themselves. Nowhere is this better illustrated than when looking at executive pay.

The chief Executive Officer (CEO) is the top employee, the commander-in-chief, of any public company. In the United States, CEOs run their companies with very few constraints. Technically they are supervised by boards of directors, but most American CEOs serve as chairmen of their own boards of directors -- and even select their own board members. Shareholders are the legal owners of a public company, but if shareholders are unhappy it's much easier for them to sell their shares than to fire their CEOs.

It's been widely reported that CEOs now receive enormous salaries, hundreds of times as much as their own workers. The average annual pay of a Fortune 500 CEO was over \$8,000,000 in 2009.<sup>52</sup> That's about 200 times the earnings of the average American adult who works full-time.<sup>53</sup>

Much less widely reported has been the growing gap between how much companies pay their CEOs and how much they pay the small number of top executives who work directly under the CEO. Between 1993 and 2006 CEOs at America's top 1500 public companies received average annual raises of 8.8% per year.<sup>54</sup> Corporate seconds-in-command received annual raises averaging 5.4%, thirds-in-command 5.2%, fourths-in-command 5.0%, and fifths-in-command 4.6%.<sup>55</sup>

In other words, inequality is rising even within the boardroom. It is rising everywhere we look. The rising pay gap between corporate fourths- and fifths-in-command has nothing to do with union coverage, unemployment insurance, technological change, or the premiumization of life in New York and Los Angeles. It can only be traced to changing norms of what's considered acceptable behavior in setting pay. Forty years ago, executives might have felt some pressure to take care of their employees before taking care of themselves. They certainly don't anymore.

## CLOSING THOUGHTS

Ronald Reagan was born in 1911, Richard Nixon in 1913. They came of age during the Great Depression. People of their generation had it tough. They worked hard to make ends meet, but their hard work was rewarded with ever-increasing standards of living. For Americans of their generation, things started out hard but got better and better as time went on. They were perpetual optimists, because living in America they could always be sure of one thing: life would be better for their children than it was for them.

That's simply not true anymore.

Today, American confidence in the future has reached an all-time low. Americans are optimists by nature, and optimists still outnumber pessimists by 54% to 42%, but the gap is narrower than ever before.<sup>56</sup> By a small margin of 38% to 37%, more Americans actually think life was better in the 1960s than it is today.<sup>57</sup> Among those who are old enough to actually remember adult life in the 1960s, the ratio is 49% to 30% in favor of the sixties.<sup>58</sup>

That's not just nostalgia. Life really was better in the late 1960s for many Americans, and certainly for most white Americans. Perhaps more importantly, the United States of forty years ago had much more of an ethic that they were all in it together. In the 1960s and 1970s, American CEOs paid themselves roughly 40 times as much as an ordinary worker.<sup>59</sup> That's not exactly slumming it, but it seems positively frugal by today's standards.

What's incredible is not that so many people are no better off than their parents were forty years ago. What's incredible is that so many people are no better off than their parents were forty years ago despite the fact that American economic output per person has doubled in that period. The problem isn't that the economy is stagnant. It's not stagnant. It's growing. The problem is that the rewards of that growth are all going to a very small number of people -- ironically, to the people who need them least.

There's both good news and bad news to be read in this benchmarking of the great American middle. The good news is that there are plenty of resources in America for everyone to live a very good life. There's so much income generated every year in America that if we distributed it evenly the average household could be living on \$100,000 a year. Even allowing for the kinds of inequality found in America in the 1960s and 1970s -- CEOs making 40 times their workers' salaries instead of 200 times -- the average household could be bringing in \$80,000 a year. That's not too bad.

The bad news is that there's no sign that Americans are prepared to take it into their own hands to reduce inequality. Fewer than half of Americans have a favorable view of unions; even after a major recession, slightly more Americans have a positive view of businesses than of unions.<sup>60</sup> Americans are not going to the polls to demand that their political leaders implement policies that are known to reduce inequality. Perhaps most importantly, Americans are not moving away from the divisive beggar-thy-neighbor individualism that caused inequality to rise in the first place. Instead, they seem to be embracing it.

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## NOTES

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<sup>1</sup> Based on figures from the 2010 National Income and Product Accounts from the US Bureau of Economic Analysis, Table 7-1.

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- <sup>2</sup> Based on real national income per capita estimates from Angus Maddison (2010), *Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD*, Table 3.
- <sup>3</sup> Based on 2010 US GDP estimates from US Bureau of Economic Analysis release BEA 11-02, Table 3, divided by 2010 US population estimates from US Census Bureau release NST-PEST2010-01, Table 1.
- <sup>4</sup> Based on 2011 and 2012 US growth projections from the International Monetary Fund's *World Economic Outlook Update*, January 2011.
- <sup>5</sup> Based on 2010 US personal income estimates from US Bureau of Economic Analysis release BEA 11-02, Table 10, divided by 2010 US population estimates from US Census Bureau release NST-PEST2010, Table 1.
- <sup>6</sup> Based on the age structure of the US population in 2009 from US Census Bureau release NC-EST2009, Table 2.
- <sup>7</sup> Based on 2009 figures from US Census Bureau release PINC-01, Part 1.
- <sup>8</sup> Based on an analysis of 2009 figures from US Census Bureau Income Inequality Historical Table H-2.
- <sup>9</sup> William Safire (2009), "The Cold War's Hot Kitchen," *New York Times* July 23, 2009.
- <sup>10</sup> After adjusting for inflation.
- <sup>11</sup> Based on 1955 figures from US Census Bureau Families and Living Arrangements Table MS-2.
- <sup>12</sup> Census data on homeownership only begin in 1965, but in that year the homeownership rate was already 63% (US Census Bureau Housing Vacancies and Homeownership Historical Table 7), and adjustable-rate mortgages were not widely available in the US until the 1970s.
- <sup>13</sup> Data on square footages of new-build houses go back only to 1973, but in that year the median square footage of new single-family houses was 1525 (meaning that half of all new houses were smaller), compared to a median of 2277 square feet in 2007 (US Census Bureau Characteristics of New Housing, Median and Average Square Feet of Floor Area in New Single-Family Houses Completed by Location).
- <sup>14</sup> Data for 1865-1946 based on E.H. Phelps Brown and Margaret H. Phelps Brown (1968), *A Century of Pay: The Course of Pay and Production in France, Germany, Sweden, the United Kingdom, and the United States of America, 1860-1960*, Appendix 3. Data for 1947-2009 are based on figures from US Census Bureau Historical Income Statistics Table P-8. The three separate inflation-adjusted Phelps Brown and Phelps Brown indices have been spliced together at their overlap points, then spliced to the Census Bureau 2009 dollar series using the average conversion rate between the two sources for the years 1947-1960 (\$72.87 in 2009 dollars per Phelps Brown and Phelps Brown index point). Linear interpolations have been used to fill the gaps in the series due to World War I (1914-1919) and World War II (1942-1944).
- <sup>15</sup> Based on figures from US Census Bureau Historical Income Statistics Table P-8.
- <sup>16</sup> Based on figures from US Census Bureau Historical Income Statistics Table P-8.
- <sup>17</sup> Anthony B. Atkinson, Thomas Piketty, and Emmanuel Saez. 2009. "Top Incomes in the Long Run of History," NBER Working Paper 15408; the authors include single-person households as "families," making their definition of a family near-identical to the US Census Bureau definition of a household.
- <sup>18</sup> Based on Atkinson et al's figures for the top 1% extrapolated using top 5% income growth rates since 2007 from US Census Bureau Historical Income Statistics Table H-1.
- <sup>19</sup> Based on figures from US Census Bureau Historical Income Statistics Table P-8.
- <sup>20</sup> Based on the application of income ratios from US Census Bureau Historical Income Statistics Table IE-2 to data from US Census Bureau Historical Income Statistics Table P-8.
- <sup>21</sup> Pew Research Center (2008), *Inside the Middle Class: Bad Times Hit the Good Life*.
- <sup>22</sup> Based on 2002 figures (the most recent available) from Matthew Hammill (2005), *Income Inequality in Central America, Dominican Republic and Mexico: Assessing the Importance of Individual and Household Characteristics*, Table 3.
- <sup>23</sup> Based on 2009 figures from US Census Bureau Historical Income Statistics Table H-2.
- <sup>24</sup> All figures are the most recent available. Canadian figures are for 2008 and come from Statistics Canada CANSIM Table 202-0405. United Kingdom figures are for 2008-2009 and come from UK Office for National Statistics report on Effects of Taxes and Benefits on Household Income Table 2. French figures are for 2008 and come from INSEE Revenus et Niveaux de Vie Mass des Niveaux de Vie Détenue par les x% les Plus Riches. Australian figures are for 2007-2008 and come from Australian Bureau of Statistics Document 6523.0 Table S1.
- <sup>25</sup> The Survey of Consumer Finances, which contains a supplemental sample targeting high-income individuals.
- <sup>26</sup> Based on figures from Edward N. Wolff (2010), *Levy Economics Institute Working Paper 589: Recent Trends in Household Wealth in the United States: Rising Debt and the Middle-Class Squeeze -- An Update to 2007*, Table 2. In this paper Wolff does not disaggregate figures for the lowest two quintiles. To construct the Middle Sixty percentages, Wolff's "bottom 40%" figures have been split out using the ratio between the bottom two quintiles observed for the relevant year in US Census Bureau Historical Income Statistics Table H-2 to arrive at a second quintile imputation, which was then added to Wolff's third and fourth quintile figures.
- <sup>27</sup> Again based on Wolff's figures with an imputation for the second-to-bottom quintile.
- <sup>28</sup> Based on 1968 figures from US Census Bureau Historical Income Statistics Table H-2.

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- <sup>29</sup> Vilfredo Pareto (1916), *Trattato Di Sociologia Generale* (4 vols.).
- <sup>30</sup> Elise S. Brezis and François Crouzet (2008), "The Role of Higher Education Institutions: Recruitment of Elites and Economic Growth," pp. 191-213 in *Institutions, Development, and Economic Growth*, edited by Theo S. Eicher and Cecilia García-Peñalosa.
- <sup>31</sup> Emily Beller and Michael Hout (2006), "Intergenerational Social Mobility: The United States in Comparative Perspective," *The Future of Children*, Vol. 16(2), pp. 19-36.
- <sup>32</sup> Richard Breen and Jan O. Jonsson (2000), "Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility," *Annual Review of Sociology*, Vol. 31, pp. 223-243.
- <sup>33</sup> Figures from Breen and Jonsson's (2005) summary of a series of study results (mainly from the 1980s and 1990s) collected in Gary Solon (2002), "Cross-Country Differences in Intergenerational Earnings Mobility," *Journal of Economic Perspectives*, Vol. 16, pp. 59-66.
- <sup>34</sup> Anthony Leigh (2007), "Intergenerational Mobility in Australia," *B.E. Journal of Economic Analysis & Policy*, Vol. 7(2), Article 6.
- <sup>35</sup> Markus Jäntti, Bernt Bratsberg, Knut Røed, Oddbjørn Raaum, Robin Naylor, Eva Österbacka, Anders Björklund, and Tor Eriksson (2006), "American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States," IZA Discussion Paper 1938.
- <sup>36</sup> Technically, the 40-45% figure is an elasticity, not a percentage of variance explained. It means that if a family earns less than the average income in a society, 40-45% of that disadvantage will be passed on to their children. It can also be understood as the percentage of both parents' and children's income that is explained by a constant, unobserved factor that represents family heritage.
- <sup>37</sup> Bhashkar Mazumder (2005), "Fortunate Sons: New Estimates of Intergenerational Mobility in the United States Using Social Security Earnings Data," *The Review of Economics and Statistics*, Vol. 87, pp. 235-255.
- <sup>38</sup> The author (Mazumder) uses the benchmark of reaching an average income within 5% of the national median income. This exercise represents the author's attempt to illustrate how long it takes the effects of poverty to dissipate. The benchmark of averaging within 5% of the median is, in the end, arbitrary.
- <sup>39</sup> Daniel Aaronson and Bhashkar Mazumder (2008), "Intergenerational Economic Mobility in the US: 1940 to 2000," *Journal of Human Resources*, Vol. 43, pp. 139-172.
- <sup>40</sup> George J. Borjas (2006), "Making It in America: Social Mobility in the Immigrant Population," *The Future of Children*, Vol. 16(2), pp. 55-71.
- <sup>41</sup> Belinda Reyes (1997), "Dynamics of Immigration: Return Migration to Western Mexico," Public Policy Institute of California.
- <sup>42</sup> Based figures from the 2010 National Income and Product Accounts from the US Bureau of Economic Analysis, Table 7-1.
- <sup>43</sup> Arrived at by applying US GDP growth between 1969 and 2009 to the US median household income level in 1969.
- <sup>44</sup> Winfried Koeniger, Marco Leonardi, and Luca Nunziata (2007), "Labor Market Institutions and Wage Inequality," *Industrial and Labor Relations Review*, Vol. 60, pp. 340-356 (quote from p. 340).
- <sup>45</sup> Koeniger et al (2007), Table 2.
- <sup>46</sup> Alex Bryson (2007), "The Effect of Trade Unions on Wages," *Reflète et Perspectives de la Vie Économique*, Vol. 46, pp. 33-45.
- <sup>47</sup> David G. Blanchflower and Alex Bryson (2004), "What Effect Do Unions Have on Wages Now and Would Freeman and Medoff Be Surprised?" *Journal of Labor Research*, Vol. 25, pp. 383-414, Table 2.
- <sup>48</sup> Lawrence Mishel, Jared Bernstein, and Sylvia Allegretto (2007), *The State of Working America 2006/2007*, Table 3.32.
- <sup>49</sup> Based on figures from Barry Hirsch and David Macpherson, U.S. Historical Tables, accessed through the unionstats.com website. The 1953 US figure is imputed from the 1953 private sector workers' membership figure from Barry Hirsch (2008), "Sluggish Institutions in a Dynamic World: Can Unions and Industrial Competition Coexist?" *Journal of Economic Perspectives*, Vol. 22, pp. 153-176, adjusted upward by the historical average of 25% to account for government workers and workers who were covered by union contracts but who were not union members. Figures for European countries are drawn from L. Fulton (2009), *Worker Representation in Europe*, Labour Research Department (London) and European Trade Union Institute, accessed through the worker-participation.eu website.
- <sup>50</sup> Robert J. Gordon and Ian Dew-Becker (2008), *Controversies about the Rise of American Inequality: A Survey*, NBER Working Paper 13982.
- <sup>51</sup> Robert H. Frank and Philip J. Cook (1995), *The Winner-Take-All Society*.
- <sup>52</sup> Scott DeCarlo (2010), "What the Boss Makes," *Fortune Magazine* online April 28, 2010.
- <sup>53</sup> Based on data from US Census Bureau Historical Income Statistics Table P-38.

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<sup>54</sup> Based on data from Changmin Lee and Woonam Seok (2009), "The Structure and Pay Distribution in the Executive Team," working paper, Samsung Research Institute of Finance, Table 6.

<sup>55</sup> Again based on Lee and Seok (2009), Table 6.

<sup>56</sup> Based on data from the Pew Research Center for the People and the Press (2011), "Economy Dominates Public's Agenda, Dims Hopes for the Future," p. 2.

<sup>57</sup> Again based on Pew (2011), p.13.

<sup>58</sup> Again based on Pew (2011), p.14.

<sup>59</sup> Based on figures from G. William Domhoff (2011), "Power in America: Wealth, Income, and Power," Who Rules America? website, University of California at Santa Cruz, Figure 8.

<sup>60</sup> Based on data from the Pew Research Center for the People and the Press (2011), "Labor Unions Seen as Good for Workers, Not U.S. Competitiveness," p. 2.