

Inequality, Mobility, and Being Poor in America

Steven Horwitz

Charles A. Dana Professor of Economics

St. Lawrence University

Canton, NY 13617

shorwitz@stlawu.edu

Version 2.0

January 2014

Forthcoming in *Social Philosophy and Policy* Spring 2015

Abstract: The conventional narrative that the last generation has seen the rich get richer and the poor get poorer while the middle class gets hollowed out has serious flaws. First, the claims of growing inequality overlook data on income mobility. It is not the same households who are rich and poor each year, and many poor households become richer over time. Second, the claim of middle class stagnation is largely a statistical deception based on an incomplete interpretation of median household income. The middle class has shrunk but so has the percentage of poor households as the percentage of rich households has grown significantly in the last few decades. Third, looking at consumption rather than income enables us to see both the absolute gains of poor US households and the narrowing of the gap with the wealthy. Poor US households are more likely to have basic appliances than the average household of the 1970s, and those appliances are of much higher quality. Together these three points offer a much more optimistic view of the degree of inequality and the ability of the poor to become rich. The picture is not all rosy and a final section discusses the relevance of housing, health care, and education costs to this argument.

Introduction

Among the most hotly debated issues in recent years are those surrounding the distribution of income in the United States. Has the income distribution become more unequal? If so, does that increased inequality lead to problems? If not, why do people think it has become more unequal? How are changes in inequality related to the question of income mobility, or how easy or difficult it is for households to move up (and down) the income quintiles? Finally, one question not as often asked in this discussion: what has been the change in the real standard of living of poor Americans? This question is distinct from those around inequality, in that increases or decreases in inequality as measured by the share of income earned by different quintiles have no necessary relationship to increases or decreases in the absolute standard of living of the poor. All of these questions are, or should be, in play in discussions of inequality.

A fairly standard narrative has emerged around changes in US income inequality. Since at least the 1970s, the data suggest that those in the top 20% of income earners, and especially those in the top 1% or higher, have increased their share of income while those in the other quintiles, especially the middle quintile and below, have seen their share of income fall. If one accepts that data as valid, and I will discuss some issues concerning it later on, it raises the question of how to interpret it. The easiest verbal formulation is that “the rich are getting richer and the poor are getting poorer.” Sometimes the narrative is that the gains of the rich have come at the expense of the poor, suggesting that the relationship between the spreading out of the quintiles is causal. This narrative has become more frequent in the wake of the financial crisis and recession, when the supposed upward redistribution has seemed more obvious with the bailing out of large financial firms along with the high unemployment rates of the recession and the near jobless recovery since 2009.

Often this story is folded into a broader one about the stagnation or decline of the middle class since the 1970s. Data such as relatively flat median household income as well as the notably slower growth rate in money wages since the 70s have been combined with the income distribution story from above to offer a narrative that suggests that life for the average American, and for poor Americans, is not as good as it was a generation or two ago. The losses of those groups are juxtaposed against the way the top 1% has gained and the ways in which their lives appear to have improved so dramatically in the same period. The combination easily transforms into the 99% versus the 1%, as the rich, and especially the super-rich, are argued to have gained at the expense of pretty much everyone else.

What I hope to do in what follows is to offer an interpretation of the data that runs counter to the broad contours of what has become the conventional wisdom. My alternative narrative will also bring in some other data in order to tell a somewhat different story. What the conventional wisdom overlooks is three sets of data. First, it does not deal with the question of income mobility. Too often the usual narrative makes it seem as if the poor who are getting poorer are (mostly) the same folks year-to-year as are the rich who are getting richer. In fact, there is still significant income mobility in the US, which makes static comparisons of how much each quintile has gained or loss in terms of the percentage of total income problematic as a measure of whether *specific* households are getting richer or poorer. Combined with the overall growth of income, which stretches out each quintile making each quintile richer and mobility more difficult even as people get richer, a focus on mobility offers a more dynamic analysis that suggests things are not nearly as bad as the conventional wisdom suggests.

Second, the supposed decline of the middle class is also statistically deceptive. The stagnation in median household income does not necessarily require that any specific

household's income stayed constant or declined. Recent data also indicate that the decline in the number of households in the middle class is a consequence of households moving *up* and out of the middle class rather than down and out. The declining size of the middle class might be a sign of rising rather than stagnation.

Finally, and perhaps more importantly, the whole focus on income ignores the degree to which households in all of the quintiles are able to turn their income into consumption. Looking at various data on consumption, from Census Bureau surveys of what the poor have in their homes to the labor time required to purchase a variety of consumer goods, makes clear that poor Americans are living better now than ever before. In fact, poor Americans today live better, by these measures, than did their middle class counterparts in the 1970s. The story of the poor getting poorer, and the middle class in decline, is countered by a variety of data on the state of poor and middle class American households.

My argument is hardly a claim that we live in Nirvana or that there are not serious issues facing poor and middle class Americans. In my final two sections I discuss some of those issues and their causes, then conclude with some thoughts about the more secular story I am focusing on with what seems to be happening since the financial crisis, recession, and slow recovery. It may be that some of the changes of the last five years have slowed the more positive trends my counter-narrative identifies. Lastly, I should note that the data I am presenting are presented in aggregate form and not broken down by race or gender, mostly for reasons of space. The trends identified below do vary somewhat if we do such an analysis, but not so much as to undermine the basic story.

Statics, Dynamics, and Income Mobility

The standard story of income inequality points to the gains of the rich and the losses of the poor as a percentage of total income. As one example, consider the difference between income shares of the bottom and top quintiles of income in 1967 compared to 2009. Census Bureau data indicate that in 1967, the bottom 20% had 4.0% of total income and in 2009 they had 3.4%. The top quintile in 1967 had 43.6% and 50.3% in 2009.¹ Over that generational period, it would appear as though the rich got richer and the poor got poorer, and the observed level of inequality had increased. A closer look at the top 20% shows that much of the gains went to the very top 1% or less. It's data like these that are used as a starting point for claims about growing inequality. There is no deep reason to doubt that these data are accurate. However, whether they mean what those who are making use of them claim they mean is the question.

First, just because the *share* of total income has dropped, it does not mean the poor have become poorer. More generally, increases in observed income inequality need not mean that anyone has become poorer, as increased inequality can be a reflection of uneven growth across the quintiles. Over that same 1967-2009 period, the same data set shows that the average gain in real income for the top quintile was \$70,839 while the bottom 20% gained \$2568. In percentage terms, the wealthiest saw a 71% gain in real income over those 42 years and the poorest gained 28%. Even as the relative share of the poor fell, the pie that was being shared was growing sufficiently to make the smaller share into a larger piece in absolute terms. Distinguishing between growing income inequality and an absolute worsening of the condition of the poor forces us to be more careful about claiming that the data on the relative shares of income mean "the poor got poorer."

One final observation on these data is to note that household size at the top and bottom of the income ladder might matter. Higher income households have more members on average than do poorer ones. In 2011, households above \$100,000 averaged over three persons per household while those under \$20,000 averaged under two, which means that almost twice as many people live in the households in the top quintile than live in the lowest quintile.² So to the degree that households at the top have gained and those at the bottom have either lost or grown more slowly, those larger gains have accrued to more people than have the changes at the bottom. The effects of growing inequality on the lived lives of individuals needs to account for both the absolute changes in income and the ways in which household composition differs at the top and bottom.

Any analysis of income inequality must consider that *who constitutes the rich and the poor changes from year to year*. The comparisons made with the annual data on percentages of total income need to be interpreted carefully because they are not apples to apples comparisons. It would be more precise to say of the earlier data that “the households in the top quintile in 1967 earned 43.6% of total income, while the different set of households in the top quintile in 2009 earned 50.3% of total income.” This formulation correctly accounts for the fact that households move up and down the quintiles in both the short and long run. In other words, the data on income shares tells us nothing by itself about whether any *particular* households were better or worse off over any period of time. If we are interested in the question of whether growing inequality measured as above means that households who are poor in any given year are now less able to climb out of poverty, we have need different data. To claim that growing inequality has made particular households poorer, or even made it (more) difficult for them to climb out of poverty, we would need to know something about the degree of income mobility, that is how likely it is that any given household will change quintiles over a particular period. If rich

households are richer in relative terms, but poor households are still reasonably able to eventually reach the top quintile or two, then the observed growth in inequality might be less troubling. The question is then an empirical one: how much income mobility is there in the US?

There are two notions of income mobility that we might explore. The usual version is to look at the performance of specific households over time, but we can also look at *intergenerational* mobility, which refers to the ability of children to move up and down the income ladder in comparison to their parents. Both measures of mobility have been the subject of much discussion in recent years as there have been a variety of results from several sources. Relatively high degrees of income mobility might offset a number of the concerns about the growing inequality as measured by the comparative statics of annual data. For example, if it is relatively easy for households who are poor in one year to move up in a fairly short period of time, the losses to poor households captured in the comparative statics are less worrisome because those households with a lower share in later years are a different set of households from those who did better previously. Growing inequality where the very same rich households were getting richer and where the very same poor households were getting poorer would be far more troubling than a world with a high likelihood of people either moving up the income ladder or not being able to lock in wealth in ways that prevented them from ever moving down. How much mobility would soften the effects of what degree of inequality is a question with no objective answer. However, any discussion of inequality needs to consider how the degree of mobility affects our assessment of the consequences of growing inequality.

One of the first recent contributions to the mobility issue was the analysis in Cox and Alm.³ After reporting the data on the gains and losses of the top and bottom quintile, they offered two sets of data that looked at mobility in the years leading up to the late 1990s. Both

sets have the advantage of being able to track individual households through time, providing a look at their movement up or down the income ladder. The first set, shown in Table 1 below, was based on household tax returns, and indicated that of the poor households in 1979, almost 86% were able to move up at least one quintile by 1988, leaving only just over 14% still in that quintile. Of those poor households, a full quarter moved up to the middle quintile and another quarter were in the second highest quintile. The table also shows considerable mobility across other quintiles, as a full 60% of households in the second lowest quintile had moved up by 1988, with only 10.9% falling to the lowest quintile. Unsurprisingly, downward mobility was weaker, with the vast majority of top quintile families remaining at the top.

Table 1: Income Mobility 1979 to 1988: Fraction of households in each 1979 income category that had moved to the other income categories by 1988 (US Treasury Data).

	Lowest 20% (1988)	Fourth 20%	Middle 20%	Second 20%	Top 2- 20%	Top 1%
Bottom 20% (1979)	14.2	20.7	25.0	25.3	14.4	0.3
Fourth 20%	10.9	29.0	29.6	19.5	10.8	0.3
Middle 20%	5.7	14	33	32.3	14.6	0.4
Second 20%	3.1	9.3	14.8	37.5	34.8	0.6
Top 2-20%	1.1	4.4	9.4	20.3	59.4	5.3
Top 1%	2.2	0.4	3.8	7.7	38.6	47.3

The second data set from Cox and Alm covered a longer range of years and was taken from the University of Michigan's Panel Study on Income Dynamics. The numbers here were even more dramatic, with almost 95% of poor families moving out of the lowest quintile over the

16 year period, and almost 60% of them ending up in one of the top two quintiles. The levels of mobility are similar for other quintiles, and the lower level of downward mobility is evident here too. One interpretation of both sets of data is that what we see as growing inequality in the static comparisons is really a snapshot of a much longer-term process by which households move their way through the income quintiles. The story is the same for most US households: they enter the income ladder near the bottom and, over time, work their way up through several of the quintiles. As existing households move up the ladder, the bottom is filled in by new households just entering the process. That's why more households can move up than move down – the set of households changes year to year. Once we recognize the role of mobility and the typicality of that lifetime income pattern, it gives us reason to think that the growing inequality seen in the static comparisons is mostly a statistical artifact of those longer-term patterns.

Table 2: Income Mobility 1975 to 1991: Fraction of households in each 1975 income category that had moved to the other income categories by 1991 (PSID-UM Data)

	Lowest 20% (1991)	Fourth 20%	Middle 20%	Second 20%	Top 20%
Lowest 20% (1975)	5.1	14.6	21.0	30.3	29.0
Fourth 20%	4.2	23.5	20.3	25.2	26.8
Middle 20%	3.3	19.3	28.3	30.1	19.0
Second 20%	1.9	9.3	18.8	32.6	37.4
Top 20%	0.9	2.8	10.2	23.6	62.5

Cox and Alm's use of these data came under a great deal of scrutiny, with several people arguing that they overstated the degree of mobility fairly significantly. Newer data do show less

mobility than Cox and Alm’s did. For example a US Treasury report from 2007 produced the results in Table 3.⁴ Over the 1996-2005 period, just over 50% of the poorest families moved up at least one quintile, with 50% of the second lowest quintile moving up over that period. Around 75% of middle class families either stayed middle class or moved up. Once again, downward mobility was limited. Though not as striking as the earlier data, it is still encouraging that a clear majority of poor families moved up. Díaz-Giménez, Glover, and Ríos-Rull looked at earnings between 2001 and 2007 got similar results to the 2007 Treasury data, with 44% of poor families moving up a quintile or more over that six year period.⁵ It also showed that more households in the second lowest and middle quintile moved up than moved down.

Table 3: Income Mobility 1996-2005: Fraction of households in each 1996 income category that had moved to the other income categories by 2005 (US Department of Treasury)

	Lowest 20% (2005)	Second 20%	Middle 20%	Fourth 20%	Top 20%
Lowest 20% (1996)	42.4	28.6	13.9	9.9	5.3
Second 20%	17.0	33.3	26.7	15.1	7.9
Middle 20%	7.1	17.5	33.3	29.6	12.5
Fourth 20%	4.1	7.3	18.3	40.2	30.2
Upper 20%	2.6	3.2	7.1	17.8	69.4

Whether the degree of mobility shown in the more recent data is “good” is a matter of debate, but it does seem clear that there are still opportunities for households who are poor in one year to move up to higher quintiles in subsequent years. They also show that there is downward mobility as well – just because one is in the top 20% or top 2% in one year, does not mean one is somehow assured of staying there indefinitely. What also seems evident is that the degree of

mobility is lower than it used to be. Even if the earlier data overstated matters, there is some consensus that US income mobility has decreased in the last 15 to 20 years. Without denying that claim, there is one statistical caution in order. Declining mobility is not unexpected in an economy in which income is growing. As the total amount of income grows, the width of each quintile expands as well, requiring progressively more income each year to move up from one quintile to another. If what concerns us about mobility is the ability of households in, say, the bottom two quintiles to move up the income ladder, the spreading out of the quintiles will mask actual improvement *within* each quintile. Of course that's possible even if the quintiles are not expanding, but the expansion increases its frequency. If we could measure the progress of specific households using the real income breaking points for the first year's quintiles rather than those of the later, more stretched out, quintiles, we would have a more accurate measure of the real improvement of the households in each quintile. Absent that data, we have to note that the observed movements across quintiles probably understand the degree of mobility in a world where income, and therefore the width of each quintile, is growing.

Looking at how specific households do over time is one way to measure mobility; looking at how children do compared to their parents is another. Isaacs reports that the children of the top 20% of income earners in 1969 had real incomes in 2000 that were roughly equal to what their parents had in 1969.⁶ At the other end, 82% of children of the bottom 20% in 1969 had incomes in 2000 that were higher than what their parents had in 1969. The median income of those children of the poor of 1969 was double that of their parents. There is no reason to believe that poverty is necessarily transmitted across generations for the population at large as, at the very least, the rising tide of American wealth lifted nearly all boats over that 31 year period. Not reporting the data in quintiles helps us to avoid some of the complications noted earlier, as

that very rising tide stretched out the quintiles, which would obscure those real gains. That half of the children of the 1969 poor had incomes more than double that of their parents reflects real mobility, as does the remainder that were below the median but still above what their parents had earned. These results are consistent with the argument by Winship elsewhere in this volume.⁷

Although inequality may be growing as measured by the comparative statics of income shares, looking more closely at both measures of mobility should significantly temper the worst reading of the inequality data. The claim that the rich are getting richer and the poor poorer is an oversimplification of the underlying processes. There is plenty of evidence that that most poor households get richer over various runs of time and that many of them make it into the top two quintiles. This mobility also extends across generations and indicates that the rich can sometimes become poor.

What About the Middle Class?

One response to this argument is to point to the various claims made about the decline of the middle class. Even if the significant cautions noted above are true, isn't there substantial evidence that the size and well-being of the American middle class has declined? As with inequality, there are several pieces of data that seem to support this argument. For example, it is true that the percentage of US households earning between \$35,000 and \$75,000 fell between 1980 and 2006. Also, median household income has been fairly stagnant for a number of years and it has actually fallen in the last few. That appears to be a pretty powerful case for the decline of the middle class. However, as with the inequality data, not everything is as it appears on the surface.

The first problem in any discussion of the “middle class” is defining exactly what that means. One definition would be to take the middle quintile of household income, which in 2011 spanned \$38,521 to \$62,434. Conveniently, one of the more recent looks at changes in the composition of households at different income levels allows us to divide the US into four groups: less than \$35,000, \$35,000 to \$75,000, \$75,000 to \$100,000 and more than \$100,000.⁸ The \$35,000 to \$75,000 group, what we might call the broad middle class, shrank from about 38% of households in 1980 to 33% in 2006. This decline in the middle class, however, was part of a broader upward trend in real income across households. The 5.4 percentage point decline in that middle class group was exceeded by a 6.1 percentage point decline in the percentage of households earning under \$35,000. That decline was from roughly 43% to 37%. At the other end, the number of households earning \$75,000 to \$100,000 increased from 10% to 11% and, most interestingly, households earning \$100,000 or more increased from about 9% of households to 19%. In other words, there was an 11.5 percentage point shift from households making under \$75,000 to households making more than that amount. Seen one other way, between 1980 and 2006, the percentage of US households making less than \$75,000 fell from approximately 81% to 70%, while those making more than that increased from 19% to 30, or over a 50% increase in the percentage making more than \$75,000. Finally, if we think of \$35,000 to \$100,000 as “middle class,” it went from just under 50% of households to just over 44%. One way to describe what happened is that a number of poorer households moved up to the middle class, but the middle class still shrank because *even more households went from middle class to rich than went from poor to middle class.*

The stagnation in median household income is another piece of evidence offered in support of the decline of the middle class. From 1998 until 2008, Census Bureau data indicate

that median household income wobbled between \$54,000 and \$56,000 in 2012 dollars. Since 2008, it has fallen to \$51,100 in 2011 and now \$51,017 in 2012. This stagnation, and more recent decline, are often interpreted as suggesting that middle class households are treading water economically. There are at least two problems with this interpretation. The first is a statistical point. Whenever one compares medians of two different populations, one has to be careful in interpreting the results. If the number of households in the population increases, a stagnant or even declining median is compatible with each and every household from the earlier period being better off in the later period. Consider the following example. Suppose I give a test to 5 students who score 50, 60, 70, 80, and 90. The median score is 70. Now I give them a second test, but this time 3 additional students are in the class. Suppose the original 5 students each did five points better and each of the new students scored a 50 giving us a distribution like this: 50, 50, 50, 55, 65, 75, 85, 95. The new median has dropped to 65 from 70, yet *no student who took the first exam did worse*. The addition of new households at the bottom of the income scale drags down the median even as every existing household is better off. I could have constructed the example to have a constant median and made the same point.

One explanation of the data on median household income is that new entrants into the income scale are coming in below the median in such a way that keeps the median stagnant even though a large number of existing households might be better off, as our earlier data (and some to be examined below) indicate. New immigrants and high school and college graduates entering the labor force will mostly come in below the median, generating the stagnation. Moreover, as Roberts has pointed out, changes in household composition matter here too.⁹ The higher divorce rate now compared to the early 1970s means that each year a good number of households go from being one well-off household to two poorer ones. Because divorce is more

common among the poor, the reality is that higher divorce rates create a large number of new poor households each year. The growth rate in the number of households since the 1970s has outstripped the population growth rate considerably as a result of this phenomenon. With many of those new households either being new entrants into the US labor force or newly divorced people, all of whom tend to have incomes below the median, it's no surprise that the growth rate in median household income has stagnated. Even so, it has no necessary implication for the stagnation of middle class incomes, as the growth in the number of below the median households due to divorce is compatible with income growth for many, if not all, of the remaining households.

Finally, if you think the middle class is worse off today than in years past, consider a thought experiment from Boudreaux.¹⁰ Given the choice, would you prefer to live in 1967 with *today's* (2012) real median household income of \$51,017 or today with 1967's real median household income of \$35,379? After 45 years, that's a gain of just 44%, which isn't all that impressive. Were the material lives of the middle class that much better in 1967, a world where the typical middle class home lacked many safety features, creature comforts, and life-saving technologies that it has today? Where basic home appliances were far more expensive than today? Where my bank gives me for free an electronic calculator that did not even exist then? Where we spent more time on the job than we do now (the average annual hours worked fell by over 14% between 1960 and 1996)?¹¹ And where we hold the world's libraries in the palm of our hands, and where all of these things are affordable by the lower middle class and many of the poor? What this thought experiment suggests is that income, especially median household income, does not tell us enough about well-being to really ask good questions about inequality and poverty. For that we need to turn to measures of consumption.

What if We Look at Consumption Instead?

The standard discussions of US inequality focus on income, and sometimes on wealth. Those are not the only dimensions along which inequality might matter and be measured. If the reason we care about incomes and wealth is because of what they enable people to consume, and thereby acquire goods that add to some broad notion of well-being, then it might also be worthwhile to look at some of the data on consumption to see what it suggests about both inequality and, importantly, the real condition of the poor. Just as adding the dimension of mobility to the discussion of income inequality shines some light on the relationship between inequality and the opportunities for the poor to become richer, bringing in consumption data gives us look at one important dimension of being poor in America. The data suggest two things: 1) the poor of the early 21st century live better along a number of measures of their ability to consume than did the US middle class in the early 1970s; and 2) as a result inequality in consumption is far less than inequality in income or wealth.

Before looking at the consumption data directly, I want to take a quick overview of the significant improvements in productivity and corresponding reduction in cost of so many basic consumption items over the last century. Several authors have made use of a particular technique to illustrate these changes.¹² They have attempted to measure the amount of work time required to purchase standard consumption items for someone working at the average private sector wage. For example, in 1973 the average wage was \$3.95 per hour and it would have required 101.3 hours of work to purchase a typical TV priced at \$400. This is not a “labor theory of value,” as it’s not using the labor hours to explain why the price is what it is. Rather it simply reflects the view that our time is the ultimate resource. The less time we have to spend working

to purchase particular goods, the more that the rest of our time can be devoted to purchasing additional goods, including leisure.

If the work time cost of typical consumption goods has tended to fall over time, it makes those goods more easily accessible to lower income groups. This is what has, in fact, happened over the last 100 years, including the last 40, thanks to a conjunction of two related processes. Increases in capital and technology, along with competition, have made driven down the costs of production for a whole variety of standard consumption items. Even if we ignore the labor time calculation, the inflation-adjusted prices of many of these goods are lower than they were a generation ago. At the same time, competition for human labor along with increases in its productivity thanks to those same improvements in capital and technology have driven up labor's value and the average wage. These two processes are really two sides of the same coin. The result is that the typical US worker not only earns more real purchasing power per hour of work, but also faces lower real prices for many of the goods she wishes to purchase. As an example, that 1973 color TV mentioned earlier would have required 127.8 hours at the average 1959 wage of \$2.09 per hour, but by 2013 required only 20.7 hours at the average wage of \$19.30. Put differently, the TV costs 16% of what it did in 1959 and just over 20% of what it did in 1973. This process is one of the key reasons that so many more consumption goods are within reach of more poor households than in the past and why the percentage of a typical family's income spent on food, clothing, and shelter is less than half of what it was a century ago. It may well be true that the rich have become richer, but it is not at the expense of the poor. In fact, the poor look increasingly like the rich in terms of their ability to purchase these basic items.

The table below, taken from Perry, offers a more complete set of these comparisons across those three years.¹³ The trend holds across all of these basic household appliances, and

some of the declines are significant. If the appliances are viewed as a bundle that we might see in the typical US household, the decline in work time required to purchase all of them is from 885.6 hours to 170.4, or over 80%. The bundle in 2013 costs just over 19% of what it cost in 1959. Cox and Alm offer similar data over a longer period, showing how food staples such as a ½ gallon of milk and a 1lb loaf of bread fell by 1997 to 18.9% and 26.9% of their 1920 values.¹⁴ A 3lb chicken in 1997 cost a mere 9.5% of what it did in 1920, while 100kwt hours of electricity in 1997 cost 4.6% of what it did in 1920. Similar declines can be found for Sears Catalog items such as automobile tires and work boots between 1975 and 2006.¹⁵ Whether it's common appliances, food, or technology, the real cost of pretty much everything is much cheaper than it's ever been, enabling more poor households to have access to these goods with income left over to buy more of anything else.

Table 3: Retail Prices and the Time Cost of Household Appliances: 1959 vs. 1973 vs. 2013

	Retail Price 1959	Hours of Work @ \$2.09	Retail Price 1973	Hours of Work @ \$3.95	Retail Price 2013	Hours of Work @ 19.30
Household Appliances						
Washing Machine	\$210	100.5	\$285	72.2	\$450	23.3
Clothes Dryer (gas)	\$170	81.3	\$185	46.8	\$450	23.3
Dishwasher	\$190	90.9	\$310	78.5	\$400	20.7
Refrigerator	\$350	167.5	\$370	93.7	\$432	22.4
Freezer	\$320	153.1	\$240	60.8	\$330	17.1
Stove (gas)	\$190	90.9	\$290	73.4	\$550	28.5
Coffee Pot	\$23	11	\$37	9.4	\$70	3.6
Blender	\$22	10.5	\$40	10.1	\$40	2.1

Toaster	\$14	6.7	\$25	6.3	\$37	1.9
Vacuum Cleaner	\$95	45.5	\$90	22.8	\$130	6.7
Color TV	\$267	127.8	\$400	101.3	\$400	20.7
TOTALS	\$1,851	885.6	\$2,272	575.2	\$3,289	170.4

One element that these data do not capture is the change in quality of these items. The color TV of 1959 or 1973 is hardly the same thing as the one from 2013. Even the 1973 TV was at most 25" with poor resolution, probably no remote control, weak sound, and generally nothing like its 2013 descendant. One can make similar points about the other items in this list, all of which have more features and do a better job at their tasks than did their earlier and far more expensive models. Although it might be true that some of the smaller appliances, like a coffee pot or toaster, do not last as long as their predecessors, it turns out that the cost savings are significant enough that even if the lifespan of the newer models are a half or a third of the older one, they are still cheaper over the long run. (I put aside here the potential environmental issues raised by goods that are disposed of more frequently, but will note that a full accounting would have to ask whether the production processes of the more disposable goods today are themselves less wasteful.) Some products last far longer than they used to, such as automobiles. Getting 100,000 miles out of a car in the 1970s was cause for celebration. *Not* getting 100,000 miles out of a car today is cause to think you bought a lemon. The decline in costs in all of these goods by itself is remarkable, but when combined with the dramatic increase in quality, the cornucopia of modern Western life is clear.

One final illustration of this point is to consider what a particular number of labor hours at some point in the past would purchase today. For example, in 1964, the average hourly wage was \$2.50. One could find a "moderately priced excellent stereo system" in the Sears catalog for

\$379.95. It was a turntable, an amplifier with AM/FM radio, and two pretty tinny speakers. Purchasing that would have required 152 hours of labor at the average wage. Flash forward to 2010. Working at the average wage of about \$19.00, 152 hours of labor would be worth almost \$3000. For that amount, one could have gone into Walmart and bought a large HDTV, a nice 5.1 surround sound system, a new iPhone, a Blu-ray player, a nice laptop computer, a digital camera and several other bits of electronics, all of which dwarf the capabilities and quality of the 1964 stereo system. All of which are even cheaper and better in 2013 and available to an increasing number of American households.

To see this last point, we can look at Census Bureau survey data going back several decades that shows how likely it is for the average US household and US households *below the poverty line* to have particular consumer items in their possession. Table 4 reports those results. There are several things worth noting here. First, the percentage of poor households in possession of each item has climbed notably with only a couple of exceptions that can be explained by substitutes (e.g. cell phones for telephones and built-in freezers for freezers). A second point worth noting is the gains to all US households between 1971 and 2005. Over that 34 year period the average US household was increasingly likely to have these items on hand, with some of the increases being quite large. This is evidence for the earlier discussion about the non-existent decline of the middle class. Even if wage and compensation growth have slowed, those wages buy a lot more than they used to. Third, there are a whole range of items commonly found in US households, including poor ones, that *did not even exist* a generation or two ago. Ownership rates aside, even just compiling that list (as Cox and Alm did over a decade ago) is an interesting exercise.¹⁶ Finally, compare the ownership rates among poor households in 2005 with those of the average household in 1971. For the clear majority of these items, poor

households in 2005 were more likely to have them than the average household in 1971. If one concern about growing inequality is that it harms the poor, that concern seems hard to justify given these data.

Table 4: Percentage of Households with Various Consumer Items, 1984-2005

% Households with:	Poor 1984	Poor 1994	Poor 2003	Poor 2005	All 1971	All 2005
Washing machine	58.2	71.7	67.0	68.7	71.3	84.0
Clothes dryer	35.6	50.2	58.5	61.2	44.5	81.2
Dishwasher	13.6	19.6	33.9	36.7	18.8	64.0
Refrigerator	95.8	97.9	98.2	98.5	83.3	99.3
Freezer	29.2	28.6	25.4	25.1	32.2	36.6
Stove	95.2	97.7	97.1	97.0	87.0	98.8
Microwave	12.5	60.0	88.7	91.2	1.0	96.4
Color TV	70.3	92.5	96.8	97.4	43.3	98.9
VCR	3.4	59.7	75.4	83.6	0.0	92.2
Personal computer	2.9	7.4	36.0	42.4	0.0	67.1
Telephone	71.0	76.7	87.3	79.8	93.0	90.6
Air conditioner	42.5	49.6	77.7	78.8	31.8	85.7
Cellular Telephone			34.7	48.3	0.0	71.3
One or more cars	64.1	71.8	72.8 (2001)		79.5	

We can see the implications for inequality more clearly by considering one more set of data and then thinking through some of the implications. The 2003 and 2005 data from the Census Bureau also report on the percentages of households in the top 20% in possession of those consumer goods. This enables us to see over that short period anyway what the “ownership gap” is between rich households and those below the poverty line and to also see if that gap narrows or widens in the two years. Those results are in Table 5.¹⁷ For more than half of the goods, the absolute gap is less than 20 percentage points in 2005. For all but two of the goods, the gap between rich and poor narrowed between 2003 and 2005. One of those two items was the telephone, where the increasing gap was outweighed by the decreasing gap in cell phone

ownership. The other increasing gap was a 0.2 increase in the gap in ownership of stoves, but both rich and poor are at or above 97% ownership rates, which suggests that change does not have much economic significance.

Table 5: Percentages of Poor and Rich Households with Various Consumer Items 2003 and 2005

% Households with:	Poor 2003	Rich 2003	2003 gap	Poor 2005	Rich 2005	2005 gap	<i>Gap change</i>
Washing machine	67.0	94.8	27.8	68.7	95.2	26.5	-1.3
Clothes dryer	58.5	93.6	35.1	61.2	94.3	33.1	-2.0
Dishwasher	33.9	86.1	52.2	36.7	88.4	51.7	-0.5
Refrigerator	98.2	99.6	1.4	98.5	99.8	1.3	-0.1
Freezer	25.4	44	18.6	25.1	43.7	18.6	0.0
Stove	97.1	99.6	2.5	97.0	99.7	2.7	0.2
Microwave	88.7	98.6	9.9	91.2	98.8	7.6	-2.3
Color TV	96.8	99.5	2.7	97.4	99.5	2.1	-0.6
VCR	75.4	97.7	22.3	83.6	98.5	14.9	-7.4
Personal computer	36.0	87.9	51.9	42.4	92.7	50.3	-1.6
Telephone	87.3	98.6	11.3	79.8	97.1	17.3	6.0
Air conditioner	77.7	90.3	12.6	78.8	89.1	10.3	-2.3
Cellular Telephone	34.7	88.6	53.9	48.3	92.4	44.1	-9.8

Hassett and Mathur use Consumer Expenditure Survey data from 1987 to 2009 and conclude that consumption inequality over all goods has increased only marginally since the 1980s and that Gini coefficients of consumption are largely stable over time. They also use data from the Residential Energy Consumption Survey to look at the consumption of durable goods as we have above. They conclude that with respect to household appliances:¹⁸

Simple tabulations of these data across years suggest that a higher percentage of low-income households is able to afford and possess these items. In addition, the quality of dwelling spaces has improved and more low-income households have heating and air conditioning today than at any time in the past.

They then compare the data for poor households to that of wealthier ones to measure the gap.

Their conclusion is worth quoting in full:¹⁹

The results suggest a significant narrowing of the gap between low-income and other households in certain durable-goods items, such as color televisions, microwaves, refrigerators, and air conditioners. In other items, like computers and printers, the gap was small to begin with but widened as usage of these items became more widespread and cost of these items declined. However, in recent times, even this gap has narrowed. For a third category of items, including clothes washers, clothes dryers, and dishwashers, the gap has tended to be fairly stable over time. Even in a statistical sense, there is a trend toward narrowing the consumption gap between low-income and other households.

One of the arguments for using consumption rather than income to measure inequality is that income has more year-to-year variability than does consumption, implying that comparing different years of income may be picking up year-specific noise rather than a real trend over time. Hassett and Mathur's results show that even as income inequality measures of over the last few decades have shown more inequality, consumption inequality does not. Not only are poor households living absolutely better than ever, they are catching up to wealthier ones.

The narrowing of consumption inequality can be seen in a non-statistical way by considering the following change in the nature of what it means to be poor and rich, at least in the Western world. For most of human history, the difference between the rich and the poor was a difference in the kinds of things they had access to. Rich people had stuff that poor people didn't. Even if we go back 75 or 100 years, the rich had cars and the poor largely did not. The rich ate many kinds of food that the poor did not, for example meat until the 20th century. There were the "haves" and the "have nots." Today the difference between the poor and rich in the US

is far less a matter of having or not having, and far more often differences in quantity and quality. The majority of poor households have a car and Bill Gates has a car. He just has more and better ones. He may well eat higher quality foods than the average poor household, but even the poorest Americans have access to most of the same foods Bill Gates does. The narrowing of that inequality gap is not trivial, as it both represents a huge gain in well-being for the poor and is probably responsible, despite recent rumblings about the 1%, for a degree of domestic tranquility that is harder to achieve in societies far more divided into “haves” and “have nots.”

This point is even more salient when we recognize that one of the reasons that these new and better goods are more available to the poor is because of the existence of households with sufficient wealth to try them out when they are new and far more expensive. The story of virtually every innovation in consumer goods involves trying out new products, or new features of old products, that can at first only be afforded by the wealthy. One need only think of the first HDTVs in our own time, but this trend goes back to VCRs in the 1970s, and microwaves before that. It also extends historically to things like indoor plumbing, air conditioning, and refrigeration, all of which are consumer goods that have not just provided comfort but have saved lives. The willingness of the rich to pay for the new and exotic, perhaps only because they wish to show off, is what enables producers to find out what people want and do not want, not to mention providing the revenues to cover the fixed costs of production. Once they cover these costs, they can begin to produce at much lower marginal costs, driving down the price and expanding access to households of lesser means. In this sense, the existence of inequality might well be a precondition for the improving real condition of the poor. Hayek put it this way:

A large part of the expenditure of the rich, though not intended for that end, thus serves to defray the cost of the experimentation with the new things that, as a result, can later be

made available to the poor....Even the poorest today owe their relative material well-being to the results of past inequality.²⁰

Rather than serving to worsen the lives of the poor, inequality, at least to some degree, might be responsible for improving them.

There are Still Things to Talk About

The data from the last few sections hardly end the debate. There are two criticisms one might raise about the consumption data that need to be addressed and there is the larger question of what all of this says about the obvious poverty that remains.

One response to the consumption data is that poor families might be able to afford all of those items because they are either going deep into debt to do so or because of government transfer programs. If either or both are true, a critic might argue that the data overstate the actual well-being of the poor because we would have to count the burden of the debt as a clear negative and recognize that it's, to some degree, transfer programs and not the underlying economy that are making those improvements possible. The data on indebtedness suggest that over the last generation or two American families, including poor ones, have not significantly increased their debt-to-income ratios. The debt has taken a different form, being somewhat more geared to credit cards and rather than other types of loans, particularly store credit and buying consumer durables in payments, but the overall burden is not much greater.²¹ No doubt some of the additions in consumption have been financed by transfer payments, but there seems no good reason to believe that increases in the size of such transfers have been sufficient to fund the significant increases in ownership rates or the ability to obtain products that previously did not exist. Moreover, if one believes that the size, or at least the growth rate, of the welfare state has

shrunk since the 1970s, it's not clear how that complaint can be reconciled with the belief that transfer payments are the key explanation for dramatically increased consumption possibilities for the poor. The better answer remains that increases in productivity and competition have caused the real prices of those goods to fall and have brought to market cheaper versions of new products, all of which are increasingly within reach of poor Americans, even with only modest, at best, increases in transfer payments.

A second concern is that these household appliances are fairly trivial and that there should be more focus on items such as health care, housing, and education. Things like large screen TVs or Blu-Ray players might well be considered trivial, but the expansion in ownership of air conditioning, cellphones, and refrigerators/freezers seems like something more. Air conditioning is not just a matter of comfort; it saves lives as we have seen in heat waves in Europe and the US. Cellphones enable the poor to not just access information more easily, but also be readily available for jobs or other opportunities. Cellphone access can also be a lifesaver in emergency situations. The benefits of expanded refrigeration ownership are not just limited to fresher food and less spoilage, but also to the ability to keep medicines fresh. Refrigerators and freezers also allow the poor to plan better for the future and take advantage of surpluses or volume discounts. One might also note the benefits of cleaner clothes from automatic washers, as well as the dramatic savings in time coming from not having to go back and forth to a laundromat or, worse, do it by hand. Only in a world where the middle class and higher take the presence of such goods for granted could they be seen as trivial.

Health care, housing, and education, however, are serious concerns for this argument. All three are more expensive than they used to be, although that varies with respect to health care, and the concern is that all three have become increasingly out of reach for poor, if not

middle class, American households. Health care expenditures take up more of household budgets than they used to. However, several cautions are in order. One is that what we get for our money is of higher quality than in the past. We do spend more on health care, but we have treatments, drugs, and technology that past generations did not, even 20 or 30 years ago. Note that this means we have to distinguish between the *cost* of health care (that is, the total we spend on it) and the *price* of health care. One reason we spend more on health care is because we consume more of it thanks to lower prices, and because new, more effective forms of care exist that we could not have purchased at any price in the past. For example many common prescriptions can be bought for a fraction of an hour's work at Walmart and now common medicines like beta blockers did not even exist. Some forms of health care are also more accessible, with after-hours clinics and primary care facilities in malls and the like. The overall spending figure also has to be seen in the institutional context of the US health care system which is very much a combination of the worst of the public and the private. Large health care expenditures are at least partially a reflection of bad policy choices dating back to the origins of employer-provided health insurance in the wage controls of World War II. None of the dramatically cheaper goods and services that were discussed in the last section have been affected by poor public policy the way health care has. In those medical markets where policy has largely stayed away, such as Lasik eye surgery, competition has driven costs down to a degree similar to that of the consumption goods discussed earlier.

One can make a very similar argument about housing. Housing has a higher sticker price than it used to, but one has to account for both quality changes and the role of public policy. The average American house in 2013 is a far cry from the average house a generation or two ago. Houses are have more square footage, they have better safety features, they are more energy

efficient, they are far more likely to include things like central air conditioning, and the appliances in them are better and also more energy efficient. Whether the gains in quality are worth the additional expense has no clear answer. In addition, the housing market, like health care, has been dramatically affected by poor public policy. A whole variety of government programs have subsidized homeownership, causing housing prices to be higher than they otherwise would be. The housing bubble of the early 21st century was driven by a combination of artificially low interest rates created by the Federal Reserve and various housing subsidies directly to purchasers and indirectly through government-sponsored enterprises like Fannie Mae and Freddie Mac. Like health care, we don't know for sure what the housing market would look like absent those bad policies and institutions, but there is broad agreement that they all have made housing unnecessarily expensive for many Americans.

The claim that the quality of education is better than it used to be is harder to defend than a similar claim about health care and housing. At least along one dimension it seems to be: the returns to college over high school are higher than previously. That may not reflect quality in the sense that college faculty might mean it, but it does mean, like the larger house or better medication, that the good delivers more value. Education too is a good that has been subject to a great deal of bad policy, including ever more generous student loans that enable students to afford higher tuition, which generates increases in that tuition from schools. Various mandates on higher education have increased the number of administrators, which also tends to drive up tuition to cover those costs. Again, the degree of government involvement in this "market" in ways that make the good more costly at least suggests that we can do better and reduce the burden of this expense.

Even considering the large role played by health care, housing, and education, the best evidence that their increased costs aren't enough to say that life is harder for the poor and middle class today remains the thought experiment from earlier. The fact that most people would be unwilling to go back in time with today's median income suggests that there's something notably better about life today, even if some important things are more expensive and some numbers don't suggest we've progressed.

None of what I have argued here should be taken to suggest that poverty is not a problem. Even the most optimistic of the income mobility data indicate that there are millions of Americans stuck in poverty for the long term and I believe we have a responsibility to think about what we can do to change that. We can simultaneously recognize and even celebrate the gains of poor and middle-class Americans even as we realize that problems still remain. This essay is not the place to debate how best to help them, although the data do suggest that we should be thinking about why some households seem immune to mobility, which might require different thinking about anti-poverty measures than approaches of the past. Finding ways to bring the same sorts of competitive cost-reducing innovation to more areas of the economy, especially those that are perhaps making it hard for people to move up (e.g. k-12 education) might also be worth considering.

Concluding Thoughts on Inequality and Poverty Post-2008

The financial crisis and the subsequent response to it have triggered new concerns about issues of inequality and poverty. Although many at the very top lost a lot in 2008, they seem to have recouped much of those losses even as those in the middle and at the bottom have found that the slow recovery has not brought them along for the ride. Various measures of inequality

seem to have gotten worse in the last few years, with a recent study indicating that over 95% of the income gains between 2009 and 2012 went to the top 1%.²² For critics of the market, this is taken as further evidence for the arguments explored earlier in this essay. However, an alternate interpretation is available. Recessions normally cause setbacks in the improvement of various economic indicators, but the recovery is usually quick. If inequality has become worse, and if the improvements in the lives of poor and middle class have stagnated and don't seem to be heading back to trend, perhaps this has to do with the policy choices that affected the depth of this recession and the slow recovery. Whatever the causes, if the uptick in inequality and the stagnation of the lower and middle classes is real, it demands our attention. However, it should be seen not as the continuation of a generation long, or century long, trend, but as the reversal of long term real gains that have improved the lives of poor and middle class Americans in significant ways.

Notes

¹ United States Census Bureau, “Historical Income Tables: Household,”

<http://www.census.gov/hhes/www/income/data/historical/household>

² United States Census Bureau, “Current Population Survey,”

http://www.census.gov/hhes/www/cpstables/032012/hhinc/hinc01_000.htm

³ W. Michael Cox and Richard Alm. *Myths of Rich and Poor: Why We’re Better Off Than We Think*, (New York: Basic Books, 1999).

⁴ United States Department of Treasury, “Income Mobility in the U.S. from 1996 to 2005,”

<http://www.treasury.gov/resource-center/tax-policy/Documents/incomemobilitystudy03-08revise.pdf>

⁵ Javier Díaz-Giménez, Andy Glover, and José-Víctor Ríos-Rull, “Facts on the Distributions of Earnings, Income, and Wealth in the United States: 2007 Update,” *Federal Reserve Bank of Minneapolis Quarterly Review* 31 no. 1 (2011): 2-31.

⁶ Julia B. Isaacs, “Economic Mobility of Families Across Generations,”

http://www.brookings.edu/~media/research/files/papers/2007/11/generations%20isaacs/11_generations_isaacs.pdf.

⁷ Scott Winship, “Has Rising Income Inequality Worsened Inequality of Opportunity?” *Social Philosophy and Public Policy* (2014).

⁸ “Statistical Abstract of the United States: 2009” <http://www.census.gov/compendia/statab/>

⁹ Russ Roberts, “Inequality and Stagnation,” <http://cafehayek.com/2012/02/inequality-and-stagnation.html>.

¹⁰ Don Boudreaux, “We’re Much Wealthier,”

http://cafehayek.com/2006/08/were_much_wealt.html

¹¹ W. Michael Cox and Richard Alm. *Myths of Rich and Poor: Why We're Better Off Than We Think*, (New York: Basic Books, 1999): 55.

¹² W. Michael Cox and Richard Alm. *Myths of Rich and Poor: Why We're Better Off Than We Think*, (New York: Basic Books, 1999); Don Boudreaux, "Working for Sears," http://cafehaye.typepad.com/hayek/2006/01/working_for_sea.html; Mark Perry, "When it Comes to the Affordability of Common Household Goods, the Rich and the Poor are Both Getting Richer," <http://www.aei-ideas.org/2013/10/when-it-comes-to-the-affordability-of-common-household-goods-the-rich-and-the-poor-are-both-getting-richer/>.

¹³ Mark Perry, "When it Comes to the Affordability of Common Household Goods, the Rich and the Poor are Both Getting Richer," <http://www.aei-ideas.org/2013/10/when-it-comes-to-the-affordability-of-common-household-goods-the-rich-and-the-poor-are-both-getting-richer/>.

¹⁴ W. Michael Cox and Richard Alm. *Myths of Rich and Poor: Why We're Better Off Than We Think*, (New York: Basic Books, 1999)

¹⁵ Don Boudreaux, "Working for Sears," http://cafehaye.typepad.com/hayek/2006/01/working_for_sea.html

¹⁶ W. Michael Cox and Richard Alm. *Myths of Rich and Poor: Why We're Better Off Than We Think*, (New York: Basic Books, 1999): 26.

¹⁷ United States Census Bureau, "Extended Measures of Well-being: Living Conditions in the United States, 2005," <http://www.census.gov/population/www/socdemo/extended-05.html>

¹⁸ Kevin Hassett and Aparna Mathur. "A New Measure of Consumption Inequality," *AEI Economic Studies*, Washington, DC: American Enterprise Institute, http://www.aei.org/files/2012/06/25/-a-new-measure-of-consumption-inequality_142931647663.pdf (2012): 1.

¹⁹ Ibid.

²⁰ F. A. Hayek, *The Constitution of Liberty*, (Chicago: University of Chicago Press, 1960): 43-44.

²¹ Todd J. Zywicki, “An Economics Analysis of the Consumer Bankruptcy Crisis,” *Northwestern University Law Review* 99 (2005): 1463-1542.

²² Saez, Emmanuel, “Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2012 preliminary estimates)” <http://elsa.berkeley.edu/~saez/saez-UStopincomes-2012.pdf>.