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**National Economic Education Delegation**

**Economic Mobility Narrative**

Date: November 5, 2021

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Slides:

1. **Opening slide**

<brief summary and opening>

1. **DO NOT DELETE: National Economic Education Delegation**
   1. Brief discussion of what NEED is and NEED does
   2. Use your judgement for what should be said.
2. **Who we are?**
   1. 44 honorary board – 3 Nobel prize winners, 6 former chairs of council, and 2 former Chairs of the Federal Reserve.
   2. 364 delegates, one in each state.
   3. 42 Global Partners
3. **Where are we?**
4. **DO NOT DELETE: Credits and Disclaimer**
5. **Outline:**

I. What do we mean by economic mobility and why does it matter?

Relative vs. absolute; link between mobility, inequality, and growth

II. What are the facts? Empirical patterns and cultural context:

Trends: declining absolute mobility, stable relative mobility, int’l comparisons

III. What can we make of these patterns?

What is the desirable level of mobility?

Unpacking the causes of the persistence in outcomes.

IV. Exploring different barriers to upward mobility – empirical evidence

* + E.g. access to elite education, business ownership

V. Are we using the right measures? Alternative views.

1. **What do we mean by economic mobility**
2. What do we mean by economic mobility and why does it matter?

Relative vs. absolute; link between mobility, inequality, and growth

1. What are the facts? Empirical patterns and cultural context:

Trends: declining absolute mobility, stable relative mobility, int’l comparisons

1. What can we make of these patterns?

What is the desirable level of mobility?

Unpacking the causes of the persistence in outcomes.

1. Exploring different barriers to upward mobility – empirical evidence
   * E.g. access to elite education, business ownership
2. Are we using the right measures? Alternative views.
3. **Economic Mobility – Defined**

In common usage (also adopted here), *economic mobility* is the *ability to advance beyond the status of one’s parents*: ***<click>*** whether in income, wealth, education level, occupation, home ownership , or – more broadly – socioeconomic class.

Note: this is *inter-generational* mobility.

Alternatively, we could examine mobility along an individual’s life or career.

For the purposes of this conversation, we will focus on income mobility. Not only is this a driver of many other forms of mobility, or driven by others (education), but it is to date the most thoroughly studied.

The first question is, what does it mean to “advance beyond the status of your parents?”.

1. **Absolute and Relative Mobility**

When thinking about status mobility, there are several ways of measuring it. ***“Status”*** can be interpreted as *absolute* or *relative* achievement. Consider income:

* *Absolute*: absolute mobility simply means that you have higher household income at a particular age than did your family when your parents were at the same age. It is important to note that we are talking about inflation adjusted incomes.
  + E.g. At 40, Bob earns $60,000/year, while his father earned $50,000 => Bob was upwardly mobile and experienced a $10,000 or 20% gain over his parent.
* *Relative:* relative mobility is more complicated.If a person has experienced RELATIVE income mobility, it means that they are higher up in the income distribution than were their parents.
  + E.g. Bob’s father ranked at the 45th percentile among his peers and Bob ranks at the 55th percentile, among *his* own peers => Bob was upwardly mobile and experienced a 10 percentile gain over his parent.

One of the key differences between the two measures is that it is possible for everybody to experience absolute mobility while there must be equal numbers of people experiencing relative mobility.

1. **Absolute vs Relative: Escalator Analogy**

One way of thinking about the difference between absolute and relative mobility is to think of mobility as moving up an escalator. This is a never-ending escalator, so we don’t have to worry about what happens when we get to the top.

If we think in terms of **absolute mobility**. The analogy is simply that you are moving up the escalator. A couple of points here:

1. You can think of your parents being at one point on the escalator and not moving. Their income has long since been determined.
2. So, everybody actually ON the escalator is going to be moving up on average as fast as the economy grows and presumably generates more income for everybody.
   1. It is possible for EVERYBODY to experience income mobility.

Alternatively, if we think of **relative mobility** in our escalator context, the analogy implies that you are walking up the escalator while others are standing on it, just casually riding It up. A couple of points here:

1. Again, your parents are off to the side of the elevator and you are moving relative to them.
2. If you have relative mobility, this means that you are in fact moving ahead of some people on the escalator. And similarly, that they are moving behind.
   1. Not everybody can be passing somebody on the escalator.
   2. For each person passing somebody, there is somebody being passed.
3. Finally, it is not necessary for the escalator to be moving forward for you to experience relative mobility.
   1. While rare, it is possible to experience positive relative mobility at the same time that you experience negative absolute mobility.
      1. You could be moving backwards on the escalator, if it moves backwards, and if you’re walking, but at a slower pace than the escalator is moving backwards, you will have lower income than your parents, but will be higher in the income distribution.

***Another way of illustrating:***

PERHAPS AN ANIMATION OR DRAWING SHOWING SOMETHING LIKE THIS:

* first, 5 houses, ranked by size, corresponding to 5 parental households
* A boy leaves each house, heads towards the next row of houses: these represent the younger generation. Does each child go straight to the same-ranked house as the one he left? If yes, there is no relative mobility.
  + A representation like this can also make it obvious that it’s a zero-sum game: if a child moves to a better-ranked house, then another child has to move to a lower-ranked one
  + We can also use this to show why a completely static pattern is unfair: suppose there are many sets of children making this transition from the parental house to their own house, and they all keep the same rank. Maybe in the first set all kids look the same, but in some later ones perhaps some of the kids are carrying large stacks of books, while others are playing video games – if they all maintain their parent’s rank, that start to look wrong.
  + Now for absolute mobility: for instance, cross out the bottom-ranked house and make the next 2 smaller to indicate reduced opportunities compared to parents’ generation

1. **More on Absolute vs Relative Mobility**

It’s important to recognize that these two measures are truly different things. Having one form of mobility does not imply the other.

How about absolute mobility? If we have significant absolute mobility, does that mean that there will also be significant relative mobility? It does not. If every child has incomes that are 20% higher than their parents, there is no relative mobility. In our escalator example, this means that all of the kids are higher up on the escalator, but they are ordered in the same way that there parents were.

Similarly, suppose we have relative mobility. Does that mean that there will be absolute mobility? Not necessarily. On average, kids may have the same incomes as their parents, but the ordering may be different. In this image, the magenta child has leaped ahead, while the light blue child has fallen behind.

Perhaps the magenta child excelled at school and obtained a Ph.D. while his parents only had a bachelor’s degree. Similarly, suppose the light blue child obtained less education and decided to spend more time at home with kids. There would be a RELATIVE reshuffling of the families, with NO absolute increase in income.

1. **Economic Growth and Mobility**

It’s also important to consider the influence of increased economic activity, the potential for everybody to have higher incomes, on both absolute and relative mobility.

First, let’s consider absolute mobility. With economic growth, higher inflation adjusted GDP, it is necessarily the case that there will be some absolute mobility. It has the potential to raise the incomes of all kids relative to their parents.

* But it need not. If the income gains are heavily concentrated at the top, there will be just a very little bit of absolute mobility.

Now, consider relative mobility. Relative mobility is determined by a wide variety of things that we will talk about, but it has absolutely nothing to do with growth in incomes more generally.

* GDP growth means exactly nothing for relative mobility. There may be some of both, but the relative mobility is not necessarily a result of the GDP growth.

1. **Empirical Patterns**

We’ve talked conceptually about mobility, exactly how to think about it. Now, let’s have a look at exactly how much there is when it is measured.

1. **Mobility – Empirical Patterns[[1]](#footnote-1)**

If we look first at ABSOLUTE MOBILITY, we see that it is positive, but only slightly, in the most recent data.

For those born in the 1940s, the vast majority could expect to earn more than their parents – again, adjusted for inflation. By the mid 1980s, this figure was down to 50%. So, for millennials, it is more or less a crap shoot. Half will experience upward absolute mobility while half will not. This is a staggering finding. It says that upward mobility, on average, does not exist.

If we know that per capita income is increasing in the United States over time, which we know it is, we would expect there to be on average some upward mobility. Now, to say that there is on average no upward mobility, that doesn’t take into consideration the AMOUNT of upward mobility versus downward mobility.

If incomes are rising on average, but there is no upward mobility on average, it must be that those who are experiencing upward absolute mobility are experiencing a lot of it! This is generally consistent with the fact of dramatically increasing income inequality over this same period.

It is in fact true that those in the bottom half of the income distribution have experience no real increase in incomes since the 1970s.

1. **The Fading American Dream**

From this graph, we can see that there was a pretty steady, if rapid, decline in observed upward absolute mobility between those born in 1940 through the mid 1960s. By the mid 1960s, the share of people earning more than their parents had fallen from 90% to just under 60%. This figure held roughly steady until about 1970, when it started falling again. By the time 1984 rolled around, those born in that year could not reasonably expect to experience upward absolute mobility. The odds are even for both up and down.[[2]](#footnote-2)

1. **The Fading American Dream**

The American Dream is really quite an amorphous thing. More or less it is the notion that the United States is the land of opportunity and one that facilitates doing better than your parents did. This image makes clear that although not necessarily dead, the economic situation is such that it is harder to make progress on your parent achievements.

Being born in the 1940s, 9 in 10 were expected to do better than their parents. And for those born in the 1980s it’s just 1 in 2.

To the extent that growing incomes are necessary for achieving the American dream, the dream has faded.

1. **Absolute Mobility by Birth Cohort**

<closely lifted from <http://www.equality-of-opportunity.org/papers/abs_mobility_paper.pdf>

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<click through the cohorts – there are 5 graphs on this page. The first is just the 1940 cohort, the last adds the 1980s cohort.

The figure plots rates of absolute mobility by parental income percentile for the decadal birth cohorts, 1940-1980.

Each series shows the percentage of children earning more than their parents vs. their parents’ income percentile, limiting the sample to parents with positive income. Family income of the children is measured in **real pre-tax dollars** at age 30.

In the 1940 birth cohort, nearly all children grew up to earn more than their parents regardless of their parental income. Naturally, rates of absolute mobility were lower at the highest parental income levels, as children have less scope to do better than their parents if their parents had very high incomes.

Rates of absolute mobility have fallen substantially since 1940, especially for families in the middle and upper class. At the 10th percentile of the parental income distribution, children born in 1940 had a 94% chance of earning more than their parents, compared with 70% for children born in 1980.

At the 50th percentile, rates of absolute mobility fell from 93% for children born in 1940 to 45% for those born in 1980. And at the 90th percentile, rates of absolute mobility fell from 88% to 33% over the same period.

1. **Absolute Mobility Matters: Life Expectancy**

It turns out that life expectancy is very highly correlated with income. If your household income is in the top percentiles, and you are a man, you can expect to live about 10 years longer than a man in one of the lower percentiles. The difference is less pronounced if you are a woman, but is still significant.

What this has to do with absolute mobility is the fact that this correlation has to do with income. Lower income individuals tend to have a shorter life expectancy. We know that there is greater inequality in the United States, we know that on average incomes are rising, and we know that absolute mobility is declining. Therefore, declining absolute mobility in a growing economy suggests more lower income individuals, suggesting lower lifespan for more workers.

We should expect to see the slope of these lines increase, suggesting greater disparity in lifespan across percentiles.

This finding also has important implications for social policy. The progressivity built into programs such as social security is undercut by differences in life expectancy across income groups. Those in the top 1% of the income distribution can expect to receive benefits under Social Security and Medicare for 11.8 (men) and 8.3 (women) more years than can those in the bottom 1% of the income distribution.

1. **Educational Mobility is Also in Decline**

We can also look at absolute differences in educational attainment. For cohorts born between 1940 and 1980, there was a consistent decline in this likelihood throughout the period. The cohort of children born in 1940 were nearly 70% more likely to obtain more education than their parents had while those born in 1980 were less than 50% more likely to obtain more education than their parents.

Some of this decline may be understandable. As the population becomes more educated, it is necessarily the case that this rate will decline as there is less room above their parents. If everybody has a Ph.D., then educational mobility will be zero.

1. **Poor Kids Are Less Likely to “Out Learn” Parents**

This graph indicates the likelihood that kids born into the bottom half of the education distribution, their parents are in the bottom half of the education distribution, will wind up in the upper quarter of the distribution in term of educational attainment.

It looks at the same cohorts as the previous graph and shows that this “poverty-to-privilege” rate has declined significantly. Those born in 1940 the probability was .18 that they would end up among the highly educated. By the 1970 and 1980 cohort, this same probability was between .13 and .14, about a 25% decline in the likelihood of winding up in privilege.

Again, some of this is a natural byproduct of a society that is achieving higher and higher levels of education. The bar that one must meet to get into the top quartile is continually rising. But this decline seems much more extreme than could possibly be explained by a rising of the bar.

1. **Relative Mobility**

When looking at relative mobility, it is necessary to classify individuals according to their position in the income distribution. This is commonly done in a variety of ways.

One method of measuring relative mobility is to report “transition probabilities”: for each possible starting point in the parental income distribution, what are the odds that children will place at different points in their generation’s income distribution.

The second is too look at percentiles, this breaks up the distribution into effectively 100 buckets.

The first method provides slightly more detail about what exactly happens to people born into each quintile of family income.

The second method provides overall averages for each percentile.

Both are useful for understanding income mobility. The first is a pretty good snapshot of what the current situation is, or what it was at a given point in time while the second is more useful for evaluating changes over time.

Let’s have a look.

1. **Mobility Example: Perfect Relative Mobility**

Relative mobility is movement around the income distribution relative to your childhood family status. This graph illustrates what we might expect to see if incomes in adulthood were completely independent of family income as a child.

The bars each reflect 20% of the economy and the colors reflect where in the income distribution each child ends up. For each quintile, the bars are divided into 5 equal pieces meaning that no matter what quintile you were born into, you have an equal chance of ending up in any of the 5 quintiles – just as easily in the top quintile as the bottom.

The sizes of the blocks within the bars represent what are called transition rates. That is, each one reflects the likelihood that a child born into each quintile will end up in any one of the five quintiles. Here, the blocks are all 20% in size, so they are all the same size, so the transition rates are exactly the same for all quintiles of childhood family income and adult family income.

This is kind of a base case against which the actual relationships can be judged. This does not exist anywhere, especially not in the United States.

1. **Transition Probabilities in the United States**

When looking at quintiles, it is useful to look at a box of transition rates. That’s what we have here. Each box indicates what percent of each quintile goes into which part of the income distribution. Each column tells you what happens to people born into each quintile. The columns are broken up into 5 separate pieces. Each piece indicates the proportion of the quintile that ended up in each of the 5 quintiles.

Ok, let’s look specifically at the first column. The first column indicates what happens to people born into families with low income, those born into families in the bottom quintile. It turns out that 42% of them will also live in a family with income that puts them in the bottom quintile when they grow up. The percent that are likely to end up in each succeeding quintile decline, until the top quintile, into which just 6% of those born into the bottom quintile will end up in the top quintile.

Looking at the top quintile, the column on the right, almost exactly the opposite is true. Nearly two-fifths of those born into a high-income family will also be in a high-income family in adulthood. At the same time, just 9% of those born into a high-income family will end up in a low-income family in adulthood.

The same transitions are characterized for all 5 quintiles. The middle quintile appears to be the most mobile. Transition percentages relatively equal.

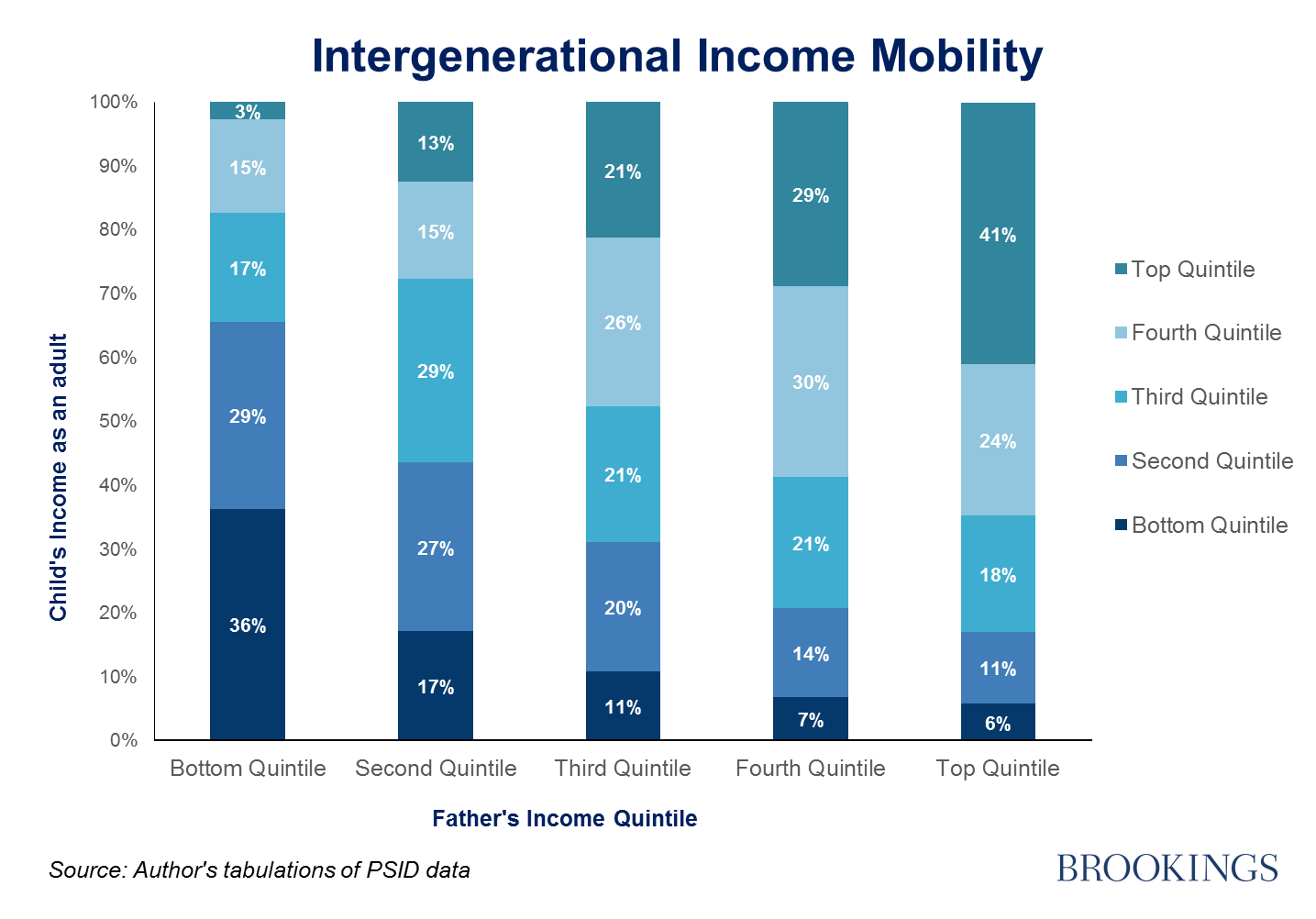
It is worth considering what this graph would look like i an economy with perfect income mobility. Perfect income mobility is when what your family income was when you were growing up doesn’t matter at all in predicting your income as an adult. If this were the case, then each of these bars would be broken into 5 equal pieces of 20% each.

<Would be great to find an image of this – or to make one>

At the opposite extreme, relative immobility, each column would be a single bar of 100% that maps each quintile along the bottom of the chart to the same quintile on the left hand side.

<Would be great to find an image of this – or to make one – overlay on top of this one>

What we see is an intermediate case, where those born low in the income distribution are likely to end up there, those born high in the distribution are likely to end up there. Shortly, we will have a conversation about just why that is.



1. **Wealth Mobility**

The same transition matrix has been calculated for wealth mobility. We see the same sorts of transitions. Notably, there is a stickiness at the top and at the bottom. What is surprising is that there isn’t more stickiness. The distribution of wealth is much more unequal than is the distribution of income (see graph below), so we might expect even less transition from the bottom to the top – the leap is simply greater. Then again, perhaps this distribution just isn’t fine enough to pick up the heavy concentration at the top. Nearly 80% of all wealth is currently held by the top 10%.[[3]](#footnote-3) So perhaps the rest of the distribution is not so inequitably distributed.

A close up of a map

Description automatically generated

1. **Educational Mobility**

The primary focus of most research on mobility is on income or financial mobility. However, educational mobility is also important. Higher education can generally be turned into higher incomes. It also brings with it a variety of other benefits, including generally better health outcomes, more interesting jobs, and simply a better knowledge of how the world works.

There are benefits to both society and individuals to educational mobility. It is not helpful if kids born to poorly-educated parents end up poorly-educated themselves. The implications for the individual are obvious, those for society are less so, but still exist. Society is better off if everybody believes that they can succeed, achieve higher incomes and levels of education if they choose to.

This graph provides the transition probabilities for education.[[4]](#footnote-4) The matrix bears a striking resemblance to the matrix of income mobility. A couple of exceptions. First, the transmission of education from highly educated parents is stronger than for income. Second, the transmission of low levels of education is slightly less strong. Otherwise, the transmission probabilities are comparable.

The transition probabilities of highest quintile education to top quintile is strong, but the transition to the top 2 quintiles is much stronger than it is for income: 76% in the case of education, but just 62% in the case of income.

Recall that the more space the top quintile’s kids take in these quintiles, the less space there is for kids from the other quintiles. Such is the nature of these statistics.

This discussion about education mobility speaks to the notion of inequality of opportunity. Clearly these statistics suggest that we are far from that ideal.

1. **Transitions: International Comparisons**

This image indicates the transition probabilities for low-income households in 6 different developed countries. The US is in the upper left-hand corner.

The United States stands out among these six as having relatively low proportion of people born into low-income households making it into high-income households. In each of the other countries, the probability is between 11 and 14%. In the U.S., it is just 8%. Different here because it is a different dataset.

What is perhaps more striking is how high the percent of these low-income kids who stay in a low-income household when they are adults. In the U.S. it is 42%, a full 12 percentage points higher than the next highest. The others range from 25% to 30%. Being low-income is much “stickier” in the U.S. than it is in most other developed countries.

<< TRANSITION PROBABILITIES ARE LIKELY MORE STRAIGHTFORWARD TO INTERPRET THAN RANK CORRELATIONS THERE ARE COMPLEX GRAPHS AND EVEN SOME ANIMATIONS OUT THERE:

<https://www.nytimes.com/interactive/2018/03/27/upshot/make-your-own-mobility-animation.html>

1. **Reflections on the American Dream**

The American Dream is predicated on the notion that one can rise from nothing to the highest echelons of income and power. It is certainly true that many have realized great economic success from little or nothing.

But the big question is: does this have more to do with numbers than with a greater likelihood of this happening in the United States than elsewhere? The evidence suggests that it is a numbers game. The United States is just a very big country, so more people will, Horatio Alger style, rise from rags to riches here than elsewhere!

Indeed, a comparison of transition probabilities between the bottom quintile and the top quintile suggests that this is true. In Canada, our neighbors to the north, it appears as though an individual is twice as likely to go from the bottom to the top than in the United States. It is also much more likely in Denmark and slightly more likely in the United Kingdom.

It does appear that we either need to reevaluate the reality of the American Dream, or we have much to do in terms of policy to reinstate it. We’ll talk more later about policy options.

1. **American Dream: Geography Matters**

Not only is it true that the American Dream isn’t what we thought it was, but it is also true that it varies significantly depending on where you grew up. Here, lighter colors indicate MORE upward mobility. The southeast corner of the United States is somehow mired in a sea of low mobility.

The colors reflect the extent to which somebody born into a family in the bottom quarter of the income distribution exceeds their parents’ income. There are light colors throughout the country, but they are largely absent from the lower right hand corner – the Southeast.

1. **American Dream: Geography Matters**

An alternative look by state. The picture is different in that it shows changes over time. Not sure there is a coherent story here.

<summary from Chetty et al., <https://opportunityinsights.org/wp-content/uploads/2018/03/abs_mobility_paper.pdf>>

Absolute mobility fell substantially in all 50 states between the 1940 and 1980 birth cohorts. Absolute mobility fell particularly sharply in the industrial Midwest, where rates of absolute mobility fell by 48 percentage points in Michigan and approximately 45 percentage points in Indiana, Illinois, and Ohio. The smallest declines occurred in states such as Massachusetts, New York, and Montana, where absolute mobility fell by approximately 35 percentage points.

1. **Relative Mobility – Rank Correlation**

The other way to look at relative income mobility – well, the other way that we will look at income mobility – is the rank correlation of child’s income with childhood family income.

This shows up as a line on a graph similar to the one that we just looked at where the percentiles of the income distribution, sorted from low to high, are on each axis. The average outcome for each percentile is graphed. It is usually monotonically increasing as the percentile of childhood income goes up – that is, adult income is expected be higher, the higher is childhood family income – so it forms a nice upward sloping line.

We are comparing two ranks:

1. The ranking of a child’s adult outcome – where do they rank relative to the families of other children born at about the same time?
2. The ranking of the child’s family income– where did their family rank relative to all other families at the time when the child was growing up?

The correlation or relationship between the answers to these two questions describes relative mobility in an economy.

* For the US, the rank-rank slope is around 0.34
  + Meaning that, if all we knew about two individuals A and B is that A’s parent is 10 percentiles higher in the income distribution than B’s parent, we would predict that A’s income is about 3.4 percentiles higher than B’s.
* Is this “high” or “low”?
  + Hard to say whether or not this is too high or too low. A comparison across countries will, however, give an idea for where we stand.

1. **Relative Mobility in the U.S. – Percentiles**

This line is formed by lining up parents according to their income rank and putting it on the horizontal axis. Get the children’s income rank as adults and line them up on the vertical axis.

Each dot represents the answer to the question: What is the average income ranking of children born in this particular income ranking?

For example, a child born to the 1st percentile, will, on average, have an income ranking of about 30, or be in the 30th percentile as an adult. A child born into the 99th percentile will, on average, have an income ranking of about 68%, or will be in the 68th percentile as an adult.

The slope of this line indicates the extent of relative mobility. In the United States, the slope is about 0.34, meaning that the kids of a family in a given percentile end up about 3.4 percentiles higher on average in their adult family.

1. **Intergenerational Mobility – The Abstract**

This number is not immediately meaningful, unless related to the same number in other countries. We’ll do that shortly.

The number is bounded by the two extremes of 0 and 1. When there is zero relative mobility, kids end up in the same percentile that they grew up in. When there is perfect mobility, the slope is zero. Everybody from each percentile ends up, on average, in the 50th percentile, right at the median.

1. **Intergenerational Mobility – The Abstract**

Nowhere do either of these two extremes exist. The U.S. case of 0.34 is about one-third of the way between perfect mobility and no mobility.

It is worth noting that imperfections in the data will result in a lower correlation than actually exists. Randomness will mean that there is less information and hence the correlation will lie closer to zero. Think about it, if there were a great deal of error, it would look like adult outcomes are completely independent of childhood experiences. That would look like a slope of zero.

1. **An International Comparison**

It turns out that finding international comparisons of the Rank-Rank measure is quite difficult. However, we have found one that compares the U.S. with Denmark.

Recall that with regard to transitions from the bottom to the top were much more likely in Denmark than in the United States. Well, it turns out that mobility at all parental ranks is greater in Denmark than in the United States.

In Denmark, a 1 percentile increase in parent’s income ranking gives just a 1.8 percentile change in expectations for their children, whereas it was 3.4 for the United States. IE, an increase in the income of your parents is much less impactful in Denmark than it is in the United States.

1. **Mobility – What’s the Right Amount?**

Intergenerational mobility is much lower in the United States than it is in Denmark and many other countries. This begs the question of what is the right amount? Extremely difficult to say. There is no objective measure indicating that .34 is a better number than .18 or vice versa.

An implication worth considering, however, is the reality that given a rank correlation, the higher it is, the more inequality in society matters. We are currently experiencing a significant increase in income inequality in the United States. The implication being that there are more children born into the lower part of the distribution. In the end, there average difficulty with which children climb to the top can increase with increased inequality.

1. **College Attendance Rates – by Parent’s Income**

<lifted straight from Chetty et al., 2014 – recent trends in mobility>

Trends in College Gradients. We cannot use income to assess mobility for children born after 1986 because many of these individuals are still completing their education or just entering the labor market. We therefore use college attendance to measure intergenerational mobility for these recent birth cohorts. CHKS demonstrate that the correlation between college attendance rates and parent income is a strong predictor of differences in intergenerational income mobility across areas within the U.S. The fact that the college attendance is a good proxy for income mobility is intuitive given the strong association between higher education and subsequent earnings.

The relationship between college attendance rates and parent income ranks is approximately linear (Appendix Figure 4). We therefore summarize the association between parent income and college attendance by regressing an indicator for being enrolled in college at age 19 on parent income rank. The coefficient in this regression, which we term the college attendance gradient, can be interpreted as the gap in college attendance rates between children from the lowest- and highes tincome families. The series in triangles in Figure 2 plots the college attendance gradient for the 1984-93 birth cohorts. The gap in college attendance rates between children from the lowest- and highest income families is essentially constant at 74.5% between the 1984-89 birth cohorts. The gap falls slightly in the most recent cohorts, reaching 69.2% for the 1993 cohort. This suggests that mobility in the U.S. may be improving, although one must be cautious in extrapolating from the college gradient to the income gradient as we explain below. We find very similar results when measuring college attendance at later ages (Appendix Figure 5).

Our estimates of the college attendance gradient for the 1984 cohort are consistent with Bailey and Dynarski’s (2011) estimates for the 1979-82 cohorts in survey data. Bailey and Dynarski show that the college attendance gap between children from families in the top vs. bottom quartile of the income distribution grew between the 1961-64 and 1979-82 birth cohorts. Our data show that the college attendance gap has stabilized in more recent cohorts. \footnote Duncan, Kalil, and Ziol-Guest (2013) show that much of the increase documented by Bailey and Dynarski is driven by the increased inequality among parents rather than an increase in the association between college attendance and the level of parent income. The slower growth of income inequality in the 1990s (Card and Dinardo 2002, Autor, Katz, and Kearney 2008) could explain why the relationship between parent income ranks and college

attendance is more stable for recent cohorts.

1. **College Quality Rank – by Parent’s Income**

<lifted straight from Chetty et al., 2014 – recent trends in mobility>

One can obtain a richer prediction of a child’s future income using information not just on whether a child attends any college, but on which college the child attends. Using data from 1098-T forms, Chetty, Friedman, and Rockoff (2013) construct an earnings-based index of “college quality” using the mean individual wage earnings at age 31 of children born in 1979-80 based on the college they attended at age 20. Children who do not attend college are included in a separate “no college” category in this index. We assign each child in our population-based sample a value of this college quality index based on the college in which they were enrolled at age 19. We then convert this dollar index to percentile ranks, assigning the 52.7% of children who do not attend college a rank of 26.6.

The relationship between a child’s college quality rank and parent income rank is convex (Appendix Figure 6), because most children from low-income families do not attend college. To account for this non-linearity, we define the gradient in college quality as the difference in mean college quality rank between children with parents around the 75th percentile (percentiles 72 to 78) and children with parents around the 25th percentile (percentiles 22 to 28). The time series of the resulting college quality gradient is almost identical to the time series of the college attendance gradient (Appendix Figure 7). Hence, intergenerational mobility is stable (or improving slightly) not just based on college attendance rates, but also based on college quality.

1. **Public Perception and Sentiment**

As with the measurement of mobility, we can look at public perception in both relative terms and absolute terms.

**In relative terms**, there is a perception that we live in a different world, perhaps a “New World”, where the “American Dream” lives. The general perception is that if you work hard, you’ll get ahead. That there is more equality of opportunity in the United States than elsewhere <click> We are after all, not the stuffy “Old World” of Europe with its nobility titles and other barriers to success.

<click> The perception of a U.S. meritocracy, with a true belief in “rags to riches” possibilities is quite alive. Nowhere is this belief more evident than in books written by Heratio Alger.

***Heratio Alger***: Horatio Alger Jr. was an American writer of young adult novels about impoverished boys and their rise from humble backgrounds to lives of middle-class security and comfort through hard work, determination, courage, and honesty. <wikopedia>

And back when Mr. Alger was forming his views, it might well be that there was sufficient mobility in the U.S. to support this view. As we have seen, mobility in the United States has declined significantly relative to what it once was.

<click> This is where the **absolute perception** comes in. There remains a lingering sense in the United States that mobility is alive and well. The American Dream still plays a significant role in our national consciousness. This role may well still live because there are rags to riches stories to grab onto. However, there are in fact fewer rags to riches stories in the United States relative to population than there are elsewhere.[[5]](#footnote-5)

We just have a larger population, so there are simply more stories.

Let’s have a look at exactly how the U.S. stacks up both relative to other countries and relative to our perceptions, or sense of national self.

1. **Intergenerational Elasticity of Income**

We can get a much better sense of mobility in the United States relative to other developed countries if we bring in yet another measure of mobility: the intergenerational elasticity of income. That is, how much does a change in parent’s income affect the child’s adulthood income?

The measure is subject to a wide variety of criticisms, so we won’t spend a lot of time on it. However, it is the most often used in international comparison, so we’ll have a look at that.

1. **IGE: U.S. in International Comparison**

Evidence shows that the US meritocratic system does *not* imply more mobility.

* The barriers are present but more subtle, which makes them potentially more pernicious (Currid-Halkett, 2017)
* Relative mobility is lower in the US than in other developed countries (Corak 2013)

This graph[[6]](#footnote-6) compares the correlations between the earnings of fathers and sons in a variety of countries. The U.S. is in good company with regard to developed countries and mobility, by this measure, but many exhibit much greater mobility.

The UK, Italy, and Switzerland are all in a similar range to the U.S. But countries with much less income inequality have greater mobility: Denmark, Norway, Finland, and Canada.

1. **Most Americans Overestimate Mobility**

#### Methods: Mobility beliefs[[7]](#footnote-7)

We created six questions to assess the participants' beliefs in social class mobility. For each of these items, population data exist from the years 1996–2007 on actual social class mobility in the United States ([www.stateofworkingamerica.org](http://www.stateofworkingamerica.org/); [Mishel et al., 2012](https://www.sciencedirect.com/science/article/pii/S0022103115000062" \l "bb0230)). Three of the items assessed beliefs in income mobility: participants were asked to think about 100 people during a ten-year time period from 1997–2006. The questions asked participants to assess how many of these 100 people would (1) move from the bottom 20% of income by working 1000 extra hours (M = 36.08, SD = 25.24); (2) move from the bottom 20% of income to the top 20%? (M = 15.60, SD = 17.88); and (3) move from the top 1% of income to the bottom 80%? (M = 14.57, SD = 17.88). Three educational mobility questions assessed (4) how many of a group of 100 people would move from the bottom 20% of income with some kind of college degree? (M = 61.34, SD = 22.52), (5) how many of 100 top college and university students would be from the top 20% of [income families](https://www.sciencedirect.com/topics/psychology/family-income)? (M = 43.54, SD = 20.62); and (6) how many of these 100 students would be from the bottom 20% of income families? (M = 15.83, SD = 11.65).

<click>

In response to the question about extra work, there appears to be a perception that additional work is all it takes to get ahead. Expected mobility is about 3x higher than is the reality.

<click>

The potential for people to move from the bottom income quintile to the top income quintile was wildly overestimated. The actual potential is about 2 percent (though some studies put it at 6-7%), while the estimate was in excess of 15%.

<click>

Downward mobility, movement from the top quintile to the bottom quintile, was surprisingly well estimated.

1. **Most Americans Overestimate Mobility**

In the same way that people overestimate the amount of mobility with regard to income, the role of education is not very well understood.

<click>

In the survey, respondents thought that more than 60% of people would increase social class through education. The reality is about half that.

<click>

Respondents in particular underestimated the influence of education on mobility for high-income individuals. Those from high-income families are nearly twice as likely to improve their social standing through education than was expected.

<click>

The reverse is true at the bottom. There seems to be a general perception that education is a very good way to for people to lift themselves in terms of social class, whereas the reality is that there is very little mobility gained through education.

1. **The “American Dream” Shapes Perceptions**

According to survey data from 27 different countries, the “American Dream” has a significant influence over perceptions regarding mobility.

In each horizontal bar, the arrow indicates the percent of people in the United States agreeing with the belief. The bar reflects the range of this percentage in the 27 different countries, with the vertical line indicating the median % across countries.

The first two bars speak to our impression of the meritocratic nature of our country. It reveals that Americans have a great deal of faith in merit leading to better outcomes, more than the citizens of almost any other country. The perception is that both hard work and intelligence and skills get rewarded in the United States.

Americans are less likely to believe that wealth matters very much for getting ahead. We saw earlier that it does. Recall the stickiness at the top and the bottom.

Americans are also less likely to be bothered by income inequality – or they are just unaware of its extent and they are much less likely to believe that there is a role for government in addressing differences in income. Evidence suggests that there is a correlation between inequality concerns and reality in all advanced economics, except for the U.S.[[8]](#footnote-8) The same appears to be true of mobility.

1. **Education Does Matter – at All Levels**

We don’t want to leave you with the impression that education doesn’t matter. It clearly matters more for those growing up in high-income families (54% vs 23%), but it does matter quite a lot for those at the bottom (19% vs 5%). Matters less at the bottom than the top, with regard to transitioning into the top income quintile.

1. **Mobility – Important Relationships**

Economic or social mobility has relationships with other issues that are quite important: overall economic growth and income inequality.

Is there a compelling case to be made that mobility matters for growth?

Growth, of course, drives absolute mobility, but does absolute or relative mobility drive growth?

<https://www.brookings.edu/opinions/the-economic-case-for-social-mobility/>

* This article has well articulated reasons to care

<http://www.oecd.org/eco/public-finance/chapter%205%20gfg%202010.pdf>

* Suggests that low mobility is related to: a lack of equal opportunities, constrain productivity and curb economic growth.

There is a two-way relationship between economic mobility and growth. Let’s deal with the easy one first. That is growth’s effect on economic mobility. Back in the day, 90% of people did better than their parents. In order for this to happen, there has to be more income to distribute. The only way that there is more income is for there to be growth in the overall economy. This mechanism is purely mathematical.

The mechanism going the other way, from mobility to growth, is less obvious and not a matter of math. Consider a society with no economic mobility. Imagine if you were in the lowest 20% of the income distribution and there was no chance of your moving up to the next quintile. The amount of effort that you might exert to achieve that higher income would be reduced. Similarly, if you were born into the top 20% and you were destined to stay there no matter what you did, you probably wouldn’t work so hard to stay there.

This reduced effort and lower investment in human capital will surely cause the aggregate economy to grow more slowly than it otherwise would.

<click>

Regarding income inequality, while mobility has little to do with determining levels of income (or other forms of) inequality, inequality does have implications for mobility. There are other important matters that influence both. In particular, equality of access to opportunity. We can think of this as access to education, access to role models, access to credit.

But focusing on the relationship between inequality and mobility, again, how inequality affects mobility, it has an effect on both absolute and relative mobility.[[9]](#footnote-9)

1. **The Great Gatsby Curve**

This relationship between inequality isn’t perfect, but it does hold up well when comparing mobility and inequality relationships around the world. This graph was named the Great Gatsby curve after the book by F. Scott Fitzgerald. The book was all about the romance of wealth accumulation – with no small commentary on the activities that often accompany it.

This graph shows the generally positive relationship between inequality and the intergenerational earnings elasticity. The higher is inequality, the higher is the elasticity. Recall that a higher elasticity means less mobility – greater ties between parents’ incomes and childs’.

<click> Here is the U.S., pretty high up the line. The U.S. currently has lots of income inequality and relatively little mobility – confirming our conversation earlier about how the U.S. stacks up.

<click>It is worth noting that the U.S. is up in a part of this graph with countries like Peru and Brazil, countries much less well developed than the United States.

<click>The U.S. is also not far from China.

<click>More developed countries, Germany and Canada, for instance, have both chosen a path of less income inequality and they have more economic mobility.

1. **Absolute Mobility: Race**

We can also look within the United States at differences across race and ethnicity. Here, we examine differences between mobility in white families versus black families. Overall, mobility his higher, but not substantially, in white families: 67% vs 63%.

However, the differences are much more significant in every single quintile. In only the bottom quintile does more black children exceed their parents incomes than in their overall average: 73% vs 63%. For white children, it is true in each quintile, except for the top!

This difference is striking and reflects two things: first, a significantly lower rate of absolute mobility among black children in the middle incomes, and second, that black families are and have been clustered in the bottom quintile of the overall income distribution.[[10]](#footnote-10)

<should talk about why this is so – or maybe indicate that we will talk about differences in opportunity later>

1. **Relative Mobility: Race**

As with absolute mobility, there are significant differences across races in relative mobility. In every quintile for which data are available, the probability of an African American child ending up in the bottom two quintiles of the income distribution is significantly greater than it is for a white child. The differential is 21 percentage points at the bottom quintile, grows to 29 percentage points in the middle quintile, and is still 22 percentage points in the fourth quintile. Data for the top quintile are not available.

<should talk about why this is so – or maybe indicate that we will talk about differences in opportunity later>

1. **Absolute Mobility: Gender**

The differences between men and women in terms of absolute mobility are not huge, though women do tend to have slightly – 5 percentage points – less than men. By quintile, the differences are all much larger, women less than men, except for the middle quintile, where mobility is about equal.

It is worth noting that it continues to be true that women earn less than men for comparable work. That fact may well be playing a role in outcomes.

1. **Relative Mobility: Gender**

In terms of relative mobility, outcomes are again, reasonably similar. Though the differences tend to disadvantage women. Through the distribution, their ability to land in the top 10% often exceeds that of men. It is also true that women are more likely to land in the bottom 40% of the distribution, sometimes by wide margins – in particular, in the 4th quintile of parents’ income.

Overall, comparable proportions, about one-third, of women and men are upwardly mobile. Another quarter are holding tight, maintaining their parents’ family income position. The only significant difference is that daughters appear to be slightly more downwardly mobile than are sons, in the sense of moving down by 1 or 2 quintiles relative to their parents.

1. **III. What Can we Make of This?**

At this point, we have a pretty good sense of the data on economic mobility:

1. Economic mobility in the United States has been in decline since the 1940s.
2. Economic mobility is lower in the United States than in many developed countries.
3. The most staggering fact is that half of people born in the mid 1980s have not outperformed their parents in terms of income earned.
   1. This is staggering because it should not be the case in an economy that is growing. Per capita incomes are rising, but half of the people are being left behind.
4. **Why Should we Care?**

There are a variety of reasons to care about economic mobility. Economists tend to put these reasons into two buckets: efficiency and equity.

Here, efficiency is a proxy for economic growth. The question is, will greater economic mobility lead to more economic growth?

Equity is a reflection of a sense of fairness. How do we judge or feel about our economy if it is leaving a great many people behind. How do we feel about it if it does not provide the promise of the American Dream?

Here, we will spend most of our time evaluating efficiency concerns, but will also discuss equity considerations.

1. **Private Issue with Public Consequences?**

In the United States, and elsewhere, the lack of absolute mobility is having a very clear impact on society. In the Midwest and for men relative to their fathers, their career prospects have declined significantly. Whether this is due to declining unionization, increased automation, trade, or immigration isn’t clear, but it is reasonably clear that good jobs that were just available to people with relatively little in the way of skills, or education are just not available anymore.

This phenomenon is not unique to the United States. It is likely that Brexit is a consequence of this decline in mobility as well.

Third bullet

1. **Absolute or Relative Mobility?**

At this point, it’s worth standing back and thinking big picture about mobility and its forms. How do we feel about absolute mobility? How do we feel about relative mobility? Is one more important than the other? Are both unambiguously positive?

The story with regard to absolute mobility is relatively simple, conceptually. It is possible for everybody to be upwardly mobile. As the economy grows, there is more income to be had. In only **1 out of the last 60 years** has per capita income declined in the United States. That was in 2009, during the Great Recession.

This yields at least the potential for everybody do be better off than their parents. This potential is far from the reality that we observe. <click> That half the population is at best treading water should be a source of concern.

<click>Relative mobility is a different thing. There is no such thing as unambiguously good relative mobility. It IS a zero-sum game. In order for one person to move up the distribution, somebody else has to move back.

<click>In essence, what more relative mobility brings with it is simply more social churn. It is worth considering whether or not this is a desirable thing. At some levels, it appears to be:

* 1. Mobility out of the lowest rungs is likely desirable. An economy without this mobility is doomed to an underclass for which there are few solutions.
  2. Mobility from a lower quintile into the top quintile would also seem to be a desirable thing. This is, after all, the manifestation of the American Dream. That if you work hard enough, you can make it to the top!

Aside from these extremes, relatively mobility is harder to evaluate in purely normative terms. It is hard to label it as either good or bad.

<click>

Last Bullet

A conversation about the merits of relative mobility can be aided by contemplating the two cases of perfect mobility and zero mobility.

1. **Is PERFECT Relative Mobility Undesirable?**

Often, a regime of perfect relative mobility is held up as the ideal. That is, that everybody in the economy should have the same access to outcomes as everybody else. As we discussed earlier, this would mean that all of the transition probabilities in the quintile graph would be 20%.

There are a variety of reasons why this should not be held up as an ideal to which our current degree of mobility is compared.

From a fairness perspective, it seems reasonable that families with higher earnings tend to have family characteristics that make the transmission of status legitimate (Reeves and Joo, 2016) These might include the following:

* 1. Committed and engaged parenting
  2. Emphasis on education
  3. Other productive values.

It seems reasonable that the children of parents who have these should get ahead. This is true both from the individual families perspective and from the perspective of society as a whole. If kids from families that do not have these values are also able to get ahead, that would likely suggest an economy that is functioning at less than full efficiency.

The bottom line is that talent should be recognized and compensated. It is also worth having a system that encourages parents to make investments in their children’s productive capacity. If the outcome is largely a crap shoot. These investments won’t have a properly high rate of return.

1. **Is ZERO Relative Mobility Desirable?**

Now let’s ask the reverse question. How do we feel about zero mobility? The case is much easier to make here that this would be undesirable. Such an economy would have something akin to a rigid caste system. Such a system is flat out morally objectionable. To condemn the offspring in a given family to exactly the same economic status is unreasonable, but in the case of the lower part of the distribution, it is hard to argue that such a system would have much if any argument in its defense.

In order to get zero mobility to be reasonable and perhaps fair, we would need a completely fair distribution of outcomes among parents and then the transmission of abilities, traits, and effort would have to be completely correlated across generations. It is not.

The consequence of zero mobility is also undesirable. A system in which people feel powerless and that the game is rigged against them is highly unlikely to be stable and produce the best economic outcomes for society as a whole.

1. **How Much Relative Mobility is Desirable?**

So, now we have begged the question. If perfect is too much and zero is too little, how much makes the porridge just right?

This is an extremely difficult question to answer. Not only don’t we have the data for it, but the answer also hinges on morals, values, and ethics. Different people will have different views on the right answer.

In other words, if we could fully research the question, we would find that there are nearly as many different answers as there are people.

So, let’s ask a less ambitious, but also useful question: Is the current degree of mobility too low or too high?

* An answer to this question is extremely useful for setting policy.

1. **How is the Mobility Porridge?**

There are a variety of ways to address this question. One, we can use common sense judgement.

* A child from the top 1% is 77 times more likely to go to an ivy league school than is a child from the bottom of the distribution
  + Does this make sense? Sit well? Reflect equality of access to opportunity?

Does this even make sense from society’s perspective? It seems highly unlikely that the distribution of academic talent is that highly correlated with parental income. Thus, it’s likely that a lot of talent is going unrealized. That is not helpful to society.

Another way is to look at transmission mechanisms, which we will do shortly.

First, though, let’s have a take a more concrete approach: let’s ask people!

1. **Survey says on Upward mobility from the bottom**

Turns out that the general population would like there to be more mobility from the bottom to the top. This, somewhat surprisingly, defies liberal and conservative designations. On average, people think that it should be about 5 times more likely that somebody born into the bottom quintile should be able to make it to the top. About 16% from the survey, when reality is about 4%.

1. **Survey says on Downward Mobility from the Top**

The opposite question was also asked. If born into the top, how easy should it be to stay there?

Here, the economy has it about right. Averaging conservative and liberals yields about the actual value: 40%. Contrary to intuition, liberals are asking for a little bit more stickiness at the top than are conservatives: 43% to 38%.

1. **Preferences hit Awkward Truth: Math!**

The awkward truth is the zero-sum nature of relative mobility. These preferences as expressed leave hardly any room for the middle classes, middle 60%, to make it to the top.

There is only room for 20% of kids to make it to the top. Preferences indicate something on the order of 40% being in the top, but that’s not the way that deciles work. Only 20% go into each decile.

The actual mobility results are reasonably intuitive. The stickiness at the top isn’t surprising. Those at the top have the resources necessary to do what they can to ensure that their kids have a good outcome. Those resources are less available the further down the distribution you go.

There is some good mobility from the bottom. Winding up in the bottom quintile is often a function of bad luck and although it is often true, it is not generally true that those at the bottom have much less access to resources to move up. In particular, access to public education.

There is an inconsistency in that there is no excess room at the top and those at the bottom often move up. What about the middle? There is some mobility from all parts of the distribution to the bottom. The explanations for these are various, including bad luck.

1. **Barriers to Upward Mobility**

To the extent that you feel like all kids ought to have the ability to be upwardly mobile, it is worth exploring the barriers to upward mobility and contemplating the extent to which there is public action necessary to increase upward mobility.

So, lets discuss some of these barriers. We’ll discuss them in two categories:

* 1. Birth lottery
  2. Structural barriers

1. **Barriers to Upward Mobility – Birth Lottery**

There are both nature and nurture aspects to these early advantages. Genetics likely plays a role, in terms of ability and health.

An individuals home environment also plays a significant role. How well is the child cared for during pregnancy, what values are shared in the home while growing up. It is also important to note that the local environment outside of the home also matters enormously. In particular the availability of good role models and educators, peer groups.

Those born into wealthier neighborhoods tend to have better access to all of these things, simply because of where they live.

1. **Structural Barriers to Upward Mobility**

The first set of structural barriers are general in nature. They consist of access to education, family planning, and lucrative employment. Much of this is dependent on neighborhoods in which the individual grows up and the family into which the person is born.

These barriers have a lot to do with the people that the individual grows up with and around.

1. **Structural Barriers to Upward Mobility (2)**

Other barriers are highly correlated with income and wealth of the individual’s family. Access to wealth creation avenues is generally greater for families with wealth, entrepreneurship is often an approach to work that is dependent on being exposed to entrepreneurial activity. While this isn’t necessarily restricted to high-income or wealth families, it is likely to be highly correlated. Finally is the simple gifting of assets from parents or other relatives to the individual.

These are all factors that are correlated with being in the upper rungs of the economic ladder. They tend to be factors that maintain the stickiness at the top.

1. **Barriers to Upward Mobility – Drilling Down**

A lot of work has been done to try and figure out how important these channels are. In the next few slides, we will explore how important each is, the fairness of each barrier, and the plausibility of policy to offset the barriers, increasing fairness and perhaps overall economic efficiency.

1. **IV. Exploring different barriers to upward mobility – empirical evidence**

Let’s turn to explanations for different degrees of upward mobility across geographies and time.

There are a wide variety of explanations. These range from access to resources, to the extent of inequality. We will explore these and many more.

1. **Barriers: Findings**

*Education Channel*

Education is an important contributor to upward mobility. It is also the case that for a given low-income entrant, the Ivy League universities do have a terrific record of moving those individuals from the lower income quintile to the top quintile, about 60% make that transition.

However, it is also true that relatively few bottom income quintile students attend Ivy League universities. Only about 3.8% of Ivy League entrants are from the bottom quintile.

Accordingly, other, less selective universities have a better track record of facilitating such mobility. For instance, at SUNY-Stony Brook, 16.4% of students are from the bottom quintile and 51% of those end up in the top quintile. That is a smaller share, but much greater numbers.[[11]](#footnote-11)

*Inventive Channel*

The research suggests that rates of innovation in adulthood are very highly correlated with exposure to innovation in childhood. This is a role model effect that need not come from within the family, but can be related to just growing up in a high innovation environment. This suggests that there are a great number of “lost Einsteins” because of lack of exposure. This applies particularly to women and children in low-income neighborhoods. Girls appear to respond better to other female role models and low-income neighborhoods are seldom characterized by high rates of innovation.[[12]](#footnote-12)

*Entrepreneurship Channel*

Evidence suggests that entrepreneurs are rare in low-income communities and quite common in high-income communities. Most low-income families are supported by regular employees, while 60% of households in the top 1% are supported by family owned or started businesses. There are links both between being born into an entrepreneurial family and becoming an entrepreneur and between entrepreneurship and wealth accumulation. Being an entrepreneur in your early adult years is associated with an advantage of more than a single decile difference (13 percentiles) in the wealth distribution.[[13]](#footnote-13)

<Oana – Holtz-Eakin et al suggest that entrepreneurship is better for low-income workers relative to those with a regular job than it is for high-income workers. From 2000, but does it hold up? If so, worth mentioning?>

*The Geography Channel*

The evidence suggests that it matters in which county you are born and raised. There is a great deal of variation across counties in upward mobility. Counties with less concentrated poverty, less income inequality, better schools, a larger share of 2-parent families, and lower crime rates produce better outcomes for children born into poor families. While it is certainly true that counties with better outcomes tend to be more expensive there are “opportunity bargains” out there, places with good outcomes that are not terribly expensive.[[14]](#footnote-14)

1. **Channels of Upward Mobility – Business Ownership vs Higher Education**

Business ownership and higher education are both really good channels for upward mobility.

Ownership of a business, particularly an incorporated business, is a big indicator of wealth accumulation. Individuals who incorporate a business are much more likely to accumulate significant wealth.

The problem is that not everybody has equal propensity to form a business. In particular, individuals from low-income households are much less likely to form a business than are their counterparts from high-income families. There are a variety of reasons for this, including the lack of availability of capital and ability to absorb risk.

It is generally true that it is easier to borrow if you have significant assets. It is easier to start a new business if you have access to capital, whether your own or borrowed.

Something similar goes on with regard to college admissions. It is certainly much easier to get into an Ivy League university if you come from a family with means. This is evidenced by the very low representation of low-income individuals in these schools. Coming from a family with high income puts a child in a better position to be accepted and then also in a better position to be able to afford the investment, student aid notwithstanding.

Both business ownership and elite college attendance are activities that facilitate upward economic mobility. Both are more accessible to those already high up the economic ladder.

1. **Incorporating a Business and College Diploma – Both Matter Significantly**

We have made the case that both incorporating a business and a college diploma matter for wealth outcomes. Now, let’s have a look at the evidence.

These graphs are slightly complicated, but bear with me. Let’s first have a look at the left-hand graph. It illustrates two things: 1) the importance of incorporating a business for wealth accumulation and 2) that it is much more likely to be children from a wealthy family that incorporate a business.

The first point is indicated by the position of the dark red line relative to either the red line or the blue line. The dark red line is between 15 and 20 points higher. That means that incorporating a business results in expected wealth that is 15 to 20 percentiles higher up the wealth distribution than if you don’t. That’s a big difference!

Point #2 is illustrated by the size of the markers in the graph. Looking just at the top or dark red line, it is clear that the markers get bigger as you move from left to right. On the left are markers representing children from low wealth households – they are small, indicating small numbers of children from low wealth households incorporate a business. Looking at the blue markers on the left, they are big, indicating that larger numbers of children from low wealth households never start a business.

On the right are the children of high wealth families. The dark red markers on the right are both bigger and higher, meaning that more kids from high wealth families start a business and their outcomes are better when they do.

The same story applies to educational achievement, with a college degree or more being comparable to incorporating a business. The dark red line is again 15 to 20 points higher and the dark green markers are considerably smaller on the left than on the right.

Both matter significantly, but few with poor parents accomplish either one.

1. **Mobility: Business Ownership vs College**

Both business ownership and higher education provide a boost to economic mobility. Though the biggest boost comes with incorporating a business, which suggests that the business has reached a certain size and level of success. Similarly, the biggest boost from education comes from graduating form a prestigious university.

It would be nice to believe that both of these gateways to mobility are meritocratic, but the evidence doesn’t entirely bare this out. Once you consider parental wealth, access to education is meritocratic, but that’s a slightly distorted version of meritocracy. Business ownership tends to be less meritocratic.

1. **Ability (IQ) Drives College Achievement - less so Business Ownership**

<I’ll let you discuss this as it’s your research.>

1. **Channels of Upward Mobility – Employment Networks**

Employment networks mean a wide variety of things. Who do your parents know? Who did you go to college with? Where did you work when you were in school?

By one measure, these employment networks are very dependent on the income of a son’s father. In particular, in Canada, 2 out of three son’s get access to their father’s employer in the form of a job at some point in their career.

The numbers are inverted, 1 in 3 at best for lower levels of father’s earnings.

While not always the best option, having better rather than lesser access to a job when the time comes has to improve outcomes and hence economic mobility.

1. **Channels of Upward Mobility – Inventions**

Being born into a well off family also matters for the propensity of children to be inventors. Here, the horizontal axis is third grade test scores on math – going from low on the left to high on the right. The vertical axis is the number of inventions that each group produce.

The orange line is for children whose families are above the 80th percentile and the blue line is parental income less than the 80th percentile.

A couple of observations come from this graph:

1. Children both good at math and from higher income households do a LOT more inventing.
2. Inventing is much LESS highly correlated with ability from higher income households.
3. Inventing is much more correlated with ability for lower income children than for higher income children.

Hence access to inventing is MORE meritocratic within the bottom

1. **Public Interventions**

When looked at in conjunction with these changes in the American economy, we get some interesting policy implications.

1. One, there should be more spending on education- given the importance of ideas for economic growth in future, the case for education having diminishing returns is already weak.
2. Second, have more skilled people come in through immigration-directly as workers or indirectly as students- which can help increase the size of economic pie while people born in the US get the required time and money for education.
3. Third, there should be a change in the way we approach education in order to foster life long learning capabilities in those being educated.
4. Fourth, Redistribution-More public spending on education also means more redistribution, something that the paper finds reverses the decline in probability of earning more that your parents. [[15]](#footnote-15)
5. **Access to Education?**

Access to the highest levels of education in the United States is clearly biased towards those from higher income families.

On the left, this graph looks at the distribution of parental incomes at 4 different colleges, both ivy league (Harvard) and other types of higher education institutions. It is clear that access is correlated with the measured quality of the institution. The relationship is in fact reversed for community colleges, with the largest group of students being from the bottom quintile of the income distribution.

There are a variety of sources for this bias, not only family income. As we have discussed, success is often highly correlated with the neighborhood in which you grow up – because of better schools, experience with peers and roll models, and other factors.

When looking at the Ivy League-plus (University of Chicago, Stanford University, MIT, and Duke University), the data indicate that less than 4% of all students are from the bottom part of the income distribution, while 14.5% are from the top 1% of the distribution.

Access to college, and the Ivy League, in particular, is clearly not based on merit alone. Were we to assert that it is, would be the same as indicating that children born into wealthier families are inherently more capable than are other children. There is no evidence that this is the case.

Access to education, therefore appears to be a very significant impediment to economic mobility. An area ripe for public policy intervention.

1. **Summary: Policy Options**

Along the way, we have discussed some obvious policy options. Here is just a summary of some of the more effective options.

First, are inequities in housing. Inequities in access to housing that is in neighborhoods conducive to mobility. We need to make sure that it is not only the wealthy that have access to good schools, clean air, good role models, and so on. All individuals and families should have access to these things.

Second, there is a need to increase access to education. Not just at the neighborhood level, but at all levels. It is of course of primary importance to increase the local schools that children have access to. This is the pathway to better educational opportunities at the post-secondary level. College preparedness training should possible regardless of where you grow up.

Third, is new business formation. It has been illustrated as a pathway to upward mobility. One way to facilitate this is to introduce notions of entrepreneurship early on in a child’s life and to encourage activities that are conducive to entrepreneurship later on.

Finally, and at the heart of all of the other policy responses are policies that reduce inequality. What is clear is that mobility is sticky. Those born at the bottom of the income or wealth distribution are more likely to remain there. Those born at the top are similarly likely to stay there. So if we can reduce the difference between the bottom and the top, this stickiness should be reduced.

1. **Summary**

We have gone over a bunch of aspects of economic or social mobility. We have defined it: absolute – income relative to your parents – and relative – your place in the income distribution relative to your parents. We’ve talked about these in terms of wealth and education in addition to income.

We’ve talked about the levels. Absolute levels are very low relative to historical experience. And relative mobility is quite low in the United States relative to other countries. Both of these are disconcerting. That half of all children are at best treading water relative to their parents income is both surprising and disconcerting. As income per person goes up in the United States, we would expect mobility to be, in absolute terms, more common.

As for relative mobility, it is endemic in the American psyche that anybody can achieve greatness in the United States. This is part and parcel of the American dream, along with home ownership. However, this appears to be less the case in the United States than in nearly every other developed country. In particular, relative mobility is roughly twice as common in Canada than in the United States.

We have also talked about many correlates with mobility. That so many correlates have been identified is suggestive of policy options should you think that the lack of mobility is a problem.

1. **Any Questions?**
2. **V. Are We Using the Right Measures? Alternative Views.**

Concerns have been expressed about whether or not changes in income and wealth truly reflect mobility of well-being in society. Let’s have a look at some criticisms and attempt to evaluate them.

1. **Are we sure people aren’t better off? – addressing potential critiques**

The first objection to income and wealth is that inflation adjustments overstate the loss in purchasing power. Those at the bottom of the distribution have to technology and a variety of other goods and services that were out of reach 40 years ago.

The prices of TVs and computers have come down, not only relative to other products, but in absolute levels. They are therefore reasonably common in low-income households, whereas they were not 40 years ago.

1. **Are we sure people aren’t better off? – addressing potential critiques, con’t**

Concern over income and wealth mobility presupposes a set of values on lower income households. It could be that material possessions are not as important as family ties and enjoying more leisure time.

This is essentially an argument that those at the bottom of the distribution choose to be/stay there and that it isn’t a particular set of barriers impeding mobility that might be addressed with policy.

1. **Are we sure people aren’t better off? – addressing potential critiques, con’t**

Lets think a little bit about these critiques.

While it is certainly true that those at the bottom of the distribution have greater choices now than they did 40 years ago, it is also true that they have fewer choices than those above them in the distribution. As the maxim goes, most desire to “keep up with the Jones’”. It is unlikely that those at the bottom recognize that their choices are greater now than relative to the past and are therefore content to stay where they are.

It is also true that the benefits to moving upward are likely greater now than they were 40 years ago, suggesting that the motivation for upward mobility is stronger now than it was 40 years ago.

It is also the case that most measures of good outcomes, heath, life expectancy, live satisfaction, and so many more metrics tend to improve quickly as we move up the income and wealth distributions. Again, suggesting that the incentive for upward mobility has only increased over time, while actual mobility has declined.

1. **Summary Policy Options**
2. **Additional Images**

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   * *Data downloaded from www.equality-of-opportunity.org/data/*

   [↑](#footnote-ref-1)
2. It is worthy of noting that this figure differs significantly from the Pew Charitable Trusts “Pursuing the American Dream: Economic Mobility Across Generations” report. In their Figure 1, they report mobility of 84% rather than the 50% reported here. However, they make 2 questionable decisions. First, they adjust for family size. Second, they include social transfers. It is likely that these two adjustments explain most of the difference. https://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs\_assets/2012/pursuingamericandreampdf.pdf [↑](#footnote-ref-2)
3. Source: Chad Stone, Danilo Trisi, Arloc Sherman, and Roderick Taylor, “A Guide to Statistics on Historical Trends in Income Inequality,” Center on Budget and Policy Priorities, Policy Futures, May 15, 2018, page 15, Figure 4. [↑](#footnote-ref-3)
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5. I know that I saw a source for this. Just have to find it again. [↑](#footnote-ref-5)
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