

James J. Heckman

AEA Continuing Education Program
ASSA Course: Microeconomics of Life Course Inequality
San Francisco, CA, January 5-7, 2016
In the first part of this chapter, we review facts about the economic outcomes that we care about most: poverty and intergenerational economic mobility. Then we review trends in family composition, employment and wages, and education, because they all affect poverty and economic mobility. We also show that inequality in these factors is mostly growing, which explains to a great extent why inequality in economic outcomes is growing as well and has proven so difficult to change.

**ECONOMIC OUTCOMES**

**OUTCOME: POVERTY**

Finding: Although the official measure of poverty shows little decline in the last half century, better measures show that poverty has declined, although a great deal of poverty remains.

As Figure 1 shows, under the official federal measure of poverty for children in single-mother households, all children, and the elderly, every group made good progress against poverty between the late 1950s and 1969. After 1969, poverty among the elderly continued a gradual decline, reaching stability at around 10 percent by 1995 and not varying much more than 1 percentage point in the next two decades. This progress can be attributed to government programs because the entire reason for the decline is Social Security. The poverty rate among all children reached 14 percent in 1969 and, as hard as it might be to believe, rose and fell in subsequent years but never again reached as low as 14 percent. In fact, the average between 1970 and 2014 was nearly 20 percent.

Progress against poverty for single-mother households falls between the relative lack of progress for all children since the late 1960s and the remarkable decline for the elderly. Poverty among single-mother families fluctuated modestly between 1969 and the early to mid-1990s, when it began a decade-long decline, from 40 percent in 1991 to 28 percent in 2000 (about a 30 percent drop). But since then, poverty in single-mother families has mostly increased, ending at a little above 33 percent in 2014.

But these figures are misleading. Perhaps the most important shortcoming of the official poverty measure is that it doesn’t include many of the very government benefits that greatly increase the incomes of the poor and near-poor. Fortunately, we have alternative ways to measure poverty. Several years ago, the Census Bureau, well aware of the official measure’s deficiencies, published the experimental Supplemental Poverty Measure. The new poverty measure includes most of the sources of...
Figure 2: Poverty rates under the official poverty measure, the Columbia poverty measure, and the consumption-based poverty measure, 1967–2012

Note: Data for consumption poverty unavailable from 1962-1971 and after 2010.
Figure 3: Income quintile of children when they grow up relative to their parents’ income quintile

Percent of Adult Children with Income in the:

- **Bottom Quintile**: 43% are stuck at the bottom
- **Second Quintile**: 24% (14% in top, 9% in bottom)
- **Middle Quintile**: 25% (14% in top, 10% in bottom)
- **Fourth Quintile**: 24% (19% in top, 8% in bottom)
- **Top Quintile**: 40% (23% in top, 19% in bottom)

Note: Numbers are adjusted for family size.
OVERVIEW OF FACTORS SHAPING POVERTY AND OPPORTUNITY

FACTOR: FAMILY COMPOSITION

Finding: Marriage rates are declining and nonmarital birth rates are increasing, so more children are growing up in single-parent families, especially among the less-educated.

Over the last four decades, the American family has changed dramatically. One of the most notable changes is the long and steady decline in marriage rates. Figure 4a shows marriage rates by age in the decennial censuses of 1970 through 2010. Rates have fallen at all age levels, but the biggest declines have been at the youngest ages. Most of the declines are substantial. For women aged 30-34, for example, the drop was 27 percentage points, from around 82 percent to a little over 55 percent.


Figure 4: Percentage of women married by age, 1970–2010

Source: Centers for Disease Control, National Vital Statistics Reports.
Finding: Marriage rates are declining and nonmarital birth rates are increasing, so more children are growing up in single-parent families, especially among the less-educated.

Over the last four decades, the American family has changed dramatically. One of the most notable changes is the long and steady decline in marriage rates. Figure 4a shows marriage rates by age in the decennial censuses of 1970 through 2010. Rates have fallen at all age levels, but the biggest declines have been at the youngest ages. Most of the declines are substantial. For women aged 30-34, for example, the drop was 27 percentage points, from around 82 percent to a little over 55 percent.


Source: Centers for Disease Control, National Vital Statistics Reports.
An important consequence of the decline of marriage is that both men and women spend many years outside marriage, often their entire lives. But they don’t refrain from forming sexual relationships while single, one outcome of which is a rise in nonmarital births. As Figure 4b shows, the share of births occurring to unmarried mothers has increased substantially for blacks and whites since 1970 and for Hispanics since at least 1990 (the first year the Centers for Disease Control collected separate data for Hispanics). The share for blacks is now well over 70 percent, and more than 40 percent of all American babies are now born outside marriage.

The combined effect of the trends in marriage rates, divorce rates, and nonmarital birth rates has produced major changes in the composition of American families (Figure 4c). Examining changes in the living arrangements of women at age 35 in each decennial census since 1970, we find that the proportion of all women who are married and living with children declined from about 78 percent to 51 percent, a fall of 27 percentage points. The frequency of the other three categories of household composition increased—by 4.0 percentage points for married without children, 11.6 percentage points for single without children, and 11.2 percentage points for single with children. Many of the women who appear as single (with or without children) in Figure 4 are actually cohabiting. Some analysts argue that cohabitation is the new marriage. If parents live together and share resources, as they frequently do in Europe, isn’t cohabitation a good substitute for marriage? Some researchers think that cohabitation occupies a middle ground between married-couple families and single-parent families, while others argue that it is closer to single-parenthood in its effects, especially in the U.S. because the duration of cohabiting relationships is much shorter than the duration of marriage. Setting aside the complex arguments about whether the promise implied by taking vows and publicly pledging a lifelong relationship is an important part of the parental commitment, cohabiters are three times as likely to split by the child’s fifth birthday as are married parents (39 percent of cohabiters vs. 13 percent of married couples), with important consequences for the child’s development. In fact, as a recent volume from the Annals of the American Academy of Political and Social Science shows, the decline of marriage and rise of cohabitation have given rise to a new sub-discipline of social science devoted to explaining the causes and effects of “family complexity.” Agreement seems to be emerging that the frequent changes in living arrangements that accompany family complexity and other factors associated with or even caused by family complexity lead to problems for children.

Two obvious consequences of the increasing number of children in single-parent families, 77 percent of which are headed by mothers, are lower income and higher poverty rates as compared to married-couple families. By 2013, at nearly $107,000, the average married-couple family with children had nearly three times the income of 1970.
although it is still much higher than before the mid-1990s.
The EPR for never-married mothers presents the same mixed picture. Never-married mothers and their children have high poverty rates and frequently receive public benefits. Fewer than half these mothers worked before the mid-1990s. Their employment rose rapidly between 1996 and 2000, after passage of the 1996 welfare reform law and expansion of the Earned Income Tax Credit (EITC), before being stopped by the recession of 2001. Like the EPR for all women, the ratio for never-married mothers had not fully recovered from the 2001 recession when the recession of 2007–2009 hit and reduced their EPRs by a few more points. Still, in 2013 their EPR was higher than in any year before its rapid rise began in the mid-1990s. We think that one of the most direct ways to reduce poverty, and possibly to increase economic mobility, is to help single mothers work and to improve their skills so they can earn higher wages. We return to this subject below.

Finally, the ratio for young black men peaked at the low level (compared with other demographic groups) of a little more than 65 percent in the late 1980s. From that already low level, the EPR declined in fits and starts to under 50 percent by 2010. Some but not all of this decline can be accounted for by rising school enrollment among young men.
Although it is still much higher than before the mid-1990s.

The EPR for never-married mothers presents the same mixed picture. Never-married mothers and their children have high poverty rates and frequently receive public benefits. Fewer than half these mothers worked before the mid-1990s. Their employment rose rapidly between 1996 and 2000, after passage of the 1996 welfare reform law and expansion of the Earned Income Tax Credit (EITC), before being stopped by the recession of 2001. Like the EPR for all women, the ratio for never-married mothers had not fully recovered from the 2001 recession when the recession of 2007–2009 hit and reduced their EPRs by a few more points. Still, in 2013 their EPR was higher than in any year before its rapid rise began in the mid-1990s. We think that one of the most direct ways to reduce poverty, and possibly to increase economic mobility, is to help single mothers work and to improve their skills so they can earn higher wages. We return to this subject below.

Finally, the ratio for young black men peaked at the low level (compared with other demographic groups) of a little more than 65 percent in the late 1980s. From that already low level, the EPR declined and starts to under 50 percent by 2010. Some but not all of this decline can be accounted for by rising school enrollment among young men.

Figure 9: Cumulative changes in real hourly wages of women, by income percentile, 1979–2012

Figure 10: Effect of earnings, transfers, and taxes on the poverty rate among households headed by single mothers, 1987–2013

If the picture for low-income men's work is discouraging, the picture for low-income women presents some room for optimism, for two reasons. First, as Figure 7 shows, women's wages have generally risen more than men's since 1979. Like men, women at the 10th percentile of the wage distribution had nearly the same wage in 2012 as they had in 1979. But throughout the rest of the wage distribution, their wages rose more than men's did. Men's wages all the way up to the 50th percentile, for example, were more or less the same as they had been in 1979, but women's wages at the 50th percentile rose 35 percent over the period. At the 80th percentile, women's wages had increased by around 58 percent as compared with men's roughly 20 percent increase. These relatively higher wage increases for women, however, must be balanced against the fact that even after these increases, women's wages are only a little more than 80 percent of men's wages, on average.

The second reason for optimism about women's labor force experience is a series of mostly bipartisan agreements in Congress about earnings supplements that were reached between roughly the mid-1970s and the early 2000s. Congress intended to create what might be called a “work support system” that would provide various cash and in-kind supplements to the earnings of low-wage workers with children. These earnings supplements would reduce the work disincentives inherent in the welfare system created when women entered the workforce and earned money. Taken together, increased work and the generous work support system substantially reduced poverty among single-mother families. Because the combination of work and work-support opportunities turn to an explanation of how this approach works.

Figure 8 shows the trends in poverty rates from 1987 to 2013 based on a poverty measure, like the Supplemental Poverty Measure, that counts a wide range of government benefits as income. The top line shows the poverty rate when only earnings are counted as income. Lines below the first line show poverty rates when the various work support benefits are added to income and taxes are subtracted, in stepwise fashion. The major finding from the figure is that government work support benefits have

Note: Abbreviations are as follows: Unemployment Insurance (UI), Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Temporary Assistance for Needy Families (TANF), General Assistance (GA), Supplemental Nutrition Assistance (SNAP), Earned Income Tax Credit (EITC), Additional Child Tax Credit (ACTC), and Federal Insurance Contributions Act (FICA).

greatly reduced poverty rates among single-mother families (and low-income two-parent families as well) in every year since 1987. In addition, the chart reveals a number of important lessons for those interested in fighting poverty.

The above table of data from Figure 8 provides the information we need to understand these lessons.

From 1987 to 1993, the poverty rate among single-mother families with children, based only on the mothers’ earnings, was very high—well over 50 percent in every year and averaging 54.3 percent. Then it plummeted for the next seven years, falling from 54.3 percent to 40.8 percent, the lowest it had ever been. This precipitous decline in poverty occurred mostly because many more single mothers were working (see Figure 5).

Now consider how work support programs affected the poverty rate based on earnings only. Government transfer programs drove the poverty rate down from 54.3 to 41.7 percent in 1987–93, a drop of about 23 percent. But when the work rate was much higher in 2000, the poverty rate based exclusively on earnings was only 40.8 percent, 25 percent lower than the comparable rate in the 1987–93 period. Even better, after single mothers received the package of work-based benefits, the 2000 poverty rate fell to 26.8 percent, a decline of 34 percent.

In 2010, work declined and poverty rose, due to the Great Recession. Yet the combination of relatively high work rates in 2010 (relative to the 1987 to 1993 period) kept poverty lower than during the earlier period, and the impact of government programs in percentage terms produced nearly twice as great a decline in poverty as in the earlier period (a reduction of 40.9 percent vs. 23.2 percent).

Finally, the figures for 2013 show that female heads of families are again increasing their earnings from work, and the work-based safety net continues to reduce poverty a great deal (nearly 39 percent).

Thus the federal work support system achieves the important goal of, as President Clinton put it so tersely, “making work pay.” The most important element of the work support system was the creation of the EITC program in 1975 and its expansion, almost always on a bipartisan basis, on several occasions since. The EITC gives working families with children nearly $60 billion each year, mostly in one-time cash payments. The passage of the Additional Child Tax Credit in the 2001 Bush tax reforms, and subsequent expansions, were also important. The Additional Child Tax Credit now gives working families with children around $30 billion each year. In addition, child care subsidies have been expanded on numerous occasions, the Supplemental Nutrition Assistance Program (SNAP) has been modified to make it easier for working families to claim the benefit, the Medicaid program has been modified and extended (in part by creating the Child Health Insurance Program in 1997) to cover almost all children under 200 percent of the poverty line, and a number of other improvements have been made in the work support system at both the federal and state levels. This system is available to all low-income working families with children. Most families that work close to full time can avoid poverty when their earnings and their benefits from the work support system are combined.

### Figure 11

<table>
<thead>
<tr>
<th>YEARS</th>
<th>EARNINGS ONLY</th>
<th>EARNINGS PLUS BENEFITS MINUS TAXES</th>
<th>DIFFERENCE (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987-93</td>
<td>54.3</td>
<td>41.7</td>
<td>-23.2</td>
</tr>
<tr>
<td>2000</td>
<td>40.8</td>
<td>26.8</td>
<td>-34.3</td>
</tr>
<tr>
<td>2010</td>
<td>50.1</td>
<td>29.6</td>
<td>-40.9</td>
</tr>
<tr>
<td>2013</td>
<td>47.6</td>
<td>29.2</td>
<td>-38.7</td>
</tr>
</tbody>
</table>
Finding: Gaps in academic achievement (test scores) and schooling attainment (years completed) between children from higher- and lower-income families are rising over time.

The traditional route to economic mobility is education. Until recent decades, the primary reason Americans enjoyed the world's most productive economy and the world's highest standard of living was the nation's superiority in education. Similarly, individuals' and families' level of education is directly connected to their level of affluence. Figure 9 shows the median family income of adults in their prime earning years by their education level (less than high school, high school degree only, some college, college degree, graduate or professional degree). Since the administration of President John F. Kennedy—and in all likelihood even before—people with more education have made more money. But in recent decades, two additional patterns have emerged. First, since roughly the 1980s, the line graphs depicting this relationship have gotten farther apart, which means that the payoff to education has been increasing. Second, the average income of those with some college (but not a degree), a high school degree, or no high school degree has been stable or falling. More education still pays off, but it's becoming harder to earn a middle-class wage without a college degree or at least some type of postsecondary credential.

These trends in income levels and inequality reflect important changes in our nation's labor markets since the 1970s: a rise in the use of workplace technologies (which economists call "skill-biased technical change," since these technologies tend to replace unskilled workers doing routine tasks while creating more demand for highly skilled workers); growing globalization (due to a higher volume of trade, offshoring of production, and immigration); and the weakening of institutions that have traditionally helped limit inequality, such as the minimum wage and collective bargaining. The combined effect of these changes has been to make educational attainment and achievement even more important in determining worker employment and earnings, and therefore to increase inequality between those who have more education and those who have less and between those who have work-related skills and credentials and those who don't.

Unfortunately, just as the payoff to education has increased, and getting into the middle class requires more education than in the past, the gap in educational attainment between the wealthy and less wealthy has increased over time. The CPS changed the phrasing of the educational attainment question in 1992, which accounts for that year's sudden drop among the less-than-high-school group.

**Figure 12: Median family income of adults age 30–39 by education level, 1964–2014**

*Note:* The CPS changed the phrasing of the educational attainment question in 1992, which accounts for that year's sudden drop among the less-than-high-school group. *Source:* Census Annual Social and Economic.
attainment and achievement between children from poor and better-off families has been rising. The gap in reading scores between children whose families are in the top and bottom ten percent of the income distribution appears to have risen over the second half of the 20th century (Figure 10); so, too, has the gap in attainment of higher education between high- and low-income youth, at least among women. Schools and universities, the traditional route to economic well-being and economic mobility, may actually expand the gaps in educational attainment and achievement and therefore the gap in income between children from low-income families and more advantaged families. An important way to reduce poverty and increase mobility is therefore to focus on helping those at the bottom reduce the education gap.

**SUMMARY AND CONCLUSION**

The nation has made considerable progress in reducing poverty rates, especially if we use measures of poverty that include government benefits or are based on consumption rather than income. But the progress has been slow and tends to be substantially offset by the explosion of single-mother families with their lower income and higher poverty rates and by the declining employment and earnings of men. In contrast to the decline in poverty rates, there has been no progress in increasing economic mobility. Many factors account for this lack of progress in increasing opportunity in America, but inferior education, the decline of work and the stagnation of wages, and the movement away from the married-couple family all contribute powerfully. In the chapters ahead, we focus on how to improve education, increase work and wages, and reverse or compensate for the rise of single-parent families. Unless we as a nation can reduce these basic causes of high poverty and stagnation of economic opportunity, we are not optimistic that more than modest progress will be possible.

**Figure 13: Trend in 90/10 income gap in reading, 1943–2001 cohorts**