

Mobility in the United States in comparative perspective

Markus Jäntti

Markus Jäntti is Professor of Economics at Åbo Akademi University in Turku, Finland, and Research Director of the Luxembourg Income Study.

Introduction

The United States has a much more unequal distribution of income than most developed nations.¹ Even though it has one of the highest standards of living on average, as measured by its gross domestic product per capita, the more unequal income distribution translates into comparatively high rates of both relative poverty (50 percent of median disposable income) and absolute poverty (the official U.S. poverty thresholds).² Some analysts suggest that high inequality and poverty in any year are of little public policy concern, if there are also high rates of mobility.

Income mobility and poverty mobility are closely related to notions of equality of opportunity, whereas annual measures of inequality and poverty are related to notions of equality of outcome. This article discusses both poverty mobility over time and intergenerational mobility, emphasizing the relationship between long- and short-run measures of economic outcomes.

Short-term poverty

Official U.S. poverty statistics, like those in most other countries, are based on annual income. However, to the extent that income changes within the year affect families that earn low wages and experience periods of unemployment, short-term income fluctuations may be associated with substantial drops in living standards. For persons with low or no savings, income shortfalls during shorter periods may be highly distressing. On the other hand, changes in household income from month to month can be part of normal economic activity, such as in the case of agricultural work, where activity levels are seasonally variable.

In this section, I examine trends in short-term poverty, measured on a monthly basis. Because poverty rates for periods shorter than one year are unavailable for other countries, I focus solely on the United States.³

Figure 1 shows the official poverty rates of all persons for different time periods between 1996 and 1999. The first column series shows the rate of episodic poverty, defined as the proportion of the population that was poor in two or more

months in every year from 1996 to 1999, as well as the proportion that was poor for two or more months between 1996 and 1999.⁴ In 1999, one in five persons lived in a household with below-poverty-level income for at least two months of the year; over the four-year period, 34.2 percent experienced at least two months of poverty-level income. A higher fraction of persons experience at least one month of poverty than are counted as officially poor.

John Iceland also reports trends in poverty for different time periods for selected population groups.⁵ Figure 2 shows the episodic poverty rate in 1999, by race; age; family type; and area. In sum, by shortening the period over which poverty is measured, the poverty rate increases substantially for all of the groups. While some part of the short-term dynamics of poverty probably reflects measurement errors rather than actual changes in income, examining short-term dynamics is informative all the same. The episodic poverty rate is about twice the poverty rate based on annual income. However, racial minorities and female-headed households are at greatest risk of both annual poverty and short-term poverty.

Long-term poverty

The study of poverty dynamics typically examines poverty across longer periods than a single year, rather than the shorter perspective discussed above. One way to approach this is to choose a period of, say, four years and examine how many persons were poor during the whole period—call this persistent poverty. One may also examine what fraction of the population was poor at any one time during the period—call this episodic poverty. It is also interesting to look at entries into

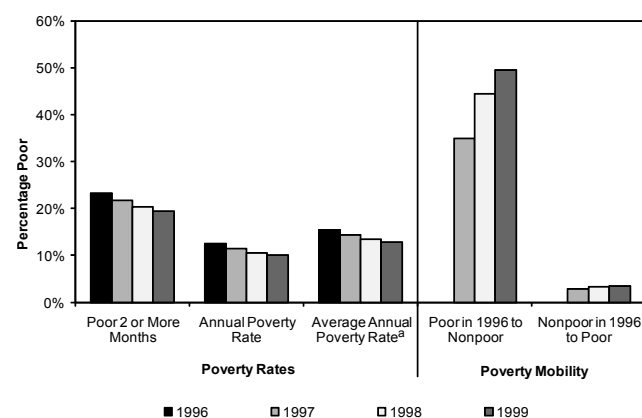


Figure 1. Monthly and annual poverty rates and poverty mobility in the United States, 1996-1999.

Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996.

^aBased on monthly poverty rates.

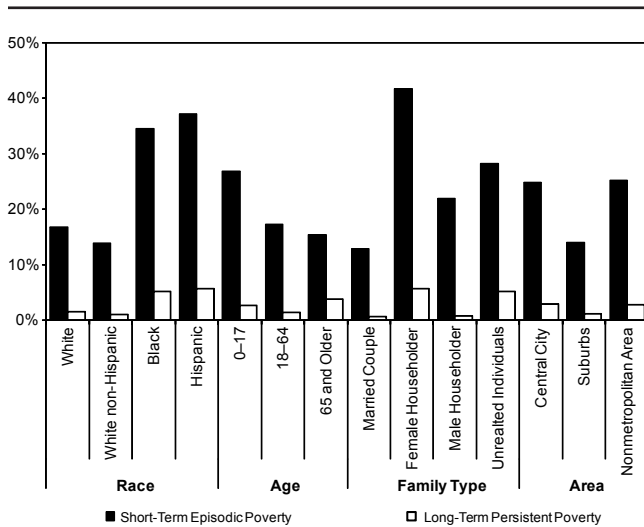


Figure 2. Short- and long-term poverty rates by population groups.

and exits out of poverty, along with the distribution of poverty spells. In this section, I analyze comparable evidence for the United States and other countries on patterns of long-term poverty and poverty dynamics over periods longer than a year.

John Iceland measures long-term poverty in the United States based on monthly incomes, shown in Figure 2.⁶ The risk of persistent poverty varies substantially by race and ethnicity; both African Americans and Hispanics have more than a 5 percent risk of chronic poverty, compared to 1 percent for white non-Hispanics. Female-headed households and unrelated individuals are also at high risk of persistent poverty. Children are at a higher risk than the average person of persistent poverty, as are the elderly.

International evidence

The annual poverty rate in the United States is high compared to the rates in other rich nations, especially the poverty

rate that is based on a relative definition, as is customary in international comparisons. When poverty is based on an absolute definition by converting the official U.S. poverty line into an equivalent value in other countries, the comparison is more complicated. However, countries that have very low levels of relative poverty and reasonably high average income levels, such as the Nordic countries, tend to have much lower levels of poverty even when the U.S. poverty line is used.⁷ But how do poverty dynamics compare across countries? Answering this question is difficult because it requires having comparable datasets for many countries.⁸

Robert G. Valletta estimates poverty dynamics across six years for Canada, Germany, the United Kingdom, and the United States.⁹ Poverty in the United States is measured in terms of annual income, and Valletta uses both a relative definition (50 percent of median disposable income) and the official U.S. definition. In the other countries, he uses only the relative definition.¹⁰ Table 1 summarizes different aspects of poverty dynamics for the working-age population (household head between the ages of 16 and 64) in these four countries. Table 1 also shows poverty rates based on income averaged across the six years, in column 4, which Robert Valletta calls chronic poverty. These rates, which measure those who have persistently low income, vary substantially across countries.

Table 1 also provides information about differences in the antipoverty effectiveness of government transfers by comparing the change in poverty on moving from a market-income- to a disposable-income-based definition. For the most part, the difference in market income and disposable income poverty rates are of the same order of magnitude. For instance, in Canada, market income poverty is reduced by 5 to 7 percentage points for all four poverty definitions. For the relative poverty definition in the United States, poverty is not reduced very much by government transfers. Using the official definition (last two rows of table), the persistent poverty rate is reduced from 4.1 percent to 2.3 percent (column 3);

Table 1
Poverty Rates Over Six-Year Periods in Canada, Germany, the United Kingdom, and the United States

Country	Income	Average Annual Poverty Rate (1)	In Poverty at Least Once (2)	Always in Poverty (3)	Chronic Poverty ^a (4)
Percentage of Working-Age Population					
Canada	Market income	19.5%	32.7%	8.0%	14.5%
	Disposable income	12.6	25.3	3.5	9.1
Germany	Market income	16.2	27.6	3.6	9.1
	Disposable income	9.7	18.1	1.4	4.4
United Kingdom	Market income	15.9	26.1	2.5	7.0
	Disposable income	9.9	21.2	0.4	2.9
United States	Market income	18.3	30.7	5.5	12.2
	Disposable income	17.0	30.5	3.9	10.6
United States (official threshold)	Market income	15.0	25.7	4.1	8.8
	Disposable income	11.8	22.2	2.3	6.0

Source: R. G. Valletta, "The Ins and Outs of Poverty in Advanced Economies: Government Policy and Poverty Dynamics in Canada, Germany, Great Britain, and the United States," *Review of Income and Wealth* 52, No. 2 (2006): 261–284, Table 2.

Note: Poverty is measured from 1991 to 1996 in all countries except Canada, where poverty is measured from 1993 to 1998.

^aPercentage of the sample for whom average equivalent income over the six sample years falls below the average poverty line over the same period.

using a relative line, the persistent poverty rate is reduced from 5.5 percent to 3.9 percent.

Bruce Bradbury, Stephen Jenkins, and John Micklewright compare the poverty dynamics of children in several countries, including Germany, the United Kingdom, and the United States. They find that the persistence of child poverty is high in those countries where the annual child poverty rate is high. For instance, 7.7 percent of German children were poor in the first year of the data and 1.5 percent of children were poor in all of the five years they were followed. In the United States, 24.7 percent of children were poor in the first year and 13.0 percent were poor in all five years.¹¹

Has the persistence of poverty changed over time?

Lloyd Grieger and Jessica Wyse estimate long-term child poverty rates based on post-tax, post-transfer income plus food stamps averaged across several years.¹² Their measure, similar to what Valletta called chronic poverty, increased for cohorts born in the 1970s from 5.9 percent to 10 percent for cohorts born in the 1980s, and decreased again, to about 7.3 percent, for those born in the 1990s. The chronic poverty rate was substantially higher and increased more and decreased less for black children.

In sum, while only about 2 percent of all Americans were poor in every month in the four years from 1996 through 1999, the risk of such long-term poverty was higher for groups that are at higher risk of both short-term and annual poverty. Differences in the length of poverty spells and exits out of and entries into poverty across the years show similar patterns. The same characteristics—racial and ethnic minorities, single-parent families—have above average annual poverty rates and higher short- and long-term poverty rates.

Also, even though the United States has poverty rates that are higher than those in some other major economies, poverty dynamics are similar. Episodic poverty over a period of six years occurs at a rate that is roughly twice the annual poverty rate, and the proportion of poor in every single year is substantially smaller than the annual rate. The duration of poverty was also quite similar across countries, with Canada having the longest durations. Finally, in all four countries, poverty dynamics were most closely associated with changes in family structure, changes in the number of full-time workers in the household, and changes in labor earnings. The importance of public transfers in accounting for poverty dynamics, by contrast, varied quite a bit.

Intergenerational mobility

Do poor children become poor adults? To answer this question requires us to confront many substantive and measurement issues.¹³ Cross-country comparisons of intergenerational income mobility are difficult because they are sensitive to many assumptions about measurement that the researcher must make.¹⁴ The most common way to examine how closely related children's economic status is to that of

their parents is to estimate the intergenerational elasticity, that is, the regression coefficient obtained from regressing the natural logarithm of offspring income on that of the parent. This elasticity is a measure of how many percentage points a child's income will increase if a parent's income increases by, say, one percent. A larger dependence means children's adult economic status is more highly dependent on that of their parents.

One way to think of the estimated elasticity of children's income with respect to their parents' is to ask how much of a given income advantage observed in the parental generation is preserved in the children's generation. Miles Corak exemplifies this for the difference observed in the United States for families with children under the age of 18.¹⁵ The top fifth of such families have about 12 times as much income as the bottom fifth. If the intergenerational persistence of income was equal to one, that income advantage would be transferred in whole to the next generation. That is, the children of the richest fifth would have 12 times as much income as the children of the poorest fifth. If the intergenerational persistence of income were equal to zero, none of that advantage would be present among the children of these groups. Corak reported that U.S. estimates of the elasticity vary in the range of 0.4–0.6, corresponding to an inherited income advantage of between 2.70 and 4.44 for the richest fifth compared to the poorest fifth. Elasticity at these levels means that the children whose parents were among the richest fifth (i.e., parents whose income was 12 times that of the poorest fifth) grow up to earn about 3 to 4 times as much as the children whose parents were among the poorest fifth. Thus, their income advantage was roughly half that of their parents.¹⁶

The United States, Italy, and France all have high persistence, at 0.45, 0.44, and 0.42, respectively, which with a 12-fold income advantage in the parental generation would translate to roughly three times higher incomes among the children of the richest fifth compared to those of the poorest. Denmark has the lowest persistence at 0.12, and most other countries are quite close to 0.25. These numbers translate to 1.35 and 1.86 times higher incomes among the richest fifth offspring, holding constant the parental income advantage.¹⁷

The intergenerational mobility of women

Most studies of intergenerational mobility focus on the relationship between sons and their fathers. This focus on men is due in large part to the difficulties in measuring the economic status of women over time and across countries. The labor force participation rates of women have increased quite substantially in the past few decades and the timing of these increases varies across countries. Thus, comparing estimates of intergenerational mobility across countries with different labor market institutions for women may be problematic.

Laura N. Chadwick and Gary Solon examine the intergenerational income persistence of women in the United States using data on family income or the combined earnings of couples (for those who are married). Their estimates suggest that women's family incomes are also highly correlated with

that of their parents, although slightly less strongly than for men—the elasticity is 0.43 for women and 0.54 for men.¹⁸

Oddbjörn Raaum and colleagues compare the intergenerational income persistence of women and men in the United States with that of women in the United Kingdom and the Nordic countries.¹⁹ They compile their cross-country evidence on the intergenerational persistence based both on a person's own annual earnings and on the combined earnings of their partners (if present) and themselves. The differences across countries in the persistence of a woman's own earnings with respect to the earnings of her parents are quite small, although it is higher in the United Kingdom (0.27) and the United States (0.25) than in the Nordic countries (between 0.186 and 0.197).

Intergenerational mobility by race in the United States

We documented above that annual and longitudinal poverty rates in the United States are higher for racial and ethnic minorities. There also are differences in intergenerational income persistence across racial groups.²⁰ The rates of persistence—measured as the correlation between the income of parents and their children—in family income for both men and women among the whites separately, 0.39, and blacks separately, 0.32, are lower than for both groups pooled together, 0.53. This is due to the fact that differences in the average incomes of the two groups contribute to the high overall level of intergenerational income persistence. Note, however, that these results suggest that across the whole distribution, there is more, not less, intergenerational mobility among blacks than whites.

This is not the case for persistence of low income. Tom Hertz reports the likelihood that a child whose family is in the lowest 25 percent of the income distribution would end up as an adult in that same level of the distribution.²¹ About 47 percent of children whose parents are in the lowest fourth of the income distribution are among the poorest 25 percent of their generation when they are young adults. Among African American children, 63 percent will be among the poorest quarter of the population when they are adults, compared to 32 percent of white children.

What accounts for intergenerational persistence in income?

It would be important to know why income position is to some extent inherited, since some reasons might be more amenable to policy interventions to decrease persistence than others. Some policy interventions, if they were effective, might also be more likely to gain political support than others. In particular, interventions that occur early in life, such as intensive preschool education for disadvantaged children, tend to be more politically popular than interventions that occur later in life. It would be good to know if the early interventions were effective in decreasing persistence.

Economic explanations for why incomes are correlated across generations tend to emphasize that educational attainment, skills, and ability, all of which affect income levels,

are transmitted from parents to children.²² Sociological accounts of persistence tend to emphasize the intergenerational similarity of occupation and class.²³ Some scholars emphasize the genetic transmission of traits.²⁴ Although the exact mechanisms that explain income persistence are unknown, it seems that policies aimed at reducing inequalities in the quality of schooling and meritocratic selection into higher education might promote mobility and reduce intergenerational persistence. If income persistence and income inequality are positively related, then policies aimed at reducing inequality might also decrease intergenerational persistence.²⁵

In sum, incomes are highly intergenerationally persistent in many countries and this persistence is greater in countries with greater inequality and poverty. The income persistence of women is slightly less than that for men, but once we examine family income, the levels of persistence are similar. The intergenerational income persistence of African Americans and whites are lower when examined separately than when combined, which suggests that black-white income difference accounts for part of the high level of persistence in the United States. Income persistence in the United States seems not to have changed by much in recent decades, while persistence appears to have increased in the United Kingdom, but decreased in the Nordic countries.

Conclusions

Some policy analysts call attention to poverty dynamics to point out that the rate of persistent poverty is much smaller than the annual poverty rate, suggesting that poverty is less prevalent than is commonly believed. However, poverty dynamics also calls attention to the fact that more individuals are affected by poverty during a period of a few years than are poor in a single year, so the risk of poverty is quite widespread. Moreover, even if many people exit poverty each year, they do not exit very far from the poverty line and are at substantial risk of re-entry. This suggests that the economically vulnerable population is quite large.

We also documented that similar background factors are associated with long- and short-term poverty. Thus, a policy that reduces annual poverty risks might also reduce persistent poverty. Moreover, policies that are aimed at increasing the likelihood of poverty exit for families with children by providing strong work incentives risk reducing the living standards of children unless the policies result in substantially increased income.

Intergenerational income persistence in the United States is quite high compared to other countries, and that persistence has not changed much over the years. While economic and sociological theories suggest several reasons one might expect intergenerational income differences to persist, cross-national research has yet to suggest which policy responses are likely to be effective in reducing income persistence. However, it is reasonable to suggest that reduced inequalities in schooling, especially for very young children, and more

meritocratic selection into higher education are quite likely to increase equality of opportunity and reduce intergenerational persistence. ■

¹This article draws on “Mobility in the United States in Comparative Perspective,” in *Changing Poverty, Changing Policies*, eds. M. Cancian and S. Danziger (New York: Russell Sage Foundation, 2009).

²See, for example, B. Bradbury and M. Jäntti, “Child Poverty across Twenty-Five Countries,” in *The Dynamics of Child Poverty in Industrialised Countries*, eds. B. Bradbury, S. P. Jenkins, and J. Micklewright (Cambridge, UK: Cambridge University Press, 2001).

³Income measured over any period will reflect both true income and random measurement errors. Some of the changes in income from period to period reflect changes in measurement errors. Most analysts believe there is more such “noise” in measured income over very short periods. Thus, not all of the short-term changes in poverty need reflect true changes in poverty status. Unfortunately, it is very difficult to assess how much of the measured short-term movements reflect changes in measurement errors. Despite the potentially greater relative importance of measurement errors, it is instructive to examine short-term poverty dynamics.

⁴J. Iceland, “Dynamics of Economic Well-Being: Poverty 1996–1999,” *Current Population Reports*, Series P70, No. 91, 2003, Washington, DC: U.S. Government Printing Office for U.S. Census Bureau.

⁵Iceland, “Dynamics of Economic Well-Being.”

⁶The requirement that a person be poor in every month across the years 1996–1999 is more stringent than the requirement that a person be poor in every year during that time, since many who are poor in terms of annual income will have some months with above-poverty-level income. Thus, chronic poverty defined in terms of monthly poverty is bound to be lower, or at least not higher, than chronic poverty defined in terms of annual incomes across the same number of years.

⁷T. Smeeding, L. Rainwater, and G. Burtless, “United States Poverty in a Cross-National Context,” in *Understanding Poverty*, eds. S. Danziger and R. Haveman (New York and Cambridge, MA: Russell Sage Foundation and Harvard University Press, 2001), 162–189.

⁸R. Burkhauser, and K. Couch, “Intragenerational Inequality and Intertemporal Mobility,” in *Oxford Handbook of Economic Inequality*, eds. by W. Salverda, B. Nolan, and T. M. Smeeding (Oxford, UK: Oxford University Press, 2009); P. Gottschalk, S. Danziger, “Family Income Mobility — How Much Is There and Has It Changed?” in *The Inequality Paradox: Growth of Income Disparity*, eds. J. A. Auerbach and R. S. Belous (Washington, DC: National Policy Association, 1998).

⁹R. G. Valletta, “The Ins and Outs of Poverty in Advanced Economies: Government Policy and Poverty Dynamics in Canada, Germany, Great Britain, and the United States,” *Review of Income and Wealth* 52, No. 2 (2006): 261–284.

¹⁰G. Duncan, B. Gustafsson, R. Hauser, G. Shmauss, H. Messinger, R. Muffels, et al., “Poverty Dynamics in Eight Countries,” *Journal of Population Economics* 6, No. 3 (1993): 215–234; B. Nolan and I. Marx, “Economic Inequality, Poverty and Social Exclusion,” in *Oxford Handbook of Economic Inequality*, eds. W. Salverda, B. Nolan, and T. M. Smeeding (Oxford, UK: Oxford University Press, 2009).

¹¹B. Bradbury, S. Jenkins, and J. Micklewright, eds., *The Dynamics of Child Poverty in Industrialised Countries* (Cambridge, UK: Cambridge University Press, 2001).

¹²L. Grieger and J. J. Wyse, “Long-Term Poverty among Black and White Children and Its Demographic Correlates: 1973–1999,” unpublished manuscript, Ann Arbor, MI: Gerald R Ford School of Public Policy, University of Michigan, 2008.

¹³See A. Björklund and M. Jäntti, “Intergenerational Income Mobility and the Role of Family Background,” in *Oxford Handbook of Economic*

Inequality, eds. W. Salverda, B. Nolan, and T. M. Smeeding (Oxford, UK: Oxford University Press, 2009).

¹⁴See G. Solon, “Intergenerational Mobility in the Labor Market,” in *Handbook of Labor Economics*, eds. O. Ashenfelter and D. Card, Vol. 3 (New York: Elsevier Science B.V., 1999), 1761–1800; G. Solon, “A Model of Intergenerational Mobility Variation over Time and Place,” in *Generational Income Mobility in North America and Europe*, ed. M. Corak (Cambridge: Cambridge University Press, 2004), 38–47.

¹⁵M. Corak, “Do Poor Children Become Poor Adults? Lessons for Public Policy from a Cross Country Comparison of Generational Earnings Mobility,” *Research on Economic Inequality* 13, No. 1 (2006): 143–188.

¹⁶Corak, “Do Poor Children Become Poor Adults?”

¹⁷Björklund and Jäntti, “Intergenerational Income Mobility.”

¹⁸L. N. Chadwick and G. Solon, “Intergenerational Income Mobility among Daughters,” *American Economic Review* 92, No. 1 (2002): 335–344.

¹⁹O. Raaum, B. Bratsberg, K. Røed, E. Österbacka, T. Eriksson, M. Jäntti et al., “Marital Sorting, Household Labor Supply and Intergenerational Earnings Mobility across Countries,” *B.E. Journal of Economic Analysis and Policy* 7, No. 2 (2007 [Advances]), Article 7, available at <http://www.bepress.com/bejap/vol7/iss2/art7>.

²⁰Hertz, T., “Rags, Riches, and Race: The Intergenerational Economic Mobility of Black and White Families in the United States,” in *Unequal Chances: Family Background and Economic Success*, eds. S. Bowles, H. Gintis, and M. Osborne (New York: Russell Sage Foundation, 2005), 165–191.

²¹Hertz, “Rags, Riches, and Race.”

²²G. S. Becker and N. Tomes, “Human Capital and the Rise and Fall of Families,” *Journal of Labor Economics* 4, No. 3 (1986): S1–39; Solon, “A Model of Intergenerational Mobility Variation.”

²³R. Erikson and J. H. Goldthorpe, *The Constant Flux — A Study of Class Mobility in Industrial Societies* (Oxford, UK: Clarendon Press, 1992).

²⁴C. Jencks and L. Tach, “Would Equal Opportunity Mean More Mobility?” in *Mobility and Inequality: Frontiers of Research in Sociology and Economics*, eds. S. L. Morgan, D. B. Grusky, and G. S. Fields (Palo Alto, CA: Stanford University Press, 2006) 23–38.

²⁵Björklund and Jäntti, “Intergenerational Income Mobility.”