

Earnings mobility and low-wage workers in the United States

Data from the Panel Study of Income Dynamics indicate that persons initially with low income, but who work full time, remain in good health, and receive more education exhibit upward earnings mobility; the picture is quite the opposite, however, for those who do not work or who start out at the lowest end of the income scale

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Is earnings mobility within the United States a way out of poverty? Much has been made of participation in the labor force as a means to escaping poverty, but the ability of low-wage individuals to move out of poverty through work is less clear than the debate suggests. Sociologists have argued for years about the existence and stagnation of an economic underclass—an extremely poor group with low educational attainment and few labor advancement opportunities. Economists, however, have published numerous studies documenting a significant ability of workers to leave poverty through higher wages. Which description is to be believed? Analysis suggests that, seemingly paradoxically, both views may be correct.

In this article, annual employment and earnings figures for a low-income cohort of individuals from 1995 until 2001, as recorded by the Panel Study of Income Dynamics (PSID), are examined.¹ Tracking the employment and earnings experience of the same individuals over time contributes to our understanding of the debate, showing that mobility varies across groups in important ways. Upward earnings mobility is, encouragingly, evident for workers who remain employed full time. Significantly higher earnings growth also has been demonstrated for workers in good health and with more education. Earnings mobility, however, is largely absent for those

individuals who were not employed or who were at the lowest end of the income scale at the beginning of the study. Race and gender are not significant factors in determining mobility for the low-income cohort.

Broadly, low-wage workers remain in low-wage jobs because higher paying jobs are not available (demand-side constraints), discrimination exists (sociological or institutional limitations), or workers do not pursue or do not qualify for higher pay (attitudinal, ability, or educational causes). Many different remedies, ranging from planned economies to welfare states, have been crafted in accordance with variations across ideology and time. Faced with increasing budgetary pressures and a growing free-market ideology over the past few decades, many industrialized nations have begun to rely more heavily on the workplace as a means of alleviating poverty. Few nations have been more assertive in that regard than the United States.

The U.S. economy has undergone a significant transformation over the last several decades, with the labor force increasingly moving from employment in the industrial to the service sector. Also, the U.S. economy has become more globally interconnected, and increased trade has amplified the volatility of the labor market and threatened wage growth. The 1980s saw significant growth in income inequality across the developed world.

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However, in contrast to most other member nations of the Organization for Economic Cooperation and Development (OECD), the United States witnessed continued growth in inequality in the 1990s. Further complicating matters, real wages for the lowest quintile of workers in the United States have stagnated over the past three decades. The latest figures from 2004, a year in which the U.S. economy added 1.4 million jobs and generated substantial corporate profits, indicate real wage declines for the average worker.

It is within this setting that the United States overhauled its welfare system in the late 1990s. Much of the dialogue and legislation about relieving poverty emphasized employment. With the passage of the Personal Responsibility and Work Opportunity Reconciliation Act in 1996, the United States fully embraced the idea that the best way to alleviate poverty was through encouraging work. The Act created work requirements and time limits for recipients of public assistance. Work was viewed as a positive development—an opportunity to acquire skills, experience, and training.²

With stagnating real wages and the increase in service sector jobs on the one hand, and government reliance on work as a strategy for alleviating poverty on the other, the importance of upward earnings mobility for low-wage workers becomes quite apparent. The existence of the working poor in the United States is well documented; however, before advancing with a study of the PSID sample, it is useful to review the circumstances surrounding low-wage workers. The first noteworthy feature of low-wage work is the sheer number of individuals who are employed part or full time with wages at or near their State's minimum wage. A full-time year-round worker earning the current Federal minimum wage of \$5.15 per hour will earn \$10,712 per year—before taxes, social insurance deductions, and credits. To date, 18 States and the District of Columbia have established minimum wages above the federally mandated level.³

The poverty cutoff for a family of four was \$19,157 annually in the United States in 2004. As of 2003, 13 percent of the workforce earned under \$8.00 per hour, or about \$16,500 annually.⁴

Twelve percent of Americans now live below the poverty line, a rate higher than that seen in other OECD nations. Table 1 shows the percentage of individuals in poverty, as defined by 50 percent, 100 percent, and 200 percent of the poverty line. For example, someone earning 50 percent below the poverty line of \$19,157 would earn only \$9,578 per year. Significant differences by socioeconomic group are evident: blacks, Hispanics, youths (especially young children), and, to a lesser extent, women experienced higher rates of poverty in the United States in 2004. For example, more than 1 in 5 blacks and Hispanics were in poverty that year.⁵

Is work sufficient to pull oneself out of poverty? To gain a clear understanding of the factors that influence wage

mobility, we must consider low-income wages from the perspective of corporate profitability and worker productivity. It is within these contexts that low-wage workers are especially disadvantaged. As seen in chart 1, worker productivity and the real minimum wage have diverged greatly over the past generation. Sizeable gains in worker productivity have been realized, with improvements in technology and human capital, yet the real minimum wage has declined. As worker productivity has risen, real average wages and corporate profits have increased, especially in recent years. Since 1990, profits have increased annually by 7.5 percent, in line with a 2.8-percent increase in productivity. Meanwhile, average earnings increased by 1.4 percent and the minimum wage was virtually unchanged.⁶

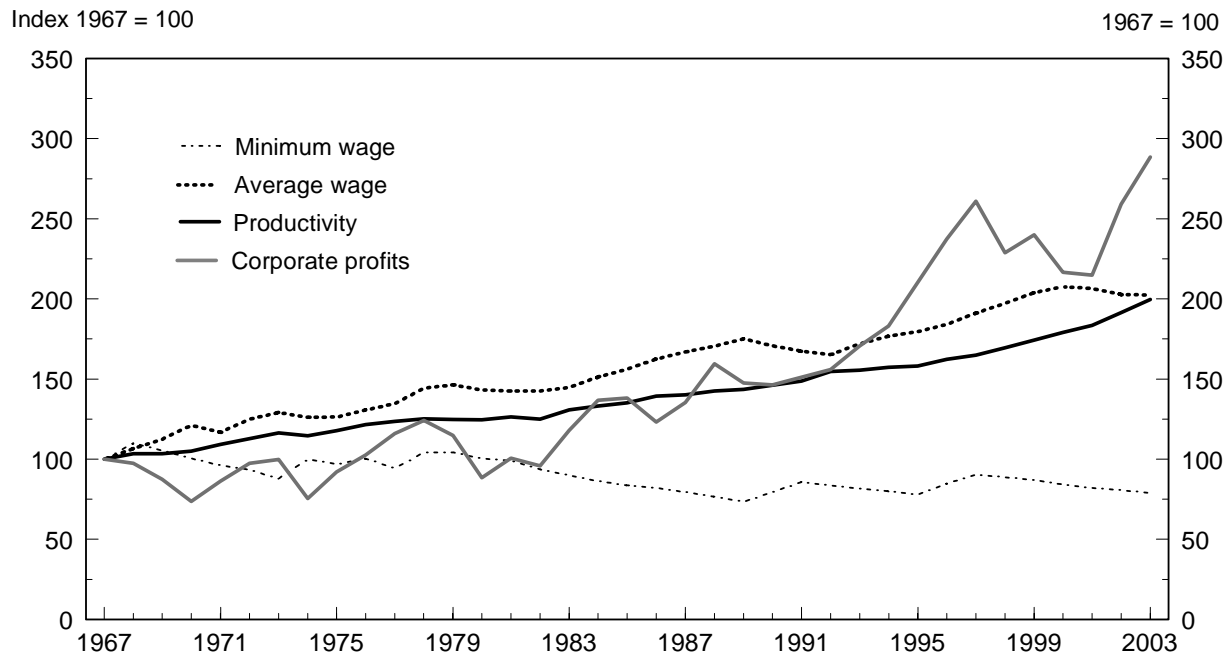
Low-wage jobs are not evenly distributed throughout the economy, but concentrated in certain industries. Table 2 shows the number of individuals employed in various industries, as well as the percentage of individuals in those industries who are employed at wages below \$5.15, \$6.15, and \$8.00 per hour. Sectors most frequently containing low-

Table 1. Percent of people in poverty in the United States, 2004

Category	Under 50 percent	Under 100 percent	Under 200 percent
All persons	5.3	12.5	31.1
Under 18 years	7.7	17.6	39.1
Under 5 years	10.0	20.3	42.6
65 years and older	2.6	10.2	38.7
White non-Hispanic	3.4	8.2	23.6
Under 18 years	4.1	9.8	26.4
Under 5 years	5.3	11.5	29.4
65 years and older	2.1	8.0	35.8
Black	11.8	24.4	48.4
Under 18 years	17.9	34.1	61.3
Under 5 years	24.7	39.7	65.1
65 years and older	5.1	23.7	55.9
Asian	5.5	11.8	27.0
Under 18 years	5.4	12.5	29.7
Under 5 years	5.4	8.4	23.8
65 years and older	4.6	14.3	41.5
Hispanic	8.4	22.5	52.6
Under 18 years	10.9	29.7	62.6
Under 5 years	12.8	32.4	65.2
65 years and older	4.6	18.8	53.5
Men	4.9	11.2	28.7
White non-Hispanic	3.1	7.2	21.2
Black	11.0	22.0	44.7
Asian	5.6	11.6	26.3
Hispanic	7.5	20.6	50.8
Women	5.7	13.7	33.3
White non-Hispanic	3.7	9.1	25.8
Black	12.4	26.5	51.5
Asian	5.4	12.0	27.6
Hispanic	9.3	24.4	54.5

SOURCE: Bureau of Labor Statistics and Bureau of the Census, Current Population Survey, 2004.

Chart 1. Minimum wage, average wage, productivity, and corporate profits, 1967–2003



SOURCE: Minimum wage data: Employment Standards Administration, Wage Hour Division, Department of Labor; average income for individuals over time: U.S. Census Bureau; productivity data: Bureau of Labor Statistics; corporate profits data: National Income and Product Accounts, Bureau of Economic Analysis.

Table 2. Percent of workers in industry, by wage category, 2000

Industry	Employment	Percent earning less than \$5.15 per hour	Percent earning less than \$6.15 per hour	Percent earning less than \$8.00 per hour
Total	119,191,000	2.6	10.6	23.1
Agriculture	1,770,000	7.9	27.6	52.2
Mining	526,000	1.4	3.2	8.3
Construction	6,869,000	1.2	4.5	13.1
Manufacturing, durable goods	11,758,000	.7	3.9	11.8
Manufacturing, nondurable goods	7,524,000	1.4	7.4	18.5
Transportation	5,706,000	1.9	4.7	13.0
Communications	1,868,000	.5	2.6	7.5
Utilities and sanitation	1,522,000	.4	2.5	6.6
Wholesale trade	4,662,000	1.3	5.8	17.0
Retail trade	20,116,000	4.4	24.7	48.1
Fire, insurance, and real estate	7,666,000	1.7	4.5	12.8
Private households	940,000	28.5	42.7	63.3
Business, auto, and repair services	7,502,000	2.2	9.3	21.4
Personal services	2,763,000	5.9	21.1	43.3
Entertainment and recreation services	2,197,000	3.9	21.1	43.3
Hospitals	5,030,000	1.0	4.1	12.9
Medical services	5,803,000	1.7	9.1	23.2
Educational services	10,838,000	2.8	9.0	18.0
Social services	2,889,000	5.3	18.7	36.8
Other professional services	5,189,000	2.4	5.3	12.7
Forestry and fisheries	93,000	4.0	10.8	21.2
Public administration	5,958,000	2.6	10.6	23.1

SOURCE: *Solutions for Progress*, analysis of CPS, 2000, cited in Holly Sklar, Laryssa Mykita, and Susan Wefald, *Raise the Floor: Wages and Policies That Work for All of Us* (New York, Ms. Foundation for Women, 2001).

wage workers include agriculture, retail trade, private households, personal services, entertainment and recreation services, and social services. More than 4 out of 10 workers in these industries earned \$8.00 or less per hour in 2000. Due to its size, the retail trade industry employs more than half of the Nation's hourly employees paid at or below the minimum wage.

Other studies

Employment histories and job and earnings mobility have been topics of interest since the 1950s. The first couple of decades were spent primarily researching the effects of intergenerational earnings mobility—that is, to what extent children inherit their economic outcomes from their parents. It was not until the 1970s and the increasing use of panel data that researchers turned to the question of earnings and class mobility within a worker's lifetime.⁷ As opposed to cross-sectional data, panel data are capable of following individuals over multiple years in an effort to gauge outcomes over time.

Several competing models were advanced during this period, including the dual labor market theory (alternatively called the stratification model), human-capital theory, job competition model, and models that incorporated randomness into mobility.⁸ The debate increasingly developed between neoclassical economists, who believed that the labor market was a single arena, and dual labor market economists, who claimed that primary sector jobs were rationed. The dual labor market theory was difficult to verify empirically, because the primary and secondary labor segments proved too complicated to separate accurately, especially with the shift to more "white-collar" low-wage service jobs. The theory faced sustained criticism as being overly simplistic. Further, segmented labor markets, if they exist, become irrelevant if workers can move between them.⁹

The 1990s saw a greater emphasis on earnings mobility across several countries and for certain populations, such as former welfare recipients. U.S. scholars placed special emphasis on the return to work. Recent literature has begun again to examine the role of firms in earnings mobility, in a sense returning full circle to the themes of the early research.

The literature on earnings mobility has operated sometimes in parallel with, and sometimes tangentially to, the literature surrounding returns to education. The question of earnings mobility, however, remains broader. Another distinct, yet related, area in the literature is career mobility, a frequent, but not requisite, factor contributing to earnings mobility. Several theories address a low-wage worker's promotion, tenure, and departure, but they are beyond the scope of this article. Other researchers have sought to address similar issues, but have positioned the question differently. For example, David Neumark and Olena Nizalova ask whether exposure to minimum wages at a young age leads to negative effects in the long run.¹⁰

General findings. Assessments of earnings mobility have been remarkably consistent across time, countries, and studies. Earnings mobility is widely held to be fairly extensive. For example, Paul Swaim found evidence that half of all workers in OECD nations move up or down at least one earnings quintile.¹¹ However, many questions follow: Which characteristics correlate with an individual's moving up income quintiles, and which with a move down? How long do workers remain above the low-wage classification? How prevalent is low-wage recidivism? What percentage of individuals are chronically low-wage earners? Is the low-wage quintile composed of individuals with lesser employment options, or is low pay a "stopgap" measure?¹² What prevents earnings mobility from being even greater (for example, discrimination or poor educational outcomes)?

Some of these questions have been addressed in the literature. Several authors uncovered an answer to the aforementioned debate between sociologists and economists, namely, that, although exiting the low-wage classification is quite common, so, too, is chronic low earnings.¹³ The likelihood of leaving low pay decreases dramatically as tenure in a low-paying job increases. Low-wage employment could itself decrease future wage growth if it causes workers to receive less training or skill development, conveys a negative signal to future employers, or provides access only or chiefly to weaker labor market networks.¹⁴ Significant numbers of stagnant low-wage earners could also be visible because of "sorting," as those individuals with lower employment opportunities remain low-wage workers.¹⁵ The latter finding indicates that, not only is earnings mobility a reality for a substantial number of initially low earners, but also there is continued poverty within a large subpopulation of workers.

Earnings growth has been demonstrated among some severely low-income populations, including former welfare recipients. Controlling for experience, Susanna Loeb and Mary Corcoran found that full-time women workers who previously received benefits from the Aid to Families with Dependent Children (AFDC) program did not have lower earnings growth than non-AFDC women.¹⁶ Yet Neumark and Nizalova found evidence that employment at jobs paying the minimum wage depresses future earnings: individuals earned less in the future the longer they were exposed to minimum wages.¹⁷

Findings by sector and group. Several studies have examined the effects of earnings mobility by sector or type of job. Gosta Esping-Andersen, Gotz Rohwer, and Leth Sorensen found significantly higher mobility for unskilled service sector workers than unskilled manual laborers.¹⁸ Fredrik Andersson, Harry Holzer, and Julia Lane answered a slightly different question in finding that earnings mobility varies across sectors in the U.S. economy.¹⁹ The latter authors

also found significant variation in earnings mobility across firms within the same sector, indicating important firm-level influences on mobility, including the level of unionization and the organizational culture.²⁰

As might be predicted, earnings mobility varies widely among different groups within society. The question arises, however, Do groups that have a greater likelihood of low-wage work also have a greater likelihood of wage “stickiness”? Peter Gottschalk found that the characteristics associated with low-wage employment lead to greater rates of permanently low earnings, including lower mobility for the aged, the less educated, and nonwhites.²¹ In 1990, Thomas Boston demonstrated a divide in outcomes along racial lines in the United States: although 47 percent of white women and 39 percent of white men were able to leave the secondary for the primary sector,²² just 26 percent of black men and 18 percent of black women made such a transition. Also, David Maume found that U.S. women face varying earnings mobility prospects by sector.²³ In particular, women face lower upward mobility of earnings in “male-dominated” occupations. Several other studies found consistent results along these demographic characteristics.²⁴

In addition, the age of the individual seems important to mobility. Many studies document different earnings mobility rates for various age cohorts. Most find that, for youths, receiving low wages is much more likely to be a stopgap than for other age groups. By contrast, low-wage older workers face lower-than-usual prospects of increased earnings.

Definitional issues. Inevitably, any study on earnings mobility must grapple with several difficult definitional issues. Foremost is the designation of workers as low wage. Researchers have used various definitions in their attempts to examine the mobility of workers. Beginning with the dual labor market studies, workers have been defined by occupation, sector, industry, firm size, and bargaining power.²⁵ Increasingly, workers are defined by wage data, collected longitudinally. Most empirical studies of wages have examined relative wages, although some few have used absolute cutoffs.

Second, every study must define a timeframe over which its effects are measured. However, it is not clear, a priori, how to define workers who temporarily leave low-wage or high-wage employment before returning. For example, a low-wage worker who is defined as such during an initial period could be a medium- or high-wage earner who briefly visits low-wage status before returning. Esping-Andersen, Rohwer, and Sorensen write that is necessary to distinguish between low-wage workers for whom low-wage work is a stopgap and those for whom low wages are more reflective of their previous employment outcomes.²⁶ More recently, others have glossed over this distinction by designating workers as

low-wage earners only after they have been in that situation for 3 consecutive years.²⁷ In contrast, Swaim and others characterize workers as low wage only if they are deemed so from the initial survey.²⁸ Further complicating results, data often are censored after a few years of observations, leaving low-wage workers’ long-term outcomes in question.

Third, it is desirable to include in any study workers who alternate between employment and nonemployment. Most studies fail to do so, however, because it is difficult to determine whether workers have become discouraged and left the labor force due to the absence of opportunities for mobility or through another, unrelated factor, such as childbirth. Yet excluding workers who leave the workforce likely biases earnings mobility estimates upwards. Indeed, Swaim finds a high degree of movement between low-wage jobs and nonemployment.²⁹ Most authors do not offer an extensive analysis of the biases created by the omission of workers who leave the workforce.

Comparative findings. Beginning in the 1990s, several studies sought to compare relative earnings mobility across nations, placing earnings mobility in the United States within the context of other developed countries. Besides the United States, many OECD nations increasingly have shifted their poverty alleviation schemes into the marketplace.³⁰ The efforts aimed at examining comparative earnings mobility stem from a desire to understand the factors that create mobility. However, while successful in documenting mobility rates across countries, they have done little to explain why the various differences exist (or rather, why even more differences do *not* exist). A comprehensive review of the literature indicates that different factors contribute to earnings mobility in different countries. For example, Rachael Rosenfeld found that macroeconomic conditions likely are more important for earnings mobility in the United States than in Europe.³¹ Likewise, in countries with more rigidly stratified educational systems (for example, Germany), academic credentials determine upward mobility more appreciably, “while in the United States, years of education are what counts.”³² Several studies have found comparable rates of earnings mobility. For example, Swaim demonstrated that mobility is largely consistent across eight OECD nations.³³ This finding is especially noteworthy because mobility has been shown to be consistent across countries with vastly different economies and levels of inequality.

Trends in labor earnings

This study uses longitudinal data from the PSID on low-wage earners over the years 1993–2001.³⁴ For purposes of analysis, the low-income cohort is defined as those with annual U.S. earnings below \$18,000 for 1993 through 1995.³⁵ An absolute

measure of poverty (that is, earnings under \$18,000), rather than a relative measure (that is, the lowest quintile of earnings), was chosen for two reasons. First, the study includes nonearners in the analysis, and classifying them into ranked earnings positions is problematic. Second, the absolute measure provides a more direct comment on how mobility relates to poverty. For example, if quintiles are the defining measure, mobility could be high, and yet, if several quintiles exhibit poor earnings growth, the measure may prove falsely encouraging. An absolute cutoff does have the disadvantage of being arbitrary in nature, but it does provide a point at which to describe who has moved beyond it.

This definition of the low-income cohort is both expansive and restrictive. A relatively high earnings level of \$18,000 has been chosen so as to include both severely and moderately low-wage individuals. Other recognized cutoffs, such as the poverty line, or previously established measures, such as \$12,000 by Andersson, Holzer, and Lane, are too low to capture the full breadth of the low-income population.³⁶ At the same time, the measure is highly restrictive because an individual must earn less than \$18,000 per year over the 3-year period of the study. This strict measure of the low-wage cohort is utilized in an effort to examine those who are truly earning a low income and exclude those for whom low-wage status is merely a stopgap. The low-wage group's outcomes are then measured over the period from 1995 (as the base year) until 2001.

It is clear that the low-income cohort is different from the general PSID population, and understanding the differences may provide a clue as to why this group persists. Table 3 highlights some of the marked differences between the low-income cohort and the general PSID sample. The description is limited to readily identifiable and quantifiable indicators, meaning that potentially important factors such as motivation and ability cannot be recorded. It is in recognition of those immeasurable differences that longitudinal data are used to follow the earnings mobility of the same individuals over time. Table 3 shows that the low-income cohort has a higher representation of women, nonwhites, and those with poor health or disabilities than the general PSID sample. The low-income cohort is older, less likely to be married, and less educated, but family size and number of children are comparable between the two groups. Finally, the low-income cohort is much less likely to be employed either full time or part time. These findings are not surprising and generally comport with the current understanding of low-income status.

Before tracking individuals over time, it is useful to get a picture of how strong earnings growth is, both in general and for specific subgroups of the population. In surveying the charts that follow, it is important to remember the universe of analysis. The charts do not present earnings growth for all

people in a certain demographic category (for example, all women or all part-time workers); rather, they show the earnings growth of those who were consistently low-income workers. Whereas many studies have found *overall earnings mobility* quite strong, this article is concerned with the earnings outcomes of *low-income workers* alone.³⁷

Chart 2 highlights average earning growth for the low-income cohort, with pay adjusted for inflation. The chart shows highly consistent, slow-paced growth in earnings over the period 1995–2001. Disaggregating the data reveals that earnings growth was not equally divided among all the members of the group. As indicated in chart 3, earnings growth is markedly different for whites and nonwhites, with low-income whites exhibiting higher earnings growth starting from a higher base. This difference leads to a widening earnings gap between the two groups. Chart 4 illustrates continued earnings growth for both men and women. In 1995, low-income women received 82 percent of men's remuneration; with slightly higher earnings growth, by 2001 they were at 92 percent of men's pay.

Health is an important factor in determining earnings. Chart 5 shows earnings level and earnings growth for the healthy and the unhealthy in a given year. Note that the chart does not imply that the health status of individuals remains constant over time.³⁸

The chart is interesting because of the measure of stock and flow. While it is understandable that those in better health would exhibit higher earnings than those in ill health, the earnings of the healthy have shown a tendency to grow as well. Healthy workers in the low-income cohort grow their income substantially more than unhealthy workers do. Both factors combined to make a strikingly different earnings picture by 2001.

Table 3. Demographic statistics on the low-income cohort

[In percent]

Category	Entire PSID sample	Low-income cohort ¹
Number of observations	111,917	13,355
Age (years)	31.1	39.0
Number of persons ²	3.6	3.3
Number of children ²	1.5	1.5
Married	38.2	25.7
Years of education	12.6	11.4
Women	52.1	62.0
Nonwhite	35.9	45.3
Disabled	16.4	31.8
Unhealthy	15.1	30.3
Employed full time	32.2	12.3
Employed part time	18.1	14.5

¹ Data contain missing observations and are averaged over nonmissing values. The low-income cohort is defined as individuals in the PSID with earnings under \$18,000 during 1993–95.

² In household at time of study.

SOURCE: PSID, means over the years 1995, 1996, 1997, 1999, and 2001.

Not surprisingly, working full time and having more education are important factors in earnings growth. Chart 6 illustrates earnings levels and earnings growth for full-time and part-time workers. Keeping in mind that individuals can be employed part time one year and full time the next year and vice versa, one sees that part-time workers earn about 50 percent of full-time workers, and this ratio remained fairly constant over time. Chart 7, showing labor earnings by education level, uncovers the relative income discrepancies among those with less than a high school education, those with a high school diploma, and those with more than a high school education. Predictably, earnings levels track educational attainment, with individuals who completed more than 12 years of education earning and growing the most, followed by those with 12 years of education.

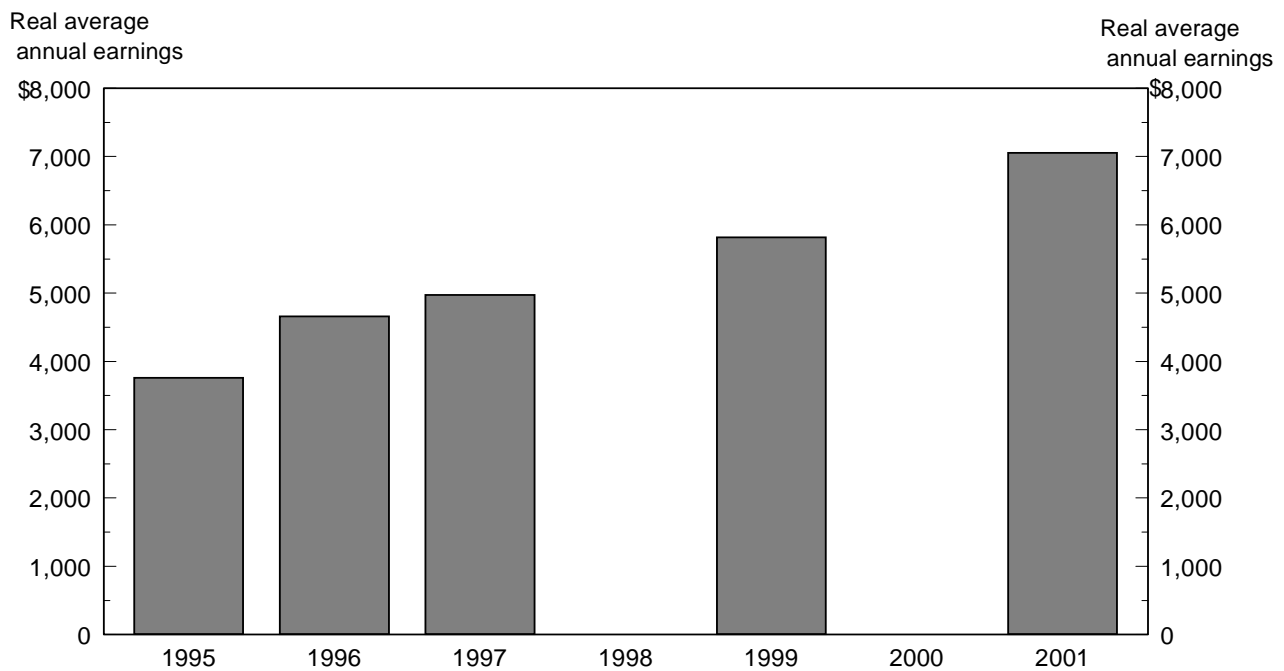
Mobility findings

While table 1 is useful in understanding the composition of the low-income cohort and charts 2–7 begin to reveal some of the characteristics that may be important to earnings growth, it is necessary to follow an individual’s income across a number of years to gain a picture of earnings mobility.

Broadly, earnings mobility is the extent to which individuals shift their earnings levels in subsequent years. Because the primary question posed in this article is “What happens to the earnings of low-wage workers over time?” the discussion will follow the earning transition of this entire sample, including the nonearners. Doing so, however, presents a definitional problem, because several accepted measures of earnings mobility are not appropriate for data with a high degree of nonearners. For example, mobility by income quintile cannot be examined, as it is not clear how to assign those with zero earnings. Nonetheless, several alternative measures have been created. Two broad measures of mobility are presented: changes in employment status and changes in earnings. Changes in employment status are included in order to examine more fully the mobility of nonearners. Changes in earnings are estimated for two groups: first, the entire low-income cohort and then a subset of that cohort, namely, those with positive earnings in all years examined.

Employment status mobility. In analyzing and explaining earnings mobility, it is useful to look at transitions in employment status. As is hardly surprising, employment status is highly influential in determining wages. For the low-

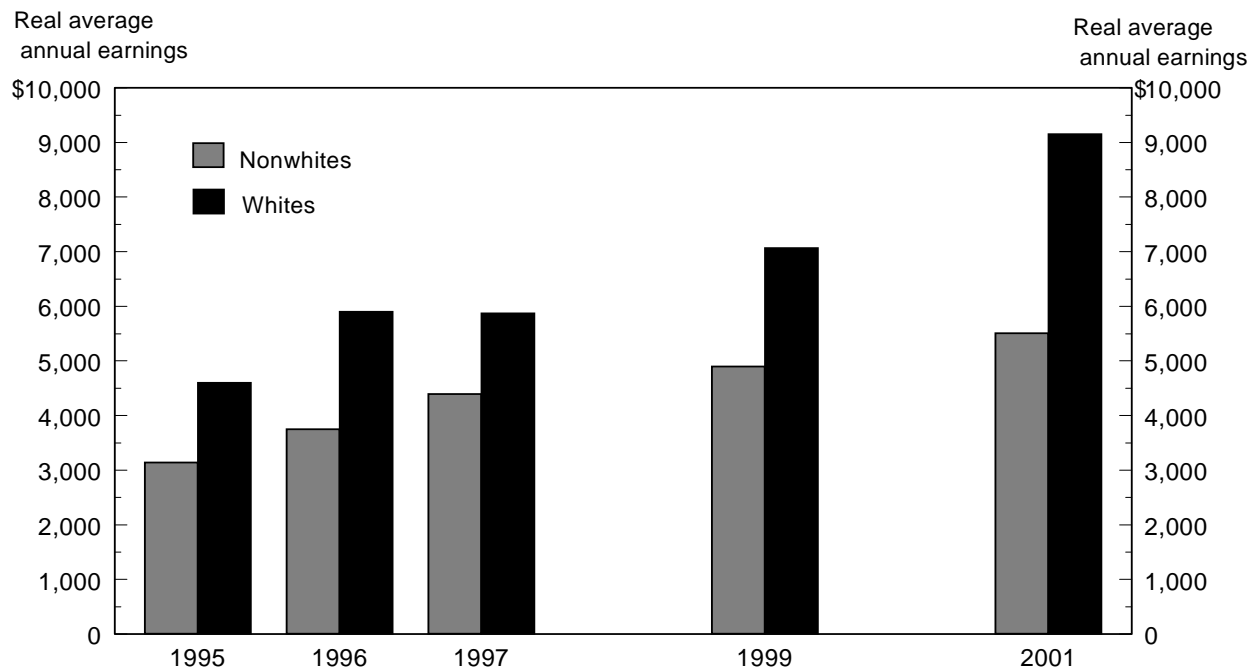
Chart 2. Labor earnings of low-income cohort, 1995–97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001.

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

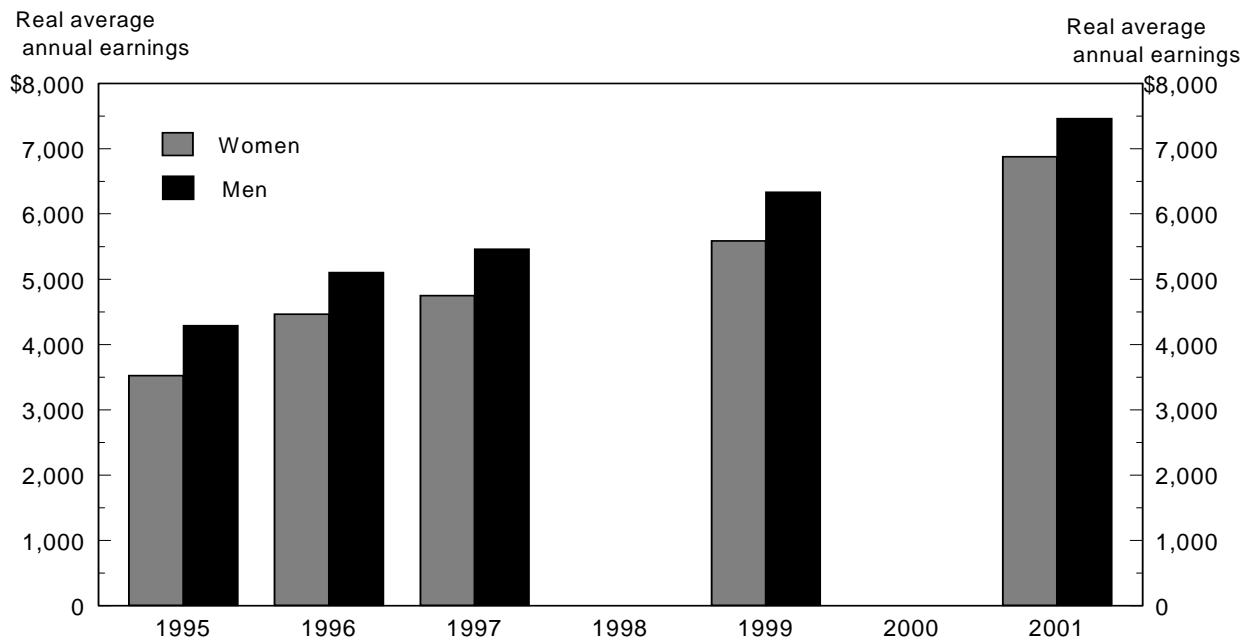
Chart 3. Labor earnings of low-income cohort, by race, 1995-97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

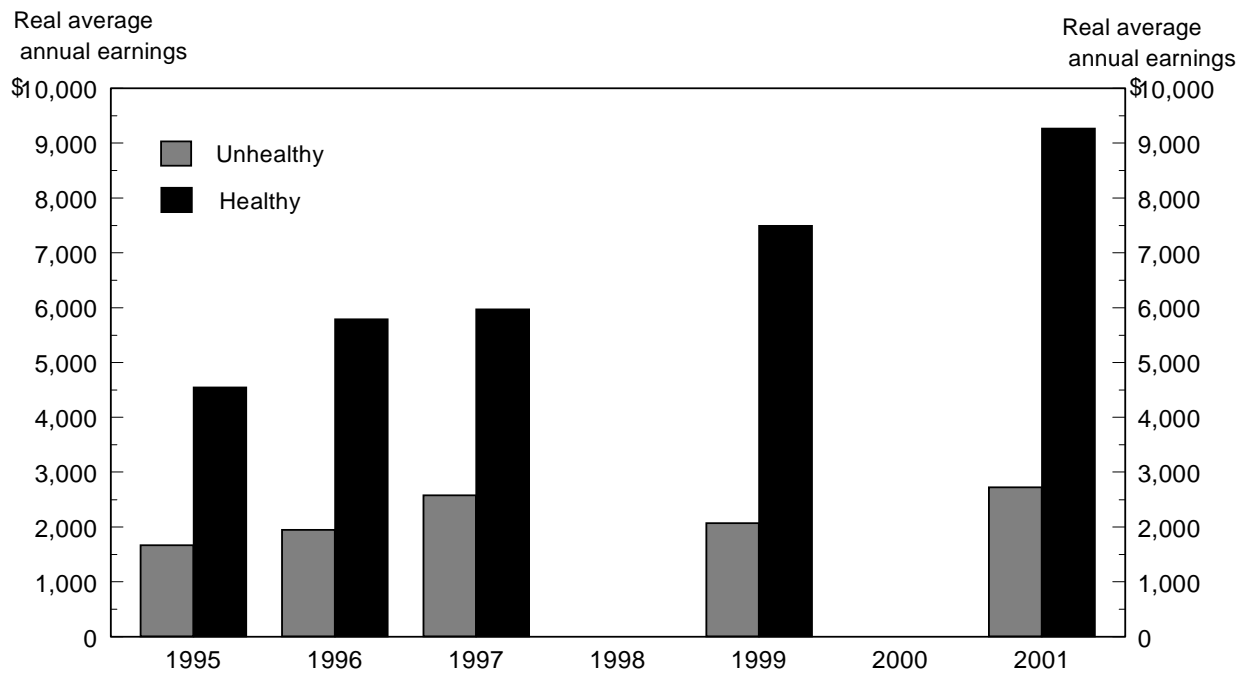
Chart 4. Labor earnings of low-income cohort, by gender, 1995-97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001.

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

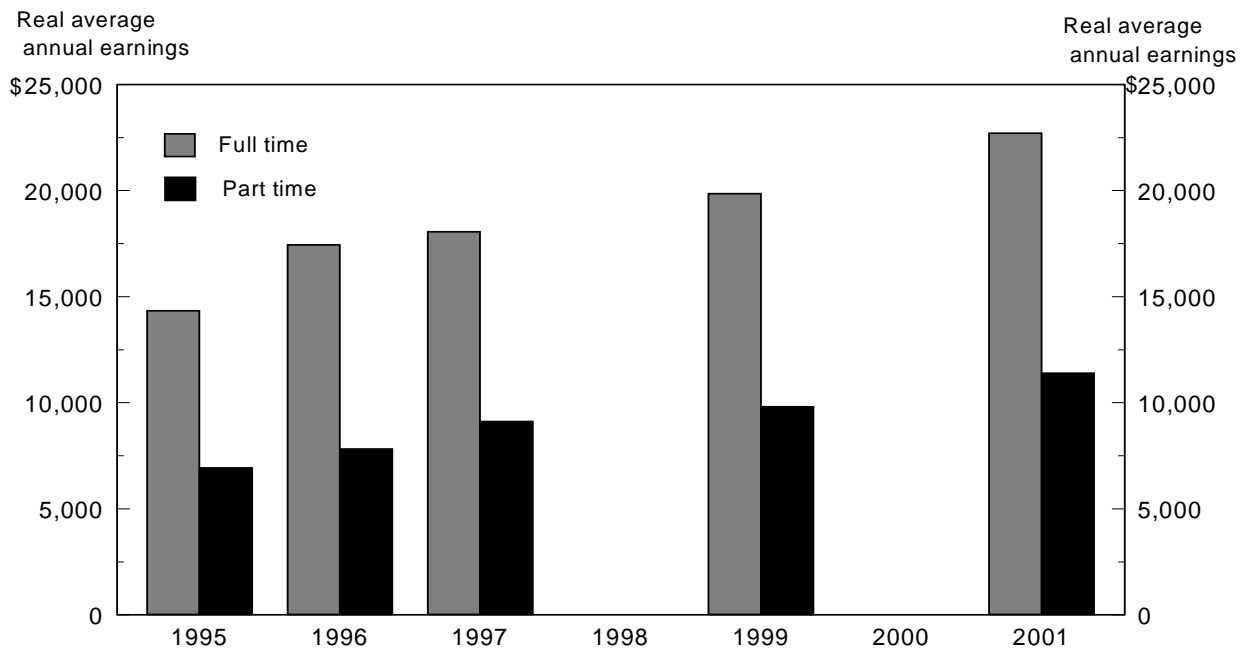
Chart 5. Labor earnings of low-income cohort, by health status, 1995-97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001.

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

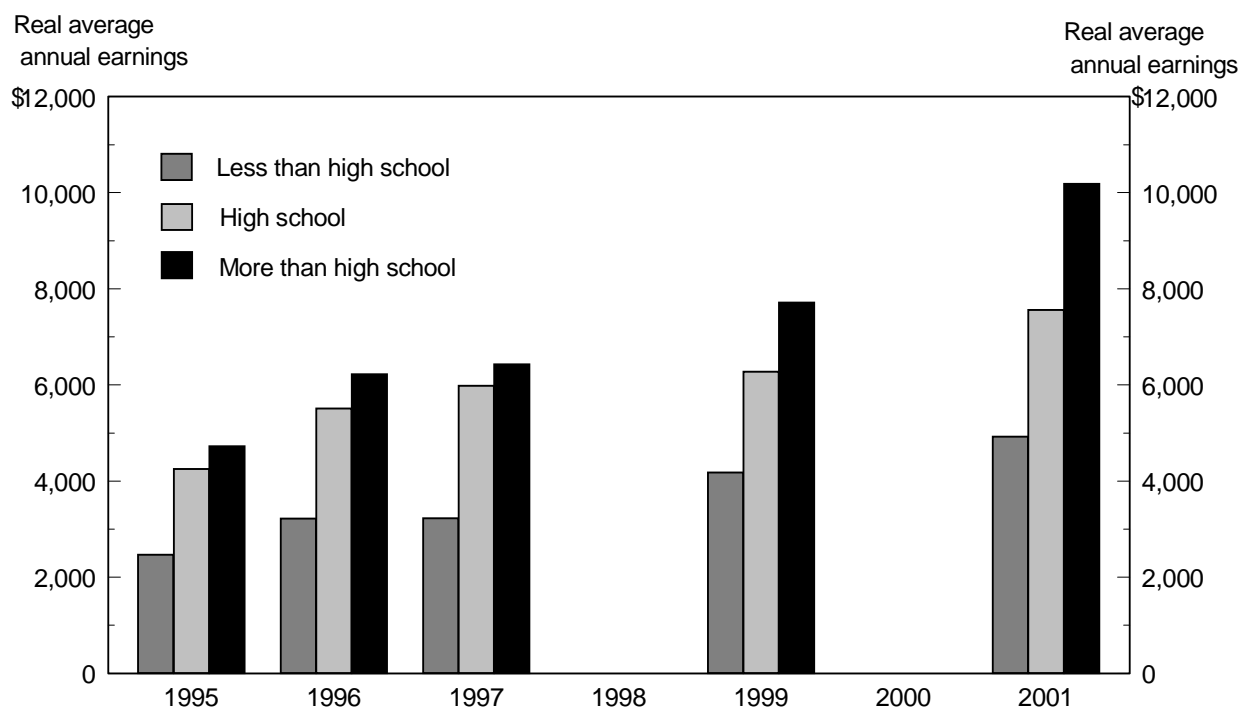
Chart 6. Labor earnings of low-income cohort, by employment status, 1995-97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001.

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

Chart 7. Labor earnings of low-income cohort, by education level, 1995–97, 1999, and 2001



NOTE: Data were not available through the Panel Study of Income Dynamics (PSID) for 1998 and 2000. Where necessary, measures are collected over 2-year spans, between 1997 and 1999, and 1999 and 2001.

SOURCE: All data were taken from the PSID-defined low-income cohort over years 1995, 1997, 1999, 2001.

wage cohort, those not working have no labor income, part-time employees have mean earnings of \$8,856 (with a median of \$6,779), and full-time employees have mean earnings of \$18,896 (with a median of \$17,000).

The following tabulation examines transitions in employment status in consecutive periods between 1995 and 2001, providing an average for between-year pairs (figures shown are percentages):³⁹

<i>Year t - 1</i>	<i>Year t</i>		
	<i>Not working</i>	<i>Working part time</i>	<i>Working full time</i>
Not working	91.65	5.87	2.48
Working part time	18.34	56.79	24.87
Working full time	6.18	22.28	71.54

To understand what happens to employees of a certain status in 1 year, the table should be read across the rows to see the average transition. The percentages shown exhibit a striking degree of continuity for consecutive years. Nonworking individuals appear especially “locked in” to their

status in the next year, with more than 90 percent of their numbers remaining jobless. Although less of a constraint, full-time status in year *t - 1* also is a good predictor of full-time status in year *t*: more than 70 percent of full-time employees return to full-time work in the subsequent year. Most of those who leave full-time work remain employed part time, with only 6 percent leaving work completely. Part-time-status is more transitive: only 57 percent of part-time workers return to part-time work, with the remainder roughly dividing between stepping up into full-time employment and leaving work altogether. The data shown appear to imply that in order to transit from nonwork to full-time work, many successful individuals first find part-time work.

Also of interest is whether employees are more likely to change their employment status over a longer time horizon than that shown. The next tabulation is similar to the previous one, but follows individuals’ transitions in employment status over a span of 6 years (with observations in 1996, 1997, 1999, and 2001), in order to gauge the extent of their mobility (again, the figures shown are percentages):⁴⁰

<i>Year</i>	<i>Not working</i>	<i>Working part time</i>	<i>Working full time</i>
1995, not working:			
1996	92.42	6.20	1.38
1997	91.04	7.00	1.95
1999	88.06	7.12	4.82
2001	85.76	7.92	6.31
1995, part time:			
1996	14.87	62.97	22.15
1997	21.52	54.43	24.05
1999	21.20	45.57	33.23
2001	25.63	35.76	38.61
1995, full time:			
1996	6.25	22.60	71.15
1997	5.773	0.29	63.94
1999	13.46	20.67	65.87
2001	11.06	23.56	65.38

Following each employment group separately, one can see from the tabulation that, although the likelihood of remaining in the same status falls over time, a person's original position remains strongly predictive even 6 years later. The percentage of individuals remaining nonworking falls moderately from 1996 to 2001, with a slight growth in part-time employment, and a 5-percent growth in full-time employment, over the same period. The failure of people to join the workforce is of great concern in assessing earnings mobility, because the nonworking population is little able to experience earnings growth. Of course, some people do not find work because they do not desire it or, due to health or other complications, are unable to accept it. The analysis of flows into and out of employment does not provide information about an individual's reasons for not finding work.

A strikingly different picture emerges in the experience of workers who were employed part time in 1995. As can be seen in the tabulation, this group's employment options diverge. By 2001, more of the 1995 part-time, low-income workers were employed full time than part time (39 percent, compared with 36 percent), with a sizeable number ceasing to work altogether (26 percent). This trend confirms the belief that part-time employment is a transitional stage for many workers.

Full-time status in 1995 fell slightly as a predictor of future employment status, in a manner highly similar to nonworkers' status in 1995. Those remaining in full-time work dropped from 71 percent to 65 percent over the 6 years studied. Only 1 percent of individuals left full-time for part-time work if they had not already done so after the first year; five percent left work altogether. This scenario paints a rather hopeful picture of earnings stability for full-time employees, especially those who are able to remain so beyond a year's time. By contrast, a much greater percentage of the nonworking population remained out of work in every period from 1996 to 2001 than did either of the other two groups: 80 percent, compared with

17 percent of part-time workers and 35 percent of full-time workers.

As a final measure of employment status mobility, the 1995 population can be broken into three categories: those whose employment status was improved, those whose status was neutral, and those whose status worsened. Although arbitrary, these categories help to explain the extent of lasting change in a person's employment status. The category of those whose employment status was improved encompasses all low-wage earners who saw a rise in their employment status, either from nonwork to part-time work, from nonwork to full-time work, or from part-time work to full-time work, during at least two of the four periods studied. The category of those whose employment status worsened comprises all low-wage earners who saw a decline in their employment status, either from full-time work to part-time work, from full-time work to nonwork, or from part-time work to nonwork, during at least two of the four periods. The category of those whose employment status was neutral is composed of individuals who saw only one rise, only one decline, one rise and one decline, or two rises and two declines in their employment status from 1996 to 2001, compared with their 1995 status. The breakdown by these categories was as follows: those who improved, 15.63 percent; those who remained neutral, 73.12 percent; and those who worsened, 11.25 percent.

The overall picture is rather static. On the one hand, improvements in employment lead declines by 4 percent. On the other hand, the neutral category, making up nearly three-quarters of the population, is more difficult to interpret. Among its members, full-time individuals who remain employed full-time clearly represent a positive outcome. However, nonworking individuals who remain so may represent a "trap."

Earnings mobility. When it comes to the low-income population, earnings mobility is more difficult to examine than employment status mobility. Any analysis must struggle with defining the large number of nonearners. Measures such as dividing earnings returns by quintile are not feasible for this population, because nearly 60 percent of it is nonworking in the base year. Such a measure yields much higher returns. Analyses incorporating percentage growth or decline of wages in subsequent years are not possible for near-zero earners. Yet the nonearning population is too important to ignore, both because it incorporates a significant proportion of the sample cohort and because earnings growth may be of greatest need to those with the least earnings.

To understand the earnings mobility of all members of the low-income cohort, recall that nearly 80 percent of those not employed in 1995 remained so throughout the subsequent 6 years of analysis. Thus, roughly 50 percent of the population

saw no earnings growth over that time, though neither did they witness a decline in earnings. In an attempt to view overall movement in earnings for the low-income cohort, an absolute measure of earnings change was established. The measure, a gain or loss of \$1,000 in real income, while arbitrary, is aimed at overcoming some of the difficulties with the cohort sample having a large share of nonearners. The measure is intended merely as a *tool* in understanding mobility, not as a definition of the term. A measure of percent change in earnings would, of course, be more favorable, and that is what, indeed, is presented with regard to the earning population later.

The sum totals of earnings mobility in consecutive years may be broken into the three earlier defined categories of those whose earnings status was improved, those whose status was neutral, and those whose status worsened. The breakdown of 21.79 percent, 70.47 percent, and 7.74 percent, respectively, for these categories shows that the overwhelming majority of individuals remained within their earnings range, even with earnings change defined over the reasonably modest annual increase or decrease of \$1,000 (roughly \$19 per week). Encouragingly, when earnings did change, growth outpaced decline by 14 percentage points.

For a longer view of earnings change, the same standard of movement—an increase or a decrease of \$1,000 in real income—can be applied to the 1995 population, broken down into the same three categories as before, but this time over the period 1995–2001. Here, 27.03 percent saw their earnings status improve, 60.86 percent had a neutral status, and 12.11 percent saw their earnings status worsen. In comparison with earnings mobility in consecutive years, longer time horizons produce a greater divergence of experience, with more people seeing both increased and decreased earnings at the expense of the neutral category. Overall, the number of those whose earnings status was neutral fell 10 percent, divided roughly into equal proportions between increased and decreased earnings.

Mobility for earners only. In an analysis of low-wage workers such as that presented here, the employed population is of special interest as the group most likely to witness changes in earnings. Even if nonworkers are largely unable or unwilling to join the labor force, the employed may exhibit important earnings gains. The next two tabulations address the question of how many earners saw improvements or declines in their take-home pay. The following tabulation highlights the extent of earnings mobility (percent of earners in each category) in consecutive years for 1995 low-wage earners:⁴¹

<i>Years</i>	<i>Decrease</i>	<i>Neutral</i>	<i>Increase</i>
1995–96	40.88	13.14	45.99
1996–97	34.67	11.86	53.47
1997–99	32.48	7.66	59.85
1999–2001	32.85	8.03	59.12

In 1996, 46 percent of the cohort saw increased earnings, and 41 percent saw decreased earnings, compared with their 1995 earnings. By 2001, those who saw increased earnings had grown to 59 percent, while 33 percent of the cohort experienced a decline in earnings, in real terms. Note that the growth in earnings over the last two periods, 1997–99 and 1999–2001, is over 2 years and thus is not directly comparable to 1-year growth figures.

The following tabulation examines earnings changes (percent of earners in each category) of those with earnings, in comparison with the base year, 1995:⁴²

<i>Years</i>	<i>Decrease</i>	<i>Neutral</i>	<i>Increase</i>
1995–2001	36.86	3.28	58.03
1995–99	39.42	4.01	56.57
1995–97	41.61	7.66	50.73
1995–96	40.88	13.14	45.99

In the tabulation, individuals' earnings are followed over the period from 1996 to 2001 to evaluate the extent to which they decreased, were “neutral,” or increased. The trend is towards increased earnings. By 2001, 58 percent of individuals had higher earnings, in real terms, than they did in 1995. Notable is that while 13 percent of individuals exhibited “neutral” earnings after 1 year, only 3 percent did after 6 years. However, the trend is less optimistic for those with initially decreased earnings. Forty-one percent of the low-income cohort had diminished earnings in 1996, and 37 percent of the cohort still faced decreased earnings by 2001. This finding lends credence to the theory that there are two quite different groups with very different outcomes related to earnings mobility: a majority group that advances in earnings with work experience and a sizable minority of individuals who fail to realize earnings advancement even while remaining employed.

In addition to understanding how many people enjoyed increased earnings, and how many suffered decreased earnings, over the 6 years studied, it is useful to determine the extent of those increases and decreases. The next two tabulations present three categories of earnings change in order to gain a picture of how significant these changes are for various individuals in the low-wage population. Mean earnings change is not a consequential measure for this analysis, because outliers skew the average upwards significantly. After ranking individuals by earnings growth in each year, the two tabulations present the median value (50-percent individual), as well as the quarter value (25-percent individual) and three-quarters value (75-percent individual). The first tabulation shows that earnings growth in consecutive years, represented by the percentage of earners in each category during those years, is quite small, but positive, for the median individual:⁴³

Years	Quarter (25 percent) individual	Median (50 percent) individual	Three-quarter (75 percent) individual	Years	Quarter (25 percent) individual	Median (50 percent) individual	Three-quarter (75 percent) individual
1995–96	-41.00	1.43	45.41	1995–2001	-62.15	35.00	135.32
1996–97	-35.56	2.49	35.71	1995–99	-58.38	18.44	108.67
1997–99	-37.20	9.36	50.74	1995–97	-7.18	5.76	60.51
1999–2001	-24.53	3.77	41.51	1995–96	-41.00	1.43	45.41

Note that earnings losses are not quite as deep as earnings gains at the 25- and 75-percent levels. In 1996, the quarter individual lost 41 percent in earnings, while the three-quarter gained 45 percent. With the exception of 2001 for the quarter individual and 1999 for the three-quarter individual, the extent of the earnings change remained roughly constant over the years 1996–2001.

Finally, the second of the aforementioned two tabulations presents the extent of the earnings change over the 6-year period of the study, represented by the percentage of earners in each category during those years, for the quarter, median, and three-quarter individuals, in comparison with their earnings levels in 1995:

The picture of earnings shown here is one of growing inequality. Earnings of the three-quarter earner grew dramatically, from a 45-percent increase in 1996 to a 136-percent increase by 2001. While not as dramatic, the growth rate of the median earner's earnings was 35 percent at the end of the 6 years. By contrast, the quarter individual saw an earnings decline of 41 percent after the first year, deepening to a decline of 62 percent by year 6. These comparisons document the fact that, among low-income earners, many see significant gains in income that, if continued, will result in their escaping poverty. However, there is also a sizable component of this population for whom no, or even highly negative, earnings growth is evident, worsening over the long term. □

Notes

¹ The Panel Study of Income Dynamics (PSID) is a nationally representative longitudinal study of the economic, health, and social behavior of nearly 8,000 U.S. families. The study, conducted by the University of Michigan's Institute for Social Research, has followed the same families and individuals since its inception in 1968. For more information, visit the Institute's Web site on the Internet at psidonline.isr.umich.edu.

² Robert Crutchfield and Susan Pitchford, "Work and Crime: The Effects of Labor Stratification," *Social Forces*, September 1997, pp. 93–118.

³ The States with higher minimum wages are Alaska, California, Connecticut, Delaware, Florida, Illinois, Hawaii, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New York, Oregon, Rhode Island, Vermont, Washington, and Wisconsin. The minimum-wage levels above the federally mandated level range from \$5.70 in Wisconsin to \$7.63 in Washington State. Three States — Oregon, Washington, and Florida — index their minimum wage to inflation.

⁴ Jeff Chapman and Michael Ettlinger, "The Who and Why of the Minimum Wage," *Economic Policy Institute Issue Brief*, no. 201, Aug. 6, 2004.

⁵ For a more comprehensive review of the prevalence of poverty and the working poor in the United States see, for example, Holly Sklar, Laryssa Mykyta, and Susan Wefald, *Raise the Floor: Wages and Policies That Work for All of Us* (New York, Ms. Foundation for Women, 2001); and William Julius Wilson, *When Work Disappears: The World of the New Urban Poor* (New York, Knopf, 1996).

⁶ Sklar, Mykyta, and Wefald, *Raise the Floor*, go on to report that if the minimum wage had kept pace with corporate profits during 1968–2000, it would currently stand at \$13.02 per hour.

⁷ See Bradley Schiller, "Relative Earnings Mobility in the United

States," *American Economic Review*, December 1977, pp. 926–41. Though not focused specifically on the low-wage population, this seminal paper presented some early findings on earnings mobility within the United States.

⁸ *Ibid.*

⁹ For a review of previous dual labor market studies and an assessment of the dual labor market theory, see Arthur Sakamoto and Meichu Chen, "Inequality and Attainment in a Dual Labor Market," *American Sociological Review*, June 1991, pp. 295–308.

¹⁰ David Neumark and Olena Nizalova, *Minimum Wage Effects in the Longer Run*, Working Paper No. 10656 (National Bureau of Economic Research, 2004).

¹¹ Paul Swaim, "Earnings inequality, low-paid employment and earnings mobility," *Employment Outlook* (Paris, Organization for Economic Cooperation and Development, 1997).

¹² The use of this term is from Gosta Esping-Andersen, Gotz Rohwer, and Leth Sorensen, "Institutions and Occupational Class Mobility: Scaling the Skill Barrier in the Danish Labour Market," *European Sociological Review*, September 1994, pp. 119–34.

¹³ See Peter Gottschalk, "Earnings Mobility: Permanent Change or Transitory Fluctuations?" *Review of Economics and Statistics*, August 1982, pp. 450–56; Ralph Smith and Bruce Vavrichek, "The Wage Mobility of Minimum Wage Workers," *Industrial and Labor Relations Review*, October 1992, pp. 82–88; and Swaim, "Earnings inequality."

¹⁴ Neumark and Nizalova, *Minimum Wage Effects*.

¹⁵ Swaim, "Earnings inequality."

¹⁶ Susanna Loeb and Mary Corcoran, "Welfare, Work Experience, and Economic Self-Sufficiency," *Journal of Policy Analysis and*

Management, winter 2001, pp. 1–20.

¹⁷ Neumark and Nizalova, *Minimum Wage Effects*.

¹⁸ Esping-Andersen, Rohwer, and Sorensen, “Institutions and Occupational Class Mobility.”

¹⁹ Fredrik Andersson, Harry Holzer, and Julia Lane, *Moving Up or Moving On: Who Advances in the Low Wage Labor Market?* (New York, Russell Sage, 2005).

²⁰ *Ibid.*

²¹ Gottschalk, “Earnings Mobility.”

²² Thomas Boston, “Segmented Labor Markets: New Evidence from a Study of Four Race-Gender Groups,” *Industrial and Labor Relations Review*, October 1990, pp. 99–115.

²³ David Maume, “Occupational Segregation and the Career Mobility of White Men and Women,” *Social Forces*, June 1999, pp. 1433–59.

²⁴ Schiller, “Relative Earnings Mobility”; Smith and Vavrichek, “The Wage Mobility”; and Gottschalk, “Earnings Mobility.”

²⁵ Sakamoto and Chen, “Inequality and Attainment.”

²⁶ Esping-Andersen, Rohwer, and Sorensen, “Institutions and Occupational Class Mobility.”

²⁷ Andersson, Holzer, and Lane, *Moving Up or Moving On*.

²⁸ Paul Swaim, “Earnings mobility: taking a longer run view,” *Employment Outlook* (Paris, Organization for Economic Cooperation and Development, 1996).

²⁹ *Ibid.*

³⁰ Like the United States, the United Kingdom has been a strong advocate of a welfare-to-work policy as a means of enhancing upward wage mobility. Beginning in the 1990s, the United Kingdom adopted the Welfare to Work and Making Work Pay programs in an effort to encourage workers to leave poverty through participation in the labor force. Also in the early 1990s, Canada enacted several programs in an effort to reduce welfare costs and “make work pay.” In 1996, these efforts culminated in the enactment of the Canada Health and Social Transfer program, which replaced previous welfare programs and operated at a lower cost.

³¹ Rachael Rosenfeld, “Job Mobility and Career Processes,” *Annual Review of Sociology*, 1992, pp. 39–61.

³² *Ibid.*

³³ Swaim, “Earnings inequality.”

³⁴ The data were compiled and harmonized in the Cross-National Equivalent File, available through the Cornell College of Human Ecology. The years 1993–95 constitute the base period, with 1996–2001 providing the observations for earnings growth. Data for 1998 and 2000 were not available through the Cornell College, so those years are omitted. When necessary, mobility was measured in 2-year spans, between 1997 and 1999 and between 1999 and 2001.

³⁵ The minimum age in the sample is 17 years. Traditionally, college-age students are excluded from earnings mobility studies due to their low labor force participation and low earnings growth. They are included here for two reasons. First, the study has a 3-year base period and a 6-year period during which earnings were observed, making up a sufficient length of time for youths to realize earnings gains. Second, less than 1 percent of the base sample and less than 2 percent of the annual hours sample are 22 years or younger.

³⁶ Andersson, Holzer, and Lane, *Moving Up or Moving On*.

³⁷ See, for example, Esping-Andersen, Rohwer, and Sorensen, “Institutions and Occupational Class Mobility”; Gottschalk, “Earnings Mobility”; Schiller, “Relative Earnings Mobility”; and Swaim, “Earnings inequality.”

³⁸ However, health status in 1995 is a good predictor of health status in future years: eighty-five percent of individuals in the low-income cohort had the same health status between 1995 and 1996, and 78 percent had the same health status between 1995 and 2001.

³⁹ The data are from the low-income cohort of the PSID. The 1997–99 and 1999–2001 comparisons are, of course, not consecutive years, but they are the next-available-year observations.

⁴⁰ The data are from the low-income cohort of the PSID. Each individual’s transition is compared with his or her employment status in 1995.

⁴¹ The data are from the low-income cohort of the PSID. The “decreased” category comprises earners who exhibited earnings *losses* greater than 5 percent, the “increased” category encompasses earners who exhibited earnings *gains* greater than 5 percent, and the “neutral” category consists of earners who exhibited earnings changes between a loss of 5 percent and a gain of 5 percent, inclusive. (For why the first two periods are 1-year spans and the last two 2-year intervals, see note 34.)

⁴² See note 39 for the source of the data and an explanation of the categories.

⁴³ The data are from the low-income cohort of the PSID. Individuals are ranked by earnings growth, and returns are shown for quarter, median, and three-quarter individuals. Earnings are in real terms.