Weathering the bills

Ah, New England winters. The sparkling snow. The frosty windows. The nip in the air. The heating bills.

With an average daily temperature below 30 degrees from December through March, winters in New England are long and cold. But more than that, they are expensive. Prices for most types of fuel are higher here than in the rest of the country. Factoring in our long winters means that the typical New England household pays $350 more in energy bills than the U.S. average.

While you can always turn down the thermostat and put on a sweater to save money, there are limits to how much you can cut heating costs. It can be dangerous to live in an unheated house, especially for children and the elderly, and letting the oil tank get too low can damage the furnace. "The sensible thing to do is to get oil first," says Mae Chapin, who runs the Hardwick Area Food Pantry in northeastern Vermont. "But then many families have no money in their pocket for food."

Indeed, a 10-degree drop in temperature leads poor families to spend $67 more per month on fuel and $16 less on food prepared inside the home in today's dollars, according to a recent study by Jayanta Bhattacharya of the Stanford University School of Medicine and his colleagues. Meanwhile, richer families increase their expenditures on both fuel and food when the weather turns cold, paying $96 more for fuel and $20 more for food prepared inside the home.

Those extra costs pinch the poor more, since fuel costs are a larger percentage of poor families' budgets and since they have lower incomes to begin with. To cover the difference, many must reach out for additional help from the community. Chapin's food pantry often serves 10 to 15 percent more families in winter than summer. This year, she may serve even more; the price of residential fuel oil in first quarter 2003 is expected to rise 18 percent over the same period last year. —Carrie Conaway

SINCE MOST *people judge their well-being by comparison with others, widening inequality of lifetime incomes may threaten our standing as a "land of opportunity."*

By Katharine Bradbury and Jane Katz

Are lifetime incomes growing more unequal? Looking at new evidence on family income mobility

THE UNITED STATES HAS ALWAYS taken great pride in its reputation as a land of opportunity, a place where people have a chance to move up instead of being trapped where they start. But is this really the case? Can families who start at the bottom move up, or are most of them mired at the lower end of the income scale? Is the only way to reach the top to start there? These questions go to the heart of our identity as a nation as well as to our social and economic health.

Whether we still deserve our reputation has been called into question in light of the fact that over the last thirty years, Americans' household incomes have become increasingly unequal (see chart). In the early 1970s, the change was small; but by the late 1970s, the growing disparity between rich and poor was clearly evident. The difference grew even larger in the 1980s and continued to increase into the 1990s. In 1969, the richest one-fifth of households had about 10 times as much income, on average, as the poorest households; by 1998, the figure was almost 14 times. This increasing disparity was a significant reversal of the U.S. experience between 1950 and 1970, when rapid economic growth occurred along with a decrease in the difference between the incomes of the rich and poor. Moreover, the pattern stands virtually undisputed among researchers. No matter what data are used, whether looking at individuals or families, incomes in the United States have become increasingly unequal over the past quarter-century.

SHOULD WE CARE?

Is growing inequality a significant problem? Should the government support policies to do anything about it? These are bigger questions that provoke far greater debate. That debate centers on whether the increased inequality of year-by-year incomes tells us anything about the distribution of success and opportunity over longer time periods.

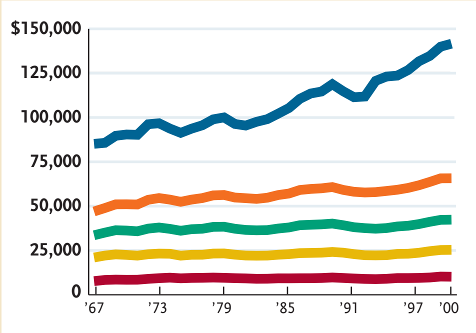
To see why, imagine two economies. Both show the pattern of increasing inequality noted above, but they differ in how that inequality falls on individual families over time.

In the first economy, the range of incomes is wide every year simply due to luck. Some people might have unexpected medical problems and lose paid time at work, while others win the lottery. Or perhaps one part of the country has unusually bad weather causing local crops to fail, while another enjoys ideal growing conditions for local produce. In any case, this random luck causes a number of families to experience unusually low or high incomes that year. Next year, other people or regions will have the good and bad luck and receive high or low incomes; the rest return to the *status quo*. Although incomes may be quite unequal in any given year, families in this economy will experience a fair amount of mobility year to year as their incomes bounce

ILLUSTRATION BY JESSICA ALLEN

A dramatic rise in inequality . . .

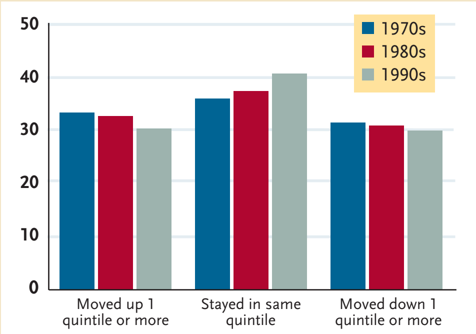
MEAN REAL INCOME FOR EACH QUINTILE OF U.S. HOUSEHOLDS



SOURCE: U.S. Census Bureau

. . . has not been offset by an increase in mobility

PERCENT OF ALL FAMILIES



SOURCE: Authors' calculations from data collected by the Panel Study of Income Dynamics

up and down along with the good and bad luck. Even if inequality is increasing over time, families at the bottom still have a shot at the middle and top each year as their luck changes. Over the long haul, the good and bad years for any particular family tend to cancel out, and all families have roughly equal lifetime incomes.

The second economy also has a wide spread of incomes; however, rather than being distributed randomly every year, the differences in incomes are persistent. Families at the top stay at the top, those in the middle stay in the middle, and those at the bottom stay at the bottom. That is, families experience no mobility relative to other families. This might occur because society enforces a class or caste system or because certain families or groups are discriminated against. Or it might be that individuals differ along some key dimensions that help to determine their family income—talent, willingness to work hard, access to a high-quality education or a good job—and those differences tend to persist. In this economy, if inequality is increasing over time, families at the top will enjoy both large and growing advantages over those at the bottom, and those at the bottom will be increasingly worse off and have no prospect of moving up.

This exercise suggests that how much attention inequality deserves from voters and policymakers depends, in part, upon whether inequality reflects short-run difficulties that families will get through or longer-term hardships that trap some at the bottom. And that determination depends, in turn, upon how much mobility—year-to-year shifts in position along the income scale—is also occurring. If increasing inequality, such as that experienced in the United States since the early 1970s, is not accompanied by increasing mobility, the short-run dispersion in incomes will tend to accumulate and lifetime incomes will grow increasing unequal. Some argue that a growing gap between the top and bottom is not a problem so long as everyone's income is rising in real terms. But to the extent that we judge our well-being by comparison with others, then the widening inequality of lifetime incomes may indeed threaten our standing as a "land of opportunity."

HAS MOBILITY INCREASED?

To answer this question, we need to know how individual families' incomes change over time; the Panel Study of Income Dynamics collects such information. Using their data on working-age households, we find no evidence of an increase in family income mobility since the 1970s. Consistent with earlier studies, we find that mobility held more or less constant from the 1970s to the 1980s. Based on newly available data from the 1990s, we estimate that mobility *decreased* slightly in the 1990s.

Looking at the 1970s, the movement of families up and down the income ladder seems unlikely to have been produced by chance. If we rank families from poorest to richest and divide them into five equal-sized groups (quintiles), we find that about half of all families in the poorest quintile at the beginning of the decade were still in the poorest quintile 10 years later; only about one-quarter of these families made it past the bottom two quintiles (see tables). Rich families also tended to stay put—about half of families that started in the top quintile ended there.

Mobility patterns during the 1980s appear very similar to the 1970s. About 33 percent of all families moved up one quin-

Measures of mobility

Income mobility can be measured only by following the same families over time. Income inequality is measured using a different sample each year.

Mobility can be defined in either absolute or relative terms. Tracking the movement of families across a fixed threshold (updated for inflation) measures absolute mobility. Absolute mobility measures do not change with changes in the shape of the income distribution. Thus, they furnish an absolute target against which we can measure progress—for example when evaluating policies that seek to raise income or consumption above some purchasing-power level such as the federal poverty line.

Tracking the location of families across quintiles (or any percentile) measures relative mobility since it follows the movement of each family up or down the income ladder relative to other families. This is useful since most people judge their well-being relative to others and because participation in society depends partly on having access to the goods and services that others have. Relative measures also tell us about the degree to which each family's place in the income distribution is permanent or transitory.

tile or more between 1969 and 1979; during the 1980s, the figure is 32 percent (see bar chart). Downward mobility was about the same in both decades. Although mobility would need to *increase* over time to offset the impact of increasing inequality on lifetime incomes, our calculations suggest that mobility was about the same.

In the 1990s, however, mobility declined noticeably. About 53 percent of families that began the decade in the poorest quintile were still there ten years later (see lower table), several percentage points higher than before. Families in the richest quintile were also more likely to remain there than previously.

Overall, about 40 percent of families ended the 1990s where they began, as compared with 36 and 37 percent in the 1970s and 1980s, respectively. While some hoped that increased mobility had offset the increased inequality in the 1980s and 1990s, these data provide no evidence of such an offsetting role. Rather, we find a slight decrease in mobility, which suggests that the lifetime incomes of rich and poor families have indeed grown more unequal.

SHRINKING OPPORTUNITY?

These findings suggest that those who are concerned about the future for families at the lower rungs of the income ladder may have cause to worry. Compared to 30 years ago, families at the bottom are poorer relative to families at the top and also a bit more stuck there. Mobility alone has not and is not likely to counteract the hardships caused by increasing inequality. Instead, we might want to look more seriously at policies to even up and improve the possibilities for those at the bottom in order to maintain our standing as a land of opportunity. ✻

THE AUTHORS' ARTICLE, "WOMEN'S LABOR MARKET INVOLVEMENT AND FAMILY INCOME MOBILITY WHEN MARRIAGES END," APPEARS IN THE *NEW ENGLAND ECONOMIC REVIEW*, Q4 2002.

Up and down the income ladder

Mobility tables are a way of displaying where families start and end in the income distribution over a period of time. The upper table, for example, which displays outcomes for the 1970s, reveals that 49 percent (upper left corner) of all families who had incomes in the lowest 20 percent—or lowest quintile—at the beginning of the decade were still in the lowest quintile 10 years later, while only 3 percent (upper right corner) made it to the richest quintile. The lower table shows that in the 1990s the same figures were 53 percent and 4 percent, respectively. Note that if mobility outcomes were determined solely by chance, every cell would have an entry of 20—indicating that 20 percent of families that began the decade in a given quintile would land in each of the five ending quintiles 10 years later.

Several things are worth keeping in mind when interpreting the tables. First, some movements from lower to higher quintiles are simply the result of higher earnings that come with age and experience. Second, counting as mobility any family's crossing of a quintile dividing line (or any other threshold) means that some very small changes can be included, such as when a family right above or below the dividing line experiences a small decline or increase in income. For the same reason, the measure may miss some changes that are quite large, such as when a family starts at the bottom of one quintile but doesn't gain quite enough to move up into the next. This issue is particularly relevant at the extremes, since families can't drop lower than the poorest quintile nor rise higher than the top, although they can become much poorer or richer, and shift positions, within these quintiles. Third, the range between the upper and lower boundaries of each quintile can vary across quintiles and over time. Indeed, growing inequality pushes quintile boundaries farther apart; this has made moving up or down a quintile a higher hurdle in the 1990s than in the 1980s or 1970s.

1969–79 DECADE

WHERE FAMILIES STARTED IN 1969, BY QUINTILE	WHERE FAMILIES ENDED UP IN 1979, BY QUINTILE				
	POOREST	SECOND	THIRD	FOURTH	RICHEST
Poorest	49.4	24.5	13.8	9.1	3.3
Second	23.2	27.8	25.2	16.2	7.7
Third	10.2	23.4	24.8	23.0	18.7
Fourth	9.9	15.0	24.1	27.4	23.7
Richest	5.0	9.0	13.2	23.7	49.1

Percentages sum to 100 across rows

1988–98 DECADE

WHERE FAMILIES STARTED IN 1988, BY QUINTILE	WHERE FAMILIES ENDED UP IN 1998, BY QUINTILE				
	POOREST	SECOND	THIRD	FOURTH	RICHEST
Poorest	53.3	23.6	12.4	6.4	4.3
Second	25.7	36.3	22.6	11.0	4.3
Third	10.9	20.7	28.3	27.5	12.6
Fourth	6.5	12.9	23.7	31.1	25.8
Richest	3.0	5.7	14.9	23.2	53.2

Percentages sum to 100 across rows

NOTE: Data are from the Panel Study of Income Dynamics (PSID). Income is in constant 2000 dollars and is adjusted using the PSID measure of needs, which takes into account family size and composition. One-person families (persons living alone or with nonrelatives) are included. Families in which there are no adults below retirement age are excluded.
SOURCE: Katharine Bradbury and Jane Katz, "Women's Labor Market Involvement and Family Income Mobility When Marriages End," *New England Economic Review* Q4 2002, Appendix Table A1 (which also includes the mobility table for the 1980s)