

Spring 1997

Quarterly Review

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Federal Reserve Bank of Minneapolis

Quarterly Review

Vol. 21, No. 2

ISSN 0271-5287

This publication primarily presents economic research aimed at improving policymaking by the Federal Reserve System and other governmental authorities.

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Research Department
Federal Reserve Bank of Minneapolis
P.O. Box 291
Minneapolis, Minnesota 55480-0291
(612-340-2341 / FAX 612-340-2366).

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Dimensions of Inequality: Facts on the U.S. Distributions of Earnings, Income, and Wealth*

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The purpose of this article is to report facts on the distributions of labor earnings, income, and wealth in the United States. We provide a quantitative description of these three most often discussed dimensions of inequality.¹ Providing such a description is no easy task, mainly because, in abstract terms, *inequality* means very little, and when we try to give *inequality* a concrete meaning, we discover its multidimensional nature.

The basic question that any study of inequality has to address is, Inequality of what? When people talk about inequality, they talk about the unequal distributions of opportunities, talents, earnings, income, wealth, consumption, leisure, bequests, luck, and so on. Often people treat some of these variables, especially income and wealth, as if they are more or less the same. But are they? In our view, an accurate description of inequality should acknowledge its multidimensional nature, and it should consider as many of these dimensions as possible.

Given this multidimensional nature of inequality, our specific objectives in this article are to use the available data to document some of the dimensions of inequality and to highlight the main features of the data in a coherent and summarized fashion.

Creating a precise description of inequality based on available data is difficult. We cannot use established theory to provide us with guidance because there is no such thing as an established theory of inequality. Given

this lack of an established theory, we have attempted to provide the data in a format that allows researchers to analyze the data with whatever theory they have in mind and to use the data to test the implications of any theory.²

We have found two reliable and systematic sources of data on inequality among U.S. households: the Survey of Consumer Finances (SCF) and the Panel Study of Income Dynamics (PSID). (The SCF is conducted by the National Opinion Research Center at the University of Chicago and is sponsored by the Federal Reserve with the cooperation of the Department of the Treasury. The PSID is conducted by the Survey Research Center of the University of Michigan and is funded primarily by the National Science Foundation.) Every fact that

*For contributions to this work, the authors thank research technical support staff at the Minneapolis Fed and the editors and referees of this journal.

¹This article is by no means unique in its attempts to account for U.S. inequality in earnings, income, and wealth. For example, Weicher (1995) describes the changes in the U.S. wealth distribution between 1983 and 1989. Using preliminary data, Kennickell, Starr-McCluer, and Sundén (1997) detail recent changes in the income, net worth, assets, and liabilities of U.S. families. Wolff (1987) produces estimates of wealth inequality for the 1962–83 period. In contrast to these studies, we attempt to provide a global view of inequality that relates earnings, income, and wealth rather than concentrate on how the distribution of one or more of these variables changes over time.

²Quadrini and Ríos-Rull (in an article in this issue of the *Quarterly Review*) review some recent theories of inequality, and they evaluate these theories according to how well the theories account for some of the data we report here.

we report in this article has been constructed from the data obtained from one of those two sources. The sample years we use are 1992 for the SCF and 1984, 1985, 1989, and 1990 for the PSID. (Earnings and income reported in these sample years are for the preceding calendar year. All other data reported are for the sample year.) We discuss some of the technical details of the SCF and the PSID in the Appendix.

The dimensions of inequality which we describe in this article are the following:

Earnings, Income, and Wealth. The dimensions of inequality that are perhaps the most frequently studied and most easily confused are earnings, income, and wealth. This confusion arises in part from the twisted nature of the relationships among them, especially the relationship between income and wealth. First, *labor earnings* is one of the components of income, the one related to labor input. Next, *income* is defined as revenue from all sources before taxes but after transfers. Among other components, this variable includes both labor earnings and income generated by wealth. Finally, *wealth* is defined as the net worth of the household, both the stock of unspent past income and one of the sources from which income (capital income) is obtained. Moreover, given that labor income and capital income are perfect substitutes as far as their purchasing power is concerned, wealth also plays a potentially important role in the labor supply decision and, hence, in the determination of labor earnings. (See the Appendix for details on more precise definitions of these three variables.)

Additional evidence that earnings, income, and wealth are easily confused is provided by the ambiguous meanings of *rich* and *poor*. When people talk about the rich, it is not clear whether they are referring to the earnings-rich, the income-rich, or the wealth-rich. Also confusing are references to the poor, including the earnings-poor, the income-poor, and the wealth-poor. We document unambiguously that these concepts of rich and poor are not all the same.

To document some of the earnings, income, and wealth inequality facts, we partition our sample into groups along each of these three dimensions. Since people do move up and down the economic scale, we also report some facts about earnings, income, and wealth mobility.

Contrary to common belief, many of the characteristics of the earnings, income, and wealth distributions

are significantly different. We find that wealth is by far the most concentrated of the three variables, earnings ranks second, and income is the most dispersed of the three. Furthermore, we find that even though earnings and income are highly correlated, the correlations between earnings and wealth and between income and wealth are surprisingly low, 0.230 and 0.321, respectively. We contend that a good theory of inequality should be able to account for the differences among the distributions of earnings, income, and wealth that we document in this article. Given the interdependences among these variables, accounting for these differences is difficult.

Age. The measures of inequality are different if we consider yearly earnings, income, or wealth or if we study those same variables throughout the life cycles of the people in the household. Inequality measurements also differ across age cohorts. We partition our sample into age groups to document some of these differences. We find that people of retirement age play an important role in accounting for inequality.

Employment Status. To document the relationship between income sources and inequality, we partition our sample into workers (people who are employed by others), the self-employed, retirees, and nonworkers (people who do not work but do not consider themselves retired) according to the employment status of the household head. We report the average earnings, income, and wealth; the shares of income accruing from different sources; and the average size of the households in this partition. We find that the self-employed are rich along all three dimensions.

Education. Education (or human capital accumulation) increases the market value of people's time, and therefore, it plays a potentially important role in the determination of labor earnings and, hence, in the distributions of earnings, income, and wealth. To characterize the implications of inequality in education, we partition our sample into college graduates, high school graduates, and non-high school graduates according to the education level of the head of the household. We report the average earnings, income, and wealth; the shares of income accruing from different sources; and the average size of the households in this partition. It turns out that according to the SCF data set, there is a close association between the education level and the economic performance of households.

Marital Status. Finally, we partition the households in our sample according to the marital status of the household head. We report the inequality in earnings, income, and wealth of married households and of single households with and without dependents. The groups of singles with and without dependents are further partitioned by sex. We find that as far as the economic performance of households is concerned, it seems to pay off to be married.

We do not discuss the following potentially important dimensions of inequality, primarily because we have not found a reliable source of data for them:

Inherited Ability and Tastes. Two dimensions of inequality, inherited ability and tastes, play important roles in labor/leisure choices, and they are, therefore, potentially important determinants of the earnings distribution and, indirectly, the distributions of income and wealth. Tastes pose additional problems for theory because they play a crucial role in most model economies and are hard to measure.

Bequests. Bequests also condition labor/leisure choices, and hence, they help determine the distributions of earnings, income, and wealth. Bequests are an additional motive for altruistic households to save, and hence, they foster earnings, income, and wealth inequality. Finally, bequests are a vehicle for the intergenerational transmission of wealth inequality, and hence, they increase the persistence of that inequality.

Luck. Luck probably plays an important role in the determination of inequality. But it is hard to separate luck from some other variables. Are talent, effort, judgment, or luck reasons that make some people better off than others? Why do champions tend to get lucky? The difficulties that arise when trying to answer these and other related questions justify in part our decision not to discuss luck in this article.

We also do not describe other forms of inequality, such as differences in the levels of consumption or the number of hours worked.³ Looking at inequality from those points of view perhaps should be our ultimate concern, since to some extent those variables show how the households perceive their own present and future opportunities, and hence, they give us a better indication of inequality in welfare. We leave this approach for a future project.

Finally, in light of the inequality facts we document, we describe in our conclusion what we consider to be

the essential ingredients of a successful theory of inequality.

Earnings, Income, and Wealth

The SCF data set unambiguously shows that earnings, income, and wealth are unequally distributed across the households in the sample. The values of the concentration statistics that we have computed are large, and the density functions of the earnings, income, and wealth distributions are skewed; they present a fat lower tail and a thin upper tail. Perhaps more surprisingly, the data show that while earnings and income are highly correlated, the correlations between income and wealth and between earnings and wealth are much smaller. We report a set of statistics that describe the earnings, income, and wealth partitions. Then we use those statistics to summarize some of the earnings, income, and wealth inequality facts.

Concentration

Let's start by examining how concentrated earnings, income, and wealth are in the United States. Table 1 reports the Gini indexes, the coefficients of variation, and the ratios of the shares earned or owned by the top 1 percent and the bottom 40 percent of the earnings, income, and wealth distributions. We have chosen to report this last statistic because the bottom 40 percent is the smallest group that holds a positive share in all three distributions.

The three sets of statistics unambiguously show that wealth is the variable that is by far the most concentrated. The households that belong to the top 1 percent of the wealth distribution own 29.55 percent of the wealth, and they are on average 875 times wealthier than those that belong to the bottom 40 percent of the wealth distribution. This difference between the top and bottom groups is about 10 times larger than the difference for the same groups in the income partition and about 4 times larger than that difference in the earnings partition.

The concentration statistics that we have computed also show that labor earnings are significantly more concentrated than income. We conjecture that one of the reasons for this fact is the equalizing effect of income transfers, which we include in our definition of *income* and which we do not include in our definition of *earnings*. Transfers make it possible for some peo-

³See Slesnick 1993, 1994 for a discussion of inequality in consumption.

ple to receive welfare payments and not have to enter the labor force, and hence, these people's income is significantly greater than their labor earnings.

In Chart 1, we plot the Lorenz curves for the earn-

Tables 1-3

Measures of U.S. Earnings, Income, and Wealth

Table 1 Concentration

Variable	Gini Index	Coefficient of Variation	Ratio of Top 1% to Bottom 40%
Earnings	.63	4.19	211
Income	.57	3.86	84
Wealth	.78	6.09	875

Table 2 Skewness

Variable	Percentile Location of Mean	Ratio of Mean to Median
Earnings	65	1.65
Income	71	1.72
Wealth	80	3.61

Table 3 Correlation

Variables	Correlation Coefficient
Earnings and Income	.928
Earnings and Wealth	.230
Income and Wealth	.321

Source: 1992 Survey of Consumer Finances

ings, income, and wealth distributions. In this chart, we observe that in the lower part of the distribution, the Lorenz curve for earnings lies below the Lorenz curve for income. This offers additional support for our conjecture about the equalizing effect of income transfers, since it shows that income is indeed less concentrated than earnings in the lower tail. The Lorenz curve for earnings crosses the Lorenz curve for income at approximately the 87th percentile, which is the point at which the concentration of income increases as the share of capital income starts to dominate. In the entire domain, the Lorenz curve for wealth lies significantly below the Lorenz curves for earnings and income.

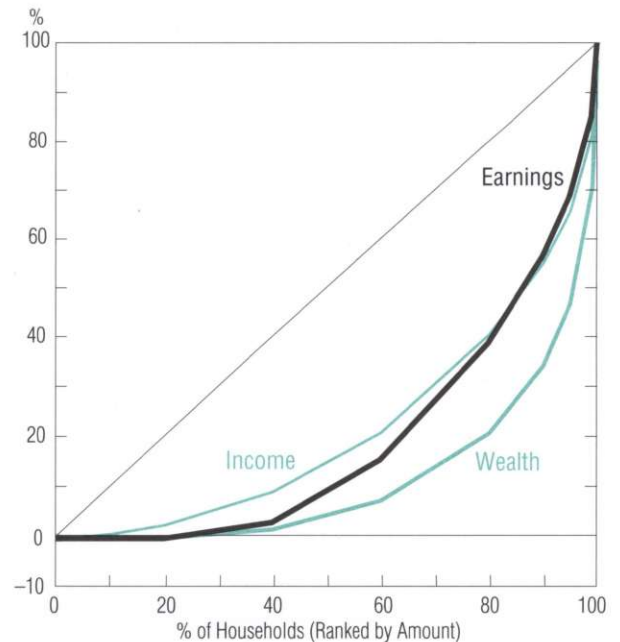
Skewness

Table 2 reports the percentiles at which the earnings, income, and wealth means are located and the mean-to-

Chart 1

The Lorenz Curves for the U.S. Distributions of Earnings, Income, and Wealth

What % of All Households Have
What % of All Earnings, Income, and Wealth



Source: 1992 Survey of Consumer Finances

median ratio for each of the three distributions. In symmetric distributions, the mean is located in the 50th percentile; consequently, the ratio of the mean to the median is 1. As the concentration of a variable increases, so does the mean-to-median ratio, and the location of the mean moves to a higher percentile.

We find that the wealth distribution is the most skewed of the three and that income is somewhat more skewed than earnings. Charts 2–5 display the histograms of the three distributions and the histogram of nonzero earnings.

Correlation

To describe the joint distributions of earnings, income, and wealth, we compute the correlation coefficients among these three variables, and we report them in Table 3.

As we could have expected, our data show that earnings, income, and wealth are positively correlated and that the correlation between earnings and income is high. This should, indeed, be the case, given that labor earnings account for approximately 72 percent of household income.

A more interesting fact is that the correlation between income and wealth is only 0.321. This fact becomes more remarkable if we take into account the high correlation between capital income and wealth. The correlation between earnings and wealth, 0.230, is even lower than that between income and wealth. The low correlation between earnings and wealth could arise for a variety of reasons. For example, it could be a result of the fact that wealthy households assign a significantly smaller amount of time to the labor market, perhaps because a large fraction of the households are comprised of retirees, or it could be because wealthy households command lower wages.

The Poor and the Rich

As we have already mentioned, the common usage of the concepts of rich and poor is fairly ambiguous. To avoid this ambiguity, we distinguish between rich and poor in terms of earnings, income, and wealth. In this section, we discuss some of the facts reported in Tables 4, 5, and 6. We organize these facts into two groups: those that pertain to the households that belong to the lower tail of the different partitions, which we refer to generically as the *poor*, and those that pertain to the households that belong to the upper tail of the different partitions, which we refer to generically as the *rich*. We

have chosen this organization criterion because most of the existing theories of inequality have trouble justifying the two tails of the distributions. We hope that this characterization of the data will point to the possible reasons the existing theories seem to fail.⁴

□ *The Earnings-Poor*

Let's start with the earnings-poor. (The data on the earnings partition are displayed in Table 4.) As many as 24 percent of the households in the SCF sample have zero earnings, and an additional 0.42 percent have negative earnings, because there are a large number of households with members outside the labor force. This is also the case for households with a retired head. In fact, most of the earnings-poor are apparently retirees. (The average age of the heads of the households that belong to the lowest earnings quintile is 65.42 years.) Moreover, households in the lowest quintile earn a significant share of income (7.93 percent), which consists mostly of transfers and capital income, and they own a sizable share of wealth (17.92 percent).⁵

The households with negative earnings are mostly headed by business owners in financial distress. In spite of these business losses, the total income of these households is positive, since they receive significant shares of transfers and capital income. Moreover, in the SCF sample, the households with negative earnings are wealthy. Specifically, the households that are in the lowest 1 percent of the earnings distribution own almost three times the average wealth, which puts them above the 80th percentile of the wealth distribution.

□ *The Earnings-Rich*

Next, we consider the earnings-rich. (See Table 4.) The households that belong to the top 1 percent of the earnings distribution make almost 15 times the sample's average earnings, and those that belong to the top quintile make just over 3 times the average earnings. A large share of the income of the earnings-rich comes from business sources, which include income from professional practices, businesses, and farms. Moreover,

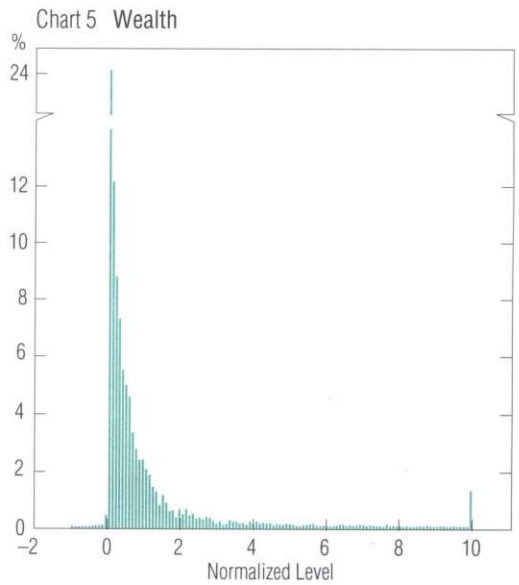
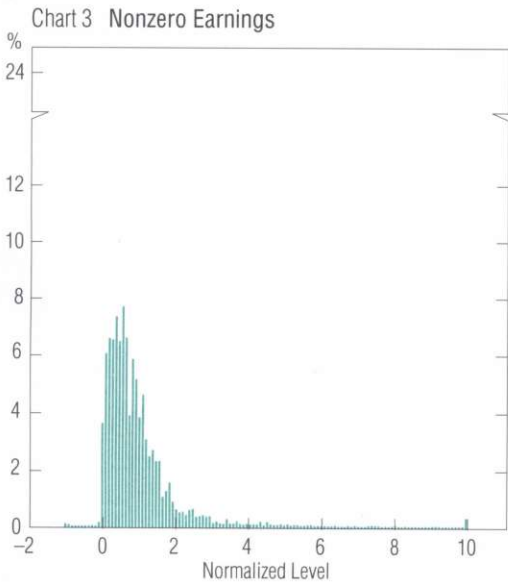
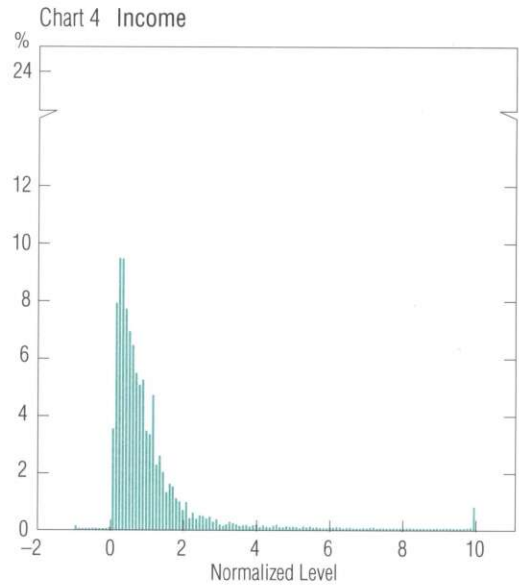
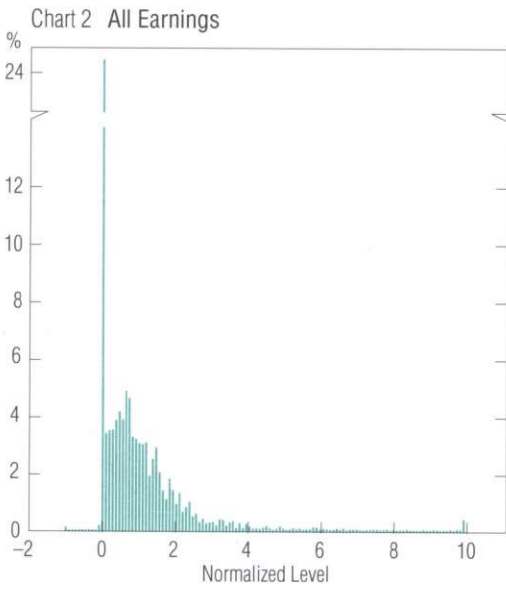
⁴In our discussion of the rich, we highlight the characteristics of the top 1 percent because the households that belong to this small group make 14.76 percent of total earnings and 18.57 percent of total income, and they own 29.55 percent of total wealth.

⁵These wealth holdings would put the households that belong to the lowest quintile of the earnings distribution well into the third quintile of the wealth distribution.

Charts 2-5

U.S. Distributions of Earnings, Income, and Wealth

With Levels Normalized So That the Mean is 1*



*On all of these charts, the last plotted bar represents the frequency of households with more than 9.91 times the average level.

Source: 1992 Survey of Consumer Finances

Table 4
U.S. Households Ranked by Earnings . . .
Characteristics of Sample Households in Each Earnings Group*

Household Characteristics	The Earnings-Poor			Households in Earnings Quintiles					The Earnings-Rich			Total Sample
	<i>Bottom</i> 1%	1–5%	5–10%	1st	2nd	3rd	4th	5th	<i>Top</i> 10–5%	5–1%	1%	
Share of Total Sample (% of \$)												
<i>Earnings</i>	-.40	.00	.00	-.40	3.19	12.49	23.33	61.39	12.38	16.37	14.76	100.00
Ratio of Earnings Group Average to Sample Average	-.41	.00	.00	-.02	.16	.62	1.17	3.07	2.47	4.09	14.76	1.00
<i>Income</i>	.29	1.54	1.78	7.93	7.87	11.24	19.75	53.21	10.60	14.80	13.09	100.00
<i>Wealth</i>	2.92	3.32	4.09	17.92	12.24	8.30	13.71	47.83	8.84	14.59	14.68	100.00
Share of Each Group's Income (% of \$)												
<i>Source of Income</i>												
Labor	33.28	.00	.00	1.20	27.75	76.97	81.48	67.72	75.79	67.76	43.28	63.06
Capital	101.58	28.14	31.58	31.58	18.63	5.50	5.74	7.92	6.45	9.30	11.67	9.93
Business	-156.07	.00	.00	-5.63	1.70	3.49	4.17	17.79	9.68	13.75	43.85	10.37
Transfers	91.42	59.46	63.81	55.13	37.00	8.67	3.26	.93	1.45	.51	.43	9.39
Other	29.79	12.40	4.61	17.72	14.92	5.37	5.36	5.65	6.62	8.68	.77	7.24
Share of Each Group's Sample (% of People)												
<i>Age of Household Head</i>												
Share of Each Group 30 and Under	.55	5.90	7.34	6.42	22.17	26.24	19.55	7.79	7.50	5.02	2.02	16.44
31–45	19.41	10.48	8.06	10.67	25.67	39.39	45.65	49.19	55.06	42.52	34.01	34.11
46–65	20.49	19.60	18.95	19.59	24.11	29.06	31.87	41.31	35.69	50.77	59.27	29.19
Over 65	59.55	64.02	65.65	63.31	28.05	5.32	2.93	1.72	1.75	1.69	4.70	20.26
Average Age (Years)	65.22	65.82	66.03	65.42	49.63	41.18	41.61	44.32	43.59	46.26	49.22	48.43
<i>Marital Status of Household Head</i>												
Married	42.95	32.68	29.55	32.13	38.29	53.65	72.13	90.86	94.50	93.91	87.69	57.41
Single												
Without Dependents	44.07	53.71	55.59	53.22	43.33	30.75	20.21	8.39	4.60	5.99	11.13	31.18
With Dependents	12.98	13.61	14.86	14.65	18.38	15.60	7.65	.75	.90	.10	1.18	11.41
Average Household Size (Number of People)	2.05	1.66	1.72	1.73	2.06	2.41	2.79	3.09	3.09	3.23	3.01	2.41

*Percentages may not sum to 100% due to rounding.

Source: 1992 Survey of Consumer Finances

this type of income is increasing with earnings. Many of the earnings-rich are married, and they tend to live in large households. (The average household size in the top quintile of the earnings distribution is 3.09 people, while that in the lowest quintile is only 1.73 people.) In fact, across the earnings distribution, except for the lower and upper tails, both the proportion of married households and the average household size are clearly increasing with earnings.

□ *The Income-Poor*

Now let's turn to the income-poor. (See Table 5.) Only 0.96 percent of the households in the SCF sample have zero income. The fraction of households with zero earnings, recall, is 24 percent. If we discount households with heads over age 65, which constitute 20.26 percent of the SCF sample, we still find at least 3 percent of sample households with positive income and zero earnings. (Their income is either capital income or transfers.) Some of this income is operating as a safety net. An additional 0.25 percent of the households have negative income. (The fraction of households with negative earnings, again, is 0.42 percent.)

Two other important facts must be kept in mind when interpreting these numbers. One is that 1991, the year of the SCF data for earnings and income, was a recession year. The other is that the share of income earned by the lowest quintile is procyclical. Hence, the long-term number of the income-poor might be somewhat smaller than these annual data suggest.⁶ As we could have expected, the negative-income households are, once again, headed by business owners in financial distress. Given that 1991 was a recession year, the number of business failures that affected the households in our sample was probably above average.

A perhaps more surprising fact is that the income-poor own above-average wealth. Specifically, Table 5 shows that the households that are in the lowest 1 percent of the income distribution own 1.54 percent of total wealth, which puts them in the 85th percentile of the wealth distribution. Moreover, the households that are in the lowest 1–5 percent of the income distribution own 0.63 percent of total wealth, which puts them in the second quintile of the wealth distribution.

Across the whole income distribution, the percentage of income obtained from transfers is decreasing with income. Transfers account for 75.19 percent of the income earned by the households that belong to the lowest income quintile and for only 3.23 percent of the in-

come earned by the households that belong to the top income quintile. Perhaps more surprising is the fact that without transfers, 12.78 percent of the sample households would have zero income.

As far as their marital status is concerned, a very large percentage of the income-poor are single, both with and without dependents. Specifically, while singles without dependents account for about half of the households in each of the lowest two quintiles, they represent only 31.18 percent of the total sample. The share of singles with dependents is also significantly larger in the lowest quintile (21.12 percent) than in the total sample (11.41 percent), and the share of singles with dependents decreases as income increases.

□ *The Income-Rich*

Turning to the income-rich, we find that the households that belong to the top 1 percent of the income distribution earn about 19 times the sample's average income, but when we consider those households that belong to the top quintile, this number is reduced to 3 times. Here, as was the case in the earnings partition, the income-rich receive a significant share of their income from business sources. Specifically, business income accounts for 27.49 percent of the income of the households that are in the top 1 percent of the income distribution and for 16.16 percent of the income of the households that are in the top income quintile.

The income-rich also tend to be earnings- and wealth-rich. In fact, the households that are in the top income quintile hold very similar shares of earnings, income, and wealth: 58.36 percent, 59.91 percent, and 62.73 percent, respectively.

Finally, the income-rich are mostly middle-aged and married, and they tend to live in large households. Specifically, in the top income quintile, 85.5 percent of the household heads are between 31 and 65 years old, 88.21 percent of the top quintile household heads are married, and their average household size is 2.95 people. Moreover, across the income distribution, both the share of married households and the household size are clearly increasing with income.

□ *The Wealth-Poor*

Next, we discuss the wealth-poor. (Table 6 shows the wealth partition.) Approximately 3.4 percent of the

⁶For details on the cyclical behavior of the income distribution, see Castañeda, Díaz-Giménez, and Ríos-Rull 1995.

Table 5

. . . Ranked by Income . . .

Characteristics of Sample Households in Each Income Group*

Household Characteristics		The Income-Poor			Households in Income Quintiles					The Income-Rich			Total Sample
		<i>Bottom</i> 1%	1–5%	5–10%	1st	2nd	3rd	4th	5th	<i>Top</i> 10–5%	5–1%	1%	
Share of Total Sample (% of \$)	<i>Income</i>	–.30	.16	.54	2.18	6.63	11.80	19.47	59.91	10.72	15.87	18.57	100.00
	Ratio of Income Group Average to Sample Average	–.31	.04	.11	.11	.33	.59	.97	3.00	2.14	3.97	18.57	1.00
	<i>Earnings</i>	–.37	.07	.19	.71	5.37	12.60	22.95	58.36	12.32	16.76	11.73	100.00
	<i>Wealth</i>	1.54	.63	.86	5.29	7.05	9.95	14.98	62.73	11.97	22.25	16.32	100.00
Share of Each Group's Income (% of \$)	<i>Source of Income</i>												
	Labor	28.76	30.11	24.06	39.35	57.46	74.82	81.61	56.20	72.98	62.05	21.75	63.06
	Capital	1.56	7.30	.68	3.11	5.23	4.94	5.88	13.00	10.85	16.30	17.08	9.93
	Business	–135.55	.97	1.45	–18.28	1.03	2.44	3.76	16.16	11.34	16.19	27.49	10.37
	Transfers	6.31	60.56	73.70	75.19	34.79	16.62	7.94	3.23	3.79	2.56	.69	9.39
Other	–1.08	1.05	.12	.62	1.49	1.18	.80	11.41	1.03	2.90	32.98	7.24	
Share of Each Group's Sample (% of People)	<i>Age of Household Head</i>												
	Share of Each Group 30 and Under	10.46	28.13	20.39	19.49	19.64	22.64	14.05	6.36	6.62	3.21	3.72	16.44
	31–45	28.73	20.10	19.20	22.44	25.03	37.18	42.28	43.64	44.28	39.50	29.40	34.11
	46–65	39.89	29.71	25.18	22.55	24.82	23.49	33.21	41.86	42.13	47.36	52.47	29.19
	Over 65	20.92	22.06	35.23	35.52	30.51	16.69	10.46	8.13	6.96	9.92	14.40	20.26
	Average Age (Years)	52.46	47.96	53.80	53.18	51.21	45.11	45.28	47.37	46.94	49.50	52.54	48.43
<i>Marital Status of Household Head</i>	Married	32.95	21.93	16.39	22.30	43.85	56.87	75.83	88.21	89.13	90.99	80.86	57.41
	Single												
	Without Dependents	52.82	56.07	58.79	56.58	40.35	29.78	19.01	10.19	10.59	8.29	16.72	31.18
With Dependents	14.23	22.00	24.82	21.12	15.80	13.35	5.16	1.60	.28	.72	2.41	11.41	
Average Household Size (Number of People)		1.76	1.87	1.87	1.87	2.08	2.40	2.76	2.95	2.90	3.12	2.69	2.41

*Percentages may not sum to 100% due to rounding.

Source: 1992 Survey of Consumer Finances

sample households have zero wealth, and another 3.5 percent have negative wealth. However, in spite of this reasonably small number of propertyless households, wealth is by far the most unequally distributed of the three variables that we consider in this section. The households that are in the lowest 40 percent of the wealth distribution own only 1.35 percent of the total sample wealth, and those in the lowest 80 percent own only 20.51 percent of the total sample wealth.

The SCF data also show that some of the wealth-poor are reasonably well-to-do, in terms of both earnings and income. Specifically, the earnings of the lowest 1 percent of the wealth-poor households are only slightly lower than median earnings, and their income is slightly above median income. Furthermore, given that these households have a significant ability to borrow (with average debts that amount to approximately 50 percent of average wealth), there must be some sense in which these households are not actually poor.

The average net worth of the rest of the households in the lowest wealth quintile is approximately zero. These households, however, also make a significant amount of income, which puts them in the second and third quintiles of the income distribution.

The wealth-poor tend to be young and single. A total of 33.64 percent of the households in the lowest wealth quintile have a head under age 31. This percentage is more than twice the sample average (16.44 percent). The percentage of households in the lowest wealth quintile that are single is 64.48, and 24.93 percent of them are single with dependents, which, again, is more than twice the sample share of singles with dependents.

□ *The Wealth-Rich*

Finally, let's look at the wealth-rich. Table 6 shows that the households in the top 1 percent of the wealth distribution own 29.55 percent of the total sample wealth, and those in the top quintile own an impressive 79.49 percent. Moreover, this last group of households is both earnings-rich and income-rich. (The households in the top quintile earn 41.21 percent of total earnings and make 46.15 percent of total income.) The top quintile wealth-rich obtain significant shares of their income from capital (18.39 percent) and from business sources (17.95 percent).

Wealth-rich households tend to be both older and married. The percentage of household heads in the top

wealth quintile over age 65 is 29.70, while the sample share of that age is only 20.26 percent, and 77.07 percent of the household heads in the top wealth quintile are married, while the sample share of married households is 57.41 percent.

Mobility

People move up and down the economic scale; they do not stay in the same earnings, income, and wealth groups forever.⁷ Different reasons make households change earnings, income, and wealth groups. Perhaps aging is the main cause of mobility for most households, but it is certainly not the only one. Mobility is also affected by the results of business projects and other ventures that can bring about significant changes in earnings to lucky or unlucky entrepreneurs. There can also be some other radical expressions of good luck (such as gambling) or bad luck (such as accidents). Yet some other changes are a consequence of the conscious effort of households to smooth consumption over time. Whatever its cause, economic mobility makes inequality an essentially dynamic phenomenon, and in our opinion, a trustworthy theory of inequality should be able to account for at least some of the earnings, income, and wealth mobility facts that we report in this section.

All the facts reported so far are based on data from the SCF. However, since the SCF is not a panel study, it does not track people over time.⁸ Therefore, to construct our mobility measures, we use data from the PSID.⁹

We use data on household net worth from the PSID for the years 1984 and 1989 (reported in the 1984 and 1989 PSIDs) and combine them with data on earnings and income for the same households for those two years (reported in the 1985 and 1990 PSIDs). We use the PSID data to construct Table 7, where we report the transition matrices for the 1984 earnings, income, and wealth quintiles.

For example, the entry in the first row and the first column of Table 7 reports that 85.8 percent of the

⁷Note that this could be the case, and we could still have invariant distributions of earnings, income, and wealth.

⁸Actually, in the 1983 and 1986 SCFs, there was a limited effort to follow households over time. See Kennickell and Starr-McCluer 1994.

⁹An important shortcoming of the PSID is that, unlike the SCF, it has not been designed to address issues related to wealth holdings, and therefore, the data for these variables are of lower quality, especially the data that pertain to the wealth- and income-rich. For a discussion of the PSID, see the Appendix.

Table 6
... And Ranked by Wealth

Characteristics of Sample Households in Each Wealth Group*

Household Characteristics	The Wealth-Poor			Households in Wealth Quintiles					The Wealth-Rich			Total Sample	
	<i>Bottom</i> 1%	1–5%	5–10%	1st	2nd	3rd	4th	5th	<i>Top</i> 10–5%	5–1%	1%		
Share of Total Sample (% of \$)	<i>Wealth</i>	-.52	-.02	.01	-.39	1.74	5.72	13.43	79.49	12.62	23.95	29.55	100.00
	Ratio of Wealth Group Average to Sample Average	-.52	.00	.00	-.02	.09	.29	.67	3.97	2.52	5.99	29.55	1.00
	<i>Earnings</i>	.83	1.18	.88	7.05	14.50	16.48	20.76	41.21	8.43	12.34	7.65	100.00
	<i>Income</i>	.75	1.11	1.26	6.90	12.55	14.87	19.54	46.15	9.05	13.80	9.59	100.00
Share of Each Group's Income (% of \$)	<i>Source of Income</i>												
	Labor	78.87	75.78	50.30	72.15	81.30	76.53	71.56	48.80	57.86	43.40	30.50	63.06
	Capital	11.48	.09	.21	1.68	.53	2.40	4.64	18.39	15.04	20.27	33.54	9.93
	Business	.64	.36	.36	1.65	2.22	3.83	5.75	17.95	10.62	24.31	31.22	10.37
	Transfers	8.79	22.26	34.76	20.06	7.17	11.30	10.93	7.14	9.76	4.94	2.39	9.39
Other	.22	1.50	14.36	4.46	8.77	5.94	7.11	7.72	6.71	7.07	2.34	7.24	
Share of Each Group's Sample (% of People)	<i>Age of Household Head</i>												
	Share of Each Group												
	30 and Under	11.64	31.19	33.17	33.64	27.49	13.64	5.27	2.14	1.06	1.34	.49	16.44
	31–45	56.77	45.45	30.57	36.48	39.13	37.48	35.79	21.69	18.56	21.11	14.00	34.11
	46–65	24.67	16.68	18.45	17.06	21.39	26.81	34.21	46.46	51.32	50.53	54.82	29.19
	Over 65	6.92	6.69	17.80	12.81	11.99	22.07	24.72	29.70	29.06	27.01	30.70	20.26
Average Age (Years)	42.16	38.62	43.14	40.90	42.32	49.43	52.61	56.89	57.71	56.33	59.28	48.43	
<i>Marital Status of Household Head</i>	Married	70.79	29.82	21.84	35.52	49.82	59.42	65.23	77.07	79.30	83.83	85.27	57.41
	Single												
	Without Dependents	23.56	38.47	45.18	39.55	36.28	30.96	28.42	20.70	18.45	14.94	12.06	31.18
With Dependents	5.64	31.71	32.98	24.93	13.90	9.62	6.35	2.24	2.24	1.23	2.68	11.41	
Average Household Size (Number of People)	2.51	2.44	2.28	2.37	2.36	2.44	2.43	2.47	2.38	2.74	2.58	2.41	

*Percentages may not sum to 100% due to rounding.

Source: 1992 Survey of Consumer Finances

Table 7

Three Measures of the Economic Mobility of U.S. Households

Percentage of Households in Each Quintile in 1984 That Were in Each Quintile in 1989

Measure	1984 Quintile	1989 Quintile				
		1st	2nd	3rd	4th	5th
Earnings	1st	85.8	11.6	1.4	.6	.5
	2nd	18.6	40.9	30.0	7.1	3.4
	3rd	7.1	12.0	47.0	26.2	7.6
	4th	7.5	6.8	17.5	46.5	21.7
	5th	5.8	4.1	5.5	18.3	66.3
Income	1st	71.0	17.9	7.0	2.9	1.3
	2nd	19.5	43.8	22.9	10.1	3.7
	3rd	5.1	25.5	37.2	24.9	7.3
	4th	2.5	10.7	23.4	42.5	20.8
	5th	1.9	2.1	9.5	20.3	66.3
Wealth	1st	66.7	23.4	6.6	2.9	.4
	2nd	25.4	46.6	20.4	5.4	2.3
	3rd	5.8	24.4	44.9	20.5	4.6
	4th	1.8	4.6	22.4	49.6	21.6
	5th	.7	.8	5.7	21.6	71.2

Source: 1984, 1985, 1989, and 1990 Panel Study of Income Dynamics

households in the lowest earnings quintile in 1984 were also in the lowest earnings quintile in 1989. To avoid the role of retirees in shaping the mobility of households with zero earnings, Table 8 reports the transition matrices in earnings for households with positive earnings in both sample periods. To partially control for the role played by age in shaping the properties of the mobility of earnings, Table 8 also reports the transition

Table 8

A Closer Look at the Economic Mobility of U.S. Households

Percentage of Households in Each Earnings Quintile in 1984 That Were in Each Earnings Quintile in 1989

Type of Household	1984 Quintile	1989 Quintile				
		1st	2nd	3rd	4th	5th
With Positive Earnings in Both 1984 and 1989	1st	58.8	25.1	9.0	5.1	2.0
	2nd	20.2	45.6	21.6	8.6	4.0
	3rd	9.7	20.2	40.4	21.9	7.8
	4th	7.7	6.1	20.0	45.9	20.4
	5th	3.6	2.9	9.0	18.4	66.1
With Heads 35-45 Years Old in 1984	1st	63.3	27.2	4.0	3.3	2.3
	2nd	23.6	44.3	22.3	7.3	2.4
	3rd	4.7	16.7	47.0	25.1	6.6
	4th	6.9	8.1	20.2	44.6	20.1
	5th	1.1	4.0	6.4	19.1	69.3

Source: 1984, 1985, 1989, and 1990 Panel Study of Income Dynamics

matrices of earnings for those households with heads between the ages of 35 and 45 in 1984.

As far as earnings is concerned, the households in the lowest quintile are by far the least mobile. This lack of mobility is probably mostly attributable to age-related issues, but it could also reflect some form of earnings poverty trap. (Recall that the lowest quintile is made up of a large fraction of retirees, and retirees seldom move out of retirement.) In general, the lowest and highest quintiles should be the least mobile, since the households in those quintiles can only move either up or down the economic scale, while those in the middle quintiles can move both up and down. The households in the three middle quintiles are clearly the most mobile. When we exclude the households with zero earnings, the second-highest eigenvalue for earnings is

only 0.687. In this case, earnings becomes the most mobile of the three variables and wealth the most persistent.

As far as income is concerned, again, the households in the lowest quintile are the least mobile, but they are more mobile than those in the lowest quintile of the earnings partition. In contrast, in the wealth partition, the households in the top quintile are the least mobile. This suggests that wealth is the most persistent of the three variables under study.

These transition matrices include a lot of information. We want to use a simple, one-dimensional summary statistic. One such statistic is the second-highest eigenvalue.¹⁰ The closer this eigenvalue is to 1, the more persistent is the variable under study. The second-highest eigenvalues for earnings, income, and wealth are 0.807, 0.742, and 0.804, respectively. Therefore, according to these statistics, the mobility among income quintiles is greater than the mobility among earnings or wealth quintiles.

Other Dimensions of Inequality

Some characteristics of households that are closely related to earnings, income, and wealth are age, employment status, education, and marital status. Here we discuss in detail how those dimensions shape inequality among households in terms of earnings, income, and wealth.

Age

Some of the differences in earnings, income, and wealth across households can be safely attributed to the differences in people's age.¹¹ There are two main ways to quantify the earnings, income, and wealth differences. One way is to compare people's lifetime statistics with their yearly statistics. This would require following a sample of households through their entire life cycle. Unfortunately, we do not have a long enough panel to do that. Thus, we choose instead to use the other way of quantifying differences: to partition the population of the household heads into age cohorts and compute the relevant statistics for each cohort. We report these statistics in Table 9. Specifically, we report, for 10 age cohorts and for the entire sample, the U.S. sample averages and the Gini indexes for earnings, income, and wealth; the percentages of income from various income sources; the relative cohort size; and the number of people per primary economic unit.

We find that earnings are monotonically increasing

with the age of household heads until age 50, when earnings start to decline. As we could have expected, the earnings of households with a head over age 65 drop significantly to only about 15 percent of the sample's average earnings. The income of the different age cohorts displays a similar behavior. Income is moderately increasing until age 55, and then it declines, albeit significantly more gradually than earnings. The average income of households with a head over age 65 is close to 62 percent of the average income in the total sample. Wealth is also monotonically increasing in the early stages of the life cycle and peaks a little before age 60, five years after income does. The group over age 65 owns more wealth than any of the groups age 45 and under.

With some exceptions, the Gini index for earnings is moderately increasing with age, and it is highest for the group over age 65.¹² The Gini index for income displays a similar behavior. A perhaps more surprising fact is that age seems to make little difference for wealth inequality. The maximum difference in this statistic between ages is only 0.089, and if we do not take into account the youngest cohort (whose wealth is the most concentrated), then this difference drops to only 0.036.

As far as the income sources of the different age cohorts are concerned, it appears that they are almost monotonic in age for all types of income. With the exception of the youngest and the 36–45 age groups, the share of labor income decreases as age increases. The share of capital income tends to increase with age. The share of business income is lowest at both ends of the age distribution and highest in the 36–45 and 61–65 age groups. The smaller shares in the 46–60 age group are hard to explain. The share of transfers is quite low for all ages except, of course, for the older cohorts. It increases somewhat in the 61–65 age group, and it peaks in the over-65 age group; transfers account for almost half of the latter group's income. In the case of households with heads age 25 and under, transfers also account for a larger share of income than in the middle-aged groups.

¹⁰Note that in probability transition matrices, the highest eigenvalue is always 1.

¹¹In fact, there is a large quantitative literature that uses models in which differences in people's age are the main source of differences in earnings, income, and wealth across households. See, for example, Auerbach and Kotlikoff 1987, Fullerton and Rogers 1993, and Ríos-Rull 1996.

¹²In fact, for this group, the Gini index shows a rarely seen value higher than 1, because there are a nontrivial number of households with negative earnings.

Employment Status

Next, in order to document the relationship between income sources and inequality, we partition the SCF sample into workers, the self-employed, retirees, and non-workers according to the employment status of the household head. In Table 9, we report the 1992 U.S. sample averages and Gini indexes for earnings, income, and wealth; the percentages of income from various sources; the relative cohort size; and the number of people per primary economic unit for these four employment status groups and for the entire sample.

It turns out that the differences across these groups are substantial. Workers are the largest group; they account for 54.9 percent of the sample. The average earnings of workers are about 25 percent higher than the sample average, and their average income is nearly 6 percent higher than the sample average. Also, workers' average wealth is significantly lower than the sample average. (Workers own about 67 percent of the sample average.) Although self-employed households make up only 10.9 percent of the sample, they enjoy a remarkably good financial situation. Their income is almost twice the sample average, and they own an even greater share of wealth—more than three times the sample average. Retirees account for 18.1 percent of the sample. Their income is about 78 percent of the average. As we could have expected, while both the earnings and the income of retirees are below the sample average, their wealth is above the average (almost 24 percent above it). Households with a head who does not work are both income-poor and wealth-poor. The earnings of these households are less than one-third of the average earnings, which account for half of their income. Another important source of income for this group is transfers.

Education

Next, in order to document the relationship between education and inequality, we partition the SCF sample into three groups based on the level of education attained: a group labeled *college*, which includes households with a head who has at least a college degree; a group labeled *high school*, which includes households with a head who has a high school degree but has not completed college; and a group labeled *no high school*, which includes households with a head who has not completed high school. In Table 9, we report, for these three education groups and for the entire sample, the averages and Gini indexes for earnings, income, and

wealth; the percentages of income from various sources; the group size; and the number of people per primary economic unit.

According to the SCF data set, there is a close association between the education level and the economic performance of households. High school households make up 50.2 percent of the SCF sample; college households, 28.6 percent; and no-high school households, the remaining 21.2 percent. On average, college and high school households have earnings that are, respectively, about six and three times higher than the earnings of no-high school households. The differences in wealth holdings are also large, about five and two times larger, respectively. Finally, the differences in income, although still large—about four and two times, respectively—are somewhat smaller due in part to the equalizing effect of transfers, which account for 28.2 percent of the income of no-high school households.

The Gini indexes show that the concentrations of income and wealth are very similar across education levels, while earnings are most concentrated in households with no high school.

As far as the income sources are concerned, college households obtain more income from business and capital sources than do other groups; households that have completed high school are mostly laborers; and among all these groups, households with no high school receive the largest share of income from transfers and the lowest share from labor, capital, and business sources.

Finally, it is also the case that the average size of the SCF primary economic unit is slightly increasing with the amount of education of the head of the household.

Marital Status

In this section, we document the relationship between marital status and inequality. For this purpose, we partition the SCF sample into married and single households according to the marital status of the head of the household. We also partition singles according to whether or not they have dependents, and we subdivide these two partitions according to the sex of the head of the household. We refer to these groups as the *marital status partition*.¹³ In Table 9, we report the averages and Gini indexes for earnings, income, and wealth; the percentages of income from various income sources;

¹³Note that singles without dependents do not necessarily live alone; they may also live with other financially independent adults.

Table 9

Other Dimensions of U.S. Inequality

Breakdown of U.S. Household 1992 Sample by Characteristics of Household Head*

Characteristic	Average Level (1992 \$)			Concentration (Gini Index)			Source of Income (%)					% of Sample	Average Household Size (Number of People)
	Earnings	Income	Wealth	Earnings	Income	Wealth	Labor	Capital	Business	Transfers	Other		
Age													
25 and Under	16,210	18,908	26,207	.528	.471	.808	84.0	1.7	2.0	6.4	5.8	6.8	2.23
26–30	29,937	34,009	35,732	.410	.418	.734	86.4	1.7	1.9	2.6	7.3	9.7	2.44
31–35	39,164	47,701	76,060	.466	.494	.755	75.0	3.2	8.2	3.1	10.5	12.1	3.12
36–40	47,123	54,618	102,234	.542	.555	.719	66.4	3.3	23.0	2.4	4.9	11.4	3.02
41–45	48,367	58,616	187,820	.506	.513	.753	71.4	8.3	12.8	4.0	3.4	10.6	3.12
46–50	52,301	62,914	254,922	.473	.499	.753	74.9	9.1	9.5	3.0	3.5	8.6	2.94
51–55	49,207	63,884	299,256	.509	.550	.755	71.3	10.0	6.6	2.7	9.3	7.0	2.13
56–60	43,352	57,411	357,254	.613	.609	.751	67.0	14.3	9.9	4.7	4.1	6.3	2.08
61–65	29,722	53,119	300,240	.793	.679	.744	45.4	14.8	12.2	15.8	11.8	7.3	1.86
Over 65	4,927	28,442	251,850	1.032	.611	.725	12.5	26.8	5.5	43.4	11.7	20.3	1.51
Employment Status													
Worker	41,247	48,532	123,958	.439	.467	.740	83.0	5.4	2.3	3.0	6.3	54.9	2.67
Self-Employed	64,429	90,483	580,934	.606	.618	.758	45.5	15.9	29.8	3.2	5.6	10.9	2.71
Retired	10,438	35,714	228,269	.955	.653	.689	13.5	19.1	18.2	35.1	14.0	18.1	1.62
Nonworker	9,491	18,386	72,363	.786	.563	.818	50.3	10.7	1.5	30.9	6.6	16.1	2.23
Education													
College	60,231	81,188	353,270	.564	.556	.764	61.0	11.8	15.3	4.7	7.2	28.6	2.50
High School	27,225	36,694	136,923	.554	.485	.734	69.5	8.2	5.4	10.9	5.9	50.2	2.41
No High School	10,236	20,146	68,275	.733	.551	.752	46.6	7.2	4.9	28.2	13.1	21.2	2.31
Marital Status													
Married	46,580	61,692	249,398	.545	.522	.759	65.3	9.6	11.8	6.7	6.6	57.4	3.09
Single													
<i>Without Dependents</i>	15,308	26,306	113,063	.729	.589	.760	53.0	12.8	6.0	17.3	10.9	31.2	1.00
<i>With Dependents</i>	13,653	20,186	51,426	.583	.474	.803	64.8	5.5	3.3	22.0	4.4	11.4	2.90
Single Without Dependents													
Male	21,365	33,696	125,897	.690	.625	.805	55.7	11.2	8.9	11.8	12.3	13.0	1.00
Female	10,984	21,030	103,899	.745	.534	.717	50.0	14.6	2.6	23.6	9.2	18.2	1.00
Single With Dependents													
Male	21,125	25,491	85,757	.451	.396	.754	75.4	6.2	8.6	9.8	.0	2.1	2.66
Female	11,991	19,006	43,790	.609	.487	.811	61.6	5.3	1.8	25.7	5.7	9.3	2.96
Total Sample	33,074	45,924	184,308	.628	.573	.781	63.1	9.9	10.4	9.4	7.2	100.0	2.41

*Percentages may not sum to 100% due to rounding.

Source: 1992 Survey of Consumer Finances

the relative cohort sizes; and the number of people per primary economic unit for these marital status groups and for the entire sample.

The main properties of the marital status partition are the following: compared to single households with or without dependents, married households make substantially higher earnings and income and own a substantially higher amount of wealth. This is still the case if we divide the earnings, income, and wealth of married households by two to account for double-income households.

We find that singles without dependents are significantly better off financially than singles with dependents. Not only are the earnings of singles without dependents about 12 percent higher, but their income is about 30 percent higher, and their wealth is close to an impressive 120 percent higher than singles with dependents. However, the average household size of singles without dependents is only about one-third of the average household size of singles with dependents. The percentage of income from transfers is about three times larger for single households than for married households. As we could have expected, the percentage of income from transfers is the largest for singles with dependents.

As far as the Gini indexes are concerned, both the earnings and the income of single households without dependents are the most unequally distributed, while the greatest concentration of wealth corresponds to single households with dependents.

Finally, single females significantly outnumber single males in the SCF sample, with sample shares of 27.5 percent and 15.1 percent, respectively. This difference is consistent with the fact that females live longer than males. Single females both with and without dependents earn less labor earnings (47 percent less), make less income (38 percent less), and own less wealth (31 percent less) than their male counterparts. Also, single females with dependents account for a large part of the sample (9.3 percent), and they are in a particularly bad financial position: their earnings, income, and wealth are only about 36 percent, 41 percent, and 24 percent, respectively, of the sample averages.

Conclusion

So far, economists have no satisfactory theory of inequality. Such a theory must simultaneously account for all of the properties of the U.S. distributions of earnings, income, and wealth that we have discussed

here: concentration, skewness, and correlation. Moreover, such a theory of inequality must account for the dynamic features of such distributions, that is, the mobility of individual households up and down the economic scale over time, which we have also discussed here.

In light of the inequality facts in this article, we suggest that the following elements are important ingredients for a reliable theory of inequality:

- *Transfers.* Income transfers distort the labor/leisure decision, and they allow households to survive without work. They are an important source of income for earnings- and wealth-poor households; hence, they should play an important role in any attempt to account for the lower tails of the distributions.
- *Businesses.* Businesses in financial distress account for the sizable amount of negative income earned by many U.S. households. Moreover, business income is an important source of income for the households in the upper tails of the distributions. These facts suggest that both business successes and business failures should be important elements for any theory of inequality.
- *Retirees.* Retirees hold a large share of total wealth. Moreover, their labor earnings are zero. These facts spell trouble for any theory of inequality that abstracts from elements of the life cycle.
- *Education.* Households whose head has a college education have more than twice the earnings, income, and wealth of those households whose head has a high school education. Understanding the determinants of the acquisition of education becomes a crucial part of understanding inequality.
- *Marital Status.* The better financial performance of married households over single households cannot be accounted for only by family size. A successful theory should account for how the patterns of household formation and dissolution shape inequality.

All this probably amounts to a somewhat tall order for theorists, but work in this direction has begun. In a companion article in this issue, Quadrini and Ríos-Rull assess the performance of existing theories of inequality to account for the U.S. wealth distribution and discuss new directions of research that take into account the dimensions of inequality we discussed in this article.

Appendix Data Sources and Variable Definitions

Here we describe where we got the data and how we define the variables discussed in the preceding article.

Data Sources

Our primary data source is the 1992 Survey of Consumer Finances (SCF) conducted by the National Opinion Research Center at the University of Chicago and sponsored by the Federal Reserve with the cooperation of the Department of the Treasury. The SCF is probably the most comprehensive source of data on the earnings, income, and wealth of U.S. households.

The SCF uses a two-part sampling strategy designed to obtain a sufficiently large and unbiased sample of wealthier households. The 1992 sample includes 3,906 households, out of which 2,456 were selected using standard multistage area-probability sampling methods. The remaining 1,450 households were selected using tax report data. This second group of households was specifically selected to oversample wealthier households. To enhance the reliability of the data, the SCF also makes weighting adjustments for survey nonrespondents. (See Kennickell and Starr-McCluer 1994 and the references contained therein for details on the properties of this data set. Also see Kennickell, McManus, and Woodburn 1996 for the statistical apparatus for understanding the significance of the results.)

Our secondary data source is the Panel Study of Income Dynamics (PSID) conducted by the Survey Research Center of the University of Michigan and funded primarily by the National Science Foundation. The PSID follows households over time, and we have used its data to construct our measures of household mobility. The only two years for which PSID data on household wealth are available are 1984 and 1989.¹ We combine these data with data on earnings and income from 1985 and 1990 that refer to 1984 and 1989. Unlike the SCF sample, the PSID sample includes a very small number of income-rich and wealth-rich families; therefore, the statistics computed for the right tail of the distribution based on the PSID data set are less reliable.

Variable Definitions

Households

The households in this article are the primary economic units of the SCF. A primary economic unit includes a person or a couple of persons who live together and all the other persons who live in the same household who are financially dependent on them. For example, underage children and, in

some circumstances, older relatives are considered dependents. A financially independent person who lives in the same house, such as a roommate or a brother-in-law, is not considered to be a member of the unit.

We also follow the SCF convention as far as the determination of the head of the household is concerned. The SCF considers the male of a couple to be the head of the household.²

Earnings, Income, and Wealth

The key variables that we consider in this article are labor earnings, income, and wealth. The definitions of these variables are as follows.

□ Earnings

We define *labor earnings* as wages and salaries of all kinds plus a fraction of business income. Business income includes income from professional practices, businesses, and farm sources. The value for the fraction of business and farm income that we impute to labor earnings is the samplewide ratio of unambiguous labor income (wages plus salaries) to the sum of unambiguous labor income and unambiguous capital income. In the sample that we consider, this ratio is 0.864.

□ Income

We define *income* as all kinds of revenue before taxes. Hence, our definition of income includes both government and private transfers.

Specifically, the sources of income that we consider are the following: wages and salaries; income (whether positive or negative) from professional practices, businesses, and farm sources; interest income, dividends, gains or losses from the sale of stocks, bonds, and real estate; rent, trust income, and royalties from any other investment or business; unemployment and worker compensation; child support and alimony; Aid to Dependent Children, Aid to Families with Dependent Children, food stamps, and other forms of welfare and assistance; income from Social Security and other pensions, annuities, compensation for disabilities, and retirement programs; income from all other sources including settlements, prizes, scholarships and grants, inheritances, gifts, and so on.

¹At the time this article was written, 1994 PSID data on household wealth were not available.

²In single households, the financially independent person of either sex is considered to be the household head.

In other words, the notion of income that we use attempts to include all before-tax income received during the year. It approximately corresponds to the payments to the factors of production owned by the household plus transfers. However, it does not include imputed income from the services of some assets such as owner-occupied housing. (See Slesnick 1992, 1993 for details.)

□ *Wealth*

We define *wealth* as the net worth of households. This includes the value of financial and real assets of all kinds net of various kinds of debts. Specifically, the assets that we consider are the following: residences and other real estate; farms and all other businesses; checking accounts, certificates of deposit, and other banking accounts; IRA/Keogh accounts, money market accounts, mutual funds, bonds and stocks, cash and call money at the stock brokerage, and all annuities, trusts, and managed investment accounts; vehicles; the cash value of term life insurance policies and other policies; money owed by friends, relatives, businesses, and others; pension plans accumulated in accounts; and other assets.³

Our definition of *wealth* differs slightly from those used in other studies. Wolff (1995), for instance, provides several definitions of *household wealth*. The definition of his that is closest to ours is what he calls *marketable wealth*. The main difference between this definition and ours is that he does not include vehicles and pension plans accumulated in accounts, while we do. Kennickell and Starr-McCluer's (1994) definition differs from ours in that they include the current face value of term life insurance policies that build up a cash value (that is, the cash amount paid in case the particular event occurs), while we include only the cash value of these policies.

The SCF and the U.S. NIPA

Other data available on income and wealth are consistent with the SCF sample data. For example, in the 1992 SCF sample, average household income for the calendar year of 1991 was \$45,924, and average household income excluding transfers for that year was \$41,610. In comparison, 1991 personal income minus government transfers, as measured by the U.S. national income and product accounts (NIPA), was slightly over \$40,000.⁴

Also, in the 1992 SCF sample, average household wealth in 1992 was \$184,308, and the resulting ratio of wealth to income minus transfers was 4.43. The ratio between the Federal Reserve flow of funds accounts measurement of household net worth and the NIPA definition of *national income* was 4.31 in 1988. Notwithstanding the differences in the definitions of *income* and *wealth*, these two ratios are fairly similar.⁵

³Note that in our definition of *wealth*, we have not included the present value of pension plans not accumulated in accounts.

⁴These calculations are based on a population size of 250 million and an average household size of 2.4 people.

⁵To refine our comparison, we should subtract from the NIPA definition of *national income* the following components: corporate profits minus personal dividends, employer contributions to Social Security, and the rent imputed to owner-occupied houses. We should also subtract from the Federal Reserve flow of funds accounts measurement of household net worth the value of all consumer durables other than vehicles. These corrections would reduce both the numerator and the denominator of the wealth-to-income ratio, and we conjecture that the corrected value for that ratio would not differ by much from the one that we have quoted.

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