

Levy Institute Measure of Economic Well-Being

Concept, Measurement, and Findings:

United States, 1989 and 2000

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Preface

The Levy Economics Institute has, since its inception, maintained an active research program on the distribution of earnings, income, and wealth. Experience from the 1990s suggests that economic growth alone cannot dramatically reduce economic inequality. Because we are concerned with the improvement of well-being, we have initiated a research project, the Levy Institute Measure of Economic Well-Being (LIMEW), within the program on distribution of income and wealth. This project seeks to assess policy options and to provide guidance toward improving the distribution of economic well-being in the United States, and it gives us the opportunity to track the progress of economic well-being using a comprehensive measure. Our expectation is that the LIMEW will become a useful tool for policymakers to assess programs and to design policies that will ensure improvement in economic well-being.

Gross money income, the most widely used official measure of the level and distribution of economic well-being, is increasingly recognized as an incomplete measure. Our measure contributes toward filling this lacuna. Our analysis using the LIMEW suggests that the official measures of the command over commodities understate the level of inequality in the distribution of such command; that the increase in economic well-being attained during the economic expansion of the 1990s was accompanied by a comparable increase in hours of total work (paid and household work); and that the effectiveness of government spending and taxation policies in reducing inequalities generated by market forces has declined. While economic well-being has improved, government policies and regulations have failed to temper the time crunch faced by American households or to mitigate the growing inequality in the distribution of well-being.

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Introduction

This publication presents estimates of the Levy Institute Measure of Economic Well-Being (LIMEW) in 1989 and 2000 for the United States and different regions of the country. It is, as far as we know, the most comprehensive measure of economic well-being used in the United States or any other country.

The LIMEW has two crucial characteristics: (1) its focus is limited to components that can be converted into money equivalents; and (2) in contrast to most indicators, which have been constructed for the total population or at the mean, it is a household-level measure that is constructed using detailed data on individuals and households.

The LIMEW follows, to a great extent, the recommendations of the Canberra Group (2001), an international association of experts on household income statistics drawn from 26 national statistical agencies and 7 international organizations. Differences in our treatment of economic well-being are documented in Wolff and Zacharias (2002, 2003). We note that, in the construction of our measure, we have made several “judgment calls” about what to include and what not to include, and about what estimation procedures to use. We plan to subject our assumptions and estimation procedures to a rigorous sensitivity analysis as part of our subsequent work.

Research is currently under way to construct the LIMEW for a number of benchmark years in the second half of the 20th century, because the last 30 years have been a period of relatively slow growth in the standard of living in the United States (based on standard income concepts), despite the economic boom in the late 1990s. This is particularly apparent when comparing changes in well-being in the early postwar period (1947 to 1973). On the basis of conventionally measured family income, we find that median family income more than doubled in real terms between 1947 and 1973. By contrast, median family income grew by only 25 percent from 1973 to 2000, as real hourly wages fell by 8 percent. This contrasts with the preceding period (1947 to 1973), when real wages grew by 75 percent. Indeed, in 2000, the hourly

wage was \$14.08 per hour, about the same level (in real terms) as in 1968. Moreover, inequality in the distribution of family income, which remained virtually unchanged from the end of World War II to the early 1970s, has increased sharply.

The initial phase of our research focused on confronting the conceptual, methodological, and data problems associated with the construction of a measure of economic well-being for the United States. Although the United States is currently undergoing a period of tardy economic growth, its macroeconomic performance during the 1980s and 1990s was exceptional among the advanced capitalist countries. Many people have hailed the United States as the economic model for the rest of the world. We chose to focus our study on two benchmark years, 1989 and 2000, because they may be considered as the terminal years of the last two economic expansions in the United States.¹

This publication discusses our measure of economic well-being and its components in Section I. Estimates of the LIMEW and its components in terms of mean and median values for 1989 and 2000 are presented in Section II, followed by their overall distribution in Section III and our concluding comments.

Section I. A Measure of Economic Well-Being

A. Basic Concept

Our measure of economic well-being is informed by the view that the command or access by members of a household over the necessities and conveniences of life produced in an economy is mediated by three key institutions—market, household, and the state.² The magnitude of the access that can be exercised by the household is approximated by an income measure, since household income should, in principle, reflect the resources that a household can command for facilitating current consumption or for acquiring financial and physical assets. Gross money income—the current yardstick used in the official measures of poverty and income inequality—is meant to reflect the command over commodities. Household money income does not completely reflect such command, however. As is well known, a part of the

compensation of labor is in the form of fringe benefits that essentially constitute employer payments on the behalf of employees for commodities available in the market place (e.g., health insurance premiums).

In all modern economies, the state intervenes in determining a household's command over commodities. Apart from cash transfers that are included in gross money income, noncash transfers from the government to households are similar to fringe benefits, in the sense that these transfers constitute government payments for commodities on behalf of recipients. Through a system of direct taxes (including negative income taxes, such as the Earned Income Tax Credit) and indirect taxes, the state affects the command that a household exercises over commodities.

Admittedly, commodities form only a portion, though a critical one, of the entire set of goods and services produced and distributed in an economy. Apart from influencing the command over commodities, the state also plays a crucial role in the direct provisioning of the necessities and conveniences of life (as in the case of schools and highways). Of course, it is also the case that the state undertakes activities that do not result in the immediate provisioning of goods and services that can be consumed by households (e.g., judicial and legislative functions, space research, and "corporate welfare"). Such activities, in our view, are treated as social overhead or undertaken on behalf of the business sector of the economy. Another portion of the goods and services produced and consumed in the economy is the result of self-provisioning by means of nonmarket³ household work (e.g., childcare, cooking, and cleaning).

The three institutions discussed above form interdependent parts of a complex organic entity, which fundamentally shapes household economic well-being. Accordingly, the LIMEW accounts for factor income and wealth, for net government expenditures (transfers and public consumption, net of taxes), and for household production. We believe that important insights about economic well-being, which

may not be available using the official measure, can be gained through such a comprehensive measure.

B. Components of the LIMEW

1. Money income and wealth

Our definition of the LIMEW begins with the major component of the Census Bureau's gross (pretax) money income as recorded in the public-use files developed from the Current Population Survey's Annual Demographic Supplement (ADS).⁴ This component, which we call "base money income," is simply gross money income less the sum of property-type income (interest, dividends, and rents) and government cash transfers (e.g., Social Security benefits). Earnings make up the overwhelming portion of base money income and the remainder consists of pensions and other small items, such as interpersonal transfers and workers' compensation paid by the private sector. Constructing the LIMEW involves, essentially, adding other relevant items, which determine the actual or potential command over necessities and conveniences, to base money income.

The first item added to base money income is employer contributions to health insurance, as calculated by the Census Bureau in the ADS. This item is, by far, the most important in-kind compensation for work that can be considered a part of current income, at least in the United States. Compared to other components of the LIMEW, however, employer payments for health insurance premiums are quantitatively small.

The second item added to base money income is imputed income from wealth.⁵ In the official gross money income measure, property-type income consists of the actual receipts of interest, dividends, and rent.⁶ From our perspective, the actual, annual property income is an incomplete measure of the economic well-being derived from the ownership of assets. Real assets, such as houses, typically last for several years and yield services to their owners, thereby freeing up resources otherwise spent on

housing. Financial assets in the form of bank and nonbank balances, and accumulated balances in private welfare and social insurance funds, can, under normal conditions, be sources of economic security in addition to property-type income.

Adding wealth, a stock variable, to a measure of well-being, where all components are flow variables, requires conversion of wealth into a flow variable. Several studies have attempted to develop a composite measure of income and wealth using alternative conversion methods (e.g., Weisbrod and Hansen 1968). These studies do not generally distinguish between housing wealth (owner-occupied housing) and other types of wealth (primarily financial wealth).

Our approach differs from the standard approach in two significant ways. First, we distinguish between home and nonhome wealth. Housing is a universal need and home ownership frees the owner from the obligation of paying rent, leaving an equivalent amount of resources for consumption and asset accumulation. Hence, benefits from owner-occupied housing are reckoned in terms of the replacement cost of the services derived from it (i.e., a rental equivalent).⁷

We estimate the benefits from wealth, other than from owner-occupied housing (nonhousing wealth), using a variant of the standard lifetime annuity method. Our rationale for employing this method is that it is a better indicator of the resources available to the wealth holder on a sustainable basis over his or her expected lifetime compared to the bond-coupon method. The standard method calculates an annuity based on a given amount of wealth, an interest rate, and life expectancy. The annual amount is the same for the remaining life of the wealth holder and the terminal wealth is zero. (In the case of households with multiple adults, we use the maximum of the life expectancy of the head of household and spouse in the annuity formula.) The modification we make to the standard procedure is an attempt to account for differences in portfolio composition across households. Instead of using a single interest rate for all assets, we use a weighted average of asset-specific and historic

real rates of return,⁸ where the weights are the proportions of the different assets in a household's total wealth.

2. Net government expenditures

The third item that we add to base money income is net government expenditures—the difference between government expenditures incurred on behalf of households and taxes paid by households. Our approach to determine expenditures and taxes may be called the social accounting approach (Hicks 1946). It is similar, in several practical aspects, to the methods used by the Office of National Statistics in the United Kingdom to assess, annually, the effect of taxes, transfers, and some public expenditures on household income (Lakin 2002, pp. 43–46), and by the Organisation for Economic and Co-operation and Development (OECD) to estimate net social expenditures (Adema 2001, p. 19).

Government expenditures included in the LIMEW consist of cash transfers, noncash transfers, and public consumption. These expenditures, in general, are derived from the National Income and Product Accounts (NIPA Tables 3.12 and 3.15).⁹ In the case of government cash transfers, the social accounting approach to government expenditures yields the generally accepted conclusion: they are considered to be, in their entirety, part of the money income of recipients. Indeed, as previously noted, cash transfers are also included in the official measure of well-being.

Our approach to noncash transfers is to allocate them among recipients on the basis of the appropriate average cost incurred by the government (e.g., in the case of medical benefits, the average cost for the elderly differs from that for children). It has been argued on theoretical grounds, however, that the value of income from a given noncash transfer for the recipient is, on average, less than the average cost incurred by the government that provides the benefit (e.g., *see* Canberra Group 2001, pp. 24, 65). In practice, a method of imputation (often referred to as the cash-equivalent method) that is consistent with this argument involves the estimation of how much the household could have paid for the transfer after meeting its expenditures on such

basic items as food and clothing, with the maximum payment for the transfer set equal to the average cost incurred by the government.

We did not pursue the alternative method because it implies that households in the program with incomes below the minimum threshold are presumed to receive no benefit from their consumption of a good or service. This presumption is inconsistent with our goal of measuring the household's access or command over commodities. Furthermore, unlike the social accounting approach, the alternative method would not, by definition, yield the total government expenditures when the transfer payment is aggregated across recipients. This feature is incompatible with our goal of estimating net government expenditures using a consistent methodology.

Another type of government expenditure that we include in our measure of well-being is some public expenditures ("public consumption"). When allocating these expenditures to the household sector, we attempt to follow, as much as possible, the general criterion that a particular expenditure must be incurred directly on behalf of that sector and expands its consumption possibilities. The implementation of the approach is carried out in two stages.

We begin with a detailed functional classification of government expenditures (excluding transfer payments) and omit functions that fail to satisfy the general criterion. Most of the excluded functions are part of the general social overhead, which keeps the ship of state afloat—national defense, general public service, and law courts and prisons. Expenditures under other functional categories also may not fully meet the general criterion because some of them are incurred on behalf of the business sector (e.g., transportation, energy, and natural resources). We estimate the household sector's share of such expenditures using data on the utilization or consumption of the goods and services resulting from the expenditures.¹⁰ Finally, expenditures under certain functional categories are considered to be completely incurred on behalf of the household sector, such as education and health.

In the next step the relevant expenditures for each functional category are distributed among the households. Our distribution procedures build on earlier studies that employ the government-cost approach (e.g., Ruggles and Higgins 1981). Some expenditures are distributed in the same way as the split between the household sector and other sectors (i.e., on the basis of estimated patterns of utilization or consumption),¹¹ while other expenditures are distributed equally among the relevant population.¹²

The final step in constructing net government expenditures is concerned with taxes. The social accounting approach to taxes is based on the simple rationale that the concept of tax payments is important in its own right. Our objective is to determine the distribution of actual tax payments by households in different income and demographic groups in an accounting sense rather than incidence in a theoretical sense. We align the aggregate taxes in the ADS (imputed by the Census Bureau) with their NIPA counterparts, as for expenditures. The bulk of the taxes paid by households falls in this group—federal and state personal income taxes, property taxes on owner-occupied housing, and payroll taxes (employee portion). Our estimated total tax burden on households also includes state consumption taxes, which were not aligned with a NIPA counterpart (our reasons are discussed in the Appendix). Taxes on corporate profits, on business-owned property, and on other businesses, as well as nontaxes, were not allocated to the household sector because we assumed that they were paid out of business sector incomes.

3. Household production

The final item that we add to base money income is the imputed value of household production. Economists have long recognized that individuals and households engage in unpaid, nonmarket activities in order to produce, enhance, and consume the necessities and conveniences of life available to them (*see* Reid 1934). In a modern capitalist economy, where income from paid work is the predominant form of income and nonlabor inputs into unpaid activities are purchased, typically, with money, these activities do not constitute an alternative to paid work for the vast majority of

households, because they cannot be repeated indefinitely without earning labor income. For households that depend on transfers or property income for their main source of income, the same asymmetry occurs between money income and unpaid work, as money income sets the conditions and constraints for the performance and regulation of unpaid work.¹³

Three broad categories of unpaid activities are usually included in the definition of household production: (1) core production activities, such as cooking and cleaning; (2) distribution activities, such as shopping for groceries and for clothing; and (3) childcare activities, such as caring for babies and reading to children.

The rationale for considering these activities as “production” is attributed to a crucial and common feature: these activities can be assigned, generally, to persons or third parties apart from the person who performs them.¹⁴ In the case of the first two categories, this feature may be obvious, but it also holds for childcare activities when we recognize that third parties are *not* a substitute for the intimate, personal, and emotional bond that exists between parent and child (Reid 1934, pp. 14–15).

Because the LIMEW seeks to measure the command over the necessities and conveniences of life by individuals and households, it is natural to include household production in our measure. Ideally, we would like to add the value of the net output of household production. Sufficient information, however, does not typically exist and allow us to implement the ideal approach. The common strategy, therefore, is to value the amount of time spent by individuals on household production¹⁵ using one of three procedures:

- *Replacement cost using average earnings of domestic servants or household employees* (Kuznets, et al 1941, pp. 432–433; Landefeld and McCulla 2000).
- *Replacement cost using specialist wages*. This procedure uses different market wage rates for different types of household production, such as valuing time

spent in childcare according to the average wages of daycare workers (Murphy 1982, pp. 40–41).

- *Opportunity cost or forgone earnings.* This procedure uses either potential wages, which are estimated on the basis of individual characteristics, such as age and education, or actual wages (Aslaksen, et al 1998; Murphy 1978).

While all the procedures have known issues,¹⁶ we believe that the replacement-cost procedure—valuing an hour of housework by the average hourly wage of private household employees—is the least problematic. However, the efficiency and quality of household production are likely to vary across households. We therefore modify the replacement-cost procedure and apply to the average replacement cost a discount or premium that depends on how the individual (whose time is being valued) ranks in terms of a performance index. The index seeks to capture certain key factors (household income, educational attainment, and time availability) that affect efficiency and quality differentials (*see* Appendix for details).

Section II. LIMEW, 1989 and 2000

A. Overall Values

Table 1 presents our estimates of the LIMEW for 1989 and 2000 in 2000 dollars,¹⁷ and compares our estimates with those of the Census Bureau’s (ADS) money income and extended income measures. By construction, the values of the LIMEW are considerably higher than money income: the median value in 1989 is 54 percent higher and in 2000, 63 percent higher; the mean value is 57 percent higher in 1989 and 60 percent higher in 2000. The change during the period from 1989 to 2000 is particularly interesting. Whereas the median income increased by only 5 percent using the Census Bureau’s estimates, the LIMEW increased by 11 percent. According to our measure, the economic well-being of the average American household grew more than twice as fast as indicated by the money income measure. On the other hand, the mean income of the LIMEW increased at almost the same rate as money income—17 percent versus 15 percent.

Comparisons between the LIMEW and the Census Bureau's extended income (EI) measure, the most comprehensive official measure of well-being, also yield similar conclusions. EI expands the notion of income from wealth to include, in addition to property income, realized net capital gains and returns on home equity. Unlike LIMEW, however, EI does not include an annuity flow from nonhome wealth. Including noncash transfers and taxes, in addition to cash transfers, also broadens the accounting of the government's role in mediating the command over commodities, while incorporating employer contributions for health insurance expands the definition of income from work. This measure is lower than money income at the mean, but close to money income at the median. Compared to EI in 1989 and 2000, the LIMEW is 56 percent and 61 percent higher at the median, and 69 percent and 71 percent higher at the mean, respectively. The growth rate of EI is 16 percent for the mean and 8 percent for the median, which are both lower than that of the LIMEW.

An advantage of the information base constructed for the LIMEW is that it allows us to estimate the hours of total work (paid work plus housework) by the members of the average household that accompanies their level of well-being (*see* Table 1). Our estimates show that the annual hours of total work at the median increased by 7.4 percent (from 4,401 hours to 4,727 hours)—an increase of about 326 hours or over 8 weeks of full-time work (using a 40-hour work week). The reported increase in the LIMEW and money income, therefore, was accompanied by a comparable increase in hours of total work.

There are marked differences in the growth rates among the various components of the LIMEW between 1989 and 2000. Base money income, which consists mainly of earnings (95 percent), grew by a modest 4 percent in terms of its median value (compared to 11 percent for the LIMEW) and by 18 percent in terms of its mean value (compared to 17 percent for the LIMEW). The median value of employer-provided health insurance grew by 18 percent, while the mean value grew by 13 percent. The median value of imputed rent and annuities increased by 4 percent and

its mean value soared by 37 percent. The median value of government transfers declined, whereas the mean value grew by a healthy 21 percent. Public consumption saw a 5-percent growth at the median and a 15-percent growth at the mean. Over the 1989–2000 period, the median tax burden grew by 11 percent, whereas its mean surged by 29 percent. The combined effect of transfers, public consumption, and taxes is reflected in the change in net government expenditures: while the median value grew by 4 percent, its mean value declined by a striking 123 percent and was negative by 2000. The median value of household production rose only 1 percent during the period, whereas the mean value rose by 7 percent.

Figure 1 shows the different components of the LIMEW in 1989 and 2000. The largest component in both years is base money income (approximately 54 percent). Household production slipped from second place in 1989 to third place in 2000 (from 22.5 to 20.5 percent). In contrast, imputed income from wealth (rent and annuities) rose from 19.9 to 23.4 percent. Government transfers and public consumption (approximately 9 percent each in 2000) and employer-provided health insurance (approximately 2.3 percent in 2000) maintained roughly constant shares. An increase in the share of taxes (from 16.8 to 18.5 percent) resulted in a decline in the share of net government expenditures (from 1.3 to -0.3 percent).

In an accounting sense the growth and relative importance of the individual components of the LIMEW determine their contribution to the change in the mean value of the LIMEW between 1989 and 2000. As shown in Figure 2, the change in the LIMEW can be attributed almost entirely to components that are driven predominantly by market forces—base money income and imputed income from wealth (rent and annuities). By contrast, net government expenditures incurred on behalf of households, as well as household production, contributed much smaller amounts, which, notably, roughly offset each other.

Table 1A, an addendum to Table 1, provides further details on our estimated components of the LIMEW.¹⁸ Annuities represented 73 percent of the total imputed

income from wealth in 2000, which increased by 37 percent over the 1989–2000 period. The largest contribution to growth, by far, was from annuities, which increased by 49 percent, while imputed rent to owner-occupied housing only increased by 14 percent. Social Security benefits made up 43 percent of total government transfers in 2000 followed by Medicare (23 percent) and Medicaid (17 percent). All other transfers comprised 18 percent. The highest growth rate, by far, was Medicaid, which almost doubled during the period (94 percent), followed by Medicare (35 percent), and Social Security payments (9 percent).

Education represented more than half of total public consumption in 2000. The next largest expenditures were public health and hospitals (10 percent), highways (9 percent), and police and fire departments (6 percent). While total public consumption increased by 15 percent between 1989 and 2000, expenditures for police and fire departments increased by a striking 36 percent and education increased by a more modest 19 percent. The remaining components of public consumption expenditures rose at below average rates: a paltry growth rate of 2 percent for public health and hospitals, and 10 percent for highways.

Federal income taxes made up the largest portion of total personal taxes in 2000 (55 percent), followed by payroll taxes (20 percent), state income taxes (11 percent), state and local consumption taxes (9 percent), and property taxes (5 percent). The largest growth rate was for federal income taxes (38 percent), followed by state income taxes (34 percent), consumption taxes (24 percent), payroll taxes (16 percent), and property taxes (2 percent).

More than half of household production (57 percent) in 2000 was devoted to core activities, followed by childcare (24 percent) and distribution (19 percent). While the total value of household production grew by 7 percent between 1989 and 2000, hours spent on housework remained roughly constant (46 hours per week). However, the composition of housework changed dramatically. Hours spent on childcare doubled at the expense of time spent on core and distribution activities over the 1989–2000

period. The reason for the increase in the value of household production is that our estimated wage for household workers grew by a meager 7 percent between 1989 and 2000 (from \$6.92 to \$7.42 per hour, in 2000 dollars).

B. LIMEW by Demographic Characteristics

We next look at mean and median values of the LIMEW for different demographics and compare them with the values using the money income measure. We find marked differences between the two measures with regard to relative values and rates of change.

1. Racial differences

The first notable finding is that the racial gap in economic welfare is much lower according to the LIMEW than the money income measure (*see* Table 2). The nonwhite to white ratio in means in 2000 was 83 percent for the LIMEW versus 76 percent for money income, while the ratio of medians was 86 percent and 76 percent, respectively.¹⁹ The mean and the median values of the LIMEW grew faster for nonwhites than whites from 1989 to 2000. The same result holds for the money income measure.

There is much faster growth in imputed income from wealth for nonwhites than whites between 1989 and 2000. As a result, the ratio of mean imputed income from wealth between nonwhites and whites more than doubled: from 21 to 46 percent (median imputed income from wealth remained close to zero for nonwhites in both years). Government transfers were greater for nonwhites than whites, while mean transfers grew at a slower pace for nonwhites than whites over the 1990s. Likewise the value of public consumption was higher for nonwhites than whites in both years and increased at a slower pace for nonwhites. The tax burden for nonwhites remained less than whites, but, in this case, it grew much faster among nonwhite households (40 versus 30 percent for taxes at the mean and 34 versus 12 percent for taxes at the

median). The ratio of average taxes paid by nonwhites to average taxes paid by whites rose from 65 to 70 percent, as a result.

The value of household production was greater for whites than nonwhites, but, again, grew much faster for nonwhites over the 1989–2000 period, so the gap in the value of household production narrowed markedly. The ratio of the mean value of household production of nonwhites to whites increased from 85 to 93 percent over the period and the ratio of median values increased from 78 to 88 percent. The narrowing of the racial gap in economic welfare according to the LIMEW can be traced to relative gains in imputed income from wealth and household production for nonwhites.²⁰

2. Household type

Family households, on average, are much better off than nonfamily households. Within family households, there is a striking difference between married couples and others in favor of married couples (*see* Table 3). Families with an unmarried male householder, moreover, are better off than those with an unmarried female householder. Within nonfamily households we observe similar differences between males and females. These patterns hold irrespective of using the LIMEW or money income as the yardstick. However, in certain cases, the extent of the disparities depends on the chosen yardstick.

In terms of both mean and median values of the LIMEW and money income, married couples were about 1.3 times as well off as the average household in 1989 and 2000. A review of the components of the LIMEW in 1989 and 2000 shows that married couples have the highest mean and median values of base income, income from wealth, taxes, and household production. Unlike other family households, married couples have negative net government expenditures, which are similar to nonfamily households with a male householder.

According to the LIMEW, families with a female householder are relatively less worse off than the average household as compared to the money income measure,

due, mainly, to high net government expenditures. These households, as expected, have higher values of household production than families with a male householder or than nonfamily households. There was, moreover, virtually no change in the differences among the five household types in the LIMEW (or money income) between 1989 and 2000.

3. Housing tenure

In 2000 the mean value of the LIMEW among renters was only 54 percent of homeowners, and the median value was only 60 percent (*see* Table 4). Similar results are found using money income: a ratio of 56 percent in mean values and 55 percent in median values. Mean imputed income from wealth, as expected, was much larger for homeowners than renters: a ratio of 9 in 2000 (median imputed income from wealth among renters was zero). The differences reflect not only the imputed rent from owner-occupied housing, but also the much larger wealth holdings of homeowners. By contrast, there was virtually no difference in mean government transfers or in the mean value of public consumption between the two groups, and the discrepancy in mean taxes and mean household production was much smaller than the discrepancy in wealth. Again, there was very little change in the 1989–2000 period in the relative value of the LIMEW (or in money income) between the two groups.

4. Age group

We divided households into four age groups, as shown in Table 5. In terms of the mean value of the LIMEW in 2000 the 51–64 age group was the most well off (10 percent above the overall average), followed closely by the 35–50 age group (7 percent above) and the elderly (5 percent above). The least well-off group was the under-35 age group (24 percent below average). In terms of median values the most well-off age group was 35–50 (17 percent above the overall median), followed by the 51–64 age group (5 percent above). The young and the elderly were 14 percent below the overall median.

Income differences were more marked, so the rank order was somewhat different. In terms of mean income the most well-off group in 2000 was the 35–50 age group (22 percent above the overall average), followed by the 51–64 age group (17 percent above). The under-35 age group was 13 percent below the overall mean, while the elderly ranked last at 39 percent below. Median income had a similar rank order with the 35–50 age group first (31 percent above the overall median), followed by the 51–64 age group (19 percent above), the under-35 age group (7 percent below), and the elderly (45 percent below).

The elderly, in particular, are better off in terms of the LIMEW than money income. One reason is that the elderly are, by far, the most well off in terms of imputed income from wealth (in 2000 more than twice the overall mean and more than three times the overall median). A second reason is that, among all age groups, mean net government expenditures are positive only for the elderly and the amount is quite substantial (about \$18,000 in 2000), reflecting the combination of relatively larger amounts of noncash government transfers and relatively low tax burdens, which are not included in money income.

There are also very large discrepancies among the other age groups with respect to imputed income from wealth. The 51–64 age group is in second place (34 percent above the overall mean and more than twice the overall median), followed by the 35–50 age group (63 percent and 92 percent above the overall mean and median, respectively). Young households are in a distant last place (at only 19 and 3 percent of the overall mean and median).

The value of public consumption was highest in the 35–50 age group (reflecting the importance of educational expenditures for school-age children) and lowest among the elderly. Levels of household production were similar across the four age groups, and there was little change between 1989 and 2000 in the relative mean and median values of the LIMEW or money income.

5. Income class and education

Not surprisingly, the LIMEW varied directly with the income level of households (*see* Table 6). The mean value of the LIMEW for the top income group (\$100,000 or more) in 2000 was 238 percent of the overall mean and its median was 226 percent of the overall median. The mean and median values of the LIMEW for the bottom income group (less than \$20,000) were 48 percent of the overall values. By contrast, the dispersion of income across the five income groups using the money income measure was greater: mean income for the top income group was 291 percent of the overall mean and median income was 311 percent of the overall median. Mean income for the bottom income group was only 20 percent and the median was only 28 percent of the overall values.

The smaller dispersion in the LIMEW among income groups compared to money income is due to the equalizing effects of net government expenditures and the value of household production, which offset the disequalizing effects of imputed income from wealth. First, net government expenditures add a substantial amount of income to the bottom income group and subtract a substantial amount of income from the top income groups. (Mean net government expenditures in 2000 were 42 percent of the LIMEW for the bottom income group and -22 percent for the top income group.) Mean government transfers in the LIMEW are much larger for the bottom income group than the money income measure because of the relatively large amount of noncash transfers. Although the value of public consumption varies directly with income level, the disparities in public consumption were much lower than the disparities in money income. The mean value of public consumption was 125 percent of the overall mean for the top income group and 78 percent for the bottom income group. The tax burden, not surprisingly, varied directly with income level, and the disparities were also greater than money income.

Second, the differences in wealth among income groups in the LIMEW were much greater than the differences in money income. Third, although the value of household production varied directly with income level, the discrepancies were somewhat less

than money income or the LIMEW. The mean value of household production for the bottom income class in 2000 was 58 percent of the overall mean, and, for the top income class, 191 percent. There are two reasons for the correlation between the value of household production and income level: (1) hours of housework, especially time spent on childcare, increase steadily with income; and (2) our accounting method for unobserved differences in the efficiency and quality of household production involves a positive relation between income and the replacement cost of household production (*see* Appendix for details).

There was some change in the relative value of the LIMEW by income group between 1989 and 2000. The relative mean and median values of the LIMEW for the bottom income group remained almost unchanged, whereas those for the three income groups in the middle declined. For the top income group, the mean increased from 224 to 238 percent of the overall mean, while the median fell from 240 to 226 percent of the overall median. Similar patterns occurred in terms of money income. The relative income of the bottom income group did not change between 1989 and 2000, while the relative mean and median incomes of the three middle income groups declined. Mean income relative to the overall mean increased somewhat for the top income group, while median income declined.

Differences by education level are shown in Table 7 and are similar to the differences by income group. The mean value of the LIMEW for households with a college degree was 41 percent above the overall average in 2000, followed by some college education (6 percent below), high school graduates (18 percent below), and less than a high school diploma (29 percent below). The medians showed a similar pattern.

The variation by educational level was much greater for money income than the LIMEW. The mean income of college graduates was 59 percent above the overall average, while the mean income of households with less than a high school diploma was only half of the overall average. Comparative results for the median values were similar. The disparity between the LIMEW and money income by educational level is

traceable, once again, to greater government transfers to the less educated, to smaller differences in public consumption by educational level than by income level, and to the greater tax burden on more educated households.

College graduates experienced the highest growth rate in the LIMEW over the 1989–2000 period, followed by the bottom educational group. By contrast, college graduates experienced the largest growth in mean money income, followed by those with some college education. The only group showing positive growth in terms of median money income was college graduates.

6. Household size

Both the mean and median of the LIMEW varied directly with household size, as did the mean and median of money income (Table 8). Differences by household size in the LIMEW were very similar to those for money income. Further observations about household size are outlined in Section 8, equivalence-scale adjusted measures.

7. Geographical differences

We use three geographical divisions in our analysis: four census regions, nine census divisions, and residential area (an urban/suburban/rural split). Variations in the LIMEW and money income by geographical division are much smaller than by demographic divisions, as outlined earlier. The mean value of the LIMEW varied from 6 percent below average in the South to 9 percent above average in the West by census region in 2000 (Table 9). Among the nine census divisions (Table 10), the mean value of the LIMEW ranged from 16 percent below average in the West South Central division to 14 percent above average in the Pacific division. Results for the median value of the LIMEW and for mean and median values of money income are similar. The most notable change in terms of the LIMEW between 1989 and 2000 was the relative slippage of the Northeast region, particularly the New England states, from first to second place, and the rise of the Pacific region to first place.

As shown in Table 11, the suburbs and the inside metro areas were the most well-off in terms of the LIMEW in 2000 (12 percent above average), followed by the central cities (6 percent below average) and rural residents (14 percent below average). The rank order was the same for the mean and median money income levels, and for 1989.

8. Equivalence-scale adjusted measures

We next look at the LIMEW and money income on the basis of equivalence-scale adjusted measures. In the case of money income, equivalent income adjusts family income according to size and composition. The adjustment factor is greater for larger families, since they need more income to attain the same standard of living as smaller families. However, the adjustment factor is less than proportional to family size because of “economies of scale” in consumption. We use the same equivalence-scale adjustment for the LIMEW as for money income.²¹

Results for the LIMEW are shown in Table 12. The main differences compared to previous tables are the relative levels of well-being among groups: there are very few changes in the growth rates of well-being over the 1989–2000 period.

There are several notable findings using the equivalence-scale adjusted LIMEW. Nonwhites appear even worse off relative to whites. The mean adjusted LIMEW for nonwhites is 74 percent of whites in 2000 compared to 83 percent using the unadjusted LIMEW. The median adjusted LIMEW is only 78 percent of whites compared to 86 percent using the unadjusted LIMEW. These results reflect the larger average household size of nonwhites. Similar to the unadjusted LIMEW, however, the adjusted LIMEW grew faster for nonwhites than whites over the 1989–2000 period.

Not surprisingly, the position of nonfamily households relative to the average household now seems better, whereas the position of family households seems worse.

According to the equivalence-scaled adjusted LIMEW, married couples were approximately 14 percent better off than the average household in the year 2000, compared to 30 percent better off according to the unadjusted measure. In 2000 the unadjusted LIMEW for nonfamily households was about 60 percent of the average, while the adjusted LIMEW was between 86 and 91 percent of the average. For family households with single householders, the unadjusted mean for the LIMEW was 80 and 100 percent of the average for females and males, respectively, while the adjusted mean was 74 and 86 percent.

The elderly now appear to be the most well-off age group in terms of the mean equivalence-scale adjusted LIMEW (29 percent above average in 2000). The major reason is their smaller average household size. Furthermore, the poorest income group appears relatively better off (59 percent of the overall mean compared to 48 percent using the unadjusted LIMEW in 2000). The top income class is now slightly worse off (reflecting its larger than average household size) and the variation of well-being by household size is considerably reduced. Two-person households now appear somewhat better off than single-person households, or households with three or more persons.

Section III. Distribution of the LIMEW

An important advantage of a comprehensive measure of economic well-being is that it can facilitate a better understanding of the forces that shape economic inequality. We therefore proceed with a well-known type of thought experiment. We start with the distribution of economic well-being using only base money income, which is modified here to include employer contributions for health insurance. The next step expands the measure to include income from wealth and to reflect the economic advantage of asset ownership. This measure may be thought of as “primary income” or “market income.” We then modify primary income by adding government transfers (net of taxes), so that the measure adequately reflects the distribution of the command over commodities. The

next to last step includes public consumption and assesses the effect of net government expenditures. The last step includes household production and is synonymous with the LIMEW.

The results of the experiment are shown in Figure 3. The degree of inequality in the distribution of base money income, as measured by the Gini ratio,²² is shown by the bars labeled BI. Because wealth is distributed much more unequally than base money income, adding income from wealth raises the level of inequality, as shown by the Gini ratio for primary income (PI). A growing concentration of wealth, especially financial assets, during the 1990s contributed to an increase in inequality from 1989 to 2000. We know from previous research that wealth inequality tends to rise when stock markets go up, so it is likely that the recent plunge in stock prices has reduced wealth inequality in the United States. As a result, the gap between the inequality in PI and BI has probably narrowed.

The third set of bars (PI+TR–TX) shows how government transfers and taxes alter the inequality in the command over commodities. Inequality that is associated with market-generated outcomes, primarily the distribution of earnings and wealth, is significantly reduced, but their effectiveness appears to have dwindled in 2000, as compared to 1989: the Gini ratio was 16 percent lower in 1989 compared to PI, while it was only 13 percent lower in 2000. The progressiveness of the transfer-tax regime might have worsened since 2000, as a result of the pro-rich orientation of the federal tax cuts and the scaling-back of major discretionary transfer programs.

When public consumption is included in the income measure (PI+TR–TX+PC), inequality declines further. A comparison of this income measure to PI shows the extent that inequality is lowered by net government expenditures. The percentage decline in the Gini ratio, relative to PI, was 19 percent in 2000 compared to 22 percent in 1989, suggesting that the redistributive effect of government spending and taxes has declined. Recent developments affecting federal and state budgets suggest that the situation may not have improved. At the federal level, budgetary priorities have shifted in favor of

defense and “homeland security”—items not included in our definition of public consumption. Moreover, the growing fiscal crisis at the state and local government levels, and the dominant method for dealing with it—cutbacks in social expenditures, such as education and public health—are not favorable toward expanding public consumption.

Incorporating household production into the income measure, which results in the LIMEW, lowers inequality by another 6 percent. Household production is a major component of the LIMEW (*see* Figure 1) and its distribution among households is relatively less unequal. While the average number of hours per week spent on housework by households has remained stable (approximately 46 hours), the burden still falls more on women than men. Women spent, on average, 31 hours per week on housework in 2000, while men spent 19 hours. The gender disparity in housework, however, has declined since 1989, as a result of changes in the economic status of women and in social norms and perceptions regarding gender roles.

It is instructive to compare measures of inequality using the LIMEW and its components with two measures of the Census Bureau, gross money income (MI) and extended income (EI). The EI is a better approximation of a household’s command over commodities than MI. The Gini ratios for EI, MI, the component of the LIMEW that reflects the command over commodities (the LIMEW excluding public consumption and household production), and the LIMEW are shown in Figure 4.

Since EI and the LIMEW excluding public consumption and household production (PI+TR-TX) are measures that, at least in principle, measure the command over commodities, it is noteworthy that our measure shows a much higher level of inequality (by about 20 percent). Our measure of the command over commodities is also more unequally distributed than MI. It is even more striking that the LIMEW, which includes public consumption and household production that lower inequality, also shows a higher level of inequality than EI. While there are a number of methodological differences between the measures, it is likely that a major factor causing the difference is the treatment of financial wealth. The Census Bureau, which focuses on actual cash income,

attempts to capture the economic advantage of financial wealth using property income and realized capital gains. We capture this advantage by means of a lifetime annuity.

We next turn to a more detailed comparison of inequality using money income and the LIMEW. Our results are summarized in Table 13 and Figures 5, 6A, and 6B.

As noted earlier, the LIMEW is distributed more equally than money income. The Gini coefficient for the LIMEW was 0.417 in 2000, while that for money income was 0.451. Similar differences are apparent using the other inequality measures: the Atkinson index ($\epsilon=0.50$) for the LIMEW was 0.155, while that for money income was 0.174; and the P50 / P10 ratio for the LIMEW was 2.70, while that for money income was 3.97.

Starting with base money income, the steps taken to build the LIMEW cause the lower end of the distribution to improve its position relative to the middle and top ends. When the inequality aversion parameter (ϵ) of the Atkinson index²³ is set to equal 0.25 (more weight is given to changes in the top end of the distribution), we find almost identical estimates of inequality using money income and the LIMEW. When the parameter is set to 0.75 (more weight is given to the bottom end of the distribution), the LIMEW estimates show more equality than money income. This pattern is also evident in the percentile ratios: P90 / P50 is almost identical for money income and the LIMEW, while P90 / P10 and P50 / P10 are smaller for the LIMEW (*see* Figure 6A).

The extent of the increase in inequality between 1989 and 2000 using the LIMEW compared to money income depends on the inequality measure. Using the Gini and Atkinson measures, the increase in inequality is lower in the LIMEW than money income. The Atkinson measure shows a 16 to 21 percent increase in inequality using the money income measure and a 14 to 15 percent increase using the LIMEW (Table

13). The difference is very small using the Gini measure (an 8 percent increase in inequality for money income versus a 7 percent increase for the LIMEW). The percentile ratios, however, tell a different story: P90 / P50 shows a greater change in inequality using money income than the LIMEW, while P90 / P10 and P50 / P10 show a greater change for the LIMEW than for money income (Figure 6B).

Figure 5 details the percentage change in the LIMEW and money income for different percentiles. As noted in Section II, the LIMEW median increased by 11 percent between 1989 and 2000, while money income showed only a 5-percent growth rate. Similar results occur for the other percentiles of the distribution. The 25th percentile rose 8 percent for the LIMEW and 5 percent for money income. The 75th percentile increased 12 percent for the LIMEW and 9 percent for money income, while the 95th percentile increased 24 percent for the LIMEW and 15 percent for money income. With the exception of the 10th percentile, the LIMEW increased more in percentage terms than money income.

Table 13 also shows the effects of adjusting money income for the various components of the LIMEW on the level of inequality. As expected, adjusting money income for wealth substantially raises inequality. In contrast, adjusting for government transfers results in a sizeable reduction in the Gini coefficient (from 0.451 to 0.412 in 2000), as does the addition of public consumption (from 0.451 to 0.411) and household production (from 0.451 to 0.417). The subtraction of taxes also substantially lowers the Gini coefficient (from 0.451 to 0.405) and shows that the overall tax system in 2000 was primarily progressive. Because of its relatively large share in the LIMEW, the addition of household production to money income has a particularly large effect on the overall inequality of the LIMEW. When household production is eliminated from the LIMEW, the Gini coefficient increases from 0.417 to 0.444.

The largest absolute increase in inequality during the 1989–2000 period is found for money income adjusted for wealth, which increased by 0.038 to 0.521, compared to an increase of 0.033 for money income and 0.029 for the LIMEW. The Gini coefficient for money income adjusted for government transfers rose, in absolute terms, by 0.033, while that for money income adjusted for public consumption rose by 0.027 and that for money income adjusted for household production rose by 0.028. The Gini coefficient for after-tax money income, however, increased in absolute terms by only 0.022.

Concluding Comments

The picture of economic well-being is crucially dependent on the yardstick chosen for measurement. Official measures, such as money income and the Census Bureau's extended income, are meant to reflect the household's command over commodities. For the benchmark years studied here, the official measures understate the growth in such command. They also understate the level of inequality in the distribution of command over commodities.

A complete measure of economic well-being should include the access to goods and services available to the household via public provisioning and household production, in addition to command over commodities. The LIMEW is such a measure. For the benchmark years studied here, the LIMEW for the median household grew faster than the official measures. However, we do not know whether the 1990s constitute an acceleration or slowdown in the growth of the LIMEW relative to earlier periods, especially from 1947 to 1973. We hope to close this gap in our future research. The distribution of economic well-being appears to be more unequal, as gauged by the LIMEW, than extended income, the most comprehensive official measure.

Intergroup differences in economic well-being are mainly lower in terms of the LIMEW than in terms of money income. Disparities between the two measures (at the mean) for different demographic groups in 2000 are shown in Figure 7. The groupings most

sensitive to the measure of well-being used are those based on household income as well as on the age, educational level, and marital status of the householder. The racial gap in economic welfare is much lower according to the LIMEW than money income. In each group, the category considered to be the least well off, according to money income, appears to gain the most in terms of the LIMEW.

We emphasize that disparities are reduced, but not extinguished, by evaluating well-being using the LIMEW. We also note that comparisons of the LIMEW to conventional poverty thresholds is inappropriate, because the thresholds in question do not include such corresponding “needs” as schooling or parental care. Our finding that certain groups appear relatively less worse off according to the LIMEW than money income is an indication of the importance of various components that are excluded or inadequately included in the official measures of well-being. The elderly, for example, appear less worse off because they have the highest imputed income from wealth and the only positive net government expenditures among all age groups.

Wealth inequality contributes a great deal to economic inequality and its effect was greater in 2000 than in 1989, as a result of the rising concentration of financial wealth. Policies to promote net worth among those mired in debt or without assets, along with reasonable taxation of high amounts of financial wealth, are needed to mitigate the socially undesirable effects of wealth inequality. Marginal reductions in wealth inequality brought about by the bursting of asset prices—as it seems to have happened since 2000—cannot substitute for active policies.

Government spending on behalf of households (transfers and public consumption) and taxation play an important progressive role by reducing inequality. The effectiveness of this type of intervention in reducing inequality, however, appears to be lower in 2000 than in 1989. Notably, mean net government expenditures (the difference between government spending for households and taxes paid by households) were negative in 2000, but positive in 1989. The trends since 2000—prorich tax cuts, scaling down major discretionary transfer programs, shifting federal budgetary priorities in favor of military

and “homeland security,” and cutting back social expenditures by state and local governments—might have worsened the situation. The accomplishments of popular legislation and struggles that brought about the progressive spending-tax structure will be seriously undermined if the current trends persist.

The reported growth rates in economic well-being between 1989 and 2000 have been accompanied by a comparable increase in the annual hours of total work (sum of paid and household work) performed by the median household. Since the time spent on household work remained constant for the average household, the increase in hours of paid work has increased the pressure on free time. While the average household might be economically better off in 2000 than 1989, it appears to have come at the expense of life-enriching activities and plain relaxation. Government has to actively encourage, by tax and income policies and regulations, workplace arrangements that reduce the painful trade-off between sufficient time for oneself, family, and community, and income.

Several aspects of the issues that relate to well-being require further research and evaluation. We hope that the analysis presented here will stimulate a rethinking of public policies that affect well-being and further academic and policy research about it.

NOTES

1. The two phases of economic expansion, defined here as consecutive quarters of positive real GDP growth, may be dated respectively as 1983:1 to 1990:2 and 1991:2 to 2000:4 (we are ignoring here the latest NIPA revision, which reported a 0.5 percent decline in GDP for 2000:3). This makes the years 1989 and 2000 the last full years before the 1990–91 and 2001 recessions. It may also be noted that the unemployment rate reached its nadir during 1989 and 2000.
2. “Every man is rich or poor according to the degree in which he can afford to enjoy the necessities, conveniences, and amusements of human life.” (Smith [1776] 2000).

A contemporary discussion of the notion of necessities and conveniences of life may be found in Gram (1998) and Walsh (2000).

3. The term “nonmarket” is used here in the sense that the activities in question do not result in the production of a good or service that can be sold by the household in the market, i.e., a commodity.

4. For details regarding the ADS, see Appendix.

5. The ADS does not collect any information on household wealth. Therefore, we integrated information from the Federal Reserve Board’s Surveys of Consumer Finances into the ADS in order to estimate income from wealth. Details regarding the integration can be found in the Appendix.

6. In the ADS, rental income can be income from renting land or buildings (including rent from roomers or boarders), royalties, estates, or trusts.

7. This is consistent with the approach adopted in most national income accounts.

8. The rate of return used in our procedure is real total return—the sum of the change in capital value and income from the asset, adjusted for inflation. For example, for stocks, total real return would be the inflation-adjusted sum of the change in stock prices plus dividend yields.

9. Details regarding the derivation of NIPA benchmarks and distribution procedures among households can be found in the Appendix.

10. For example, in the case of highways we split the expenditures between the business and household sectors using estimates from highway cost allocation studies that split expenditures between vehicle types.

11. Continuing the example of highways in the previous footnote, we distribute total expenditures allocated to the household sector among households on the basis of estimated person-miles traveled. The latter are estimated from household surveys of personal travel.

12. The relevant population may be the entire U.S. civilian, noninstitutionalized population (as in the case of distributing expenditures on public health) or a specific demographic group (e.g., administrative costs of Medicare are distributed among Medicare recipients).

13. Marx had pointed out the asymmetry noted here in his discussion of productive and unproductive labor: “It (i.e., a household dependent on wage income) can only cook meat for itself when it has produced a wage with which to pay for the meat; and it can only keep its furniture and dwellings clean, it can only polish its boots, when it has produced the value of furniture, house rent and boots.”(Marx 1963: 166).
14. The third-party principle is sometimes ambiguous in the case of such personal-care activities as shaving (see Organisation for Economic Co-operation and Development 1995: 11).
15. The ADS does not contain any information on time spent on unpaid activities. Therefore, we integrated information from unofficial surveys conducted on patterns of time use (Robinson and Godbey 2001). Details regarding the integration can be found in the Appendix.
16. See, for example, the discussion in Chadeau (1992), and Goldschmidt-Clermont (1993).
17. The adjustment for inflation was made using the BLS Consumer Price Index (all urban consumers) with 1982–84 as the base year.
18. As noted before, base money income and employer contributions to health insurance are those reported in the ADS.
19. The nonwhite group includes blacks, Hispanics, Asians, and other races.
20. According to the official measure, faster growth in base money income for nonwhites was the predominant factor in reducing the racial gap, while it played a smaller role than imputed income from wealth and household production in the case of the LIMEW.
21. We employed the three-parameter equivalence scale currently used in the Census Bureau’s experimental poverty measures (Short 2001, Technical Appendix [Table A-2]). For single parents, the scale is $(A+0.8+0.5*(C-1))^{0.7}$, while for all other households, it is $(A+0.5*C)^{0.7}$, where A is the number of adults and C is the number of children.
22. The Gini coefficient is an index that ranges from zero (perfect equality) to one (maximal inequality).

23. This measure has the nice feature of enabling the researcher to adjust the weight on different parts of the distribution by changing the inequality aversion parameter.

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Appendix: Sources and Methods

Introduction

Our empirical strategy is to begin with the public-use datafiles developed by the U.S. Bureau of the Census from the Current Population Survey's Annual Demographic Supplement (ADS). In 1989 this survey included 59,941 households and in 2000 it included 78,054 households. The survey is the most comprehensive source of annual information regarding household income, housing tenure, receipt of noncash transfers, and a number of key demographic characteristics of U.S. households. The ADS, however, contains either partial or no information on five of seven components of the LIMEW—imputed income from wealth, government transfers, public consumption, taxes, and household production. The calculation of the LIMEW, therefore, involves a set of imputations based on additional information from such sources as household surveys on wealth and the national income and product accounts (NIPA).

The component of the LIMEW that is also included in the official definition of money income is called "base money income"—the amount of money income remaining

after deducting property income (the sum of dividends, interest, and rent) and government cash transfers, as reported in the ADS. Roughly 95 percent of base money income consists of earnings.²⁴ Another component of the LIMEW that is taken directly from the ADS (though not included in the official measure of income) is the imputed value of employer contributions to health insurance. Our estimation of the remaining five components of the LIMEW is briefly described below.

Imputed Income from Wealth

Our data source for household wealth is the Survey of Consumer Finances (SCF), conducted by the Federal Reserve Board in 1989 and 2001. The survey collected data for 3,134 and 4,442 households, respectively. We use marketable wealth (or net worth) as our wealth concept, which is defined as the current value of all marketable or fungible assets less the current value of debts. Total assets are the sum of (1) the gross value of owner-occupied housing; (2) other real estate owned by the household; (3) cash and demand deposits; (4) time and savings deposits, certificates of deposit, and money market accounts; (5) government bonds, corporate bonds, foreign bonds, and other financial securities; (6) the cash surrender value of life insurance plans; (7) the cash surrender value of pension plans, including IRAs, Keogh, and 401(k) plans; (8) corporate stock and mutual funds; (9) net equity in unincorporated businesses; and (10) equity in trust funds. Total liabilities are the sum of mortgage debt, consumer debt (including auto loans), and other debt.

Home and nonhome wealth are treated separately in the imputation process. In the case of home wealth, imputed rent is the replacement cost of services derived from owner-occupied housing. We estimate this amount by distributing the total amount of imputed rent on nonfarm, owner-occupied housing in the GDP²⁵ to homeowners in the SCF based on the (gross) value of their houses. In the case of nonhome wealth, we estimate the constant lifetime annuity flow generated by each nonhome wealth component using average total real rates of return for each component from 1960 to 2000. In the next step we calculate the weighted sum of the annuity flows for each household with the portfolio shares of the components serving as weights. The

annuity amount calculated is such that nonhome wealth is exhausted at the end of the wealth-holder's life.²⁶

Following our estimation of imputed rents and annuities from nonhome wealth using the SCF, we assign these estimates by statistical matching to the households in the ADS. Each household record in the SCF is matched with a household record in the ADS, where a match represents a similar unit. The strata variables used in the matching procedure are race of the household head (white versus nonwhite), homeownership status of the household (owner or buyer versus renter), family type (married couple, single male, or single female), and age of the household head (age differences within a range of two, five, and ten or more years). Within these strata, records are matched by minimizing a distance function based on education and occupation of the household head and total income and size of the household. The weights of the distance function are the coefficient estimates from an OLS regression of net worth that includes, as regressors, all of the variables mentioned above.

Government Transfers

Government transfers in the LIMEW are “NIPA consistent,” in the sense that, in aggregate, they are equal to the appropriate NIPA benchmarks. The latter are derived from NIPA table 3.12, “Government social benefits,” by adjusting for differences in definition and coverage. These adjustments are made for old age, survivors and disability insurance, unemployment insurance, Supplemental Security Income, veterans' payments, workers' compensation, and the cash-component of public assistance on the basis of estimates in Roemer (2000). Adjustments are also made for NIPA expenditures on Medicare and Medicaid to exclude expenditures on institutionalized recipients based on administrative data.²⁷

Transfers for which actual or imputed amounts are reported in the ADS are aggregated across recipients and compared against the benchmarks.²⁸ Any discrepancy between the ADS total and the NIPA benchmark for a given transfer payment is distributed across recipients according to the distribution of that transfer

payment in the ADS. This procedure was chosen to avoid changing the distribution of transfers among recipients identified in the ADS, as a result of the NIPA adjustment, rather than to reflect any assumptions about misreporting in the survey.²⁹

Transfers for which there are no actual or imputed amounts reported in the ADS can be divided into two categories in 2000: those where recipients are identified in the ADS itself, and those where we imputed reciprocity. The first category consists of the noncash component of public assistance;³⁰ the Women, Infants, and Children (WIC) program; and employment and training. Noncash public assistance is distributed across households according to the number of “cases” per household, which is equal to the sum of those reporting cash public assistance, of children receiving publicly assisted childcare, and of those reporting receipt of transportation assistance.

Expenditures on WIC are distributed equally among the recipients. Expenditures on employment and training are distributed equally among those receiving job training or attending school to get the General Equivalency Diploma (GED). The second category consists of military-related transfers (veterans' life insurance, medical payments for retired and active armed forces personnel and their dependents at nonmilitary facilities), and payments to nonprofit institutions. Potential beneficiaries from military-related transfers are identified using demographic information from the ADS, and these expenditures are divided equally among the beneficiaries. Payments to nonprofit institutions are assumed to be incurred on behalf of the entire population and distributed on an equal per capita basis.

All of the transfers discussed in the previous paragraph—with the exception of the noncash component of public assistance, which did not exist at the time—had to be distributed on the basis of imputed reciprocity in 1989, because the survey did not ask questions that identified recipients. In addition to the second category discussed above, for which the same procedure was followed in 1989 and 2000, this entailed imputing reciprocity for the WIC program, and employment and training. We approximated the federal eligibility criteria to identify the potential WIC beneficiaries (families with income up to 185 percent of the poverty-line and with children under 6

years of age) and divided the expenditures equally among them. Expenditures on employment and training were divided equally among adults receiving cash public assistance and those in training, but wanting a regular job.

Expenditures on WIC, payments to nonprofit institutions, and payments for medical services for retired military personnel and their dependents at nonmilitary facilities are not reported separately in NIPA table 3.12. We estimate these amounts using unpublished information from the Bureau of Economic Analysis³¹ and reports from the Congressional Research Service.³²

Public Consumption

Estimates of public consumption by households were constructed in three steps: (1) obtaining total expenditures by function and level of government; (2) allocating total expenditures between the household sector and other sectors of the economy; and (3) distributing expenditures allocated to the household sector among households.

Expenditure by Function and Level of Government

The expenditure category used here is the same as that on the product side of the NIPA: government consumption expenditures and gross investment. In order to allocate and distribute government expenditures among households, it is essential to group expenditures according to purpose. We have adopted the functional classification given in NIPA table 3.15, “Government consumption expenditures and gross investment by function,” with minor modifications.

Since the disparities in state and local expenditures across the states could possibly effect the distribution of economic well-being, we distributed the NIPA aggregate of state and local expenditures among the states. This distribution was accomplished using the Annual Survey of Government Finances conducted by the U.S. Bureau of the Census in 1989 and 2000. We used the Annual Survey of Government Finances (ASGF) to determine the proportions in which the total state and local expenditures given in the NIPA for each function (such as education) are divided among the states.

Care was taken to ensure that the expenditure concept formed from the ASGF and the groupings of the ASGF functions conform as closely as possible to the NIPA expenditure and function concepts.

Allocation of Expenditures to the Household Sector

Our data allowed us to construct a schema of 44 functions by level of government (federal versus state and local). Allocation of expenditures between the household and other sectors was based on a set of assumptions regarding these functions. Table A.1 groups the functions into nine major functions and summarizes the results.

Table A.1. Government consumption and gross investment expenditures by function ((in billions of current dollars): total expenditure and the amount and share (in percent) allocated to the household sector

Function	1989			2000		
	Total	Allocated	Household share	Total	Allocated	Household share
General public service	88.90	0.00	0.0%	172.50	0.00	0.0%
National defense	363.20	0.00	0.0%	374.90	0.00	0.0%
Public order and safety	92.00	24.55	26.7%	203.20	53.50	26.3%
Economic affairs	161.70	92.15	57.0%	278.90	166.24	59.6%
Housing and Community Services	23.60	16.41	69.5%	28.10	19.34	68.8%
Health	57.50	57.50	100.0%	92.70	92.70	100.0%
Recreation and culture	13.30	13.30	100.0%	25.20	25.20	100.0%
Education	270.80	245.96	90.8%	511.70	469.42	91.7%
Income security	29.20	29.20	100.0%	63.80	63.80	100.0%
Total government expenditures	1100.20	479.07	43.5%	1751.00	890.21	50.8%

Source: Authors' calculations.

Two sets of assumptions are at work here. One involves designating a particular function involving activities that do not expand the potential amenities available to the household sector or that only expand the household sector's potential amenities. General public service, national defense, and law courts and prisons (under public order and safety) are prominent examples of functions that are assumed to provide no directly usable services to the household sector. By contrast, functions such as

elementary and secondary education (under education), or income security, are assumed to directly expand amenities only to the household sector.

The second set of assumptions concerns functions that can potentially serve the household and nonhousehold sectors. Costs incurred in the performance of these functions (under economic affairs and housing and community services) are allocated to the household sector in accordance with the extent that they are “responsible” in generating such costs. Our judgment regarding the extent of responsibility is based on the available empirical information, as much as possible. A prominent example of this type of function is highways (included under economic affairs), where approximately 60 percent of expenditures were estimated to occur on behalf of households. Our estimate was based on the 1997 Federal Highway Administration study that calculated costs per mile and miles traveled by vehicle type.

Distribution of Allocated Expenditures among Households

After determining government expenditures allocated to the household sector (i.e., “public consumption”) by function, we distributed them among households. We attempted to follow the same principles of direct usage and cost responsibility that were employed in splitting total government expenditures between the household and nonhousehold sectors. Various assumptions were necessary, since household-level information for a number of variables was not available in the ADS.

Two major categories of public consumption are distributed among households: those distributed equally across persons and those distributed according to household-level, or person-level, characteristics. The categories and their share of total public consumption are shown in Table A.2, which also shows the largest individual functions (in terms of expenditures) and their share of total expenditures.

Table A.2. Classification of public consumption expenditures according to distribution method: total expenditure (in billions of current dollars) and share (in percent) of total expenditure allocated to the household sector.

	1989		2000	
	Amount	Share	Amount	Share
Public consumption	479.07	100.0%	890.21	100.0%
A. Distributed equally	131.53	27.5%	240.58	27.0%
Police and Fire	24.55	4.9%	53.50	5.7%
Public health and hospitals	54.00	11.3%	88.74	10.0%
Other	52.98	11.1%	98.34	11.0%
B. Distributed by characteristics	347.54	72.5%	649.63	73.0%
Highways	43.83	9.1%	77.35	8.7%
Elementary and secondary education	204.70	42.7%	397.20	44.6%
Other	99.01	20.7%	175.08	19.7%

Source: Authors' calculations.

The first class of expenditures pertains to functions that we consider, at least in principle, to be equally available to all individuals. The actual utilization patterns of these public amenities, of course, are bound to vary according to a number of individual or household characteristics. We consider these functions, however, as a universal in-kind benefit in contrast to, for example, Medicare or Food Stamps, which are only available to specific segments of the population. The second class of expenditures—those distributed according to characteristics—account for the bulk of public consumption (nearly three-quarters in 1989 and 2000). The person-level or household-level characteristics used in the distribution procedures, and their corresponding functions, are listed below:

- *Amount and type of income*: agriculture.
- *Type of income received (including receipt of noncash transfers)*: public housing, administrative costs of Medicare, disability, retirement income (Social Security), welfare and social services, and unemployment compensation.
- *Shares in consumption expenditures on relevant items*: energy, pollution control and abatement, postal service, liquor stores, water supply, sewerage and sanitation.

- *Enrollment in public educational institutions*: education.
- *Patterns of vehicle ownership and transportation usage*: transportation and parking.
- *Employment status*: occupational safety and health.

Information on the type and amount of income, as well as the employment status of individuals, is obtained directly from the ADS. All other characteristics were imputed to individuals or households in the ADS sample from information gathered from external sources.³³

Taxes

The estimated household tax burden in the LIMEW consists of federal and state individual income taxes, property taxes on owner-occupied housing, payroll taxes (employee portion), and state and local consumption taxes (excise and sales). All taxes, apart from consumption taxes, have imputed values in the ADS (estimated by the Census Bureau) and were aligned with their NIPA counterparts.³⁵ Alignment was done by distributing the discrepancy between the NIPA and ADS aggregate for each tax among households according to the share of each household in the ADS aggregate.

State and local consumption taxes are calculated on the basis of estimates published by the Institute on Taxation and Economic Policy (McIntyre, et al. 2003). The publication contains average state tax rates for “General Sales–Individuals” and “Other Sales and Excise–Individuals” differentiated for households in each quintile of the household income distribution and in selected portions of the top quintile. These tax rates were estimated using 2000 income levels and 2002 tax laws. We assigned the average tax rates in 2000 to households in the corresponding positions in the ADS household income distribution. The publication also contains the estimated change in the combined sales and excise average tax rates by state and income quintile between 1989 and 2000. These estimates did not distinguish between taxes for individuals and businesses. Since separate estimates were not available for the two tax rates, we calculated the average tax rates for 1989 by assuming that changes in the sales and

excise tax rates were the same and equal to the change in their combined average tax rate.

The resulting tax aggregates were lower than the NIPA counterparts published in NIPA table 3.5. Since we had no independent estimate of the household shares in the NIPA totals, it was impossible to align the household consumption tax burden with any portion of the NIPA. Even if a household portion estimate of indirect business taxes could be estimated, an alignment would be problematic, because the 2000 tax rates were calculated on the basis of 2002 tax laws.

Household Production

The most reliable microdata sources for assessing household production are time-use surveys that use the time-diary method (Robinson and Godbey 2001, pp. 58–67). In principle, the time-diary method records the entire list of activities performed by the respondent over a 24-hour period, including the duration of each activity. Codes similar to the classification of occupations were developed to classify each activity. The surveys also collected demographic and economic information from the respondents.

Our data sources for household production are the Americans' Use of Time Project (AUTP) conducted in 1985 and the Family Interaction, Social Capital, and Trends in Time Use Study (FISCT) conducted during the 1998–99 period. Both surveys were undertaken at the Survey Research Center, University of Maryland. These surveys used the time-diary method and collected time use, demographic, and economic data for 5,358 and 1,151 individuals, respectively. The list of activities allowed us to estimate the total time spent on meal preparation and cleanup, housecleaning, outdoors chores, laundry, ironing, clothes care, home repair, baby care, childcare, shopping for food, traveling to and from food shopping, personal care, medical care, family financial activities, and sleeping, as well as time spent attending school, classes, seminars, special interest group meetings, religious meetings, sports events, and other social activities.

Our imputations are based on the AOTP data for 1989 and the FISCT data for 2000. We statistically matched each adult record in the time-use survey to an adult record in the ADS. Men and women were matched separately, because the effects of match variables on the number of hours spent on household production vary significantly by sex. The strata variables used in the matching procedure are the dummy variables for being employed and for being a parent. Within these strata we match records by minimizing a distance function based on the number of children under five and dummy variables for marital status, unemployment, age, education, and retirement. We also include a dummy variable for women who are homemakers. The weights of the match variables in the distance function are the coefficient estimates in a Tobit regression of weekly hours of housework on all the variables listed above. Weekly hours were calculated by multiplying the reported daily hours by 7 and applying “day weights” available from the time-use surveys to adjust the reported hours for the day of the week that the respondent filled out the time diary.

The matching of records allowed us to impute weekly hours of housework and weekly hours of paid work to adults in the ADS. Annual hours of housework were calculated by multiplying the weekly hours by 52. To calculate the annual value of household production, we used the average hourly wage rate (in 2000 dollars) for private household employees, which was calculated from the annual file that was created by merging the Current Population Survey’s monthly outgoing rotations files. The wage rate was defined as usual weekly earnings divided by usual weekly hours of work.

The value of household production was estimated using a variant of the standard replacement cost method. Our rationale for the modification is that using the same replacement cost for every household masks the real differences across individuals and households in terms of the quality and efficiency of housework. Research suggests that these differences are correlated with household-level characteristics (such as the level of household wealth) and characteristics of household members

(such as the influence of parental education on childrearing practices, e.g., Yeung and Stafford 2003). We attempted to capture these differences by constructing a performance index for each adult in the ADS that consists of years of education, household income, and time availability for housework.³⁴ Ideally, the performance index must be constructed by combining these variables (and perhaps other relevant ones) and using weights reflecting their relative importance. Due to the absence of such information, we weighted them equally in the performance index. The hourly wage rate of private household employees was multiplied by this index to derive an estimate of hourly replacement cost for each adult's housework. The annual value of household production for each adult was then calculated as the product of the individual's hourly replacement cost and annual hours of housework. Finally, the imputed value of household production at the household level was derived by summing the imputed values for all adults in the household.

NOTES

24. In 2000 the major components of base money income were the following (shares in base money income are shown in brackets): wages and salaries (88.1%), self-employment income (6.8%), private pensions (3.8%), and other money income (1.4%). The composition is also very much the same in 1989.

25. NIPA table 8.21, line 172.

26. In the case of households with multiple adults, life expectancy is the maximum of life expectancies of the head of household and spouse. Information on remaining lifetimes is taken from the tables on vital statistics (U.S. Census Bureau 2002, Table 93).

27. For 2000, the shares of expenditures on nursing facilities in total program payments reported in the table "CMS Benefit Payments by Major Program Service Categories: Fiscal Year 2000," published by Centers for Medicare and Medicaid in their 2002 Data Compendium, were assumed to be the shares of NIPA expenditures on institutionalized recipients. Available on the web at <http://www.cms.gov/researchers/pubs/datacompendium> (accessed on June 15, 2003).

For 1989, the same shares were assumed to be, respectively, the share of reimbursements for skilled nursing services in total reimbursements for Medicare, and the share of payments for skilled nursing facilities and intermediate care facilities for the mentally retarded in total Medicaid payments (U.S. Census Bureau 1992, Tables 145 and 150).

28. The only exception to this procedure was educational assistance, for which we lacked information to split the NIPA amount between recipients residing in households and student-housing (such as dormitories). Hence, no modification was made to the amount reported in the ADS.

29. In the case of Medicaid and Medicare, this procedure involves altering the “person market value” (the average government cost) in such a manner that the relative values remain the same among risk classes.

30. The noncash component of public assistance in 2000 was assumed to be equal to the share of total expenditure on “non-assistance” in fiscal year 2000 reported in the 2001 TANF Annual Report to the U.S. Congress (U.S. Department of Health and Human Service, Administration for Children and Families, Office of Planning, Research and Evaluation. “Temporary Assistance for Needy Families Program [TANF]: Fourth Annual Report to the Congress,” April 2002, Table 2:14). Available at <http://www.acf.dhhs.gov/programs/opre/ar2001/indexar.htm> (accessed on May 2, 2002).

31. We are grateful to Michelle Robinson of the BEA for her generous help.

32. Burke, Vee. (2001, 1991). *Cash and Noncash Benefits for Persons with Limited Income: Eligibility Rules, Recipient and Expenditure Data FY1998–FY2000; FY1988–FY1990*. Congressional Research Service: Washington, D.C.

33. A full discussion of the imputation procedures is available in the unpublished manuscript by Edward N. Wolff and Ajit Zacharias, “The Levy Institute Measure of Economic Well-Being,” October 2002.

34. NIPA aggregates for individual income taxes are from NIPA table 3.4. This table does not have a separate total for state individual income taxes. We assumed that the share of the latter in the combined state and local total is the same as that observed in

the ASGF data where separate totals are available. NIPA aggregate for property taxes on owner-occupied housing is from NIPA table 8.21, line 122. Finally, the NIPA aggregate for payroll taxes paid by employees is from NIPA table 3.14.

35. Years of education and household income are available in the ADS. We calculated time available for housework by deducting weekly hours of rest (assumed to be 56) and usual weekly hours of work from the total hours in a week. Although the latter variable is available in the ADS, we used the imputed amount from the time-use survey in the calculation to ensure that the weekly hours spent on all activities do not exceed the total hours in a week.

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Table 1. Household economic well-being (in 2000 dollars)

	Median			Mean		
	1989	2000	Change	1989	2000	Change
LIMEW						
Base money income ¹	61,830	68,529	11%	77,864	91,238	17%
Employer-provided health insurance	34,718	36,000	4%	41,921	49,309	18%
Imputed rent and annuity	1,300	1,528	18%	1,879	2,120	13%
Net government expenditure	2,796	2,921	4%	15,520	21,330	37%
Government transfers	655	680	4%	991	-233	-123%
Public consumption	382	300	-21%	6,939	8,405	21%
Taxes	3,279	3,452	5%	7,140	8,242	15%
	-8,341	-9,286	11%	-13,088	-16,880	29%
Household production	12,876	12,949	1%	17,553	18,713	7%
Memo items:						
ADS money income	40,167	42,000	5%	49,570	57,140	15%
Extended Income (Census Bureau) ²	39,600	42,652	8%	46,194	53,372	16%
Ratio of LIMEW to ADS money income	1.54	1.63	6%	1.57	1.60	2%
Ratio of LIMEW to Extended Income	1.56	1.61	3%	1.69	1.71	1%
Total annual work hours ³	4,401	4,727	7%	4,677	4,982	7%

1. ADS money income less government cash transfers less property income (rent, dividends and interest)

2. The broadest definition of income used by Census Bureau, MI - TX + NC + HE: Money income plus realized net capital gains, less federal and state income taxes, less payroll taxes, plus the value of employer-provided health benefits and all noncash transfers, plus the annual benefits of converting one's home equity into an annuity, net of property taxes. Source: Authors' calculations based on the definition in DeNavas-Walt, Carmen et al. (2003).

3. The sum of paid work hours and unpaid housework hours. Housework consists of core production such as cooking, cleaning, distribution activities such as shopping and childcare activities.

Table 1a. Composition of estimated components of LIMEW

Components of LIMEW	Mean (in 2000 dollars)			Shares (in percent)		
	1989	2000	Change	1989	2000	Change
Imputed income from wealth	15,520	21,330	37%	100	100	0
Imputed rent	5,030	5,743	14%	32	27	-5
Annuities	10,490	15,586	49%	68	73	5
Government transfers	6,939	8,405	21%	100	100	0
Social Security	3,299	3,589	9%	48	43	-5
Medicare	1,402	1,897	35%	20	23	2
Medicaid	726	1,412	94%	10	17	6
All others	1,512	1,507	0%	22	18	-4
Public consumption	7,140	8,242	15%	100	100	0
Police and Fire	361	489	36%	5	6	1
Public Health and Hospitals	794	811	2%	11	10	-1
Education	3,508	4,171	19%	49	51	1
Highways	651	714	10%	9	9	0
All others	1,827	2,057	13%	26	25	-1
Taxes	13,088	16,880	29%	100	100	0
Federal income taxes	6,705	9,231	38%	51	55	3
State income taxes	1,382	1,853	34%	11	11	0
Payroll taxes	2,847	3,311	16%	22	20	-2
State consumption taxes	1,269	1,578	24%	10	9	0
Property taxes	885	906	2%	7	5	-1
Household production	17,553	18,713	7%	100	100	0
Core	10,843	10,614	-2%	62	57	-5
Distribution	4,567	3,621	-21%	26	19	-7
Childcare	2,161	4,475	107%	12	24	12
Memo items:						
<i>Weekly hours of housework</i>	45.8	46.2	1%	100	100	0
<i>Core</i>	28.5	26.6	-7%	62	58	-5
<i>Distribution</i>	11.7	8.7	-25%	26	19	-7
<i>Childcare</i>	5.5	10.9	96%	12	23	11

Table 2: LIMEW and its major components by race groups: 1989 and 2000 (in thousands of 2000 dollars).									
	1989			2000			Percentage Change, 1989-2000		
	(1)	(2)	Ratio (2)/(1)	(1)	(2)	Ratio (2)/(1)	All	White	Non- white
	White	Non- white		White	Non- white				
<u>Mean Values</u>									
Base Income	44.0	33.9	0.77	52.1	41.6	0.80	49.3	18	23
Income from Wealth	18.6	3.9	0.21	24.9	11.4	0.46	21.3	34	192
Net Govt. Expenditures	-0.9	8.3	-8.97	-2.7	6.5	-2.45	-0.2	188	-21
Public Consumption	6.5	9.7	1.50	7.3	10.7	1.46	8.2	14	11
Transfers	6.7	7.7	1.15	8.3	8.6	1.03	8.4	24	12
Taxes	14.1	9.2	0.65	18.3	12.8	0.70	16.9	30	40
Household Production	18.1	15.4	0.85	19.0	17.8	0.93	18.7	5	16
LIMEW	81.7	63.1	0.77	95.5	79.3	0.83	91.2	17	26
Money Income	52.4	38.7	0.74	61.0	46.5	0.76	57.1	16	20
<u>Median Values</u>									
Base Income	36.7	26.3	0.72	39.0	30.3	0.78	36.0	6	15
Income from Wealth	4.0	0.1	0.02	4.6	0.2	0.05	2.9	15	148
Net Govt. Expenditures	-0.6	6.3	-10.45	-1.0	5.0	-4.75	0.7	73	-22
Public Consumption	3.1	5.0	1.62	3.2	5.2	1.61	3.5	4	4
Transfers	0.2	1.2	7.45	0.1	1.4	10.42	0.3	-12	24
Taxes	9.3	5.1	0.55	10.4	6.9	0.66	9.3	12	34
Household Production	13.5	10.5	0.78	13.3	11.8	0.88	12.9	-1	12
LIMEW	64.1	54.0	0.84	71.3	61.4	0.86	68.5	11	14
Money Income	43.0	29.2	0.68	45.2	34.4	0.76	42.0	5	18

Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.

Table 3: LIMEW and its major components by marital status: 1989 and 2000 (in thousands of 2000 dollars).

	(1) Family households						(2) Non-family							(1) Family households						(2) Non-family												
	(1A)			(1B)			(1C)			(2A)				(2B)			(1A)			(1B)			(1C)				(2A)			(2B)		
	Married couple families	Female house holder	Male house holder	Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)	Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)	Married couple families	Female house holder	Male house holder		Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)	Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)	Married couple families	Female house holder	Male house holder	Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)		Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)			
Mean Values																																
Base Income	54.3	25.1	43.9	17.7	34.1	1.30	0.60	1.05	0.42	0.81	1.30	0.60	1.05	0.42	0.81	41.9	21	21	12	29	9	18	21	21	12	29	9	18				
Income from Wealth	19.1	7.7	13.1	10.9	13.7	1.23	0.50	0.85	0.70	0.88	1.23	0.50	0.85	0.70	0.88	15.5	43	55	41	35	19	37	43	55	41	35	19	37				
Net Govt. Expenditures	-1.9	15.3	2.7	4.5	-4.4	-1.96	15.41	2.71	4.57	-4.39	-1.96	15.41	2.71	4.57	-4.39	1.0	137	12	56	-25	1	-123	137	12	56	-25	1	-123				
Public Consumption	8.6	11.5	8.3	2.3	2.8	1.20	1.61	1.17	0.33	0.39	1.20	1.61	1.17	0.33	0.39	7.1	18	18	28	12	15	15	18	18	28	12	15	15				
Transfers	6.4	10.3	7.2	8.4	4.3	0.92	1.48	1.03	1.21	0.63	0.92	1.48	1.03	1.21	0.63	6.9	27	15	24	9	31	21	27	15	24	9	31	21				
Taxes	16.9	6.5	12.8	6.2	11.4	1.29	0.50	0.98	0.47	0.87	1.29	0.50	0.98	0.47	0.87	13.1	35	27	20	35	16	29	35	27	20	35	16	29				
Household Production	23.6	13.9	13.4	9.0	6.5	1.34	0.79	0.76	0.52	0.37	1.34	0.79	0.76	0.52	0.37	17.6	20	12	13	10	18	7	20	12	13	10	18	7				
LIMEW	97.5	63.2	74.9	42.8	51.1	1.25	0.81	0.96	0.55	0.66	1.25	0.81	0.96	0.55	0.66	77.9	20	21	19	2	13	17	20	21	19	2	13	17				
Money Income	62.4	31.6	50.5	26.4	39.5	1.26	0.64	1.02	0.53	0.80	1.26	0.64	1.02	0.53	0.80	49.6	20	15	9	17	9	15	20	15	9	17	9	15				
Median Values																																
Base Income	48.6	18.5	37.2	7.0	27.8	1.40	0.53	1.07	0.20	0.80	1.40	0.53	1.07	0.20	0.80	34.7																
Income from Wealth	4.7	0.2	1.5	1.3	0.5	1.68	0.06	0.54	0.46	0.17	1.68	0.06	0.54	0.46	0.17	2.8																
Net Govt. Expenditures	-1.6	12.3	2.3	7.4	-4.0	-2.40	18.77	3.45	11.34	-6.18	-2.40	18.77	3.45	11.34	-6.18	0.7																
Public Consumption	4.1	9.4	4.8	1.8	1.9	1.26	2.86	1.48	0.55	0.58	1.26	2.86	1.48	0.55	0.58	3.3																
Transfers	0.1	6.0	1.0	8.6	0.1	0.38	15.67	2.70	22.58	0.28	0.38	15.67	2.70	22.58	0.28	0.4																
Taxes	12.0	3.5	8.5	2.9	7.3	1.44	0.42	1.02	0.35	0.87	1.44	0.42	1.02	0.35	0.87	8.3																
Household Production	19.4	10.4	8.5	6.7	3.2	1.51	0.81	0.66	0.52	0.25	1.51	0.81	0.66	0.52	0.25	12.9																
LIMEW	80.5	52.8	62.0	32.4	35.8	1.30	0.85	1.00	0.52	0.58	1.30	0.85	1.00	0.52	0.58	61.8																
Money Income	53.6	24.0	42.0	19.0	31.1	1.33	0.60	1.05	0.47	0.77	1.33	0.60	1.05	0.47	0.77	40.2																
2000																																
	(1) Family households						(2) Non-family							(1) Family households						(2) Non-family												
	(1A)			(1B)			(1C)			(2A)				(2B)			(1A)			(1B)			(1C)				(2A)			(2B)		
	Married couple families	Female house holder	Male house holder	Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)	Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)	Married couple families	Female house holder	Male house holder		Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)	Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)	Married couple families	Female house holder	Male house holder	Ratio (1A)/(All)	Ratio (1B)/(All)	Ratio (1C)/(All)		Ratio (2A)/(All)	Ratio (2B)/(All)	Ratio (All)			
Mean Values																																
Base Income	65.8	30.4	49.2	22.9	37.2	1.33	0.62	1.00	0.46	0.75	1.33	0.62	1.00	0.46	0.75	49.3	21	21	12	29	9	18	21	21	12	29	9	18				
Income from Wealth	27.3	12.0	18.5	14.7	16.3	1.28	0.56	0.87	0.69	0.76	1.28	0.56	0.87	0.69	0.76	21.3	43	55	41	35	19	37	43	55	41	35	19	37				
Net Govt. Expenditures	-4.6	17.1	4.2	3.4	-4.4	-19.80	-73.45	-17.99	-14.57	18.93	-19.80	-73.45	-17.99	-14.57	18.93	-0.2	137	12	56	-25	1	-123	137	12	56	-25	1	-123				
Public Consumption	10.1	13.6	10.7	2.6	3.2	1.23	1.65	1.29	0.32	0.39	1.23	1.65	1.29	0.32	0.39	8.2	18	18	28	12	15	15	18	18	28	12	15	15				
Transfers	8.1	11.8	8.9	9.1	5.7	0.96	1.40	1.06	1.08	0.67	0.96	1.40	1.06	1.08	0.67	8.4	27	15	24	9	31	21	27	15	24	9	31	21				
Taxes	22.8	8.3	15.3	8.3	13.2	1.35	0.49	0.91	0.49	0.78	1.35	0.49	0.91	0.49	0.78	16.9	35	27	20	35	16	29	35	27	20	35	16	29				
Household Production	25.7	15.6	15.1	10.0	7.6	1.37	0.83	0.81	0.53	0.41	1.37	0.83	0.81	0.53	0.41	18.7	9	12	13	10	18	7	9	12	13	10	18	7				
LIMEW	117.1	76.6	89.1	51.7	57.9	1.28	0.84	0.98	0.57	0.64	1.28	0.84	0.98	0.57	0.64	91.2	20	21	19	2	13	17	20	21	19	2	13	17				
Money Income	74.7	36.3	55.2	30.9	43.2	1.31	0.64	0.97	0.54	0.76	1.31	0.64	0.97	0.54	0.76	57.1	20	15	9	17	9	15	20	15	9	17	9	15				
Median Values																																
Base Income	54.0	23.5	38.0	11.2	28.0	1.50	0.65	1.06	0.31	0.78	1.50	0.65	1.06	0.31	0.78	36.0	11	27	2	60	1	4	11	27	2	60	1	4				
Income from Wealth	5.3	0.3	0.8	2.1	0.8	1.83	0.10	0.28	0.74	0.27	1.83	0.10	0.28	0.74	0.27	2.9	13	74	-46	67	64	4	13	74	-46	67	64	4				
Net Govt. Expenditures	-2.3	13.1	4.8	5.5	-4.2	-3.35	19.33	7.04	8.16	-6.15	-3.35	19.33	7.04	8.16	-6.15	0.7	45	7	112	-25	3	4	45	7	112	-25	3	4				
Public Consumption	4.6	11.0	7.9	1.9	2.1	1.33	3.19	2.30	0.56	0.61	1.33	3.19	2.30	0.56	0.61	3.5	11	18	64	8	11	5	11	18	64	8	11	5				
Transfers	0.1	5.5	2.1	6.5	0.1	0.41	18.20	7.11	21.62	0.23	0.41	18.20	7.11	21.62	0.23	0.3	-16	-9	107	-25	-36	-21	-16	-9	107	-25	-36	-21				
Taxes	14.2	4.7	9.0	3.5	7.8	1.53	0.51	0.97	0.38	0.84	1.53	0.51	0.97	0.38	0.84	9.3	19	36	6	21	8	11	19	36	6	21	8	11				
Household Production	20.3	11.1	10.2	5.6	4.1	1.57	0.86	0.79	0.43	0.31	1.57	0.86	0.79	0.43	0.31	12.9	5	7	20	-16	27	1	5	7	20	-16	27	1				
LIMEW	90.4	61.4	66.8	36.4	38.7	1.32	0.90	0.97	0.53	0.56	1.32	0.90	0.97	0.53	0.56	68.5	12	16	8	12	8	11	12	16	8	12	8	11				
Money Income	59.3	28.2	42.0	20.2	31.2	1.41	0.67	1.00	0.48	0.74	1.41	0.67	1.00	0.48	0.74	42.0	11	18	0	7	0	5	11	18	0	7	0	5				
Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.																																
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Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.

Table 4: LIMEW and its major components by housing tenure: 1989 and 2000 (in thousands of 2000 dollars).									
1989					2000				
	(1)		(2)		Ratio (2)/(1)	(1)		(2)	
	Own	Rent	Own	Rent		Own	Rent	Own	Rent
Mean Values									
Base Income	48.7	29.8			0.61	57.1	32.9	17	10
Income from Wealth	22.6	2.8			0.12	29.9	3.3	32	19
Net Govt. Expenditures	-1.7	5.8			-3.39	-3.6	6.8	109	17
Public Consumption	7.1	7.2			1.01	8.2	8.4	15	16
Transfers	7.1	6.6			0.92	8.6	8.1	20	22
Taxes	16.0	7.9			0.50	20.4	9.6	27	21
Household Production	20.4	12.4			0.61	21.3	13.4	4	8
LIMEW	92.2	52.2	77.9	57.9	0.57	107.1	57.9	16	11
Money Income	58.1	34.4	49.6	37.2	0.59	66.6	37.2	15	8
Median Values									
Base Income	42.5	24.6			0.58	44.7	25.0	5	2
Income from Wealth	6.3	0.0			0.00	6.6	0.0	4	23
Net Govt. Expenditures	-0.6	2.5			-3.92	-1.1	3.3	81	36
Public Consumption	3.3	3.2			0.96	3.4	3.5	4	9
Transfers	0.2	0.7			3.11	0.1	1.0	-35	57
Taxes	11.0	4.9			0.45	12.1	5.3	10	8
Household Production	15.8	8.4			0.53	15.6	8.2	-1	-2
LIMEW	74.0	44.6	61.8	48.2	0.60	80.5	48.2	9	8
Money Income	49.0	27.8	40.2	28.0	0.57	51.0	28.0	4	1

Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.

Table 6: LIMEW and its major components by income group: 1989 and 2000 (in thousands of 2000 dollars).

	1989					2000					Percentage Change, 1989-2000				
	(1) Less than \$20 K	(2) \$20 K- \$50 K	(3) \$50 K- \$75 K	(4) \$75 K- \$100 K	(5) \$100 K or more	(1) Less than \$20 K	(2) \$20 K- \$50 K	(3) \$50 K- \$75 K	(4) \$75 K- \$100 K	(5) \$100 K or more	(1) Less than \$20 K	(2) \$20 K- \$50 K	(3) \$50 K- \$75 K	(4) \$75 K- \$100 K	(5) \$100 K or more
Mean Values															
Base Income	5.0	27.6	55.3	78.5	122.6	0.12	0.66	1.32	1.87	2.93	41.9	0.66	1.32	1.87	2.93
Income from Wealth	6.5	10.3	16.5	20.9	49.4	0.42	0.66	1.06	1.35	3.18	15.5	0.42	0.66	1.06	1.35
Net Govt. Expenditures	15.9	7.0	-3.0	-38.1	16.05	16.05	7.02	-3.00	-10.83	-38.40	1.0	16.05	7.02	-3.00	-10.83
Public Consumption	6.0	6.6	7.9	8.9	8.6	0.84	0.93	1.10	1.25	1.20	7.1	0.84	0.93	1.10	1.25
Transfers	11.4	7.1	4.2	3.8	3.9	1.64	1.02	0.61	0.55	0.56	6.9	1.64	1.02	0.61	0.55
Taxes	1.5	6.8	15.1	23.5	50.5	0.11	0.52	1.15	1.79	3.86	13.1	0.11	0.52	1.15	1.79
Household Production	9.9	14.4	19.6	25.1	36.4	0.56	0.82	1.12	1.43	2.08	17.6	0.56	0.82	1.12	1.43
LIMEW	37.5	60.6	91.3	117.3	174.8	0.48	0.78	1.17	1.51	2.24	77.9	0.48	0.78	1.17	1.51
Money Income	11.3	34.2	61.4	86.0	140.5	0.23	0.69	1.24	1.74	2.83	49.6	0.23	0.69	1.24	1.74
Median Values															
Base Income	1.5	28.9	56.9	81.2	116.7	0.04	0.83	1.64	2.34	3.36	34.7	0.04	0.83	1.64	2.34
Income from Wealth	0.2	1.6	4.0	7.0	17.3	0.08	0.58	1.43	2.52	6.20	2.8	0.08	0.58	1.43	2.52
Net Govt. Expenditures	14.1	3.4	-6.4	-14.2	-31.5	21.51	5.18	-9.76	-21.76	-48.08	0.7	21.51	5.18	-9.76	-21.76
Public Consumption	2.4	3.0	3.7	4.5	4.4	0.74	0.92	1.13	1.37	1.34	3.3	0.74	0.92	1.13	1.37
Transfers	11.6	0.5	0.1	0.1	0.1	30.29	1.20	0.28	0.31	0.31	0.4	30.29	1.20	0.28	0.31
Taxes	1.0	6.5	14.7	23.2	39.8	0.12	0.78	1.77	2.78	4.77	8.3	0.12	0.78	1.77	2.78
Household Production	7.2	11.0	16.1	21.2	31.1	0.56	0.85	1.25	1.64	2.42	12.9	0.56	0.85	1.25	1.64
LIMEW	30.6	53.1	80.9	106.6	148.2	0.49	0.86	1.31	1.72	2.40	61.8	0.49	0.86	1.31	1.72
Money Income	11.3	34.0	60.8	85.2	127.5	0.28	0.85	1.51	2.12	3.17	40.2	0.28	0.85	1.51	2.12
Mean Values															
Base Income	4.8	27.1	55.2	73.0	150.0	0.10	0.55	1.12	1.59	3.04	49.3	0.10	0.55	1.12	1.59
Income from Wealth	9.2	12.3	14.9	22.2	73.0	0.43	0.58	0.70	1.04	3.42	21.3	0.43	0.58	0.70	1.04
Net Govt. Expenditures	18.3	9.9	-1.2	-12.0	-46.8	-78.75	-42.63	5.26	51.75	200.98	-0.2	18.3	9.9	-1.2	-12.0
Public Consumption	6.4	7.7	9.1	9.8	10.3	0.78	0.94	1.11	1.18	1.25	8.2	0.78	0.94	1.11	1.18
Transfers	13.5	9.2	5.6	4.5	4.8	1.61	1.09	0.67	0.53	0.57	8.4	1.61	1.09	0.67	0.53
Taxes	1.6	7.0	16.0	26.3	61.8	0.09	0.41	0.95	1.56	3.66	16.9	0.09	0.41	0.95	1.56
Household Production	10.9	15.1	19.6	24.0	35.7	0.58	0.81	1.05	1.28	1.91	18.7	0.58	0.81	1.05	1.28
LIMEW	43.5	65.9	91.4	116.0	216.8	0.48	0.72	1.00	1.27	2.38	91.2	0.48	0.72	1.00	1.27
Money Income	11.2	33.7	61.2	85.6	166.5	0.20	0.59	1.07	1.50	2.91	57.1	0.20	0.59	1.07	1.50
Median Values															
Base Income	1.6	28.2	57.0	80.1	120.0	0.04	0.78	1.58	2.23	3.33	36.0	0.04	0.78	1.58	2.23
Income from Wealth	0.4	1.4	3.8	8.3	17.7	0.12	0.49	1.31	2.84	6.07	2.9	0.12	0.49	1.31	2.84
Net Govt. Expenditures	15.7	5.9	-5.7	-15.7	-36.3	23.06	8.62	-8.45	-23.15	-53.38	0.7	15.7	5.9	-5.7	-15.7
Public Consumption	2.5	3.2	4.1	4.6	5.1	0.72	0.94	1.18	1.32	1.47	3.5	0.72	0.94	1.18	1.32
Transfers	12.8	1.2	0.1	0.1	0.1	42.66	4.13	0.28	0.23	0.23	0.3	12.8	1.2	0.1	0.1
Taxes	1.2	6.6	15.5	25.8	46.6	0.13	0.71	1.67	2.78	5.02	9.3	0.13	0.71	1.67	2.78
Household Production	6.4	10.4	15.1	19.2	28.2	0.50	0.80	1.16	1.48	2.16	12.9	0.50	0.80	1.16	1.48
LIMEW	32.9	55.8	82.1	105.0	154.9	0.48	0.81	1.20	1.53	2.26	68.5	0.48	0.81	1.20	1.53
Money Income	11.6	33.0	60.6	85.0	130.8	0.28	0.79	1.44	2.02	3.11	42.0	0.28	0.79	1.44	2.02

Note: LIMEW is the sum of Base Income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance.
Net government expenditures equals public consumption plus transfers less taxes.

Table 7: LIMEW and its major components by education group: 1989 and 2000 (in thousands of 2000 dollars).																									
1989										2000															
(1)		(2)		(3)		(4)		Ratio				(1)		(2)		(3)		(4)		Percentage Change, 1989-2000					
LH		HS		SC		CD		Ratio (1)/All		Ratio (2)/All		Ratio (3)/All		Ratio (4)/All		LH		HS		SC		CD		All	
Mean Values																									
Base Income		19.2	37.6	46.7	68.2	0.46	0.90	1.11	1.63	41.9	20.8	37.1	49.2	81.2	0.42	0.75	1.00	1.65	49.3	8	-1	5	19	18	
Income from Wealth		10.6	11.8	14.9	26.9	0.69	0.76	0.96	1.73	15.5	14.2	14.0	15.8	39.9	0.67	0.66	0.74	1.87	21.3	33	18	6	48	37	
Net Govt. Expenditures		13.9	3.1	-1.5	-13.6	14.02	3.11	-1.48	-13.73	1.0	17.1	5.7	-0.4	-17.8	-73.48	-24.65	1.52	76.29	-0.2	23	86	-76	30	-123	
Public Consumption		6.9	7.2	7.5	7.0	0.96	1.01	1.05	0.98	7.1	8.7	8.1	8.6	7.8	1.06	0.98	1.04	0.94	8.2	27	12	14	11	15	
Transfers		12.4	6.5	5.0	3.7	1.79	0.93	0.72	0.53	6.9	14.5	9.1	7.0	5.2	1.73	1.09	0.84	0.61	8.4	17	42	41	40	21	
Taxes		5.4	10.6	14.0	24.2	0.41	0.81	1.07	1.85	13.1	6.1	11.5	16.0	30.7	0.36	0.68	0.95	1.82	16.9	14	8	14	27	29	
Household Production		11.9	16.0	18.0	25.4	0.68	0.91	1.03	1.45	17.6	11.4	16.2	18.7	26.2	0.61	0.86	1.00	1.40	18.7	-4	1	4	3	7	
LIMEW		56.6	70.5	80.3	109.5	0.73	0.91	1.03	1.41	77.9	64.5	75.0	85.7	132.3	0.71	0.82	0.94	1.45	91.2	14	6	7	21	17	
Money Income		28.0	44.1	53.3	77.3	0.56	0.89	1.08	1.56	49.6	28.8	44.3	56.1	90.6	0.50	0.78	0.98	1.59	57.1	3	0	5	17	15	
Median Values																									
Base Income		9.3	32.8	41.7	61.1	0.27	0.94	1.20	1.76	34.7	11.5	30.0	40.0	64.5	0.32	0.83	1.11	1.79	36.0	24	-8	-4	5	4	
Income from Wealth		1.6	2.3	2.6	5.9	0.59	0.82	0.94	2.10	2.8	0.7	2.2	2.7	7.1	0.26	0.76	0.91	2.43	2.9	-54	-3	2	21	4	
Net Govt. Expenditures		13.6	1.3	-2.2	-9.3	20.76	2.05	-3.43	-14.19	0.7	15.5	4.7	-0.9	-11.0	22.85	6.87	-1.29	-16.21	0.7	14	248	-61	19	4	
Public Consumption		3.0	3.3	3.4	3.3	0.92	1.02	1.05	1.00	3.3	3.5	3.4	3.7	3.3	1.00	0.99	1.06	0.97	3.5	15	2	6	2	5	
Transfers		11.8	0.5	0.1	0.1	31.04	1.25	0.35	0.13	0.4	12.5	1.9	0.1	0.1	41.71	6.42	0.41	0.23	0.3	6	305	-8	33	-21	
Taxes		2.3	7.7	10.4	17.3	0.28	0.92	1.25	2.07	8.3	2.6	7.3	10.2	20.0	0.28	0.79	1.09	2.15	9.3	14	-5	-3	16	11	
Household Production		8.5	12.7	13.8	19.7	0.66	0.98	1.07	1.53	12.9	7.0	12.2	13.4	19.5	0.54	0.94	1.03	1.51	12.9	-18	-3	-3	-1	1	
LIMEW		44.9	59.7	66.5	88.8	0.73	0.97	1.08	1.44	61.8	48.0	62.0	70.5	95.5	0.70	0.90	1.03	1.39	68.5	7	4	6	8	11	
Money Income		20.6	37.6	46.6	66.8	0.51	0.94	1.16	1.66	40.2	20.4	35.4	45.0	71.0	0.48	0.84	1.07	1.69	42.0	1	-6	-3	6	5	

Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.

LH stands for "less than high school", HS for "high school degree", SC for "some college experience", CD for "college degree".

Table 8: LIMEW and its major components by household size: 1989 and 2000 (in thousands of 2000 dollars).

	1989						2000						Percentage Change, 1989-2000		
	(1)	(2)	(3)	Ratio			(1)	(2)	(3)	Ratio			(1)	(2)	(3)
	One	Two	Three or more	Ratio (1)/All	Ratio (2)/All	Ratio (3)/All	One	Two	Three or more	Ratio (1)/All	Ratio (2)/All	Ratio (3)/All	One	Two	Three or more
Mean Values															
Base Income	19.8	40.5	55.6	0.47	0.97	1.33	23.0	48.7	66.6	0.47	0.99	1.35	16	20	20
Income from Wealth	12.8	22.3	12.0	0.83	1.44	0.77	16.5	28.0	19.0	0.77	1.31	0.89	29	25	59
Net Govt. Expenditures	1.9	-0.9	1.9	1.90	-0.96	1.95	1.6	-3.0	0.9	-6.70	12.86	-3.74	-17	215	-55
Public Consumption	2.1	3.7	12.6	0.29	0.52	1.77	2.2	4.1	15.4	0.27	0.50	1.87	7	1	22
Transfers	7.2	8.9	5.4	1.03	1.28	0.77	8.1	10.5	6.9	0.97	1.25	0.82	14	18	28
Taxes	7.3	13.5	16.0	0.56	1.03	1.23	8.8	17.6	21.5	0.52	1.04	1.27	20	30	34
Household Production	7.0	16.9	24.1	0.40	0.96	1.37	7.6	18.4	26.1	0.41	0.98	1.40	9	9	8
LIMEW	42.2	80.4	96.3	0.54	1.03	1.24	49.4	94.0	115.7	0.54	1.03	1.27	17	17	20
Money Income	27.7	51.3	60.8	0.56	1.03	1.23	30.6	59.5	72.2	0.53	1.04	1.26	10	16	19
Median Values															
Base Income	11.5	32.3	49.7	0.33	0.93	1.43	14.0	35.7	54.0	0.39	0.99	1.50	21	10	9
Income from Wealth	1.1	4.6	2.9	0.38	1.66	1.05	1.8	4.7	2.7	0.61	1.61	0.92	68	1	-9
Net Govt. Expenditures	1.1	-1.2	1.6	1.67	-1.77	2.37	0.6	-2.0	2.6	0.81	-2.94	3.89	-50	72	70
Public Consumption	1.7	2.7	10.8	0.53	0.82	3.30	1.9	3.0	13.0	0.54	0.86	3.77	8	11	21
Transfers	2.5	1.0	0.2	6.46	2.61	0.45	0.7	1.0	0.1	2.45	3.25	0.46	-70	-2	-18
Taxes	3.6	8.4	11.6	0.43	1.01	1.39	4.2	10.1	13.1	0.45	1.09	1.41	16	19	13
Household Production	4.5	13.5	19.6	0.35	1.05	1.52	4.3	13.9	20.1	0.33	1.07	1.55	-5	3	3
LIMEW	30.8	61.2	83.6	0.50	0.99	1.35	33.7	68.2	93.1	0.49	1.00	1.36	9	11	11
Money Income	20.5	41.5	52.9	0.51	1.03	1.32	21.3	44.4	57.6	0.51	1.06	1.37	4	7	9

Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.

Table 10: LIMEW and its major components by Census division: 1989 and 2000 (in thousands of 2000 dollars).

	1989																			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		Ratio (1)/All	Ratio (2)/All	Ratio (3)/All	Ratio (4)/All	Ratio (5)/All	Ratio (6)/All	Ratio (7)/All	Ratio (8)/All	Ratio (9)/All	All
Mean Values	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific											
Base Income	51.2	45.8	41.2	38.7	40.6	32.6	37.0	38.4	47.4		1.22	1.09	0.98	0.92	0.97	0.78	0.88	0.92	1.13	41.9
Income from Wealth	16.1	14.4	17.0	20.0	15.9	10.2	11.5	16.9	16.6		1.04	0.93	1.10	1.29	1.03	0.66	0.74	1.09	1.07	15.5
Net Govt. Expenditures	-0.6	0.7	1.1	1.1	1.1	3.7	2.1	2.3	-0.8		-0.61	0.72	1.14	1.07	1.08	3.68	2.12	2.32	-0.82	1.0
Public Consumption	7.9	8.6	6.7	6.9	6.7	5.7	6.5	7.0	7.6		1.10	1.21	0.94	0.97	0.94	0.80	0.91	0.98	1.07	7.1
Transfers	7.6	8.1	7.0	6.3	6.6	6.8	6.0	6.9	6.9		1.09	1.17	1.01	0.91	0.96	0.98	0.86	1.00	0.99	6.9
Taxes	16.0	16.0	12.5	12.2	12.3	8.9	10.3	11.7	15.3		1.23	1.22	0.96	0.93	0.94	0.68	0.79	0.89	1.17	13.1
Household Production	20.0	19.0	17.6	16.5	17.2	15.6	17.5	17.6	16.9		1.14	1.08	1.00	0.94	0.98	0.89	1.00	1.00	0.97	17.6
LIMEW	89.2	82.1	79.2	78.1	76.3	63.5	69.4	76.7	82.2		1.15	1.05	1.02	1.00	0.98	0.81	0.89	0.98	1.06	77.9
Money Income	59.8	54.3	48.8	46.0	48.2	38.8	43.5	46.1	55.4		1.21	1.09	0.98	0.93	0.97	0.78	0.88	0.93	1.12	49.6
Median Values																				
Base Income	44.4	37.8	35.3	32.4	32.9	25.0	29.1	31.9	39.2		1.28	1.09	1.02	0.93	0.95	0.72	0.84	0.92	1.13	34.7
Income from Wealth	4.2	3.2	3.0	3.1	2.8	2.0	2.1	2.8	2.4		1.51	1.16	1.09	1.12	1.00	0.72	0.76	1.00	0.85	2.8
Net Govt. Expenditures	-1.5	1.0	0.1	0.6	1.0	2.8	1.5	1.5	-0.7		-2.24	1.49	0.11	0.86	1.46	4.34	2.29	2.26	-1.05	0.7
Public Consumption	4.0	3.8	2.8	3.0	3.2	2.9	3.0	3.4	3.3		1.21	1.15	0.84	0.92	0.97	0.89	0.91	1.04	1.02	3.3
Transfers	0.1	0.5	0.4	0.3	0.4	1.0	0.4	0.4	0.2		0.38	1.44	1.00	0.77	1.12	2.71	1.03	0.93	0.54	0.4
Taxes	11.4	10.1	8.7	8.0	7.8	5.3	6.3	7.7	9.6		1.36	1.21	1.04	0.96	0.93	0.64	0.75	0.93	1.15	8.3
Household Production	14.5	14.0	13.3	12.1	12.6	11.4	13.0	13.1	11.9		1.12	1.09	1.03	0.94	0.98	0.88	1.01	1.02	0.92	12.9
LIMEW	74.1	68.1	63.1	59.3	59.7	50.8	56.3	59.6	64.9		1.20	1.10	1.02	0.96	0.97	0.82	0.91	0.96	1.05	61.8
Money Income	49.7	44.1	40.8	37.5	38.7	30.4	34.3	37.8	45.1		1.24	1.10	1.02	0.93	0.96	0.76	0.85	0.94	1.12	40.2

Table 10 (continued): LIMEW and its major components by Census division: 1989 and 2000 (in thousands of 2000 dollars).

2000

	(1) New England	(2) Middle Atlantic	(3) East North Central	(4) West North Central	(5) South Atlantic	(6) East South Central	(7) West south Central	(8) Mountain	(9) Pacific	Ratio (1)/All	Ratio (2)/All	Ratio (3)/All	Ratio (4)/All	Ratio (5)/All	Ratio (6)/All	Ratio (7)/All	Ratio (8)/All	Ratio (9)/All	All
Mean Values																			
Base Income	53.9	51.5	49.6	49.3	47.8	41.3	44.3	48.0	54.6	1.09	1.05	1.01	1.00	0.97	0.84	0.90	0.97	1.11	49.3
Income from Wealth	25.4	22.0	19.6	18.3	21.1	27.6	15.1	21.1	24.9	1.19	1.03	0.92	0.86	0.99	1.29	0.71	0.99	1.17	21.3
Net Govt. Expenditures	-0.2	1.3	-0.9	-2.1	-0.4	2.2	1.4	-0.4	-1.9	1.02	-5.44	4.06	9.09	1.72	-9.58	-6.13	1.84	8.17	-0.2
Public Consumption	8.6	9.7	8.3	8.1	7.2	6.8	7.5	7.9	9.4	1.04	1.17	1.01	0.98	0.87	0.83	0.91	0.96	1.14	8.2
Transfers	12.0	10.3	7.4	7.5	8.2	7.9	7.3	8.1	8.2	1.42	1.23	0.88	0.89	0.98	0.94	0.87	0.96	0.98	8.4
Taxes	20.8	18.7	16.7	17.7	15.8	12.5	13.4	16.4	19.5	1.23	1.11	0.99	1.05	0.94	0.74	0.79	0.97	1.15	16.9
Household Production	17.3	18.6	18.3	17.4	18.3	18.1	15.8	17.9	23.6	0.92	0.99	0.98	0.93	0.98	0.97	0.84	0.95	1.26	18.7
LIMEW	98.9	95.7	89.1	85.2	88.5	90.8	78.1	88.5	103.7	1.08	1.05	0.98	0.93	0.97	0.99	0.86	0.97	1.14	91.2
Money Income	62.9	60.1	57.5	57.2	55.6	48.0	51.2	55.3	62.7	1.10	1.05	1.01	1.00	0.97	0.84	0.90	0.97	1.10	57.1
Median Values																			
Base Income	39.6	36.7	38.4	39.0	35.0	29.9	30.6	37.0	40.0	1.10	1.02	1.07	1.08	0.97	0.83	0.85	1.03	1.11	36.0
Income from Wealth	3.3	2.9	3.4	3.7	3.2	2.8	2.1	3.0	2.4	1.12	0.99	1.17	1.27	1.08	0.96	0.72	1.01	0.84	2.9
Net Govt. Expenditures	-0.2	1.7	-0.5	-1.6	0.2	2.2	2.7	0.1	0.5	-0.35	2.50	-0.76	-2.34	0.29	3.23	3.93	0.14	0.73	0.7
Public Consumption	3.8	3.7	3.2	3.4	3.1	3.1	3.2	3.8	4.2	1.10	1.08	0.93	1.00	0.91	0.91	0.92	1.09	1.21	3.5
Transfers	0.4	0.9	0.1	0.1	0.3	1.4	0.5	0.1	0.4	1.25	2.93	0.46	0.41	1.06	4.57	1.61	0.41	1.29	0.3
Taxes	11.0	10.0	10.3	10.7	8.8	6.9	6.8	9.5	10.2	1.18	1.07	1.11	1.15	0.95	0.75	0.73	1.02	1.10	9.3
Household Production	11.6	12.2	13.9	12.8	13.3	12.4	10.2	10.8	16.0	0.89	0.94	1.08	0.99	1.03	0.96	0.79	0.83	1.24	12.9
LIMEW	72.8	72.4	69.9	68.7	66.5	62.2	59.2	66.6	76.5	1.06	1.06	1.02	1.00	0.97	0.91	0.86	0.97	1.12	68.5
Money Income	45.8	43.0	44.0	44.7	41.0	35.0	35.4	42.3	45.7	1.09	1.02	1.05	1.06	0.98	0.83	0.84	1.01	1.09	42.0

Table 10 (continued): LIMEW and its major components by Census division: 1989 and 2000 (in thousands of 2000 dollars).

Percentage Change, 1989-2000										
	(1) New England	(2) Middle Atlantic	(3) East North Central	(4) West North Central	(5) South Atlantic	(6) East South Central	(7) West south Central	(8) Mountain	(9) Pacific	All
Mean Values										
Base Income	5	12	20	28	18	27	20	25	15	18
Income from Wealth	58	53	15	-8	32	171	31	25	50	37
Net Govt. Expenditures	-61	78	-184	-300	-138	-39	-32	-119	133	-123
Public Consumption	9	12	25	17	7	19	15	13	23	15
Transfers	58	28	6	18	24	16	23	16	19	21
Taxes	29	17	33	45	29	41	30	41	27	29
Household Production	-14	-2	4	5	7	16	-10	2	39	7
LIMEW	11	17	12	9	16	43	12	15	26	17
Money Income	5	11	18	24	15	24	18	20	13	15
Median Values										
Base Income	-11	-3	9	21	6	20	5	16	2	4
Income from Wealth	-22	-11	12	19	13	39	-1	6	3	4
Net Govt. Expenditures	-84	75	-798	-381	-79	-23	78	-93	-173	4
Public Consumption	-4	-1	16	14	-1	8	7	10	26	5
Transfers	160	61	-64	-58	-26	33	22	-66	89	-21
Taxes	-4	-1	18	34	13	31	8	22	7	11
Household Production	-20	-13	5	5	6	9	-21	-18	35	1
LIMEW	-2	6	11	16	11	23	5	12	18	11
Money Income	-8	-2	8	19	6	15	3	12	1	5
Note: LIMEW is the sum of Base income, Income from Wealth, Net Government Expenditures, Household Production and employer contributions for health insurance. Net government expenditures equals public consumption plus transfers less taxes.										

Table 12. LIMEW (equivalence scale-adjusted) by household characteristics, 1989 and 2000 (in 2000 dollars)

Characteristic	1989		2000		Percent Change	
	Mean	Median	Mean	Median	Mean	Median
Race						
White	109,852	86,404	130,130	96,716	18.46	11.93
Non-white	74,410	65,949	96,843	75,666	30.15	14.73
Household type						
Married couples	114,118	92,708	138,400	104,344	21.28	12.55
Single males	96,869	70,665	109,017	76,194	12.54	7.82
Single females	82,557	66,061	98,718	74,483	19.58	12.75
Housing tenure						
Own	119,281	93,460	140,689	102,401	17.95	9.57
Rent	72,432	64,266	80,675	69,281	11.38	7.80
Age of householder						
Less than 35	76,516	68,848	86,650	74,812	13.24	8.66
35-50 years	99,663	88,498	113,436	93,563	13.82	5.72
51-64 years	112,959	91,322	136,698	99,764	21.02	9.24
65 or older	129,437	82,462	156,194	98,390	20.67	19.31
Income						
Less than \$20,000	60,422	49,957	71,797	54,911	18.83	9.92
\$20,000-50,000	85,069	71,971	93,556	76,534	9.98	6.34
\$50,000-75,000	116,312	97,849	116,223	100,486	-0.08	2.70
\$75,000-100,000	140,019	121,606	142,623	122,435	1.86	0.68
\$100,000 or more	205,001	166,062	265,890	177,050	29.70	6.62
Education of householder						
Less than high school	76,368	62,013	85,908	64,713	12.49	4.35
High school degree	91,242	77,120	99,648	82,579	9.21	7.08
Some college	104,910	87,064	112,323	91,856	7.07	5.50
College degree	145,157	114,841	177,603	124,528	22.35	8.44
Household size						
One person	91,164	66,421	106,801	72,725	17.15	9.49
Two persons	122,832	93,494	143,494	104,168	16.82	11.42
Three or more persons	93,687	82,269	112,588	91,581	20.18	11.32
Region						
Northeast	107,604	90,161	126,999	95,809	18.02	6.26
Midwest	105,309	81,105	117,043	92,120	11.14	13.58
South	95,143	75,359	115,878	84,798	21.79	12.53
West	106,291	83,021	130,057	94,284	22.36	13.57
Division						
New England	114,349	95,677	131,615	96,824	15.10	1.20
Middle Atlantic	105,269	87,958	125,306	95,468	19.03	8.54
East North Central	104,979	82,872	117,768	92,847	12.18	12.04
West North Central	106,077	77,614	115,369	91,069	8.76	17.34
South Atlantic	102,221	79,828	121,257	89,434	18.62	12.03
East South Central	82,295	67,888	122,578	83,201	48.95	22.56
West South Central	90,860	73,102	102,572	77,378	12.89	5.85
Mountain	103,304	80,442	114,800	86,211	11.13	7.17
Pacific	107,399	84,014	136,463	98,773	27.06	17.57
Residence						
Inside metro areas	105,385	85,316	126,534	94,324	20.07	10.56
Central cities	95,192	76,813	117,515	85,045	23.45	10.72
Suburban	112,738	91,633	131,865	99,562	16.97	8.65
Outside metro areas	92,486	71,714	106,903	81,130	15.59	13.13
All households	102,467	81,622	121,338	90,653	18.42	11.07
Memo Item: Equivalent household money income	65,659	53,655	76,236	57,095	16.11	6.41
Memo Item: Equivalent household extended income	61,519	53,472	71,610	58,366	16.40	9.15

Figure 1: Components of LIMEW, 1989 and 2000 (as a percent of LIMEW)

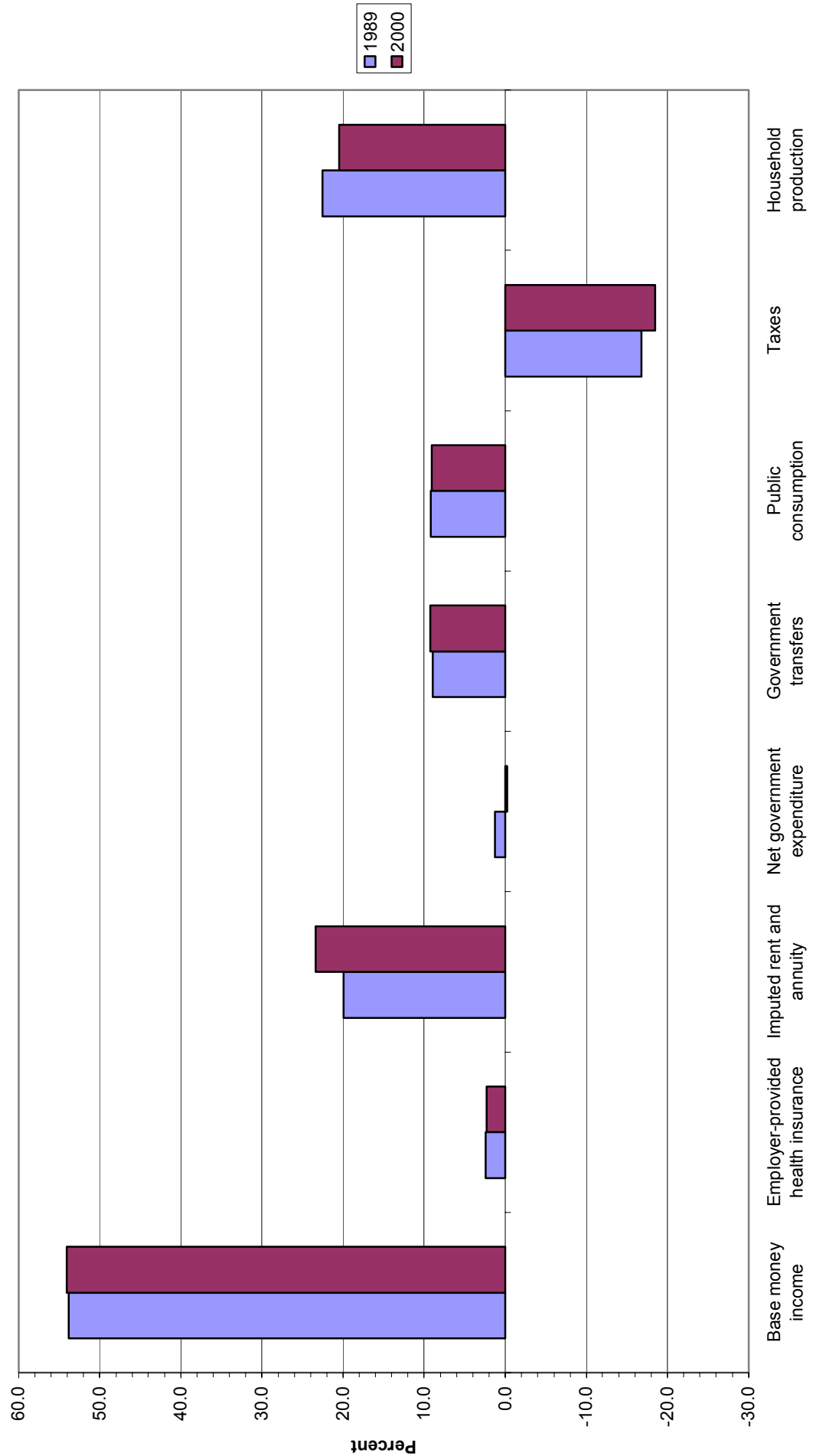


Figure 2. Contributions of components to the percent change in LIMEW: 1989 to 2000

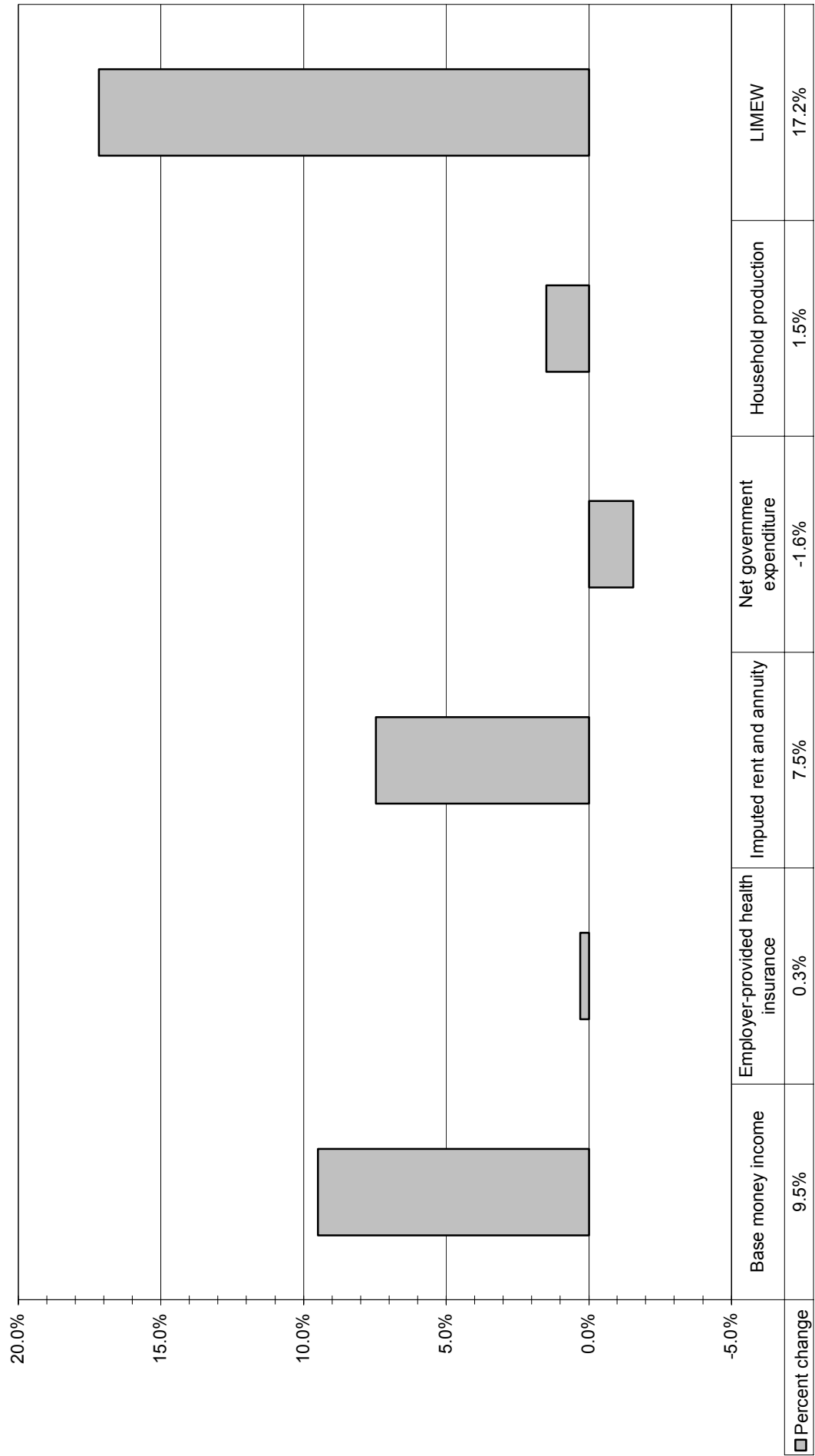
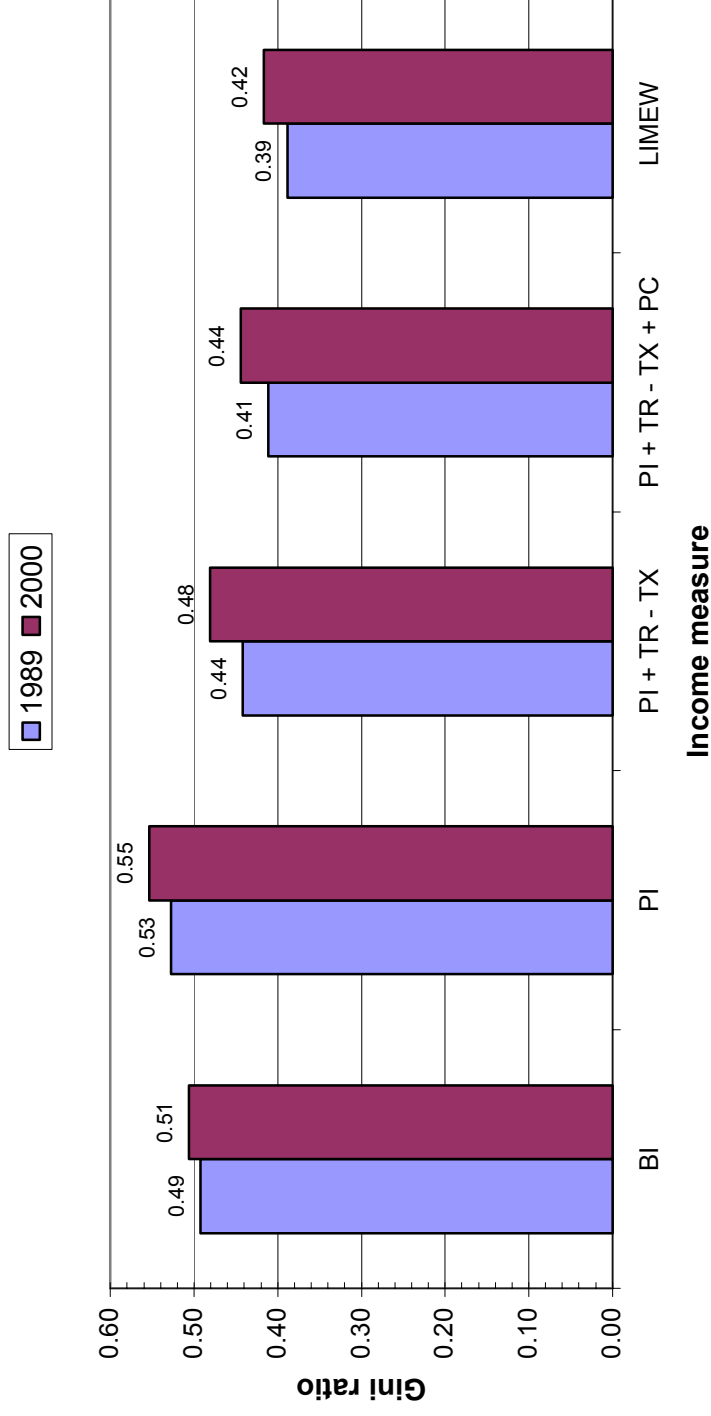
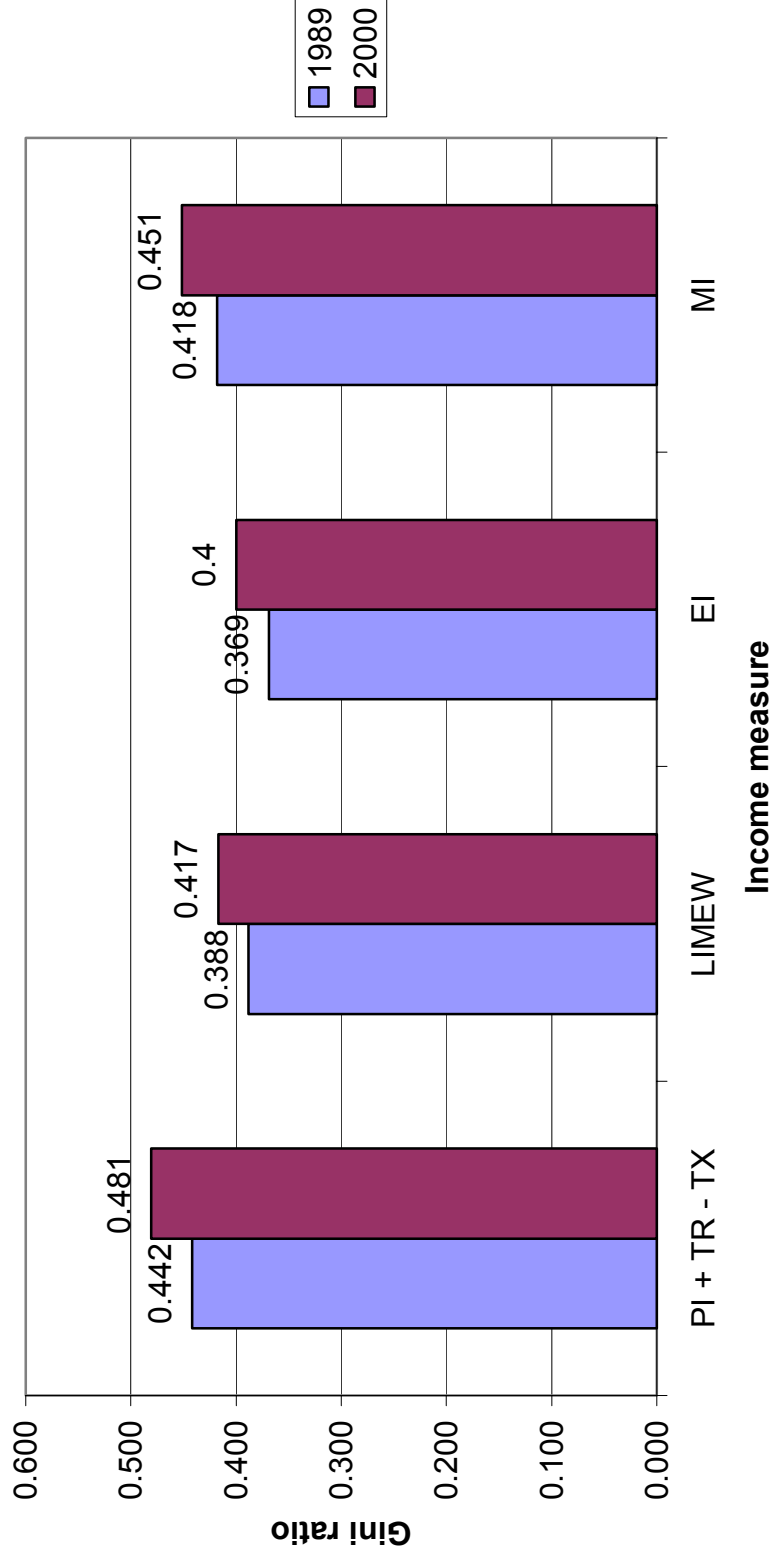


Figure 3. Economic inequality, 1989 and 2000



Note: BI = sum of base money income and employer contributions for health insurance; PI (Primary income) = sum of BI and income from wealth; TR = government transfers; TX = taxes; PC = public consumption; LIMEW = the sum of primary income, net government expenditure (TR - TX + PC) and the value of household production; MI = gross money income.

Figure 4. Economic inequality by income measure, 1989 and 2000



Note: PI = sum of base income, employer contributions for health insurance and income from wealth; TR = government transfers; TX = taxes; PC = public consumption; LIMEW = the sum of primary income, net government expenditure (TR - TX + PC) and the value of household production; EI (Census extended income) = sum of base money income, employer contributions for health insurance, property income, realized capital gains, government transfers net of taxes and return on home equity; MI = gross money income.

Figure 5: Percent change from 1989 to 2000 in money income and LIMEW

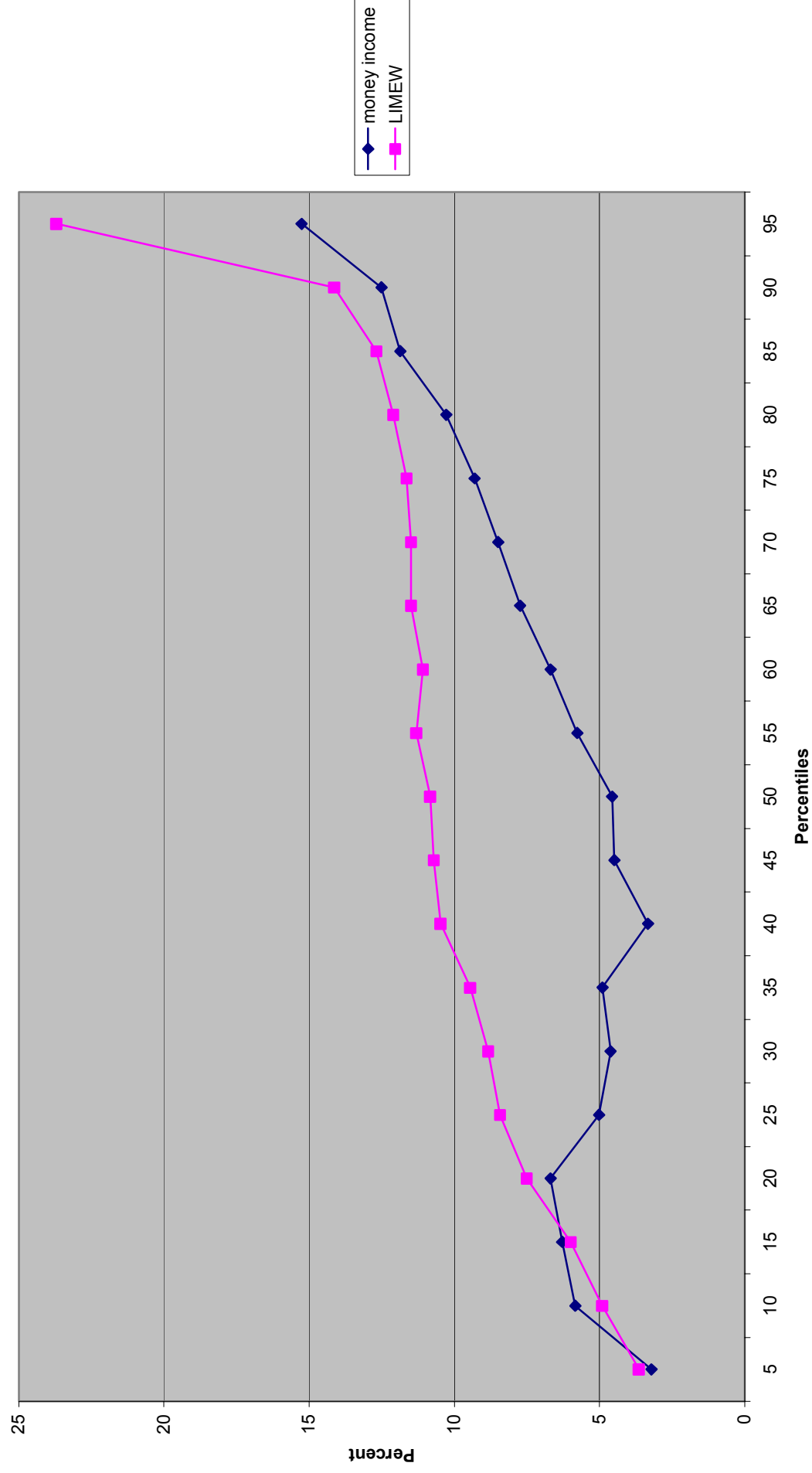
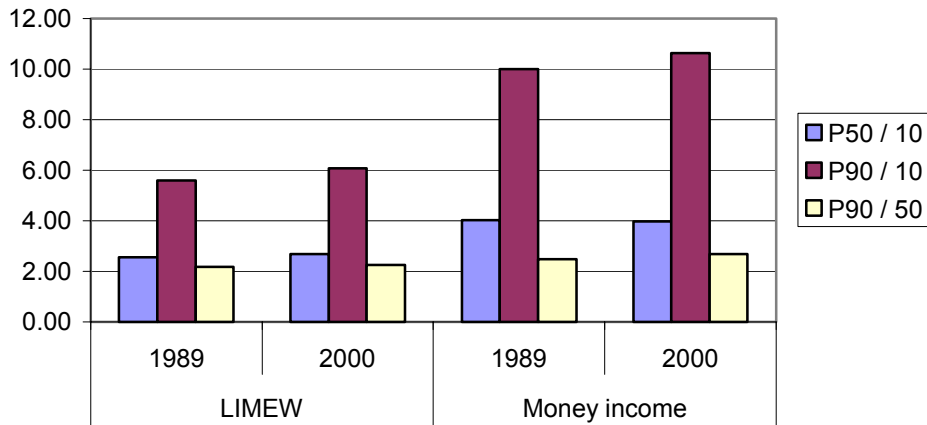


Figure 6A: Percentile Ratios



**Figure 6B: Percent Change in Percentile Ratios:
1989 to 2000**

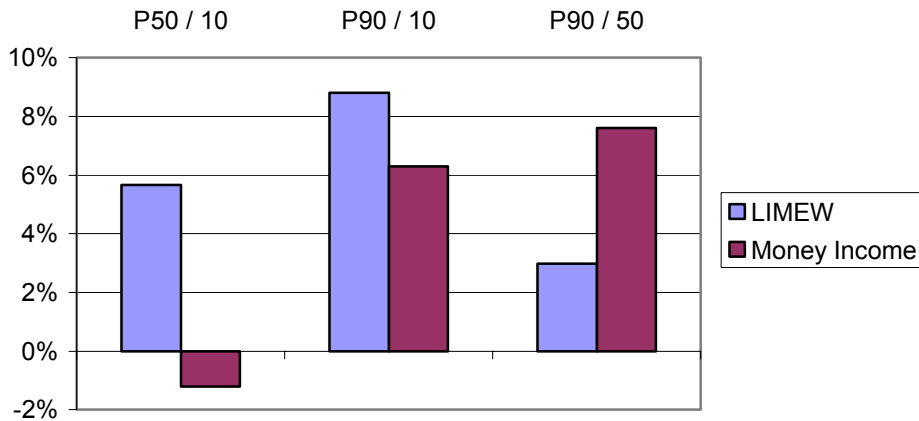


Figure 7: Mean LIMEW as a percentage of mean money income by selected household characteristics, 2000

