The Levy Economics Institute of Bard College

Levy Institute Measure of Economic Well-Being

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A New Perspective

EDWARD N. WOLFF, AJIT ZACHARIAS, and HYUNSUB KUM

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Preface

Given the aging of the U.S. population and the widening gap between rich and poor, not to mention the controversy surrounding the future viability of Social Security, the economic welfare of the elderly is an extremely topical issue. This report provides a new look at America's elderly, and shows that the official measures drastically understate their level of economic well-being.

The conventional measures of well-being do not adequately reflect income from wealth and net government expenditures. Moreover, in the period from 1989 to 2001, there was an extraordinary increase in income from nonhome wealth, as well as a widening gap in net government expenditures between the elderly and nonelderly. Thus, on the basis of the Levy Institute Measure of Economic Well-Being, which is a more comprehensive measure of income, the economic disadvantage of the elderly relative to the nonelderly appears to be less severe. Nevertheless, inequality has continued to widen within both groups.

The results suggest that government policies and programs that favor the elderly over the nonelderly are misdirected. Rather than cutting back on these programs or redirecting policy, however, the authors advocate the extension of similar programs to the nonelderly, such as universal health care, as well as more generous provisions for the nonelderly in existing social welfare programs.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*
April 2007

Introduction

The sustainability of government expenditures for the elderly has become an important political topic in recent years. An adequate examination of policy options has to be based on a sound assessment of the economic well-being of the elderly. The most widely used measure of economic well-being is household gross money income (MI) provided by the U.S. Census Bureau. According to this measure, the ratio of average MI between the elderly and nonelderly was merely 0.55 in 2001. It appears that the elderly are considerably worse off than the rest of the population.

Previous research has pointed out a number of deficiencies in using MI to evaluate elderly well-being. On average, the elderly pay less in taxes than the nonelderly (at the same income level); by definition, the differential impact on their well-being due to taxes is not reflected in MI. Government expenditures on the provision of noncash benefits for the average elderly person far exceed those for the nonelderly; by taking into account only cash income, MI does not reflect the disparity in the receipt of noncash benefits. Wealth holdings, on average, are also higher for the elderly than the nonelderly (at the same income level), yet the advantage in economic well-being from higher home equity and financial net worth is not reflected in a measure of current cash income. Further, differences in the availability of time between the two groups could translate into different amounts of the household production of services—an element of well-being that is excluded from the standard income measures (Danziger et al. 1984).

The most systematic and continuous estimate of the effects of noncash benefits, taxes, and home equity on household well-being has been available from the Census Bureau since the early 1980s. The broadest alternative measure of income, which we call extended income (EI), shows a much higher relative economic status for the elderly. EI is calculated by adding imputed values of realized capital gains, noncash benefits (including government transfers and employer contributions to health insurance), and return on home equity to MI, and then subtracting income and payroll taxes from MI. As noted above, the average elderly household's MI was only 55 percent of that of the nonelderly in 2001. By contrast, the average elderly household's EI was 73 percent of that of the nonelderly. The "improvement" could be attributed to the huge gap in noncash government benefits, which for the elderly were about *six* times higher than those for the nonelderly. The return on home equity for the average

elderly household was about 72 percent higher and the tax burden was only half of that for the nonelderly (measured as a percentage of EI).[1] The distribution of MI and EI was also quite different in 2001. While the EI Gini coefficient was lower than MI for nonelderly households (0.40 versus 0.45), the equalizing effect of modifications to MI was much greater for the elderly (0.40 versus 0.48).

We believe that a broader measure than EI is necessary to fully capture a household's access to, and command over, the goods and services produced in a modern economy. The Levy Institute Measure of Economic Well-being (LIMEW) is an alternative measure that offers a comprehensive view of the level and distribution of economic well-being in the United States during the 1989–2001 period (Wolff, Zacharias, and Kum 2005). Our aim in this report is to show that the picture of elderly well-being is quite different if the yardstick of well-being is the LIMEW rather than EI or MI.

The LIMEW

The LIMEW is defined as the sum of the following components: base income, income from wealth, net government expenditures (government expenditures *minus* taxes), and household production (see Table 1 for a comparison of the LIMEW and EI). The basic data are drawn from the Annual Demographic Supplement (March CPS) public-use files of the Census Bureau. The calculation of base income uses values reported in the Census files for the relevant variables, without any adjustment. Additional information from Federal Reserve surveys on household wealth and surveys on time-use are incorporated into the Census files via statistical matching to estimate income from wealth and the value of household production, respectively. Information from a variety of other sources, including the National Income and Product Accounts (NIPA) and several governmental agencies, is used to arrive at the final set of estimates.[2]

We begin with MI and subtract the sum of property-type income and government cash transfers. We then add employer contributions to health insurance to obtain base income. Labor income (earnings plus the value of employer-provided health insurance) makes up the overwhelming portion of base income, and the remainder consists of pensions and other small items (e.g., interpersonal transfers).

The next step is to add imputed income from wealth.

Table 1 A Comparison of the LIMEW and Extended Income (EI)

LIMEW		EI	
Money income (MI)		**Money income (MI)**	
Less	Property income and government cash transfers	*Less*	Property income and government cash transfers
Plus	Employer contributions for health insurance	*Plus*	Employer contributions for health insurance
Equals	Base income	*Equals*	Base income
Plus	Income from wealth	*Plus*	Income from wealth
	Annuity from nonhome wealth		Property income and realized capital gains (losses)
	Imputed rent on owner-occupied housing		Imputed return on home equity
Less	Taxes	*Less*	Taxes
	Income taxes[1]		Income taxes
	Payroll taxes[1]		Payroll taxes
	Property taxes[1]		Property taxes
	Consumption taxes		
Plus	Cash transfers[1]	*Plus*	Cash transfers
Plus	Noncash transfers[1, 2]	*Plus*	Noncash transfers
Plus	Public consumption		
Plus	Household production		
Equals	LIMEW	*Equals*	EI

1. The amounts estimated by the Census Bureau and used in EI are modified to make the aggregates consistent with the NIPA estimates.

2. The government-cost approach is used: the Census Bureau uses the fungible value method for valuing Medicare and Medicaid in EI. The main difference between the two methods is that, while the fungible value method assigns an income value for a benefit according to the recipient's level of income, the government-cost approach assigns an income value for a benefit irrespective of the recipient's income.

Property income, which is included in MI, is a very limited measure of economic well-being derived from the ownership of assets. Houses last for many years and yield services to home owners, thereby freeing up resources otherwise spent on housing. Under normal conditions and in addition to property income, financial assets such as bank balances, stocks, and bonds are a source of economic security.

Our approach to the valuation of income from wealth is different from the methods suggested in the literature (e.g., Weisbrod and Hansen 1968) in two significant ways. First, we distinguish between home and nonhome wealth. Housing is a universal need, and ownership frees the household from the obligation of paying rent, leaving an equivalent amount of resources for consumption and asset accumulation. Hence, benefits from owner-occupied housing are regarded in terms of the replacement cost of the services derived from it (i.e., a rental equivalent).[3] Second, we estimate the benefits from nonhome wealth using a variant of the standard lifetime annuity method.[4] We calculate an annuity based on a given amount of wealth, an interest rate, and life expectancy. The annuity is the same for the remaining life of the wealth holder and the terminal wealth is zero. (For

households with multiple adults, we use the maximum life expectancy of the head of household and spouse in the annuity formula.) We modify the standard procedure by accounting 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,[5] where the weights are proportional to the different assets in a household's total wealth portfolio (see Wolff and Zacharias 2006b for approaches to calculating income from wealth).

In the next step we add net government expenditures—the difference between government expenditures incurred on behalf of households and taxes paid by households (e.g., see Wolff and Zacharias 2006a). Our approach to determining expenditures and taxes may be called the social accounting approach (Hicks 1946). Government expenditures included in the LIMEW consist of cash transfers, noncash transfers, and public consumption. These expenditures, in general, are derived from the NIPA (Tables 3.12 and 3.15.5). Government cash transfers are considered to be part of the money income of recipients. We value noncash transfers at the average cost incurred by the government (e.g., in the case of medical benefits, the average cost for

the elderly, reckoned as an insurance value, differs from that for children) rather than the fungible or cash-equivalent value (U.S. Census Bureau 1993, Appendix B). Public consumption includes expenditures on public services such as education. When allocating these expenditures to the household sector, we follow the criterion that a particular expenditure must be incurred directly on behalf of individuals and must expand their consumption possibilities. In distributing expenditures among households, we build on earlier studies that employ the government-cost approach (e.g., Ruggles and O'Higgins 1981).

The final step in constructing net government expenditures is to net out taxes paid by individuals. We calculate actual tax payments by household in different income and demographic groups rather than attempt to determine the incidence of different taxes. We align the aggregate taxes in the Census file (imputed by the Census Bureau) with their NIPA counterparts, as we do for expenditures. The bulk of the taxes paid by households includes federal and state personal income taxes, property taxes on owner-occupied housing, and payroll taxes (the employee portion). Our estimated total tax burden on households also includes state consumption taxes, which are not aligned with a NIPA counterpart because an appropriate NIPA benchmark is not available. Taxes on corporate profits, business-owned property, and other businesses are not allocated to the household sector because they are paid out of business-sector incomes (even though the incidence of these taxes falls partly on households).

Finally, to arrive at the LIMEW, we add the imputed value of household production. We include three broad categories of unpaid activities in the definition of household production: core production (e.g., cooking), procurement (e.g., shopping for groceries), and care (e.g., reading to children). These activities are considered as "production" since they can be assigned generally to third parties apart from the person who performs them, although third parties are *not* always a substitute for the person, especially in terms of care.

Our strategy for imputing the overall value of household production is to value the amount of time spent by individuals on household tasks using the replacement-cost procedure based on average earnings of private household employees (Kuznets et al. 1941, pp. 432-33; Landefeld and McCulla 2000). We recognize that the efficiency and quality of household production vary across households. Therefore, we modify the replacement-cost procedure and apply a discount or a premium to the average replacement cost 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 that affect efficiency and quality differentials (e.g., household income, educational attainment, and time availability).

Level and Composition of Well-Being

Our unit of analysis is the household. We define an elderly household as one in which the "householder" is age 65 or over and a nonelderly household as one in which the householder is under 65. The overwhelming majority of elderly individuals live in elderly households (90.3 percent in 2001), so our unit of analysis does not lead to a biased view of the distinctions between the elderly and the nonelderly.

Estimates of the constituent components of the LIMEW for 1989 and 2001, including some supplementary information, are shown in Table 2.[6] The first component, base income, excludes both transfers and property income. For the nonelderly, this component is made up mostly of earnings; for the elderly, private pensions. Not surprisingly, the ratio of base income between elderly and nonelderly households was only 0.27 in both years.

The second component is income from home wealth, which is defined as the difference between imputed rent and the annuitized value of mortgage debt. Differences in income from home wealth, therefore, reflect differences in home ownership rates and home equity. In 2001, income from home wealth was much higher for the elderly than the nonelderly, a reflection, in part, of the higher home ownership rate of the elderly (81 versus 65 percent). The ratio of mean income from home wealth for the elderly climbed very sharply over the 1989–2001 period (from 1.43 to 1.81), while the income from home wealth actually declined by 7.6 percent among the nonelderly because of rising mortgage debt.

The disparity in income from nonhome wealth between elderly and nonelderly households is even greater than that for home wealth. In 2001, the ratio was 3.37, which is about the same as in 1989. The wealth ratio is actually smaller—1.68 in 2001. The reason why the annuity ratio is higher than the nonhome wealth ratio is that the elderly have a shorter conditional life expectancy than the nonelderly.[7] In 2001, the average conditional life expectancy of the elderly was 12.5 years, compared to 36.7 years for the nonelderly—a difference similar to that in 1989. The effect from the difference in life expectancy is partially offset by the lower real rate of return on the average (nonhome)

Table 2 Components of the LIMEW for Nonelderly and Elderly Households (in 2005 dollars)

Components	Mean		
	1989	**2001**	**Percent Change**
A. Base Income			
Nonelderly	59,394	69,055	16.3
Elderly	15,791	18,429	16.7
Ratio: Elderly to nonelderly	0.27	0.27	
B. Income from home wealth			
Nonelderly	3,600	3,326	-7.6
Elderly	5,139	6,006	16.9
Ratio: Elderly to nonelderly	1.43	1.81	
Memo: Homeownership Rates			
Nonelderly	61.0%	64.8%	6.2
Elderly	75.5%	80.8%	7.1
C. Income from nonhome wealth			
Nonelderly	7,963	13,862	74.1
Elderly	26,395	46,768	77.2
Ratio: Elderly to nonelderly	3.31	3.37	
Memo: Mean Nonhome Wealth			
Nonelderly	172,572	290,789	68.5
Elderly	267,101	489,514	83.3
Ratio: Elderly to nonelderly	1.55	1.68	
D. Government cash transfers			
Nonelderly	2,516	2,858	13.6
Elderly	14,286	15,933	11.5
Ratio: Elderly to nonelderly	5.68	5.58	
E. Government noncash transfers			
Nonelderly	1,581	2,966	87.6
Elderly	7,140	10,674	49.5
Ratio: Elderly to nonelderly	4.52	3.60	
F. Public consumption			
Nonelderly	9,453	11,089	17.3
Elderly	3,550	3,803	7.1
Ratio: Elderly to nonelderly	0.38	0.34	
G. Taxes			
Nonelderly	16,989	21,453	26.3
Elderly	7,053	8,217	16.5
Ratio: Elderly to nonelderly	0.42	0.38	
H. Household production			
Nonelderly	20,053	23,036	14.9
Elderly	19,122	20,711	8.3
Ratio: Elderly to nonelderly	0.95	0.90	

Source: Authors' calculations

portfolio of elderly households (only 1.73 percent in 2001, compared to 3.23 percent for the nonelderly). This difference, which was also evident in 1989, reflects greater stock holdings among the nonelderly. Income from nonhome wealth climbed by *77 percent* for the elderly and *74 percent* for the nonelderly over the 1990s, a result of the surging stock market.[8]

Yet the differences in income from nonhome wealth between the elderly and nonelderly are dwarfed by the disparities in cash transfers. In 2001, the ratio of cash transfers between the two groups was 5.6, slightly lower than in 1989. Disparities in noncash transfers between the elderly and nonelderly were smaller than those in cash transfers (ratios of 4.5 in 1989 and 3.6 in 2001).

Public consumption is much higher among the nonelderly than the elderly (in 2001, $11,089 versus $3,803), and has grown faster for the nonelderly in the 1989–2000 period (17.3 versus 7.1 percent). These disparities largely reflect the considerable role that educational expenditures play in public consumption. Taxes are much greater for the nonelderly. The ratio of mean taxes between the elderly and nonelderly was only 0.38 in 2001, a decline from 0.42 in 1989. Moreover, the elderly paid a smaller chunk of their MI in taxes in 2001, 21.2 versus 30.3 percent),.

As a result of differences in government transfers, public consumption, and taxes, the elderly were a net *beneficiary* of the fiscal system (Figure 1). Their average net benefit amounted to $22,192 in 2001. In contrast, the nonelderly were a net *payer,* as their net government expenditures averaged *minus* $4,539. Between 1989 and 2001, average net government spending increased 24 percent for the elderly and decreased 32 percent for the nonelderly, thus widening the spending gap between the two groups (from $21,363 to $26,731).

The last component of the LIMEW is the value of household production. Disparities in household production between the elderly and nonelderly are small compared to those for the other components. The elderly-to-nonelderly ratio of mean household production was 0.90 in 2001, a decline from 0.95 in 1989.

We obtain the estimates for the LIMEW by aggregating all of the components (Table 3). We expect the LIMEW to be higher than MI or EI for all households because it includes components of well-being that are excluded from the other measures; that is, public consumption and household production. The extent of the difference between the measures, however, varies considerably for the elderly and the nonelderly (Figure 2). The median EI for the elderly and nonelderly was only 53 and 63 percent of the LIMEW, respectively, in 2001, while the comparable median MI figures were 37 and 66 percent. A comparison of mean values also shows that the conventional measures greatly understate the well-being of the elderly if the LIMEW is taken as the appropriate yardstick.

Figure 1 Net Government Expenditures (in 2005 dollars)
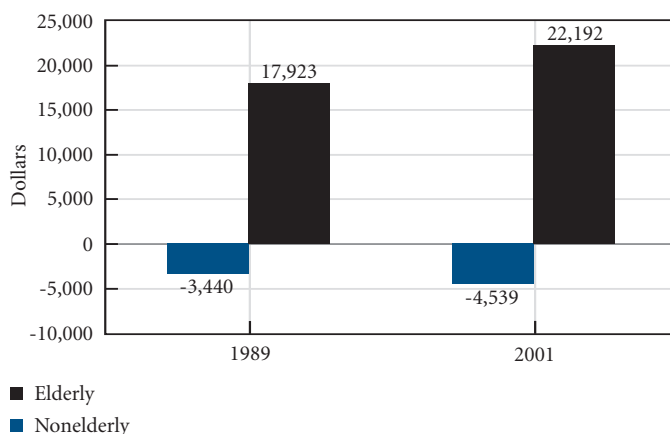
Source: Authors' calculations

Figure 2 Average Values of Conventional Income Measures, 2001 (as a percent of the LIMEW)
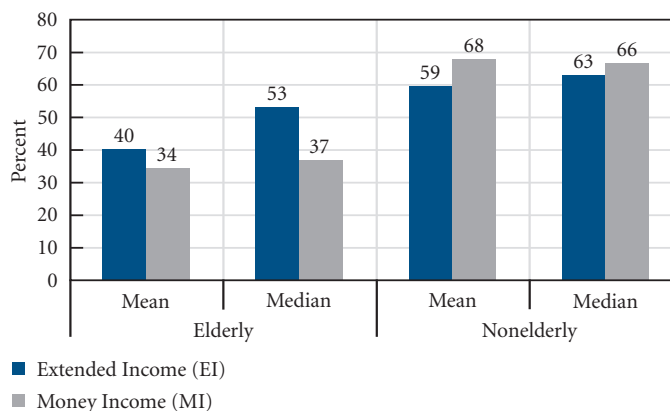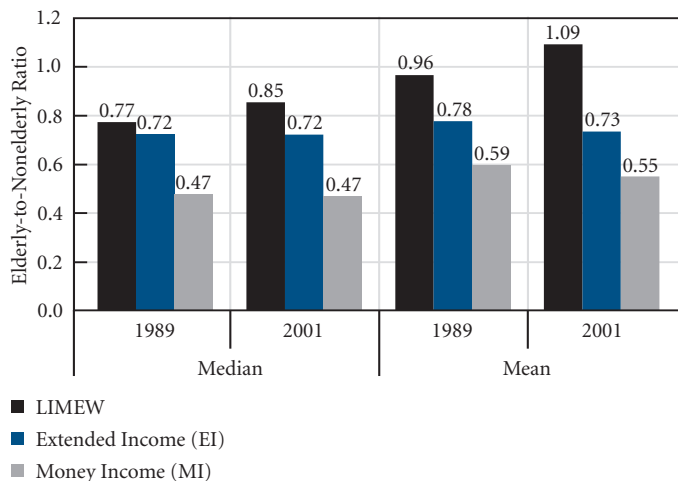

Source: Authors' calculations

We pointed out earlier that, as compared to the MI measure, EI shows a higher level of relative well-being for the elderly. The relative well-being of the elderly according to the LIMEW is even higher than EI (Figure 3). In fact, the mean LIMEW for the elderly was 9 percent higher than that for the nonelderly in 2001.

Table 3 The LIMEW for Nonelderly and Elderly Households (in 2005 dollars)

	Mean			Median		
	1989	2001	Percent Change	1989	2001	Percent Change
Nonelderly	87,570	104,740	19.6	74,226	81,741	10.1
Elderly	84,370	114,107	35.2	57,253	69,732	21.8
Ratio: Elderly to nonelderly	0.96	1.09		0.77	0.85	

Source: Authors' calculations

Figure 3 Relative Well-Being of the Elderly
by Income Measure

Source: Authors' calculations

Figure 4 Disparity between Elderly and Nonelderly
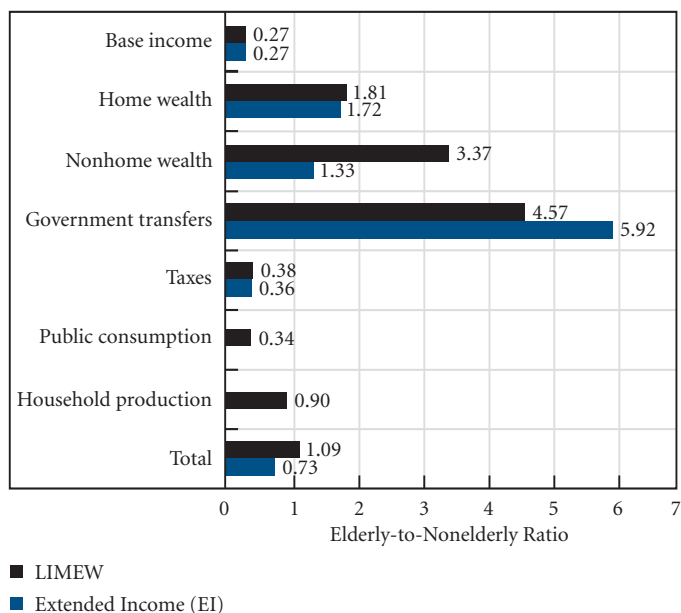Households by Component and Measure, 2001

Source: Authors' calculations

We also note that the trend in relative well-being differs between the official measures and the LIMEW. The median values of MI and EI for the elderly relative to the nonelderly remained stagnant between 1989 and 2001, while the mean values declined. By contrast, the mean and median values of the LIMEW for the elderly improved relative to the nonelderly over the same period.[9]

Why does the well-being of the elderly relative to the nonelderly appear to be higher when the yardstick is the LIMEW rather than EI? The unique components of the LIMEW—public consumption and household production—do not contribute to the difference (Figure 4).[10] As we have already noted, public consumption heavily favors the nonelderly, and household production is similar for both groups. The two measures show the same substantial advantage in base income and disadvantage in taxes for the nonelderly. Transfers favor the elderly in EI more than in the LIMEW, so this component cannot contribute to the greater relative well-being of the elderly using the latter measure. Finally, while the elderly-to-nonelderly ratio in income from home wealth is higher in the LIMEW, this component is a rather small portion of both measures.[11]

The process of elimination leaves the income from nonhome wealth component as the primary factor in the difference between the measures. Indeed, the advantage of the elderly over the nonelderly is dramatically higher in the LIMEW than in EI (a ratio of 3.37 versus 1.33). Annuities accruing to the elderly in 2001 were nearly *six times* higher than current income

from nonhome assets, as measured in EI. For the nonelderly, however, the discrepancy between the two measures was smaller (2.4 times). Furthermore, income from nonhome wealth accounts for a much larger share of elderly well-being in the LIMEW as compared to EI (41 versus 13 percent).

The trend in the relative well-being of the elderly, as displayed by EI and the LIMEW, also reflects the divergent behavior of annuities and current income from nonhome assets. The main reason for the higher elderly-to-nonelderly ratio of mean LIMEW in 2001 than in 1989 is the phenomenal 77 percent increase in income from nonhome wealth for the elderly. By contrast, income from nonhome wealth in EI fell 17 percent over the same period for the elderly.

Inequality among the Elderly and Nonelderly

So far, we have reviewed average values, which can be misleading if they are not supplemented with a review of overall distributions. A natural question is, What is the disparity in economic well-being between elderly and nonelderly households in different portions of the LIMEW distribution? For example, on average, was the bottom 10 percent of elderly households better off than the bottom 10 percent of nonelderly households? Figure 5, which displays the

Figure 5 Ratio of the Elderly to the Nonelderly in Terms of the LIMEW by Decile, 1989 and 2001

Source: Authors' calculations

Figure 6 Percent Change in the LIMEW by Decile, 1989 to 2001
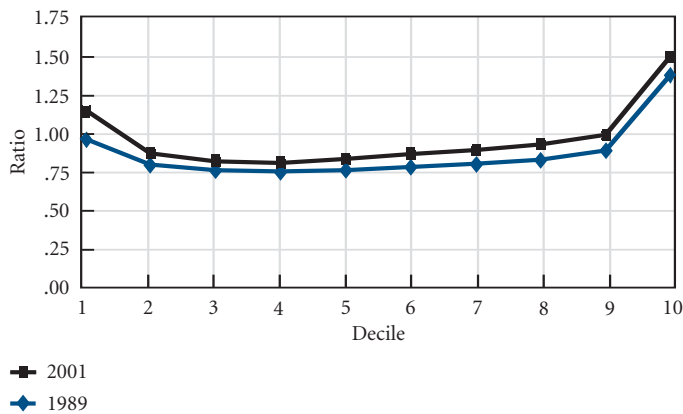
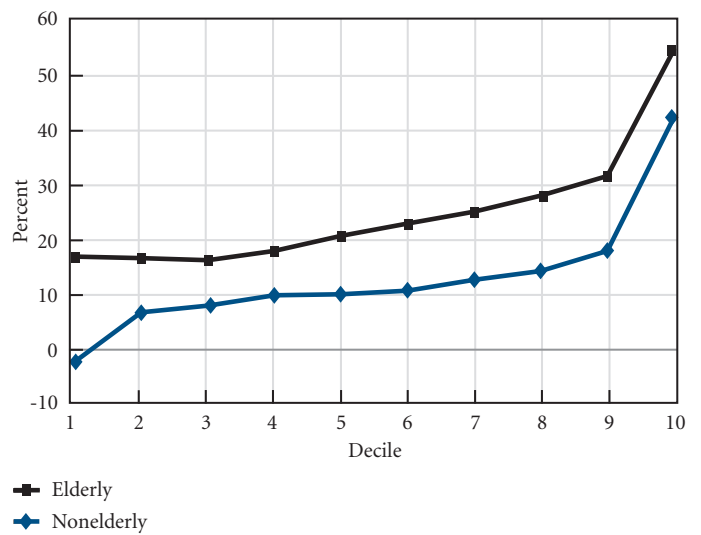

Source: Authors' calculations

ratio of the mean LIMEW for the elderly to the mean LIMEW for the nonelderly in each decile, supplies some clues to the answer.[12]

Elderly households in the top and bottom deciles were substantially better off than their respective nonelderly households in 2001. They were on par with the nonelderly households in the 9th decile. The remaining 70 percent of elderly households had a lower mean LIMEW than the nonelderly, with the shortfall ranging from 19 percent (for the 4th decile) to 7 percent (for the 8th decile). It is also noteworthy that the bottom and 9th deciles had mean values that were lower than their nonelderly counterparts in 1989.

The relative well-being of elderly households appears to have improved throughout the distribution between 1989 and 2001. Because this result could be due to different combinations of changes in the well-being of the two groups, it is useful to look at the changes themselves. Figure 6 shows the change in the mean LIMEW by decile. Elderly households in each decile experienced substantially higher growth in well-being than their nonelderly counterparts. The gap was the widest for the bottom decile, reflecting the absolute decline in well-being for the nonelderly. The gap narrowed over the next three deciles before widening further up the income ladder.

We now examine the patterns of overall inequality between the elderly and nonelderly using the EI and LIMEW measures. As measured by the Gini coefficient, inequality in the LIMEW was much higher among the elderly than the nonelderly (Figure 7). The huge 10 Gini-point difference remained fairly

Figure 7 Inequality among the Nonelderly and Elderly by Measure of Well-Being (Gini ratio x 100)
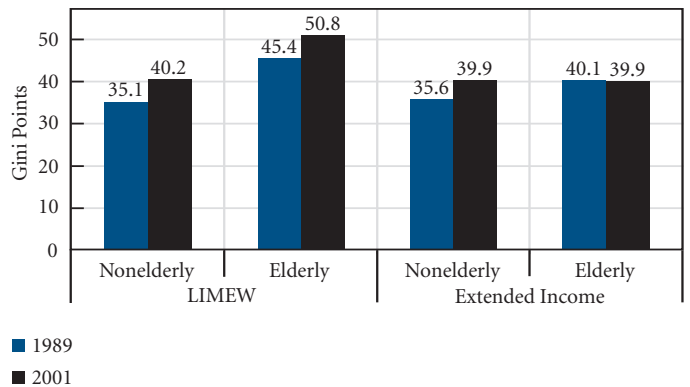
Source: Authors' calculations

constant over the 1989–2001 period, as the coefficients for the two groups increased by approximately the same amount (5 points). The level of inequality for the nonelderly in EI was about the same as that in the LIMEW, but it was much lower for the elderly. The EI measure indicates a large increase in inequality for the nonelderly from 1989 to 2001 (4.3 points), but virtually no change for the elderly.[13]

To understand the differences in both inequality levels and trends over time, we use the so-called "natural decomposition"

Figure 8 Inequality in the LIMEW by Component, 2001

Base income: 8.5 / 23.8
Income from home wealth: 2.2 / 1.6
Income from nonhome wealth: 33.4 / 10.6
Government transfers: 3.3 / 0.4
Taxes: -3.4 / -7.5
Public consumption: 0.7 / 2.7
Household production: 6.2 / 8.5
Total: 50.8 / 40.2

Gini Points

■ Elderly
■ Nonelderly

Source: Authors' calculations

Figure 9 Contribution to the Change in the Gini Ratio of the LIMEW for the Elderly by Component, 1989 to 2001

Base income: -1.3
Income from home wealth: -0.5
Income from nonhome wealth: 8.7
Government expenditures: -0.1
Taxes: 0.3
Household production: -1.6
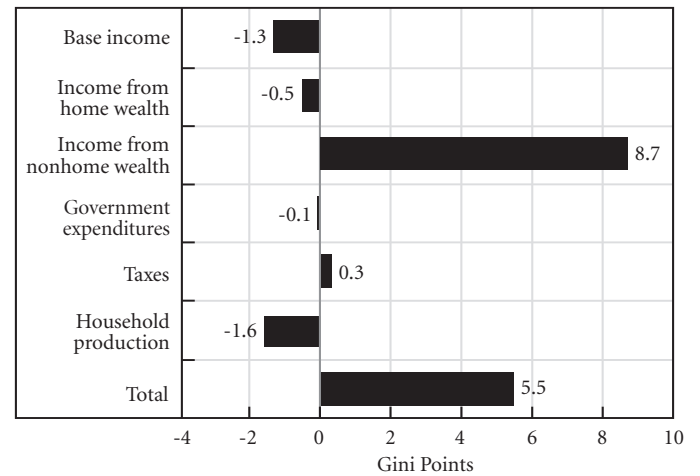Total: 5.5

Gini Points

Source: Authors' calculations

of the Gini coefficient (Lerman 1999). First, we calculate the contribution of each source of income (base income, income from wealth, and so on) to overall inequality in the LIMEW for the elderly and nonelderly in an arbitrarily chosen year. This allows us to resolve the difference in the level of inequality between the two groups to the contributions made by individual income sources in that year. We then repeat the calculations for other years. Using these estimates, we calculate the contribution of income sources to the change in the Gini coefficient for the two groups as the difference between the individual income source contributions in 1989 and 2001.[14]

We initially examine why inequality in the LIMEW was much higher among the elderly than the nonelderly. The contribution to inequality by each component of the LIMEW for the two groups in 2001 is shown in Figure 8.[15] Base income and income from nonhome wealth were the major contributors to inequality among the nonelderly and elderly, respectively. However, the difference in the contribution from base income between the two groups (15.3 Gini points higher for the nonelderly) was overwhelmed by the difference in income from nonhome wealth (22.8 points higher for the elderly). The larger contribution to inequality among the elderly by the income from nonhome wealth component was *not* due to its more unequal

distribution across the LIMEW distribution.[16] Rather, it reflects the much larger share of income from nonhome wealth in the LIMEW for the elderly (41 versus 13 percent).

Finally, we examine why inequality in the LIMEW for the elderly grew by a sizable 5.5 Gini points between 1989 and 2001. The contribution by the income from nonhome wealth component (8.7 Gini points) exceeded the overall increase in inequality (Figure 9). This contribution was partially offset by declines in the base income and household production components (−1.3 and −1.6 points, respectively). These changes resulted from sharp growth in the income from nonhome wealth component relative to the other components of the LIMEW.[17]

Conclusion

The picture of economic well-being is substantially altered when the LIMEW is used as the yardstick instead of the standard measures. Consistent with previous literature, we find that MI, the official measure of economic well-being, drastically understates elderly well-being. Our most striking result is that the elderly are much better off relative to the nonelderly in terms of the LIMEW than in EI (the broadest official measure of post-tax, post-transfer income). The principle reasons for

the relatively higher LIMEW are the much higher values of income from wealth and net government expenditures for the elderly than the nonelderly.

Both mean and median LIMEW values grew much faster for the elderly than the nonelderly between 1989 and 2001. By contrast, the growth rates of MI were greater for the nonelderly over this period. As a result, the relative LIMEW *increased* for the elderly, while their relative mean money income *declined* and relative median money income remained steady. The main reason for the positive growth in the LIMEW ratio compared to the negative or nil growth in the MI ratio is the extraordinary increase in income from nonhome wealth. A secondary reason is the widening gap in net government expenditures between the elderly and nonelderly.

The degree of inequality in the LIMEW in 2001 was substantially higher for the elderly than the nonelderly. By contrast, inequality according to EI was virtually identical for the two groups. The leading factor was the greater size and concentration of income from nonhome wealth in the LIMEW as compared to EI. Furthermore, the change in inequality between 1989 and 2001 is also different according to which measure is used. Inequality in the LIMEW grew for both the elderly and the nonelderly, while it grew for the nonelderly only in EI and MI. While income from wealth as a share of the LIMEW for the elderly rose significantly over the period, it fell sharply as a share of EI. The divergent trends in income from nonhome wealth were largely why elderly inequality grew in the LIMEW but remained stable in EI.

On the basis of a comprehensive measure of income, the bottom line is that the economic disadvantage of the elderly appears to be much less severe. The mean and median values of the LIMEW for the elderly in 2001 were 9 percent higher and 15 percent lower, respectively, than those for the nonelderly.[18] Government policies and programs that favor the elderly relative to the nonelderly are therefore misdirected. The policies include the favorable tax treatment of Social Security income, the near-universal provision of medical insurance to the elderly, and the generosity of Social Security retirement benefits relative to social programs oriented to the nonelderly. While we are not suggesting that these policies should be cut back, we are advocating the extension of similar programs to the nonelderly—such as the adoption of a universal health care plan—as well as the inclusion of more generous provisions for the nonelderly in existing social programs.

Notes

1. These estimates are based on the authors' calculations from the public-use microdata in the U.S. Census Bureau's annual income survey, known as the Annual Demographic Supplement.
2. See Wolff, Zacharias, and Caner (2004) for details regarding the sources and methods used to estimate these components.
3. This is consistent with the approach adopted in most national income accounts.
4. 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 an expected lifetime, as compared to the bond-coupon method (i.e., assigning a fixed rate of return, such as 3 percent, to all assets).
5. The rate of return that we use is the total real return: the sum of the change in capital value and asset income, adjusted for inflation. For example, the total real return for stocks is the inflation-adjusted sum of the change in stock prices plus dividend yields.
6. Estimates for 1995 and 2000, as well as more detailed analysis, are available in Wolff, Zacharias, and Kum (2005).
7. The annual annuity flow is distributed over the remaining lifetime of an individual, so that the full value of nonhome wealth is exhausted at the time of death.
8. Actually, the increase between 1989 and 2000 was even greater, followed by a 14 percent decline from 2000 to 2001 that reflected sagging stock prices.
9. Household size and composition differ a great deal between elderly and nonelderly households. This is to be expected, since elderly households have fewer members on average (as most of the elderly are past the child-rearing age and are likely to live alone). Since the effect of adjusting household well-being by equivalence scale results is an upward improvement in the measured relative well-being of the elderly for all income measures, we do not present the equivalent-income measures here (see Figure 2 and Wolff, Zacharias, and Kum 2005, Tables 2 and 13, for some equivalent-income estimates).
10. We show only the results for 2001 because those for other years lead to qualitatively similar conclusions.
11. Elderly income from home wealth had a share of 3.2 percent in the LIMEW and 4.5 percent in EI.
12. It should be noted that the deciles are defined with respect to the within-group distribution of the LIMEW and not with respect to the overall distribution.

13. Inequality in MI was also higher for the elderly than the nonelderly in 1989 (a difference of 7.2 Gini points). Like EI, inequality in MI increased much faster for the nonelderly than the elderly (it actually declined for the elderly). By 2001, the difference had fallen to only 3.0 Gini points.

14. Mathematically, the operations can be described as follows. Let G indicate the Gini coefficient. For each group, we decompose the Gini coefficient as: $G = \sum_{i=1} K_i = \sum_{i=1} s_i\, c_i$, where K_i indicates the contribution to inequality made by the ith income source in the LIMEW. (Estimates of K_i for 2001 are shown in Figure 5 for the two groups.) The contribution by source is equal to the product of its share in the LIMEW (s_i) and its concentration coefficient (c_i). The latter is a measure of the degree of inequality in the distribution of an income source (e.g., wages) across the LIMEW distribution. It follows that we can calculate the change in the Gini between two years, say, Year 0 and Year 1, as: $G_1 - G_0 = \sum_{i=1} (K_{1i} - K_{0i})$. Estimates of the terms in the parenthesis are shown in Figure 8.

15. We present the results for 2001 only because other years reveal a similar pattern.

16. The concentration coefficient for income from nonhome wealth in the LIMEW was approximately 0.81 for both groups in 2001.

17. In principle, the change in the contribution of a component is a combination of the change in its share in the LIMEW and the change in its concentration coefficient. The concentration coefficients for income from nonhome wealth, base income, and household production were largely unchanged over the period, however, and changes in income shares among these components explain the change in the Gini ratio for the elderly.

18. In terms of equivalent LIMEW, the mean and median values for the elderly were higher than the nonelderly in 1989 and 2001. Their relative well-being also improved markedly over the period: the elderly-to-nonelderly ratio of mean values rose from 1.24 to 1.41, while the ratio of median values increased from 1.04 to 1.13.

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