## The Levy Economics Institute of Bard College

## Levy Institute Measure of Economic Well-Being

What Are the Long-Term Trends in Intergroup Economic Disparities?

THOMAS MASTERSON is a research scholar at The Levy Economics Institute.
EDWARD N. WOLFF is a senior scholar at The Levy Economics Institute and a professor of economics at New York University. AJIT ZACHARIAS is a senior scholar at The Levy Economics Institute.

## The Levy Institute is grateful to the Alfred P. Sloan Foundation for its financial support of the LIMEW project.

The Levy Economics Institute of Bard College, founded in 1986, is an autonomous research organization. It is nonpartisan, open to the examination of diverse points of view, and dedicated to public service.

The Institute is publishing this research with the conviction that it is a constructive and positive contribution to discussions and debates on relevant policy issues. Neither the Institute's Board of Governors nor its advisers necessarily endorse any proposal made by the authors.

The Institute believes in the potential for the study of economics to improve the human condition. Through scholarship and research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

The present research agenda includes such issues as financial instability, poverty, employment, gender, problems associated with the distribution of income and wealth, and international trade and competitiveness. In all its endeavors, the Institute places heavy emphasis on the values of personal freedom and justice.

Editor: W. Ray Towle
Text Editor: Barbara Ross
The Levy Institute Measure of Economic Well-Being is a research project of The Levy Economics Institute of Bard College, Blithewood, PO Box 5000, Annandale-on-Hudson, NY 12504-5000. For information about the Levy Institute and to order publications, call 845-758-7700 or 202-887-8464 (in Washington, D.C.), e-mail info@levy.org, or visit the Levy Institute website at www.levy.org.

This publication is produced by the Bard Publications Office.
Copyright © 2009 by The Levy Economics Institute. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information-retrieval system, without permission in writing from the publisher.

## Preface

In the previous LIMEW report, the authors describe a picture of postwar trends in economic well-being in the United States that is very different from the official measures. They attribute most of the differences to changes in household production, income from wealth, and the public sector.

In the current report, the authors examine long-term trends in economic wellbeing within various population subgroups based on such household characteristics as race/ethnicity, age, education, and marital status. They also break down the absolute gap in well-being (measured in dollars) between subgroups by component. This is helpful in highlighting the extent to which the sources of changes in disparities are the result of policy or broader economic trends.

With the exception of income from wealth, the gap between nonwhite and white households narrowed between 1959 and 2004, and public consumption increasingly favored nonwhites. Relative well-being for the 65-and-older age group improved significantly, and was 9 percent higher than the average nonelderly household in 2000 (a finding at odds with the official measures). An important part of the story is the impact of tax and transfer policies on the well-being of the elderly. In contrast, the under- 35 age group experienced a sizable deterioration in relative well-being, as did less educated groups relative to college graduates (due largely to the widening gap in base income). The gap between families with a single, female head of household and families with a married head of household also widened further over time.

The sources of disparity among groups often differ between our measure of well-being and the official measures. Therefore, it is important to recognize these differences when accounting for intergroup economic disparities and formulating appropriate policies to improve the relative well-being of disadvantaged groups.

## As always, I welcome your comments and suggestions.

## Dimitri B. Papadimitriou, President

February 2009

## Introduction

Economic disparities among population subgroups in the United States have, in some cases, undergone profound transformations over the last half century; in other cases, disparities persist. Official poverty rates among the elderly, for example, are now in line with overall poverty rates; in the past, the elderly were much more prone to poverty. Meanwhile, disparities between racial subgroups persist in spite of some improvement.

Government policy has had an important hand in alleviating disparities. For example, special tax treatment for families with children has meant an improvement in the well-being of single mothers, and Medicare and Social Security have been the driving force in improving well-being among the elderly. Thus, the measure of economic well-being that is used is critical in attempting to assess changes in disparities between groups.

Gross money income (MI) is the official measure of household economic well-being in the United States. Because it omits noncash transfers (which have become increasingly important over time) and is a pretax income measure (thus ignoring the dis-
tributional impact of tax policy), MI does not adequately reflect a household's command over, or access to, the products produced in a market economy. The U.S. Census Bureau's most comprehensive measure, which we refer to as extended income (EI), is a better approximation of a household's command over commodities because it accounts for the most important types of taxes and noncash transfers, and attempts to include better measures of income from wealth. ${ }^{1}$ In our view, EI still has important limitations because it does not adequately capture the economic advantage from wealth, and it ignores public production of services (e.g., education) and provisioning within households (e.g., child care).

The Levy Institute Measure of Economic Well-Being (LIMEW) is a more comprehensive measure than the official measures (see Table 1 for a comparison of components between the LIMEW and EI). In addition to including taxes and noncash transfers, the LIMEW treats wealth as an economic resource rather than focusing on income from wealth. The LIMEW also includes the provision of public goods and the value of household production. Details regarding our sources and methods are outlined in

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 |
| Equals | Base money income | Equals | Base money 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 |
| 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. In 1959, neither the Medicare nor the Medicaid program existed. However, there were meanstested medical assistance programs in a large number of states. The imputed value of medical assistance received by households was valued at govenment cost in the LIMEW, and the same value was also used in the EI estimated for 1959.

Wolff, Zacharias, and Masterson (2009). Our previous reports have provided estimates of the LIMEW and its components for households in the United States and some key demographic groups, and estimates of overall economic inequality for 1989, 1995, 2000, 2001, and 2002. We have also compared the economic well-being of the elderly and nonelderly (Wolff, Zacharias, and Kum 2007).

In this report, we examine long-term trends in economic well-being in the United States between 1959 and 2004 within various population subgroups based on the following household characteristics: race/ethnicity, age, education, and marital status. ${ }^{2}$ Our indicator of disparity between subgroups (e.g., nonwhite versus white in the grouping based on race) is relative economic well-being, as expressed by the ratio of mean and median values. ${ }^{3}$ Because the constituent components of the LIMEW and official measures differ in important ways, we also break down the absolute gap in well-being (measured in dollars) between subgroups by component. This is helpful in highlighting the extent to which the sources of changes in disparities are the result of policy or broader economic trends.

## Race

Trends in racial disparities are shown in Table 2, panel A, and in Figure 1A. In 1959, mean LIMEW of nonwhites equaled 0.64 of mean LIMEW of whites. ${ }^{4}$ The ratio grew steadily to 0.80 in 1989, fell back to 0.75 in 2000, then recovered slightly, reaching 0.76 in 2004. In contrast, the racial gap decreased over the whole period according to EI, with the ratio of mean EI between nonwhites and whites rising from 0.60 in 1959 to 0.76 in 2004. However, both LIMEW and EI show similar trends in the ratio of median values from 1959 to 2004, with the racial ratio rising from 0.61 to 0.85 in LIMEW and from 0.57 to 0.74 in EI. The ratio of mean equivalence scale-adjusted LIMEW follows the same pattern as LIMEW, with the difference increasing from 6 to 8 percentage points (lower) in each year. ${ }^{5}$ Due to larger household size, nonwhite households look relatively less well off when an adjustment is made for size of household.

The main drivers of the dynamics of nonwhite households' relative economic well-being are the gaps in income from wealth and net government expenditures. The gap in income from wealth between white and nonwhite households (defined as the mean value for nonwhites divided by the mean value for whites)

Figure 1A Racial Disparity: Ratio of Nonwhite to White, 1959-2004


[^0]Table 2 Mean Economic Well-Being by Measure and Selected Household Characteristics, 1959-2004
I. Ratio of mean and median values

| Characteristics | 1959 |  |  | 1972 |  |  | 1982 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LIMEW | EI | MI | LIMEW | EI | MI | LIMEW | EI | MI |
| A. Race/Ethnicity |  |  |  |  |  |  |  |  |  |
| Nonwhite/white (mean) | 0.64 | 0.60 | 0.58 | 0.78 | 0.73 | 0.72 | 0.76 | 0.73 | 0.69 |
| Nonwhite/white (median) | 0.61 | 0.57 | 0.54 | 0.79 | 0.72 | 0.66 | 0.80 | 0.69 | 0.62 |
| B. Age |  |  |  |  |  |  |  |  |  |
| Elderly/nonelderly (mean) | 0.61 | 0.50 | 0.41 | 0.59 | 0.54 | 0.38 | 0.74 | 0.80 | 0.48 |
| Elderly/nonelderly (median) | 0.79 | 0.66 | 0.58 | 0.72 | 0.64 | 0.51 | 0.93 | 0.84 | 0.60 |
| C. Education |  |  |  |  |  |  |  |  |  |
| Mean |  |  |  |  |  |  |  |  |  |
| < High school/college | 0.53 | 0.51 | 0.48 | 0.56 | 0.55 | 0.48 | 0.54 | 0.53 | 0.40 |
| High school/college | 0.67 | 0.67 | 0.64 | 0.73 | 0.72 | 0.69 | 0.67 | 0.68 | 0.61 |
| Some college/college | 0.77 | 0.76 | 0.74 | 0.77 | 0.78 | 0.76 | 0.70 | 0.74 | 0.69 |
| Median |  |  |  |  |  |  |  |  |  |
| < High school/college | 0.56 | 0.54 | 0.51 | 0.58 | 0.52 | 0.42 | 0.57 | 0.51 | 0.34 |
| High school/college | 0.75 | 0.72 | 0.71 | 0.77 | 0.74 | 0.71 | 0.71 | 0.69 | 0.61 |
| Some college/college | 0.82 | 0.80 | 0.78 | 0.81 | 0.79 | 0.76 | 0.76 | 0.74 | 0.71 |
| D. Family Type |  |  |  |  |  |  |  |  |  |
| Single female/married (mean) | 0.72 | 0.65 | 0.63 | 0.74 | 0.68 | 0.63 | 0.61 | 0.59 | 0.51 |
| Single female/married (median) | 0.67 | 0.60 | 0.56 | 0.70 | 0.64 | 0.56 | 0.65 | 0.55 | 0.46 |


| Characteristics | 1989 |  |  | 2000 |  |  | 2004 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LIMEW | EI | MI | LIMEW | EI | MI | LIMEW | EI | MI |
| A. Race/Ethnicity <br> Nonwhite/white (mean) <br> Nonwhite/white (median) <br> B. Age <br> Elderly/nonelderly (mean) <br> Elderly/nonelderly (median) <br> C. Education <br> Mean <br> < High school/college <br> High school/college <br> Some college/college |  |  |  |  |  |  |  |  |  |
|  | 0.80 | 0.75 | 0.72 | 0.75 | 0.76 | 0.74 | 0.76 | 0.76 | 0.74 |
|  | 0.83 | 0.71 | 0.66 | 0.85 | 0.76 | 0.74 | 0.85 | 0.74 | 0.71 |
|  |  |  |  |  |  |  |  |  |  |
|  | 0.78 | 0.76 | 0.47 | 0.89 | 0.77 | 0.48 | 0.86 | 0.79 | 0.49 |
|  | 0.99 | 0.81 | 0.59 | 1.09 | 0.76 | 0.55 | 0.98 | 0.81 | 0.57 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 0.53 | 0.46 | 0.36 | 0.53 | 0.40 | 0.32 | 0.50 | 0.41 | 0.31 |
|  | 0.64 | 0.63 | 0.57 | 0.63 | 0.54 | 0.49 | 0.62 | 0.58 | 0.50 |
|  | 0.75 | 0.73 | 0.69 | 0.72 | 0.65 | 0.62 | 0.70 | 0.68 | 0.62 |
| Median< High school/collegeHigh school/collegeSome college/college |  |  |  |  |  |  |  |  |  |
|  | 0.54 | 0.44 | 0.31 | 0.57 | 0.41 | 0.29 | 0.55 | 0.40 | 0.28 |
|  | 0.69 | 0.63 | 0.56 | 0.68 | 0.59 | 0.50 | 0.67 | 0.60 | 0.49 |
|  | 0.77 | 0.74 | 0.70 | 0.77 | 0.69 | 0.63 | 0.76 | 0.70 | 0.65 |
| D. Family Type |  |  |  |  |  |  |  |  |  |
| Single female/married (mean) | 0.60 | 0.58 | 0.51 | 0.63 | 0.55 | 0.49 | 0.62 | 0.56 | 0.48 |
| Single female/married (median) | 0.64 | 0.53 | 0.46 | 0.68 | 0.56 | 0.49 | 0.69 | 0.56 | 0.47 |

[^1]
## II. Values in thousands of $\mathbf{2 0 0 7}$ dollars

| Characteristics | 1959 |  |  | 1972 |  |  | 1982 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LIMEW | EI | MI | LIMEW | EI | MI | LIMEW | EI | MI |
| A. Race/Ethnicity |  |  |  |  |  |  |  |  |  |
| White | 73.9 | 40.1 | 44.6 | 79.1 | 49.1 | 53.8 | 77.8 | 49.8 | 54.0 |
| Nonwhite | 47.0 | 24.0 | 25.9 | 61.3 | 35.9 | 38.5 | 58.8 | 36.1 | 37.4 |
| B. Age |  |  |  |  |  |  |  |  |  |
| < 65 years | 74.0 | 40.9 | 46.1 | 80.6 | 50.5 | 56.8 | 76.6 | 49.8 | 56.6 |
| < 35 years | 66.3 | 35.4 | 39.9 | 68.5 | 43.4 | 49.5 | 59.2 | 39.4 | 46.5 |
| 35-45 years | 81.6 | 44.4 | 49.9 | 93.2 | 56.1 | 63.1 | 85.8 | 53.1 | 62.5 |
| 45-55 years | 79.3 | 44.9 | 50.7 | 92.5 | 58.1 | 65.3 | 96.1 | 61.4 | 67.9 |
| 55-64 years | 68.3 | 39.3 | 44.3 | 74.4 | 48.2 | 53.0 | 79.8 | 54.3 | 58.0 |
| 65 or older | 58.5 | 26.9 | 27.0 | 58.3 | 32.4 | 29.1 | 70.9 | 41.7 | 34.0 |
| C. Education |  |  |  |  |  |  |  |  |  |
| < High school | 60.1 | 32.1 | 34.8 | 60.8 | 36.7 | 37.6 | 57.9 | 35.6 | 32.3 |
| High school | 76.9 | 41.8 | 47.0 | 78.7 | 48.7 | 54.0 | 71.7 | 46.2 | 49.1 |
| Some college | 87.4 | 47.7 | 54.2 | 83.4 | 52.6 | 59.1 | 74.6 | 49.9 | 55.8 |
| College | 114.2 | 62.7 | 72.9 | 108.1 | 67.2 | 78.0 | 107.3 | 67.5 | 80.9 |
| D. Family Type |  |  |  |  |  |  |  |  |  |
| Married couple | 79.9 | 42.9 | 47.9 | 87.8 | 53.6 | 59.3 | 94.5 | 58.2 | 63.6 |
| Single female | 57.8 | 28.1 | 30.2 | 64.7 | 36.6 | 37.2 | 58.0 | 34.1 | 32.7 |
| Single male | 72.1 | 39.2 | 43.9 | 74.1 | 50.8 | 54.0 | 67.1 | 47.8 | 51.2 |
| All Households | 71.3 | 38.5 | 42.8 | 76.3 | 47.0 | 51.4 | 75.4 | 48.1 | 51.9 |


| Characteristics | 1989 |  |  | 2000 |  |  | 2004 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LIMEW | EI | MI | LIMEW | EI | MI | LIMEW | EI | MI |
| A. Race/Ethnicity |  |  |  |  |  |  |  |  |  |
| White | 95.3 | 56.1 | 63.3 | 118.0 | 65.9 | 73.6 | 119.4 | 63.6 | 71.8 |
| Nonwhite | 76.1 | 42.0 | 45.5 | 87.9 | 50.0 | 54.7 | 91.2 | 48.3 | 52.8 |
| B. Age |  |  |  |  |  |  |  |  |  |
| < 65 years | 91.7 | 55.6 | 65.4 | 108.2 | 65.1 | 75.9 | 111.9 | 61.7 | 72.9 |
| $<35$ years | 73.0 | 43.7 | 52.2 | 86.8 | 51.2 | 60.1 | 88.1 | 47.8 | 55.5 |
| 35-45 years | 102.0 | 59.6 | 71.5 | 119.0 | 68.7 | 81.1 | 126.2 | 66.7 | 79.8 |
| 45-55 years | 109.5 | 68.3 | 80.1 | 124.7 | 76.5 | 89.8 | 126.3 | 70.5 | 84.9 |
| 55-64 years | 92.1 | 58.6 | 65.4 | 103.0 | 66.1 | 73.9 | 108.9 | 64.0 | 73.7 |
| 65 or older | 90.5 | 44.8 | 38.9 | 118.4 | 49.2 | 41.7 | 110.0 | 49.8 | 41.2 |
| C. Education |  |  |  |  |  |  |  |  |  |
| < High school | 68.0 | 35.4 | 33.7 | 78.9 | 36.7 | 34.7 | 75.9 | 35.0 | 32.3 |
| High school | 81.3 | 48.5 | 53.2 | 95.1 | 50.2 | 53.3 | 95.1 | 49.1 | 51.4 |
| Some college | 95.7 | 56.0 | 64.2 | 107.6 | 60.4 | 67.5 | 107.0 | 57.8 | 64.3 |
| College | 128.0 | 77.0 | 93.1 | 150.3 | 92.3 | 109.1 | 153.1 | 84.9 | 103.3 |
| D. Family Type |  |  |  |  |  |  |  |  |  |
| Married couple | 116.0 | 65.6 | 74.6 | 141.7 | 78.4 | 88.7 | 142.8 | 74.7 | 85.5 |
| Single female | 70.0 | 37.9 | 38.4 | 89.8 | 43.4 | 43.8 | 89.1 | 41.6 | 40.8 |
| Single male | 86.2 | 54.4 | 60.9 | 103.4 | 60.4 | 66.6 | 102.3 | 55.4 | 60.7 |
| All Households | 91.4 | 53.3 | 59.7 | 110.3 | 61.8 | 68.8 | 111.5 | 59.3 | 66.4 |

Figure 1B Racial Disparity by Component: White Minus Nonwhite, 1959-2004


Source: Authors' calculations
increased in every period except 2000-04. The income from wealth of nonwhites was 29 percent that of whites in 1959. The ratio rose slightly, to 30 percent in 1972, fell to 20 percent in 1982, and increased to 33 percent in 1989, but it dropped back to 20 percent in 2000 before increasing to 24 percent in 2004, offsetting the trend toward greater parity in the other components (see Figure 1B). However, the increase between 1959 and 1989 was more than counteracted by the relative increase in net government expenditures for nonwhite households. A major reason for the relative decline in mean LIMEW of nonwhites during the 1990s was that the growing wealth gap was not offset by net government expenditures: the change was the same for white and nonwhite households. With the exception of income from wealth, the gap between nonwhite and white households narrowed in almost all the other components of the LIMEW between 1959 and 2004. The gap in government transfers changed from $\$ 400$ in favor of whites in 1959 to $\$ 1,400$ in favor of nonwhites in 1989, and back to $\$ 600$ in favor of whites in $2004 .{ }^{6}$ The corresponding gap in public consumption rose from $\$ 500$ to $\$ 4,100$ in favor of nonwhites over the period, while the gap in household production fell from $\$ 8,100$ to $\$ 2,600$ in favor of whites. The gap in the tax burden increased from \$4,300 to \$7,000 in favor
of nonwhites between 1959 and 2000, before dropping back to $\$ 5,800$ in 2004. The gap in base income fell from $\$ 17,300$ to $\$ 12,600$ in favor of whites between 1959 and 1982 before increasing to \$14,400 in 2004.

Overall, the relatively small increase in the LIMEW gap over the period masks the large increase in the gap in income from wealth because of the larger gains by nonwhite households in household production, public consumption, and base income. It is noteworthy that public consumption increasingly favored nonwhites over whites (rising by $\$ 3,500$ during the period), largely reflecting higher educational expenditures due to more children in the average nonwhite household (and despite the fact that the gap between white and nonwhite households in terms of children shrank by 50 percent between 1959 and 2004). On the other hand, the value of household production was higher for whites in all years because the hourly replacement cost was higher due to higher average money income and educational attainment (and despite the fact that white households went from spending more hours on household production than nonwhite households to spending significantly less).

## Age

We next examine household well-being according to five age groups (see Table 2, panel B). The standard "hump" shape of the age-to-income relationship (i.e., the middle-age groups are better off than both the youngest and oldest groups) held up for all three measures between 1959 and 1989. While the pattern repeated for EI and MI in 2000, a new pattern emerged in LIMEW: wellbeing for the 65 -and-older age group was 9 percent higher than the average nonelderly household. In contrast, the average income of the elderly was 76 percent of the income of nonelderly households according to EI and only 55 percent according to MI. Although mean LIMEW of the elderly declined to slightly below average LIMEW for all nonelderly households in 2004, the elderly were still substantially better off than the youngest group and slightly better off than the soon-to-retire age group.

There are some notable differences in the three measures regarding time trends. Mean LIMEW of the elderly relative to the nonelderly dropped from 0.79 in 1959 to 0.72 in 1972, climbed to 1.09 in 2000, and declined to 0.98 in 2004 (see Figure 2A). In contrast, mean EI decreased moderately, from 0.66 in 1959 to 0.64 in 1972, climbed to 0.84 in 1982, and fell to 0.76 in 2000
before recovering to 0.81 in 2004. MI showed a different trend, dropping considerably between 1959 and 1972 (from 0.58 to 0.51 ), improving in 1982 and 1989 (at roughly 0.60), and encountering setbacks in 2000 and 2004 (sliding to 0.57). The average well-being of the elderly relative to the nonelderly is highest according to LIMEW, followed by EI and MI. Equivalence scale-adjusted measures show that the elderly are relatively better off than the unadjusted measures. In fact, the ratio of mean equivalent LIMEW for elderly households to nonelderly households is greater than one in each year, rising from 1.01 in 1959 to 1.44 in 2000 before falling to 1.27 in 2004. Trends in median values by all three measures also show an improvement in the relative wellbeing of the elderly, but the gap between the elderly and nonelderly was generally much higher in terms of median values than mean values (with the exception of EI in 2000).

Among the nonelderly, the youngest age group (under 35) saw a sizable deterioration in relative well-being. The ratio of mean LIMEW to overall mean LIMEW fell from 93 percent in 1959 to 79 percent in 2004. Similar trends, though not as pronounced, are evident for EI ( 92 to 81 percent) and MI ( 93 to 84 percent), and in terms of median values. The other three nonelderly

Figure 2A Age Disparity: Ratio of Elderly to Nonelderly, 1959-2004


[^2]Figure 2B Age Disparity by Component: Nonelderly Minus Elderly, 2007


Source: Authors' calculations
age groups (35-44, 45-54, and 55-64) showed improvement in relative well-being in the 1960s and '70s, but were back where they started by 2004 as a result of gains by the elderly in the 1990s.

The gap in mean LIMEW between the elderly and nonelderly in absolute terms changed from \$15,500 in favor of the nonelderly in 1959 to $\$ 10,100$ in favor of the elderly in 2000 (Figure 2B). In 2000, the nonelderly had a substantial advantage in terms of base income (a difference of $\$ 51,500$ ) and a more moderate advantage in terms of public consumption ( $\$ 7,500$ ) and household production $(\$ 1,800)$. However, the elderly were much farther ahead of the nonelderly in terms of income from wealth (a difference of $\$ 35,800$ ), government transfers $(\$ 21,600)$, and taxes paying $\$ 13,500$ less. The difference in income from wealth reflects the fact that the LIMEW includes, as income, the annuity value from nonhome wealth, which is quite high for the elderly because of greater accumulated wealth and a shorter life expectancy. Government transfers also raise the relative well-being of the elderly because of the large share of age-based entitlement programs in total transfers (Social Security and Medicare). Taxes also affect nonelderly households more than elderly households because the nonelderly have higher taxable incomes. ${ }^{7}$

The bursting of the stock market bubble reduced the elderly's average income from wealth by $\$ 14,500$ between 2000 and 2004. For the elderly, increases in average government transfers (partly due to new Medicare pharmaceutical benefits) and tax reductions were not enough to cover the loss in wealth. For the nonelderly, decreases in average taxes $(\$ 3,900)$ and increases in average government transfers $(\$ 1,700)$ more than made up for the loss in average base income $(\$ 2,600)$. Of the $\$ 13,800$ reduction in the mean LIMEW gap between the elderly and the nonelderly from 1959 to 2004, $\$ 14,000$ was due to income from wealth. The other large contributors to closing the LIMEW gap were government transfers ( $\$ 15,500$ ), taxes paid ( $\$ 6,600$ ), and household production $(\$ 3,700)$, but this was almost completely offset by the widening gap in base income $(\$ 21,500)$ and public consumption $(\$ 4,500)$.

## Education

We next examine the gap in well-being between households classified by the educational attainment of the household head. The main story here is that less educated groups (less than high school, high school graduates, and some college) had deteriorating living
standards relative to college graduates over the period from 1959 to 2004 (see Table 2, panel C, and Figure 3A). The mean LIMEW ratio of household heads with less than a high school degree to those with a college degree fell from 0.53 to 0.50 , while the corresponding ratio for high school graduates declined from 0.67 to 0.62 , and from 0.77 to 0.70 for those with some college education. This downward trend is even more pronounced in terms of mean EI and mean MI. For example, the mean MI ratio of high school graduates to college graduates fell from 0.64 in 1959 to 0.50 in 2004. Similar trends are evident in terms of median values for the three measures, although the deterioration is greater for median EI and MI than for mean EI and MI. Equivalencescale adjustment produces strikingly similar results for all three measures because household size is similar between educational groups.

Figure 3B highlights the gap in mean LIMEW between high school and college graduates over the 1959-2004 period. The overall gap in 2004 was \$57,900, up from \$37,200 in 1959. College graduates had an advantage in base income ( $\$ 50,200$ ), income from wealth $(\$ 18,200)$, and household production $(\$ 12,500)$. On the other hand, high school graduates paid less in
taxes on average ( $\$ 17,200$ ), gained more in government transfers $(\$ 5,300)$, and had a slight advantage in terms of public consumption.

Of the increase in the LIMEW gap between college and high school graduates between 1959 and 2004 (\$20,700), more than 100 percent $(\$ 27,600)$ was due to the increase in the gap in base income (high school graduates made $\$ 600$ less in 2004 than in 1959), and there was a rising differential in income from wealth $(\$ 9,500)$. The largest contributors to reducing the LIMEW gap were government transfers (which increased by $\$ 7,000$ in favor of high school graduates), and taxes paid (which increased by $\$ 10,500$ in favor of college graduates).

## Marital Status

We now turn to disparities among three subgroups based on marital status and sex of the head of household. ${ }^{8}$ All three measures show a very wide gap between families with a single, female head of household ("single female") and families with a married head of household ("married couple") that widened further over time (see Table 2, panel D, and Figure 4A). Average money

Figure 3A Educational Disparity: Ratio of Educational Attainment to College Graduate, 1959-2004


[^3]Figure 3B Educational Disparity by Component: College Graduate Minus High School Graduate, 1959-2004


Source: Authors' calculations
income for single females in 2004 was less than half that for married couples. EI and LIMEW paint a better picture since the corresponding ratios of mean values were 0.56 and 0.62 , respectively. According to all measures, the gap in well-being between single, male heads of household ("single male") and married couples was considerably less than the gap between single females and married couples. The ratio for single males was 0.72 according to LIMEW, 0.74 according to EI, and 0.71 according to MI. However, these ratios represent a dramatic deterioration of relative well-being for single males, which was 90 percent of average LIMEW for married couples in 1959. Ratios of median values were similar for single females and single males in 2004, while equivalence scale-adjusted measures show larger gaps for femaleheaded households and smaller gaps for male-headed households. The difference between the ratios of mean equivalent LIMEW and mean LIMEW fell steadily over the period due to the convergence of household size among subgroups.

Time trends are also striking. The ratio of mean LIMEW between single female and married couple households declined rather steadily, from 0.72 in 1959 to 0.60 in 1989, before improving slightly to 0.62 in 2004. After first rising from 0.65 in 1959 to 0.68
in 1972, EI declines steadily to 0.56 in 2004, as does MI (from 0.63 to 0.48 ). In contrast, the ratio of median LIMEW showed a slight improvement between 1959 and 2004 (from 0.67 to 0.69 ). The difference in time trends between the mean and median ratios largely reflects the rising share of income from wealth in the LIMEW that went primarily to the upper income groups of married couples. As a result, mean LIMEW grew at a much faster rate than median LIMEW among married couples. The ratios of median EI and MI, which are similar to the mean ratios, show that single female wellbeing steadily declined relative to married couple well-being.

The distinct roles played by the individual components in shaping the absolute gap between single female and married couples in the LIMEW are highlighted in Figure 4B. Average LIMEW for single females was lower by roughly $\$ 53,700$ in $2004 .{ }^{9}$ The gap was due to base income ( $\$ 41,500$, or 77 percent), income from wealth ( $\$ 21,600$, or 40 percent), and household production ( $\$ 13,300$, or 25 percent). On the other side of the ledger, married couples paid, on average, $\$ 13,200$ more in taxes and received less in transfers (by $\$ 4,600$ ) and public consumption (by $\$ 5,000$ ). The advantage in net government expenditures for single females amounted to $\$ 22,700$.

Figure 4A Marital Status Disparity: Ratio of Marital Status to Married Couple, 1959-2004


Source: Authors' calculations

Figure 4B Marital Status Disparity by Component: Married Couple Minus Female-headed Household, 1959-2004


[^4]We can now see why the gap in mean LIMEW between single females and married couples rose sharply over time. Between 1959 and 2004, the $\$ 31,600$ rise in the gap in mean LIMEW was ascribable to base income ( 68 percent), income from wealth (63 percent), and household production (20 percent). Offsetting this increase was a large relative gain for single females in terms of public consumption (18 percent of the change in the overall gap), and particularly in terms of taxes paid (31 percent). Government transfers accounted for only a small improvement (2 percent) of the total gap over four decades.

## Conclusion

The LIMEW provides a different picture of disparities among population subgroups. According to the LIMEW, racial disparities decreased from 1959 to 1989, but then increased to 2000, while both EI and MI show a narrowing of disparities over the period. (All three indices show almost no change between 2000 and 2004.) The worsening racial gap during the 1990s is traceable mainly to the considerable and growing disadvantage in wealth ownership for nonwhites. All three measures show a very large gap in well-being between single females and married couples, as well as a deterioration in relative well-being. However, the sources of disparity between the two groups in the LIMEW appear to be considerably different than the official measures because they are shaped by the complex interaction of advantages and disadvantages in income from wealth, net government expenditures, and household production. This is especially striking in terms of public consumption and taxes. Single mothers enjoyed greater gains in school spending and child tax credits over the period. In contrast, the disparity between the groups according to EI and MI is largely a reflection of the gap in labor income.

The hump shape of the age-to-income relationship (where, on average, the middle-age groups are better off than both the youngest and oldest groups) holds for MI and EI throughout the period, but this relationship does not hold for LIMEW in 2000 and 2004. The elderly were approximately 9 percent better off than the nonelderly (on the basis of mean values) in 2000 because of greater income from accumulated wealth and a shorter remaining life expectancy. In 2004, the elderly were near parity with the nonelderly and better off than the soon-to-retire group. Moreover, LIMEW shows an almost continuous improvement in relative well-being of the elderly from 1959 to 2000. In contrast, EI shows an improvement from 1959 to 1982, followed by a
worsening to 2000, while MI shows a slight worsening over the whole period (particularly, from 1989 to 2000). An important part of the story here is the impact of tax and transfer policies on the well-being of the elderly. The advantage of the elderly in terms of net government expenditures increased from $\$ 8,500$ to $\$ 26,000$ between 1959 and 2004, while more than two thirds of the improvement for the under-35 age group was in base income.

## Acknowledgments

We are deeply indebted to the Alfred P. Sloan Foundation for financial support for this project. We are also grateful to Hyunsub Kum and Melissa Mahoney for their assistance.

## Notes

1. The U.S. Census Bureau has since replaced this concept with "disposable income," which omits the value of government medical insurance (Medicare and Medicaid) and employer contributions for private health insurance.
2. Prior to 1980, Census Bureau surveys always designated the husband as the "head" or householder in married-couple families. Since 1980, the householder is the person in whose name the housing unit is owned or rented. If it is owned or rented jointly by a married couple, then the householder may be either the wife or the husband.
3. We prefer to use mean rather than median values because it allows us to decompose the difference between subgroups by individual components. However, we also note the median values where appropriate.
4. "Whites" are defined here as non-Hispanic whites. "Nonwhites" refers to everyone else.
5. The equivalence scale used here is the three-parameter scale employed in the Census Bureau's experimental poverty measures (U.S. Census Bureau 2001). The three parameters attempt to take into account the following features of household consumption: on average, children consume less than adults; consumption rises less than proportionately to household size; and, the increase in household consumption is generally more when a child is added to a single-person family than when a child is added to a two-person family.
6. All dollar values are in inflation-adjusted 2007 dollars.
7. Most Social Security income is excluded from taxable income.
8. We include only family households in this comparison, thus households with only one person or with only unrelated individuals (e.g., roommates or unmarried partners).
9. The size of the difference can perhaps be appreciated by considering the following statistic: in 2007, the median annual earnings of an average full-time male worker were $\$ 45,113$; the corresponding mean value was $\$ 58,335$.

## References

U.S. Census Bureau. 2001. Experimental Poverty Measures: 1999. Current Population Reports, P60-216. Washington, D.C.: U.S. Government Printing Office.

Wolff, E. N., A. Zacharias, and H. Kum. 2007. How Well Off Are America's Elderly? A New Perspective. Annandale-onHudson, N.Y.: The Levy Economics Institute. April.
Wolff, E. N., A. Zacharias, and T. Masterson. 2009. "Long-Term Trends in The Levy Institute Measure of Economic WellBeing (LIMEW), United States, 1959-2004." Working Paper No. 556. Annandale-on-Hudson, N.Y.: The Levy Economics Institute. January.

Related Levy Institute Publications LeVY institute measure of economic well-being
What Are the Long-Term Trends in Intergroup
Economic Disparities?
THOMAS MASTERSON, EDWARD N. WOLFF, and ajIT ZaCharias
February 2009

Postwar Trends in Economic Well-Being in the
United States, 1959-2004
EDWARD N. WOLFF, AJIT ZACHARIAS,
and THOMAS MASTERSON
February 2009

How Well Off Are America's Elderly? A New Perspective EDWARD N. WOLFF, AJIT ZACHARIAS, and HYUNSUB KUM April 2007

## Wealth and Economic Inequality: Who's at the Top of the Economic Ladder?

EDWARD N. WOLFF and ajIT ZACHARIAS
December 2006

Interim Report 2005: The Effects of Government Deficits and the 2001-02 Recession on Well-Being
EDWARD N. WOLFF, AJIT ZACHARIAS, and HYUNSUB KUM May 2005

## STRATEGIC ANALYSIS

Flow of Funds Figures Show the Largest Drop in Household Borrowing in the Last 40 Years GENNARO ZEZZA
January 2009

Prospects for the United States and the World:
A Crisis That Conventional Remedies Cannot Resolve WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU, and GENNARO ZEZZA
December 2008

## Fiscal Stimulus: Is More Needed?

DIMITRI b. PAPADIMITRIOU, GREG HANNSGEN, and GENNARO ZEZZA
April 2008

The U.S. Economy: Is There a Way Out of the Woods? WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU, and Gennaro zezza
November 2007

The U.S. Economy: What's Next?
WYNNE GODLEY, DIMITRI B. PAPADIMITRIOU, and GENNARO ZEZZA
April 2007

## POLICY NOTES

Obama's Job Creation Promise: A Modest Proposal to Guarantee That He Meets and Exceeds Expectations
PAVLINA R. TCHERNEVA
2009/1

Time to Bail Out: Alternatives to the Bush-Paulson Plan DIMITRI B. PAPADIMITRIOU and L. RANDALL WRAY 2008/6

Will the Paulson Bailout Produce the Basis for Another Minsky Moment?

JAN KREGEL
2008/5

A Simple Proposal to Resolve the Disruption of Counterparty Risk in Short-Term Credit Markets

JAN Kregel
2008/4

What's a Central Bank to Do?
Policy Response to the Current Crisis
L. RANDALL WRAY

2008/3

## PUBLIC POLICY BRIEFS

After the Bust: The Outlook for Macroeconomics and Macroeconomic Policy

THOMAS I. PALLEY
No. 97, 2009 (Highlights, No. 97A)

## The Commodities Market Bubble

Money Manager Capitalism and the Financialization
of Commodities
L. RANDALL WRAY

No. 96, 2008 (Highlights, No. 96A)

## Shaky Foundations

Policy Lessons from America's Historic Housing Crash
PEDRO NICOLACI DA COSTA
No. 95, 2008 (Highlights, No. 95A)

## Financial Markets Meltdown

What Can We Learn from Minsky?
L. RANDALL WRAY

No. 94, 2008 (Highlights, No. 94A)

## WORKING PAPERS

Long-Term Trends in the Levy Institute Measure
of Economic Well-Being (LIMEW), 1959-2004
EDWARD N. WOLFF, AJIT ZACHARIAS, and THOMAS MASTERSON

No. 556, January 2009

Financial Stability: The Significance and Distinctiveness of Islamic Banking in Malaysia EWA KARWOWSKI

No. 555, January 2009

Macroeconomic Imbalances in the United States and Their Impact on the International Financial System JULIA S. PERELSTEIN
No. 554, January 2009

Insuring Against Private Capital Flows:
Is It Worth the Premium? What Are the Alternatives? JÖRG BIBOW

No. 553, December 2008

Hypothetical Integration in a Social Accounting Matrix and Fixed-price Multiplier Analysis

KIJONG KIM
No. 552, December 2008

Small Is Beautiful: Evidence of an Inverse Relationship between Farm Size and Yield in Turkey FATMA GÜL ÜNAL

No. 551, December 2008

An Empirical Analysis of Gender Bias in Education Spending in Paraguay
THOMAS MASTERSON
No. 550, November 2008

## Minsky's Cushions of Safety

Systemic Risk and the Crisis in the U.S. Subprime Mortgage Market JAN KREGEL

No. 93, 2008 (Highlights, No. 93A)


[^0]:    Source: Authors' calculations

[^1]:    Source: Author's calculations

[^2]:    Source: Authors' calculations

[^3]:    Source: Authors' calculations

[^4]:    Source: Authors' calculations

