

REDEFINING PROGRESS ISSUE BRIEF December 2001

THE GENUINE PROGRESS INDICATOR 2000 UPDATE

by Clifford Cobb, Mark Glickman, and Craig Cheslog

REDEFINING THE MEANING OF PROGRESS

The general public, policymakers, and media traditionally rely upon the Gross Domestic Product (GDP) as their primary scorecard of the nation's well-being. While the GDP has many useful functions, Redefining Progress has argued since 1994 that it is a poor tool for evaluating the United States' economic health.

Why? The GDP merely tallies monetary transactions on an annual basis. It makes no distinction between economic transactions that add to—or diminish—our well-being.

Redefining Progress' research reveals that much of what is now measured as economic growth consists of fixing social problems, borrowing environmental and other resources from the future, or shifting functions from the community and household realm to the monetized economy.

Using the GDP as the sole measure of economic growth, therefore, can mask key societal and economic problems.

Redefining Progress developed the Genuine Progress Indicator (GPI) in response to these concerns. The GPI is a comprehensive measure of national health expressed in economic terms. The GPI includes the economic contributions of household and volunteer work while subtracting factors like crime, pollution, and family breakdown. These adjustments allow the GPI to provide a more accurate snapshot of our nation's progress than the GDP.

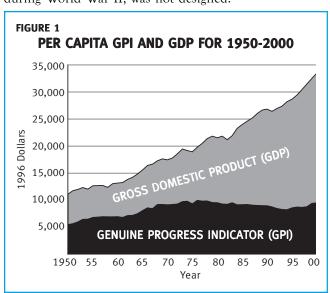
The GPI rose slightly in 2000 to an all-time high of \$2.63 trillion (as measured in 1996 dollars). This represents growth of \$64 billion (or 2.5 percent) over its 1999 level. Per capita GPI rose by \$148 (or 1.6 percent) to \$9,550.

These figures compare to a GDP in 2000 of \$9.22 trillion (as measured in constant 1996 dollars). The GDP grew in 2000 by \$348 billion (or 3.9 percent). Per capita GDP rose by \$978 (or 3.0 percent) to \$33,497.

If one observed only the GDP, it would appear that economic progress had been almost continuous (with only relatively brief recessions) since 1950. The GDP grew 79 percent in real terms from 1974-1994. The GPI—which accounts for social and environmental factors in addition to output, capital growth, and trade—grew only 2 percent during that time, from \$2.09 trillion to \$2.14 trillion (in 1996 dollars). From 1974-2000, the GPI rose 25 percent while the GDP rose 125 percent (in 1996 dollars).

The difference between the GDP and GPI growth rates illustrates how market prices fail to reflect the true social costs of economic activity. For example, rising fossil fuel use adds to the GDP, but reduces the GPI. The GPI considers that increased fossil fuel use is depleting nonrenewable resources, polluting the atmosphere with factory and vehicle emissions, increasing traffic congestion and accidents, and contributing to climate change. All of these outcomes reduce our quality of life.

The GDP and GPI tell remarkably different stories about the last half-century. That is because the GDP is being asked to measure growth in our standard of living. It is a task for which the GDP, developed to measure production during World War II, was not designed.



MEASURING OUTPUT, NOT PROGRESS

When the GDP rises, pundits cheer and politicians scramble to take credit. When the GDP is stagnant or falls, people become alarmed, the pundits seek to assign blame, and politicians scramble to escape guilt.

The GDP, however, is simply a gross tally of the total market value of goods and services produced in the United States.² This means that the GDP includes only a portion of the nation's economic activity—the part that involves an exchange of money. It omits, by design, much of what people value and many of the activities that fulfill our basic needs.

The GDP does not count community volunteer work or the unpaid work of households caring for children and the elderly. It ignores the value of leisure time spent in recreation, relaxation, or with family and friends. It leaves out the crucial contributions of the natural habitat, such as clean air and water, fertile soil, moderate climate, and protection from the sun's harmful rays.

The GDP fails to distinguish between monetary transactions that genuinely add to well-being and those that diminish it or merely seek to maintain the status quo. It makes no adjustment for economic activities that simply try to make up for degraded conditions. Most people perceive many of the activities that contribute to GDP growth as losses rather than gains. The GDP, for example, treats the money we pay to avoid or remedy crime, divorce, and other signs of social breakdown as economic gains. Car wrecks, medical costs, insurance, and new locks and security systems also add to the GDP figure.

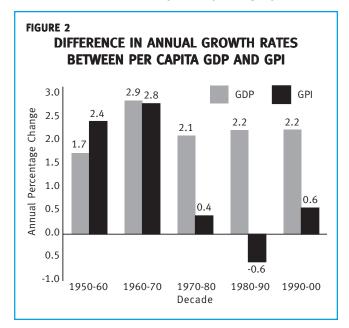
The GDP also ignores the environmental costs of economic activities. It does not account for the depletion of natural resources used to produce goods and services. By treating the depletion or degradation of our natural resources as income rather than asset depreciation, the GDP violates both basic accounting principles and common sense.

CALCULATING THE GPI

The GPI begins with the personal consumption component of the GDP, excluding capital investment, government spending, and net exports. Beyond these general economic measures, the GPI factors in social, environmental, and economic phenomena that diminish or enhance quality of life. Many of these factors are not typically measured in monetary terms or included in typical national income accounting.

The GPI considers who benefits from economic growth by including measures of social progress or decline, like income distribution and unemployment rates. The GPI also adjusts for other quality of social life indicators. These include the costs of crime and family breakdown and contributions made by unpaid housework and childcare. The GPI also factors in the ability of people to enjoy the benefits of economic growth by subtracting the value of the hours people spent commuting to work and adjusting for the change in leisure time relative to the base year of 1969.

The GPI also extracts significant long-term trends from short-term accounting variations. Some data are averaged over five years, as year-to-year fluctuations of a single value could distort understanding of long-term progressions.



DISSECTING THE GPI

The GPI grew at a rate of 3.3 percent per year during the past six years (1994-2000) following a 20-year period of stagnation (1974-1994). This higher growth rate is mostly accounted for by changes in five factors, listed below in the descending order of their effects.

1) Capital stock per worker increased dramatically from 1994 to 2000. If the rate of growth of capital stock per worker in recent years had followed the previous 20-year trend, the annual growth of capital would have been \$291 billion less in 2000 than it was, and the GPI would have been 11 percent lower. (If annual additions to the capital stock had been as rapid from 1974 to 1994 as they have been in the last six years, the GPI would have been over \$5 trillion larger. That suggests the rapid accumulation of capital stock from 1994 to 2000 is not sustainable.)

2) Personal consumption also jumped from 1994 to 2000. Whereas personal consumption grew at an annual rate of 3.1 percent from 1974 to 1994, during the next six years it

CALCULATING THE 2000 GENUINE PROGRESS INDICATOR (in billions of 1996 dollars)

BILLIONS OF DOLLARS

THE GPI'S STARTING POINT

Personal Consumption in 2000

6,258

COSTS IGNORED BY THE GDP THAT ARE SUBTRACTED FROM THE GPI

Economic costs (such as the widening gap between the rich and poor and the future costs of borrowing from foreign countries to pay for current consumption)

Adjustment for unequal income distribution	-959
Net foreign lending or borrowing	-324
Cost of consumer durables	-896

Social costs (such as the cost of divorce, household cost of crime, or loss of leisure time)

Cost of crime	-30
Costs of automobile accidents	-158
Cost of commuting	-455
Cost of family breakdown	-63
Loss of leisure time	-336
Cost of underemployment	-115

Environmental costs (such as the cost of pollution and depletion of our stock of natural resources)

Cost of household pollution abatement	-14
Cost of water pollution	-53
Cost of air pollution	-39
Cost of noise pollution	-16
Loss of wetlands	-412
Loss of farmlands	-171
Depletion of nonrenewable resources	-1,497
Cost of long-term environmental damage	-1,179
Cost of ozone depletion	-313
Loss of old-growth forests	-90

BENEFITS IGNORED BY THE GDP THAT ARE ADDED TO THE GPI

Value of housework and parenting	2,079
Value of volunteer work	97
Services of consumer durables	744
Services of highways and streets	96
Net capital investment	476

THE TOTAL: THE GENUINE PROGRESS INDICATOR

2,630

(Per capita GPI in 2000 was \$9,550. Per capita GDP in 2000 was \$33,497.)

grew at a rate of 4.1 percent per year. If the higher rate had prevailed during the earlier period, the GPI would have reached \$2.96 trillion in 1994 and grown by 41 percent from 1974 to 1994. Conversely, if personal consumption had grown by only 3.1 percent in the past six years, the GPI would have been 10 percent lower in 2000.

3) The pace of declining leisure time slowed and unemployment fell from 1994 to 2000. From 1994 to 2000, the rate at which leisure time is declining slowed and the cost of underemployment fell in absolute value. (Unemployment fell to its lowest point in over three decades.) If the experience of the past six years had applied to the earlier period, the GPI would have grown by 17 percent from 1974 to 1994, rather than 2 percent.

Alternatively, if the 20-year trend had applied to the recent six-year period, the GPI in 2000 would have been \$2.38 trillion, or 9 percent lower than the \$2.61 trillion it actually reached.

4) The rate of loss of natural assets fell during the 1994–2000 period. If the loss

of farmland, wetlands, old-growth forest, and mineral resources had occurred during the 1974-1994 period at the lower rates of the past six years, the GPI would have been \$205 billion higher in 1994 than it actually was. It would have grown by 12 percent instead of 2 percent. If the costs of long-term environmental damage and of ozone depletion had grown as slowly in the earlier 20-year period as they did in the past six years, the GPI would have been \$261 billion higher in 1994 than it was. It would have grown by 15 percent instead of 2 percent. Combining the two effects would have raised the growth of GPI from 1974 to 1994 to 25 percent.

Thus, a major factor in the stagnation of GPI from 1974 to 1994 was rapid resource depletion and global environmental damage. If the loss of natural assets had

continued at the same rate from 1994 to 2000 that had occurred in the previous twenty years, the GPI would have been 8 percent lower than it was in 2000. The GPI would have grown 1.9 percent per year instead of 3.3 percent per year for the past six years.

The Genuine Progress Indicator (GPI) has been sounding warnings about our future since its initial 1994 release. It is time to stop ignoring them.

The Gross Domestic Product

the activities that fulfill our

basic needs.

(GDP) omits, by design, much of

what people value and many of

5) The distribution of income over the population leveled off from 1994-2000 after dramatically widening over the previous 20 years. The GPI includes a factor for income distribution, with higher percentages of income going to the wealthiest segments of the economy lowering the GPI. If the distribution index (based on the Gini coefficient) had been the same in 1994 as it was in 1974, the GPI would have been \$648 billion higher in 1994.³ The GPI

would have risen by 33 percent—instead of 2 percent—during that time just by making that single change.

Most of the apparent GDP gains during the past three decades accrued to the richest 20 percent of society because of the increasingly uneven distribution of income. Inequality has changed little after 1994, however, so this factor has not slowed the growth of GPI in recent years. If the index of distribution had continued to become more unequal at the same rate as it did from 1974 to 1994, the GPI in 2000 would have been \$178 billion (or 7 percent) lower than it was.

The most important countervailing trend, which *lowered* the growth of the GPI in the past six years, was the dramatic

growth of indebtedness to foreign lenders. In 1989, the U.S. net international position became negative, which means that foreigners owned more American assets, than Americans owned foreign assets.

From 1989 through 1994, that imbalance worsened by an average of \$232 billion per year. From 1994 through 2000, the gap in asset ownership widened by an average of \$1,149 billion per year, almost exactly five times as fast. If the imbalance of asset ownership had continued to increase annually at \$232 billion (instead of \$1.15 trillion), the GPI in 2000 would have been \$324 billion or 12 percent higher than it was. Thus changes in foreign indebtedness partially offset the five factors helped boost the GPI from 1994 to 2000.

TREND OR ANOMALY?

Do the past six years of a rising GPI indicate the beginning of a new long-term trend or an anomaly that will last only a few years and fade away? Of the five factors that boosted the GPI from 1994 to 2000, it seems likely that only two—

a slower rate of resource depletion and stability in income distribution—are likely to continue to stimulate the GPI.

The other three factors are likely to reverse as the economy goes into recession (as it did in March 2001)⁴ and GDP levels off or declines.

Consumption, employment, and additions to the capital stock are unlikely to sustain the rates of growth recently witnessed. That means the GPI will likely remain flat or decline slightly in the next few years after its recent unprecedented growth unless other factors—such as environmental improvements—offset this downward pressure.

LOOKING AHEAD

Congress continues to debate an economic stimulus package as this report is written. These proposals, proponents argue, will stimulate an U.S. economy suffering from a recession that began in March 2001 and was exacerbated by the terrorist attacks of September 11, 2001.

If our political leaders focus solely on trying to spark GDP growth (or rewarding industries and interest groups with the most-effective lobbyists) as they negotiate a stimulus package, they risk exacerbating the negative social and environmental costs that the GPI measures but the GDP excludes.

For example, income or capital gains tax cuts that increase income inequality may stimulate consumption but could also reduce the GPI. A payroll tax cut or enhancements to the Earned Income Tax Credit, on the other hand, could stimulate the economy without risking great increases in income inequality.

Measures that increase the net capital stock, like proposals to accelerate depreciation of business expenses, could stimulate investment and improve the GPI. The GPI would also be boosted by measures to reduce the trade deficit and improve the United States' Net International Position.

Environmental improvements—like reducing water, air, and noise pollution—would stimulate GPI growth. Slowing the depletion of nonrenewable resources would have a positive GPI impact. Enacting measures to reduce the United States' fossil fuel dependence would lead to GPI growth, greater energy and national security, reduced climate change impacts, and less pollution.

The longest period of economic growth in U.S. history ended in 2001, and that fact will be reflected in our next GPI report. This growth, including the rapid expansion of the late 1990s, was fueled by consumption. Even that brisk growth failed, however, to resolve the challenges that reduce our quality of life and add to the burden future generations will face.

We need to reduce our consumer, national, and ecological debts. We must start developing innovative and long-term stimulating alternatives to our oil-addicted economy. We have to reconnect with our communities and our families and place a higher value on parenting, volunteer work, and our common assets.

The Genuine Progress Indicator asks questions and articulates problems the Gross Domestic Product ignores by design. The GDP is an useful measure in other contexts, but policymakers should not rely on it as a snapshot of our society's health. It must not exist in a policy vacuum.

The GPI has been sounding warnings about our future since its initial 1994 release. It is time to stop ignoring them.

FOR ADDITIONAL READING

For more information about the Genuine Progress Indicator, you can read the following publications:

Anielski, Mark and Jonathan Rowe. The Genuine Progress Indicator 1998 Update. San Francisco, Calif.: Redefining Progress, 1998.

Cobb, Clifford, Gary Sue Goodman; and Joanne C. May Kliejunas. Blazing Sun Overhead and Clouds on the Horizon: The Genuine Progress Report for 1999. Oakland, Calif.: Redefining Progress, 2000.

Cobb, Clifford, Gary Sue Goodman, and Mathis Wackernagel. Why Bigger Isn't Better: The Genuine Progress Indicator—1999 Update. San Francisco, Calif.: Redefining Progress, 1999.

Cobb, Clifford, Ted Halstead, Jonathan Rowe. The Genuine Progress Indicator: Summary of Data and Methodology. San Francisco, Calif.: Redefining Progress, 1995.

Cobb, Clifford, Ted Halstead, and Jonathan Rowe. "If The GDP Is Up, Why Is America Down?" *The Atlantic Monthly*, October 1995: pp. 59-78. (Also available on-line at www.theatlantic.com/politics/ecbig/gdp.htm.)

Daly, Herman E., John B. Cobb Jr., and Clifford W. Cobb. For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future. Boston, Mass.: Beacon Press, 1994.

ENDNOTES

- ¹ Bureau of Economic Analysis, U.S. Department of Commerce, National Income and Product Accounts Tables, Table 1.2, Real Gross Domestic Product. Retrieved Dec. 17, 2001, from www.bea.doc.gov/bea/dn/nipaweb/TableViewFixed.asp#Mid.
- ² Congressional Budget Office, Glossary of Budgetary and Economic Terms, Retrieved Nov. 26, 2001, from www.cbo.gov/glossary.cfm.
- ³ The Gini coefficient is a standard measure of relative distribution of income the represents the degree of a society's equality in income distribution. A Gini coefficient of "0" stands for perfect equality among all households, "1" indicates that a single household receives all of the income.
- ⁴ "The Business Cycle Peak of March 2001," *National Bureau of Economic Research*, November 26, 2001.

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ABOUT THE AUTHORS

Clifford Cobb, a Redefining Progress Senior Fellow, pioneered the use of the GPI as an alternative measure of progress and conducted the research and calculations for this annual update. Mark Glickman is Redefining Progress' Accurate Prices Program Director. Craig Cheslog is Redefining Progress' Communications and Government Relations Director.

REDEFINING PROGRESS is a nonprofit organization that develops policies and tools that reorient the economy to value people and nature first.

Redefining Progress does this by developing policies and tools to internalize the economy's hidden social and environmental costs (the **Accurate Prices Program**), to transform the human use and distribution of the Earth's natural resources (the **Sustainability Program**), and to restore the value of shared social and natural assets (the **Common Assets Program**).

These three goals come together in Redefining Progress's advocacy of fair and low-cost policies to reverse climate change (the **Climate Change Program**).

REDEFINING PROGRESS

1904 Franklin Street, 6th Floor Oakland, CA 94612 Telephone: 510.444.3041 FAX: 510.444.3191

www.RedefiningProgress.org

