
Measuring Real Progress

Author

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Reviewer's note

This paper describes the necessity of having new measures for progress on the society level. This discussion is not really new; but it is new that a jurisdiction (Nova Scotia) will soon have a detailed and policy-relevant measure of wellbeing and sustainable development available and ready for actual application in practice, and that a national statistical agency (Statistics Canada) has been interested in and supportive of the work. On the one hand we have the same problem in industry because all traditional accounting systems are obsolete. We are trying to solve this problem with the use of excellence models like the Malcolm Baldrige National Quality Award or the Balanced Score Card for the deployment process. Some of us know that we need stakeholder approaches instead of simple shareholder-value concepts. Colman is describing the same problem on a society level. The old measure is leading to wrong goals. Growth per se cannot be a value worth living for. The use of a Genuine Progress Index (or the use of a Society Excellence Model) is a measure we owe to our children.

—Klaus J. Zink, Chair, Industrial Management and Human Factors, Univ. of Kaiserslautern, Germany

Introduction

There is remarkable consensus across all political divisions on the fundamental principles of a decent society and on the benchmarks that would signify genuine progress. We all want to live in a peaceful and safe society without crime. We all value a clean environment with healthy forests, soils, lakes and oceans. We need good health, strong communities, and time to relax and develop our potential. We want economic security and less poverty.

No political party officially favors greater insecurity, a degraded environment, or more stress, crime, poverty, and inequality. Why then do we see policies that promote those very outcomes? Why have we been unable to create the kind of society we genuinely want to inhabit? Why have we not ordered our policies and priorities in accord with our shared values and human needs?

One reason is that we have all been getting the wrong message from our current measures of progress, which are based primarily on economic growth statistics as measured by changes in the Gross Domestic Product (GDP). All of us—politicians, economists, journalists, and the general public—have been completely hooked on the illusion that equates economic growth with well-being and prosperity. This was not the intention of those who created the GDP. Simon Kuznets, its principal architect, warned 40 years ago:

The welfare of a nation can scarcely be inferred from a measurement of national income.... Goals for “more” growth should specify of what and for what.¹

GDP growth statistics were never meant to be used as a measure of progress, as they are today. In fact, activities that degrade our quality of life, like crime, pollution, and addictive gambling, all make the economy grow. The more fish we sell and the more trees we cut down, the more the economy grows. Working longer hours makes the economy grow. And the economy can grow even if inequality and poverty increase.

Engines of growth

Here in Canada we have been enamored with the “dynamic” American economy and rapid growth rates through the 1990s. But we do not often ask, as

Engines of growth, continued

Kuznets counsels, what is driving that growth.

For example, one of the fastest growing sectors of the American economy is imprisonment, at an annual growth rate of 6.2 percent per year throughout the 1990s. One in every 150 Americans is now behind bars, the highest rate in the world compared to one in 900 Canadians and one in 1,600 Nova Scotians. The O.J. Simpson trial alone added \$200 million to the U.S. economy, and the Oklahoma City explosion and Littleton massacre fueled the booming U.S. security industry, which now adds \$40 billion a year to the economy, with most sales now going to schools. Gambling is another rapid growth industry—a \$50-billion-a-year business in the U.S. Divorce adds \$20 billion a year to the U.S. economy. Car crashes add another \$57 billion.²

The more rapidly we deplete our natural resources and the more fossil fuels we burn, the faster the economy grows. Because we assign no value to our natural capital, we actually count its depreciation as gain, like a factory owner selling off his machinery and counting it as profit.

Overeating contributes to economic growth many times over, starting with the value of the excess food consumed and the advertising needed to sell it. Then the diet and weight-loss industries add \$32 billion a year more to the U.S. economy, and obesity-related health problems another \$50 billion, at the same time that 20 million people in the world, mostly children, die every year from hunger and malnutrition.

Similarly, toxic pollution, sickness, stress, and war all make the economy grow. The Exxon Valdez contributed more to the Alaska economy by spilling its oil than if it had delivered the oil safely to port, because the entire cleanup costs, lawsuits, and media coverage added to the growth statistics. The Yugoslav war stimulated the economies of the NATO countries to the tune of \$60 million a day, and our economies will benefit even more by rebuilding what we have destroyed.

In short, our growth statistics make no distinction between economic activity that contributes to well-being and that which causes harm. Growth is simply a quantitative increase in the physical scale of the economy, and it tells us nothing about our actual well-being.

Citizenship and voluntary work

Ironically, while we are so busy counting everything on which we spend money, we assign no economic value to vital unpaid activities that contribute to our well-being. Citizenship and voluntary community service, which constitute the backbone of civil society, are not counted or valued in our measures of progress because no money is exchanged. If we did measure them, we would know that volunteer services to the elderly, sick, disabled, children, and other vulnerable groups have declined throughout Canada during the 1990s at the same time that government has cut social services, leading to a cumulative 30% erosion in the social safety net.

Counting the value of households

Even though household work and raising children are more essential to basic quality of life than much of the work done in offices, factories, and stores, they have

Counting the value of households, continued

no value in the GDP, while every additional lawyer, broker, and advertising executive is counted as a contribution to well-being. We value the booming child care industry as the fourth fastest growing industry in the country, but we do not count unpaid child care, and so we do not notice that parents are spending less time with their children than ever before—a sign of progress?

If we were to count voluntary and household work, we would see that they add \$325 billion a year of valuable services to the Canadian economy. If we measured the household—not just as a source of consumption, as taught in every economics textbook, but as a productive economic unit—we would discover that total paid and unpaid work has steadily increased. In 1900, a single-earner male breadwinner worked a 59-hour week in Canada, while a full-time female homemaker put in an average 56-hour week of household work, for a total household workweek of 115 hours. Today the average Canadian dual earner couple puts in 79 hours of paid work and 56 hours of unpaid household work a week, for a total household workweek of 135 hours.

All those extra *paid* hours fuel economic growth and are counted as progress. But the loss of “precious” free time is invisible and unvalued in our measures of progress. Aristotle recognized 2,400 years ago that leisure was a prerequisite for contemplation, informed discussion, participation in political life, and genuine freedom. It is also essential for relaxation and health, for spiritual practice, and for a decent quality of life.

What we count is what we value in society

The things we measure and count—quite literally—tell us what we value as a society. If we do not count non-monetary and non-material assets, we effectively discount and devalue them. And what we don't measure and value in our central accounting mechanism will be effectively sidelined in the policy arena. We may pay pious public homage to environmental quality and to social and spiritual values, but if we count their degradation as progress in our growth measures, and do not count their preservation or improvement as assets, we will continue to send misleading signals to policy makers and public alike. The result will be to blunt effective remedial action, and to distort policy priorities.

Until we explicitly assign economic value to our free time, voluntary community service, parental time with children, and natural resource wealth, they will never receive adequate attention on the public policy agenda. Similarly, until we assign explicit value to equity in our growth measures, we will continue to give little policy attention to the fact that here in Nova Scotia the poorest 40% of households have lost 20% of their real income after taxes and transfers since 1990.

A better way to measure progress

The obsession with economic growth and its confusion with quality of life have led us down a dangerous and self-destructive path. It is doubtful that we will leave our children a better legacy until we stop gauging our well-being and prosperity by how fast the economy is growing, and until we stop misusing the GDP as a measure of progress. Thirty years ago, just before he was assassinated, Robert

A better way to measure progress, continued

Kennedy remarked:

Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things.... The Gross National Product includes air pollution and advertising for cigarettes, and ambulances to clear our highways of carnage. It counts special locks for our doors, and jails for the people who break them. The GNP includes the destruction of the redwoods and the death of Lake Superior. It grows with the production of napalm and missiles and nuclear warheads.

And if the GNP includes all this, there is much that it does not comprehend. It does not allow for the health of our families, the quality of their education, or the joy of their play. It is indifferent to the decency of our factories and the safety of our streets alike. It does not include the beauty of our poetry or the strength of our marriages, or the intelligence of our public debate, or the integrity of our public officials.

The GNP measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile.³

What is urgently, indeed desperately, needed are measures of well-being, prosperity, and progress that explicitly value the non-material assets that are the true basis of our wealth, including the strength of our communities, our free time, the quality of our environment, the health of our natural resources, and our concern for others. The means to do so exist.

In fact, tremendous progress has been made in the last 20 years in natural resource accounting, and in developing good social indicators, time use surveys, environmental quality measures, and other means of assessing well-being and quality of life. We are now completely capable of measuring our progress in a better way that accords with our shared values and lets us know whether we are moving towards the society we want to create.

After three California researchers developed a Genuine Progress Indicator (GPI) in 1995, incorporating 26 social, economic, and environmental variables, 400 leading economists, including Nobel laureates, jointly stated:

Since the GDP measures only the quantity of market activity without accounting for the social and ecological costs involved, it is both inadequate and misleading as a measure of true prosperity. Policy-makers, economists, the media, and international agencies should cease using the GDP as a measure of progress and publicly acknowledge its shortcomings. New indicators of progress are urgently needed to guide our society...The GPI is an important step in this direction.⁴

GPI Atlantic is developing a Genuine Progress Index as a pilot project for Canada

Here in Nova Scotia *GPI Atlantic*, a non-profit research group, is developing a Genuine Progress Index as a pilot project for the country, with advice and support from experts in Statistics Canada. We hope to have it ready for use before the end of the year 2002. It is designed as a practical policy-relevant tool that is easy to maintain and replicate, that can accurately measure sustainable development, and that can provide much-needed information to policy makers about issues that are currently hidden and even invisible in our market statistics.

The Nova Scotia GPI assigns explicit value to natural resources, including soils, forests, fisheries, and non-renewable energy sources and assesses the sustainability of

GPI for Nova Scotia, continued

harvesting practices, consumption habits, and transportation systems. It measures and values unpaid voluntary and household work, and it counts crime, pollution, greenhouse gas emissions, road accidents, and other liabilities as economic costs—not gains, as the GDP does.

The index goes up if our society is becoming more equal, if we have more free time, and if our quality of life is improving. It counts our health, educational attainment, and economic security. It attempts, in short, to measure “that which makes life worthwhile.” It is common-sense economics that corresponds with the realities of our daily lives as we actually experience them.

Costs and benefits

Unlike the GDP, the GPI distinguishes economic activities that produce benefit from those that cause harm. Having a more peaceful society may actually show up as a disadvantage in the GDP and growth statistics.

By contrast, the GPI regards a peaceful and secure society as a profound social asset, with higher crime rates a sign of depreciation in the value of that asset. Unlike the GDP, lower crime rates make the GPI go up, and crime costs are subtracted rather than added in assessments of prosperity.

GPI Atlantic found that crime costs Nova Scotians \$1.2 billion a year, or \$3,500 per household, including \$312 million in victim losses; \$258 million in public spending on prisons, police, and courts; and \$46 million in home security expenses. Nova Scotian households pay \$800 a year more in higher prices due to in-store retail theft and business crime prevention costs, and \$200 more per household in higher insurance premiums due to insurance fraud.

Canadians are three times as likely to be victims of crime as their parents were a generation ago. According to the GPI, this is not a sign of progress, even though our economy may grow as a result. GPI Atlantic found that if crime were still at 1962 levels, Nova Scotians would be saving about \$750 million a year, or \$2,200 per household.⁵

The GPI takes a similar approach to road accidents, toxic pollution, and greenhouse gas emissions, which are also seen as costs rather than benefits. Like crime and resource depletion, they are areas of the economy where more growth is clearly not desirable.

By incorporating “external” costs directly into the economic accounting structure, the “full cost accounting” mechanisms in the GPI can also help policy makers to identify investments that produce lower social and environmental costs to society. Gambling, clear-cutting, and other growth industries might receive less government support if social costs were counted, and sustainable practices might receive more encouragement.

For example, GPI Atlantic recently found that a 10% shift from truck to rail freight would save Nova Scotian taxpayers \$11 million a year when the costs of greenhouse gas emissions, road accidents, and road maintenance costs are included. Telecommuting two days per week would save \$2,200 annually per employee when travel time, fuel, parking, accident, air pollution, and other environmental and social

**Costs and benefits,
continued**

costs are included.

The GPI approach contrasts sharply with conventional accounting methods, which value the contribution that commuting makes to economic growth. Canadians currently spend \$102 billion a year on their cars, \$11 billion more on highways, \$500 million on car advertisements, and billions more on hospitals, police, courts, and funeral costs for the 3,000 killed and 25,000 seriously injured car crash victims every year. All this spending currently counts as progress and contributes to assessments of consumer confidence. By contrast, car-pooling may slow GDP growth even though it produces major savings in fuel costs and avoided environmental and social damages. Full cost-benefit accounting methods would lend more support to taxation policies and subsidy incentives that support mass transit alternatives and other more sustainable practices.

**Valuing our natural
resources**

The costs of holding on to the illusion that “more is better” are frightening. Scientists recognize that the only biological organism that has unlimited growth as its dogma is the cancer cell, the apparent model for our conventional economic theory. By contrast, the natural world thrives on balance and equilibrium, and recognizes inherent limits to growth. The cancer analogy is apt, because the path of limitless growth is profoundly self-destructive. No matter how many cars we have in the driveway or how many possessions we accumulate, the environment will not tolerate the growth illusion even if we fail to see through it.

Valuing both natural resources and time provides an accounting framework that recognizes inherent limits to our economic activity and values balance and equilibrium. In the Genuine Progress Index, natural resources are valued as finite capital stocks, subject to depreciation like produced capital. Genuine progress is measured by our ability to live off the income, or services, produced by our resources without depleting the capital stock that is the basis of wealth for both our children and ourselves.

The GPI acknowledges the full range of ecological and social services provided by these resources. The GPI Forest Account, for example, counts not only timber production, but also the value of forests in protecting watersheds, habitat, and biodiversity; guarding against soil erosion; regulating climate and sequestering carbon; and providing for recreation and spiritual enjoyment. Healthy soils and the maintenance of multi-species, multi-aged forests in turn provide multiple economic benefits, by enhancing timber productivity, increasing the economic value of forest products, protecting against fire, disease, and insects; and supporting the burgeoning eco-tourism industry.

The massive unemployment created by the collapse of the Atlantic ground fishery punctured the conventional illusion that jobs and environmental conservation are in conflict. Failure to protect and conserve a valuable natural resource resulted in the loss of 40,000 fisheries jobs in the region.

We now understand that soil erosion today threatens food security for our

Valuing time

children and that valuing and protecting our resource wealth are essential to protect the human economy.

Like natural resources, time is also finite and similarly limits economic activity. We all have 24 hours a day and a limited life span. How we pass that time, and how we balance our paid and unpaid work, our voluntary service, and our free time, are measures of our well-being, quality of life, and contribution to society. The GPI uses time use surveys to measure and value time over a full 24-hour period and to assess the balance between its alternative uses. Measuring time as time, rather than as money, also cuts through the myth of limitless growth.

What happens when we start valuing time? The policy implications are profound. For example, GPI Atlantic found that Nova Scotians have the highest rate of voluntary activity in the country, giving 134 million hours a year, the equivalent of 81,000 jobs, or \$1.9 billion in services, equal to ten percent of our GDP—a reservoir of generosity completely invisible in our conventional accounts. Unmeasured and unvalued, the voluntary sector has not received the support it needs to do its work well.

Value of work

Longer work hours due to downsizing and declining real incomes have squeezed volunteer time, producing a steady decline of 7.2 percent in voluntary service hours over the past ten years. For the first time, claims by the Canadian Finance Minister that volunteers could compensate for government service cuts have been disproved. Without tracking the unpaid volunteer sector, such government statements could never be tested.

Measuring unpaid household work shines the spotlight on the time stress of working parents struggling to juggle job and household responsibilities, and on the need for family-friendly work arrangements and flexible work hours. The modern work place has not yet adjusted to the reality that women have doubled their rate of participation in the paid work force. Working mothers put in an average of more than 11 hours a day of paid and unpaid work on weekdays, and more than 15 hours of unpaid work on weekends. According to Statistics Canada, the average working mother today puts in a 75-hour workweek.

Measuring housework also raises important pay equity issues. Work traditionally performed by women in the household and regarded as “free” has been devalued in the market economy, resulting in significant gender pay inequities. Although it is an important investment in our human capital, and it requires vital skills and continuous alertness, child care workers in Nova Scotia earn an average of only \$7.58 an hour.

GPI Atlantic found that single mothers dependent on the household economy put in an average of 50 hours a week of productive household work. If it were replaced for pay in the market economy, this work would be worth \$450 a week. Because it is invisible and unvalued, 70 percent of single mothers in Nova Scotia live below the “low-income cut-off,” the major cause of child poverty in the province. From the GPI perspective, social supports for single mothers are not “welfare” any more than taxpayer subsidies for job creation in the market economy are “welfare.”

Value of work, continued

They are seen, instead, as essential social infrastructure for the household economy.

Equity and job creation

Millions of Americans have been left behind by the growth spurt in that country. The U.S. Census Bureau reports that income inequality has risen dramatically since 1968: by 18 percent for all U.S. households, and by over 23 percent for families. The richest one-percent of American households now owns 40 percent of the national wealth, while the net worth of middle class families has fallen steadily through the 1990s due to rising indebtedness. Is this progress?

In 1989 the Canadian House of Commons unanimously vowed to eliminate child poverty by the year 2000. Since 1989 child poverty has increased by 47%. In other words, there is no guarantee that the tide of economic growth lifts all boats, and the evidence indicates that the opposite is frequently the case.

For this reason the GPI explicitly values increased equity and job security as benchmarks of genuine progress. Indeed, Statistics Canada recently recognized that concern for equity is inherent in any measure of sustainable development. Once limits to growth are accepted, the issue is fair distribution rather than increased production. If everyone in the world consumed resources at the Canadian level, we would require four additional planets earth.

Within this country, Statistics Canada points to a growing polarization of hours as the main cause of increased earnings inequality. The growth of insecure, temporary, and marginal employment—the engine of employment growth in the 1990s—means that more Canadians cannot get the work hours they need to support themselves. At the same time, due to downsizing and declining real incomes, more Canadians are working longer hours.

By counting underemployment and overwork as economic costs, and giving explicit value to equity and free time, the GPI can point to a range of intelligent job creation strategies that are not dependent on more growth.

Shifting the viewpoint

None of this means that there should be no growth of any kind. Some types of economic growth clearly enhance well-being, increase equity, and protect the environment. There is vital work to be done in our society—raising children, caring for those in need, restoring our forests, providing adequate food and shelter for all, enhancing our knowledge and understanding, and strengthening our communities.

But we will never shift our attention to the work that is needed if we fail to value our natural resources, our voluntary service, and our child rearing, and if we place no value on equity, free time, and the health of our communities. And we will never escape from the materialist illusion that has trapped us for so long, or even know whether we are really better off, if we continue to count costs like crime and pollution as benefits, and if we measure our well-being according to the GDP and economic growth statistics.

We can begin to fashion more self-reliant and self-sufficient forms of community economic development that provide a real alternative to increasing reliance on

Shifting the viewpoint, continued

the international market that puts our destiny in the hands of forces beyond our control. Knowing that more possessions are not the key to happiness and well-being, we can still take back our future, and perhaps even live a little more simply.

Nova Scotia seems particularly fertile ground for this experiment, because it has been just far enough removed from the materialist mainstream to preserve its community strength, spiritual values, quality of life, and a strong tradition of generous community service, more effectively than many other parts of North America. The province has also experienced first-hand the collapse of a natural resource, and it has not generally been well served by conventional economic theory, thus creating a greater openness to alternatives. Already Kings County and Glace Bay, Nova Scotia, are developing community level GPI's for actual use as a measure progress and a strategy of community development, and other counties will do so as soon as it is complete.

The cusp of the millennium is a rare moment in history when a long-term practical vision can actually overpower our habitual short-term preoccupations. The time has never been better to contemplate the legacy we are leaving our children and the society we want to inhabit in the new millennium. It is a moment that invites us to lay the foundations of a genuinely decent society for the sake of our children and all the world's inhabitants.

References

1. Kuznets, Simon, *The New Republic*, October 20, 1962, cited in Cobb, Clifford, Ted Halstead, and Jonathan Rowe, "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*, October, 1995, page 67.
2. All facts and figures in this article have been assembled from several detailed GPI Atlantic reports which are available at the GPI Atlantic website, www.gpiatlantic.org. Readers will find fully referenced sources for all statistics in those reports. The purpose here is, rather, to use the statistics for illustrative purposes to demonstrate the basic purpose, scope, and approach of the Genuine Progress Index.
3. Kennedy, Robert, "Recapturing America's Moral Vision," March 18, 1968, in *RFK: Collected Speeches*, Viking Press, 1993.
4. Signatories include Robert Dorfman, Professor Emeritus, Harvard University; Robert Heilbroner, Professor Emeritus, New School for Social Research; Herbert Simon, Nobel Laureate, 1978; Partha Dasgupta, Oxford University; Robert Eisner, former president, American Economics Association; Mohan Munasinghe, Chief, Environmental Policy and Research Division, World Bank; Stephen Marglin and Juliet Schor, Harvard University; Don Paarlberg, Professor Emeritus, Purdue University; Emile Van Lennep, former Secretary General, OECD; Maurice Strong, Chair, Ontario Hydro, and Secretary General, Rio Earth Summit; and Daniel Goeudevert, former Chairman and President, Volkswagen AG. Full text and signatory list available from *Redefining Progress*, 1904 Franklin St., Oakland, CA 94612.
5. This data is from a detailed, 223-page "Cost of Crime" report that is available through the GPI Atlantic website at www.gpiatlantic.org. Readers will find fully referenced sources for facts and statistics cited here in that report. The purpose here is simply to use some of those statistics for illustrative purposes to demonstrate how the GPI treats crime costs very differently from our standard economic growth measures.

Author information

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