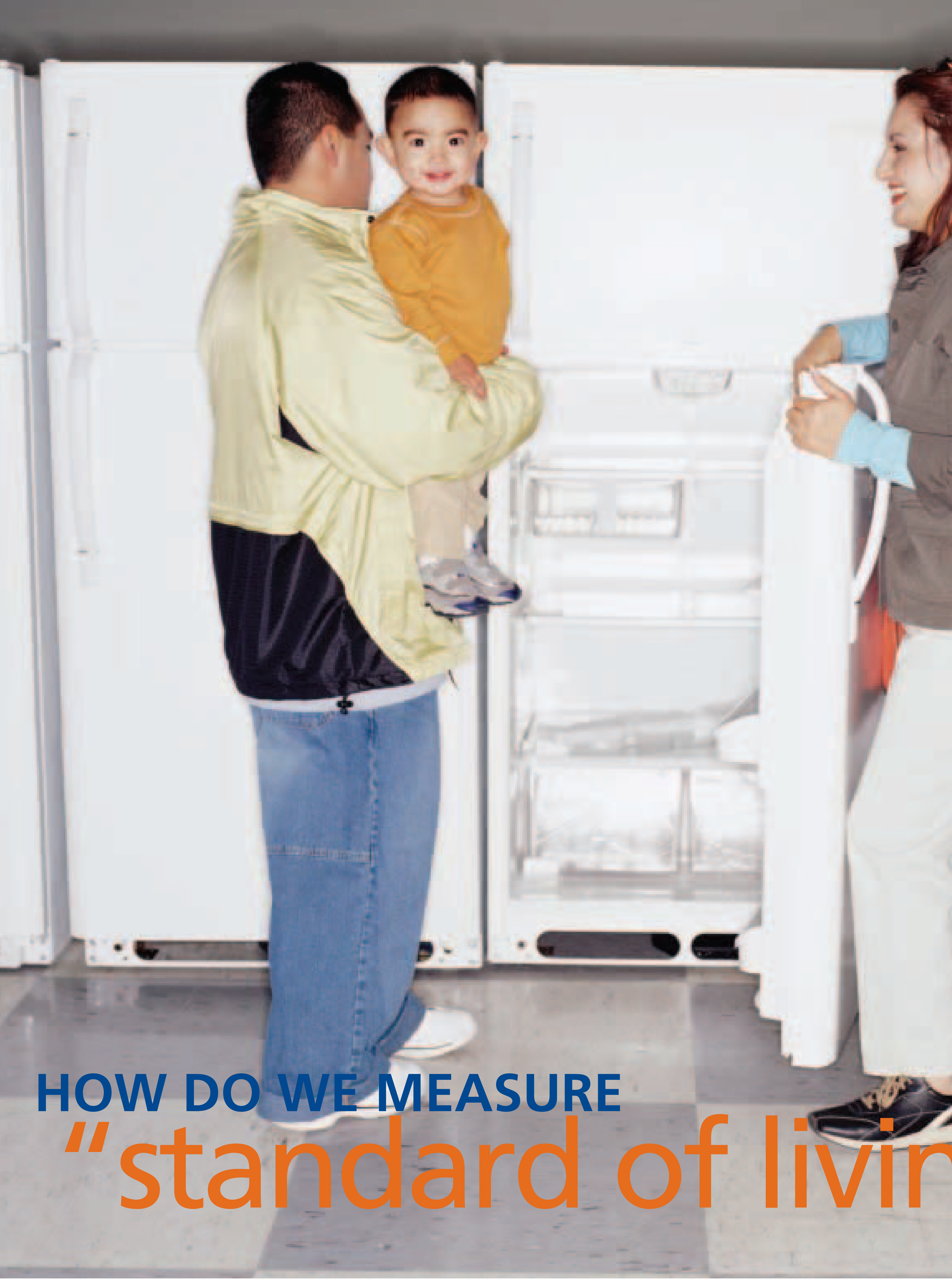


HOW DO WE MEASURE “standard of livin

For most of us, standard of living is a know-it-when-I-see-it concept. We might not be able to express it in precise terms, but we think we know it when we see it.

Ask us to define it, and we'll reel off a list of things we associate with living well: a nice car, a pleasant place to live, clothes, furniture, appliances, food, vacations, maybe even education. Ask us to measure it, and we'll probably look at whether or not we're "doing better" than our parents.

Yet there is a generally accepted measure for standard of living: *average real gross domestic product (GDP) per capita.* Let's break it down piece by piece:

- **GDP** measures annual economic output — the total value of new goods and services produced within a country's borders.

- **Real GDP** is the inflation-adjusted value.

- **Average GDP per capita** tells us how big each person's share of GDP would be if we were to divide the total into equal portions.

In effect, we take the value of all goods and services produced within a country's borders, adjust for inflation, and divide by the total population.

If average real GDP per capita is increasing, there's a strong likelihood that: (a) more goods and services are available to consumers, and (b) consumers are in a better position to buy them. And while buying more things won't necessarily help us find true happiness, true love, or true enlightenment, it is a pretty good indicator of our material standard of living.

But as a tool for measuring how *well* we live, GDP per capita has its shortcomings. There are lots of things it doesn't take into account, including:

Unpaid work — Real GDP per capita doesn't acknowledge the value of housework, in-home child care, in-home elder care, volunteer work, and community service.

Distribution of wealth — There's always the possibility that a large share of the gains in real GDP per capita will go to a relatively small percentage of the population. And, in the bad old days, gains were also more likely to be skewed along gender, racial, and ethnic lines.

Changes in the quality of life — Real GDP per capita doesn't fully account for the value of things like clean air, clean water, more leisure time, and increased life expectancy; nor does it fully account for the cost of such undesirable changes as increased traffic congestion or loss of open space.

Changes in the quality of goods — Real GDP per capita doesn't fully reflect the fact that your new furnace is far more efficient than your old one or that the components on your low-end mountain bike were considered state-of-the-art five years ago. (But GDP figures make some adjustments for quality improvements to cars, computers, and a few other items.)

So, if it leaves so much out, why do we persist in using average real GDP per capita to measure standard of living? Two reasons: (1) We have a fairly accurate idea of what it is, and (2) It's tough to come up with quantitative measures for things like well-being, quality of life, and happiness.

Productivity is the key.

We tend to equate a higher standard of living with a higher level of consumption, but the key to long-term prosperity is **productivity**. Increased productivity is what makes increased consumption possible.

But what exactly is productivity? The answer depends on what you look at.

Labor productivity measures the value of goods and services produced per unit of labor time — the value of goods and services produced in a given period of time, divided by the amount of labor used to produce them. Often expressed as "output per hour" or "output per worker," it usually focuses on manufacturing rather than services because manufacturing output is easier to quantify. When news accounts mention "productivity," they are almost always referring to labor productivity.

Total factor productivity (or multi-factor productivity) looks at all three factors of production: labor, materials, and capital. It measures "the efficiency with which people, capital, resources, and ideas are combined in the economy."[1] Total factor productivity is more comprehensive than labor productivity, but it is also more difficult to measure.

If you want to know more about productivity, the Industry Canada web site has *A Primer on Productivity* **http://strategis.ic.gc.ca/SSG/pr00016e.html**. It will enlighten you without telling you more than you ever wanted to know.

[1] *Productivity: A Policy Challenge for a Higher Standard of Living*, Andrei Sulzenko and James Kalwarowsky, Industry Canada, Spring 2000.

Don't tell me how I feel!

Standard of living can be a touchy subject. Try to convince people that they're better off than they think, and they'll give you half a dozen reasons why they're not. Or try to tell them that their standard of living isn't as high as they think, and . . . well . . . they might react the way Catherine Hennessey did.

Ms. Hennessey lives on Prince Edward Island, one of the pleasantest spots in North America. In the summer of 2000 she was not pleased when a Canadian government study reported that all 50 U.S. states and every Canadian province except Newfoundland enjoyed a higher standard of living than her island home. Here's some of what she had to say:

Last week the media announced a news item released by Industry Canada. It was a grading of Standard of Living in the country and comparing it to the USA. All I can say is if our country takes serious note of this item we are in trouble. We are probably in trouble anyway, if we have economists sitting somewhere collecting this data and making decisions based on it. The news item begs the question "What makes a Standard of Living"? Oh, I forgot to say the lead story in this issue was that Prince Edward Island has the lowest Standard of Living in all of Canada and The USA!!!! You can lose confidence in yourself with that kind of headline . . . if you believed it.

This summer Prince Edward Island looks magnificent. I have had the pleasure of touring some first-visit-to-the-island people around, and they simply can't believe it. Houses well maintained, gardens glorious, safe place, clean, friendly, rich in history, etc., etc. What more can you ask for, and this from the place with the lowest standard of living?

. . . Add value of life and beauty and quietness to that equation and you make those statisticians look even worse. Please, God, don't let Government and Hotshots make decisions based on news items like this and spoil what is truly a Standard of Living. http://www.catherinehennessey.com

Anyone who's ever been to Prince Edward Island, or read *Anne of Green Gables*, can understand Ms. Hennessey's passionate defense of her home province. How, she wonders, could anyone seriously contend that her standard of living is lower than that of someone living in Mississippi (the lowest ranked U.S. state) or even Delaware (the highest ranked state)?

But the study that triggered Ms. Hennessey's reaction was based on well-established economic principles. It noted that "standard of living is best measured through real GDP per capita as it encompasses all earnings accruing to residents of a country." It also emphasized that increased productivity is the key to boosting real GDP per capita (See sidebar, "Productivity is the key"):

> *Over long periods of time productivity is the single most important determinant of a nation's living standard or its level of real income. A more productive Canada would be a wealthier Canada. Increasing our collective wealth would give us greater scope and flexibility to make the public and private choices that would keep improving our quality of life.*

The report also pointed out that " trade, investment, and human capital formation are the main drivers of productivity growth." (Out of 50 U.S. states and 10 Canadian provinces, Prince Edward Island ranked

60th — dead last — in productivity.)

Yet when all is said and done, people living in a place that ranks low in standard of living may firmly believe they live better than people in higher ranking places. Standard of living numbers don't necessarily define how well we live — or how well we think we live.

So, does that mean standard of living and real GDP per capita aren't valid measures? Not all. But it does underscore the fact that standard of living, quality of life, and social well-being are not interchangeable terms.

Alternative measures

There are other standard-of-living yardsticks besides real GDP per capita. We're not endorsing these alternatives, nor are we dismissing them. We just thought readers might want to know something about them. Here are three such alternative indicators:

1. GPI: The Genuine Progress Indicator

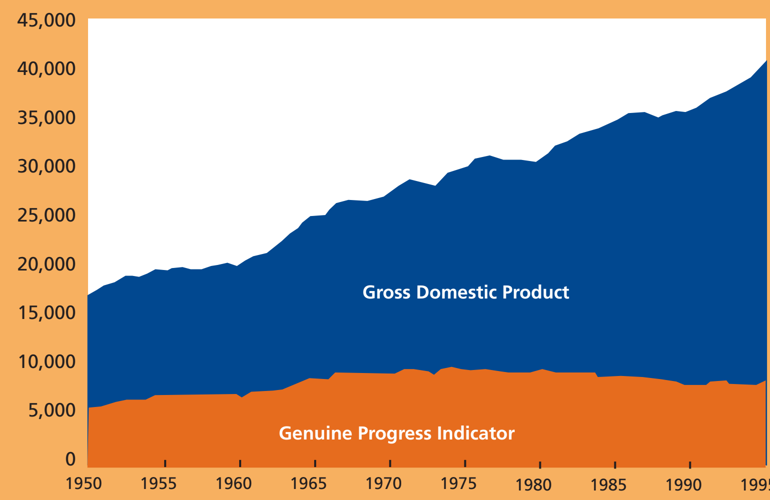
The people at Redefining Progress, a non-profit public policy organization based in northern California, maintain that GDP was never intended as "the primary scorecard of a nation's economic health and well-being." It is, they say, "merely a gross tally of products and services bought and sold, with no distinctions between transactions that add to well-being, and those that diminish it." So in 1995, they developed the Genuine Progress Indicator (GPI), which they believe is "a more accurate measure of progress."

The Redefining Progress web site, **http://www.rprogress.org**, gives a ten-point comparison between GDP and GPI. Here are some of the points it covers:

• **Crime and family breakdown** — "Social breakdown imposes large economic costs on individuals and society, in the form of legal fees, medical expenses, damage to property, and the like. The GDP treats such expenses as additions to well-being. By contrast, the GPI subtracts the costs arising from crime and divorce."

• **Household and volunteer work** — "Much of the most important work in society is done in household and community settings: child care, home repairs, volunteer work, and so on. These contributions are ignored in GDP because no money changes hands. To correct this omission, the GPI includes, among other things, the value of household work figured at the approximate cost of hiring someone to do it."

GDP and GPI, 1950-1995, in 1996 Dollars



Source: Redefining Progress.

• **Income distribution** — "A rising tide does not necessarily lift all boats — not if the gap between the very rich and everyone else increases. Both economic theory and common sense tell us that the poor benefit more from a given increase in their income than do the rich. Accordingly, the GPI rises when the poor receive a larger percentage of national income, and falls when their share decreases."

• **Pollution** — "The GDP often counts pollution as a double gain; once when it's created, and then again when it is cleaned up. By contrast, the GPI subtracts the costs of air and water pollution as measured by actual damage to human health and the environment."

2. HDI: The Human Development Index

The Human Development Index (HDI) offers a global perspective on the question of how well people are living. Devised by the United Nations in the 1990s, the HDI is a composite of three different indicators: (1) life expectancy at birth, (2) education as measured by a combination of school enrollment and adult literacy, and (3) standard of living as measured by a variation on GDP per capita that adjusts for price differences between countries (purchasing power parity in U.S. dollars).

The United Nations *Human Development Report 2002* (**http://www.undp.org/hdro**) lists HDI rankings for 173 countries. It notes some alarming facts:

• Nearly one billion of the world's people don't have

Human Development Index
10 Highest-Ranked Countries

Norway
Sweden
Canada
Belgium
Australia
United States
Iceland
Netherlands
Japan
Finland

Source: Human Development Report 2002, United Nations Development Programme access to improved water sources; 2.4 billion lack access to basic sanitation.

• Eleven million children under the age of five die each year from preventable causes. That's equivalent to more than 30,000 deaths a day.

• Approximately 1.2 billion people live on less than $1 a day; 2.8 billion live on less than $2 a day.

But there were also some encouraging trends:

• A child born in 2002 could expect to live eight years longer than one born in the early 1970s.

• The share of rural families with access to safe water has grown more than fivefold since the early 1970s.

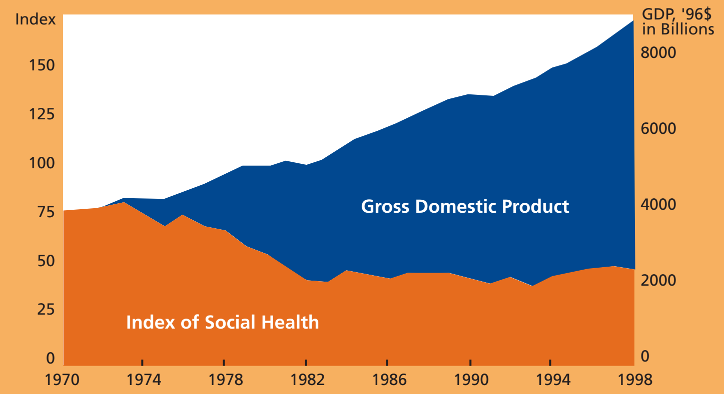
• Between 1975 and 1998, average incomes in developing countries nearly doubled in real terms, from $1,300 to $2,500.

3. Index of Social Health

Marc Miringoff is director of the Fordham University Institute for Innovation in Social Policy. Marque-Luisa Miringoff is a professor of sociology at Vassar College. Together, they developed the Index of Social Health, which they describe as "a broad-based gauge of the social well-being of the nation, similar in concept to the Dow Jones Average or the Gross Domestic Product." Published annually since 1987, the index uses government data for 16 social indicators to create profiles and rankings for all 50 states. In 2001, Iowa ranked number one with a score of 73 out of 100. New Mexico finished at the bottom with a score of 21.4.

Marc Miringoff places particular emphasis on three of the indicators — child poverty, health care coverage, and high school completion. In an interview with *The New York Times* he observed that, "A state does not do well without doing well in these three indicators, and a state doesn't do badly without performing poorly in these areas. . . . [I]f you want to get more bang for your buck, or you don't want to monitor all 16 indicators, concentrate on these things to improve life in your state."

Index of Social Health and Gross Domestic Product, 1970-1998



Source: Fordham Institute for Innovation in Social Policy.

The Sixteen Indicators in the Index of Social Health

1. Affordable housing
2. Alcohol-related traffic fatalities
3. Child poverty
4. High school completion
5. Infant mortality
6. Teenage births
7. Unemployment
8. Wages
9. Age 65-plus poverty
10. Child abuse
11. Health care coverage
12. Inequality in family income
13. Life expectancy
14. Teenage drug use
15. Violent crime
16. Youth suicide