A Brief History of Economic Time

How the world

grew rich.

By Steven Landsburg

odern humans first emerged about 100,000 years ago. For the next 99,800 years or so, nothing happened. Well, not quite nothing. There were wars, political intrigue, the invention of agriculture—but none of

that stuff had much effect on the quality of people's lives. Almost everyone lived on the modern equivalent of \$400 to \$600 a year, just above the subsistence level. True, there were always tiny aristocracies

who lived far better, but numerically they were quite insignificant.

Then—just a couple of hundred years ago, maybe 10 generations—people started getting richer. And richer and richer still. Per capita income, at least in the West, began to grow at the unprecedented rate of about three quarters of a percent per year. A couple of decades later, the same thing was happening around the world.

Then it got even better. By the 20th century, per capita real incomes, that is, incomes adjusted for inflation, were growing at 1.5% per year, on average, and for the past half century they've been growing at about 2.3%. If you're earning a modest middle-class income of \$50,000 a year, and if you expect your children, 25 years from now, to occupy that same modest rung on the economic ladder, then with a 2.3% growth rate, they'll be earning the inflation-adjusted equivalent of \$89,000 a year. *Their* children, another 25 years down the line, will earn \$158,000 a year.

Against a backdrop like that, the temporary ups and downs of the business cycle seem fantastically minor. In the 1930s, we had a Great Depression, when income levels fell back to where they had been 20 years earlier. For a few years, people had to live the way their parents had always lived, and they found it almost intolerable. The underlying expectation—that the present is supposed to be better than the past—is a new phenomenon in history. No 18th-century politician would have asked "Are you better off than you were four years ago?" because it never would have occurred to anyone that they ought to be better off than they were four years ago.

Rising income is only part of the story. One hundred years ago the average American workweek was over 60 hours; today it's under 35. One hundred years ago 6% of manufacturing workers took vacations; today it's over 90%. One hundred years ago the average housekeeper spent 12 hours a day on laundry, cooking, cleaning and sewing; today it's about three hours.

As far as the quality of the goods we buy, try picking up an electronics catalogue from, oh, say, 2001 and ask yourself whether there's anything there you'd want to buy. That was the year my friend Ben spent \$600 for a 1.3-megapixel digital camera that weighed a pound and a half. What about services, such as health care? Would you rather purchase today's health care at today's prices or the health care of, say, 1970 at 1970 prices? I don't know any informed person who would choose 1970, which means that despite all the hype about costs, health care-now is a better bargain than it's ever been before.

The moral is that increases in measured income—even the phenomenal increases of the past two centuries—grossly understate the real

improvements in our economic condition. The average middle-class American might have a smaller measured income than the European monarchs of the Middle Ages, but I suspect that Tudor King Henry VIII would have traded half his kingdom for modern plumbing, a lifetime supply of antibiotics and access to the Internet.

The source of this wealth the engine of prosperity—is technological progress. And the engine of technological progress is ideas—not just the ideas from engineering laboratories, but also ideas

like new methods of crop rotation, or just-intime inventory management. You can fly from New York to Tokyo partly because someone figured out how to build an airplane and partly because someone figured out how to insure it. I'm writing this on a personal computer instead of an electric typewriter partly because someone said, "Hey! I wonder if we can make computer chips out of silicon!" and partly because someone said "Hey! I wonder if we can finance startups with junk bonds!"

Which contribution is more important? By one rough measure—the profits earned by the innovator—they're about equal. In the late 1980s, Microsoft earned economic profits of about \$600 million a year, while Michael Milken, the inventor of the junk bond, earned an annual income that was just about the same.

Some good ideas even come from economists. Julian Simon came up with the idea of bribing airline passengers to give up their seats on overbooked flights—and gone were the days when you relied on the luck of the draw to make it to your daughter's wedding. Economists first suggested creating property rights in African elephants, a policy that has given villagers an incentive to harvest at a sustainable rate and drive the poachers away. The result? Villagers have prospered and the elephant population has soared.

Engineers figure out how to harness the power of technology; economists figure out how to harness the power of incentives. Our prosperity relies on both.

Mr. Landsburg's latest book is "More Sex Is Safer Sex: The Unconventional Wisdom of Economics" (The Free Press, 2007).