

which encouraged investment, which in turn spurred innovation. Others going back to Max Weber have argued that culture was responsible—specifically, that Calvinist-flavored Protestantism made people “particularly rational and oriented towards economic achievement.” A third possibility is that the gains of the Scientific Revolution a century earlier gave tinkers the tools to improve production.

Robert C. Allen, an economic historian at Oxford University, doesn't dispute these theories. “Good law and good culture may have been necessary conditions for the Industrial Revolution,” he writes, “but they were not sufficient.” These features of British society were the *supply* that fed innovation. But without *demand* (on the part of producers), no one would have toiled away at the exhausting process of innovation. In England at the time, wages were relatively high, especially in relation to the cost of

capital. That meant that new technologies, even costly ones up to a point, were cost-effective for producers if they reduced the need for labor. And thus it was England's high wages—not its legal system or religion or scientific knowledge—that drove inventors to their workshops.

The history of the spinning jenny (a machine that allows one person to spin multiple spools of thread at once) illustrates Allen's point. Invented in the 1760s by James Hargreaves, an illiterate weaver from Lancashire, and improved upon in England and America for several decades thereafter, the spinning jenny was rapidly adopted throughout England, but not in France and India. In those two countries, Allen explains, labor was cheap enough and capital expensive enough that investing in the machine didn't pay. It would be years before it made economic sense for producers in

India and France to invest in industrial technologies.

Allen says the same story plays out around the world today: Technologies that are a good investment in wealthy countries often are not adopted in the developing world, where labor is cheap and capital improvements cost many times the average wage. In such places, choosing not to invest in newfangled equipment isn't the result of some sort of cultural deficit or institutional failure, but a rational response to economic considerations.

ECONOMICS, LABOR & BUSINESS

Measure for Measure

THE SOURCES: “Beyond GDP: The Quest for a Measure of Social Welfare” by Marc Fleurbaey, in *The Journal of Economic Literature*, Dec. 2009, and “Measuring Quality of Life” by Renee Courtois, in *Region Focus*, Summer 2009.

IN THE WORLD OF ECONOMIC statistics, gross domestic product (GDP) is king. A measure of total economic activity, it reigns widely as the ultimate indicator of a society's well-being. Economists employ a related statistic, GDP per capita, or average income, to draw comparisons among countries and over time. But many critics say these numbers are misleading and that it's time to create other ways to measure quality of life.

They point to many flaws in the kingly statistic. For one, GDP rises when a country spends more in bad times, such as pumping up national defense during war, cleaning up after natural disasters, or paying for



No need to get all wound up. With a spinning jenny, one woman can do the work of many.

more police officers during a crime wave. Environmental degradation goes unnoticed in GDP, as do intangible additions to quality of life such as time enjoyed in a public park. And GDP ignores the distribution of wealth and opportunity within a society; a country with an extremely wealthy elite may have a higher GDP per capita than one with a large middle class, but it is hard to say that such a society is better off.

Moreover, behavioral economists point out that even at the individual level, higher income does not always mean greater happiness. As people make more money, their material desires increase as well, a phenomenon economists have called the “hedonic treadmill.” Thus, a country with a booming economy might not experience an increase in happiness.

But Marc Fleurbaey, an economist

Behavioral economists point out that a higher income does not always mean greater happiness.

at the University of Paris Descartes, notes that economists are a long way from agreeing on alternative yardsticks of national well-being. He explores four proposed measures: corrected GDP, which assesses “non-market aspects of well-being”; “Gross National Happiness,” which uses surveys, behavioral observations, and physiological measures to gauge how happy people are; Nobel-winning economist Amartya Sen’s “capability approach,” which seeks to measure individuals’ opportunities; and “syn-

thetic indicators,” which combine data on nonmonetary aspects of well-being, such as health, literacy, and life expectancy. Fleurbaey supports further exploration of corrected GDP, happiness measurements, and the capability approach, but none of these are yet shovel-ready, so to speak.

But would a different measure of social welfare change policies? “Yes and no,” writes Renee Courtois, a staff writer at the Federal Reserve Bank of Richmond. Economists may wish it were otherwise, but at the end of the day, policies are made by politicians, not statisticians. Politics is a process for weighing competing priorities—economic growth, defense, and quality of life, to name a few. GDP may reign supreme among well-being indicators, but in real life, politicians are not transfixed by it.

FOREIGN POLICY & DEFENSE

The Not-So-Long Arm of the Law

THE SOURCE: “Beyond Protection” by Philip Hamburger, in *Columbia Law Review*, Dec. 2009.

FOR YEARS, LEGISLATORS, executive branch lawyers, and the courts have been tied up in knots over the scope of the rights that must be accorded suspected terrorists. Are they due a civilian jury? Can they be detained without being charged? Philip Hamburger, a professor at Columbia Law School,

says that a more basic question must first be addressed: Do American legal protections even cover such people at all?

Hamburger argues that a legal doctrine prominent during the American Revolution, the “protection principle,” can help U.S. officials sort people into two groups: those who are protected by U.S. law and those who aren’t. The protection principle is based on the long-neglected idea that allegiance

to a sovereign and the guarantee of that sovereign’s protection are reciprocal. Foreigners who enter the country in amity traditionally have enjoyed protection, but noncitizens who take up arms against the United States or pledge allegiance to enemy countries are neither bound nor protected by U.S. laws. (Under this logic, 9/11 mastermind Khalid Sheikh Mohammed, whose trial in a civilian courts has been a subject of controversy, would not be entitled to such a trial.)

Today, the U.S. government relies heavily on geography in deciding whether its laws apply. A Supreme Court decision in 1950 “left open the possibility that prisoners of war, if held domestically,