## The New Hork Times Magazine

## Viagra and the Wealth of Nations

Paul Krugman

August 23, 1998

What popped into your mind when you first read the headlines about Viagra? Well, I thought about that, too. But as a typical, fun-loving economist I also found myself wondering how the Commerce Department would account for the wonder drug in its estimates of the gross domestic product — and from there wandered into a reverie about the meaning of economic progress.

Government statisticians will, of course, have no difficulty slotting Viagra into their estimates of "nominal" G.D.P., the sum total of all the money spent in the economy. Viagra's contribution will simply be the total amount that people spend on the pills, or, equivalently, the profits earned and wages paid in the drug's manufacture and distribution. What's more, we can be pretty sure that Viagra's numbers, while music to the stockholders' ears, will make very little difference to the national totals. The new drug's spectacular sales are small change in an \$8 trillion economy. And besides, most of the spending on this new product will come at the expense of spending on other things — say, romantic vacations and candlelight dinners.

But nominal G.D.P. doesn't tell us much. Most of the time, the economic number we care about is "real," or inflation-adjusted, G.D.P., which is supposed to measure the purchasing power as opposed to the dollar income of the economy. Basically, nominal G.D.P. is converted into real G.D.P. by dividing it by a price index — a "deflator" — that is supposed to measure the average cost of goods and services sold in the economy.

So far, so good. But what happens with the introduction of Viagra, or Propecia, or whatever the next big thing may be? Statisticians can't compare the prices of these drugs with what they were last year because they weren't around last year. So inevitably, estimates of the deflator take account only of the goods that have been around for at least a little while.

So what? Well, this year some men can buy something they wanted pretty badly — or baldly, in the case of Propecia — and they can get it at a reasonable price. Last year they couldn't buy what the pills provide at any price, and probably would have gladly spent far more at clinics or in therapy to get lesser results. So surely, in

some sense, the nation's purchasing power has increased because of the availability of those pills.

Yet the numbers you see on real G.D.P. don't reflect that increase — and they never will. Eventually Viagra will be in the index, and as its price falls in the face of competition, the deflator will fall and measured real income will rise. But at no point will the statistics ever capture the big payoff, the one that happened when Viagra became available for \$10 a, um, pop.

How could the statisticians get this right? It would have to involve a subjective evaluation: each person would have to be asked, and would have to answer truthfully, the question "How much money would you have spent last year (with your ever-growing bald spot and that other problem) to be as satisfied as you are now?" Averaging over the population, we would come up with a true measure of the change in the cost of living, and we would deflate G.D.P. by that.

In fact, where they can, the statisticians do try to do something more or less along these lines, adjusting the price of automobiles and many other products by imputations for improved quality. But nearly everyone admits that the imputations fall well short of capturing the real improvement in living standards. Officially, the median family in 1996 had only slightly higher real income than it did in 1973; in reality, that median family would be extremely upset if forced to go back to a 1973 standard of living (no VCR, no microwave, no A.T.M.'s).

So what's the moral? Should we smugly assume that the official statistics understate economic progress, that the New Economy is speeding us to a new age of economic bliss? Not so fast. For one thing, it is by no means clear that our age of technological marvels is any more marvelous than the age our parents, grandparents or great-grandparents lived in.

Viagra is only the latest in a long line of medical miracles — antibiotics, smallpox vaccine, anesthesia — just as the Internet is only the latest in a line that goes back to the fax machine, the telephone and the telegraph. While the statistics do understate today's true rate of economic progress, they always have.

But there is a deeper point. The value of Viagra is not a dollar-and-cents issue. Rather, it is a psychological question — what we are really asking is how much better off the drug makes people feel. But isn't that true of economic progress in general? And once you put it that way, you have to wonder whether we are really making that much progress after all.

Consider: According to the official statistics, the median family in 1947 had almost exactly the same purchasing power as the 20th-percentile family — just a little ways above the poverty line — of 1996. And the statistics surely understate the true increase in purchasing power. Does that mean that most people in 1947 were poor? Well, they didn't feel poor. Conversely, the 60th percentile in 1996 officially had about the same real income as the 95th percentile in 1947, and again this surely understates the real progress.

Does this mean that most Americans are now upper middle class? They don't feel that way.

In other words, as soon as you try to think seriously about how to measure Viagra's effect on the nation's wealth, you realize what a dubious enterprise such comparisons are. I have nothing against calculating real G.D.P. as accurately as possible; we need that number for all kinds of purposes. But the rather vulgar case of Viagra reminds us that, in the end, economics is not about wealth — it's about the pursuit of happiness.

©1998 The New York Times Company