

Price indexes and the history and geography of the world

In his latest letter, Angus reminds us of the importance of price indexes in a wide range of economic calculations and of the continuing weaknesses of such indexes, especially when it comes to making allowance for quality.

The price index has become the Cinderella of modern economics, at least in the graduate classrooms of North America, where it has been entirely banished in favor of newer and flashier topics. As I write this, we are beginning the teaching year, and I asked one of my talented young colleagues about his first class. He is teaching macroeconomics to the first year graduate students, and had been impressed by the students' prior knowledge. In particular they had questioned the convergence of the infinite integral of discounted consumption utility with which he had introduced them to the subject. Five (six, or ten) years from now, when these students graduate from Princeton, few will have encountered a price index in class, or know how the government statistical service constructs the c that goes into the u that goes under the \int . Yet recent events have shown that price indexes — of which there is much that we do not understand — are more crucial than ever in how we see the world.

A decade ago I wrote in this letter about the US consumer price index and the fierce debate that erupted in the 90s over how to incorporate quality changes. The debate has not gone away, nor has it been settled. One of the most difficult issues is the treatment of the healthcare component in GDP

and the potential consequences of improvements in quality. Mortality rates have fallen sharply in the US (and other rich countries) since 1970, and there is little doubt that new pharmaceuticals and new treatments have played an important part. Yet this increase in the quality of healthcare is not explicitly (and some would say at all) incorporated into the national accounts. One way of doing better would be to construct a price index that computes, not the costs of various treatments, which have been rising fast, but the cost of maintaining a constant level of mortality, which has arguably been falling. Calculations by William Nordhaus of Yale, and by Robert Topel and

Kevin Murphy at the University of Chicago, using more or less standard numbers for the value of life, suggest that the resulting corrections would be very large indeed, swamping both the level and growth of GDP as currently measured. Yet such calculations, if in the right direction, are inherently controversial, at least if they are seen as corrections to GDP within its current definition. To get the numbers right requires an accounting of the causes of mortality decline, how much to the medical system, how much to reductions in smoking, how much to long-ago improvements in childhood nutrition and disease, and how much to background trends that we simply do not understand. Solving this long-standing research question is hardly something that can be simply handed over to the Bureau of Labor Statistics.

Another set of recent calculations has raised a different set of issues. Christian Broda and John Romalis at the University of Chicago have argued that the much of the difference in real income growth between upper and lower percentiles of the US income distribution is nullified once we take into account the increase in the price of services relative to the prices of goods given that the share of the budget devoted to services rises with income. The influx of relatively

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low quality goods from China sold by enormous retail chains like Walmart and Target are benefiting those who shop there, while the rich are being hammered — if not exactly impoverished — by the rising price of doulas, personal trainers, yoga teachers, dog walkers, health management consultants, and clothing purchase advisors — who rarely recommend Walmart. Broda and Romalis also estimate a price index that takes into account the increasing variety of goods available in Walmart and Target, and with this correction, they find no increase in the dispersion of real income between the 90th and 10th percentiles.

And now to the really big issues. The latest results from the International Comparison Program, now housed in the World Bank, estimate the size of the Indian and Chinese economies to be about 40 percent smaller than previously thought. Once again, it's all about price indexes. The ICP collects prices — and the 2005 exercise covered more countries with greater precision than ever before — and combines them into price indexes for GDP and its components. In the simplest terms, these indexes allow comparison of the cost of a bundle of comparable goods in India (in rupees) versus in the US (in dollars.) Nominal values come from national accounts, so that the quantity measures — which show such sharp reductions in the sizes of the Indian and Chinese economies — are entirely dependent on how the price indexes are constructed.

Perhaps the biggest cause of the restatement comes from upward revisions in the implicit prices of government administration, a service that is even more resistant to pricing than healthcare. Another cause is, once again, the treatment of quality in consumption. The current round used very precise definitions of goods and services to guarantee the comparison of like with like, something that was not previously done so that, for example, brain surgery in Nairobi or Kinshasa was taken to be the same thing as brain surgery in New York or Paris. (Though perhaps Douglas might go the other way?) But there is at least some suspicion that the new round may have overdone the correction; many of the precisely defined commodities, such as 'international' brand name goods, are available, if at all, in luxury shops in a few cities in India and China, and are extremely expensive relative to the commonly purchased local goods that fulfil much the same function in those countries. We could correct for quality if we knew what the function was, and how to calculate the cheapest way of fulfilling it, which is essentially the equivalent of the mortality problem. The World Bank itself has pronounced the quality control a great success, and has added back a hundred million or so Indians and three hundred million Chinese into the global poverty counts, people who had previously been thought to have escaped.

Perhaps the Princeton graduates will help with the task of improving our ability to think about and deal with these issues, in spite of the absence of these topics from the curriculum. Certainly, my young colleague — whose training is from Chicago, one of the few places where such topics are still covered — is thinking about saying something about price indexes along the way.

The British Household Panel Survey at 18

The British Household Panel Survey (BHPS) celebrates its 18th birthday this autumn. The survey has tracked the lives of 10,000 individuals in 5,000 households since 1991.

As it comes of age, the BHPS will be incorporated into 'Understanding Society', the UK's new longitudinal survey of around 100,000 individuals in 40,000 households. To celebrate the 18th birthday of the BHPS and the launch of Understanding Society, the Institute for Social and Economic Research (ISER) has published a new report – *In Praise of Panel Surveys* – explaining the achievements of the BHPS.

Poverty and social exclusion

In the report, ISER's director Professor Stephen Jenkins shows that poverty spell repetition (and the fact that the chances of returning to poverty decline the longer the time since leaving it) indicates the importance of measures preventing entries into poverty (not just helping exits from poverty). This is based on BHPS data which show that individuals' experience of poverty over a period of time more commonly reflects repeated short spells of poverty rather than a single long spell of poverty. So while there is no homogeneous and unchanging group of 'the poor', substantially more people are 'touched' by low income over time.

Low paid workers

BHPS data show that people in low-paying jobs are likely to remain in low-paying jobs, and unemployed people are likely to stay out of work. In this respect, low-wage jobs are more similar to unemployment than to higher paying jobs, and experience of unemployment or a low-wage job is likely to result in a cycle of transitions between the two.

Furthermore, according to ISER's Dr Mark Taylor, once workers return to work after becoming unemployed, they rarely earn as much as they used to. The size of the difference depends on the number of times they have become unemployed and why they left their previous job.

These findings indicate that permanent improvements in employment prospects need to be based on stable jobs that provide training and career progression. They highlight the importance of education and training in preventing initial unemployment spells.

The BHPS has played an important role in assessing the impact on workers' experiences of the introduction in April 1999 of the UK's national minimum wage. For low-wage jobs generally, the minimum wage appears to be a stepping stone to higher pay for a minority of workers.

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