

## *The Accidental Theorist*

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Imagine an economy that produces only two things: hot dogs and buns. Consumers in this economy insist that every hot dog come with a bun, and vice versa. And labor is the only input to production.

OK, time out. Before we go any further, I need to ask what you think of an essay that begins this way. Does it sound silly to you? Were you about to turn the page, figuring that this couldn't be about anything important?

One of the points of this essay is to illustrate a paradox: You

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can't do serious economics unless you are willing to be playful. Economic theory is not a collection of dictums laid down by pompous authority figures. Mainly, it is a menagerie of thought experiments—parables, if you like—that are intended to capture the logic of economic processes in a simplified way. In the end, of course, ideas must be tested against the facts. But even to know what facts are relevant, you must play with those ideas in hypothetical settings. And I use the word “play” advisedly: Innovative thinkers, in economics and other disciplines, often have a pronounced whimsical streak. It so happens that I am about to use my hot-dog-and-bun example to talk about technology, jobs, and the future of capitalism. And I plan to make some serious points about those subjects—the kind of points that can only be made if you are willing to play around with a thought experiment or two.

So let's continue. Suppose that our economy initially employs 120 million workers, which corresponds more or less to full employment. It takes two person-days to produce either a hot dog or a bun. (Hey, realism is not the point here.) Assuming that the economy produces what consumers want, it must be producing 30 million hot dogs and 30 million buns each day; 60 million workers will be employed in each sector.

Now, suppose that improved technology allows a worker to produce a hot dog in one day rather than two. And suppose that the economy makes use of this increased productivity to increase consumption to 40 million hot dogs with buns a day. This requires some reallocation of labor, with only 40 million workers now producing hot dogs, 80 million producing buns.

Then a famous journalist arrives on the scene. He takes a look at recent history and declares that something terrible has happened: *Twenty million hot-dog jobs have been destroyed*. When he looks deeper into the matter, he discovers that the output of hot dogs has actually risen 33 percent, yet employment has declined 33 percent. He begins a two-year research project, touring the globe

as he talks with executives, government officials, and labor leaders. The picture becomes increasingly clear to him: Supply is growing at a breakneck pace, and there just isn't enough consumer demand to go around. True, jobs are still being created in the bun sector; but soon enough the technological revolution will destroy those jobs, too. Global capitalism, in short, is hurtling toward crisis. He writes up his alarming conclusions in a five-hundred-page book. It is full of startling facts about the changes underway in technology and the global market; larded with phrases in Japanese, German, Chinese, and even Malay; and punctuated with occasional barbed remarks about the blinkered vision of conventional economists. The book is widely acclaimed for its erudition and sophistication, and its author becomes a lion of the talk-show circuit.

Meanwhile, economists are a bit bemused, because they can't quite understand his point. Yes, technological change has led to a shift in the industrial structure of employment. But there has been no net job loss; and there is no reason to expect such a loss in the future. After all, suppose that productivity were to double in buns as well as hot dogs. Why couldn't the economy simply take advantage of that higher productivity to raise consumption to 60 million hot dogs with buns, employing 60 million workers in each sector?

Or, to put it a different way: Productivity growth in one sector can very easily reduce employment *in that sector*. But to suppose that productivity growth reduces employment in the economy *as a whole* is a very different matter. In our hypothetical economy it is—or should be—obvious that reducing the number of workers it takes to make a hot dog reduces the number of jobs in the hot-dog sector but creates an equal number in the bun sector, and vice versa. Of course, you would never learn that from talking to hot-dog producers, no matter how many countries you visit; you might not even learn it from talking to bun manufacturers. It is an insight that you can gain only by playing with hypothetical economies—by engaging in thought experiments.

Is this thought experiment too simple to tell us anything about the real world? No, not at all. For one thing, if for "hot dogs" you substitute "manufactures" and for "buns" you substitute "services," my story actually looks quite a lot like the history of the U.S. economy over the past generation. Between 1970 and the present, the economy's output of manufactures roughly doubled; but, because of increases in productivity, employment actually declined slightly. The production of services also roughly doubled—but there was little productivity improvement, and employment grew by 90 percent. Overall, the U.S. economy added more than 45 million jobs. So in the real economy, as in the parable, productivity growth in one sector seems to have led to job gains in the other.

There is also a deeper point: A simple story is not the same as a simplistic one. Even our little parable reveals possibilities that no amount of investigative reporting could uncover. It suggests, in particular, that what might seem to a naive commentator like a natural conclusion—if productivity growth in the steel industry reduces the number of jobs for steelworkers, then productivity growth in the economy as a whole reduces employment in the economy as a whole—may well involve a crucial fallacy of composition.

But wait—what entitles me to assume that consumer demand will rise enough to absorb all the additional production? One good answer is: Why not? If production were to double, and all that production were to be sold, then total income would double, too; so why wouldn't consumption double? That is, why should there be a shortfall in consumption merely because the economy produces more?

Here again, however, there is a deeper answer. It is possible for economies to suffer from an overall inadequacy of demand—recessions do happen. However, such slumps are essentially monetary—they come about because people try in the aggregate to hold more cash than there actually is in circulation. (That insight is the



essence of Keynesian economics.) And they can usually be cured by issuing more money—full stop, end of story. An overall excess of production capacity (compared to what?) has nothing at all to do with it.

Perhaps the biggest objection to my hot-dog parable is that final bit about the famous journalist. Surely, no respected figure would write a whole book on the world economy based on such a transparent fallacy. And even if he did, nobody would take him seriously. But while the hot-dog-and-bun economy is hypothetical, the journalist is not. The inspiration for this essay was *Rolling Stone* reporter William Greider's widely heralded 1997 book, *One World, Ready or Not: The Manic Logic of Global Capitalism*. That book is exactly as I have described it: a massive, panoramic description of the world economy, which piles fact upon fact (some of the crucial facts turn out to be wrong, but that is another issue) in apparent demonstration of the thesis that global supply is out-running global demand. Alas, all the facts are irrelevant to that thesis; for they amount to no more than the demonstration that there are many industries in which growing productivity and the entry of new producers has led to a loss of traditional jobs—that is, that hot-dog production is up, but hot-dog employment is down. Nobody, it seems, warned Greider that he needed to worry about fallacies of composition, that the logic of the economy as a whole is not the same as the logic of a single market.

I think I know what people like Greider would answer: that while I am talking mere theory, their arguments are based on the evidence. The fact, however, is that the U.S. economy has added forty-five million jobs over the past twenty-five years—far more jobs have been added in the service sector than have been lost in manufacturing. Greider's view, if I understand it, is that this is just a reprieve—that any day now, the whole economy will start looking like the steel industry. But this is a purely theoretical prediction. And such theorizing is all the more speculative and sim-

plistic because he is an accidental theorist, a theorist despite himself—because he and his unwary readers imagine that his conclusions simply emerge from the facts, unaware that they are driven by implicit assumptions that could not survive the light of day.

Of course, neither the general public, nor even most intellectuals, realized what a thoroughly silly book Greider had written. After all, it looked anything but silly—it seemed knowledgeable and encyclopedic, and was written in a tone of high seriousness. It strains credibility to assert the truth, which is that the main lesson one really learns from all those pages is how easy it is for an intelligent, earnest man to trip over his own intellectual shoelaces.

Why did it happen? Part of the answer is that Greider systematically cut himself off from the kind of advice and criticism that could have saved him from himself. His acknowledgments conspicuously did not include any competent economists—not a surprising thing, one supposes, for a man who describes economics as “not really a science so much as a value-laden form of prophecy.” But I also suspect that Greider was the victim of his own earnestness. He clearly took his subject (and himself) too seriously to play intellectual games. To test-drive an idea with seemingly trivial thought experiments, with hypothetical stories about simplified economies producing hot dogs and buns, would have been beneath his dignity. And it is precisely because he was so serious that his ideas were so foolish.