Innovation and economic growth

The Past and Future of America's Economy: Long Waves of Innovation that Power Cycles of Growth. By Robert D. Atkinson, Northampton, MA, Edward Elgar Publishing, Inc., 2004, 368 pp., \$140.00/cloth.

I was a little reluctant to accept this book for review given its age; how could something written before the December 2007 beginning of a serious recession still apply today? I am glad I decided to open the book and read a few chapters before I closed my mind. Robert Atkinson takes a far broader view of economic history. He thinks in time spans roughly 10 times as long as the approximately 5 years averaged by post World War II business cycles.

The first half of The Past and Future of America's Economy is a very readable and competent survey of the longterm trends of American economic history and their driving technological themes. From about 1840 to about 1890, economic growth was driven by the transformation of the economy from a horse-driven agricultural society into an increasingly urban, steam-powered, "mercantile/ craft" economy. From 1890 to 1940, a steel-framed, producer-oriented "factory-based industrial" economy ran its course. From 1940 to 1990, the economy was marked by "corporate mass production" and its concomitant mass consumption. In the 1990s, the economy morphed into the "entrepreneurial, knowledgebased" model we are riding in today.

All of this comports with my admittedly general knowledge of the broad themes of economic history, and where Atkinson's narrative brushes areas I have more specialized knowledge of (productivity and other labor statistics, for example) it does not raise any issues. In fact, this narrative by itself is worth the read, not only because it is a well-written summary of a history that seems to get short shrift in economic education, but also because it allows the reader to ask the big questions: What is the driver of growth in an economy? What does that imply for production, consumption, capital, labor, and the whole host of social and economic issues?

Atkinson presents the information technology revolution, globalization, and entrepreneurial dynamism of the era that started in about 1990 as being so fundamentally different from what went before it as to have completely rewritten the old rules. No longer are the big questions those of controlling the business cycle; for example, "Will quantitative easing work?" or "Which tax plan most encourages recovery?" Instead, the big questions are "How do we promote long-term technological innovation and productivity growth?" and "How do we build a more humane economy?" Once again, it seems, the death of the business cycle has been announced prematurely.

To be fair, if I had written this review shortly after Atkinson wrote the book, I would have been in at least weak agreement with this pronouncement. Business cycles were less frequent, shorter, and milder than they had been. Even today, after absorbing the most recent downturn into the averages, recessions are less frequent. They would not seem to be milder and shorter, however. (The average duration of the last three recessions has been about 11 months compared to 10 months for the post-WWII era.)

So, one of the big questions Atkinson was unable to ask was, "What are the new characteristics of the business cycle that we should take into account?" One answer, perhaps a small one, is that recoveries tend to be termed "jobless." In October 2002, an information Web site sought to explain the term "jobless recovery" by pointing out that, rather than hire new employees, many employers instead began purchasing business equipment, implementing productivity improvements, and demanding more hours from their workers. In May 2003, roughly 18 months into the recovery from the 2001 recession, The Economist reported "Of all the signs that America's economy is sputtering, none is more striking than the jobs market."

While this explanation is interesting, a recent report from the San Francisco Fed leads me to discount it somewhat. "In the earlier recoveries [of 1975, 1980, and 1983], employment growth was strong, as was (inflation-adjusted) business investment in equipment and software. In contrast, during the 1990s recovery, employment was essentially flat, while business investment grew only modestly, and during the most recent recovery [of 2001], employment and business investment in equipment and software actually fell."

In sum, Atkinson wrote a book that takes a long view and asks large questions in its first half. The second half attempts large answers but, in hindsight, suffers from the lack of additional data that we enjoy now. My own take is that the "small" questions of the business cycle and its ramifications are still pretty big after all, because most innovation and growth policies work better in an environment of economic stability. As far as the specific innovation and economic growth solutions Atkinson proposed, my questions ranged from the relatively small, "Is a Department of Homeland Security-model collection of tech-oriented government agencies (such as his proposed National Innovation Corporation) the right organizational tool for innovation?" to the pretty large "Even given that private profitseeking markets may indeed underinvest in research and development, is a rent-seeking market for government favor any better?"

In a more stable day, those may be

among the questions asked, and certainly this book ought to be among those read.

> --Richard M. Devens Principal Consultant First XV Communications Formerly Executive Editor Monthly Labor Review

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