The Great Decoupling

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CAMBRIDGE, MASS.—A wonderful ride has come to an end. For several decades after World War II the economic statistics we care most about all rose together as if they were tightly coupled. GDP grew, and so did productivity—our ability to get more output from each worker. At the same time, we created millions of jobs, and many of these were the kinds of jobs that allowed the average American worker, who didn’t (and still doesn’t) have a college degree, to enjoy a high and rising standard of living. Productivity growth slowed down in the 1970s—a development that had us rightly worried—but revved up again in the 1990s and has stayed strong most years since.

But as the graph below, which was first drawn by economist Jared Bernstein, shows, productivity growth and employment growth started to become decoupled from each other at the end of that decade. Bernstein calls that gap that’s opened up the “jaws of the snake,” and they show no signs of closing. We’re creating jobs these days, but not enough of them. The employment to population ratio, or percentage of working age people that have work, dropped over 5 points during the Great Recession, and has improved only half a point in the almost three and a half years since it ended.

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As the jaws of the snake opened, wages suffered even more than job growth did. Adjusted for inflation, the average American household now has lower income than it did in 1997. Wages as a share of GDP are now at an all-time low, even as corporate profits are now at an all-time high. The implicit bargain that gave workers a steady of the productivity gains has unraveled.

What’s going on? Why have the stats that workers care about—job volumes and wages—become decoupled from the rest of the train of economic progress? There are several explanations for this, including tax and policy changes and the effects of globalization and offshoring. We agree that these matter, but want to stress another driver of the “Great Decoupling:” the changing nature of technological progress.

As digital devices like computers and robots get more powerful and capable over time thanks to Moore’s Law, they can do more of the work that people used to do. Digital labor, in short, substitutes for human labor. This happens first with more routine tasks (both physical and cognitive), which is a big part of the reason why less educated workers have seen their wages fall the most in recent decades as we moved ever deeper into the computer age.

As we move ahead the Great Decoupling will only accelerate, for two reasons. First, Moore’s Law will continue to operate, and computers will keep getting drastically cheaper over time. Digital labor will become cheaper than human labor not only in the US and other rich countries, but also in places like China and India. Offshoring, in short, is only a way station on the road to automation.

Second, technologies are going to continue to become more powerful and capable, and to acquire more advanced skills and abilities. They can already drive cars in traffic, understand and produce natural human speech, write clean prose, and beat the best human Jeopardy! players. Just a few years ago most experts would have labeled these non-routine tasks—the kind that computers were supposed to be no good at. Digital progress has surprised a lot of people recently, and we ain’t seen nothing yet. Brawny computers, brainy programmers, and big data are a potent combination, and they’re nowhere near finished. The labor force implications of their work are nicely summarized by venture capitalist Marc Andreessen, who says that “The spread of computers and the Internet will put jobs in two categories: People who tell computers what to do, and people who are told by computers what to do.” Only one of these two job categories will be well paid.

The Great Decoupling is not going to reverse course, for the simple reason that advances in digital technologies are not about to stop. In fact, we’re convinced that they are accelerating. And our strong conviction is that this should be great news for our society and our lives. Digital progress lowers prices, improves quality, expands choice, and brings us into a world where abundance, rather than scarcity, becomes more often the norm.
But there is no economic law that digital progress will benefit everyone evenly. As technology races ahead it can leave a lot of workers behind. In the short run we can improve their prospects greatly by investing in infrastructure, reforming education at all levels and encouraging entrepreneurs to invent the new products, services and industries that will create new jobs.

While we’re doing this, however, we also need to start preparing for a technology-fueled economy that’s ever-more productive, but that just might not need a great deal of human labor. Designing a healthy society to go along with such an economy will be the grand challenge, and the great opportunity, of the next generation. We have to acknowledge that the old ride of tightly coupled statistics has ended, and start thinking about what we want the new ride to look like.