

As We See It

“Computers, the Internet and new telecommunications technology will have the same sort of impact (on the economy) that the railroad did in the 19th century.”

--Brian Wesbury, chief economist,
Griffin Kubik Stephens & Thompson

We have, from time to time, addressed the issue of long wave economic theory. For the sake of review, long-wave economic cycles are very slow moving and typically last 45-60 years. They usually include an upswing of 20-30 years followed by 20-30 years of decline and are superimposed over the shorter, more familiar business cycles. While the typical business cycle is associated with swings in aggregate demand, long waves are more related to the supply side of the economy, with capital spending playing a particularly important role.

Each of the past long waves in the U.S. were driven by an entirely different group of industries with the initial long-wave upswing triggered by a new set of technical innovations. The February 20-26th, 1999, issue of *The Economist* explained it this way:

. . . each upswing stimulated investment and an expansion in the economy. These long booms eventually petered out as the technologies matured and returns to investors declined with the dwindling number of opportunities. After a period of much slower expansion came the inevitable decline – only to be followed by a wave of fresh innovations which destroyed the old way of doing things and created the conditions for a new upswing.

Using this definition, *The Economist* identified five distinct waves. The first wave arose from the development of the canal system in the early 19th century. This period also witnessed the development of water power and the textile and iron industries. Next came the development of the steam engine, railroads and the steel industry in the mid- to late-19th century. The third upswing was propelled by electricity, chemicals and the automobile industry in the early part of the 20th century. The fourth wave began after World War II and was propelled by petrochemicals, electronics and aviation. The current upswing, spurred by computers, the Internet and new telecommunications technology, began in the mid-1990s.

Another proponent of long-wave economic theory is *The Bank Credit Analyst*. For several years now they have argued that the U.S. economy has been in the early stages of a technology-led long-wave upturn. As stated in the February 1999, issue:

The driving force is the rapid diffusion of new information technologies (IT) throughout the economy. This has been associated with the development of new industries and a capital spending boom that is very bullish for long-run productivity and growth. The long-wave upturn appears to have begun around the mid-1990s and on the basis of past cycles, should not be expected to reach a peak until 2010 to 2015.

According to Brian Wesbury, chief economist of Griffin Kubik Stephens & Thompson, the primary drivers of the current upswing are computers, the Internet and new telecommunications technologies. All of these technologies are interrelated, with developments in one affecting the other areas. The rate of innovation in these areas is increasing rapidly, and as a result, the rate of investment is also increasing. The increased rate of investment is in the latest technologies. This raises the productivity of the economy which, in turn, improves its rate of growth. It is this phenomenon which has given us such a resilient economy with both low unemployment and subdued inflation.

July 1999