LAWSON KROEKER
INVESTMENT MANAGEMENT

As We See It

"The farther you look back, the farther you can see ahead."
–Henry Ford

Much of economic theory deals with the relatively short-term business cycle. But there is a longer economic cycle–known as the long wave–which deserves our attention. The long wave is so large and changes so slowly that most observers do not recognize it nor the pressures it creates.

One of the early observers of longer-term economic movements was the Russian economist Nikolai Kondratieff, a scholar at Moscow's Agricultural Academy in the 1920's. He observed that in addition to the normal business cycle, the economy experienced much longer cycles as well. These cycles, which were superimposed over the more normal business cycle, lasted 45-60 years and included 25-30 years of upswing followed by 20-30 years of decline.

The late Joseph Schumpeter, who taught economics at Harvard during the 1930's and 1940's, felt that the rising waves that Kondratieff observed were created by the introduction of new production technologies and markets such as the railroad or automobile and that the declining waves were produced by the inevitable maturation of the new innovation. Most other economists, however, have had little respect for long-wave theory brushing it off as *a statistical oddity*.

More recently, the long-wave theory has received some important support. For the past fifteen years Professor John D. Sterman of the Massachusetts Institute of Technology and a group of economists he is directing have been studying the long wave. They have concluded from the historical evidence they have compiled that the long wave does indeed exist.

Professor Sterman and his group have identified four distinct phases to the long-wave cycle: expansion, peak, decline, and trough. These phases and the long-wave itself can be better understood by reviewing the most recent example.

The end of the last downturn period or trough coincided with the end of World War II. At that point in time there was tremendous pent-up demand for consumer goods (automobiles, refrigerators, etc.) and very little capacity to produce them. The result was an extended period of factory and infrastructure building to meet this demand. Employment rose, incomes rose and in general the economy performed above trend line during the 1950's and 1960's which was the expansion phase.

By the early 1970's supply caught up with demand and we entered the peak phase of the long wave. The point at which supply exceeded demand was not reached uniformly in all industries. As Professor Sterman explains in a paper based on a presentation to the Bank Credit Analysts Conference in New York this past September:

> Unemployment starts to radiate out from the capital goods industries into the durable goods industries and then moves into services, including the financial and government sectors. This further undercuts consumer incomes and aggregate demand and leads to further excess capacity which reinforces the downward cycle.

Professor Sterman also points out:

> The debt accumulated during the growth period to fuel the expansion becomes an increasingly heavy burden, with high interest rates that cannot be sustained. High debt loads and high real interest rates lead to high rates of business failures, defaults and rescheduling, which further undercut demand, and cause even more cutbacks. Once the long wave peaks the same processes that powered the upswing work in reverse to drag the economy into the downswing.

The research at MIT suggests that the world economy has been in the decline phase of the long wave since the early 1970's. As explained by Professor Sterman:

> The decline is not the end of the long wave, however. The end of the long wave occurs when the economy has navigated its way through the trough. The trough period is characterized by an economy that is no longer imploding at a significant rate but that isn't improving either. During the trough the economy is going sideways, which is very much the current situation.

The work of Professor Sterman and his colleagues suggests that the trough phase began with the 1990-91 recession and may last through the balance of the decade. If they are right, we will continue to feel the pressures of excess capacity, excess debt, and deflation of asset prices for several more years. This suggests that rather than an anomaly, the recent subpar economic performance may characterize the 1990's.

History never repeats exactly, but as Henry Ford indicated, knowledge of the past is useful in gauging the future. An appreciation of the long wave is important to an understanding of the economy. It also helps to explain shifts in political thinking which will be the topic of the next "As We See It."

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