SUMMING UP ON BUSINESS CYCLES: OPENING ADDRESS

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Is the business cycle dead? Or should the question be, "Was the business cycle ever alive?" After most periods of extended expansion, particularly if they also happen to be eras of bubbly capital gains, talk about a "New Era" geysers up and, what is more important, such talk is received with increasing credulity.

In my lifetime I have seen the soda fountain come into, and go out of, the American drug store. So too with the university course in business cycles. At the beginning of my teaching career, we had no courses in macroeconomics as such, but we always did have a basic course in Money and Banking. And to supplement that there was sure to be a course called Business Cycles. I used as textbook for that course Wesley Mitchell's 1927 survey of business cycles à la National Bureau of Economic Research, also Alvin Hansen's *Business-Cycle Theory* of the same year. But superseding them came Gottfried Haberler's 1937 *Prosperity and Depression*, whose pages presented the embalmed bones of pre-*General Theory* orthodoxy: monetary theories of the cycle; overinvestment theories; underconsumption theories; exogenous theories such as sunspots, as well as endogenous theories like those that combined the acceleration principle and the multiplier.

My Harvard teacher Joseph Schumpeter's 1939 two-volume treatise is almost a parody of eclecticism: It described short cycles under the Kitchin-Crum terminology; then the good old business cycle of allegedly eight to ten years' periodicity was labeled Juglar cycles; and of course there were also the long waves of Kondratieff and the Sunday newspaper supplements. But that was not the whole of it. In between Juglars and

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34 Paul A. Samuelson

Kondratieffs came Kuznets's intermediate cycles in construction and immigration, with an alleged approximate periodicity of 18 to 20 years. The tortured epicycles of pre-Copernicus Ptolemaic astronomy had nothing on Schumpeter.

I can sum up by stating that, if you mean by a business cycle a periodic oscillation like the swing of a pendulum or the orbit of a planet, then in economics no business cycle ever did exist. But a common pulse in various time series, within time and also cross-sectionally, was just perceptible in the data. Procrustes stretched his short victims to fit an inflexible bed and also compressed his tall ones to force a fit. Similarly, Mitchell at his wits' end and with the help of Arthur Burns defined *reference cycles*, which had average characteristics in their beginning, middle, and end, and much ingenuity was spent in relating *specific* cycles to them.

All these post-1800 cycles were what we would call Main Street ups and downs in production, price levels, and unemployment. Before 1800—and persisting ever since—economic science and mythology already knew *financial crises*—manias, bubbles, and crashes cum bank failures: Seventeenth century Dutch tulips and eighteenth century South Sea Bubbles or John Law experiments provide examples. Gold discoveries and wartime inflations cannot legitimately be ruled off limits for economists' analysis. I descend to such a banality only to remind New-Classical Rational-Expectationists how implausible is any assertion about the impotence of policy actions to affect *real* variables rather than aggregate price levels. I will return to this oldest economic mechanism of bubbles and crashes.

ARE THINGS DIFFERENT IN "THE AGE AFTER KEYNES"?

It is a scientific sin not to notice *likenesses* that are there in the empirical data. An equal sin is not to notice *differences and changes*. In the two-thirds of a century since 1933, the business cycle "ain't been what it used to be." Let me quote from Victor Zarnowitz's well-titled NBER Working Paper 6367 of 1998, "Has the Business Cycle Been *Abolished*?" (my italics):

[In the seven decades after 1870] six major depressions occurred in the United States. . . . No declines of comparable severity have been observed in the last half-century following the depressed 1930's and World War II.

Even when we take into account Christina Romer's revisionist upward adjustments to old-time recessions, I believe this Zarnowitz generalization testifies to an important truth: longer postwar expansions and shorter recessions. Eschewing the naive attribution of this change solely to Keynes's *General Theory*, I agree with the innuendo that changed

policy ideology, away from *laissez faire* and toward countercyclical macro policy, helps explain the better macro performance of real GDPs in the final half of the twentieth century.

But I discern neither in the historical data, nor in the cogent advances in economists' models, any convergence toward the disappearance of non-Pareto-optimal fluctuations. Indeed, our success has risen just so far, and probably the mixed-market economies of North America and Europe are essentially marking time as far as further trend rates of "fine and gross tuning" are concerned. That is a personal judgment or guess.

Therapeutic successes have not come without costs. The age of subdued booms and busts—before America's labor force surprised us with a new flexibility and a new tolerance for accepting *mediocre* jobs—all this had happened, until the last 15 years at least, in an age of somewhat rising price levels. And in many a newspaper column I have had to write sentences such as the following:

When the *next* recession arrives you will find written on its bottom "Made in Washington," just as was the case with the *last* one. This is not because the Fed is a sadist or an ignoramus; nor it is because the bedrooms in the White House are occupied by politicians eager to lose elections. Rather it is like the fact that hospitals are where most people die: If the central bank and fiscal authorities did not step on the brakes of an overexuberant economy *now*, they might well have to overdo that later. There is never a guarantee that intelligent and feasible policies can be discovered which will lead to perpetual soft landings at high employment and a steady price level.

The phoenix of *real* business cycles has been whistled up anew. But it has not come from the ashes of a wrongly discarded real business cycle methodology. That, like herpes, has always been with us.

What is new, and a little foolish, is the concept of a Pareto-optimal real business cycle, like the one *not* in the history books, where at one time in 1929 folks everywhere developed a desire to substitute intertemporally leisure off the job for good paychecks.

I have published a number of papers on real business cycles. Many of them can well take place *at an unchanged price level*, even though they all concomitantly involve fluctuations in outputs that ex ante and ex post the citizenry find regretful.

I am not here to preach a sermon. But wild horses cannot keep me from saying this:

Implied in the previous paragraph is a critique of the notion that a good independent central bank can optimally concern itself only with inflation.

You should not believe that the know-all and end-all ethically is concern only for the price level, or that pragmatically that is a correct procedure to follow. Right now, when the honeymoon U.S. economy may be 36 Paul A. Samuelson

showing few signs of accelerating inflation, there could well be a case for tightening interest rates a bit in order to *prolong* the average level of U.S. prosperity. Waiting until you see the whites of the eyes of wage- and commodity-price inflation could be, from the standpoint of optimal stochastic control activity, a wait too long.

Of course, one will qualify any such advice to take into account what a Fed rise in the short-term interest rate might do to Asian slumps and to Wall Street quasi-bubbles. This brings me to my closing irony.

The pre-1800 pattern of commercial panics had to be a case of NON MACRO-EFFICIENCY of markets. We've come a long way, baby, in two hundred years toward *micro* efficiency of markets: Black-Scholes option pricing, indexing of portfolio diversification, and so forth. But there is no persuasive evidence, either from economic history or avant garde theorizing, that MACRO MARKET INEFFICIENCY is trending toward extinction: The future can well witness the oldest business cycle mechanism, the South Sea Bubble, and that kind of thing. We have no theory of the putative duration of a bubble. It can always go as long again as it has already gone. You cannot make money on correcting macro inefficiencies in the price level of the stock market.

The International Monetary Fund and its critics, and the statesmen of Asia, find precious few answers in the Mitchell and Hansen and Haberler taxonomies of Main Street business cycles—or for that matter few answers in the post-*General Theory* literature—to those current dilemmas and spectres that now haunt all the economies of the globe.

After I delivered this lecture, a high Federal Reserve official asked for clarification as to whether the business cycle is after all still alive. So let me make clear that, like the below-median poor, economic instability we have always with us.