

HAS THE BUSINESS CYCLE BEEN
ABOLISHED?

Victor Zarnowitz

Working Paper **6367**

NBER WORKING PAPER SERIES

HAS THE BUSINESS CYCLE BEEN
ABOLISHED?

Victor Zarnowitz

Working Paper 6367
<http://www.nber.org/papers/w6367>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
January 1998

Any opinions expressed are those of the author and not those of the National Bureau of Economic Research.

© 1998 by Victor Zarnowitz. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Has the Business Cycle Been Abolished?

Victor Zarnowitz

NBER Working Paper No. 6367

January 1998

JEL Nos. E32, E37

ABSTRACT

Long business expansions have repeatedly generated expectations of self-perpetuating prosperity, yet it is clear that such popular forecasts always proved wrong eventually.

Few business cycle peaks are successfully predicted; indeed, most are publicly recognized only with lengthy delays. Analysts have been prompter to recognize troughs than peaks, even though the latter have often followed major slowdowns and have much longer (but also more variable) leadtimes of the indicators.

Oil price boosts and monetary policy shifts triggered some recent cyclical downturns, but even in these particular episodes other more regularly observed developments played major roles. The insistence on single shocks as *the* causes of recessions is erroneous; the older emphasis on movements in the growth of demand, money and credit, profits and investment deserves a revival.

The relatively new but now widely held belief is that, for the recession-free stability to reign, real growth must be no more than moderate and inflation must stay quiescent but financial asset prices can rise indefinitely. The risk of overheating alone is being emphasized but downside as well as upside risks exist and both need to be continually considered.

Victor Zarnowitz

FIBER

122 East 42nd Street

Suite 1512

New York, NY 10168

and NBER

victor.zarnowitz@gsb.uchicago.edu

* Also, Professor Emeritus of Economics and Finance, The University of Chicago. FIBER is the exclusive licensee of research products developed by the Center for International Business Cycle Research (CIBCR), Columbia University, New York.

Summary

Long business expansions generate expectations of indefinitely self-perpetuating prosperity, as happened in the 1920s, 1960s, and again most recently in the mid-1990s. Yet it is clear that such popular forecasts always proved wrong eventually. It is important to see the underlying observations and biases, but also the possible new factors at play, as clearly as possible, in any attempt to answer the question posed to me by this distinguished CBO panel of expert advisers.

Few business cycle peaks are successfully predicted; indeed, most are publicly recognized only with lengthy delays. Even those downturns that followed major slowdowns, a frequent cyclical sequence, were generally identified well after the event. Analysts have been less alert to peak than to trough signals, and prompt to recognize the troughs. This is so even though indicators have much longer (but also more variable) leadtimes at downturns than at upturns.

Oil price boosts in the early and late 1970s and monetary policy shifts in the late 1960s and early 1980s undoubtedly triggered some recent cyclical downturns, but even in these particular periods other more regularly observed relationships and developments played major roles. Thus, the insistence of many on single shocks such as spikes in interest rates or oil prices as *the* causes of recessions is believed to be erroneous. The older emphasis on movements in the growth of demand, money and credit, profits and investment deserves a revival. At high capacity utilization levels, corporate earnings often decline both because of slowing sales and because costs of production and financing increase faster than selling prices.

The relatively new belief, now widely held by markets and some business economists, is that for the recession-free stability to reign real growth must be no more than moderate and inflation must stay quiescent but financial asset prices can rise indefinitely. Overheating is seen as the main, indeed perhaps the only, risk. However, downside as well as upside risks exist and both needs to be continually considered by economists and policy makers.

Expansions did become longer and contractions milder in the United States and elsewhere during the post-World War II period. Several probable causes are listed, but they can only reduce, not eliminate economic instability; moreover, most of them became less effective since about the early 1970s, when contractions and slowdowns increased in severity in many countries (e.g., in Germany and Japan during the 1990s).

The potential effects on business cycles of downsizing and globalization are still very difficult to assess. It is argued that they may differ on the supply side and on the demand side and are probably mixed.

1. Predictable Timing of Forecasts of Continuous Prosperity

Widespread optimism that prosperity will prevail for a long time if not indefinitely – in other words, that the economic and financial cycles have been somehow eliminated – appears to be enjoyed in the United States today. The evidence comes from the behavior of financial markets, opinion surveys, and discussions in the media. The condition draws considerable public attention and meets with both approval by many and anxiety by some. But this is hardly new or surprising. Similarly hopeful expectations developed on a large scale in mid- and late 1920's, before the onset of the Great Depression; during the long expansion of the 1960's, missing again the troubles of the next decade; and, less pronouncedly, in the latter half of the 1980's when economic growth steadied after the disinflation and recovery from the oil price shocks and related inflationary recessions of the turbulent 1973-82 period.

These and other historical and international examples suggest strongly that long business expansions tend to be expected to last even longer. This is so particularly when they are accompanied by reasonably stable prices of goods and services but rising prices of assets. On the other hand, mild and short recessions, e.g., the one in 1990-91, are soon forgotten by the American public. Also, foreign recessions without major adverse home effects attract only transitory and limited interest even when they are quite serious such as those in Germany and Japan during the 1990's.

However, it is clear that forecasts of continuing expansion have in the past always proved wrong eventually, although sometimes after lengthy delays. Business cycle peaks are seldom

predicted in advance and indeed tend to be tardily recognized. These and certain other recurrent and apparently systematic errors of analysis and foresight are much more predictable themselves than the critical economic and financial changes that private and public decision makers, with their advisers, try to anticipate. Such errors can and do create some serious problems by leading to complacency and misguided policies, but the awareness of them remains surprisingly low, even among professional and responsible people.

2. **Missed Peaks and Related Errors**

A frequent type of forecasting error is underestimation of change, which is not just due to the presence of unpredictable random elements in the actual values but is often apparently systematic, applying on the average to both longer growth trends and shorter cyclical expansions and contractions, to real economic activity and inflation.

Another common occurrence is that cyclical turning points, mainly peaks, are missed, which gives rise to very large directional and quantitative errors (in one early collection of forecasts, nearly three times larger than the overall average, see Zarnowitz 1979). Even those downturns that followed substantial economic slowdowns (a sequence common to a number of U.S. and foreign business cycles) have as a rule been identified belatedly.

Still another important and firm finding on economic forecasts generally is that their accuracy falls rapidly as their horizon increases. The forward reach of the available data is limited. The numerical monthly or quarterly predictions of the major macro variables that are regularly produced by competent professional sources tend to be of value for 1-2 quarters ahead. They are often moderately useful for the next four quarters, or the next year or two, but hardly

informative and at times misleading beyond that. The lags in effect of monetary policies, for example, are frequently longer.¹

Those who see the business cycle recessions as the thing of the past today cannot boast of superior knowledge of economic history or superior documented foresight. They are mostly commentators on current events who see in the present prosperous state of the U.S. economy an exciting topic to write or talk about at this time, particularly given the financial and economic disorders elsewhere in much of the world. Yet it is clear to those of them who are reasonably well informed that they are predicting a radical shift from the historical trend-cycle patterns of economic change. Hence the emphasis on new structural and technological changes such as globalization, computer revolution, etc., which could conceivably alter the dynamics of market economies drastically and completely. I shall consider this idea after dealing briefly with some of the reasons for the typical forecasting errors and for the actual recessions.

3. On Forecasters' Attitudes, Methods, and Biases

It would appear that underprediction of cyclical expansions implies excessive pessimism, while missing peaks implies excessive optimism. It is probably more important, however, that both types of error have in common a tendency toward conformity and timidity. When large numbers of economists and analysts, most of whom work in business and finance, predict relatively stable, continuing increases in comprehensive indicators of real growth, there is both popularity and safety in joining them.

¹ On effective forecast spans and underestimation and turning-point errors, see Theil 1961, Zarnowitz 1967, 1992, Zarnowitz and Braun 1993, and Granger 1996. Apart from Theil's early Dutch materials, these findings are based predominantly on U.S. data. Recent confirmations, however, include also Bomhoff 1994 on G7 forecasts by OECD.

To be sure, objective data and procedures are widely used in macroeconomic analysis and forecasting. Actively used are regression, time-series, and econometric models based on national income accounts and other aggregates, as well as studies of a variety of leading and confirming indicators. But some important data inputs, such as those from the numerous surveys of attitudes and expectations, are necessarily subjective. Moreover, as shown repeatedly by their ex-post evaluations, econometric model forecasts are much influenced by judgmental adjustments and on balance improved but also rendered more alike by them (Zarnowitz 1992, ch. 13).

An early study of methods of recognizing cyclical turns and the resulting patterns concluded that leading indicators helped to give the analysts warnings of peaks but not of troughs (Fels and Hinshaw 1968). This is consistent with repeated findings that indicators used to have much longer lead times at downturns than at upturns, and still do. Nevertheless, recognition of troughs has been substantially faster than recognition of peaks.

Reputational and publicity considerations may well be important for many forecasters and their employers, and they may account for some “rational biases.” Thus some may produce eccentric, e.g., notoriously gloomy, predictions so as to stand out from the crowd of the more conservative and optimistic prognosticators. The latter, though generally little known, are going to prove more accurate most of the time. Those who predict recessions too frequently will be right only occasionally and hence will often be disbelieved. In contrast, those who never predict recessions will avoid all false alarms and mostly find themselves on the more popular and safe side, yet their overall attitude is almost equally unrealistic.

The only promising course to take here is to follow the lessons of history of business cycles in market economies around the globe and monitor the leading and confirming indicators with due

diligence and care. Even so, predicting the onset of a recession in advance will always be very difficult and often futile.

Still, even prompter recognition after the fact of a generalized downturn is likely to be a genuine achievement and highly rewarding in practice. Of course, this presupposes regular monitoring of the data, which is the opposite to the course of speculation about the likely “end of history” of economic and financial fluctuations.

4. Causes of Recessions

Many contemporary economists favor single-shock theories of cyclical downturns, stressing the role of spikes in interest rates, commonly attributed to counterinflationary monetary policies, or in oil prices, with conflicts in the Middle East carrying the brunt. They do not worry about recessions since inflation remains low and oil shortages are not a serious threat (some do worry that further expansion will ignite inflation, however).

This way of thinking about business cycles relies selectively and excessively on certain recent events to the exclusion of others and of a longer view backward and forward; it is thus both ahistorical and atheoretical. To be sure, oil price boosts triggered the downturns in some episodes (1973, 1979), monetary policy shifts and steep rises in interest rates did so in others (1969, 1981). But even in these particular periods other more regularly observed relationships and developments played major roles. For example, “inflation, shortages, weaknesses in consumption and in construction activity, and slowdowns in production all occurred in 1973 prior to the reduction in the oil supply caused by the action on the OPEC cartel” (Zarnowitz and Moore 1977, p.489). The decline in profits from production in constant dollars started a year before the late 1973 reference peak date. The 1973 –74 fall in real inventory investment was the

deepest since the 1930's, and large not only in absolute size but also relative to the change in total output. Before the onset of recession at the beginning of 1980, real retail sales and housing starts had unusually early and sharp declines.

Indeed, most of the recent recessions were preceded by substantial slowdowns in the pace of the overall economic activity, which were typically associated with early downturns in profit margins and curtailments first in business investment commitments and eventually in employment and production. Lower than expected orders and sales would result in unintended inventory accumulation, contributing to the process of downsizing and cooling the expansion. At weak growth rates, the economy would become increasingly vulnerable to adverse shocks.

Corporate earnings decline at high capacity utilization levels not only because of slowing sales but also because costs of labor and credit, materials and construction usually increase faster than selling prices, squeezing profit margins.² It is these relative price changes that are mainly harmful here, not the effects of the expansion itself on the general price level of goods and services. Low inflation as such does not necessarily jeopardize an expansion as long as it is contained and not opposed by excessively restrictive policies.

5. Markets, Expectations, and Policies

Bond markets naturally thrive on expectations of falling or steady and low inflation and interest rates. Stock markets do as well, except when moved more strongly by concurrent expectations of declining earnings. Solid real growth, low inflation, and booming financial markets all contribute to consumer and business confidence. The coincidence of these conditions

² This is an old but still valid insight of Mitchell 1913. See Zarnowitz 1992, ch. 4 (especially pp. 140-143) for a discussion of this hypothesis and evidence, with references to the literature.

is rare but by no means unprecedented (the late nineteen twenties being, of course, the most famous or infamous case in point).

What is relatively new lately is the faith that for the recession-free stability to reign two conditions are required and a third is desirable. First, real growth must be moderate or less. Second, prices of goods and services must rise slowly if at all but, third, prices of financial assets can rise indefinitely with at worst minor setbacks.

The belief appears to be widely held and linked to restrictive policies designed to avert booms in aggregate demand that would threaten higher inflation. By preventing overheating, this course of action is expected to prevent economic downturns. But, as already noted, some expansions end because they are too weak, not because they are too strong, that is, as it were, not with a bang but a whisper. Thus, a tight-money policy intended to cool a boom can instead, if mistimed or excessive, help to generate or aggravate a slowdown that will issue in a recession.

When prices of goods and services are rising only mildly during a strong business expansion, while prices of financial assets are rising swiftly, chances are that the credit demand and the money supply are both growing vigorously and large amounts of the new funds are invested in the asset markets. Confidence that stock prices in general will continue to go up and their declines will not last (hence will mainly offer good buying opportunities) must in the last analysis rely on the premise that the Fed can and will prevent bear markets by acting as a lender of last resort. But this is inconsistent with the presently dominant idea that the main mission of the central bank is to fight against inflation of consumer and producer prices, and not at all to assure an indefinite inflation of prices of assets, financial or real. A massive creation of money

and credit that is inflationary must be shunned, whether it is to finance long bull markets in stocks and bonds or spending by consumers, business, or government.

Traders in stocks and bonds generally, and many active investors as well, tend to have short horizons and overreact to all sorts of news but also engage in hedging and corrective transactions. Their behavior inevitably affects monetary policy makers who, however, should have rather long horizons and always consider the lagged effects of their decisions on the economy. Although inflation is their primary concern, they really cannot ignore issues of real growth and unemployment, particularly when fiscal policy is essentially emasculated. Downside as well as upside risks associated with alternative policies need to be continually considered.

6. U.S. 1946-96: Mild Recessions, No Deflationary Depressions

In the last three decades of the 19th and the first four decades of the 20th century, six major depressions occurred in the United States, which were generally characterized by large declines in prices and nominal aggregates as well as indexes of business activity.³ No declines of comparable severity have been observed in the last half-century following the depressed 1930's and World War II. Indeed, expansions have become longer and contractions milder during this period in other industrial economies as well. The probable sources of this welcome evaluation are several: (1) shifts of employment to less cyclical industries producing mainly services; (2) fiscal automatic stabilizers; (3) federal deposit insurance and prevention of general banking

³ The six can be approximately dated in peak-to-trough years as follows: 1873-79, 1893-97, 1907-8, 1920-21, 1929-33, and 1937-38. See Zarnowitz 1992, ch 7.

panics; (4) less volatile monetary growth; and (5) the positive feedback effect of perceived moderation of recessions on consumer, business, and investor confidence.⁴

But it is clear that these factors can only reduce, not eliminate cyclical instability. Moreover, they have lost much of their effectiveness in the second half of the postwar period with the rise in inflation and the consequent distortions, except for (1), the gradual shift to services, which proceeded throughout the recent era.

The U.S. depressions of the past were associated with deflations that increased the burden of debt falling heavily on people with high propensities to borrow, invest, and spend. In contrast, the post-WWII recessions only coincided with or preceded disinflations. The supply shocks (mainly oil price hikes) of the 1970's helped to produce two recessions which were actually associated with large runups of inflation. Here the disinflation was achieved only with lengthy lags extending well into the ensuing recoveries, and eventually at large costs of extremely tight monetary policies and high nominal and real interest rates, via the back-to-back recessions of 1980 and 1981-82.

Historically, contractions tended to be long relative to expansions during the periods of secular deflation (1814-43, 1864-96, 1920-32). They were relatively short during the periods of secular inflation (1789-1814, 1843-64, 1896-1920).⁵ In the last 50 years, the alternation of the eras of rising and falling prices has ceased, replaced by a continuing, worldwide tendency for the level of prices in general to increase. Only recently has the trend toward higher inflation been halted, succeeded by spreading disinflations and even here and there (from Japan and Germany

⁴ For more detail, evidence, and a counter critique of the argument that the moderation of business cycles is an artifact of data improvement, see Zarnowitz 1992, ch.3.

⁵ These dates of the uptrends and downtrends in the price levels approximate well the long waves much discussed since Kondratieff 1926; see Zarnowitz 1992, ch. 8.

to Canada) by incipient and scattered but resurgent deflations. Whether these phenomena foreshadow the end to our own “great” Age of Inflation, it seems still much too early to tell.

7. Will New Developments Finally Conquer the Business Cycle?

In view of the euphoric press comments on how the U.S. economy was at its best ever as it began the seventh year of its current expansion last spring, it is well to recall that the past recovery dated by NBER from March 1991 had been exceptionally weak during 1991 and 1992. Employment stagnated, unemployment actually rose for a year, and real GDP barely increased. This is remarkable because growth rates tend to be the highest in this phase of the cycle when the economy’s capacity is still very much underutilized. Indeed, growth of output was most of the time much lower in 1991-96 than in the corresponding stages of the long expansions of recent history (1961-66 and 1982-87).⁶ Thus it was only quite recently, in 1996-97 that the excellent conditions of high real growth, low inflation, and booming financial asset markets came to prevail.

The recession and sluggish recovery of the early 1990’s caused much unhappiness and particularly complaints about the concurrent spread of corporate downsizing, which resulted in lower living standards for many managers and workers. At the same time, wages of employees with modest education have fallen badly behind, and employment insecurity rose along with household indebtedness and uncertainty of consumer spending. To those especially concerned about the causes and consequences of rising income inequality, these may have seemed to be the worst of times.

To others, however, the long-run gains from the underlying trends of great technological and managerial advances and globalization of numerous economic and financial activities promised to far outweigh their short-run costs. Indeed, in recent years the U.S. economy has achieved great progress in international competitiveness evidenced in rising exports of the most sophisticated types of goods and services. Investment in productive equipment and academic education reached high levels. Strong growth of profits combined with low and stable inflation to result in a stock market that continued for years to beat all records. Surveys of economic outlook and attitudes became similarly bullish. To the many beneficiaries of these developments, these were rather evidently the best of times.

It is very difficult to evaluate the new trends of rationalization (a positive term for downsizing) and globalization, perhaps particularly with respect to their implications for domestic vs. international growth and fluctuations. One reason is that they are still young so the historical perspectives and lessons are lacking. Another reason consists in the basic difficulties of measurement of such important variables as the productivity gains from computerization and in services. Also hard to assess is the mutuality of advantage from increased trade among countries with major differences in political and social systems, cultures, and stages of development.

Rationalization has been measured by an index of cost efficiency for the nonfinancial corporate sector based on the ratio of nominal output per labor hour to labor compensation per hour (Annable 1996). This index declined mildly in 1991-92 but rose strongly in 1993-94,

⁶ 1994 brought an improvement but also renewed fears of inflation and a gradual tightening of monetary policy resulting in rising interest rates and bond market distress. 1995 was a year of an economic slowdown. The

suggesting a combination of rising productivity and wage constraint. The share of after-tax profits in the output of the sector increased strongly in 1992-95. Improvements in productivity and profitability should promote real investment and growth and keep the expansion going on the supply side. They should also work to lessen inflationary pressures at any given level of economic activity (or rate of unemployment).

However, constraining wages implies weakening of consumption expenditures and thus of the largest component of aggregate demand. In itself, a permanent shift from wages to profits through pure downsizing would probably be widely opposed as inequitable and have only limited potential to do any good. True rationalization, to be helpful, must rely on technical progress and investment in productive capital, physical and human. It will reduce costs and enhance productivity but avoid causing any significant and lasting increases in the inequality of distribution of income and wealth. Such increases would seem to me to be more likely to worsen than to improve the instability and welfare costs of business cycles.

One undoubtedly positive effect of rationalization in the broad sense would be to reduce the size and costs of inventories at any given level of sales. In fact, strong claims are being made on behalf of modern computerized methods of inventory management. So far, however, to my knowledge, evidence that the historically very large role of inventory fluctuations in business cycles has been strongly reduced is still lacking.

In general, similar observations can be made about globalization whose potential effects on business cycles are probably also mixed. In the long run, more open and intensive foreign trade

expected inflation runups never materialized.

and investment should raise growth in all participating countries, and economies that grow strongly suffer less from business cycles.

References

- Banhoff, E.J. 1994. Forecasting for Business and Economics. San Diego: Academic Press
- Granger, C.W. J. 1996. Can We Improve the Perceived Quality of Economic Forecasts? Journal of Applied Econometrics, 11: 455-474.
- Kondratieff, N.D. 1926. Die Langen Wellen der Konjunktur. Archiv für Sozial-wissenschaft und Sozialpolitik 56 (3): 573-609. Also, translated by W.F. Stolper as "The Long Waves in Economic Life", Statistics 17(6) 1935: 105-115.
- Mitchell, W.C. 1913. Business Cycles. Berkeley: University of California Press.
- Theil, H. 1961. Economic Forecasts and Policy. 2nd ed. Amsterdam: North Holland.
- Zarnowitz, V. 1967. An Appraisal of Short-Term Economic Forecasts. New York: National Bureau of Economic Research, Inc. (NBER).
- Zarnowitz, V. 1992. Business cycles: Theory, History, Indicators, and Forecasting. Chicago: The University of Chicago Press for NBER.
- Zarnowitz, V., and P. Braun. 1993. Twenty-Two Years of the Quarterly Economic Outlook Surveys: Aspects and Comparison of Forecasting Performance. In James H. Stock and Mark Watson, eds., Business Cycles, Indicators and Forecasting. Chicago: The University of Chicago Press for NBER, 1993, pp. 11-84.