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Chapter 10

Some Secular Changes in Business Cycles

Although industrialized countries continue to have business cycles, such cycles have changed significantly in character. In what follows some of these changes are described and their possible implications for research and policy are discussed.

Perhaps the most obvious change is that business recessions—periods of actual decline in economic activity—have become less frequent, shorter, and milder. Interruptions to a steady rate of growth are more often simply slowdowns rather than actual declines in aggregate economic activity. This kind of shift can be observed in the business recessions identified by the National Bureau of Economic Research. On the whole, the five recessions of 1948–1970 were shorter than the five recessions of 1920–1938; produced smaller declines in output, income, and employment; and were less widespread in impact. But recent recessions have been accompanied by higher rates of unemployment than might have been expected in view of other evidence attesting to their mildness.

One of the factors underlying this shift toward recessions of lesser severity, and one reason why it may be expected to persist, is the trend in the industrial composition of employment. Industries that normally experience larger percentage reductions in employment when recession hits are less important in the overall economic picture nowadays, while industries that often continue to expand right through recession have become more important.

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Of the eleven major industrial sectors that account for total employment, seven experienced reductions averaging 3 percent or more during the five recessions of 1948-1970 (Table 10-1). These seven sectors include manufacturing of durable goods like autos and appliances, with an average drop of 12 percent; mining, with an average drop of 10 percent; transportation and utilities, with an average drop of 5 percent; and farming, manufacturing of nondurable goods like textiles, construction, and federal employment, with drops of 3 to 4 percent. Employment in these seven sectors constituted more than half of total employment in 1955, but by 1972 their share had declined to about two-fifths. The other four major sectors—wholesale and retail trade; services; finance, insurance, and real estate; and state and local government—experienced much smaller declines or actual increases in employment during the five most recent recessions. They accounted for slightly less than half of total employment in 1955; by 1972, three-fifths. (For more recent data, see Appendix Table A-3.)

In short, the industries that have contributed most to reduced employment during recession have shown little or no growth during the past fifteen years or so, while those that have contributed least to recession have grown much faster. The added stability has reduced the impact of recession upon total employment by something like one-third. If the 1955 distribution of employment among the eleven sectors had prevailed in all five recessions of 1948-1970, the average reduction in total employment would have been 2.7 percent. With the 1972 distribution, the reduction would have been 1.7 percent.¹

If the projections of industrial employment to 1985 that have recently been published by the Bureau of Labor Statistics are anywhere near the mark, this source of employment stability will endure.² In fact, aggregate employment in the four recession-proof sectors (trade, services, finance, and state and local government) is expected to grow between 1972 and 1985 just about twice as fast as in the seven recession-prone sectors. The former will, by 1985, contribute nearly two-thirds of total employment; the latter, only about one-third. More people will be working in jobs that are relatively secure. If the distribution of employment among sectors in 1985 corresponds to the projection, an average recession will reduce total employment by 1.4 percent—approximately half the estimated 2.7 percent reduction based on the 1955 distribution.

One of the implications of these employment trends is that future recessions are more likely to be in the nature of slowdowns in the rate of economic growth. This prospect has already led economists here and abroad to experiment with new methods—or to resurrect old methods—of identifying economic fluctuations. The interest in

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the GNP gap and other measures of capacity utilization, in rates of change in activity rather than levels, in trend adjustment techniques, and in spectral analysis, stems in part from this shift. At the National Bureau, Ilse Mintz has identified growth cycles in the economies of West Germany and the United States, and other students have done similar work for Japan, Canada, Great Britain, and other countries. For the United States, Mintz's chronology includes three "growth recessions" in addition to the five already included in the National Bureau's business cycle chronology.³ These occurred in 1951-1952, 1962-1963, and 1966-1967. In each, real GNP growth dropped to an average annual rate in the range of 2.5 to 3.5 percent over periods of a year to a year and a half. Another such period of slow growth in real GNP began in the spring of 1973, well before the energy crisis came upon us.

The policy implication that I particularly would like to draw from all this is that it has become more important than ever for policy-makers to support basic research into the causes and consequences of these interruptions to steady growth. Indeed, this implication holds for anyone who is trying to foresee the outcome of current trends and the effects of efforts to move them in a more favorable direction. The emergence of a relatively new phenomenon is apt to create all sorts of uncertainties, some of which can be dispelled by research.

Let me mention a few points that are important enough or intriguing enough to call for further exploration. First, I have already noted that the trend toward milder recessions does not seem to show up in the level of the unemployment rate. Curiously, while changes in the rate have become smaller, the rate itself has become higher in both recession and prosperity. Is this due to the shift in the composition of the labor force toward greater participation by women and young persons who are prone to higher rates of unemployment? Has the existence and wider scope of unemployment benefits increased the incidence of unemployment? If the risk of losing a job has diminished because of the shift in the industrial composition of employment, why hasn't the unemployment rate come down commensurately?

Second, federal employment is not very stable over the cycle. Federal employment has declined in every one of the five recessions since 1948 and by percentages that rival those in the private sector (Table 10-2). During the intervening expansions, federal employment has increased. Although opinions differ as to whether in the long run federal employment should go up or down, scarcely anyone would argue that it should be pro cyclical. Why has it been pro cyclical? How can the timing of changes in federal employment be better con-

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Table 10-1. Estimated Effect of Employment Trends to 1985 on Cyclical Stability of Employment.

	Annual Percent Change in Employment During Five Recessions, 1948-1970	Percentage Distribution of Total Employment in			Annual Percentage Rate of Change in Employment	
		1955	1972	1985	1955-72	1972-85
Sectors with substantial percentage declines in employment during recessions						
Durable manufactures	-11.9	14.9	13.0	13.2	0.7	1.9
Mining	-9.6	1.3	0.8	0.6	-1.5	-0.2
Transportation and utilities	-4.5	6.6	5.5	5.0	0.5	1.0
Agriculture	-3.8	9.8	4.0	1.8	-3.6	-4.5
Nondurable manufactures	-3.5	11.5	9.6	8.7	0.5	1.0
Contract construction	-3.1	5.4	5.1	4.8	1.2	1.4
Federal government	-3.0	3.3	3.1	2.6	1.1	0.4
Total		52.8	41.1	36.7	0.1	0.9
Sectors with small percentage declines or with increases in employment during recessions						
Wholesale and retail trade	-0.8	20.1	21.5	20.8	2.0	1.5
Services	+1.8	15.9	20.0	22.2	2.9	2.8
Finance, insurance, and real estate	+2.4	4.0	5.0	5.5	2.9	2.5
State and local government	+4.5	7.2	12.4	14.9	4.9	3.2
Total		47.2	58.9	63.4	2.9	2.3
All Sectors	-3.0	100.0	100.0	100.0	1.6	1.8
Estimated percent change during recession for all sectors, based on 1955 distribution of employment						
	-2.7					
based on 1972 distribution of employment						
	-1.7					
based on 1985 distribution of employment						
	-1.4					

Notes to Table 10-1

Source: Compiled by the National Bureau of Economic Research, Inc., from data published by the U.S. Bureau of Labor Statistics.

based on 1972 distribution of employment -1.7
 based on 1985 distribution of employment -1.4

Notes to Table 10-1

Source: Compiled by the National Bureau of Economic Research, Inc., from data published by the U.S. Bureau of Labor Statistics. The projection of employment to 1985 is given in Ronald E. Kutscher, "The United States Economy in 1985: Projections of GNP, Income, Output and Employment," *Monthly Labor Review*, December 1973, p. 39.

The percent changes in employment during recessions are computed from three month standings of seasonally adjusted data centered on business cycle peak and trough months, on the base of cycle averages running from trough to trough (except 1948-1949, where the cycle base runs from peak to peak). The peak to trough periods are: November 1948-October 1949; July 1953-August 1954; July 1957-April 1958; May 1960-February 1961; and November 1969-November 1970.

Note: Data used to compute recession changes are from the establishment survey (jobs) except for agriculture, where the household survey (persons) is used. The "all sector" series derived in this manner undergoes larger declines during recession than total civilian employment from the household survey, because of the greater sensitivity of the nonfarm establishment data than the household data to recession. The average declines during the five recessions, 1948-1970, are:

Nonfarm, household survey (persons)	-1.1 percent
Nonfarm, establishment survey (jobs)	-2.9 "
Farm, household survey (persons)	-3.8 "
Total, household survey (persons)	-1.4 "
Total, nonfarm establishment and farm household surveys	-3.0 "

The data for the distribution of employment in 1955, 1972, and 1985 are based on the jobs concept, but differ from those used to measure recession changes because of the inclusion in the former of self-employed, unpaid family workers, and paid household employment and because of other statistical and conceptual differences.

Table 10-2. Changes in Private and Public Employment During Recession, 1948-1970 (in thousands of persons; percentage change in parentheses).

Recession Period		Private Total	Federal	State and Local
Peak	Trough			
November 1948	October 1949	-2,514 (-5.3)	-58 (-2.7)	+168 (+4.1)
July 1953	August 1954	-1,862 (-3.9)	-120 (-5.5)	+289 (+6.9)
July 1957	April 1958	-2,675 (-5.3)	-39 (-1.8)	+176 (+3.5)
May 1960	February 1961	-1,054 (-2.1)	-55 (-2.5)	+177 (+3.0)
November 1969	November 1970	-1,218 (-2.2)	-65 (-2.6)	+419 (+5.2)

Sources: See Table 10-1 for source and method of computation. See also W.W. Ebanks, "Public Employment and Post World War II Economic Fluctuations" (Ph.D dissertation, New York University, 1973).

trolled with a view to offsetting rather than augmenting employment fluctuations in the private economy?⁴

Third, wholesale prices seem to have become less responsive to changes in final demand. During each of the five recessions of the 1920s and 1930s, industrial wholesale prices declined by rates exceeding 5 percent per year. In contrast, during the five recessions of the past twenty-five years, industrial wholesale prices declined on the order of 5 percent in only one instance, 1948-1949. In part, this is related to the fact that the postwar recessions were shorter and milder than the prewar ones. But this does not seem to account for the entire shift in price behavior.⁵ What other factors are involved? Will they persist or intensify? What are their implications for the control of inflation over the longer run? (See Chapter 15.)

Fourth, financial markets have become increasingly sensitive to economic fluctuations. Interest rates have moved in far wider swings in recent recession-recovery periods than formerly.⁶ Stock prices, too, have become more sensitive not only to the standard business cycle recessions but also to the milder growth recessions. Indeed, stock price movements have exaggerated the relative severity of recent recessions. Thus the common impression that declines in the market forecast recession may prove unduly pessimistic. What is the relation, if any, between the shifts in interest rate behavior and stock price behavior? What factors underlie the greater sensitivity of stock prices, and what implications do they have for this form of investment?

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A fifth and final point is that growth recessions appear to be international in scope. It has long been known that the more severe business cycle contractions have been worldwide. The Great Depression of the early 1930s is the best known example, but the severe contractions of 1907, 1921, and 1938 are equally illustrative. It is now clear that the mild growth recessions of 1951-1952, 1962-1963, and 1966-1967 in the United States had counterparts in Europe. As a result, our exports, which used to fluctuate with demand conditions abroad and were more or less independent of domestic demand, now conform more closely to domestic conditions because foreign demand also is more nearly in tune with ours and is also now subject to wider cyclical fluctuation. As Mintz has noted, "The contrast between this shift and the dampening of the domestic business cycle is striking, and suggests that policies or structural changes conducive to international stabilization have been far less effective than those conducive to national stability."⁷ This remark, though written in 1967, seems especially apt today.

But the full implications of a more closely integrated international business cycle, or growth cycle, remain to be explored and evaluated. Better current information in comparable form for different countries on the state of the business cycle is needed. A project launched in 1973 by the National Bureau on International Economic Indicators will, we hope, help to fill this need.⁸ The subject has a bearing on international economic policy problems ranging over a very wide field—monetary relations, inflation, foreign trade, capital flows, migration, to say nothing of energy. All these topics seem likely to require a major share of policymakers' attention during the 1970s, and they will need all the help they can get from economic research.

NOTES TO CHAPTER 10

1. For an extension of this analysis to 1990, see Appendix Table A-3.
2. R.E. Kutscher, "The United States Economy in 1985: Projections of GNP, Income, Output and Employment," *Monthly Labor Review*, December 1973, p. 39.
3. Ilse Mintz, "Dating U.S. Growth Cycles," *Explorations in Economic Research* 1, 1 (Summer 1974).
4. For an analysis of the cyclical behavior of federal as well as state and local government employment, see Walter Ebanks, "Public Employment and Post World War II Economic Fluctuations" (Ph.D. dissertation, New York University, 1973).
5. Phillip Cagan has documented this change and explored some of its sources in "Changes in the Recession Behavior of Wholesale Prices in the 1920s

and Post-World War II," *Explorations in Economic Research* 2, 1 (Winter 1975): 54-104.

6. Phillip Cagan, "Changes in the Cyclical Behavior of Interest Rates," Occasional Paper 100 (New York: NBER, 1966); and Phillip Cagan, "The Recent Cyclical Movements of Interest Rates in Historical Perspective," *Business Economics* (January 1972).

7. Ise Mintz, *Cyclical Fluctuations in the Exports of the United States Since 1879* (New York: NBER, 1967).

8. See Chapter 6.

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