



A new leading indicator: workers recently laid off

GEOFFREY H. MOORE AND JOHN P. CULLITY

Layoff rates have long been used as leading indicators in business cycle analysis. The layoff rate in manufacturing was initially selected as a leading indicator of business cycles in 1960.¹ In 1961, it became 1 of 12 leading indicators published by the Bureau of Economic Analysis in *Business Conditions Digest*. The rate was derived from the labor turnover survey of manufacturing establishments, conducted by the Bureau of Labor Statistics and discontinued at the end of 1981. BEA subsequently replaced layoffs with initial claims for unemployment insurance.

Prior to 1967, the Current Population Survey collected data on laid-off workers on a very limited basis and only indirectly. This group included only those persons who were neither working nor looking for work, but responded that they had a job from which they were temporarily laid off and expected recall within 30 days. Since 1967, nonworking survey respondents have been asked directly whether they were on layoff. These workers are counted as unemployed regardless of their job search activity and form a subgroup of the job losers category. Further, workers on layoff are classified by the number of weeks since they were laid off.

At the Center for International Business Cycle Research, we used the number of all job losers on layoff, together with temporary layoffs prior to 1967, as a component of our leading employment index.

Recently, we observed that a better leading indicator could be obtained from data on *recent* "job losers on layoff," rather than all workers on layoff. The recent jobless consist of those who were laid off within the last 5 weeks and are still unemployed at the time of the household survey. This group would seem to correspond closely to those included in the reports by employers on the number of workers laid off during the past month. The category can be converted to a layoff rate by dividing by total civilian employment. The result is a new leading indicator available currently.

The new indicator's lead-lag record during the business cycle from 1969 to 1982 is shown in table 1, together with the records of the related series. The layoff series, which we

have seasonally adjusted, and the unemployment claims measure performed identically at all four troughs. The new series led at all four peaks, while initial claims led at three of the four.

Compared with the total layoff rate, the new indicator has longer leads at several turns, as would be expected because the new series reflects recent actions, whereas total layoffs include many who were laid off months earlier. Relative to the manufacturing layoff rate during the overlapping period of 1969–81, the new indicator shows longer leads at three of the four peaks, and about the same timing at the troughs. The manufacturing layoff rate, in turn, has a somewhat better leading record than temporary layoffs before 1969. Therefore, it seems reasonable to join the manufacturing layoff rate before 1969 to the new rate after 1969 to form a longer series with one break in coverage. It leads at 14 of the 16 business cycle turns from 1948 to 1982, with coincident timing in the other two turns and an overall average lead time of 6 months. The combined series is a more consistent leader than initial claims for unemployment insurance, which has coincident timing four times and *lags* twice during the same period.

So far as other important indicator characteristics are concerned, such as prompt availability and freedom from extra cycles and erratic movements, the new layoff rate stands up reasonably well to its competitors. Because it is a product of the household employment survey, the figures for a previous month are normally available on the first Friday of the following month. These figures are subject to revision annually, when seasonal factors are changed. Initial claims are available weekly, with a 2-week delay, which puts them on a par with the new layoff rate, although the monthly average is not available until the middle of the following month. Erratic movements in the new layoff rate are relatively large, however, as the following measures show:²

	<i>Ratio of irregular to cyclical change</i>	<i>Months for cyclical dominance</i>
New layoff rate, under 5 weeks, 1969–85	2.51	3
Manufacturing layoff rate, 1948–75 .	2.08	3
Initial claims, unemployment insurance, 1948–82	2.00	3

In all three series, it takes a span of 3 months for the average cyclical change to exceed the average irregular change.

The layoff rate and initial claims series tend to lead at business cycle peaks by much longer intervals than at

Geoffrey H. Moore is a director of the Center for International Business Cycle Research, Columbia University, and John P. Cullity is professor of economics at Rutgers University.

Table 1. Leads and lags of layoff rates at business cycle turns, 1948-82
 [Lead (-) or lag (+) in months]

Business cycle		Temporary layoff rate		Layoff rate, manufacturing		Layoff rate, under 5 weeks		Layoff rate, total		Layoff rate, manufacturing, to 1968; layoff rate under 5 weeks, 1969 ff.		Initial claims, unemployment insurance	
		Peak	Trough	Peak	Trough	Peak	Trough	Peak	Trough	Peak	Trough	Peak	Trough
	November 1948												
October 1949		0	-4	-5	-8					-5	-6	+1	-22
	July 1953												
May 1954		-4	-4	-4	-8					-4	-8	+4	-10
	August 1957												
April 1958		0	-14	-1	-21					-1	-21	0	-23
	April 1960												
February 1961		0	-12	0	-11					0	-11	0	-12
	December 1969												
November 1970				-1	-8	-1	-9	0	-9	-1	-9	-1	-11
	November 1973												
March 1975				-1	-9	0	-2	+3	-1	0	-2	0	-9
	January 1980												
July 1980				-2	-11	-2	-19	0	-19	-2	-19	-2	-16
	July 1981												
November 1982				(1)	0	-2	-8	-2	0	-2	-8	-2	0
Average lead (months):													
	1948-61 Peak and trough	-1	-8	-2	-12								
			-5		-7								
	1969-81 Peak and trough			-1	-7	-1	-10	+1	-7	-1	-10	-1	-9
					-5		-6		-4		-6		-6
	1948-82 Peak and trough									-2	-10	0	-13
											-6		-6
Percent of timing comparisons that are leads:													
	1948-61 Peak and trough	25	100	75	100								
			62		88								
	1969-81 Peak and trough			100	75	66	100	0	75	66	100	66	75
					86		86		43		86		71
	1948-82 Peak and trough									75	100	38	88
											88		62

NOTE: Business cycle turning points are designated by the National Bureau of Economic Research, Inc., Cambridge, MA. All series are adjusted for seasonal variation.
 1 Not available.

Table 2. Leads and lags of layoff rates at turns in employment and unemployment, 1948-82
 [Lead (-) or lag (+) in months]

Unemployment rate		Layoff rate, manufacturing, to 1968; layoff rate, under 5 weeks, 1969 ff.		Nonfarm employment		Layoff rate, manufacturing, to 1968; layoff rate, under 5 weeks, 1969 ff.	
Peak	Trough	Peak	Trough	Trough	Peak	Peak	Trough
October 1949	January 1948		+4	October 1949	September 1948	-5	-4
September 1954	June 1953	-8	-7	August 1954	July 1953	-7	-7
July 1958	April 1957	-4	-17	May 1958	March 1957	-2	-16
May 1961	February 1960	-3	-9	February 1961	April 1960	0	-11
August 1971	May 1969	-10	-2	November 1970	March 1970	-1	-12
May 1975	October 1973	-2	-1	April 1975	October 1974	-1	-13
July 1980	July 1979	-2	-13	July 1980	March 1980	-2	-21
December 1982	July 1981	-3	-8	December 1982	July 1981	-3	-8
Average lead (months):							
	1948-82 Peak and trough	-5	-7			-2	-12
			-6				-7
Percent of timing comparisons that are leads:							
	1948-82 Peak and trough	100	88			88	100
			94				94

NOTE: Business cycle turning points are designated by the National Bureau of Economic Research, Inc., Cambridge, MA. All series are adjusted for seasonal variation.

troughs. In this respect, they are similar to the total unemployment rate, which leads at peaks but usually lags at troughs. The primary reason for this asymmetry is that business cycle dates are based upon data that reflect the long-run growth of the economy, whereas layoff and unemployment rates are relatively "trendless." A trendless series tends to reach earlier peaks and later troughs than a series with a rising trend. When the turns in the layoff rates are matched with those in the total unemployment rate, rather than the business cycle, the leads are more nearly symmetrical. (See table 2.) The new layoff rate series leads the downturns in unemployment by an average of 5 months and the upturns by 7 months, for an overall average lead of 6 months.

Compared with employment, the new layoff rate again leads at both peaks and troughs, but by much longer intervals at peaks. This is to be expected, because nonfarm employment is virtually coincident with the business cycle, and reflects the growth trend of the economy.

In view of the record of the new layoff rate as a leading indicator, the Center for International Business Cycle Research has revised its leading employment index to include the new layoff rate since 1969 and the manufacturing layoff rate prior to 1969. At some future date, the new indicator might be considered a candidate for the Bureau of Economic Analysis' composite leading index, replacing initial claims for unemployment insurance. □

— FOOTNOTES —

ACKNOWLEDGMENT: We are indebted to Chantal Dubrin and Marcus Yumane for the statistical work on this report, and to John Stinson of the Bureau of Labor Statistics for providing the new data on layoffs.

¹ Geoffrey H. Moore, *Business Cycle Indicators* (Princeton University Press for the National Bureau of Economic Research, Princeton, NJ, 1961), p. 64.

² For an explanation of the ratio of irregular to cyclical change and months for cyclical dominance, see the *Handbook of Cyclical Indicators*, Bureau of Economic Analysis, 1984, pp. 167-68.

Union response to changes in printing technology: another view

DAVID J. EISEN

In the July 1985 issue of the *Review*, Michael Wallace presents a three-nation comparison of union response to the massive technological changes in the newspaper printing industry over the last two decades.¹ Professor Wallace contends that the historical craft orientation of U.S. printing unions and the resulting fragmentation of the labor movement in the industry have seriously impaired workers' abil-

David J. Eisen is Director of Research and Information, The Newspaper Guild.

ity to deal on an equal footing with management concerning the changes. He asserts, moreover, that a belated wave of mergers between the unions over the last 10 years has done little to give labor the appearance of a united front on the technology issue, citing in particular what he describes as a continuing jurisdictional struggle between The Newspaper Guild (reporters and other nonmechanical workers) and the International Typographical Union (typesetters) over the computerized setting of type. He concludes by describing labor relations patterns in the British and West German newspaper industries where, he claims, more farsighted unions took the decision at much earlier stages to consolidate or cooperate, and thus maintain their traditional control over the allocation of work.

The Newspaper Guild takes issue with Wallace on issues of both fact and interpretation:

Composition of the Guild. Wallace states that The Newspaper Guild is composed of "reporters, editors, and a few other white-collar workers." As a matter of fact, close to half the Guild's members are "other white-collar workers." The union has included advertising, circulation, business office, and other noneditorial employees since 1937 and actively seeks to represent them. On the other hand, Britain's National Union of Journalists (NUJ), which Wallace says "more than its U.S. counterpart, the Guild, seeks a broad-based membership of all white-collar workers in the industry," is, in fact, entirely limited to reporters and editors. Of course, in view of Wallace's mistaken conception of the Guild, his further statement that each of the three U.S. newspaper unions, including the Guild, "continues to be organized along occupational lines," is also incorrect. The Guild is an industrial union, and the Graphic Communications International Union (GCIU) is approaching that status.

Merger efforts. With regard to merger activity, Wallace states that the International Typographical Union (ITU) "was twice unsuccessful in completing merger negotiations with the Guild." Aside from the fact that there was only one such attempt, extending over several years, the statement seems to suggest that the Guild was the unwilling party. As a matter of fact, the Guild sought energetically to bring about a merger and had approved it by convention in June 1983; the plan fell apart when the ITU Convention unexpectedly refused to do likewise 2 months later.

There are other, less consequential errors in Wallace's discussion of merger efforts: the incumbent president, Joe Bingel, was "voted down" in the ITU's 1983 election but the Teamsters merger proposal was not on the ballot, except inferentially. And it was not the National Labor Relations Board but the Labor Department that stepped in to void the election; the NLRB has no such authority.

Guild-ITU conflict. More disturbing is Wallace's notion that "differences among journalists and composing room