

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Report of the Fourth District Economists' Roundtable

by Michael F. Bryan and John B. Martin

Uncertainties always cloud the economic horizon, and current conditions are no exception to that rule. The surge in business activity during the final quarter of 1993 raises the immediate question of whether the economy can maintain some of this momentum during the coming year, or whether the rapid year-end growth rate borrowed some strength from early 1994. One of the longer-term uncertainties is how forecasters judge the economy's inflationary potential. To help sort through these and other issues, the Federal Reserve Bank of Cleveland hosted its most recent gathering of the Fourth District Economists' Roundtable on January 21.

■ Overview of the Outlook

The economy accelerated consistently throughout 1993, culminating in a sharp 5.9 percent annualized hike in real gross domestic product (GDP) during the final quarter of the year.¹ Overall, output advanced 2.9 percent in 1993, moderating from the 3.9 percent pace in 1992, but not far from the 3.1 percent average growth rate of the entire post-World War II period.

Although monthly data generally foretold the economy's strong year-end growth, the quarterly expansion was more than a percentage point greater than most forecasters had expected. While the majority of economic sectors posted gains, the rise was not especially broad-based—roughly three-fourths of the real GDP increase in 1993:IVQ was centered in about one-fourth of the economy—capital goods,

residential construction, and consumer durables. In fact, nonresidential fixed investment, which accounts for only about 12 percent of total output, provided more than half of the rise in real GDP last year. Unlike 1992, however, a significant portion of last quarter's growth is generally expected to spill into the early stages of this year before moderating to a rate somewhat under 3 percent for the remainder of 1994, according to the median view of the Roundtable experts (see figure 1).

Of the 15 forecasts presented at the January meeting, four projected GDP growth this year above 3 percent, five ranged from 2¾ percent to 3 percent, five fell within 2½ percent and 2¾ percent, and only one projected the economy to grow by less than 2½ percent.

The engine of growth in 1994 is thought to be the same one that sparked most of the economy's strength in 1993—business spending on capital goods (table 1). The Roundtable projects that growth rate to moderate somewhat this year, but still to provide roughly a third of the economy's thrust.

Also expected to carry into 1994 are increases in residential construction and consumer spending on durable goods. Residential structures, a sector that represents only about 4 percent of real GDP, added significantly to last year's expansion, particularly in the second half, when it fueled about 20 percent of the economy's growth. Although the Roundtable forecasters expect the

Economic forecasting is a useful tool for defining the underlying trends in business activity—outlining the broad patterns that shape the economy, if not its twists and turns. The Fourth District Economists' Roundtable assembled recently to give its spin on current conditions and its predictions for the coming year.

growth rate of total consumer spending to remain below that of GDP over the six-quarter forecast horizon, the group suggested that spending on durable goods—particularly automobiles—would continue to pace the recovery. Personal durable-goods expenditures, which normally account for about 10 percent of GDP, provided more than 25 percent of overall growth in 1993.

While the Roundtable economists generally view business conditions this year with some optimism, continued weakness in a few key sectors is expected to restrain the expansion. For example, government purchases, which represent about 18 percent of GDP, are expected to add only about 1 percent of the economy's growth in 1994. Net exports are another potential drag, as foreign economies, particularly in western Europe, continue to languish.

The Roundtable panelists observed that last year's growth favored economic sectors that are heavily influenced by capital market interest rates. Furthermore, the 100-basis-point decline in long-term rates in early 1993 was an important source of the economy's year-end strength. The Roundtable's outlook for interest rates in 1994 shows a further flattening in the yield curve, mostly from a rise in money market interest rates rather than from a significant decline in capital market rates. Indeed, the Roundtable projects the corporate bond rate to hold at 7 percent in 1994, presumably reflecting the group's steady inflation projection over the period.

The Roundtable forecasters expect inflation to follow the same course as in 1993, or perhaps to edge up slightly. Measured by changes in the Consumer Price Index (CPI), the median projection calls for inflation, which ended 1993 at about a 2.8 percent annual rate, to rise gradually to 3.2 percent by the end of this year (figure 2). Although there was considerable disparity on this issue, the participants agreed that disinflation has run its course. Of the 13 Roundtable panelists presenting inflation forecasts, five expected the 1994 inflation rate to be greater than 3 percent, three fell within $2\frac{3}{4}$ percent and 3 percent, four were between $2\frac{1}{2}$ percent and $2\frac{3}{4}$ percent, and only one expected a rate less than $2\frac{1}{2}$ percent.

Among the more important issues in business analysis is the measurement of services output. Difficulties in measuring the production of services affect our interpretation of growth, productivity, and inflation. The Federal Reserve, with a stated objective of price stability, considers this a particularly cogent issue. Does price stability actually mean no underlying trend in the CPI, or do biases in the price indexes, such as from the mismeasurement of services, suggest that some rate of inflation greater than zero would be appropriate? The Roundtable invited Dennis Fixler, an economist at the Bureau of Labor Statistics (BLS), to discuss recent research on the measurement of services.

■ BLS Measurement of Service Sector Prices

Dennis Fixler, Economist, BLS, Division of Price and Index Number Research

It is well known that the share of national output provided by services in the U.S. economy has steadily increased. The development of price indexes to measure the service sector, however, has not kept pace. One reason for this lag is the complexity and intangibility of service activities: Unlike the output of mining and manufacturing firms, service firms' output tends to be difficult to define and to count.

In recent years, the BLS has attempted to expand the services coverage of the CPI, the Producer Price Index (PPI), and the U.S. Import and Export Price Indexes. Services now account for approximately 58 percent of GDP, and current coverage in the PPI is about 18.2 percent of GDP, or about 33 percent of services output.

To illustrate some of the measurement issues encountered in formulating service-sector output price indexes (which would be appropriate for the PPI program), consider the financial services provided by commercial banks and hospitals. In both cases, questions regarding the definition and measurement of output must first be addressed. For commercial banks, an additional question is how to value the financial services that are commonly provided free of charge. An output price index that resolves these issues can be formulated using the "user cost of money" concept developed by Barnett and Donovan.²

In measuring the real output of industries, the Bureau of Economic Analysis (BEA) prefers to deflate nominal output with an output price index. But because there is no output price index for commercial banks, the BEA measures real output in the banking industry by first deflating output in a given year (the benchmark value) and then estimating output in subsequent years by changing this value according to "the number of persons employed." Thus, there is an implicit assumption of no labor productivity growth in the commercial banking industry.

Further consequences of the absence of an output price index can be seen through a comparison of the BEA's measure and the output growth corresponding to the movement of the implicit quantity index obtained by deflating with the user-cost-based output index. From 1982 to 1988, the BEA method shows that the constant dollar (1982) real output of banks

FIGURE 1 MEDIAN REAL GDP FORECAST

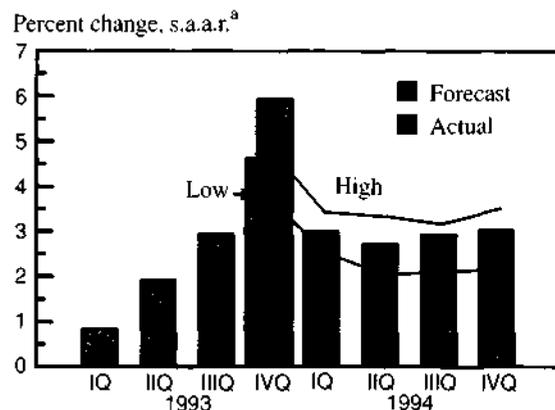
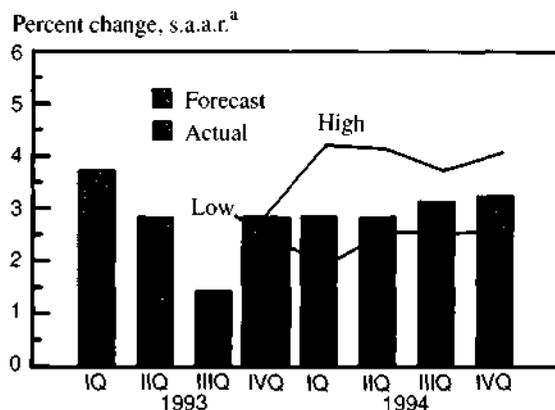


FIGURE 2 MEDIAN CPI FORECAST



a. Seasonally adjusted annual rate.
 NOTE: High and low are the average of the three highest and lowest forecasts, respectively.
 SOURCES: Fourth District Economists' Roundtable, Federal Reserve Bank of Cleveland, January 21, 1994; U.S. Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System.

rose 5 percent, while prices climbed 89 percent. Calculating the output price index for a sample of 480 large banks (assets more than \$300 million) and using it to deflate revenues reveals an output growth of 58 percent from 1984 to 1988, with prices falling 8 percent over the period.³ The implication is that there may be substantial measurement error in the output of commercial banking, but the magnitude differences are merely suggestive because of the variance in coverages. The BEA figure encompasses the entire industry.

The movement of prices in the hospital service industry has become especially important in recent years. Although many researchers use the hospital component of the CPI medical care component (itself a subindex of the overall CPI) to compute the real output of hospitals, this is inappropriate because the

TABLE 1 MEDIAN FORECASTS OF FOURTH DISTRICT ECONOMISTS' ROUNDTABLE: GDP AND RELATED ITEMS (Percent change from previous quarter, s.a.a.r.^a)

	1993 ^b	1994			
		IQ	IIQ	IIIQ	IVQ
Real GDP	2.8	3.0	2.7	2.9	3.0
Personal consumption expenditures	3.1	2.2	2.5	2.4	2.8
Nonresidential fixed investment	14.7	8.8	7.5	7.6	7.1
Residential construction	7.9	9.5	6.4	4.6	4.4
Government purchases	-0.7	-0.2	0.4	0.1	0.3
Industrial production	5.2	3.9	3.7	3.1	3.5
Consumer Price Index	2.7	2.8	2.8	3.1	3.2

a. Seasonally adjusted annual rate.

b. Actual data, fourth quarter over fourth quarter.

SOURCE: Fourth District Economists' Roundtable, Federal Reserve Bank of Cleveland, January 21, 1994.

CPI does not include business and government purchase of hospital services. In February 1993, the BLS introduced a hospital service price index that will be part of the PPI. This index tracks the price movement of an entire treatment path received during a single hospital stay. In contrast, the CPI measures the price change for individual hospital services. By definition, the PPI weights will reflect total hospital revenue from all sources.

One of the most difficult tasks for the BLS in producing price indexes is separating price change into two components: pure price change and price change induced by changes in product quality. Such a distinction is often difficult to make for services, and especially in the case of hospital services. One current avenue of research is testing whether outcome measures, such as mortality rates, can be used as quality measures to adjust hospital prices.

The effort to extend the Bureau's coverage of the service sector is continuing, but the strength of that effort depends on the availability of funds. The current plan, given funding, will extend coverage of the PPI to approximately 45 percent of the services industry, including physician services, real estate services, legal services, banking, insurance carriers, and insurance agents.

An often-discussed issue in recent months has been the slow rate at which the expansion has generated new jobs. Some have called for greater government inducements to small businesses, where it is commonly believed that the majority of new jobs originate. Recent

research by three economists has cast some doubt on that perception. The Roundtable asked Steven Davis from the University of Chicago to share these findings at the January meeting.

■ Small Business and Job Creation: Dissecting the Myth

Steven J. Davis, University of Chicago and National Bureau of Economic Research

Few ideas about the U.S. economy reap greater homage in public discourse than the belief that small businesses are the fountainhead of job creation. This conventional wisdom is frequently presented as justification for tax incentives, regulatory policies, and other government programs that favor the small business sector.

In a recent study, John Haltiwanger, Scott Schuh, and I evaluated the statistical methodology that underlies widespread claims about small business job creation.⁴ In the process, we identified several statistical fallacies and misleading data interpretations.

One common error entails the use of changes in the size distribution of employment to draw inferences about the relationship between job creation and employer size. A second problem—the regression fallacy—leads to overly favorable assessments of small business job creation whenever measurement error or transitory employment movements appear in the data. Finally, a common confusion between net and gross job creation distorts the overall picture and hides the enormous number of new jobs created by large employers.

Our study also examines how job creation and destruction behavior varied with employer size in the U.S. manufacturing sector from 1972 to 1988. Our empirical analysis yields the following results:

(1) Large plants and firms accounted for most newly created (and newly lost) manufacturing jobs. For example, firms with at least 500 employees were responsible for more than half of all gross jobs created during this period.

(2) Smaller manufacturing plants and firms exhibited sharply higher gross job creation rates, but not higher net creation rates. In fact, the net rate revealed no simple or strong relationship with either firm or plant size.

(3) Survival rates for manufacturing jobs increased sharply with employer size. For example, the one-year survival rate of jobs at the largest manufacturing firms was twice as large as the same rate at the smallest firms.

(4) When we replicate the procedures of previous studies with data for the manufacturing sector, we find that their statistical shortcomings sharply overstate the relative employment growth performance of smaller employers.

These findings undermine the conventional view about small business job creation. Although one might argue that the contrast between our results and the conventional view arises from our focus on the manufacturing sector, we believe that the conventional view does not rest upon a careful and balanced analysis of the data.

■ Concluding Remarks

A frequent player in stories about the economic outlook is the Federal Reserve, which is alternately cast either as the villainous spoiler of aggregate demand or as the virtuous defender of the purchasing power of money. In either role, however, the Federal Reserve's goal of price stability is becoming ever clearer. Yet the means of achieving price stability are less definite. Relationships between nominal GDP, the monetary aggregates, and interest rates, which once allowed the central bank to set policy based on the behavior of a few simple measures, have more recently proven unreliable. An important question in the conduct of monetary policy in 1994 concerns the policy

indicators to which the Federal Reserve should be responding.

Several Roundtable participants urged the Fed to return to some form of monetary targeting, whether it be M2 or a new variation of that measure. These monetary aggregates have, over time, shown a stable relationship with nominal spending and inflation, and there was a common presumption that they would do so again *someday*. A policy of real interest-rate targeting was generally thought to be useful in theory, but difficult to implement practically. Among other things, how do we measure the rather abstract concept of a "real" interest rate? And while an objective for the inflation rate was favorably considered, a presumed long and variable lag between policy actions and their eventual effect on prices also argued against such an objective as a singular policy guide. Instead, the Roundtable participants generally assume that the Federal Reserve will continue to

respond to a host of indicators when evaluating its policy options.

The next meeting of the Fourth District Economists' Roundtable is scheduled for May 20.

■ Footnotes

1. Upon revision, that estimate has subsequently been raised to 7.5 percent.
2. Dennis Fixler developed such a price index in "Measuring Financial Service Output and Prices in Commercial Banking," *Applied Economics*, vol. 25 (1993), pp. 983-93. The user cost of money was previously developed in W. Barnett, "Economic Monetary Aggregates," *Journal of Econometrics*, vol. 14 (1980), pp. 11-48; and in D. Donovan, "Modeling the Demand for Liquid Assets: An Application to Canada," *International Monetary Fund Staff Papers*, no. 25 (1978), pp. 676-704.
3. See Dennis Fixler and K. Zieschang, "Output and Price Measurement in Commercial Banks: Evidence from FDIC Data," Bureau of Labor Statistics, manuscript, 1993.

4. See Steven J. Davis, John Haltiwanger, and Scott Schuh, "Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts," forthcoming in L. Solmon and A. Levenson, eds., *Labor Markets, Employment Policy, and Job Creation*, Westview Press.

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