

Federal Reserve
Bank of
San Francisco

June 20, 1980

7.8 - 6.2 = 1,716,000

No profession has suffered as much of a credibility problem in recent years as the economics profession. Hand-wringing, brow-furrowing economists for several years cautioned an unconcerned "spend-while-you-have-it" public that a recession was just around the corner. And quarter after quarter, the corner remained the same distance away.

Even in late 1979, economists continued to suggest that the recession would be a mild one, because of such factors as the conservative inventory behavior of businessmen. For example, the National Association of Business Economists forecast last October that the unemployment rate this year would average 7.2 percent. But as we have seen, the jobless rate jumped from 6.2 percent to 7.8 percent just between March and May of this year—meaning (as the caption notes) a 1.7-million increase in the number of unemployed, on a seasonally-adjusted basis. And once again, economists across the nation have tried in vain to find an explanation for their inability to forecast and explain major economic events.

In their defense, economists argue that the structure of the U.S. economy has changed in many ways which are not well understood—one particular area being the labor market. Aggregate inflation (the rise in the overall price level) and the substantial increase in the relative price of energy-intensive productive inputs both have strongly affected the U.S. labor market and changed our notion of what constitutes full employment.

What's "full employment"?

Total employment increased very substantially, by 12.1 million, in the business expansion which began in the first quarter of 1975 and ended in the first quarter of this year. Nonetheless, the unemployment rate never fell below 5.7 percent in that entire period, largely because of a parallel rise in the total labor force. The same phenomenon has con-

tinued into 1980. Of the increase in joblessness since January, 900,000 represent an increase in the labor force, while 800,000 are due to a decline in employment.

The civilian labor-force participation rate rose steadily through the 1975-79 expansion and even into the ensuing recession, reaching 64.2 percent this May, the highest ever. This rise reflected an increase in women's participation rate, from 45.6 percent in 1974 to 51.0 percent in 1979, which contrasted with a modest decline in men's participation rate. Yet even with the sizable increase in the number available for work, the number with jobs hit record levels, as an unprecedented (for peacetime) 59.3 percent of the adult non-institutional population held jobs in 1979.

But to repeat, the jobless rate failed to decline below 5.7 percent throughout the prolonged expansion, despite the vast expansion of employment. Economists, and even some policymakers, began to question why the measured unemployment rate was so high in a period when the economy was apparently fully employed. And this raises a related question: if we cannot measure accurately the "full employment" unemployment rate, how can we tell today what a high unemployment rate is?

Oil prices and labor demand

The strong employment gains of the past half-decade could be traced in part to the 1973-74 oil price shock, which reduced the relative cost of labor inputs, particularly in manufacturing, and raised the cost of utilizing the existing capital stock. The quadrupling of OPEC oil prices affected the U.S. economy in two ways, through an "income effect" and through a "substitution effect." Under the income effect, the OPEC nations place a tax on U.S. consumers which could only be partially recouped from OPEC purchases of U.S. goods—that is they forced a change in the U.S. "terms of trade." That loss could not

Research Department
Federal Reserve
Bank of
San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, nor of the Board of Governors of the Federal Reserve System.

easily be circumvented by an expansion of government spending or a speed-up in money-supply growth. But under the substitution effect, labor at the margin became a relatively less expensive input, because of the rise in the cost of energy-intensive capital. The rise in energy prices thus tended to increase the demand for labor, so that the economy became more labor intensive.

According to Edward A. Hudson and Dale W. Jorgenson (*Natural Resources Journal*, 1978), the 1973–74 rise in energy prices helped account for the subsequent slow recovery in business capital spending and very substantial increase in total employment. But for that

rise in energy prices, they argued, the unemployment rate would have reached 10.3 percent in 1976 rather than the 7.7-percent rate actually experienced. The difference represented the substitution effect towards labor that resulted from the first oil shock.

Real-wage behavior

The unexpected rise in U.S. labor demand in the recent business expansion thus reflected a decline in the real (inflation adjusted) wage rate. Conversely, the major and prolonged unemployment problems experienced by other major industrial nations in that same period reflected a rise in their real wage rate.

Between 1973 and 1975, real hourly compensation in U.S. manufacturing grew at only an 0.8-percent average annual rate, compared with a 1.5-percent average rise between 1969 and 1973. In contrast, German real wages continued to grow in excess of 7 percent after the first round of oil price increases, and real wages in the U.K. and Canada rose at an even faster rate. Not surprisingly, then, the U.S. experienced sharp increases in manufacturing employment in the 1976–78 period, following a decline after the initial price shock. Germany, in contrast, experienced declines in manufacturing employment in every year from 1974 to 1978,

while the U.K. and Canada showed very little employment growth. Real wage behavior accounted for the difference.

The behavior of employment in the nation's current recession will again depend on the behavior of real wages. The latest oil-price hike and the double-digit inflation have seriously reduced real spendable income, and this will surely reduce aggregate demand. Yet if wage earners attempt to recoup all of their losses with large wage bargaining demands, they may not be as successful in expanding employment as they were in the 1975-79 period.

Any lessons learned?

For policy purposes, it is necessary for us to determine how much of the recent jump in the unemployment rate—from 6.2 percent in March to 7.8 percent in May—is due to increased energy prices, and how much to the inflation-caused reduction in workers' incomes. The latest OPEC-generated rise in energy prices certainly will have some unemployment effects, similar to those caused by the 1973-74 oil price rise. But we can also anticipate a longer-run rise in total employment because of increased energy prices, reflecting a substitution effect such as we experienced during the 1975-79 period.

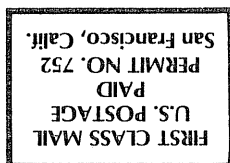
Moreover the increase in the ratio of labor per unit of capital may mean also an increase in the level of unemployment associated with a fully-employed U.S. economy. Our recent experience with double-digit inflation and soaring interest rates may force us to revise our estimates of what constitutes sustainable full employment. It may also mean that during the current recession the unemployment rate may be higher than previously for the same reduction in real output growth.

Joseph Bisignano

FIRST CLASS

Alaska • Nevada • Oregon • Utah • Washington
 Idaho • Arizona • California • Hawaii

San Francisco
 Bank of
 Federal Reserve
 Research Department



BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding	Change from	Change from	
			year ago	
Large Commercial Banks	6/4/80	5/28/80	Dollar	Percent
Loans (gross, adjusted) and investments*	136,441	- 158	8,376	6.5
Loans (gross, adjusted) — total#	114,913	- 179	9,706	9.2
Commercial and industrial	32,842	- 206	1,902	6.1
Real estate	46,354	- 2	8,644	22.9
Loans to individuals	23,781	- 92	1,612	7.3
Securities loans	1,284	252	- 343	- 21.1
U.S. Treasury securities*	6,234	27	- 1,507	- 19.5
Other securities*	15,294	- 6	177	1.2
Demand deposits — total#	44,001	2,047	805	1.9
Demand deposits — adjusted	30,579	1,268	- 943	- 3.0
Savings deposits — total	27,037	443	- 3,005	- 10.0
Time deposits — total#	63,912	- 627	14,503	29.4
Individuals, part. & corp.	54,805	- 294	14,289	35.3
(Large negotiable CD's)	22,542	- 280	6,104	37.1
Weekly Averages of Daily Figures	Week ended 6/4/80	Week ended 5/28/80	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	239	422		20
Borrowings	10	44		73
Net free reserves (+)/Net borrowed(-)	229	378		- 54

* Excludes trading account securities.

Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author . . . Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.