Research Department Federal Reserve Bank of San Francisco

March 17, 1978

# Fully Employed?

Unemployment has declined from 7.6 to 6.1 percent of the civilian labor force over the past year (February-February). Meanwhile, Congress has moved closer to passage of the Humphrey-Hawkins bill, which is aimed at reducing the rate further to 4.0 percent by 1983. Yet the continuing controversy over that legislation still leaves unsettled the question of how close we are to the full-employment unemployment rate - that is, the lowest jobless rate under the existing institutional structure that will not result in accelerated inflation. Estimates differ widely, but our analysis suggests that we are fast approaching full employment, or perhaps are already there.

### FEUR—then and now

Both the Ford and the Carter Councils of Economic Advisers have calculated the full-employment unemployment rate (FEUR) at 4.9 percent - a figure comparable in labor-market tightness to a 4.0-percent rate in the mid-1950's. The present Council, in fact, uses that 4.9-percent figure to calculate the potential output of the national economy. But both Councils have agreed that certain factors in the current market could push the rate to 5.5 percent or even higher. For that matter, some analysts claim that the mid-1950's level of the FEUR was actually closer to 4.6 or 4.8 percent than to 4.0 percent. Thus, depending on our assumption of the correct level of the mid-1950's, we could argue that inflationary pressures would be generated

by a jobless rate below the range of 5.6 to 6.3 percent.

Until recently, most economists began their calculations with the assumption that inflation pressures had not risen in the mid-1950's until the unemployment rate fell below 4.0 percent. But Philip Cagan (Contemporary Economic Problems, 1977) now estimates a non-inflationary rate for that period at 4.6 to 4.8 percent, and Franco Modigliani and Lucas Papademos (New England Economic Review, March/April 1976) estimate the initial FEUR at 4.8 percent. These authors, using a Phillipscurve approach, argue that inflationary pressures were evident in the mid-1950's at rates well above the publicized 4.0-percent figure. By adopting their estimates for that earlier period, we begin with a much higher benchmark than most analysts had previously assumed.

#### Why higher now?

But whatever the FEUR may have been two decades ago, the rate is much higher today because of a number of changing demographic and legislative factors. First is the shift in the composition of the labor force, with the sharp expansion of those groups (young workers and women workers) who exhibit the highest jobless rates. This shift, according to Cagan, boosted the FEUR by .46 percentage point over the past two decades. Another .34 percentage point could be added because of the several extensions of coverage

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of unemployment insurance, which have helped increase the duration of unemployment and hence the overall unemployment rate. The largest impact of this type was the extension of coverage to seasonal workers in 1975.

An even more important factor, according to our calculations, is the liberalization of unemployment-insurance benefits, which may have boosted the FEUR by .55 percentage point. Expanded benefits have tended to increase the number of people who want to enter or remain in the labor force. Consequently, for any given level of aggregate demand, the system generates a larger labor force and a higher unemployment rate than would otherwise exist. The liberalization of the program can be measured by the sharp increase over time in the ratio of jobless benefits - which are not taxed - to workers' average spendable earnings.

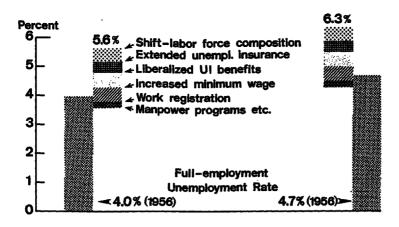
A further increase of .50 percentage point in the FEUR can be attributed to legislated increases in the minimum wage, which tend to increase joblessness among young unskilled workers because their efforts are not worth the higher mandated wage. Another .20 percentage point may be added by the work-registration requirement for welfare mothers — individuals who might not otherwise be counted as jobless because they wouldn't be looking for work.

In contrast, several factors could tend to lower the full-employment jobless rate, in relation to the level of two decades ago. The recent expansion of manpower programs could lower the FEUR by .30 percentage point, because of improvements in job training and job placement. Another .10 percentage point reduction could be due to response error in the survey, such as when a person being interviewed mistakenly tells the survey interviewer that another person in the household failed to look for work in the survey period.

#### Other evidence

Because of all the factors cited here, the full-employment unemployment rate today may be in the range of 5.6 to 6.3 percent, instead of the 4.9-5.5 percent range cited by the Council of Economic Advisers. In any event, the higher range appears more reasonable than the lower range in any recent comparison of the "unemployment gap"—the difference between the measured jobless rate and the FEUR and the "capacity gap" - the difference between the measured capacityutilization index and the full-capacity level of 87.5 percent. With the use of the higher FEUR, the unemploymentgap and capacity-gap relationships are brought into line with the "normal" experience of the early-to-mid-1960's.

Other signs of a tighter labor market are provided by employment data, which are much stronger at this stage of the business expansion than they were at the comparable stages of the four preceding cycles. Total employment has expanded at a 3.5-percent annual rate since the trough of this cycle, compared with a 2.5-percent average gain for the several preceding cycles. The ratio of employment to



adult population has risen by 1.9 percentage points over this expansion, compared with a gain of 0.8 percentage point for the average of earlier cyclical expansions. Most importantly, the rise in employment to a record 58 percent of the adult population suggests a fairly rapid move toward full employment.

All these signs suggest that the economy is much stronger than commonly believed. If the economy is fully employed with a jobless rate between 5.6 and 6.3 percent, further stimulus might only lead to more inflation without solving the real structural problems of unemployment. Thus, this high level of the FEUR gives policymakers much less room for maneuver than they might have expected in 1978.

#### What FEUR for the future?

Forecasting the full-employment jobless rate is somewhat simplified by the fact that the future composition of our working-age population (16 years and over) is largely known today, barring any unusual behavior in mortality and/or immigration. And our population is aging. Between 1980 and 1985, the number of youths (16-24) will decline in absolute numbers as well as a percentage of the working-age population. This aging trend will tend to lower the overall unemployment rate, since young workers have higherthan-average unemployment rates. But whether the future FEUR will actually decline depends also on labor-force participation rates and other factors.

If participation rates remain constant between now and 1985, the FEUR could decline perhaps a full percentage point, according to a recent study prepared for the National Commission on Manpower Policy. If, on the other hand, participation rates increase in line with recent trends, the FEUR decline could be closer to a half-percentage point by 1985.

But several caveats must be kept in mind. The female labor-force participation rate has recently risen far above trend. If this development continues. the future FEUR could rise above forecast because of the tendency for females to exhibit higher-than-average unemployment rates. Again, the future FEUR could rise if public assistance, unemployment compensation and other transfer payments increase - in relation to spendable wages - at more than their past average pace. Unemployment can also be affected in the other direction. The FEUR could fall below the projected 1985 range if the government introduces effective manpower programs which cure structural labor-supply problems and don't simply replace workers already employed.

Given all these changes in the composition of the labor force and in the institutional framework, by the mid-1980's the full-employment unemployment rate could decline perhaps 0.5 to 1.0 percentage points below the present range of 5.6 to 6.3 percent. However, successfully-executed manpower programs are essential if we are to achieve the goal of the Humphrey-Hawkins bill — 4.0 percent by 1983 — without generating new inflationary pressures.

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### BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 3/1/78	Change from 2/22/78		ige from ar ago Percent
Loans (gross, adjusted) and investments* Loans (gross, adjusted) — total Security loans Commercial and industrial Real estate Consumer instalment U.S. Treasury securities Other securities Deposits (less cash items) — total* Demand deposits (adjusted) U.S. Government deposits Time deposits — total* States and political subdivisions Savings deposits Other time deposits‡ Large negotiable CD's	105,928 83,896 1,747 25,845 28,289 14,921 7,716 14,316 103,236 28,299 579 72,517 6,520 31,353 32,040 13,924	+ 767 + 614 + 25 + 308 + 104 + 47 + 48 + 105 + 1,056 + 748 - 5 + 460 + 33 - 99 + 357 + 629	+ 13,162 + 12,790 + 2,554 + 6,260 + 2,554 - 1,052 + 1,424 + 11,159 + 2,278 + 313 + 8,326 + 852 + 118 + 6,693 + 5,159	+ 14.19 + 17.99 + 15.16 + 10.97 + 28.42 + 20.36 - 12.00 + 11.05 + 12.12
Weekly Averages of Daily Figures	Week ended 3/1/78		ended C	comparable ar-ago period
Member Bank Reserve Position Excess Reserves(+)/Deficiency (-) Borrowings Net free(+)/Net borrowed (-) Federal Funds—Seven Large Banks Interbank Federal fund transactions Net purchases (+)/Net sales(-) Transactions with U.S. security dealers Net loans (+)/Net borrowings (-)	- 279 23 - 302 + 1,132 + 370	- 2 + 1,5	211 22 233 335 285	- 9 2 - 11 + 302 + 68

<sup>\*</sup>Includes items not shown separately. ‡Individuals, partnerships and corporations.

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