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Observers of economic trends have long noted the distinctive behavior of labor market statistics for the younger members of the labor force. For example, youth unemployment rates have been higher and more variable than unemployment rates for population subgroups of older workers. Also, analysis of time series data has shown that what cyclical variation there is to be found in labor force participation is concentrated in younger age brackets.1/ The juxtaposition of high variability in both youth unemployment and labor force participation is interesting, for the variation in participation is procyclic and, therefore, dampens variation in unemployment. The question that arises, then, is how large variation in youth unemployment would be if participation were totally insensitive to cyclical activity.

Other issues relating to variability in youth unemployment concern changes in its magnitude and effects over the past two decades. Social legislation, such as various job training and income maintenance programs and expanded coverage of minimum wages, has affected the opportunity sets faced by marginal workers and their employers, so the cyclical sensitivity of youth unemployment and participation may have changed. In addition, younger workers now constitute a larger share of the total labor force than in the past, and this may have caused the overall unemployment rate to become more elastic with respect to shifts in aggregate demand.

This paper reports analysis of the separate contributions of variation in participation and employment to variation in unemployment rates, with emphasis on the behavior of labor market statistics for people between 16 and 24 years of age. The period analyzed covers the past two decades, and the investigation looks at both average cyclical sensitivity and

changes in cyclical sensitivity over this period. The analysis uses a measure of cyclical activity based on movements in economy-wide employment rather than an unemployment rate or employment-population ratio, both of which have been used in previous work. The estimates indicate that procyclic variation in youth participation reduces variation in youth unemployment 20 to 30 percent. The analysis also uncovers evidence of a rising trend in the cyclical variability in the employment of young people, particularly females, that has caused the sensitivity in their unemployment rates to increase.

I. The Approach

Equation (1) shows the relationship between the unemployment rate (U), the employment-population ratio (E), and the labor force participation rate (L):

$$(1) \quad U = 1 - E/L.$$

Differentiating with respect to an exogenous shock variable (S) yields

$$(2) \quad \frac{dU}{dS} = \frac{1-U}{L}\frac{dE}{dS} - \frac{1}{L}\frac{dL}{dS}.$$

Equation (2) provides a basis for estimating the separate effects of shifts in employment and participation. Values of U and L are readily available, and estimates of the derivatives can be obtained from regressions of L and E if a suitable measure of cyclical shocks S can be found.

The variable used in this capacity here is constructed from monthly time series of total private employment using quadratic trend regressions of the log of this series. Its value in month t is the difference between the predicted and actual values of the log of employment for

month t; the predicted value was obtained by fitting the trend regression to the employment series between months t-102 and t-12. The series constructed in this manner begins in June 1958 and ends in December 1978. Table 1 displays the values at the cyclical peaks and troughs in the period. The variable was included among the independent variables of trend regressions of the unemployment rate, the labor force participation rate, and the employment-population ratio. Its coefficients are then interpreted as estimates of the derivatives in (2).

II. Estimates of Average Variability

Sets of these three regressions were estimated for the entire population and for male and female subsets of three age groups: teenagers, 20-24 year olds, and those over 24 years of age. Tables A-1 through A-7 in the Appendix contain the results. The equations include a variable to capture the influence of military activity on the labor market. The fraction of young (18-24) people in the armed forces serves in this capacity.2/ Its coefficients indicate that higher levels of military manpower have been associated with lower unemployment rates, although the relationship is weak for the over-24 groups. The reduction in unemployment is a consequence of a strong positive association between the employment-population ratios and the military variable; the coefficient in the participation equations is positive for all groups but one--males between 20 and 24.

The cyclical shift coefficients from the unemployment, employment, and participation regressions serve as estimates of dU/dS, dE/dS, and dL/dS in equation (2). Completing the computations requires inserting U and L into the expression. Rather than using actual values, the computations reported below employed fitted values calculated using the regression

coefficients along with the trend and military variables. The cyclical shift variable was set to zero in this exercise, so the fitted values can be viewed as a series of steady-state levels of the variables, i.e., the series that would have been observed if there had been no cyclical activity. Estimates of the partial effects of variation in participation and employment were computed for each month of the sample period.

The first two columns of Table 2 report the means of the participation and employment effects for each group. The figures in the last two columns provide a rough check on the consistency of the estimates, since the equations for each group were estimated without constraints. The third column contains the sum of the two partial effects, and the fourth column contains the coefficient from the unemployment regression, which is a direct estimate of dU/dS. The figures are in the same ballpark for all groups, but the disparity in a few cases is large enough to suggest the presence of some specification error in the regressions.

The fourth column reveals the high cyclical response of youth unemployment. Teenage unemployment is three times more sensitive to cyclical shifts than mature adult unemployment among males and slightly over twice as sensitive among females. The sensitivity of unemployment among 20-24 year olds is only slightly lower than teenage unemployment sensitivity.

The estimates also indicate that variation in participation is large enough to be interesting in teenagers of both sexes and males 20-24. The cyclical sensitivity of participation is statistically significant only for the two male groups, however. The dampening of variation in unemployment for these groups is substantial. Teenage unemployment rates would be

almost 50 percent more sensitive to cyclical shifts in the absence of offsetting changes in participation. Variation in unemployment among young adult males would be about 25 percent greater.

III. Changes in Unemployment Variability

The estimates in Table 2 are computed under the assumption that all variation in the size of the effect of cyclical shifts in participation and employment on the unemployment rate arises from trends in the levels of the participation and unemployment rates; the derivatives dL/dS and dE/dS have been held constant. One might suspect, however, that for some groups these derivatives have had some trend of their own over the period. To investigate this possibility, a linear interaction between time and the cyclical shift variable was added to the regression sets described in Tables A-1 through A-7. A similar set of regressions was run on series for females between 25 and 34 years of age.

Two criteria provide a basis for determining whether, for any particular group, the specification with the interaction offers better estimates of the sensitivity of the series to cyclical demand shifts:

(1) The absolute value of the average differences between the direct estimates of the cyclical sensitivity of unemployment and the estimates obtained by summing the two partial effects; and

(2) The sum of squares of the series of these differences.

In all cases one specification minimized both values, so it was never necessary to choose between the two criteria.

Although the estimates indicate no change in the sensitivity of the total labor force series, this procedure identified four groups exhibiting significant upward trends in the cyclical sensitivity of their

unemployment rates: two female groups (the 20-24 and 25-34 age groups) and the two groups of young males. Tables A-8 through A-11 contain the regression results for these groups. Table 3 displays the January values of the sensitivity estimates for three selected years, as well as the mean values for the entire period.

The figures in the fourth column reveal rather large increases in the sensitivity of unemployment, particularly for the female groups. The sensitivity of unemployment for both males and females 20-24 doubled, and it tripled for the older female group. The sensivitity for teenage males rose about 50 percent.

The first two columns indicate that rising sensitivity of employment caused the bulk of the increase in the unemployment responses. The sensitivity of participation moved toward 0 for all groups, but this trend had different effects on unemployment volatility for males and females. Variation in male participation was procyclic throughout the period, and its small decline led to slightly more volatility in young male unemployment. Variation in female participation was countercyclic, so it amplified cyclical variation in female unemployment. Thus, the downward trend in the sensitivity of female participation moderated the effect of the increasingly procyclic variation in female employment.

IV. Concluding Remarks

The qualitative characteristics of the estimates are consistent with the priors suggested by theoretical considerations and familiarity with labor market statistics. The aggregate labor force displays no more than a trivial response to aggregate demand shifts, for cyclical sensitivity in participation is confined to the younger subsets of the labor

force. The cyclical variability of unemployment declines with age, also consistent with the priors of most observers. Finding sharply rising sensitivity in employment for childbearing-age females is somewhat surprising, and this is discussed further below.

Evaluating the size of the estimates is more difficult. Bias could arise from two sources: an inappropriate measure of cyclical activity and omitted variables. The cyclical measure suffers from the possiblity that the relationships between it and the dependent variables are at least partially tautological. This problem also plagues existing research on the behavior of participation, however, and the variable used here probably suffers less from this defect than the previous work. The general consistency of the unemployment sensitivity estimates obtained directly and by summing the partial effects provides some reassurance that the procedure does have some validity.

The specification issue is probably more important. Quadratic trend and the military variable capture all noncyclic variation in the regressions reported in the Appendix, but there undoubtedly are other variables that belong in a model such as this.3/ Some insight into the ability of these variables to capture secular changes in labor market series can be obtained from examination of the steady state unemployment rates implied by the regressions. This is conceptually similar to the "natural" or "noninflationary" unemployment rate discussed in the macroeconomic literature. Table 4 contains steady state unemployment rates at four-year intervals for the entire labor force, male teenagers, and males over 24.

The table reveals that the specification produces U-shaped series that exhibit higher values at both ends than estimates of the natural rate produced by others.4/ The rise at the end of the period puts the present

equilibrium rate in the neighborhood of 7 percent, which many will find a bit high. The cyclical measure indicates that the labor market was very tight in 1977 and 1978, and thus the unemployment in that period, though high by historical standards, is found to be below the value consistent with full employment. The contemporaneous rapid acceleration of inflation supports this view.

The military variable has considerable explanatory power in the teenage equations. The coefficient in Table A-8 implies that the decline in military manpower from 1968 to 1978 added 8.6 percentage points to the male teenage unemployment rate. Those taking this estimate at face value will probably find it uncomfortably large. The variable probably captures other aspects of changes in national social and economic policy over the past two decades as well as the decline in the size of the armed forces. Wachter and Kim (1980) have noted the relationships between these changes and the difficulty in isolating the effects of any particular one of them.

The dramatic increase in the cyclical response of employment of females in the 20-34 age bracket may arise from any of several sources. One that should receive particular attention, however, is the evolution of the Fair Labor Standards Act (FLSA). Kosters and Welch (1972) argue that the sensitivity of employment of low-wage workers to fluctuations in demand is increased by the introduction of a wage floor. The most significant aspect of changes to the FLSA has been the increase in coverage in retail trade and services, sectors employing many females at low wages. Between 1960 and 1976, the percentage of employees in retail trade covered by federal minimum wage legislation rose from 3 to 72; the coverage in services rose from 19 percent to 72 percent. These extensions of coverage may not account for all the increase in employment sensitivity, but issue certainly merits further study.

TABLE 1

PEAK AND TROUGH VALUES OF CYCLICAL SHIFT MEASURE

Date	Value	Date	Value
October 1958	-.055	May 1968	-.049
April 1960	.051	September 1969	-.016
April 1961	-.016	November 1970	-.059
July 1962	.048	May 1973	.068
October 1964	-.009	June 1975	-.068
June 1966	.040	November 1978	.061

TABLE 2

CONTRIBUTIONS OF VARIATION IN PARTICIPATION AND EMPLOYMENT TO VARIATION IN UNEMPLOYMENT: TIME SERIES EVIDENCE

	Participation Effect	Employment Effect	Sum	Unemployment Derivative
Total labor force	.030 (1.5)	-.240 (5.8)	-.210	-.165 (-7.7)
Males 16-19	.205 (2.6)	-.643 (5.8)	-.438	-.420 (9.9)
Females 16-19	.180 (1.6)	-.400 (2.6)	-.220	-.264 (-6.6)
Males 20-24	-.106 (3.1)	-.539 (8.0)	-.433	-.383 (-5.8)
Females 20-24	-.048 (0.9)	-.217 (3.0)	-.265	-.250 (-8.3)
Males 25+	.000 (0.0)	-.151 (4.8)	-.151	-.143 (6.2)
Females 25+	.022 (0.5)	-.175 (2.6)	-.153	-.124 (4.4)

TABLE 3

GROUPS WITH CHANGING CYCLICAL SENSITIVITY OF UNEMPLOYMENT

	Participation Effect	Employment Effect	Sum	Unemployment Derivative
Males 16-19				
1960	.224	-.591	-.367	-.307
1968	.225	-.634	-.409	-.389
1976	.182	-.637	-.455	-.471
Mean	.210	-.627	-.417	-.396
Males 20-24				
1960	.130	-.337	-.207	-.215
1968	.120	-.504	-.384	-.365
1976	.090	-.642	-.551	-.514
Mean	.112	-.507	-.395	-.377
Females 20-24				
1960	-.156	.029	-.127	-.148
1968	-.073	-.156	-.228	-.222
1976	-.008	-.281	-.289	-.295
Mean	-.071	-.153	-.224	-.228
Females 25-34				
1960	-.092	.061	-.030	-.079
1968	-.024	-.145	-.169	-.158
1976	-.024	-.257	-.233	-.236
Mean	-.025	-.132	-.157	-.164

TABLE 4

STEADY STATE UNEMPLOYMENT RATES IN JANUARY
OF SELECTED YEARS

	Total Labor Force	Male Teens	Males 25+
1960	5.1	17.4	4.6
1964	4.7	15.8	3.3
1968	4.6	11.0	2.7
1972	5.2	16.1	2.8
1976	6.2	18.0	3.7
1978	6.8	18.7	4.3

FOOTNOTES

1. References to and discussions of previous work on cyclic variation in labor force participation may be found in Mincer (1966) and Andersen (1978).

2. Over most of the period, data for this variable was available only on an annual basis, so the annual average value was replicated 12 times to generate the monthly series. The values for each year, beginning 1958, are as follows: .2158, .1987, .1825, .1618, .1534, .1635, .1565, .1508, .1427, .1621, .1854, .1938, .1861, .1665, .1355, .1079, .0960, .0883, .0815, .0764, .0730, .0680.

3. Andersen estimates a model that attempts to capture the factors responsible for trends in participation.

4. See Pearce (1979, p. 7) for references to studies containing estimates of the natural rate.

REFERENCES

Anderson, Leonall C. "An Explanation of Movements in the Labor Force Participation Rate." Review, Federal Reserve Bank of St. Louis, August, 1978.

Kosters, Marvin, and Welch, Finis. The Effects of Minimum Wages on the Distribution of Changes in Aggregate Employment." American Economic Review (June 1972): pp. 323-331.

Mincer, Jacob. "Labor Force Participation and Unemployment: A Review of Recent Evidence," in Prosperity and Unemployment, pp. 73-112. Edited by Robert Aaron Gordon and Margaret S. Gordon. New York: John Wiley and Sons, Inc., 1966.

Pearch, James E. "The Rise in Unemployment since the 1950's." Voice of the Federal Reserve Bank of Dallas, (January 1979), pp. 1-7.

Wachter, Michael L., and Kim, Choongsu. "Time Series Changes in Youth Joblessness." NBER Working Paper No. 384.

TABLE A-1

REGRESSION COEFFICIENTS FOR TOTAL LABOR FORCE

Variable	Unemployment	Participation	Employment
Constant	.057 (1.4)	.583 (157.1)	.544 (37.2)
Time	$-.17 \times 10^{-3}$ (0.4)	$-.15 \times 10^{-3}$ (5.2)	$.13 \times 10^{-3}$ (0.6)
Time Squared	$.96 \times 10^{-6}$ (0.7)	$.13 \times 10^{-5}$ (10.9)	$.69 \times 10^{-7}$ (0.1)
Cyclical Shift	-.165 (7.7)	.019 (1.5)	.144 (5.8)
Military Manpower	-.021 (0.8)	.070 (3.4)	.040 (1.3)
R^2	.983	.976	.965
rho	.983	.734	.959
Durbin-Watson	2.1	2.3	2.6

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-2

REGRESSION COEFFICIENTS FOR MALES 16-19

Variable	Unemployment	Participation	Employment
Constant	.302 (23.1)	.533 (33.3)	.379 (20.6)
Time	$-.62 \times 10^{-3}$ (7.1)	$-.35 \times 10^{-3}$ (3.1)	$.10 \times 10^{-3}$ (0.7)
Time Squared	$.15 \times 10^{-5}$ (3.7)	$.29 \times 10^{-5}$ (5.7)	$.13 \times 10^{-5}$ (2.1)
Cyclical Shift	-.42 (9.9)	.137 (2.6)	.363 (5.8)
Military Manpower	-.719 (9.8)	.125 (1.4)	.433 (4.3)
R^2	.855	.887	.850
rho	.577	.667	.733
Durbin-Watson	2.3	2.4	2.5

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-3

REGRESSION COEFFICIENTS FOR FEMALES 16-19

Variable	Unemployment	Participation	Employment
Constant	.251 (20.2)	.369 (22.3)	.299 (15.5)
Time	$-.21 \times 10^{-4}$ (0.3)	$-.76 \times 10^{-4}$ (0.6)	$.35 \times 10^{-4}$ (0.2)
Time Squared	$-.39 \times 10^{-6}$ (1.1)	$.31 \times 10^{-5}$ (5.8)	$.21 \times 10^{-5}$ (2.9)
Cyclical Shift	-.264 (6.6)	.092 (1.6)	.171 (2.6)
Military Manpower	-.584 (8.4)	.076 (0.8)	.130 (1.3)
R^2	.731	.967	.954
rho	.467	.705	.806
Durbin-Watson	2.1	2.3	2.3

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-4

REGRESSION COEFFICIENTS FOR MALES 20-24

Variable	Unemployment	Participation	Employment
Constant	.148 (6.7)	.924 (95.6)	.733 (43.6)
Time	$-.66 \times 10^{-3}$ (2.3)	$-.62 \times 10^{-3}$ (9.6)	$-.53 \times 10^{-5}$ (0.04)
Time Squared	$.26 \times 10^{-5}$ (2.4)	$.16 \times 10^{-5}$ (5.7)	$-.87 \times 10^{-7}$ (0.1)
Cyclical Shift	-.383 (5.8)	.099 (3.1)	.460 (8.0)
Military Manpower	-.240 (2.7)	-.197 (3.6)	.354 (3.9)
R^2	.951	.828	.890
rho	.919	.552	.773
Durbin-Watson	2.4	2.0	2.2

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-5

REGRESSION COEFFICIENTS FOR FEMALES 20-24

Variable	Unemployment	Participation	Employment
Constant	.171 (18.6)	.422 (44.7)	.349 (30.0)
Time	$-.38 \times 10^{-3}$ (6.0)	$.62 \times 10^{-3}$ (9.1)	$.84 \times 10^{-3}$ (9.1)
Time Squared	$.12 \times 10^{-5}$ (4.2)	$.19 \times 10^{-5}$ (6.2)	$.62 \times 10^{-6}$ (1.6)
Cyclical Shift	-.250 (8.3)	-.029 (0.9)	.118 (3.0)
Military Manpower	-.429 (8.3)	.113 (2.1)	.264 (4.1)
R^2	.869	.994	.991
rho	.586	.675	.750
Durbin-Watson	2.2	2.1	2.2

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-6

REGRESSION COEFFICIENTS FOR MALES 25 AND UP

Variable	Unemployment	Participation	Employment
Constant	.055 (2.9)	.855 (191.5)	.811 (40.2)
Time	$-.40 \times 10^{-3}$ (1.5)	$-.27 \times 10^{-3}$ (6.0)	$.89 \times 10^{-4}$ (0.3)
Time Squared	$.15 \times 10^{-5}$ (1.8)	$-.12 \times 10^{-6}$ (0.6)	$-.14 \times 10^{-5}$ (1.6)
Cyclical Shift	-.143 (6.2)	$.36 \times 10^{-3}$ (0.02)	.125 (4.8)
Military Manpower	-.012 (0.4)	.049 (2.1)	.026 (0.8)
R^2	.974	.995	.992
rho	.969	.852	.969
Durbin-Watson	2.2	2.2	2.3

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-7

REGRESSION COEFFICIENTS FOR FEMALES 25 AND UP

Variable	Unemployment	Participation	Employment
Constant	.066 (6.9)	.350 (64.2)	.335 (36.6)
Time	$-.36 \times 10^{-3}$ (2.8)	$.13 \times 10^{-3}$ (2.6)	$.27 \times 10^{-3}$ (2.2)
Time Squared	$.15 \times 10^{-5}$ (3.2)	$.13 \times 10^{-5}$ (6.7)	$.51 \times 10^{-6}$ (1.1)
Cyclical Shift	-.124 (4.4)	.009 (0.5)	.070 (2.6)
Military Manpower	-.033 (0.9)	.068 (2.3)	.022 (0.6)
R^2	.949	.994	.993
rho	.924	.803	.922
Durbin-Watson	2.5	2.3	2.4

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-8

REGRESSION COEFFICIENTS FOR MALES 16-19

Variable	Unemployment	Participation	Employment
Constant	.297 (22.3)	.533 (31.7)	.380 (20.3)
Time	-6.4×10^{-4} (-7.4)	-3.5×10^{-4} (-3.0)	1.1×10^{-4} (.76)
Time Squared	1.6×10^{-6} (4.0)	2.9×10^{-6} (5.4)	1.2×10^{-6} (1.9)
Cyclical Shift	-.290 (-2.9)	.150 (1.2)	.318 (2.3)
(Cyclical Shift) x Time	-8.5×10^{-4} (-1.5)	-8.1×10^{-5} (-.11)	2.9×10^{-4} (.35)
Military Manpower	-.691 (-9.2)	.128 (1.4)	.429 (4.2)
R^2	.856	.887	.850
rho	.563	.668	.728
Durbin-Watson	2.28	2.39	2.51

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-9

REGRESSION COEFFICIENTS FOR MALES 20-24

Variable	Unemployment	Participation	Employment
Constant	.154 (8.1)	.923 (91.1)	.738 (43.6)
Time	-7.2×10^{-4} (-3.1)	-6.3×10^{-4} (-9.6)	2.6×10^{-5} (.19)
Time Squared	2.9×10^{-6} (3.3)	1.7×10^{-6} (5.5)	-3.4×10^{-7} (-.58)
Cyclical Shift	-.184 (-1.5)	.131 (1.7)	.270 (2.1)
(Cyclical Shift) x Time	-1.6×10^{-3} (-2.0)	-2.1×10^{-4} (-.47)	1.3×10^{-3} (1.7)
Military Manpower	-.269 (-3.2)	-.189 (-3.3)	.323 (3.5)
R^2	.951	.829	.891
rho	.898	.551	.767
Durbin-Watson	2.38	2.04	2.27

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-10

REGRESSION COEFFICIENTS FOR FEMALES 20-24

Variable	Unemployment	Participation	Employment
Constant	.167 (18.1)	.424 (43.5)	.352 (31.2)
Time	-3.9×10^{-4} (-6.6)	6.3×10^{-4} (9.2)	8.5×10^{-4} (10.1)
Time Squared	1.3×10^{-6} (4.8)	1.8×10^{-6} (5.7)	4.9×10^{-7} (1.3)
Cyclical Shift	-.133 (-1.9)	-8.6×10^{-2} (-1.2)	-3.3×10^{-2} (-.40)
(Cyclical Shift) x Time	-7.7×10^{-4} (-1.9)	3.8×10^{-4} (0.9)	1.0×10^{-3} (2.0)
Military Manpower	-.407 (-7.8)	.100 (1.84)	.254 (4.1)
R^2	.871	.994	.991
rho	.565	.672	.726
Durbin-Watson	2.14	2.12	2.18

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings

TABLE A-11

REGRESSION COEFFICIENTS FOR FEMALES 25-34

Variable	Unemployment	Participation	Employment
Constant	.109 (12.9)	.346 (42.7)	.309 (35.1)
Time	-3.3×10^{-4} (-5.2)	-6.9×10^{-5} (-1.2)	1.0×10^{-4} (1.5)
Time Squared	1.2×10^{-6} (4.3)	4.9×10^{-6} (18.6)	3.9×10^{-6} (12.7)
Cyclical Shift	-6.3×10^{-2} (-1.0)	-4.0×10^{-2} (-0.7)	-3.9×10^{-2} (-.60)
(Cyclical Shift) x Time	-8.2×10^{-4} (-2.1)	2.6×10^{-4} (0.7)	8.6×10^{-4} (2.1)
Military Manpower	-.205 (-4.4)	6.5×10^{-2} (1.5)	.121 (2.5)
R^2	.882	.997	.997
rho	.726	.700	.769
Durbin-Watson	2.41	2.12	2.11

Note: Absolute t-ratios in parentheses
Source: BLS Employment and Earnings