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# Economic Policy Institute

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1660 L STREET, NW • SUITE 1200 • WASHINGTON, DC 20036 • 202/775-8810 • FAX 202/775-0819

Workers and the New Economy: Some Early Lessons from the United States

John Schmitt  
(jschmitt@epinet.org)  
Research Associate  
Economic Policy Institute

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## Introduction

Since at least the early 1990s, a host of international organizations, from the Organization for Economic Cooperation and Development (OECD) to the World Bank, have pushed US-style labor-market deregulation as the principal solution to the employment problems facing many European and developing-country economies. While the argumentation offered in favor of deregulation is generally complex, the unifying theme in almost all of the analysis is that reducing the economic role of key labor market institutions such as trade unions, unemployment benefits, and trade unions is a necessary precondition for the establishment of a US-style "new economy."

Over the same period, leaders of the center-left parties in the United States and the United Kingdom have been actively engaged in restructuring their own parties, with the stated objective of making them more "electable."<sup>1</sup> Two key elements of this repackaging have been distancing the Democratic and Labour parties from one of their traditional core constituencies, organized labor, and embracing the "new economy" as a "modern" solution to the economic difficulties facing their countries' workers.<sup>2</sup>

Domestically, the decision by the New Democrats and New Labour to move their parties away from their traditional working-class base has strained relations between the parties and their traditional supporters in organized labor. Moreover, many of the economic policies that have accompanied the reoriented parties –in the United States, these have included pro-corporate trade policies and "Welfare Reform"– have contributed to the continued economic difficulties facing workers since the end of the 1970s.

Internationally, the ideological shift in the Democratic and Labour parties has greatly hindered efforts to organize opposition to the spread of what is often referred to in the global North as "the US model" and in the global South as "neoliberalism." The coalitions of organized labor and environmental, community, religious, and other organizations in Europe and the South that have organized around opposition to the US- and UK-style reforms have generally had to operate without an important potential ally "inside the belly of the beast." Indeed, the identification of mainstream Democratic and Labour leaders with labor-market "reforms" and the new economy in general has almost certainly hastened the rightward shift in social democratic parties in Europe and center-left and left parties in the South.

This paper questions the New Democrats' strongly held faith in both the "newness" of the new economy and the ability of the new economy to resolve long-standing problems facing US workers. The goal here is to evaluate –in broad terms and from the perspective of workers– the performance of the new economy from two perspectives. First, the paper compares general indicators of economic performance in the United States over the first complete business cycle of the "new economy" –1989-2000– with those of earlier "old economy" business cycles. Second, the paper uses variations across US states in the level of participation in the "new economy" in the 1990s to examine the impact of the new economy on employment and wages.

The rest of the paper is organized along four main observations about the "new economy": first, that the general performance has been exaggerated; second, that the new economy has not been a "jobs machine"; third, that the new economy has not been good

for the wages of most workers; and, finally, that the new economy has produced and will almost certainly continue to produce many less-skilled and low-wage jobs.

**Observation 1: Economic performance of the new economy has been exaggerated.**

Politicians, journalists, and even some economists, frequently refer to the US economy at the end of the 1990s as experiencing "unprecedented prosperity." If the point of the statement is that gross domestic product (GDP) per person in the economy was higher at the end of the 1990s than at any other time in the nation's history, then the statement is true but trivial, since the same statement would have applied to the vast majority of years since the founding of the United States because GDP per capita grows almost every year. By this measure, the country has been experiencing "unprecedented prosperity," almost continually since its inception, even during the slow growth period that set in from the mid-1970s.<sup>3</sup>

The statement about "unprecedented prosperity," therefore, probably reflects something else. The most likely reference is to the rate of growth of GDP or to the closely related rate of growth of labor productivity, the value of the average output of goods and services in one hour's worth of work. Other possibilities are rapid employment creation, rapid income growth, low unemployment, or the combination of low unemployment and low inflation.

Table 1 presents data useful to assess these claims of "unprecedented prosperity" based on all of these measures of economic performance. The table compares performance during each of the major business cycles of the post-World War II period. Each variable is measured from the peak of one business cycle to the peak of the next, where peaks are defined as the low point of the national unemployment rate.<sup>4</sup> The full "new economy" cycle, about which so many claims have been made, began in 1989 and ran through 2000.<sup>5</sup>

**Gross and net domestic product**

The first column shows the annualized growth rate of real (inflation-adjusted) GDP in each of the major business cycles from 1948 through 2000.<sup>6</sup> The most striking result is that over the full business cycle, the 1989-2000 period only marginally outperformed (3.1% per year) the 1973-79 and 1979-89 periods (3.0% each) and was well below three of the five preceding business cycle averages. Both the immediate post-war period and the era of the 1960s were better for growth than the 1990s.

One key contributor to measured growth in GDP during the 1990s was investment in computers and related technology. Computers have been important, in part, because firms have made substantial investments in the new technology and, in part, because the statisticians that produce the national accounts have determined that the quality of computers has been rising rapidly at any given market price. Statistical treatment of quality improvements in computers, for example, added about 0.4 percentage points to the growth rate of GDP in 1998 alone (see Baker, 2000, p. 216). In addition to rapid quality improvements, however, computers have a second characteristic that works in the opposite direction. Computer improvements have taken place so rapidly that old computers quickly become obsolete. Unlike an investment in a building, say, which

depreciates slowly over several decades, an investment in a computer may lose all its value in just a few years. The GDP measure in the first column of Table 1 counts the investment made in new computers simply to replace old obsolete ones as though this investment were improving the national standard of living. The second column of Table 2 reports growth in the "net domestic product," the gross domestic product after accounting for the depreciation of investment goods, including computers. In the three post-1973 business cycles, the growth rate in net domestic product was about 0.2 percentage points lower than the growth rate for gross domestic product, reflecting, in large part, the rapid depreciation of much high-tech investment. The switch to net domestic product has little or no effect on the pre-1973 cycles. Using NDP instead of GDP, therefore, lowers the performance of the "new economy" cycle relative to most of the earlier periods. Between 1948 and 1973, for example, real NDP and real GDP grew, on average, 4.0% per year. Between 1989 and 2000, however, real NDP grew just 2.9% per year, compared to 3.1% for real GDP.

The data for GDP and NDP in Table 1 ignore one other important factor. Beginning with the national accounts data in 1978, the Bureau of Economic Analysis, the organization responsible for producing the national accounts, changed the methodology used to determine GDP growth rates in order to reflect recent changes in the Consumer Price Index. The methodological changes had the effect of lowering price increases in the years for which these changes were applied. This, in turn, has the effect of raising measured GDP growth rates for these periods. The BEA did not apply the new price methodology prior to 1978 because BEA statisticians did not have all the data necessary to do so, but a reasonable estimate suggests that if the new methodology were applied to earlier years, that this would have raised growth prior to 1978 by about 0.2 percentage points per year (see Baker, 2000, p. 215). Adding 0.2 percentage points per year to average growth rates for the business cycles before 1978, and using the NDP measure instead of the GDP measure, leaves the 1989-2000 cycle (2.9% per year) among the worst of the post-war period (1948-53: 5.2%; 1953-56: 2.8%; 1956-60: 2.8%; 1960-69: 4.8%; 1969-73: 3.8%; 1973-79: 3.0%; 1979-89: ).

### **Productivity**

The single most important determinant of the long-run standard of living is almost certainly labor productivity. The third column of Table 1 summarizes the growth in labor productivity over the postwar business cycles. The average growth rate of productivity in the "new economy" era has been 1.9% per year. This rate is above productivity growth in the 1973-79 (1.2%) and 1979-89 (1.7%) periods, but only about two-thirds of the rate maintained over the 1948-73 period (2.9%). The relatively poor performance of the new economy would be made worse if the data were adjusted for methodological changes in the CPI along the lines mentioned above in connection with GDP growth.

### **Employment**

Employment growth, as measured in the Bureau of the Census's monthly Current Population Survey, was 1.3% per year over the 1989-2000 period (see column four). This

was below the rates for five of the preceding seven business cycles, including those in 1973-79 and 1979-89.

### **Family income**

Median family income grew at 0.9% annual rate between 1989 and 2000 (see column five). This rate was a little better than the experience of the 1980s (0.6%), but less than one-third of the average rate for the 1948-73 period (3.0%).

### **Unemployment**

The average unemployment rate during the "new economy" cycle was 5.6% (see column six), a significant improvement on the average for 1973-79 (6.8%) and 1979-89 (7.3%), but higher than the average unemployment for every other postwar business cycle.

### **Inflation**

The average inflation rate for 1989-2000 was 2.8% per year (see column seven), another improvement over the 1970s (7.3%) and the 1980s (5.1%) cycles, but, again above the average for the earlier postwar periods (2.4%).

### **Misery index**

The "new economy" cannot even lay claim to particular success in combining low unemployment and low inflation. Using the crude "misery index" (the sum of the inflation and unemployment rates, popularized by Ronald Reagan in his 1980 presidential campaign), the 1989-2000 cycle (5.6+2.8=8.4) was more miserable than those of 1948-53 (6.2), 1953-56 (5.4), 1956-60 (7.6), and 1960-69 (7.0). Again, only in comparison with the difficult decades of the 1970s and 1980s do the 1990s look particularly good.

A review of the available evidence, therefore, does little to support the view that the 1990s represented a period of "unprecedented prosperity" except in so far as that is trivially true at almost every point in US history. Real GDP growth rates barely exceeded that of the 1970s and 1980s and were well below those of the earlier postwar period. Taking into account the effects of rapid computer depreciation and methodological changes in the measurement of GDP takes even more shine off the "new economy." Productivity growth rates have made substantial gains in the 1990s relative to the very low rates of the 1970s and 1980s, but productivity growth remains at two-thirds the rates of the 1948-73 period. Growth in median real family income is even more disappointing: in the "new economy" median family income growth has averaged less than one-third the rate achieved in 1948-73. Unemployment and inflation are both low compared to the 1970s and 1980s, but remain above the earlier postwar average.

Several features of the 1990s including the revival of productivity growth, some acceleration in family income growth, and some improvements in real wages in the second half of the 1990s (not documented here, but see Mishel, Bernstein, and Schmitt,

2001) are welcome developments for workers. Nevertheless, proponents have greatly oversold the "new economy." In recent historical terms, the 1990s were generally (but not always) better than the 1970s and 1980s and consistently worse than the 1948-73 period.

**Observation 2: The new economy has not been a "jobs machine."**

From workers' perspectives, a key feature of any economic system is its ability to generate employment demand. The data on employment creation in Table 1, which show a sharp deceleration in employment creation in the 1990s relative to most of the earlier postwar period, hint that, despite generally low unemployment, the "new economy" has not functioned all that well as a "jobs machine."

This section and the next section on wages look at patterns of employment (and wage) growth across the US states in order to see if employment (and wage) growth appear to be related to factors associated with the "new economy." To measure each state's situation with respect to the new economy, the paper uses the "State New Economy Index" developed by the Progressive Policy Institute (PPI), a Washington-DC-based research organization that is tied to the New Democrats' Democratic Leadership Council. PPI has been a major proponent within the Democratic party of the broad benefits of the new economy. PPI's index is a weighted average of a series of state-specific characteristics related to the new economy, all evaluated for 1998. Characteristics incorporated into the index include: employment in "knowledge jobs" (office jobs, professional and managerial jobs, education level); openness to "globalization" (state exports, state foreign direct investment); "dynamism and competition" (including Initial Public Offerings); access to and use of the internet; and the "innovation infrastructure" (including high-tech workers and access to venture capital).<sup>7</sup>

Table 2 provides a first taste of the main findings. Of the PPI's top five "new economy" states, three (first-place Massachusetts, second-place California, and fifth-place Connecticut) all have annualized employment growth rates *below the national average*.<sup>8</sup> This suggests that, if anything, the "new economy" may have been creating jobs more slowly than the rest of the economy over the period. Those who hold out deregulation and the new economy as a solution to high unemployment in some European countries should take careful note that, over the 1990s, the PPI's top new economy state, Massachusetts, only managed to match the job creation rate achieved in France over the same period, both 0.6% per year.

Figure 1 graphs the relationship between employment growth and the PPI's new economy index for all 50 US states. The x-axis of the graph shows each state's new economy index number for 1998; the y-axis shows the percent change in the state's employment rate between 1989 and 1999 (Mishel, Bernstein, and Schmitt, 2001, Table 6.5). The figure also displays a fitted regression line that summarizes the relationship between employment growth and the new economy index. The data show no obvious pattern and the regression line is close to perfectly flat, suggesting no apparent relationship between the strength of the new economy in a particular state and that state's job creation rate.<sup>9</sup>

Both the aggregate US data and the data across US states for the 1990s suggest that the new economy has done little to generate employment for US workers, at least relative to other factors generating employment in the economy over the period.

**Observation 3: The new economy has not raised wages.**

The new economy has, it seems, been lackluster with respect to employment creation. The wage data summarized in Figs 2, 3, and 4, suggest that, if anything, the new economy also appears to be associated with a *deceleration* in the wage growth of workers at the bottom and the middle of the wage distribution.

Following the same procedure as in Figure 1, Figure 2 shows the state change in the median wage against the state new economy index number. According to the regression line in the figure, higher levels of the state new economy index are actually associated with *lower* real wage gains for median workers in the US states. While it is difficult to interpret the economic magnitude of the effect –it isn't entirely clear what a one-point movement in the new economy index means– the negative relationship between wage growth and the new economy is statistically significant by conventional standards. Figure 3 shows a similar graph for workers at the 20th percentile of each state's wage distribution. As with median-wage earners, the new economy appears to be associated in a statistically significant way with *lower* wage growth for less-paid workers. Finally, Figure 4, presents a similar graph for workers in the 80th percentile of the wage distribution. The new economy appears to have depressed wage growth among low- and middle-wage workers, without having any clear positive effect on the wages of high-wage workers, the group that, in principal, is best positioned to take advantage of opportunities presented by the new economy.

The data for the US states in the 1990s suggest that the closer a state was tied to the "new economy," at least as defined by the PPI, the worse was wage growth for workers at the bottom and the middle. By contrast, one "old economy" factor –low unemployment– did seem to have a beneficial effect on wages during the 1990s. Figures 5, 6, and 7 graph the change over the 1990s in real wages at the 50th, 20th, and 80th percentiles against the state unemployment rate in 1999. In all three cases, lower unemployment rates were associated with higher wage growth. Here, the economic magnitude is easy to interpret: a one-percentage-point decline in the state unemployment rate, raised real wages over the period by about 2 percentage points.<sup>10</sup>

**Observation 4: The new economy creates many less-skilled, low-paying, jobs.**

One reason why the "new economy" of the 1990s has not been particularly effective at raising wages is that the new economy continues to create a large number of less-skilled, low-paying, jobs. Table 3, for example, presents data on the occupations employing the most 18 to 24 year olds at the peak of the new economy boom in 2000. The top-ten occupations, employing over one-fourth of working 18 to 24 year olds, include: cashiers, waiters and waitresses, cooks, sales workers, stock handlers and baggers, nursing aides, laborers, and receptionists. Only supervisors in sales occupations and truck drivers are, arguably, well paid jobs; none of the categories is obviously "high-tech." Table 4 shows the top-ten industries employing workers in the same age group

(over 40% of the total employed). Again, low-wage service industries, especially related to restaurant and retail sales, abound.

All indications are that less-skilled, low-wage, jobs will make up a large share of future job creation, with or without the new economy. Table 5 show results from a Bureau of Labor Statistics analysis of future job growth. "Systems analysts" are the top job, but "retail salespersons" and "cashiers" are second and third. The rest of the top ten include a mixture of higher-tech and lower-paid occupations.

### **Some tentative conclusions**

Politicians and business people, motivated, in part, by a desire to undermine the labor-market institutions that have served to protect workers in the "old economy," have systematically oversold the "new economy." The United States, in fact, has experienced the 1990s brand of "unprecedented prosperity" before, by some measures even during the 1970s and 1980s. Meanwhile, the broad indicators of the "new economy" across US states show no relationship with employment creation and a negative relationship with wages of low- and middle-wage workers.

Workers should welcome the recent uptick in productivity because, if sustained, it signals a long-term increase in their standard of living and the standard of living of their children. At the same time, workers should not conclude that recent economic performance is so remarkable as to warrant the abandonment of social and labor market institutions that have worked historically to raise their standard of living. Taking a critical view of the "new economy" does not mean rejecting or resisting new technology. A critical view, however, will lead workers to reject and resist claims that new technology, alone, is an answer to their economic and social problems, or a substitute for building powerful labor market institutions including strong unions, effective minimum wages, comprehensive national health insurance, and generous public pensions.

## References

Baker, Dean. 2000. "Something New in the 1990s?: Looking for Evidence of an Economic Transformation," pp. 207-235 in Jeff Madrick (ed.) *Unconventional Wisdom: Alternative Perspectives on the New Economy*. New York: The Century Foundation Press.

Faux, Jeff. 1996. *The Party's Not Over: A New Vision for the Democrats*. New York: Basic Books.

Mishel, Lawrence, Jared Bernstein, and John Schmitt. 2001. *The State of Working America 2000-2001*. Ithaca, NY: Cornell University Press.

Samuelson, Robert J. "Yes, we have no recession....," *Washington Post*, August 22, 2001, p. A19

Teixeira, Ruy and Joel Rogers. 2000. *America's Forgotten Majority: Why the White Working Class Still Matters*. New York: Basic Books.

## Notes

<sup>1</sup> For a critical discussion of the state of the Democratic party in the United States, see Jeff Faux, *The Party's Not Over: A New Vision for the Democrats*, New York: Basic Books, 1996. For an analysis of working-class voting patterns in the United States that includes a critique of the electoral logic of the New Democrats, see Ruy Teixeira and Joel Rogers, *America's Forgotten Majority: Why the White Working Class Still Matters*, New York: Basic Books, 2000.

<sup>2</sup> For representative views of the New Democrats and New Labour, see their web pages: <http://www.ndol.org/> ("New Democrats Online"); <http://www.ppionline.org/> (Progressive Policy Institute, the think-tank of the New Democrat Democratic Leadership Council); and <http://www.labour.org.uk/> (Labour Party).

<sup>3</sup> Lawrence Mishel of the Economic Policy Institute is the first, to my knowledge, to have made this point.

<sup>4</sup> For comparison, Appendix Table 1 presents the semi-official business cycles from the National Bureau of Economic Research. The principal difference between the cycles in Table 1 and those in Appendix Table 1 is that the short cycle from January 1980 through July 1981 has been folded into a longer cycle defined as starting January 1980 to July 1990. The other, minor difference, is that the scheme in Table 1, uses the low-point in the national unemployment rate to assign peaks, which sometimes shifts the peaks by one year, relative to those established by the NBER using a much broader range of indicators. For example, the NBER peak-to-peak cycle would be 1980 to 1990; but 1980 had a higher unemployment rate than 1979 (the recession hit in January 1980) and 1990 had a higher unemployment rate than 1989.

<sup>5</sup> This paper makes comparisons across business cycles to prevent starting and ending points from unduly affecting conclusions about the workings of the economy. Many analyses of the "new economy" concentrate only on the period since 1996 when the economic expansion was at its most rapid. These analyses ignore the effects of the recession of the early 1990s and the unusually sluggish expansion from 1992 through 1994.

<sup>6</sup> These numbers reflect revisions released in July 2001, made after periodic benchmarking of GDP.

<sup>7</sup> For a complete description, see the PPI's State New Economy Index web page <http://www.neweconomyindex.org/>.

<sup>8</sup> The employment figures in Table 2 differ from those in Table 1. The data in Table 1 are from a household survey, while those in Table 2 are from an establishment survey. Levels and changes in employment growth in the two surveys differ, but the two show the same

basic trends over time (see, for example, Mishel, Bernstein, and Schmitt, 2001, Table 3.4, p. 225).

<sup>9</sup> The slope of the regression line is -0.07, with a t-statistic of -0.49.

<sup>10</sup> The 2-percentage-point figure is roughly the average of the slope in the three graphs. The regression coefficients are statistically significant at the 1% level in Figures 5 and 7, and at the 10% level in Figure 6. The flatter slope of the regression for low-wage workers, who, in theory, should have the biggest response to the unemployment rate, may be due to the four increases in the federal minimum wage over the period, which disproportionately raised wages in low-wage states, regardless of the unemployment rate.

**Appendix TABLE 1**  
**NBER-Defined Economic Business Cycles, 1945 to the present**

| Expansion | Reference Dates |      |                |                | Duration in Months |              |       |     |
|-----------|-----------------|------|----------------|----------------|--------------------|--------------|-------|-----|
|           |                 |      |                |                | Contraction        | Expansion    | Cycle |     |
|           | Trough          | Peak | Peak to Trough | Trough to Peak | Trough to Trough   | Peak to Peak |       |     |
| 1         | October         | 1945 | November       | 1948           | 8                  | 37           | 88    | 45  |
| 2         | October         | 1949 | July           | 1953           | 11                 | 45           | 48    | 56  |
| 3         | May             | 1954 | August         | 1957           | 10                 | 39           | 55    | 49  |
| 4         | April           | 1958 | April          | 1960           | 8                  | 24           | 47    | 32  |
| 5         | February        | 1961 | December       | 1969           | 10                 | 106          | 34    | 116 |
| 6         | November        | 1970 | November       | 1973           | 11                 | 36           | 117   | 47  |
| 7         | March           | 1975 | January        | 1980           | 16                 | 58           | 52    | 74  |
| 8         | July            | 1980 | July           | 1981           | 6                  | 12           | 64    | 18  |
| 9         | November        | 1982 | July           | 1990           | 16                 | 92           | 28    | 108 |
| 10        | March           | 1991 | --             | --             | 8                  | --           | 100   | --  |

Source: National Bureau of Economic Research (<http://www.nber.org/cycles.html>).

**TABLE 1**  
**Economic performance, by business cycle, 1948-2000**

|         | Annualized growth rate (%) |          |              |            |                    | Annual average (%) |                |
|---------|----------------------------|----------|--------------|------------|--------------------|--------------------|----------------|
|         | Real GDP                   | Real NDP | Productivity | Employment | Real Family Income | Unemployment rate  | Inflation rate |
| 1948-53 | 4.8                        | 5.0      | 3.4          | 1.0        | 3.7                | 4.1                | 2.1            |
| 1953-56 | 2.7                        | 2.6      | 1.8          | 1.4        | 3.3                | 4.7                | 0.7            |
| 1956-60 | 2.6                        | 2.6      | 2.5          | 0.8        | 2.0                | 5.5                | 2.1            |
| 1960-69 | 4.6                        | 4.6      | 3.0          | 1.9        | 3.6                | 4.7                | 2.3            |
| 1969-73 | 3.7                        | 3.6      | 3.1          | 2.2        | 1.6                | 5.3                | 4.6            |
| 1973-79 | 3.0                        | 2.8      | 1.2          | 2.5        | 1.0                | 6.8                | 7.3            |
| 1979-89 | 3.0                        | 2.8      | 1.4          | 1.7        | 0.6                | 7.3                | 5.1            |
| 1989-00 | 3.1                        | 2.9      | 1.9          | 1.3        | 0.9                | 5.6                | 2.8            |
| 1948-73 | 4.0                        | 4.0      | 2.9          | 1.5        | 3.0                | 4.8                | 2.4            |
| 1973-89 | 3.0                        | 2.8      | 1.3          | 2.0        | 0.8                | 7.1                | 4.6            |

Sources: Author's analysis of GDP and NDP data from Bureau of Economic Affairs, <http://www.bea.doc.gov>, NIPA Table 1.10; productivity data for nonfarm business sector from Bureau of Labor Statistics (BLS), <http://stats.bls.gov>, series PRS85006093; total civilian employment from BLS series LFS11000000; median family income from Bureau of the Census, <http://www.census.gov/hhes/income/histinc/f05.html>, deflated using the CPI-U-RS; unemployment rate from BLS, series LFU21000000.

Notes: Family income data is for the period 1948-1999. Annualized growth rates are from peak to peak; average inflation and unemployment rates include second peak only.

**TABLE 2**  
**High-tech and employment**

|               | PPI State<br>New Economy |       | Employment |         |                                       |
|---------------|--------------------------|-------|------------|---------|---------------------------------------|
|               |                          |       | Thousands  |         | Annualized<br>growth rate,<br>Percent |
|               | Ranking                  | Score | 1989       | 2000    | 1989-2000                             |
| Massachusetts | 1                        | 82.27 | 3,109      | 3,319   | 0.6                                   |
| California    | 2                        | 74.25 | 12,239     | 14,518  | 1.6                                   |
| Colorado      | 3                        | 72.32 | 1,482      | 2,215   | 3.7                                   |
| Washington    | 4                        | 68.99 | 2,047      | 2,717   | 2.6                                   |
| Connecticut   | 5                        | 64.89 | 1,666      | 1,693   | 0.1                                   |
| United States | --                       | --    | 107,884    | 131,759 | 1.8                                   |
| France        | --                       | --    | 22,292     | 23,779  | 0.6                                   |

Sources:

(1) PPI State New Economy Ranking: <http://www.neweconomyindex.org/states/rankings.html>, July 1999, accessed July 26, 2001.

(2) Total non-farm employment in the United States: Bureau of Labor Statistics 790 series, <http://stats.bls.gov>, accessed July 26, 2001.

(3) Total employment in France, 1989-2000 are author's calculations based on OECD, OECD Employment Outlook, June 2001, Table 1.2, p. 14.

**TABLE 3**  
**Top ten occupations, workers age 18-24, 2000**

| Description                                       | SIC code | Share of all workers, 18-24 (percent) |
|---|----------|---------------------------------------|
| 1. Cashiers                                       | 276      | 6.1                                   |
| 2. Waiters and waitresses                         | 435      | 3.6                                   |
| 3. Cooks  | 436      | 2.8                                   |
| 4. Sales workers, n.e.c.                          | 274      | 2.3                                   |
| 5. Stock handlers and baggers                     | 877      | 2.3                                   |
| 6. Supervisors and proprietors, sales occupations | 243      | 2.3                                   |
| 7. Truck drivers                                  | 804      | 1.9                                   |
| 8. Nursing aides, orderlies, and attendants       | 447      | 1.7                                   |
| 9. Laborers, except construction                  | 889      | 1.6                                   |
| 10. Receptionists                                 | 319      | 1.6                                   |
| Total:  |          | 26.2                                  |

Source: Author's analysis of Current Population Survey data.

**TABLE 4**  
**Top ten industries, workers age 18-24, 2000**

| Description   | SIC code | Share of all workers, 18-24 (percent) |
|---|----------|---------------------------------------|
| 1. Eating and drinking places                       | 641      | 12.5                                  |
| 2. Miscellaneous general merchandise stores         | 600      | 6.7                                   |
| 3. Grocery stores                                   | 601      | 4.1                                   |
| 4. Colleges and universities                        | 850      | 3.6                                   |
| 5. Department stores                                | 591      | 3.4                                   |
| 6. Miscellaneous entertainment and recreation servs | 810      | 2.3                                   |
| 7. Elementary and secondary schools                 | 842      | 2.1                                   |
| 8. Hospitals  | 831      | 2.1                                   |
| 9. Business services, n.e.c.                        | 741      | 2.0                                   |
| 10. Banking   | 700      | 1.7                                   |
| Total:  |          | 40.6                                  |

Source: Analysis of Current Population Survey data.

**TABLE 5**  
**Ten occupations with the largest job growth, 1998-2008**  
(Thousands of jobs)

| Occupation                          | Employment |       | Change |         |
|-------------------------------------|------------|-------|--------|---------|
|                                     | 1998       | 2008  | Number | Percent |
| Systems analysts                    | 617        | 1,194 | 577    | 94      |
| Retail salespersons                 | 4,056      | 4,620 | 563    | 14      |
| Cashiers                            | 3,198      | 3,754 | 556    | 17      |
| General managers and top executives | 3,362      | 3,913 | 551    | 16      |
| Truck drivers, light and heavy      | 2,970      | 3,463 | 493    | 17      |
| Office clerks, general              | 3,021      | 3,484 | 463    | 15      |
| Registered nurses                   | 2,079      | 2,530 | 451    | 22      |
| Computer support specialists        | 429        | 869   | 439    | 102     |
| Personal care and home health aides | 746        | 1,179 | 433    | 58      |
| Teacher assistants                  | 1,192      | 1,567 | 375    | 31      |

Source: Bureau of Labor Statistics, Employment Projections 1998-2008, Table 3C, November 30, 1999, <http://stats.bls.gov/news.release/ecopro.t07.htm>, accessed August 20, 2001.

FIG. 1: EMPLOYMENT CREATION AND HIGH-TECH  
 Slope: -0.07; t-statistic: -0.49; p-value: 0.63

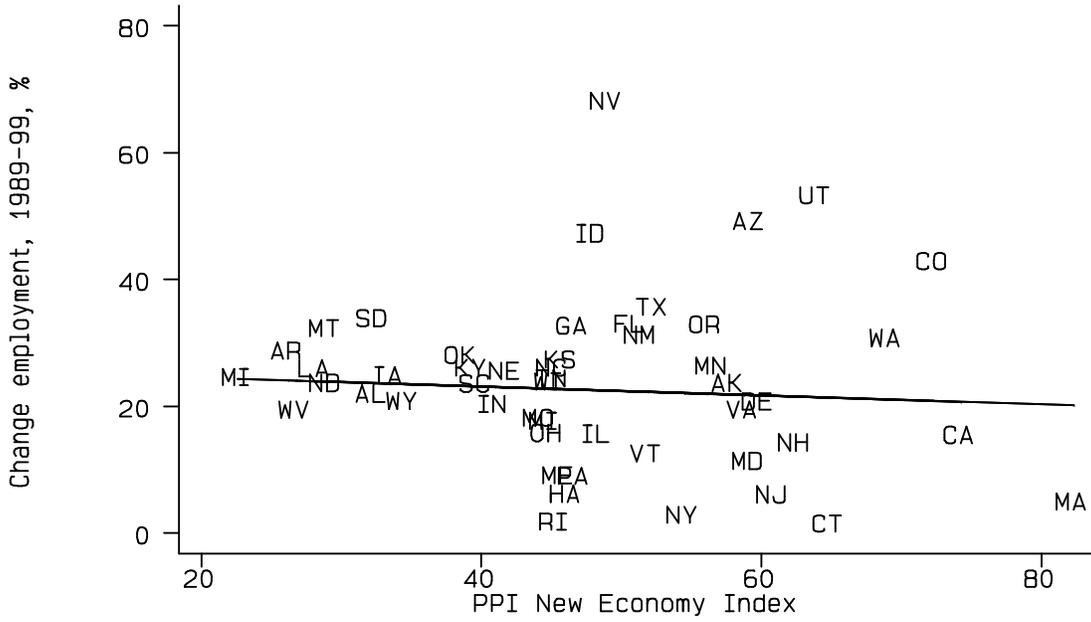


FIG. 2: CHANGE IN MEDIAN WAGE AND HIGH-TECH  
 Slope: -0.14; t-statistic: -2.22; p-value: 0.03

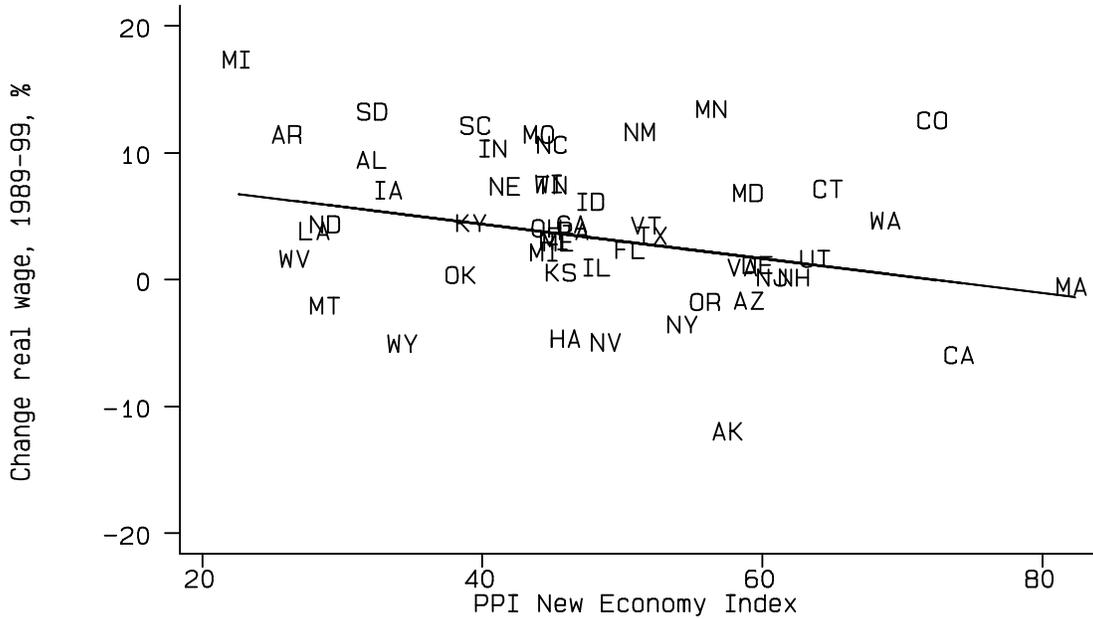


FIG. 3: CHANGE IN 20TH PERCENTILE WAGE AND HIGH-TECH  
 Slope: -0.30; t-statistic: -3.75; p-value: 0.00

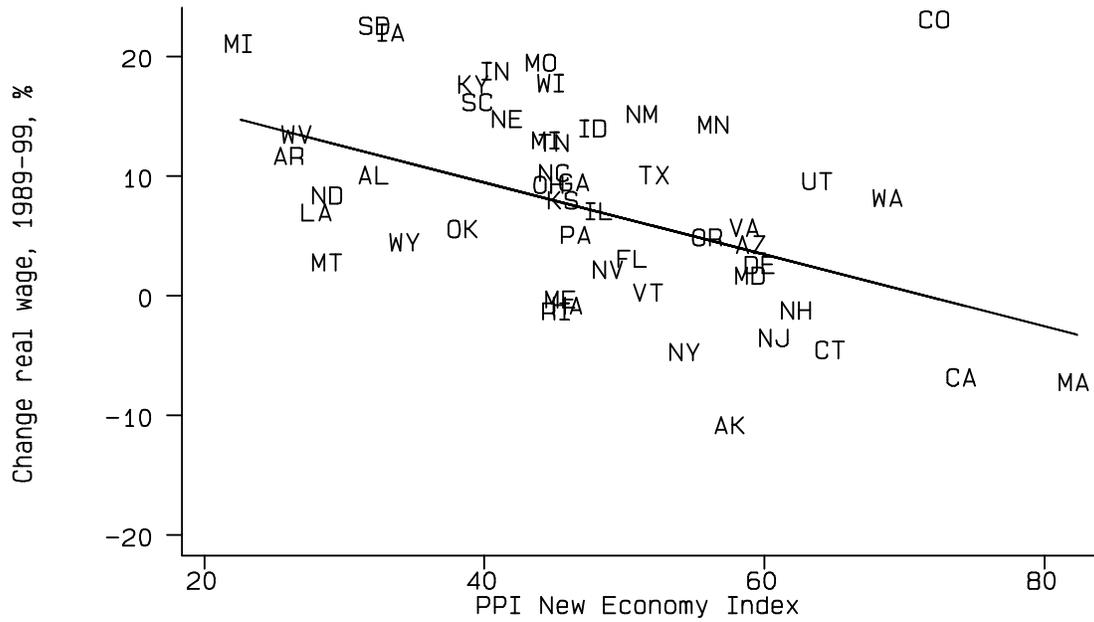


FIG. 4: CHANGE IN 80TH PERCENTILE WAGE AND HIGH-TECH  
 Slope: 0.00; t-statistic: 0.07; p-value: 0.94

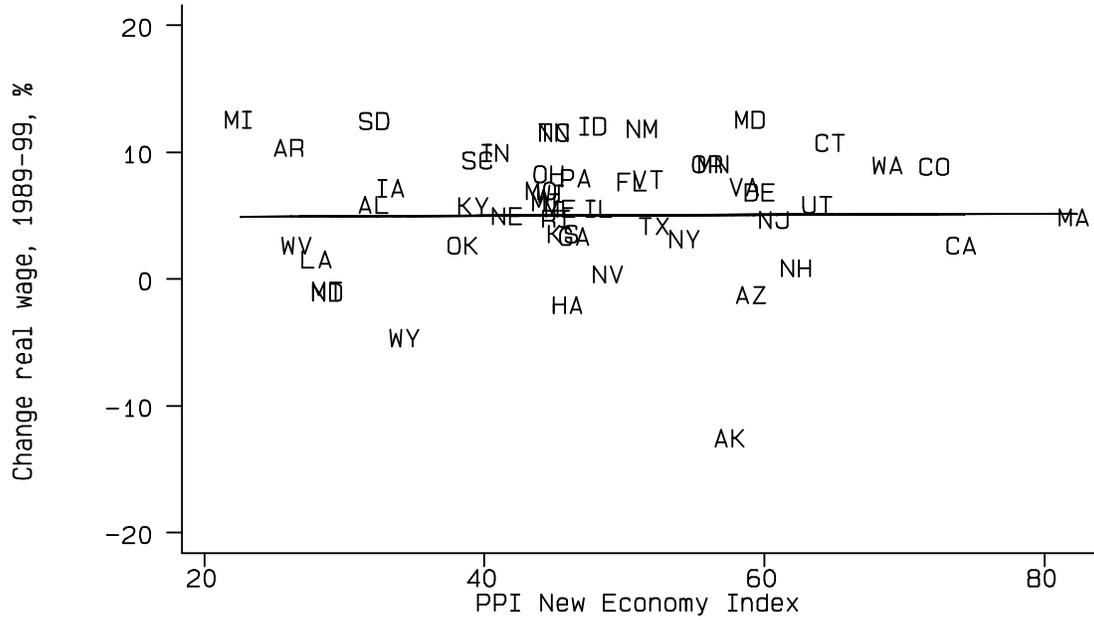


FIG. 5: CHANGE IN MEDIAN WAGE AND UNEMPLOYMENT  
 Slope: -2.27; t-statistic: -2.92; p-value: 0.01

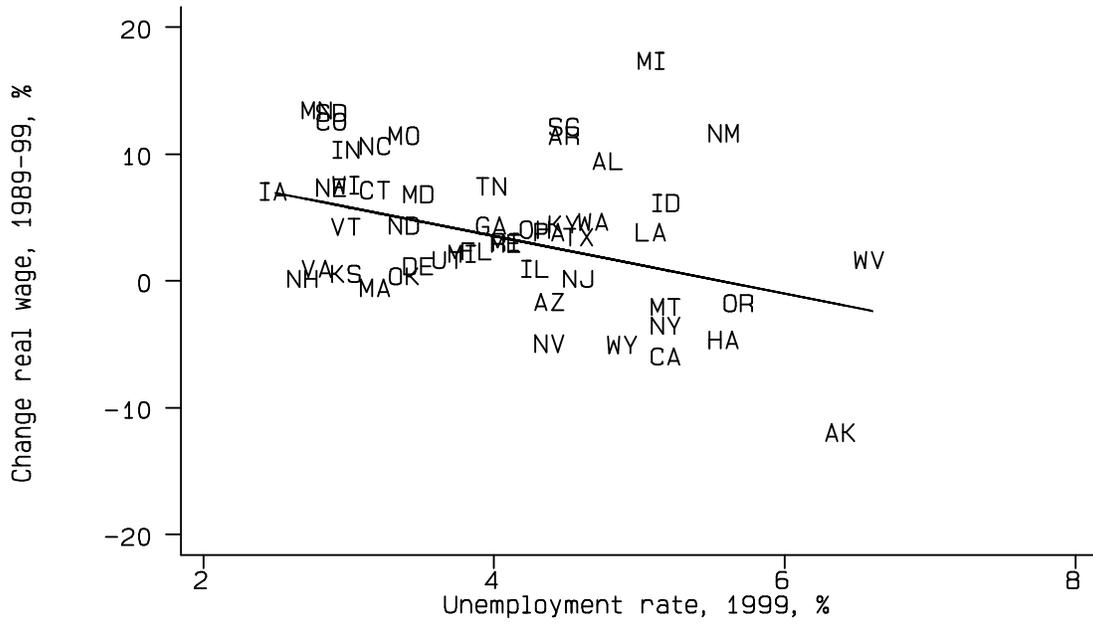


FIG. 6: CHANGE IN 20TH PERCENTILE WAGE AND UNEMPLOYMENT  
 Slope: -2.11; t-statistic: -1.83; p-value: 0.07

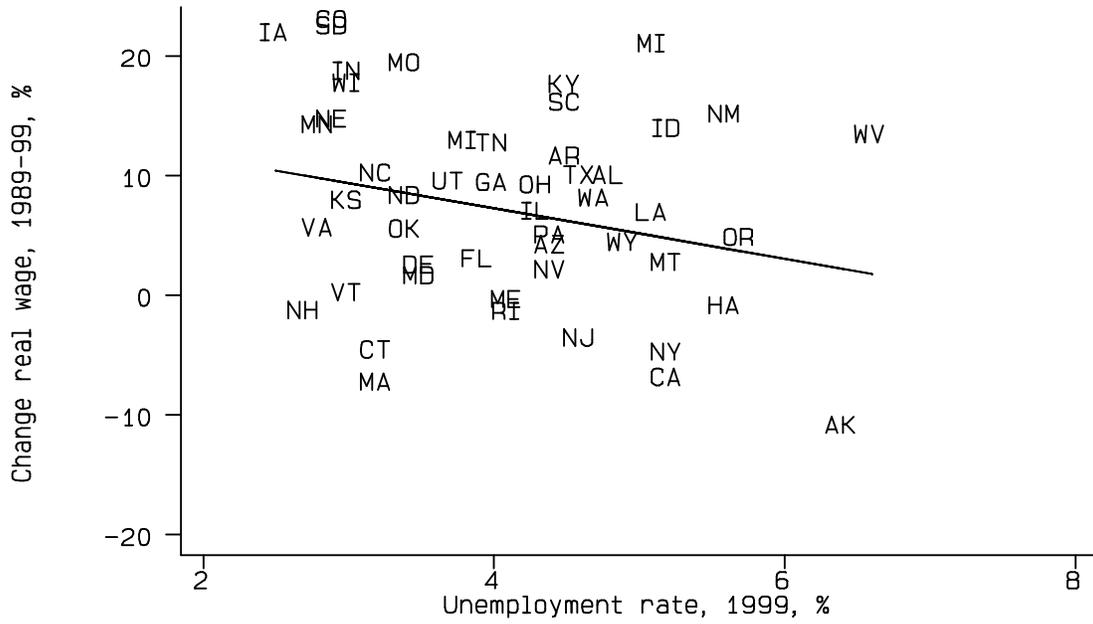


FIG. 7: CHANGE IN 80TH PERCENTILE WAGE AND UNEMPLOYMENT  
Slope: -1.68; t-statistic: -2.55; p-value: 0.01

