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October 3, 1998

MEMORANDUM FOR GENE SPERLING

FROM: JON ORSZAG

SUBJECT: Impact of Minimum Wage Increase on Small Business

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This is good.
Might send to P&H + OPOTAS
from us + to Sarah Leavelle
+ Con B...
CS
10/24/98

The Jerome Levy Economics Institute conducted a survey of 568 small businesses and asked three questions: (1) would an increase in the minimum wage alter your decision to hire former welfare recipients?; (2) did the 1996-1997 increase in the minimum wage affect your hiring or employment decisions?; and (3) if the minimum wage were raised raised to \$6 per hour, would it affect your overall hiring or employment decisions? The results of the survey were as follows:

RESPONSE TO SURVEY QUESTIONS ON MINIMUM WAGE			
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
(1) Would an increase in the minimum wage alter your decision to hire former welfare recipients?	9.9%	84.8%	5.3%
(2) Did the 1996-1997 increase in the minimum wage affect your hiring or employment decisions?	6.2%	89.4%	4.4%
(3) If the minimum wage were raised raised to \$6 per hour, would it affect your overall hiring or employment decisions?	20.7%	75.6%	3.7%

Amazingly, only 6.2 percent of small businesses felt that the 1996-1997 hike in the minimum wage had affected their overall hiring and employment practices. Of the 6.2 percent of employers who said their decisions were affected, 17.1 percent indicated that they hired fewer workers and 5.7 percent indicated that they laid off workers. That means that just 0.33 percent of all small businesses laid off workers due to the 1996-1997 minimum wage hike.

Although the percentage of businesses that expected that their decisions would be affected by an increase to a \$6 minimum wage is quite higher (20.7 percent), few of them thought they would reduce employment. Of the 20.7 percent, 29.3 percent said they would hire fewer workers and 11.2 percent said they would lay workers off. The remainder would reduce benefits, show smaller profits, or pass on the higher wage in terms of higher prices. If this survey is correct, fewer than 3 percent of all small businesses would fire workers if the minimum wage were raised to \$6 per hour.

PAY CHECK

MYTH AND THE MINIMUM WAGE

ON SEPT. 22, THE SENATE nixed a Democratic proposal to again raise the minimum wage, with Republicans howling that it would be bad for small business. But surprisingly, small-business owners don't seem to agree.

That, at least, is the finding of a new study from the nonpartisan Jerome Levy Economics Institute at Bard College.

The authors surveyed 568 commercially and geographically diverse small businesses and found that the most recent minimum-wage hike, from \$4.75 to \$5.15 per hour in September, 1997, affected

hiring decisions at just 6.2% of the businesses. At most of the affected companies, owners reduced new hires. Only 0.33% laid anyone off.

Even a raise to \$6, the survey indicated, would slow new hiring at just 20% of the companies. "It shows there's

some room [for another increase], but there are also clearly limits," says Oren Levin-Waldman, one of the study's authors. Some experts say the survey avoids the pitfalls of other such studies by relying on employer responses

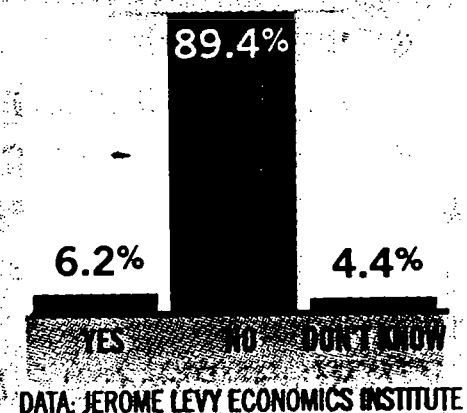
and not focusing on teenagers or food service.

The minimum wage currently totals \$10,712 annually—or \$2,090 below the poverty line for a family of three.

Edith Updike

LITTLE IMPACT

DID THE RECENT INCREASE IN THE MINIMUM WAGE AFFECT YOUR HIRING OR EMPLOYMENT DECISIONS?



Effects of the 1998 California Minimum Wage Increase

David A. Macpherson
Florida State University

March 1998

The Employment Policies Institute is a nonprofit research organization dedicated to studying public policy issues surrounding employment growth. In particular, EPI research focuses on issues that affect entry-level employment. Among other issues, EPI research has quantified the impact of new labor costs on job creation, explored the connection between entry-level employment and welfare reform, and analyzed the demographic distribution of mandated benefits. EPI sponsors nonpartisan research which is conducted by independent economists at major universities around the country.

David Macpherson is Professor of Economics and Research Director of the Pepper Institute on Aging and Public Policy at the Florida State University. His specialty is applied labor economics. His current research interests include pensions, discrimination, industry deregulation, labor unions, and the minimum wage.

He is the author of many articles in leading labor economics and industrial relations journals including the *Journal of Labor Economics*, *Industrial and Labor Relations Review*, and the *Journal of Human Resources*. He is also co-author of the annual *Union Membership and Earnings Data Book: Compilations from the Current Population Survey* published by the Bureau of National Affairs. In addition, he is a co-author of the undergraduate labor economics text *Contemporary Labor Economics* as well as the forthcoming book *Pensions and Productivity*. He received his Ph.D. from Pennsylvania State University in 1987.

Executive Summary

Based upon an analysis of Labor Department data, Dr. David Macpherson finds the 1998 California minimum wage hike from \$5.15 to \$5.75 per hour will cause more than 25,000 workers to lose job opportunities. As a consequence, California workers will lose approximately \$230 million in annual income. At the same time, minimum wage employers will see their labor costs rise by \$790 million per year in order to provide minimum wage workers an increase in average family income of only 2%.

On February 12, 1998, President Clinton proposed raising the federal minimum wage in two annual 50-cent increments, from \$5.15 to \$5.65 and then \$6.15 per hour. In support of this proposal, the President and others claim that minimum wage increases of such magnitudes do not cost jobs, and that the benefits of these increases accrue primarily to poor adults trying to raise families. With this legislative proposal on the table, it is instructive to read Dr. Macpherson's study of expected effects from California's statewide increase in its minimum wage from \$5.15 to \$5.75, which is effective March 1, 1998.

Who will be affected?

Macpherson finds that fewer than one-fifth of the workers who will be affected by the minimum wage increase are the sole breadwinners in families with children. The annual family income of affected workers averages more than \$30,000, and in some localities, e.g., San Francisco, exceeds \$40,000. These income figures indicate that most minimum wage workers are members of families with multiple workers. Only one in five affected workers lives in a family with income of less than \$10,000.

Of affected workers, many are very young; 20% are teens aged 16-19 and an additional 23% are young adults aged 20-24; 27% are living with a parent or parents. More than half of affected workers have never been married.

How will they be affected?

Of the 25,000 lost job opportunities resulting from the California increase, Hispanic workers will account for more than half. Almost half of the burden will be borne by workers with annual family incomes less than \$20,000, as well as workers under age 25. One-third of the lost jobs will be in the retail sector, and almost another third will be in the service sector. Geographically, more than half of the lost jobs will be in the Los Angeles area.

Dr. Macpherson estimates that the \$790 million in additional annual labor costs associated with the California minimum wage increase will fall disproportionately on retail employers (\$238 million) and service-sector employers (\$225 million), and on employers in the Los Angeles area (\$300 million).

Of the total income gains generated by the wage hike, only one dollar in five will go to workers living in families with incomes of less than \$10,000. Hence, the wage hike appears to be an inefficient policy tool for raising low-income workers out of poverty. The average increase in family income of affected workers will be a very modest 2.3%.

Conclusion

This study demonstrates that increases in the minimum wage entail real consequences and costs. Even a 50-cent (or ten percent) increase can cause significant job loss and impose substantial costs on employers and job seekers. At the same time, such an increase does little to combat poverty, even among those that don't lose their jobs.

Rebel A. Cole, Chief Economist
Employment Policies Institute

1. Introduction

“Living wage” campaigns have emerged in nearly three dozen states and cities.¹ According to proponents, a living wage is approximately one-half of the average local or state wage. In an attempt to increase the wages of low-income workers so as to meet this goal, living wage supporters propose that states and municipalities mandate minimum wage rates greater than the federal minimum wage rate, which was \$5.15 per hour as of September 1, 1997.

This study examines in a variety of dimensions the effects of one such law. In California, the minimum wage will rise from \$5.15 to \$5.75 in March 1998. The study reaches several conclusions regarding this minimum wage increase. First, the workers affected by this increase tend to be much younger and less educated than the average California worker. Second, only one-fifth of the affected workers are the sole earners for families supporting one or more children. Third, the impact on family income will be modest—the average increase in the family income of these workers will be a very modest 2.3%. Fourth, the minimum wage increase is projected to cause 25,816 workers to lose their jobs, with one-third of the job losses in the retail trade industry. These workers will lose \$230 million in annual income. Fifth, the cost to employers will be substantial—estimated at \$790 million per year in additional labor costs.

The study is organized as follows: The data employed to calculate some of the consequences of a higher minimum wage are described in section 2, and a statistical portrait of the workers affected by the minimum wage increase is provided in section 3. The impact of the increase on the distribution of family income is discussed in section 4. An analysis of the employment effects of the minimum wage increase is presented in section 5, and an in-

vestigation of the cost to employers of the wage hike as well as the income loss to laid-off workers is reported in section 6. Lastly, section 7 provides a summary and conclusion.

2. The Data

To analyze the effects of the 1998 California minimum wage increase, data are drawn from the January 1995 through October 1997 Current Population Survey (CPS) Outgoing Rotation Group (ORG) files. The CPS ORG has the important advantage of being a large and representative sample of the population.

The main sub-sample of the CPS ORG data employed here includes wage and salary workers who are residents of California, 16 years of age or older, and whose hourly wage is between \$5.15 and \$5.75 in March 1998 dollars.² Observations missing data necessary to compute the hourly wage, family income, or other relevant variables are deleted from the sample. The data appendix describes the calculation of the hourly wage variable and other data issues.

3. Who will be Affected by the Minimum Wage Increase?

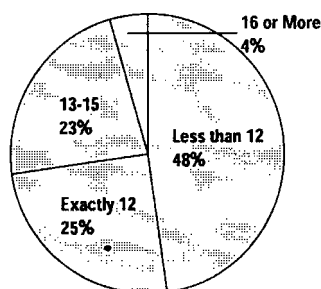
A vivid statistical portrait of the workers affected by the minimum wage increase (i.e., earning \$5.15-\$5.75 in March 1998 dollars) emerges from Table 1, which presents for such workers the means of demographic variables as well as the population size of subgroups. For comparison purposes, means for all

California workers and for all California residents who are 16 years of age and older are also included. The results reveal that a large fraction of workers affected by the higher minimum wage are young. In fact, 19.9% of affected workers are between 16 and 19 years of age, and an additional 23.3% are between 20 and 24 years of age. Thus, 43.2% of affected workers are 24 or younger. This amounts to 569,633 of the affected workers.

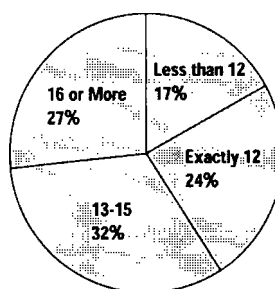
The affected workers differ from the average California resident on several other demographic characteristics. The affected workers are substantially less educated than the average Californian as nearly one-half (628,279 workers) have not graduated from high school. Also, they are much more likely to be never-married (52.6%) and Hispanic (53.2%) than the population as a whole.

Workers impacted by the minimum wage increase are less likely to be supporting a family than the typical California worker. For example, 26.8% of the workers (352,857) are living with their parent or parents, while only 10.6% of all California workers are in this category. Also, they are much less likely to be a dual earner in a married couple (22.4% versus 39.8%) than the typical California worker. Lastly, less than one-fifth are a single head or a single earner in a married couple supporting a family with children.

Workers Affected by California's 1998 Minimum Wage Hike:
Years of Schooling



All California Workers:
Years of Schooling



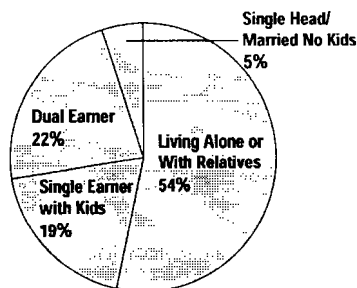
The family income of the affected worker is somewhat lower than the average California resident (\$30,586 versus \$46,509). However, less than 21% of the minimum wage workers are in families with an income of less than \$10,000. In fact, more than 52% are in families with an income of \$20,000 or more, suggesting that this increase in the California minimum wage does a poor job of targeting families living in poverty.

The affected workers are less involved in the labor market than the average California worker. More than 40% of the affected workers are employed part-time, while only 18% of all California employees work part-time. In addition, the affected workers are employed 2 fewer weeks per year than the typical worker.

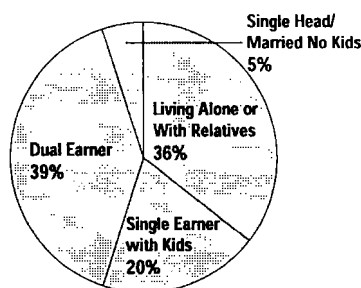
The location of the affected workers differs from the typical California resident and worker. The affected workers are more likely to live in the Los Angeles-Long Beach PMSA (34.8%) than the average California resident (28.9%).

On the other hand, they are much less likely to live in the San Francisco CMSA (13.1%) than the average California resident (21.2%).

Workers Affected by California's 1998 Minimum Wage Hike:
Family Status

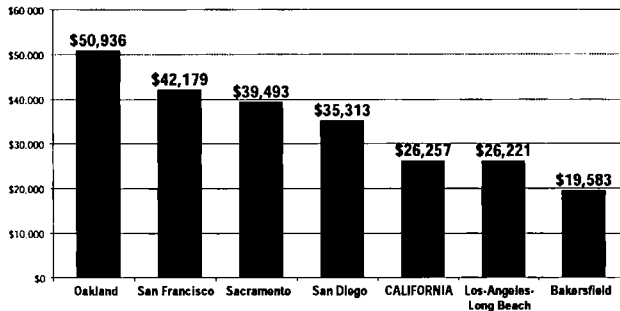


All California Workers:
Family Status



As shown in Table 2, the family income of the affected workers varies substantially depending on the location in the state. Affected workers in the

Workers Affected by California's 1998 Minimum Wage Hike: Average Family Income by Locality



San Francisco area have much higher family incomes than their counterparts in the Los Angeles area. For example, workers living in Oakland have a mean family income of \$50,936 while the corresponding figure for those living in Los Angeles-Long Beach is \$26,221.

4. What will be the Impact on the Distribution of Family Income?

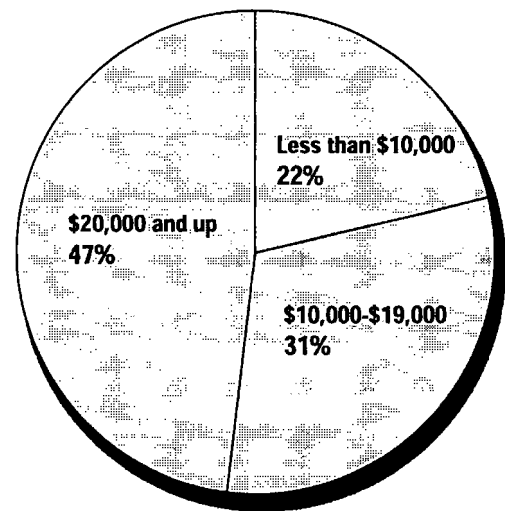
Table 3 provides calculations of the annual income increases for workers affected by the minimum wage increase as well as the resulting impact on family income. The top row shows the mean increase in annual income is only \$710. Since the average family income of the affected workers is \$30,586 per year, the resulting increase in average family income will be a very modest 2.3%.³ The increase for this with the median family income was 3.2%.

When the results are broken out by family income, they show the minimum wage increase is a blunt anti-poverty measure. The increase in family income will be \$732 (or a 13.0% rise) for persons

in families with less than \$10,000 of income. The next highest family income group (\$10,000-\$19,999) will receive a \$783 income increase. The family income increase is greater for these workers because they work two more hours per week than those in the lowest income category.

Column 5 of Table 3 presents the percentage share of the total income gains resulting from the minimum wage increase that accrue to workers in various family income groupings. The gains are roughly proportional to the percentages of af-

Share of Gains From California's 1998 Minimum Wage Hike: Distribution by Family Income



ected workers in each grouping. For example, 20.7% of the affected workers live in families with incomes of less than \$10,000, a rough approximation of the poverty threshold for the typical family affected by the California minimum wage hike.⁴ The share of total income gains going to these workers is only 21.5%. In other words, almost four-fifths of the total income gains will go to workers in families living above the poverty level.

5. How Many Workers will be Laid Off?

An important effect of the minimum wage increase is that some workers will lose their jobs because firms will no longer be able to profitably employ them. To estimate the job loss, the following procedure was used: First, the fractional wage gain due to the minimum wage increase is computed for each affected worker and then averaged across the sample. Second, estimated fractional wage gain is used in the following formula to calculate the employment loss:

$$(1) \text{ Employment Loss} = \text{Fractional Wage Gain} * \text{Affected Worker Employment} * \text{Labor Demand Elasticity}$$

This study uses an estimate of labor demand elasticity (-0.22) for minimum wage workers reported by Neumark and Wascher (1997). An elasticity of -0.22 implies that a 10% increase in wages results in a 2.2% decrease in employment of the affected group.⁵

25,816 Jobs Destroyed by California's 1998 Minimum Wage Hike: Distribution by Workers Age

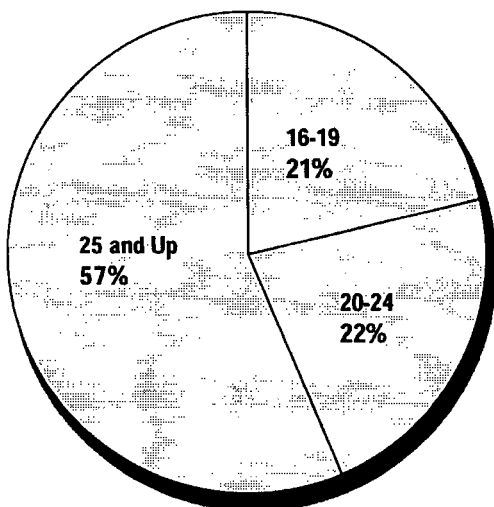
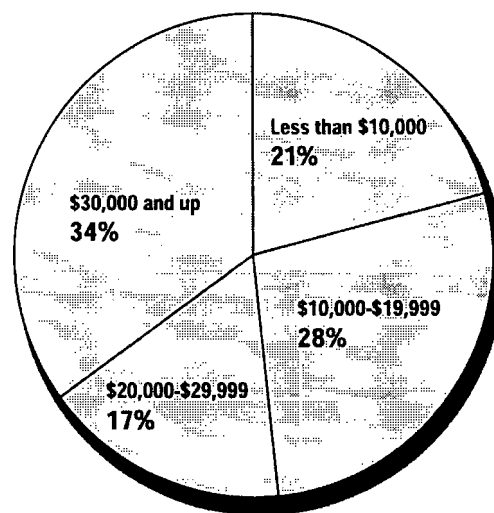


Table 4 presents the results of these calculations for all of the affected workers as well as subgroups of workers. Overall, the analysis indicates that 25,816 workers are projected to lose their jobs due to the minimum wage increase. The breakdowns by demographic groups and

25,816 Jobs Destroyed by California's 1998 Minimum Wage Hike: Distribution by Workers Family Income

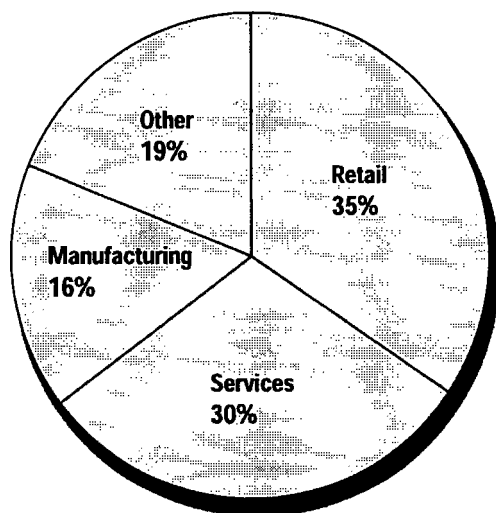


location are not surprising: 49% have not finished high school; 43% are under age 25; 48% have a family income below \$20,000 a year; and 54% are Hispanic. Slightly more than one-half of the job losses (13,567) will occur in the Los Angeles area and another 13.0% will occur in the San Francisco region.

The results by industry indicate that more than one-third of the job losses are projected to occur in the retail trade industry (8,900 jobs). This is not surprising since more than one-fifth of the workers in retail trade will be affected by this increase. Another 7,783 jobs, or 30% of the losses, are projected to occur for workers in the service industries.

25,816 Jobs Destroyed by California's 1998 Minimum Wage Hike:

Distribution by Industry



The findings by occupation show that about one-half of the losses are predicted to be for those in sales and service occupations. Another 28.5% will occur for those in blue-collar jobs.

6. What will be the Cost to Employers and the Income Loss to Laid-off Workers?

Another critical issue is the cost to employers from the minimum wage increase. These higher costs will be either passed on to consumers through higher prices or profits will be reduced for firms. Also, an important cost to workers is the loss in income due to the layoffs caused by the minimum wage increase.

These costs are calculated in the following manner: First, the increase in labor cost that would occur if no workers are laid off is calculated. This figure is estimated by multiplying the annual in-

crease in wages due to the minimum wage increase times the number of affected workers. Second, the lost income to workers (and thus reduction in labor cost) due to the layoffs is estimated.⁶ This number is calculated by multiplying the number of workers who are projected to lose their jobs times their average wage before the minimum wage increase. Third, the net increase in labor cost to employers is calculated by taking the difference between the cost to employers if no layoffs occurred and the reduction in costs due to the layoffs of employees.

Table 5 presents the results of these calculations. The first row of the table indicates that if no layoffs occurred, then the cost of labor to employers would rise by \$1.02 billion. The projected worker layoffs of 25,816 will cause \$230 million of worker income to be lost. The net rise in the cost of labor to employers is estimated to be \$790 million.

The results by industry and location indicate these costs are clearly concentrated in certain industries and locations. In the retail trade industry, net labor costs will rise by \$238 million and the income of laid-off workers will be reduced by \$70 million. For the service industry, the net employer cost will rise by \$225 million and the income loss to displaced workers will be \$65 million. The net labor cost to employers in the Los Angeles-Long Beach area will rise by \$300 million, while laid-off workers will suffer an income loss of \$87 million. For the entire Los Angeles region, the employer costs will rise by more than \$400 million and laid-off workers are projected to have a \$125 million reduction in income.

7. Summary and Conclusions

This paper examines in a variety of dimensions the effects of the rise in the California minimum wage from \$5.15 to \$5.75 starting in March 1998. The study reaches several conclusions regarding this minimum wage increase. First, the workers af-

affected by this increase tend to be much younger and less educated than the average California worker. Nearly one-half of the impacted workers do not have a high school degree and more than two-fifths are under the age of 25. Second, only one-fifth of the affected workers are the sole earner for a family supporting one or more children. Third, the impact on family income will be minimal, raising the average family income of a mini-

mum wage worker by a very modest 2.3%. Fourth, the minimum wage increase is projected to cause 25,816 workers to lose their jobs, with one-third of the job losses in the retail trade industry. This will cause an annual income loss to these workers of \$230 million. Fifth, the cost to employers will be quite substantial. It will raise their labor costs by \$790 million per year, with the costs concentrated in the retail and service industries.

Endnotes

¹ *The Minimum Wage Debate: Questions and Answers*, 3rd Ed. (Washington, D.C. Employment Policies Institute, 1997) 13-17.

² Hourly wages are adjusted for changes in the minimum wage and inflation and other data issues. See the data appendix for a more detailed explanation.

³ These calculations are based on the assumption that all affected workers increase their wage to the new minimum wage of \$5.75 per hour. Hence, we are not allowing for noncompliance or exemptions from the law.

⁴ The Earned Income Tax Credit (EITC) would bring a single worker supporting two children slightly above the poverty level for such a family.

⁵ The average elasticity reported by a survey of labor economists at leading universities is -0.21. See Fuchs, Krueger and Poterba (1997).

⁶ Workers may reduce this income loss if they are able to obtain employment in a job not covered by the minimum wage.

References

Employment Policies Institute. *The Minimum Wage Debate: Questions and Answers*, 3rd Ed. Washington, D.C.: Employment Policies Institute, 1997.

Fuchs, Victor R., Alan B. Krueger, and James M. Poterba. "Why Do Economists Disagree About Policy? The Roles of Beliefs About Parameters and Values." NBER Working Paper No. 6151, August 1997.

Hirsch, Barry T., and David A. Macpherson. *Union Membership and Earnings Data Book: Compilations from the Current Population Survey* (1997 edition). Washington, D.C.: Bureau of National Affairs, 1997.

Neumark, David and William Wascher. "The New Jersey-Pennsylvania Minimum Wage Experiment: A Re-Evaluation Using Payroll Records." *Econometrics and Economic Theory Papers*, Michigan State University, January 1998.

Data Appendix

Hourly Wage

This study uses data from the January 1995 through October 1997 Current Population Survey (CPS) Outgoing Rotation Group (ORG) files. The main sub-sample of the CPS data employed here includes wage and salary workers who are residents of California, 16 years of age or older, and whose hourly wage is between \$5.15 and \$5.75 in March 1998 dollars.

The hourly wage is constructed to account for problems caused by workers with variable hours, “top coded” or “capped” earnings, tips, commissions and overtime, inflation, and changes in the minimum wage.

The first step is to assign a wage for workers who don’t have these difficulties. Non-top coded workers who are paid by the hour and don’t receive tips, commissions or overtime are assigned their reported hourly earnings. For all non-hourly workers, the hourly wage is constructed by dividing usual weekly earnings (which includes tips, commissions and overtime pay) by usual hours worked per week.

The second step is to estimate usual weekly earnings for workers whose weekly earnings are top coded or capped at a maximum value. The CPS ORG files have a topcode of \$1,923 per week or about \$100,000 per year for year-round workers. If the earnings of topcoded workers were not adjusted, average earnings would be understated. To estimate the mean earnings of topcoded workers it is assumed that the upper tail of weekly earnings distribution follows a Pareto distribution. These estimated mean values for the CPS ORG files using this approach are presented in Hirsch and Macpherson (1997) by gender and year and are used in this study. The reported 1996 values

are assigned for 1997 observations (the values change little from year to year).

The third step is to estimate usual weekly hours for workers who indicate their weekly hours are variable. This is calculated by using the results of a regression model based on a sample of workers that have non-missing data on usual hours worked. The model is estimated by gender and year and includes controls for hours worked in the prior week, full-time status, marital status, years of schooling, age, race and ethnic status, broad occupation, and broad occupation interacted with full-time status. The parameters from this regression model are then used to estimate the usual hours for those whose weekly hours are variable.

The next step is to assign a wage for hourly workers who receive tips, commissions, or overtime pay or are topcoded workers. In this case, their hourly wage is constructed by dividing usual weekly earnings (adjusted for topcodes) by usual hours worked (or estimated usual hours if usual hours is missing).

The last step is to adjust the wages of workers for inflation and changes in the minimum wage. Wages of workers are adjusted for inflation to March 1998 using the CPI-U (a 3% percent annual inflation rate is assumed for the period between October 1997 and March 1998). For workers whose inflation-adjusted wage is less than \$5.15 in September 1997 dollars, a wage of \$5.15 in March 1998 dollars is assigned. Workers whose wage at the time of the survey was less than the legal minimum wage were deleted from the sample. The minimum wage for California workers was \$4.25 between January 1995 and October 1996; \$4.75 between October 1996 and February 1997; \$5.00 between March 1997 and August 1997; and \$5.15 between September 1997 and October 1997.

Family Income

Family income is reported as categorical variable in the CPS ORG and includes all sources of money income received in the prior 12 months. The income ranges are: less than \$5,000; \$5,000-\$7,499; \$7,500-\$9,999; \$10,000-\$12,499; \$12,500-\$14,999; \$15,000-\$17,499; \$17,500-\$19,999; \$20,000-\$24,999; \$25,000-\$29,999; \$30,000-\$34,999; \$35,000-\$39,999; \$40,000-\$49,999; \$50,000-\$74,999; and \$75,000 and up. To assign a dollar value to these categories, mean values of family income for persons in each income range was calculated from a sample of California residents in the March 1995 and 1996 CPS (which reports family income received in the prior year as a continuous variable). Very similar results occurred when a national rather than a California based sample was employed to generate the mean income values. The 1995 values are used for the 1995 observations, and the 1996 values for the 1996 and 1997 observations.

Annual Income

Though the CPS ORG provides measures of hourly earnings and hours worked, it does not indicate the number of weeks worked per year. Thus, to

generate annual income estimates for workers affected by the higher minimum wage, an alternative data source must be used and merged with the CPS ORG. Fortunately, the April 1993 CPS provides such a measure and the mean usual weeks worked was calculated for all California workers earning \$5.15-\$5.75 per hour in March 1998 dollars.

Location

The CPS ORG used 1983 Census metropolitan area identifiers for January 1995-May 1995 to provide substate location information. For the period of June 1995-August 1995, no metropolitan identifiers were provided. Since September 1995, the CPS ORG has used the 1993 Census metropolitan area identifiers. The location identifiers were made as time consistent as possible and the resulting measurement error is quite modest.

Since the months of June 1995-August 1995 contained no location information, these months were deleted from the sample when the substate analysis was conducted and the sample weights were adjusted accordingly. As a result, the total employment counts slightly differ for the substate and state-level analysis.

Table 1: Distribution of Workers Affected by the 1998 California Minimum Wage Increase

Variable	Affected California Workers		All California Workers	California Residents Age 16+
	Percent	Population		
Age:				
16 to 19	19.9%	261,997	4.6%	7.4%
20 to 24	23.3%	307,636	11.2%	9.2%
25 to 29	12.4%	162,832	13.6%	10.3%
30 to 39	20.2%	266,052	29.7%	23.3%
40 to 64	22.0%	290,249	39.3%	35.5%
65 to 99	2.3%	29,687	1.7%	14.3%
Average Age	31.1		37.4	42.3
Years of Schooling:				
0 to 8	22.8%	300,572	8.2%	10.7%
9 to 11	24.9%	327,707	8.8%	13.3%
12	25.0%	330,161	23.8%	24.6%
13 to 15	22.9%	301,629	32.6%	28.9%
16 or more	4.4%	58,384	26.7%	22.6%
Average Years of Schooling	10.7		13.1	12.6
Race:				
White	83.4%	1,099,603	81.0%	80.9%
Black	4.7%	61,411	6.4%	6.6%
Asian	8.5%	112,289	10.3%	10.4%
Other Race	3.4%	45,150	2.2%	2.2%
Ethnic Status:				
Hispanic	53.2%	701,517	28.5%	26.7%
Non-Hispanic	46.8%	616,936	71.5%	73.3%
Gender:				
Male	49.9%	657,742	54.6%	49.0%
Female	50.1%	660,711	45.4%	51.0%
Marital Status:				
Married, Spouse Present	35.3%	464,989	54.5%	53.5%
Divorced, Separated, Widowed	12.2%	160,227	15.3%	18.6%
Never Married	52.6%	693,237	30.2%	27.9%
Family Status:				
Single Individual	17.5%	230,678	21.5%	NA
Single Head	11.5%	151,720	9.9%	NA
Single Head with no children	2.3%	30,103	1.6%	NA
Single Head with 1 child	3.4%	44,880	2.9%	NA
Single Head with 2 children	2.5%	33,397	2.6%	NA
Single Head with 3+ children	3.3%	43,340	2.7%	NA
Single Earner in Married Couple	12.8%	169,088	14.7%	NA
Single Earner with no children	2.8%	37,313	3.4%	NA
Single Earner with 1 child	2.0%	26,191	2.1%	NA
Single Earner with 2 children	2.4%	31,769	3.3%	NA
Single Earner with 3+ children	5.6%	73,815	5.9%	NA

Table 1, Continued

Variable	Affected California Workers		All California Workers	California Residents Age 16+
	Percent	Population		
Dual Earner in Married Couple	22.4%	295,901	39.8%	NA
Dual Earner with no children	4.6%	61,263	10.4%	NA
Dual Earner with 1 child	3.2%	41,986	6.3%	NA
Dual Earner with 2 children	4.4%	58,637	8.8%	NA
Dual Earner with 3+ children	10.2%	134,015	14.3%	NA
Living with Parents	26.8%	352,897	10.6%	NA
Living with Other Relative	9.0%	118,169	3.5%	NA
Family Income:				
< \$10,000	20.7%	269,598	6.8%	11.7%
\$10,000-\$19,999	27.5%	358,674	13.2%	16.5%
\$20,000-\$29,999	16.9%	220,586	14.1%	15.0%
\$30,000-\$39,999	11.0%	142,948	13.8%	12.9%
\$40,000-\$49,999	6.5%	84,242	11.0%	9.3%
\$50,000-\$59,999	5.9%	76,487	10.4%	8.7%
\$60,000-\$74,999	4.0%	52,446	10.4%	8.3%
\$75,000 or more	7.6%	99,665	20.3%	17.6%
Average Family Income	\$ 30,586		\$ 52,181	\$ 46,511
Median Family Income	\$ 22,081		\$ 44,127	\$ 37,282
Location:				
Non-Metro/Small Metro Areas	6.4%	84,677	5.3%	5.9%
Los Angeles CMSA				
Los Angeles-Long Beach PMSA	34.8%	460,691	28.3%	28.9%
Riverside-San Bernardino PMSA	6.8%	90,589	7.6%	8.0%
Orange County PMSA	9.5%	125,578	9.5%	8.8%
San Francisco CMSA				
Oakland PMSA	3.4%	44,453	7.2%	6.8%
San Francisco PMSA	4.1%	54,110	6.4%	5.9%
San Jose PMSA	3.8%	50,013	6.3%	5.6%
Other San Francisco PMSAs	1.8%	23,335	3.1%	2.9%
San Diego, MSA	8.2%	108,030	8.3%	8.2%
Sacramento, MSA	3.4%	45,450	5.2%	5.2%
Fresno, MSA	3.2%	41,857	2.7%	2.6%
Bakersfield, MSA	2.8%	37,355	1.8%	1.8%
Stockton, MSA	1.8%	23,874	1.4%	1.5%
Other MSAs	10.2%	135,124	6.9%	7.7%
Hours Per Week	32.4		38.5	NA
Full-time	58.8%	775,250	82.0%	NA
Weeks Worked Per Year	47.7		50	NA
Population		1,318,453	12,511,029	23,837,428
Sample Size		3,566	33,747	65,605

Note: Data source is the January 1995-October 1997 CPS ORG. Affected workers are defined as those persons earning \$5.15-\$5.75 per hour in March 1998 dollars. All workers are defined as all wage and salary workers. Weeks worked based on a sample of workers derived from April 1993 CPS. All means are calculated using CPS sample weights.

Table 2: Family Income of Affected California Workers by Location

Family Income	Non-Metro- Small Metro	Los Angeles- Long Beach	Riverside- San Bernardino	Orange County	Oakland	San Francisco	San Jose
< \$10,000	16.3%	22.8%	15.9%	20.4%	10.5%	11.4%	18.4%
\$10,000-\$19,999	41.1%	29.9%	24.2%	24.3%	9.0%	21.7%	14.4%
\$20,000-\$29,999	13.6%	19.2%	22.0%	16.6%	16.1%	16.8%	10.7%
\$30,000-\$39,999	8.8%	10.5%	11.1%	9.7%	12.6%	14.7%	7.9%
\$40,000-\$49,999	10.3%	4.7%	3.8%	7.1%	9.6%	8.4%	15.2%
\$50,000-\$59,999	3.1%	4.8%	8.6%	8.2%	15.2%	7.5%	11.8%
\$60,000-\$74,999	2.5%	3.3%	5.6%	4.5%	7.6%	3.3%	6.2%
\$75,000 or more	4.3%	4.8%	8.7%	9.2%	19.3%	16.2%	15.3%
Mean	\$ 26,257	\$ 26,221	\$ 33,812	\$ 33,993	\$ 50,936	\$ 42,179	\$ 44,345
Median	\$ 17,145	\$ 17,253	\$ 22,194	\$ 22,194	\$ 44,127	\$ 31,954	\$ 37,351

Family Income	Other San Francisco	San Diego	Sacramento	Fresno	Bakersfield	Stockton	Other MSAs
< \$10,000	2.8%	17.8%	17.2%	37.3%	30.2%	12.0%	30.7%
\$10,000-\$19,999	16.7%	28.7%	19.1%	25.0%	30.1%	28.2%	32.4%
\$20,000-\$29,999	22.8%	11.9%	13.7%	12.1%	22.4%	6.3%	15.0%
\$30,000-\$39,999	16.1%	11.8%	16.3%	2.5%	7.2%	20.1%	9.7%
\$40,000-\$49,999	13.9%	8.4%	9.5%	2.3%	3.9%	15.7%	3.7%
\$50,000-\$59,999	4.5%	5.8%	3.1%	6.1%	2.5%	9.4%	4.4%
\$60,000-\$74,999	10.3%	4.3%	8.2%	5.8%	2.3%	4.0%	1.6%

Table 3: Income Increases for California Workers Affected by Minimum Wage Increase

Group	% in Class Before Increase	Annual Income Increase	% Increase In Family Income	% Share of Total Income Increase
All	100	\$ 710	2.3	100
Family Income:				
< \$10,000	20.7%	\$ 732	13.0%	21.5%
\$10,000-\$19,999	27.5%	\$ 783	5.6%	30.5%
\$20,000-\$29,999	16.9%	\$ 745	3.1%	17.9%
\$30,000-\$39,999	11.0%	\$ 671	1.9%	10.5%
\$40,000-\$49,999	6.5%	\$ 609	1.4%	5.6%
\$50,000-\$59,999	5.9%	\$ 577	1.1%	4.8%
\$60,000-\$74,999	4.0%	\$ 628	0.9%	3.6%
\$75,000 or more	7.6%	\$ 525	0.4%	5.7%

Note: Data source is the January 1995-October 1997 CPS ORG. Affected workers are defined as those persons earning \$5.15-\$5.75 per hour in March 1998 dollars. All means are calculated using CPS sample weights.

Table 4: California Employment Levels and Job Losses by Sector

Group	Employment			Percent of all Job Loss
	All Workers	Affected Workers	Projected Job Loss	
All	12,511,029	1,318,453	25,816	100.0%
Age:				
16-19	569,834	261,997	5,489	21.3%
20-24	1,398,764	307,636	5,772	22.4%
25-29	1,704,975	162,832	3,192	12.4%
30-39	3,711,892	266,052	5,194	20.1%
40-64	4,910,883	290,249	5,584	21.6%
65-99	214,681	29,687	585	2.3%
Family Income:				
< \$10,000	848,810	269,598	5,374	20.8%
\$10,000-\$19,999	1,641,208	358,674	7,114	27.6%
\$20,000-\$29,999	1,751,911	220,586	4,285	16.6%
\$30,000-\$39,999	1,710,538	142,948	2,719	10.5%
\$40,000-\$49,999	1,370,634	84,242	1,638	6.3%
\$50,000-\$59,999	1,288,496	76,487	1,357	5.3%
\$60,000-\$74,999	1,288,995	52,446	1,121	4.3%
\$75,000 or more	2,525,573	99,665	1,936	7.5%
Gender:				
Male	6,829,259	657,742	12,586	48.8%
Female	5,681,770	660,711	13,231	51.3%
Race:				
White	10,134,758	1,099,603	21,527	83.4%
Black	804,936	61,411	1,258	4.9%
Asian	1,289,907	112,289	2,199	8.5%
Other Race	281,428	45,150	832	3.2%
Ethnic Status:				
Hispanic	3,567,550	701,517	13,925	53.9%
Non Hispanic	8,943,479	616,936	11,891	46.1%
Years of Schooling:				
0 to 8	1,025,014	300,572	5,923	22.9%
9 to 11	1,095,440	327,707	6,676	25.9%
12	2,972,718	330,161	6,468	25.1%
13 to 15	4,079,125	301,629	5,715	22.1%
16 or more	3,338,732	58,384	1,035	4.0%

Table 4, Continued

Location:

Non-Metro/Small Metro Areas	667,242	84,677	1,648	6.4%
Los Angeles CMSA				
Los Angeles-Long Beach PMSA	3,546,083	460,691	9,243	35.8%
Riverside-San Bernardino PMSA	950,352	90,589	1,834	7.1%
Orange County PMSA	1,188,629	125,578	2,490	9.6%
San Francisco CMSA				
Oakland PMSA	904,977	44,453	889	3.4%
San Francisco PMSA	800,163	54,110	1,097	4.2%
San Jose PMSA	786,920	50,013	923	3.6%
Other San Francisco PMSAs	389,449	23,335	437	1.7%
San Diego, MSA	1,038,145	108,030	2,015	7.8%
Sacramento, MSA	647,125	45,450	840	3.3%
Fresno, MSA	341,964	41,857	805	3.1%
Bakersfield, MSA	226,055	37,355	719	2.8%
Stockton, MSA	177,093	23,874	487	1.9%
Other MSAs	865,556	135,124	2,490	9.6%

Industry:

Agriculture	386,707	108,547	2,031	7.9%
Mining	30,083	1,023	15	0.1%
Construction	571,434	31,770	572	2.2%
Durable Manufacturing	1,359,191	74,380	1,453	5.6%
Nondurable Manufacturing	792,055	136,116	2,797	10.8%
Transportation, Communication and Utilities	904,967	27,399	541	2.1%
Wholesale Trade	557,905	39,762	752	2.9%
Retail Trade	2,010,420	453,221	8,900	34.5%
Finance, Insurance and Real Estate	784,757	27,890	527	2.0%
Business and Repair Services	985,838	98,033	1,823	7.1%
Personal Services	487,350	101,660	2,057	8.0%
Entertainment and Recreation Services	352,009	56,542	1,123	4.4%
Other Professional Services	2,691,069	141,939	2,780	10.8%
Public Administration	597,244	20,171	445	1.7%

Occupation:

Executives, Administrators, and Managers	1,753,810	38,525	673	2.6%
Professionals	1,883,690	38,934	716	2.8%
Technicians	433,006	8,809	137	0.5%
Sales Occupations	1,382,641	218,357	4,134	16.0%
Administrative Support Occupations	1,972,404	101,387	1,987	7.7%
Service Occupations	1,735,037	415,752	8,563	33.2%
Farming, Forestry and Fishing Occupations	401,443	118,950	2,240	8.7%
Precision Production, Craft and Repair Occupations	1,186,048	58,883	1,080	4.2%
Machine Operators, Assemblers and Inspectors	788,911	188,061	3,848	14.9%
Transportation and Material Moving Occupations	468,073	32,365	560	2.2%
Handlers, Equipment Cleaners, Laborers	505,966	98,430	1,877	7.3%

Table 5: Cost to Employers and Lost Income to CA Workers from Minimum Wage Increase

Group	Rise in Labor Cost if no Layoffs of Workers	Lost Income due to Layoffs	Net Rise in Cost of Labor to Employers
All	\$ 1,020,136,109	\$ 230,493,777	\$ 789,642,332
Industry:			
Agriculture	\$ 105,519,007	\$ 23,938,958	\$ 81,580,049
Mining	\$ 674,867	\$ 124,118	\$ 550,749
Construction	\$ 24,665,578	\$ 5,455,685	\$ 19,209,893
Durable Manufacturing	\$ 69,941,866	\$ 15,595,138	\$ 54,346,728
Nondurable Manufacturing	\$ 130,077,882	\$ 29,079,178	\$ 100,998,704
Transportation, Communication and Utilities	\$ 22,559,020	\$ 5,167,893	\$ 17,391,127
Wholesale Trade	\$ 32,454,498	\$ 7,500,152	\$ 24,954,346
Retail Trade	\$ 307,205,107	\$ 69,613,312	\$ 237,591,795
Finance, Insurance and Real Estate	\$ 19,799,742	\$ 4,509,517	\$ 15,290,225
Business and Repair Services	\$ 75,223,029	\$ 16,930,574	\$ 58,292,455
Personal Services	\$ 79,449,393	\$ 17,847,090	\$ 61,602,303
Entertainment and Recreation Services	\$ 36,005,517	\$ 8,245,392	\$ 27,760,125
Other Professional Services	\$ 99,466,254	\$ 22,409,626	\$ 77,056,628
Public Administration	\$ 17,094,349	\$ 3,831,033	\$ 13,263,316
Location:			
Non-Metro/Small Metro Areas	\$ 59,366,774	\$ 13,523,605	\$ 45,843,169
Los Angeles CMSA			
Los Angeles-Long Beach PMSA	\$ 386,919,289	\$ 86,840,368	\$ 300,078,921
Riverside-San Bernardino PMSA	\$ 67,834,607	\$ 15,514,025	\$ 52,320,582
Orange County PMSA	\$ 100,065,919	\$ 22,546,459	\$ 77,519,460
San Francisco CMSA			
Oakland PMSA	\$ 30,268,833	\$ 6,861,895	\$ 23,406,938
San Francisco PMSA	\$ 44,856,423	\$ 10,167,592	\$ 34,688,831
San Jose PMSA	\$ 34,553,042	\$ 7,802,708	\$ 26,750,334
Other San Francisco PMSAs	\$ 17,123,856	\$ 3,878,187	\$ 13,245,669
San Diego, MSA	\$ 73,943,059	\$ 16,825,651	\$ 57,117,408
Sacramento, MSA	\$ 30,230,054	\$ 6,825,111	\$ 23,404,943
Fresno, MSA	\$ 33,154,503	\$ 7,540,074	\$ 25,614,429
Bakersfield, MSA	\$ 31,290,442	\$ 7,285,884	\$ 24,004,558
Stockton, MSA	\$ 16,976,415	\$ 3,766,725	\$ 13,209,690
Other MSAs	\$ 95,166,563	\$ 21,805,855	\$ 73,360,708

1960 Kennedy Campaign Ad: Increase the Minimum Wage

In the 1960 presidential campaign against Richard Nixon, John F. Kennedy ran an ad in which he called for an increase in the minimum wage. In the ad, Kennedy sat in front of the camera and said:

“Mr. Nixon has said that a \$1.25 minimum wage is extreme. That’s \$50 a week. What’s extreme about that? I believe the next Congress and the President should pass a minimum wage for a \$1.25 an hour. Americans must be paid enough to live.”

[C-SPAN, “Road to the White House,” 4/28/96]

1961: JACK KENNEDY VS. BOB DOLE ON THE MINIMUM WAGE

In 1961, President John F. Kennedy fought for an increase in the minimum wage from \$1.00 to \$1.25. Representative Bob Dole opposed it, and voted against it; the bill passed. In 1996, Bob Dole continues to oppose increases in the minimum wage. Here is a chronology of events leading up to the 1961 minimum wage increase.

- 1960:** **Kennedy campaign ad calls for an increase in the Minimum Wage**
In the 1960 presidential campaign against Richard Nixon, John F. Kennedy ran an ad in which he called for an increase in the minimum wage. In the ad, Kennedy said: "Mr. Nixon has said that a \$1.25 minimum wage is extreme. That's \$50 a week. What's extreme about that? I believe the next Congress and the President should pass a minimum wage for a \$1.25 an hour. Americans must be paid enough to live." [C-SPAN, "Road to the White House," 4/28/96]
- 2/1/61** **Special Message to the Congress: Program for Economic Recovery and Growth.** President John F. Kennedy: "I urge the Congress to raise the minimum wage immediately to \$1.15 and to \$1.25 within two years. This will improve the incomes, level of living, morale, and efficiency of many of our lowest-paid workers, and provide incentives for their more productive utilization. . . Together, these two principal changes in the Fair Labor Standards Act will go far to protect our lowest paid workers." [Public Papers of the Presidents, John F. Kennedy, 1961, p. 49.]
- 2/7/61** **Kennedy transmits letter to Congress for Minimum Wage Bill.** In his "Letter to the President of the Senate and to the Speaker of the House Transmitting a Minimum Wage Bill," President Kennedy wrote: "Our Nation can ill afford to tolerate the growth of an under-privileged and under-paid class. Substandard wages lead necessarily to substandard living conditions, hardship and distress. Since the last increase in the minimum wage both living costs and productivity have increased to such an extent that the proposed bill merely reflects an adjustment to keep pace with these factors." [Public Papers of the Presidents, John F. Kennedy, 1961, p. 66.]
- 3/23/61** **President Kennedy holds a news onference supporting the minimum wage hike.** In the news conference, Kennedy said: "I find it difficult to know why anyone would oppose seeing somebody, by 1963, paid \$1.25 . . . And I find it difficult to understand how anybody could object to paying somebody who works in a business which makes over \$1 million a year, by 1963, \$50 a week. I think that anyone who is paid less than that must find it extremely difficult to maintain themselves and their family." [Public Papers of the Presidents, John F. Kennedy, 1961, p. 216.]

5/3/61

Dole Votes Against Passage of the Minimum Wage Increase

On May 3, 1961, Dole voted against adoption of the conference report on H.R. 3935, the Fair Labor Standards Amendments of 1961. The conference report raised the minimum wage for 23.9 million workers already covered by the Fair Labor Standards Act to \$1.25 an hour, reached in two steps over two years, and extended minimum-wage coverage (at \$1.25 an hour, reached after four years) and overtime coverage (with some exceptions) to about 3,624,000 additional workers, mainly in the retail trades. Agreed to 230-196 [CO Almanac, 1961, Vt. # 32, p. 572]

5/5/61

President Kennedy makes remarks upon signing the Minimum Wage Bill.
Upon signing the bill into law, Kennedy said: *"I want to express my great satisfaction in signing the bill to increase the minimum wage to \$1.25 an hour, and to extend the coverage to three million, six hundred thousand people today who are not covered by this most important piece of national legislation. . .*

I don't believe that there's any American who believes that any man or woman should have to work in interstate commerce, in companies of substantial size, for less than a \$1.25 an hour, or \$50 a week. That itself is a very minimum wage, and I therefore want to commend the Members of the Congress in the House and the Senate, the Chairmen of the Subcommittees who were particularly involved, under the leadership of the House and Senate, for their untiring efforts." [Public Papers of the Presidents, John F. Kennedy, 1961, p. 353.]

9/3/61

Kennedy makes remarks the Day the Minimum Wage Took Effect

"Today the legal minimum wage for millions of American workers increases. Some will receive higher minimum protection than before, and others will be protected for the first time.

"This advance in one of our great pieces of social legislation is one of the most important domestic accomplishments so far of this Administration. It represents the most significant advance in the Federal Wage and Hour Law since it was first passed 23 years ago.

"While the new minimums of \$1.15 per hour for workers presently covered by the law and of \$1.00 per hour for those newly covered are admittedly inadequate to provide the full material well-being that this great nation is capable of giving to each of its citizens, they still provide for millions of workers a chance to enjoy a greater share of our nation's general economic progress." [Public Papers of the Presidents, John F. Kennedy, 1961, p. 587.]

March 18, 1998

MEMORANDUM FOR GENE SPERLING

FROM: JON ORSZAG

SUBJECT: Interaction of Minimum Wage and EITC

Jake Schlesinger is interested in talking to you about the interaction of the minimum wage and EITC. We are not precisely sure what he is looking for, but I thought that the following material would be helpful.

The attached box from the *Economic Report of the President* provides a good theoretical argument for why the EITC and the minimum wage work best together. You should know that Larry Katz is a very strong believer in this fact. As you know, simply providing further expansions of the EITC is probably not a viable option to help low-income workers. Further expansions of the EITC are not really possible within our budgetary constraints. And expanding the credit would force us to raise the phase-out rate (unless we reduce the EITC's targeting at low-income families). Economists would argue that higher phase-out rates could create disincentives to work for those earning between \$12,000 to \$29,000. Moreover, the EITC provides lump-sum benefits to recipients at the end of the year, not on a paycheck to paycheck basis -- the way most low-income families need help.

The minimum wage, on its own, would not be an efficient way to raise the earnings of low-income families. In order to lift families out of poverty, it would have to be set *very* high -- which economists agree would cause adverse effects on hiring. Therefore, a moderate minimum wage with a significant EITC provides low-income families the benefits they need to lift their families out of poverty while not creating disincentives to work.

I have attached the evidence of the EITC on child poverty and the studies that show the EITC provides the incentive for single mothers to enter the workforce.

Finally, I have attached a table that shows without our minimum wage proposal, a three-person family (with one full-time minimum wage worker) would not be lifted out of poverty in 1999 or 2000. That is, a minimum wage increase is necessary to ensure that a single mother with two children can raise her kids out of poverty, if she works full-time.

incentives and community efforts to move people off of welfare and into employment. This has contributed to the largest reduction in welfare rolls in history.

The same long-term changes in the wage structure that give greater rewards to education and skill also imply that some workers will find it difficult to raise themselves and their families out of poverty, even with a full-time job. To make work pay, all those who work must be guaranteed a minimum level of earnings. The Administration has made an expansion of the earned income tax credit (EITC), which raises the take-home pay of eligible low-income workers, a cornerstone of its strategy to promote work and reduce poverty (Box 1-1). This expansion has occurred alongside two increases in the minimum wage (the second

Box 1-1.—Poverty Alleviation, the Earned Income Tax Credit, and the Minimum Wage

A typical cash assistance program guarantees its maximum benefit to those who receive no income, then phases out this benefit as the recipient's income from other sources (usually labor) rises. The disincentive to work that such programs create has been a major concern—perhaps *the* major concern—of policymakers with regard to welfare policy. These disincentives will persist so long as we confine ourselves to considering policies with this structure.

One way to avoid these work disincentive effects is to design programs that add to the wages of low-income workers. One such program, the earned income tax credit, was expanded substantially in 1993. Under the EITC, eligible low-wage workers receive a credit against their income and payroll tax liability; this credit is rebated in cash if the worker's income tax liability is zero. The EITC differs from the typical cash assistance program in that no benefits are paid to those who do not work, and benefits rise as earnings increase (up to some threshold earnings level). It therefore largely eliminates the typical program's work disincentive effects.

The minimum wage complements and enhances the EITC. When used by itself to guarantee a subsistence level of income, the minimum wage must be set very high. But an excessively high minimum wage (that is, substantially above the current one) could discourage hiring. On the other hand, using the EITC alone to guarantee an income floor would require payment of a large subsidy, which would then have to be phased out slowly to minimize the disincentive to earn additional income. This makes the program much more costly. Hence, the minimum wage and the EITC are best employed jointly in designing an optimal assistance package.

- **Expanded EITC For 15 Million Working Families.** In 1993, President Clinton and the Democrats provided tax cuts to 15 million hard-pressed working families. The average family with two kids who received the EITC got a tax cut of \$1,026.
 - **4.3 Million People Lifted Out of Poverty By EITC -- Double The Number in 1993.** In 1996, the EITC lifted 4.3 million people out of poverty -- that's 2.2 million more people than were lifted out of poverty by the EITC in 1993.
 - **Half of Fall In Child Poverty Due to EITC.** Using a measure of poverty that takes into account both taxes and transfers, the child poverty rate has declined by 4.7 percent between 1993 and 1996. The Council of Economic Advisers has concluded that about half of this decline is attributable to the recent expansion of the EITC.

EITC and Work. Recent evidence is pouring in showing that the EITC is helping to increase labor supply.

- Meyer and Rosenbaum (1997) find that annual labor force participation of single mothers has increased by nearly nine percentage points between 1984 and 1996 -- more than half of increase attributed to EITC expansions.
- Dickert, Hauser, and Scholz (1995) found that the 1993 EITC expansion would induce 516,000 families to move from welfare to work.
- Eissa and Liebman (1996) found that the EITC expansion of 1986 increased labor force participation among single women by 2.8 percent from 73.0 percent in to 75.8 percent (for women with less than a high school education the increase was 6.1 percent, raising participation to 54 percent).

		<u>Proposed</u>		<u>w/ No Increase</u>	
Year	1998	1999	2000	1999	2000
Minimum Wage	5.15	5.65	6.15	5.15	5.15
FT,YR MW Worker	10300	11300	12300	10300	10300
Poverty Threshold (3 People)	13222	13526	13824	13824	13824
Poverty Threshold (4 People)	16643	17009	17383	17383	17383
Earned Income Tax Credit	3729	3804	3880	3804	3880
FICA	788	864	941	788	788
MW+EITC	13241	14240	15239	13316	13392
Poverty Gap (3 Person Family)	\$19	\$714	\$1,415	(\$508)	(\$432)
Poverty Gap (4 Person Family)	(\$3,402)	(\$2,769)	(\$2,144)	(\$4,067)	(\$3,991)

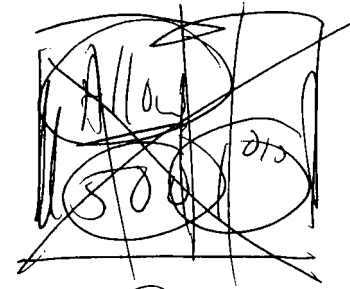
Earned Income Tax Credit Parameters 1997

	Credit Rate	Beginning Point	<u>Plateau</u> End Point	Maximum Credit	Phase-out Rate	Income Cut-off
<i>Current Law</i>						
Families with one child	34.0%	\$6,500	\$11,930	\$2,210	15.98%	\$25,760
Families with two or more children	40.0%	\$9,140	\$11,930	\$3,656	21.06%	\$29,290
Workers without children	7.65%	\$4,340	\$5,430	\$332	7.65%	\$9,770

Department of the Treasury
Office of Tax Analysis

December 24, 1996

Disqualified Income Amount: \$2,250



SOME REPUBLICAN CLAIMS ABOUT 1996/97 MINIMUM WAGE INCREASE

- **Republican National Committee Chairman Haley Barbour, 2/3/95:** "President Clinton's proposed minimum wage increase would cost over 500,000 jobs, and it would hurt the poor, the young, and the unskilled -- the most vulnerable in our society.... It would cost at least 500,000 jobs, according to the Congressional Budget Office, and *many authorities consider that estimate low.*"
- **Heritage Foundation, 5/17/95:** "Increasing the minimum wage to \$5.15 will result in around 400,000 lost entry-level job opportunities."
- **Heritage Foundation, 5/17/95:** "If one considers both teenagers and young adults (ages 16 to 24), raising the minimum wage to \$5.15 would result in about 508,000 to 677,000 jobs lost for this group of workers, according to a study by Neumark and Wascher."
- **Representative Jim Saxton, Vice Chairman of the Joint Economic Committee, 3/17/95:** "Based upon the finds of the [Minimum Wage Study Commission], we can anticipate that between 130,000 and 400,000 jobs will be lost if Mr. Clinton has his way."
- **Representative Richard Armey, 3/19/95:** "In 1988, the Congressional Budget Office estimated that increasing the minimum wage 70 cents per hour could cost as many as 500,000 jobs, with losses concentrated among low-skilled jobs that provide entry-level positions for millions of Americans."

What's Happened to the Economy Since the President Signed The Minimum Wage Increase in August 1996

Overall Economic Numbers:

- The unemployment rate has fallen from 5.2% to 4.6%.
- The economy has created nearly 4.6 million new jobs.
- The inflation rate has fallen from 2.9% to 1.6%. (From August 1995 to August 1996, the inflation rate was 2.9%; from Jan. 1996 to Jan. 1997, it was 1.6%.)

For Teenagers:

- The teen unemployment rate has fallen from 16.9% to 14.7% -- that's a slightly bigger percentage drop than the overall unemployment rate.
- Over 640,000 more teenagers are working now than in August 1996.
- The share of teenagers employed has increased from 42.4% to 45.5%.

For African-Americans:

- The African-American unemployment rate has fallen from 10.7% to 9.7%.
- 720,000 more African-Americans are working now than in August 1996.
- The share of African Americans employed has increased from 57.6% to 59.2% -- that's as high as its been on record.

For African-American Teenagers:

- The African-American teenage unemployment rate has fallen from 37.6% to 31.5%.
- Over 65,000 more African-Americans teenagers are working now than in August 1996.
- The share of African Americans teenagers employed has increased from 24.7% to 27.1%.

Economic Evidence on 1996/1997 Minimum Wage Increase:

- **Economic Policy Institute, 1997:** "These early results suggest clearly that: the higher minimum wage has substantially boosted the earnings of low-wage workers; the benefits of the minimum-wage increase went primarily to low-income working families; and *employment opportunities for teenagers and young adults -- groups that opponents of the minimum wage singled out as particularly vulnerable -- were not adversely affected by the increase.*"
- **Economists David Card and Alan Krueger, 1/98:** "We also use the ES-202 data to measure the effects of the 1996 increase in the federal minimum wage, which raised the minimum wage in Pennsylvania but not in New Jersey. *We find no indication of relative employment losses in Pennsylvania.*"

WHY IS THIS INCREASE MORE MODERATE THAN THE LAST INCREASE?

- **In Percentage Terms, This Increase Is Actually Smaller Than The Last One.** The last minimum wage increase -- from \$4.25 to \$5.15 -- was a 21-percent raise. This proposal -- raising the minimum wage from \$5.15 to \$6.15 -- is a 19-percent increase.

<u>Minimum Wage</u>		<u>Minimum Wage</u>	
1995	\$4.25	1998	\$5.15
1996	\$4.75	1999	\$5.65
1997	\$5.15	2000	\$6.15
'95-'97	21% Increase	'98-'00	19% Increase

- **In Real Terms, This Increase Is Smaller Than The Last One.** The last minimum wage increase was a 15-percent *real increase*. This proposal is a 14-percent *real terms*.

<u>Real Minimum Wage (in '97\$)</u>		<u>Real Minimum Wage (in '97\$)</u>	
1995	\$4.48	1998	\$5.04
1996	\$4.86	1999	\$5.41
1997	\$5.15	2000	\$5.76
'95-'97	15% Real Increase	'98-'00	14% Increase

- **With the Economy Stronger Today Than In 1996, It Is More Able To Absorb A Larger Increase In the Minimum Wage.** The labor market is tighter right now than in 1996 -- employers are searching more desperately for workers -- so the economy can more easily absorb a larger increase in the minimum wage without costing jobs. Today, the unemployment rate is 4.6 percent. In 1996, the unemployment rate was 5.4 percent. Over the past year, 3.4 million new jobs were created. In 1996, 2.5 million new ones were created.

REWARDING WORK BY RAISING THE MINIMUM WAGE

February 12, 1998

Today, President Clinton Is Proposing to Increase the Minimum Wage By \$1 in Two Steps To Help Raise Living Standards for 12 Million American Workers. In 1992, President Clinton promised to increase the minimum wage to help more families working hard but falling behind. In 1996, President Clinton signed into law a minimum wage hike, raising it from \$4.25 to \$5.15. But, there are still millions of workers trying to raise a family and struggling to make ends meet. With our economy the strongest in a generation, now is the time to help these workers make ends meet by raising the minimum wage again. The President's proposal would increase the minimum wage from \$5.15 to \$6.15 over two years, through a 50-cent increase on January 1, 1999 and a 50-cent increase on January 1, 2000. For someone who works full-time, this minimum wage increase will mean an additional \$2,000 per year.

- **A Higher Minimum Wage Will Help 12 Million Americans -- Mostly Adult Workers Trying To Support Their Families.** According to data from the Bureau of Labor Statistics, 12 million hourly paid workers earn between \$5.15 and \$6.14 and would directly benefit from this pay raise. Three-quarters (74%) of the workers who would benefit are adults, age 20 or over, and three-fifths (60%) are women, many of whom are trying to raise the family on \$5.15. About two-fifths of the workers who will benefit from the increase are the sole wage earner in their household, and the average minimum-wage worker brings home half of their family's earnings.
- **Valuing Work: Restoring the Value of the Minimum Wage.** President Clinton's proposal to increase the minimum wage by \$1 in two equal steps -- combined with the previous 90-cent increase -- simply restores the real value of the minimum wage to what it was when President Reagan took office in 1981. During President Reagan's eight years in office, the real value of the minimum wage *fell* more than 25 percent. This increase -- in percentage terms -- is in line with previous ones that helped low-wage workers without adversely affecting the economy: both this proposal and the last one increase the minimum wage by about 20 percent.
- **Helping Ensure Parents Can Raise Their Children Out of Poverty.** In 1993, President Clinton expanded the Earned Income Tax Credit (EITC), helping to lift hundreds of thousands of working families out of poverty. Today, with the previous minimum wage increase and the expanded EITC, parents who work full-time do not have to bring up their children in poverty. This increase will help ensure that -- as costs continue to increase -- parents who work hard and play by the rules can bring up their children out of poverty.
- **Evidence from Last Minimum Wage Increase Is Clear: 10 Million Workers Got A Raise and No Jobs Were Lost.** The last minimum wage increase provided a pay raise to 10 million workers, and since the President signed the minimum wage increase into law in August 1996, the economy has created new jobs at an historically high pace of 250,000 per month; the inflation rate has declined from 2.9 percent to 1.7 percent; and the unemployment rate has fallen to 4.7 percent -- its lowest level in 25 years. For teenagers, African-Americans, and women, unemployment is down and employment rates are up.
- **This Is Consistent With Empirical Evidence That Shows Moderate Minimum Wage Increases Do Not Cost Jobs.** Two dozen empirical studies have found that moderate increases in the minimum wage do not have significant effects on employment. These studies include state-specific research in California, Texas, and New Jersey that show that state minimum wage increases did not result in any job loss.

Q: WON'T RAISING THE MINIMUM WAGE COST JOBS?

A: No, Raising the Minimum Wage Will Help Lift Living Standards for 12 Million Workers and Will Not Cost Jobs. In August 1996, President Clinton raised the minimum wage by 90 cents, from \$4.25 to \$5.15. Since then, the economy has performed tremendously:

- **More Jobs, Less Unemployment, And Inflation Is Down.** Since the President signed the minimum wage increase, the unemployment rate has fallen from 5.2% to 4.6% -- its lowest level in 25 years; the economy has created new jobs at an historically fast pace of 253,000 per month -- that's nearly 4.6 million new jobs since August 1996; and the inflation rate has declined from 2.9 percent to 1.6 percent.
- **Teenage Unemployment Is Down.** Since the President signed the minimum wage increase, the teenage unemployment rate has fallen from 16.9% to 14.7%; over 650,000 more teenagers are working now than in August 1996; and the share of teenagers employed has increased from 42.4% to 45.5%.
- **African-American Teenage Unemployment Is Down.** Since August 1996, the African-American teenage unemployment rate has fallen from 37.6% to 31.5%; over 65,000 more African-Americans teenagers are working now than in August 1996; and the share of African Americans teenagers employed has increased from 24.7% to 27.1%.

Evidence Suggests that 1996 Minimum Wage Increase Did Not Cost Jobs. A study by two leading labor economists found "*no indication of relative employment losses*" because of the 1996 minimum-wage increase. And the Economic Policy Institute concluded that "[T]he higher minimum wage has substantially boosted the earnings of low-wage workers; the benefits of the minimum-wage increase went primarily to low-income working families; and *employment opportunities for teenagers and young adults - groups that opponents of the minimum wage singled out as particularly vulnerable - were not adversely affected by the increase.*"

- **Empirical Evidence Shows Moderate Minimum Wage Increases Do Not Cost Jobs.** *Two dozen* empirical studies have found that moderate increases in the minimum wage do not cost jobs. These studies include state-specific research in California, Texas, and New Jersey that shows that state minimum wage increases did not result in any job loss.

Q: WON'T RAISING THE MINIMUM WAGE CAUSE PRICES TO RISE?

A: There Is No Evidence To Suggest That Raising the Minimum Wage Causes Inflation. In the year before the President signed the 1996 minimum wage increase, the inflation rate was 2.9 percent. Over the past year, it has been 1.6 percent. With inflation down since the last minimum wage increase, it is difficult to argue that raising it again will cause inflation to go up.

Q: WHY ARE YOU PROPOSING TO RAISE THE MINIMUM WAGE SO SOON AFTER THE LAST INCREASE?

A: With the Economy Strong, Now Is A Good Time To Raise the Minimum Wage. The labor market is extremely tight right now -- employers are searching desperately for workers - - so the economy can absorb an increase in the minimum wage without costing jobs.

We Are Restoring the Minimum Wage To Its Historic Value. Ronald Reagan was the first elected President not to sign a minimum wage increase into law. During his eight years in office, the real value of the minimum wage *fell* more than 25 percent. President Clinton's proposal to increase the minimum wage by \$1 in two equal steps -- combined with the previous 90-cent increase -- will restore the real value of the minimum wage to that when President Reagan took office.

We Are Helping To Parents Can Raise Their Children Out of Poverty At The Turn of the Century. In 1993, President Clinton expanded the Earned Income Tax Credit (EITC), helping to lift hundreds of thousands of working families out of poverty. Today, with the previous minimum wage increase and the expanded EITC, parents who work full-time can bring up their children out in poverty. However, at the turn of the century, this will no longer be true because costs will continue to increase while the minimum wage does not. Therefore, we need to raise the minimum wage to ensure that every parent who works hard and play by the rules can bring up their children out of poverty.

Q: WHY ARE YOU PROPOSING A BIGGER INCREASE THIS TIME THAN YOU DID LAST TIME AROUND?

A: The Evidence From The Last Minimum Wage Increase Clearly Shows 10 Million People Got A Raise And Jobs Were Not Lost. Since the President signed the minimum wage increase, the unemployment rate has fallen from 5.2% to 4.6% -- its lowest level in 25 years; the economy has created more than 4.5 million new jobs; and the inflation rate has declined.

With the Economy Stronger Today Than In 1996, It Is More Able To Absorb A Larger Increase In the Minimum Wage. The labor market is tighter right now than in 1996 -- employers are searching more desperately for workers -- so the economy can more easily absorb a larger increase in the minimum wage without costing jobs.

In Percentage Terms, This Increase Is Actually Smaller Than The Last One. The last minimum wage increase -- from \$4.25 to \$5.15 -- was a 21-percent raise. This proposal -- raising the minimum wage from \$5.15 to \$6.15 -- is a 19-percent increase.

Q: ISN'T THIS PROPOSAL JUST A POLITICAL PLOY BY THE PRESIDENT TO GAIN SUPPORT OF LIBERAL DEMOCRATS?

A: President Clinton Has Always Supported Raising the Minimum Wage -- from the Campaign in 1992 to the Present. For five years, President Clinton has fought for provisions that would raise the standard of living of hard-working families, including: raising the minimum wage, expanding the Earned Income Tax Credit, and providing health care coverage for working families. This minimum wage proposal continues the President's previous commitments to help working families.

Q: WON'T RAISING THE MINIMUM WAGE HURT SMALL BUSINESSES?

A: No, There Is Little Evidence That the Last Minimum Wage Increase Hurt Small Businesses. According to Dun & Bradstreet, we had a record number of new small businesses in last year -- so the minimum wage hasn't seemed to adversely affect small businesses. And as the *Wall Street Journal* (10/27/97) wrote: "In April 1996, David Rosenstein, a fast-food entrepreneur, staunchly opposed a proposed two-step rise to \$5.15 an hour as 'a bad idea.' The middle managers at his 13 Popeyes Chicken & Biscuits restaurants didn't know how they would cope. How times have changed. Today, despite the now-higher minimum wage, Mr. Rosenstein's restaurants are prospering. Operating profits are up 11% from last year..."

Q: DIDN'T PRESIDENT CLINTON OPPOSE INCREASING THE MINIMUM WAGE IN 1993?

A: President Clinton has always supported the minimum wage -- and he has NEVER opposed a minimum wage increase. President Clinton has always supported increasing the minimum wage -- from the campaign in 1992 to the present.

- In *Putting People First*, Bill Clinton and Al Gore promised to "increase the minimum wage to keep pace with inflation." In fact, as Governor of Arkansas, Bill Clinton supported two increases in the state minimum wage. And he changed state minimum wage law to cover more workers.
- In February 1995, President Clinton proposed increasing the minimum wage by 90-cents over two years.
- In Aug. 1996, President Clinton signed into law a 90-cent minimum wage increase.
- In Oct. 1996 and Sept. 1997, the President's minimum wage increase took effect.
- In January 1998, President Clinton proposed raising the minimum wage again.

BACKGROUND: There is a *Time* magazine quote from 1995 that alludes to President Clinton's opposition to the minimum wage in 1993. But, President Clinton didn't say any such thing. The statement *Time* refers to does not appear in any transcript, tape, or speech text.

Q: WON'T RAISING THE MINIMUM WAGE HURT WELFARE-TO-WORK EFFORTS IN THE STATES?

A: No. An increase in the minimum wage will support the goals of welfare reform by ensuring that wages keep up with the cost of living and people leaving welfare for work can support their families and break the cycle of dependency.

This increase will not make it substantially more difficult for states to meet the welfare law's work participation rates (30 percent in FY 1998, rising to 40 percent in 2000 and 50 percent by 2002). While states that put welfare recipients in workfare programs will of course have to pay them the new minimum wage, such workfare programs are only a small part of most states' welfare-to-work efforts. These efforts focus primarily on getting welfare recipients private sector jobs, and can also include work-related activities like job search, vocational education, and high school (for teenagers).

For states that do chose to create workfare programs, we have helped them pay the minimum wage by allowing them to count not only cash assistance, but also food stamps, toward the wage. The dramatic drop in welfare caseloads further ensures that states will have adequate funding to pay workfare participants the minimum wage, because under the welfare law, states receive fixed block grants regardless of welfare caseloads.

THE IMPACT OF A MINIMUM WAGE INCREASE ON SMALL BUSINESS

President Clinton's Proposal Would Increase the Minimum Wage By \$1 in Two Steps To Help Raise Living Standards for 12 Million American Workers. In 1992, President Clinton promised to increase the minimum wage to help more families working hard but falling behind. In 1996, President Clinton signed into law a minimum wage hike, raising it from \$4.25 to \$5.15. And, in 1997, we had a record number of new small businesses -- so the minimum wage hasn't seemed to adversely affect small businesses. Our economy is the strongest in a generation and small businesses prospering. The President's proposal would increase the minimum wage from \$5.15 to \$6.15 over two years, through a 50-cent increase on January 1, 1999 and a 50-cent increase on January 1, 2000.

- **The Smallest Businesses -- Such as Many Mom And Pop Stores -- Do Not Have to Abide by The Federal Minimum Wage Law.** Businesses that do not have annual sales in excess of \$500,000 or employees that participate in interstate commerce are not covered by the Federal minimum wage law. This means that many small businesses will not be affected by an increase in the Federal minimum wage.
- **Most Small Businesses Already Pay Above The Minimum Wage, And Half of Minimum Wage Earners Work in Large Firms.** Previous evidence suggests that ninety percent of workers in small businesses earn more than the current minimum wage, and about half of minimum wage earners work in firms with more than 100 employees. An increase in the minimum wage will, therefore, have little effect on the majority of small businesses.
- **Small Businesses That Are Affected by a Higher Minimum Wage Will Find it Easier to Recruit, Retain, Train, And Motivate Their Workers.** Five dollars and fifteen cents per hour is not much of an incentive for people to look for a job. A \$1 increase in the minimum wage will entice more workers to enter the labor force, which will make it easier for businesses to fill job openings. Small businesses will not have to spend weeks -- or even months -- trying to find workers. A rise in the minimum wage will also help reduce job turnover, so businesses will be able to retain their workers. With less turnover, small businesses will be more willing to train their workforce, increasing their productivity and quality of work. Finally, workers will have a greater incentive to work harder when their wages are increased.
- **Many Small Businesses Have Found Minimum Wage Increases Manageable:**
 - As the *Wall Street Journal* (10/27/97) wrote: "In April 1996, David Rosenstein, a fast-food entrepreneur, staunchly opposed a proposed two-step rise to \$5.15 an hour as 'a bad idea.' The middle managers at his 13 Popeyes Chicken & Biscuits restaurants didn't know how they would cope. How times have changed. Today, despite the now-higher minimum wage, Mr. Rosenstein's restaurants are prospering. Operating profits are up 11% from last year..."
 - When New Jersey increased the minimum wage in 1992, many business leaders complained that it would cost profits and jobs. However, as one small businessman commented afterward the increase on WNYC's *On the Line*: "I'm a small business owner here in Newark, New Jersey and I did study business and I always thought that raising the minimum wage would affect negatively a lot of people in the lower income levels [and small business owners]... As it turns out it was no big deal... Before, I hired people at \$4.25 and I didn't expect much and I didn't get much from them. Now, at \$5.00, I'm somewhat more careful and it certainly hasn't affected my business that much."

STUDIES THAT CONCLUDE A MODERATE INCREASE IN THE MINIMUM WAGE DOES NOT COST JOBS

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TALKING POINTS FOR MINIMUM WAGE EVENT:

- In 1992, President Clinton said that he wanted to make work pay to help ensure that parents who work full-time can raise their children out of poverty. To this end -- without a single Republican vote -- President Clinton expanded the Earned Income Tax Credit (EITC) in 1993, providing tax relief to 15 million hard-pressed working families.
- In February 1995 -- with the EITC and minimum wage no longer enough to lift a family of three out of poverty -- President Clinton proposed increasing the minimum wage so that a single mother could raise two children out of poverty. With Senator Kennedy and Rep. Bonior's hardwork, the President signed that bill and raised the minimum wage for nearly 10 million workers in 1996.
- We must make work pay, and the evidence clearly shows that this two-pronged approach -- an expanded EITC and a higher minimum wage -- is the best way to help America's working families get ahead.
 - Last month, the Council of Economic Advisers reported that the child poverty rate declined 4.7 percentage points between 1993 and 1996. The Council found that more than half of this decline (2.5 percentage pts.) was due to the expanded EITC. They also found that more than the rest of the drop (3.0 percentage pts.) in child poverty was due to increased income for these hard-pressed families. The minimum wage -- along with the strong economy -- is certainly a main reason why the incomes of low-wage families are rising again.
- We should not be surprised by this result. There is a strong theoretical case to make that the most efficient way to provide assistance to low-income families is to jointly use the EITC and the minimum wage. Recent academic evidence shows that the EITC is very effective at helping to bring single mothers into the workforce. The minimum wage complements and enhances the EITC by providing an additional incentive -- a higher wage -- for single moms to choose work over welfare. When used by itself to guarantee a subsistence level of income, the minimum wage would have to be set very high -- at least a third higher than it is today. On the other hand, using the EITC alone would require a substantially larger credit than is provided today. The most important partners in Washington are not Alan Greenspan and Andrea Mitchell -- they are the minimum wage and the Earned Income Tax Credit.
- If we don't increase the minimum wage, we can no longer ensure that parents who work hard and play by the rules can raise their family out of poverty. This year, a full-time minimum wage worker will earn \$10,300 -- after-taxes (EITC minus payroll taxes), this worker would bring home \$13,240 -- just above the poverty line for three-people. But, as costs rise, this will no longer be true.
- That is why President Clinton strongly supports the legislation Senator Kennedy and Representative Bonior are submitting today to raise the minimum wage by \$1 by the turn of the century. With the economy strong and unemployment at its lowest level in a quarter century, there is no better time to raise the minimum wage for 12 million low-wage workers. This proposal will help ensure that -- as costs continue to increase -- we fulfill President Clinton's goal of making work pay and ensuring that parents who work full-time can bring up their children out of poverty. We hope that this legislation receives the same bipartisan support that the last minimum wage increase received. Sixty years ago, Franklin Roosevelt said that, except for Social Security, the minimum wage and the Fair Labor Standards Act is the most "far-sighted program for the benefit of workers ever adopted here or in any other country." Let us keep it that way.

WHO BENEFITS FROM A MINIMUM WAGE INCREASE?

- According to data from the Bureau of Labor Statistics, there are 12 million hourly paid workers earning between \$5.15 and \$6.14 per hour.
- Nearly 8.9 million -- 74 percent -- of these workers are adults, age 20 or over.
- Nearly 7.3 million -- 61 percent -- of these workers are women.
- Just over 1.9 million -- 16 percent -- of these workers are African American, including 667,000 African-American men and 1.2 million African-American women.
- Nearly 2.2 million -- 18 percent -- of these workers are Hispanic, including almost 1.1 million Hispanic men and 1.1 million Hispanic women.
- Over 5.7 million -- 48 percent -- of these workers work more than 35 hours per week.

Did the Minimum-Wage Increase Boost Wages?

The economic impact of the \$0.50 increase depends on the share of the workforce earning between \$4.25 and \$4.74 an hour. If few workers were affected by the increase, the impact should be negligible. But if many workers were affected, the impact on wages, incomes, and perhaps employment should be significant.

Economists traditionally use the economic impact of minimum-wage increases on teens and young adults as an indication of the probable impact on low-wage workers of all ages.¹ This study follows that procedure by focusing on the employment and earnings of teenagers age 16-19 and young adults age 20-24. Since these workers are just beginning their working lives, a large share of them earn low wages. This is not to say, however, that most minimum-wage workers are teenagers. While a disproportionate share of teenagers earn the minimum wage, most minimum-wage workers are adults. Prior to the increase in October, for example, 66% of workers earning between \$4.25 and \$4.75 were age 20 or older.

The \$0.50 increase in the minimum wage on October 1, 1996 had a substantial positive effect on the wages of teenagers and young adults. **Table 1A** displays the wage distribution for teenage and young adult workers in the six months immediately before the increase; **Table 1B** reports the same information for the six months immediately following the increase (see the data appendix for a full description of the wage information). The data in Table 1A show that, just prior to the increase, 9.8% of teenagers earned exactly \$4.25 (the old value of the minimum wage) and another 10.2% earned between \$4.26 and \$4.74. The data in Table 1B show that, after the increase, the share of teenage workers earning exactly \$4.25 fell to 2.7%, and the share earning between \$4.26 and \$4.74 declined to 5.5%. Over the same two periods, the share of teenage workers earning exactly \$4.75 (the new minimum wage) increased from 2.9% to 11.5%. The data for young adults show similar, but smaller, changes. The share of young adults in the wage range (\$4.25-\$4.74) affected by the October 1 increase fell from 6.7% to 3.0%, while the share at the new minimum wage of \$4.75 rose from 1.1% to 3.2%.²

The minimum wage had the biggest impact on the wages of black and Hispanic teenagers.³ Before the October 1 increase, 31.2% of black teens and 24.8% of Hispanic teens earned between \$4.25 and \$4.74. After the increase, the share of workers in this range fell to 14.3% for black teens and 5.2% for Hispanic teens. In the six months before the minimum-wage hike, only 3.9% of black teens earned \$4.75, but over the six months after the increase, the share climbed to 11.9%. For Hispanic teens, the share earning \$4.75 was 2.5% before October 1; it jumped to 14.8% after the increase.⁴

Some economists have argued that increases in the minimum wage will affect the wages of workers above the new \$4.75 level because employers will raise wages of these better-paid workers in order to maintain relative pay differences within the firm (see, for example, Spriggs and Klein 1994). The wage data show some signs of these “spillover” effects, especially for black male and Hispanic female teenagers. **Table 1C** reflects signs of such spillovers.⁵ For example, the share of black male teenagers earning exactly \$4.75 grew 9.1 percentage points after the increase. At the same time, the share earning between \$4.76 and \$5.14 per hour — a range above the level required by law — increased 12.7 percentage points; even the share of those earning \$5.15 or more rose 7.3 percentage points. Similarly, for Hispanic female teens, the share of workers earning \$5.15 or more jumped 9.6 percentage points after the October 1 increase.

**A Reanalysis of the Effect of the New Jersey Minimum Wage Increase
on the Fast-Food Industry with *Representative* Payroll Data**

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A Reanalysis of the Effect of the New Jersey Minimum Wage Increase
on the Fast-Food Industry with Representative Payroll Data

Abstract

This paper re-examines the effect of the 1992 New Jersey minimum wage increase on employment in the fast-food industry. We begin by analyzing employment trends using a comprehensive new data set derived from the Bureau of Labor Statistics's ES-202 data file. Both a longitudinal sample and a repeated-cross-section sample drawn from these data indicate very similar or slightly faster employment growth in New Jersey relative to eastern Pennsylvania after the rise in New Jersey's minimum wage, consistent with the main findings of our earlier survey. We also use the ES-202 data to measure the effects of the 1996 increase in the Federal minimum wage, which raised the minimum wage in Pennsylvania but not in New Jersey. Consistent with the earlier experiences, we find no indication of relative employment losses in Pennsylvania. In light of these findings, we go on to re-examine employment trends in the sample of fast-food restaurants assembled by the Employment Policies Institute (EPI) and David Neumark and William Wascher. The differences between this sample and both the BLS data and our earlier sample are attributable to a small set of restaurants owned by a single franchisee who provided the original Pennsylvania data for a 1995 EPI study. We also find that employment trends in the EPI/Neumark-Wascher sample are strikingly different for firms that reported their data on a weekly, biweekly or monthly basis, possibly because of seasonal factors. Controlling for the systematic effects of the reporting period, the combined EPI/Neumark-Wascher sample shows no difference in hours growth between New Jersey and Pennsylvania.

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Introduction

Replication and reanalysis are important endeavors in economics, especially when new findings run counter to conventional wisdom. In their comment on our 1994 American Economic Review article, Neumark and Wascher (1997) challenge our conclusion that the April 1992 increase in the New Jersey minimum wage led to no loss of employment in the fast-food industry. Using data on a non-randomly selected set of restaurants initially collected for Richard Berman of the Employment Policies Institute (EPI) and later supplemented by their own data collection efforts, Neumark and Wascher (hereafter NW) conclude that "... the New Jersey minimum wage increase led to a relative decline in fast-food employment in New Jersey" compared to Pennsylvania.¹ They attribute the discrepancies between their findings and ours to problems in our fast-food restaurant data set. Specifically, they argue that our use of employment data derived from telephone surveys, rather than from payroll records, led us to draw faulty inferences about the effect of the New Jersey minimum wage.

In this paper we attempt to reconcile the contrasting findings by analyzing administrative employment data from a new *representative* sample of fast-food employers in New Jersey and Pennsylvania, and by re-analyzing NW's data. Most importantly, we use the Bureau of Labor Statistics's (BLS's) ES-202 data file to examine employment growth of fast-food restaurants in a set of major chains in New Jersey and nearby counties of Pennsylvania.² We draw two samples from the ES-202 files: a longitudinal sample that tracks establishments between 1992 and 1993, and a series of repeated cross-sections from the end of 1991 through 1996. Because the

¹In the March 1995 version of their paper, NW relied exclusively on 71 observations collected by EPI. Subsequent versions have also included information from their supplemental data collection.

²The ES-202 data are also known as the Business Establishment List. Persons employed by an eligible organization may apply to BLS for restricted access to ES-202 data for statistical research purposes.

BLS data are derived from Unemployment Insurance payroll records, the employment measures are free of the kinds of survey errors that may have affected our earlier results. In addition, because the ES-202 data include information for every covered employer, there is no reason to doubt the representativeness of the BLS sample.

A comparison of fast-food employment growth in New Jersey and Pennsylvania over the period of our original study confirms the main findings in our 1994 paper, and calls into question the representativeness of the sample assembled by Berman, Neumark, and Wascher. Most importantly, the BLS fast-food data indicate slightly faster employment growth in New Jersey than in the Pennsylvania border counties over the time period that we initially examined, although in most specifications the difference between New Jersey and Pennsylvania is small and statistically insignificant. We use the BLS data to examine longer-run effects of the New Jersey minimum wage increase, and to conduct a preliminary analysis of the effect of the 1996 increase in the Federal minimum wage, which was binding in Pennsylvania but not in New Jersey (where the state minimum wage was already above the new federal standard). Our analysis of this new policy intervention is consistent with the conclusion that modest changes in the minimum wage have little systematic effect on employment.

In light of these findings we go on to re-examine the Berman-Neumark-Wascher (BNW) sample and evaluate NW's contention that the rise in the New Jersey minimum wage caused employment to fall in the state's fast-food industry. Our re-analysis leads to three main conclusions. First, the pattern of employment growth in the BNW sample of fast-food restaurants across chains and geographic areas within New Jersey is quite consistent with our original survey data. The differences between the BNW sample and ours are attributable to differences in the sample of Pennsylvania restaurants in their data set, which unlike our original sample and the

BLS data, show a rise in fast-food employment in the state. Second, the anomalous behavior of the BNW Pennsylvania sample is driven entirely by restaurants owned by one franchisee, who apparently provided the earliest data to EPI and comprised the entire EPI sample of Pennsylvania franchises. Third, the patterns of employment changes (or more precisely, scaled hours changes) across different restaurants in the BNW sample vary systematically with the period over which the data were reported. In particular, establishments that reported on a bi-weekly basis had faster growth than those that reported on a monthly or weekly basis. The reporting periods may matter because of different seasonal factors in the two waves of the BNW sample (e.g., holidays or weather) or because of imperfect scaling of hours. In any case, a disproportionately high fraction of Pennsylvania restaurants reported their data in bi-weekly intervals, leading to a relative overstatement of employment growth in that state. Once this peculiar feature of the sample is taken into account, the BNW data indicate virtually no difference in hours growth in New Jersey and eastern Pennsylvania.

Based on all the evidence now available, including the BLS sample, our earlier sample, and the BNW sample, we conclude that the increase in the New Jersey minimum wage in April 1992 had little or no systematic effect on total fast-food employment in the state, although there may have been individual restaurants where employment rose or fell in response to the higher minimum wage.

I. Analysis of Comprehensive BLS Fast-Food Restaurant Sample

A. Description of BLS ES-202 Data

To examine the effect of the New Jersey minimum wage increase with representative payroll data, we applied to the BLS for permission to analyze their ES-202 data. The ES-202 data consist of quarterly employment records reported by employers to their state Employment Security Agencies. The first question on the New Jersey tax form requests the "Number of covered workers employed during the pay period which includes the 12th day of each month."³ The BLS maintains these data as part of the Covered Employment and Wages Program. We analyze two types of samples from the ES-202 file: a longitudinal file and a series of repeated cross-sections.

The longitudinal sample consists of restaurants belonging to a set of the largest fast-food chains.⁴ Restaurants in the sampled chains employed 13 percent of all employees in the eating and drinking industry in New Jersey and eastern Pennsylvania in 1992. There is considerable overlap between the restaurants in the BLS sample and in our original sample. Restaurants in the sampled chains were identified by a name search in the name and unit description fields of the ES-202 file. This search was conducted on all establishments in the eating and drinking industry (SIC 5812) in New Jersey and eastern Pennsylvania in the first quarter of 1991, first quarter of 1994, and fourth quarter of 1996. The observations were inspected in these quarters to eliminate establishments that were not restaurants in the relevant chains, or to add restaurants

³The first question on the Pennsylvania form requests the "Total covered employees in pay period incl. 12th of month." Employers are asked to report employment for each month of the quarter. A copy of these forms is available from the authors on request.

⁴For confidentiality reasons, BLS has requested that we not reveal the identity or number of these chains. We can report, however, that there are fewer than 10 chains in the sample.

that were missed by the algorithm used in the computerized name search. If a restaurant in one of the fast-food chains was discovered that was not identified by the name search, the computer algorithm was amended to include that name.

The original Card-Krueger (CK) sample contained data on restaurants in 7 counties of Pennsylvania (Bucks, Chester, Lackawanna, Lehigh, Luzerne, Montgomery, and Northampton). Because this is a somewhat idiosyncratic group -- with some counties located right on the New Jersey border and others off the border -- we decided to expand the sample to include 7 additional counties: Berks, Carbon, Delaware, Monroe, Philadelphia, Pike, and Wayne. In the results that follow, we present estimates for both our original 7 counties and for the larger set of 14 counties.

Once restaurants in the relevant chains and counties were identified, we merged data on the restaurants for selected months between the first quarter of 1992 and the fourth quarter of 1994.⁵ To mirror the CK sample, only establishments with nonzero employment in February or March of 1992 -- the months covered by Wave 1 of our survey -- were included in the longitudinal analysis file.⁶ The final data set contains 687 establishments. A total of 16 (2.3 percent) of these establishments had zero or missing employment in November or December of 1992, the months covered by Wave 2 of our survey. These establishments either closed or could not be tracked because their reporting information changed.

⁵The ES-202 file also contains total quarterly payroll data. These data are problematic for our purposes, however, because any salary drawn by the franchise owner should be included in this field for incorporated restaurants. Thus, if an increase in workers' earnings is offset by a decline in the owner's profit, the quarterly payroll data will not reflect the increase in workers' wages.

⁶Additionally, to ensure that the sample consisted exclusively of restaurants (as opposed to, e.g., headquarters or monitoring posts), the authors restricted the sample to establishments with an average of 5 or more employees in February and March 1994, and average monthly payroll per employee below \$3,000 in 1992:Q1 and 1992:Q4. These restrictions eliminated 17 observations from the original sample of 704 observations.

A potential limitation of the BLS longitudinal sample for the present paper should be noted. The ES-202 data pertain to "reporting units" that may be single establishment units or multi-establishment units. The BLS encouraged employers to report their data at the county level or below in the early 1990s. Some employers were in the process of switching to a county-level reporting basis during our sample period. Consequently, some restaurants that remained open were difficult to track because they changed their reporting identifiers. Fortunately, most of the restaurants that were in this situation could be tracked by searching addresses and other characteristics of the stores. All of the restaurants that were not linked to subsequent months' data were assumed closed and assigned zero employment for these months, even though some of these restaurants may not have closed. This is probably a more common occurrence for New Jersey than Pennsylvania: 0.4 percent of the Pennsylvania restaurants had zero or missing employment at the end of 1992, as compared to 3.4 percent of New Jersey restaurants. In our original survey, 1.3 percent of Pennsylvania restaurants and 2.7 percent of New Jersey restaurants were temporarily or permanently closed at the end of 1992.⁷

Also note that because firms are allowed to report on more than one unit in a county in the BLS data, some of the records reflect an aggregation of data for multiple establishments. We address both of these issues in the analysis below. Perhaps most importantly, these problems do not apply to the cross-sectional files that we also analyze.

To draw the repeated cross-section file, the same name search algorithm was applied each quarter between 1991:Q4 and 1996:Q4.⁸ This time period spans the months covered in our

⁷An interviewer visited all of the non-responding stores in both states to determine if they were closed in our original survey.

⁸Because of a relatively high frequency of imputations, we do not use data prior to 1991:Q4.

original survey. Again, data were selected for the same chains in New Jersey and the 14 counties in eastern Pennsylvania. The cross-sectional estimates probably provide the cleanest estimates of the effect of the minimum wage increase because they incorporate the births as well as deaths of restaurants, and because possible problems caused by changes in reporting units over time are minimized.

B. Summary Statistics and Differences in Differences

Table 1 reports basic employment summary statistics for New Jersey and for the Pennsylvania counties, before and after the April 1992 increase in New Jersey's minimum wage. Panel A is based on the BLS sample of fast-food restaurants. In the first row, the "before" period pertains to average employment in February and March of 1992, and the "after" pertains to average employment in November and December of 1992.⁹ The second row reports employment figures for February and November, which were the most common survey months in our survey. The third row uses data spanning a 12-month period, from March 1992 to March 1993. Finally, for comparison, Panel B of Table 1 reports the corresponding employment statistics calculated from the CK survey.¹⁰

Several conclusions are apparent from the means in Table 1. First, the BLS data indicate a slight rise in employment in New Jersey's fast-food restaurants over the period we studied, and a slight decline in employment in Pennsylvania's restaurants over the same period. Our telephone

⁹In one case, employment was zero in March 1992, so the February figure was used.

¹⁰For comparability with BLS data, we calculate total employment in our survey data by adding together the number of full-time, part-time and managerial workers. This approach differs from Card and Krueger (1994), which weights part-time workers by 0.5 to derive full-time equivalent employment.

survey data indicate a net gain in New Jersey relative to Pennsylvania of 2.4 workers per restaurant, whereas the BLS data in row 2 indicate a smaller net gain of 1.1 workers between February and November of 1992. Second, between March 1992 and March 1993, the BLS data indicate that both New Jersey and Pennsylvania experienced a decline in average employment, with the decline being larger in Pennsylvania. Third, the average employment level in the BLS data is somewhat greater than the average level in our data, probably because some of the observations in the BLS data pertain to multiple establishments. Fourth, our data and the BLS data indicate that average restaurant size was initially larger in Pennsylvania than in New Jersey. By contrast, the BNW data set indicates that "full-time equivalent employment" was initially greater in New Jersey than in Pennsylvania (see Section III below). Finally, the BLS data indicate that the results for the 7 Pennsylvania counties that we used in our initial sample and the wider set of 14 counties are generally similar.

Neumark and Wascher (1997) and others have emphasized the fact that the dispersion in full-time employment changes in our data set is greater than the dispersion in changes in total hours worked in the BNW data. Interestingly, the BLS data display roughly the same standard deviation of employment changes as was found in our original sample. For New Jersey, for example, the standard deviation of the change in employment across reporting units between February and November of 1992 was 10.12 according to the BLS data, which slightly exceeds the standard deviation calculated from our survey data over approximately the same months. One problem with this comparison is that some of the BLS reporting units combine multi-establishment restaurants that may have broken out over time, whereas our unit of observation was consistently the individual restaurant. To address this issue, we restricted the BLS sample

to reporting units that initially had fewer than 40 employees; reporting units this size are almost certainly individual restaurants. The standard deviation of employment changes for this truncated BLS sample is 9.0 for New Jersey and 6.8 for Pennsylvania; these figures compare to 8.0 and 8.8, respectively, if we likewise truncate our survey data.

More generally, the criticism that our telephone survey was flawed because the employment data displayed a high degree of dispersion strikes us as off the mark for three other reasons. First, reporting errors in employment data collected from a telephone survey are not terribly surprising. Dispersion in our data is not out of line from that in other establishment-level employment surveys (e.g., Davis, Haltiwanger, and Schuh, 1996). Second, as long as measurement error in the dependent variable has the same mean in New Jersey and Pennsylvania, estimates based on our data will be unbiased. We know of no reason to suspect that the New Jersey and Pennsylvania managers who responded to our survey would misreport employment data in a systematically different way. Third, the standard deviation of full-time equivalent employment changes is potentially sensitive to the way data on hours, or on combinations of part-time and full-time employees, are scaled. NW convert weekly payroll hours into a measure of employment by dividing by 35, but a smaller divisor would lead to larger dispersion of employment in their data. The standard deviation of *proportionate* changes in employment is invariant to scaling, and is fairly similar in all three data sets: 0.35 in BNW's data, 0.29 in the BLS data, and 0.39 in our original survey data.

C. Regression-Adjusted Models

Panels A and B of Table 2 present basic regression estimates using the BLS ES-202

sample of fast-food restaurants. The models presented in this table essentially parallel the main specifications in Card and Krueger (1994). The dependent variable in the first two columns is the change in the number of employees, and the dependent variable in the last two columns is the proportionate change in the number of employees.¹¹ Columns 1 and 3 only include a dummy variable indicating whether the restaurant is located in New Jersey or eastern Pennsylvania. These estimates correspond to the difference-in-differences estimates that can be derived from row 1 of Table 1. In addition to the New Jersey dummy variable, the explanatory variables in the models in columns 2 and 4 are: a set of dummy variables indicating the chain the restaurant belongs to; and a dummy variable indicating whether the reporting unit was a sub-unit of a multi-unit employer.¹²

The regression results in Panel A of Table 2, which are based on the same geographic region surveyed in our earlier work, indicate small, positive coefficients on the New Jersey dummy variable.¹³ Each of the estimates is individually statistically insignificant, however. We interpret these estimates as indicating that New Jersey's employment growth in the fast-food industry over this period was essentially the same as it was for the same set of restaurant chains in the seven Pennsylvania counties.

In Panel B, regression results are presented using the wider set of 14 Pennsylvania

¹¹First and second period employment are measured as the average of February-March 1992 and November-December 1992, respectively. Following Card and Krueger (1994), the denominator of the proportionate change is the average between first and second period employment.

¹²Observations that are not reported as sub-units of multi-unit establishments are either part of a multi-unit reporting firm or the only restaurant owned by a particular reporting unit.

¹³Because, in principle, the BLS sample contains the population of fast food restaurants in the designated chains, an argument could be made that the OLS standard errors understate the precision of the estimates. Nonetheless, throughout the paper we rely on conventional tests of statistical significance.

counties as the comparison group. These results also indicate somewhat faster employment growth in New Jersey following the increase in the state's minimum wage. Only in the proportionate change specifications without covariates, however, is the difference in growth rates between New Jersey and Pennsylvania restaurants close to being statistically significant.

For comparison, Panel C contains the corresponding estimates from our survey data. These estimates differ from our original paper because we now measure employment as the unweighted sum of full-time workers, part-time workers, and managerial workers. The estimates based on our data are qualitatively similar to those based on the BLS data, with positive coefficients on the New Jersey dummy variable. In addition, in both data sets the inclusion of additional explanatory variables does not add very much to the explanatory power of the model.

D. Specification Tests

The BLS data analyzed in Tables 1 and 2 suggest that the New Jersey minimum wage increase had either no effect, or a small positive effect, on fast-food industry employment in New Jersey vis-a-vis eastern Pennsylvania. To probe this finding further, in Table 3 we examine a variety of other specifications and samples. Panel A of the table presents results using our original 7 Pennsylvania counties, and Panel B uses the wider set of 14 counties. In all of the models, we include a full set of chain dummy variables and the sub-unit dummy variable. In addition, we report results for both the change in employment specification (column 1) and the proportionate employment growth specification (column 2).

For reference, the first row replicates the basic specification from Table 2. In row 2, we exclude from the sample stores that closed; recall that some of these stores may have been open

but we were unable to track them. In the preceding estimates, stores that could not be subsequently identified in the data base were assigned 0 employment. In the ES-202 data base, closed stores should be assigned an imputation code of 9. In row 3 we add back to the sample stores whose employment was not reported (or was reported as 0) if they had an imputation code of 9. In our opinion, the row 9 sample is probably the most appropriate for this analysis. The results in the table indicate that eliminating stores with missing or zero second-period employment, or including such stores if other information indicated the store was closed, tends to increase the coefficient on the New Jersey dummy variable.

Two of the observations in the sample had employment increases about twice the mean Wave 1 size; the next largest increase was less than the mean size.¹⁴ These large employment changes may have occurred because one franchisee acquired another outlet, or for other reasons. To probe the impact of these two outliers, they are dropped from the sample in row 4. The estimates are not very much affected by these observations.

In Card and Krueger (1994) we calculated the proportionate change in employment with the average employment over the two periods in the denominator. This specification was selected because we thought it would reduce the impact of measurement error in the employment data. We have continued that specification of the proportionate change equations so far in this paper. The specification in row 5, however, measures the proportionate change in employment with the first period employment in the denominator. With this specification, New Jersey's employment growth is slightly lower than that in the 7 county Pennsylvania sample, although employment growth in New Jersey continues to be greater than in Pennsylvania when the 14 county sample

¹⁴Large negative employment changes are more likely because of restaurant closings.

is used.

In row 6 we eliminate from the sample restaurants that are located in counties on the New Jersey shore. These counties may have different seasonal demand patterns than the rest of the sample. The results are not very different in this truncated sample, however. Another way to hold seasonal effects constant is to compare employment over the same months. In row 8 we measure employment changes from March 1992 to March 1993. This 12-month change has the added advantage of allowing employers more time to adjust employment. In levels, the faster employment growth in New Jersey is notably larger when 12-month changes are used.

Finally, in row 8 we measure employment changes from February 1992 to November 1992. As mentioned, these are the months when the preponderance of data in our survey were collected. It is probably not surprising that these results are quite similar to the base specification estimates, which use the average February-March 1992 and average November-December 1992 employment data.

On the whole, we interpret the BLS longitudinal data as indicating that fast-food industry employment growth in New Jersey was about the same, or slightly stronger, than that in Pennsylvania following the increase in New Jersey's minimum wage. It is nonetheless possible to define samples and specifications in which employment growth was slightly weaker in New Jersey than in Pennsylvania. This is what one would expect if the true difference in employment growth was very close to zero. We doubt, however, that a representative sample of fast-food restaurants would show robust evidence that employment growth was significantly weaker in New Jersey than in eastern Pennsylvania in the months we have studied.

II. Repeated Cross-Sections from the BLS ES-202 Data

As described above, we used the quarterly BLS ES-202 data to draw repeated cross-sectional data sets for the fast-food chains each month from the end of 1991 through 1996. With these data, we calculated total employment for New Jersey, for the 7 counties of Pennsylvania used in our original study, and for the broader set of 14 eastern-Pennsylvania counties each month. Figure 1 summarizes the time-series patterns of aggregate employment from these files. For each of the three geographic regions, the figure shows aggregate monthly employment in the fast-food industry relative to their respective February 1992 levels.

The figure reveals a pattern that is consistent with the longitudinal estimates. In particular, between February and November of 1992 -- the main months our survey was conducted -- fast-food employment grew by 3 percent in New Jersey, while it fell by 1 percent in the 7 Pennsylvania counties and fell by 3 percent in the 14 Pennsylvania counties. Although it is possible to find some pairs of months surrounding the minimum wage increase over which employment growth in Pennsylvania exceeded that in New Jersey, on a whole the figure provides little evidence that Pennsylvania's employment growth exceeded New Jersey's in the few years following the minimum wage increase.

A. The Effect of the 1996 Federal Minimum Wage Increase

On October 1, 1996 the federal minimum wage increased from \$4.25 per hour to \$4.75 per hour. This increase was binding in Pennsylvania, but not in New Jersey because New Jersey's \$5.05 state minimum already exceeded the new federal minimum. Consequently, the same comparison can be conducted in reverse, with New Jersey now serving as a "control group"

for Pennsylvania's experience. The results in Figure 1 clearly indicate greater employment growth in Pennsylvania than in New Jersey following the 1996 minimum wage increase. Between December 1995 and December 1996, for example, employment grew by 11 percent in the 14 Pennsylvania counties and 2 percent in New Jersey.¹⁵ It is possible that the superior growth in Pennsylvania reflects a delayed reaction to the 1992 increase in New Jersey's minimum wage, but we doubt that employment adjustments would take so long in this high-turnover industry. We also doubt that Pennsylvania's strong employment growth was caused by the 1996 increase in the federal minimum wage, but there is certainly no evidence in these data to suggest that the hike in the federal minimum wage caused Pennsylvania restaurants to lower their employment relative to what it otherwise would have been in the absence of the minimum wage increase.

One caveat, however, is that these data might understate New Jersey's employment growth because one chain in the sample discontinued reporting on 37 of its New Jersey establishments between the second and third quarter of 1996. These restaurants might have been closed, or they might have been spun off to another enterprise that is not among the fast-food chains in our sample. To gauge the importance of this phenomenon, we can perform the following hypothetical calculation. Suppose these 37 establishments had continued in the sample, with their employment equal to the average size of establishments in this chain as of 1996:Q1. In this counterfactual scenario, New Jersey's employment would have grown by 6.9% between December 1995 and December 1996 -- still well below Pennsylvania's employment growth rate. Thus, the BLS data provide little support for the view that the 1996 increase in the federal

¹⁵In the 7 county Pennsylvania sample employment grew by 16 percent.

minimum wage adversely impacted employment in fast-food restaurants in Pennsylvania vis-a-vis New Jersey, at least in this short period following the federal minimum wage increase.

III. A Reanalysis of the Berman-Neumark-Wascher Data Set

A. *Genesis of the BNW sample*

The conclusion we draw from the BLS data and from our original survey data is qualitatively different from the conclusion NW draw from the data they collected in conjunction with Berman and the EPI. This discrepancy led us to re-analyze the BNW sample, devoting particular attention to the possible non-representative nature of their data. We suspect that problems in the BNW sample arise because a scientific sampling method was *not* used in the EPI data collection effort, and because the data were collected three years after the minimum wage increase.

The BNW sample was assembled in several phases. First, Berman (1995) released a report based on 41 restaurants.¹⁶ This report, which included analysis conducted by David Neumark, made no mention of the methods used to identify the restaurants in the sample. A companion paper by Neumark and Wascher (1995a) reported that the EPI sample contained 71 restaurants and provided some information on the origins of the sample.¹⁷ Evidently, informal

¹⁶The actual sample size was not reported. We estimate the sample size from Figures 1 and 2 of the report, which display data for a total of 41 restaurants. Berman also referred to these data in a Wall Street Journal op-ed on March 29, 1995.

¹⁷The description of the data set in the earliest Neumark and Wascher paper (1995a) states, "Contact was made with franchisees identified in the Chain Operator's Guide"; no mention was made of informal contacts. The most recent version of the paper (Neumark and Wascher 1997, Appendix A) states that "...the original EPI sample was drawn partly from franchisees in the Chain Operator's Guide ..., partly from restaurants owned by other franchisees ... that were identified informally, and partly from parent corporations...." A letter explaining the origins of the sample from the Chief Economist of EPI dated October 21, 1995 made no mention of the Chain Operator's Guide. Information in Neumark and Wascher (1997; Table 7) implies that at least half of the franchised restaurants in the

industry contacts were heavily relied on to select these 71 restaurants. We refer to this sample, augmented with information for one New Jersey store that closed during 1992, as the "original Berman sample." The sample contains data for 10 franchisees in the Burger King and Wendy's chains, although all of the Pennsylvania restaurants belong to one Burger King franchisee who apparently supplied the earliest data to EPI.

Around the time that Berman launched the EPI study, the Wall Street Journal (January 31, 1995, p. 1) reported:

"Lobbyists for small businesses, retailers and big companies huddled Friday at the Washington office of the National Restaurant Association to plot strategy against the Clinton effort to boost the \$4.25-per-hour minimum wage. ... The group plans to poke holes in a study widely used by proponents to show employment rose in New Jersey fast-food restaurants when the minimum wage was raised there."

In this environment, concerns were raised about the representative character of the data assembled by Berman's organization (e.g., Schmitt, 1995). In their August 1995 paper Neumark and Washer wrote that "... to avoid conflicts of interest we subsequently took over the data collection effort from EPI, so that the remaining data came from the franchisees or corporations directly to us." During the period from March to August 1995 they added information for 18 additional restaurants owned by franchisees in the original Berman sample, along with information from 7 additional franchisees and one chain. We refer to this sample of 154 restaurants as the Neumark-Wascher (NW) sample. Data for 9 other restaurants were apparently collected by EPI after NW took over data collection (see Neumark and Washer 1995b, footnote 9).¹⁸ We include these 9

Berman/EPI sample were identified through informal contacts.

¹⁸The most recent version of NW's data set includes an indicator variable for restaurants collected by EPI. This variable shows a total of 81 restaurants in the EPI sample, representing the 72 restaurants in the original Berman sample and the 9 restaurants which were provided directly to EPI after March 1995.

restaurants in the pooled BNW sample, but exclude them from the original Berman subsample and from the NW subsample.

Although NW attempted to draw a complete sample of those restaurants not included in the original Berman sample, there are reasons to doubt the representative nature of their data. First, at least one-third of the franchise owners in the NW supplementary sample were previously contacted by EPI. Second, and probably more important, NW's letter to franchisees stated that they were collecting data to "re-examine the New Jersey-Pennsylvania minimum wage study" and emphasized that they were working "in conjunction with ... a restaurant-supported lobbying" organization. This lead-in may have affected response patterns for restaurants with different employment trends in New Jersey and Pennsylvania, accounting for the low response rate in their survey.

For whatever reasons the combined BNW sample represents only a fraction of fast-food restaurants in New Jersey and eastern Pennsylvania belonging to the four chains in the sample. While we do not have a precise count of the total number of restaurants in the potential sample universe, we can obtain a lower bound estimate from the number of working telephone listings we found in January 1992 for our own fast-food sample. In New Jersey, where the geographic boundaries of the sample frame are unambiguous, we found 364 valid phone numbers whereas the BNW sample contains 163 restaurants. In eastern Pennsylvania, we found 109 working phone numbers in the 7 counties we surveyed, whereas the BNW sample contains 72 restaurants in as many as 19 counties.¹⁹ These comparisons suggest that the BNW sample includes fewer than

¹⁹BNW's sample universe covers a broader region of eastern Pennsylvania than ours because BNW define their geographic area based on our three-digit zip codes. These zip codes cover 19 counties, although our sample universe only included restaurants in 7 counties.

one-half of the potential universe of restaurants. If the BNW sample were random this would not be a problem. As explained below, however, many features of the sample suggest otherwise. In particular, the Pennsylvania restaurants in the original Berman sample appear to be substantially different from other restaurants in the data set. To the extent that restaurants in the original Berman sample are non-representative, their presence biases results based on the combined BNW sample even if the NW subsample is representative.²⁰ As it happens, any down-weighting of the original Berman restaurants in the pooled BNW sample substantially weakens the conclusion that employment fell in New Jersey relative to Pennsylvania.

B. Basic Results

Table 4 shows the basic patterns of fast-food employment in the pooled BNW sample and in various subsamples. The first three rows of the table report data on NW's main employment measure, which is based on average payroll hours reported for each restaurant in February and November of 1992. Franchise owners reported their data to EPI and Neumark-Wascher in different time units -- weekly, bi-weekly, or monthly -- for up to three "payroll periods" before and after the rise in the minimum wage. NW converted the data (for the maximum number of payroll periods available for each franchisee) into average weekly payroll hours divided by 35. As shown in row 1 of Table 4, this measure of full-time employment for the pooled BNW sample shows that stores were initially smaller in Pennsylvania than New Jersey, and that during 1992

²⁰Neumark and Wascher note that there are potential concerns with the Berman sample and attempt to address these concerns by analyzing a subsample of restaurants that were listed in the Chain Operator's Guide. This does not adequately address the issue, however, because even within the potential universe of restaurants in the Guide, some restaurants were brought into the BNW sample through informal contacts, while others are not included in the sample (possibly because of a lack of informal contacts).

stores in Pennsylvania expanded while stores in New Jersey contracted slightly. The "difference in differences" of employment growth is shown in the right-most column of the table, and indicates that relative employment fell by 0.85 full-time equivalents in New Jersey from the period just before the rise in the minimum wage to the period 6 months later.

In rows 2 and 3 we compare these relative trends for restaurants in the original Berman sample and in NW's sample. The difference in relative employment growth in the pooled sample is driven by data from the original Berman sample, which shows positive employment growth in both states, but especially strong growth in Pennsylvania. We emphasize that all the Pennsylvania restaurants in the original Berman sample belong to a single Burger King franchisee. Thus, any conclusion about the growth of average payroll hours in the fast-food industry in New Jersey relative to Pennsylvania hinges on the representativeness of the data for this single franchisee.

The final row of Table 4 reports on relative trends in an alternative measure of employment available for a subset of restaurants in the pooled BNW sample -- the total number of non-management employees. In contrast to the pattern for total payroll hours, non-management employment rose faster in New Jersey than Pennsylvania.²¹ Taken at face value, these findings suggest that the rise in the New Jersey minimum wage was associated with an increase in employment per se, and a small decline in hours per worker.²² Unfortunately,

²¹Among the subset of stores that reported non-management employment, the difference-in-differences in average payroll hours / 35 is -0.43, with a standard error of 0.55. Thus there is no strong difference between relative payroll hours trends in the pooled BNW sample and among the subset of restaurants that reported non-management employment.

²²To compare relative changes in hours and employees it is convenient to work with logarithms, so scaling is not an issue. For the sample of 55 observations that reported both numbers of employees and hours, the difference-in-differences of log payroll hours is -0.018; the difference-in-differences of log management employees is 0.066; and the difference-in-differences of log employees minus log hours is 0.084 (t-ratio = 2.28). Thus, the apparent

although one-half of restaurants in the original Berman sample supplied non-management employment data, only 10 percent of restaurants in the NW subsample reported it. Thus, the sample available for studying relative trends in employment versus hours is relatively small and heavily dependent on the original Berman sampling procedures.

C. Regression Adjusted Models

The simple comparisons of relative employment growth in Table 4 make no allowances for other sources of variation in employment growth. The effects of controlling for some of these alternative factors are illustrated in Table 5. Each column of the table corresponds to a different regression model fit to the changes in employment observed for restaurants in the pooled BNW sample.

Column 1 presents a model with only a New Jersey dummy: the estimated coefficient corresponds to the simple difference-of-differences reported in row 1 of Table 4. Column 2 reports a model with only an indicator for observations in the NW subsample. This variable is highly significant (t-ratio over 8) and negative, implying that restaurants in the NW subsample had systematically slower employment growth than those in the Berman sample. Column 3 reports the effect of another "sampling" variable: the order number assigned by NW to the identity of the chain owner supplying the data. This number runs from 1 to 19, with franchisees in the original Berman sample assigned lower numbers. Again, the variable is highly significant (t-ratio over 5) suggesting that franchisees who were brought in to the sample earlier had systematically higher employment growth. The model in column 4 explores the effect of chain

opposite movement in hours and employees is statistically significant for this small sample.

and ownership controls. These are jointly significant and show considerable differences in average growth rates across chains, with slower growth among Roy Rogers and KFC restaurants than Wendy's or Burger King outlets.

Finally, the model in column 5 includes indicators for whether the restaurant's employment data were derived from bi-weekly or monthly data (with weekly data the omitted category). These variables are also highly significant, and suggest that the period over which the data were reported affects measured employment trends. Relative to restaurants that provided weekly data (25 percent of the sample), restaurants that provided bi-weekly data experienced faster hours growth between the two waves of the survey, while restaurants that provided monthly data had slower hours growth.

An important lesson from columns 1-5 of Table 5 is that a wide variety of factors affect measured employment growth in the BNW sample. Many of these factors are also highly correlated with the New Jersey dummy. For example, a disproportionately high fraction of New Jersey stores in the pooled sample were obtained by NW. Since the NW subsample has slower growth overall, this correlation might be expected to influence the estimate of relative employment trends in New Jersey. Additionally, the Pennsylvania sample contains none of the very slow-growing KFC outlets. Thus, it may be important to control for these other factors when attempting to measure the relative trend in New Jersey employment growth.

The models in columns 6-10 include the indicator for New Jersey outlets and various subsets of the other covariates. Notice that the addition of any subset of controls lowers the magnitude of the New Jersey coefficient by 20-90 percent, and also improves the precision of the estimated coefficient by 10-15 percent. None of the estimated New Jersey coefficients are

statistically significant at conventional levels once other controls are included in the model. Simply controlling for an intercept shift between restaurants in the NW subsample and the balance of the pooled data set reduces the size of the estimated New Jersey coefficient by over 50 percent.

The addition of controls for the type of payroll data has a particularly strong impact on scaled hours. We are unsure of the reasons for the highly significant differences in measured growth rates between restaurants that reported different types of payroll data, although it is possible that they reflect differential seasonal factors or mis-scaling of hours.²³ Even controlling for chain and ownership characteristics, the bi-weekly payroll indicator is highly significant ($t=3.19$). The appendix presents further estimation results and a figure illustrating the differences in Wave 1 hours, Wave 2 hours, and hours growth for restaurants that provided different types of payroll data in the BNW sample.²⁴ These results suggest that the differences by type of payroll data (particularly between restaurants that reported bi-weekly data and other restaurants) are generic, and not an artifact of specific functional form assumptions or outliers. As illustrated in Table 5, controlling for the type of payroll data has a large effect on the estimated New Jersey relative employment effect, because a much lower fraction of New Jersey restaurants supplied bi-weekly data. Once these differences are taken into account, the employment growth differential between restaurants in New Jersey and Pennsylvania all but disappear, even in the pooled BNW sample.

²³For example, if the payroll periods happen to coincide with holidays then there may be differential seasonal factors depending on whether the payroll period is a month, a two-week period, or a week.

²⁴In the Appendix table we also report employment growth models for the subset of Burger King restaurants only. Among these restaurants the situation is similar: the bi-weekly payroll indicator is positive and highly significant ($t=2.61$); and controlling for types of payroll data the New Jersey effect is small and statistically insignificant.

D. Alternative Specifications and Samples

The results in Table 4 suggest that the measured effects of the New Jersey minimum wage differ between the original Berman sample of fast-food restaurants and the subsequent NW sample. Table 6 reports the estimated coefficient on the New Jersey dummy from a variety of alternative models fit to the pooled BNW sample, the NW subsample, and the original Berman sample. Each row of the table corresponds to a different model specification or alternative measure of the dependent variable; each column refers to one of the three possible samples. For example, the first row reports the estimated New Jersey effect from models that include no other controls: these correspond to the differences-in-differences reported in Table 4.

Row 2 of the table illustrates the influence of the data from the first franchisee who supplied the Pennsylvania observations in the original Berman sample. When the 26 restaurants owned by this franchisee are excluded, the estimated New Jersey effect in the pooled BNW sample becomes positive.²⁵ Without this owner's data it is impossible to estimate the New Jersey effect in the original Berman sample. In the NW sample, however, the exclusion has a negligible effect.

Rows 3 and 4 of Table 6 show the estimated New Jersey coefficients from specifications that control for chain and company ownership, and these variables plus indicators for the type of payroll data supplied to BNW (bi-weekly, weekly or monthly). As noted, once controls for the payroll period are included the New Jersey effect falls to essentially zero in the pooled sample. In the original Berman sample, the New Jersey effect actually switches sign.

In most of their analysis NW utilize an employment measure based on hours data for

²⁵Note that this franchisee supplied data on 23 restaurants (all in Pennsylvania) to the original Berman/EPI data collection effort, and on 3 additional restaurants (all in New Jersey) to NW's later sample.

different numbers of payroll periods for different restaurants in their data. (Data are recorded for up to three payroll periods per restaurant in each wave). To check the sensitivity of the results to this choice, we constructed a measure using only the first payroll period for restaurants that reported more than one period. In principle one would expect this alternative measure to show the same patterns as the averaged data. As illustrated in Panel B (rows 5 and 6) of Table 6, the use of the alternative employment measure leads to results that are similar to the averaged data, but uniformly less supportive of NW's conclusion of a negative employment effect in New Jersey. Even in the original Berman sample the use of the simpler hours measure leads to estimates that are well below conventional significance levels.

Finally, Panel C of Table 6 reports estimates from models that use the proportional change in average payroll hours at each restaurant -- rather than the change in the level of average hours -- as the dependent variable. The latter specifications are more appropriate if employment responses to external factors (such as a rise in the minimum wage) are roughly proportional to the scale of each restaurant. Inspection of these results suggests that the signs of the New Jersey effects are generally the same as in the corresponding models for the levels of employment, although the coefficients in the proportional change models are relatively less precise.

Our conclusion from the estimates in Table 6 is that most (but not all) of the alternatives show a negative relative employment trend in New Jersey, although the magnitudes of the estimated effects are generally much smaller than the naive difference-in-differences estimate from the pooled BNW sample. *The estimated New Jersey effect is most negative in the original Berman sample, although even in this sample the estimated New Jersey effect reverses sign once controls are introduced for the payroll period of the data.* In the NW sample or in the pooled

sample that excludes data for the Pennsylvania franchisee who supplied Berman's data, the relative employment effects are small in magnitude and uniformly statistically insignificant (t -ratios of 0.7 or less). These patterns highlight the crucial role of the original Berman data in drawing inferences from the BNW sample. Without these informally-collected data (or more precisely, without the observations from the single franchisee who evidently was the first to supply his data) the BNW sample provides little indication that the rise in the New Jersey minimum wage lowered fast-food employment.

E. Consistency of the BNW Sample with the Card-Krueger Sample

While we have shown that the evidence of a decline in relative New Jersey employment from the BNW sample is not robust, it is nevertheless interesting to ask how the employment patterns in the two data sets compare. The public-use versions of both data sets include only the first three digits of the zip code of each restaurant, rather than full addresses. This limitation necessitates comparisons of employment trends by restaurant chain and "three-digit zip code area" cells.²⁶

A useful summary of the degree of consistency between the two samples is provided by a bivariate regression of the average employment changes (by chain and zip code area) from one sample on the corresponding changes from the other. In particular, if the employment changes in the BNW sample are taken to be the "true" changes for the cells, then one would expect an intercept of 0 and a slope coefficient of 1 from a regression of the observed employment changes

²⁶The first three digits of the postal zip code do not correspond to any conventional geographic entity.

in our data on the changes for the same zip code area and chain in the BNW data.²⁷ This prediction has to be modified slightly if the employment changes in the BNW sample are "true" but scaled differently than in our survey. In particular, if the ratio of the mean employment level in our survey to the mean employment level in the BNW sample is k , then the expected slope coefficient is k .

Table 7 presents estimation results from regressing employment growth rates by chain and zip-code area from our fast-food sample on the corresponding data from the BNW sample. Although 98 chain-by-zip-code cells are available in our data set, only 48 cells are present in the pooled BNW sample. Column one shows results for these cells, while columns two and three present results separately for chain-by-zip-code areas in New Jersey and Pennsylvania. The data underlying the analysis are also plotted in Figure 2.

Inspection of Figure 2 and the regression results in Table 7 suggests that there is a reasonably high degree of consistency across the two data sets: the correlation coefficient is 0.47. The two largest negative outliers are in zip codes containing a high proportion of restaurants from EPI's initial Pennsylvania sample. In light of this finding, and the concerns raised in Table 6 about the influence of the data from the franchisee who supplied these data, we show a parallel set of models in Panel B of Table 7 that excludes this owner's data from the average changes in the BNW sample.

Looking first at the top panel of the table, the regression coefficient relating the

²⁷The situation is more complex if the BNW data are treated as a noisy measure of the truth, e.g., because of sampling or nonsampling errors. In particular, let λ_j represent the reliability of the observed employment changes (by zip-code and chain) in survey j ($j=1,2$). In this case, if the measurement errors in the two surveys are uncorrelated, the probability limit of the regression coefficient from a linear regression of the employment change in survey 1 on the change in survey 2 is λ_2 (the reliability of the second survey), and the probability limit of the R-squared is $\lambda_1 \cdot \lambda_2$ (the product of the reliability ratios).

employment changes in the two data sets is 0.78. An F-test for the joint hypothesis that this coefficient is 1 and that the intercept of the regression is 0 has a prob-value of 0.47. Comparisons of the separate results for New Jersey and Pennsylvania suggest that within New Jersey the two data sets are in closer agreement. Across the relatively small number of Pennsylvania cells the samples are much less consistent, although we can only marginally reject the hypothesis of a zero intercept and unit slope. Because we used the same survey methods and interviewer to collect data from New Jersey and Pennsylvania, there is no reason to suspect different measurement error properties in the two states in our sample. A comparison of the results in the bottom panel of the table shows that the exclusion of data from the franchisee who provided EPI's Pennsylvania sample improves the consistency of the two data sets, particularly in Pennsylvania. While not decisive, this comparison suggests that the key differences between the BNW sample and our sample are driven by the data from the single franchisee who supplied the earliest data in the Berman sample. Together with the other evidence in Tables 4-6, this finding leads us to question the representativeness of this franchisee's data.

F. Patterns of Employment Changes Within New Jersey

The main inference we draw from Table 7 is that the employment changes in the BNW and Card-Krueger data sets are reasonably highly correlated, especially within New Jersey. Bigger discrepancies emerge between the relatively small subsamples of Pennsylvania restaurants. The consistency of the BNW and CK New Jersey samples is worth emphasizing, since in our original paper we found that comparisons of employment growth within New Jersey between restaurants that were initially paying higher and lower wages led to the same conclusion about

the effect of the minimum wage as comparisons between New Jersey and Pennsylvania. As a further check on this conclusion we merged the average "proportionate gap" between the new minimum wage and the Wave 1 starting wage for each of the chain-by-zip-code areas in New Jersey derived from our survey data with the average employment changes for the corresponding cells from the BNW sample.²⁸ We then regressed the average changes in employment (ΔE) on the average gap measure (GAP) for the 37 overlapping cells. The estimated regression equation, with standard errors in parentheses, is:

$$\Delta E = -2.00 + 17.98 \text{ GAP} \quad R^2 = .09.$$

(1.11) (9.75)

The coefficient on the GAP variable in BNW's data is similar in magnitude to the estimate we obtained using the New Jersey micro data from our survey (13.1 with a standard error of 6.6). Furthermore, if we estimate the cell-level model with BNW's employment data and add dummy variables indicating the restaurant chain, we obtain:

$$\Delta E = 0.77 + 12.00 \text{ GAP} + \text{Chain Dummies} \quad R^2 = .78.$$

(0.78) (5.76)

In this model, the coefficient on the GAP variable is slightly smaller than in the bivariate regression, but it has a higher t-ratio. The positive estimated coefficients on the GAP variable indicate that employment rose faster at New Jersey restaurants located in areas that were required to raise their entry wage the most when the minimum wage increased. Thus, the pattern of employment growth rates within BNW's sample of New Jersey restaurants confirms our original finding that the rise in the minimum wage had no adverse effect on employment growth at

²⁸At the restaurant level this gap is defined as the difference between the new minimum wage and the restaurant's starting wage in Wave 1 divided by the starting wage in Wave 1. (The gap is set to zero if the starting wage is above the new minimum wage).

lower-wage relative to higher-wage restaurants in the state.

IV. Conclusion

After analyzing BNW's data, NW's data, our original survey data, and most importantly, the BLS ES-202 fast-food establishment data, we reach the following conclusion: *The increase in New Jersey's minimum wage probably had no effect on total employment in New Jersey's fast-food industry, and possibly had a small positive effect.* We have previously written that, because of frictions in the labor market, a minimum wage increase can be expected to cause some firms to reduce employment and others to raise employment, with these two effects potentially cancelling out if the rise in the minimum wage is modest (Card and Krueger, 1995, esp. pp. 13-14). If this view is correct, then it would not be surprising to find some specifications and data definitions that yield a negative impact of the minimum wage on employment. But we doubt that a representative survey of fast-food restaurants in New Jersey and eastern Pennsylvania would show a significant adverse impact of the minimum wage on total employment.

The only data set that indicates a significant decline in employment in New Jersey relative to Pennsylvania is the small, non-random group of restaurants collected by Berman and the EPI. Results of this data set stand in contrast to our survey data, to the BLS's payroll data, and to the supplemental data collected by Neumark and Wascher. The difference between the New Jersey-Pennsylvania comparison in our original survey and BNW's data cannot be reconciled by inherent differences between a telephone survey and administrative payroll records because the BLS ES-202 data are based on administrative payroll records. Instead, we suspect the common denominator is that representative surveys indicate statistically insignificant and small differences

in employment growth between New Jersey and eastern Pennsylvania, while the nonrepresentative data informally collected for Berman produce anomalous results.

An alternative interpretation of the full spectrum of results is that the New Jersey minimum wage increase did not reduce total employment, but it did reduce the average number of hours worked per employee. Neumark and Wascher (1997) reject this interpretation. Although we are less quick to rule out this possibility, we are agnostic about any conclusion concerning average hours worked per employee that relies so heavily on the informally-collected Berman/EPI sample, and the exclusion of controls for pay periods. Moreover, within New Jersey the BNW data indicate that hours grew more at restaurants in the lowest wage areas of the state, where the minimum wage increase was more likely to be a binding constraint. This finding runs counter to the view that total hours declined in response to the New Jersey minimum wage increase.

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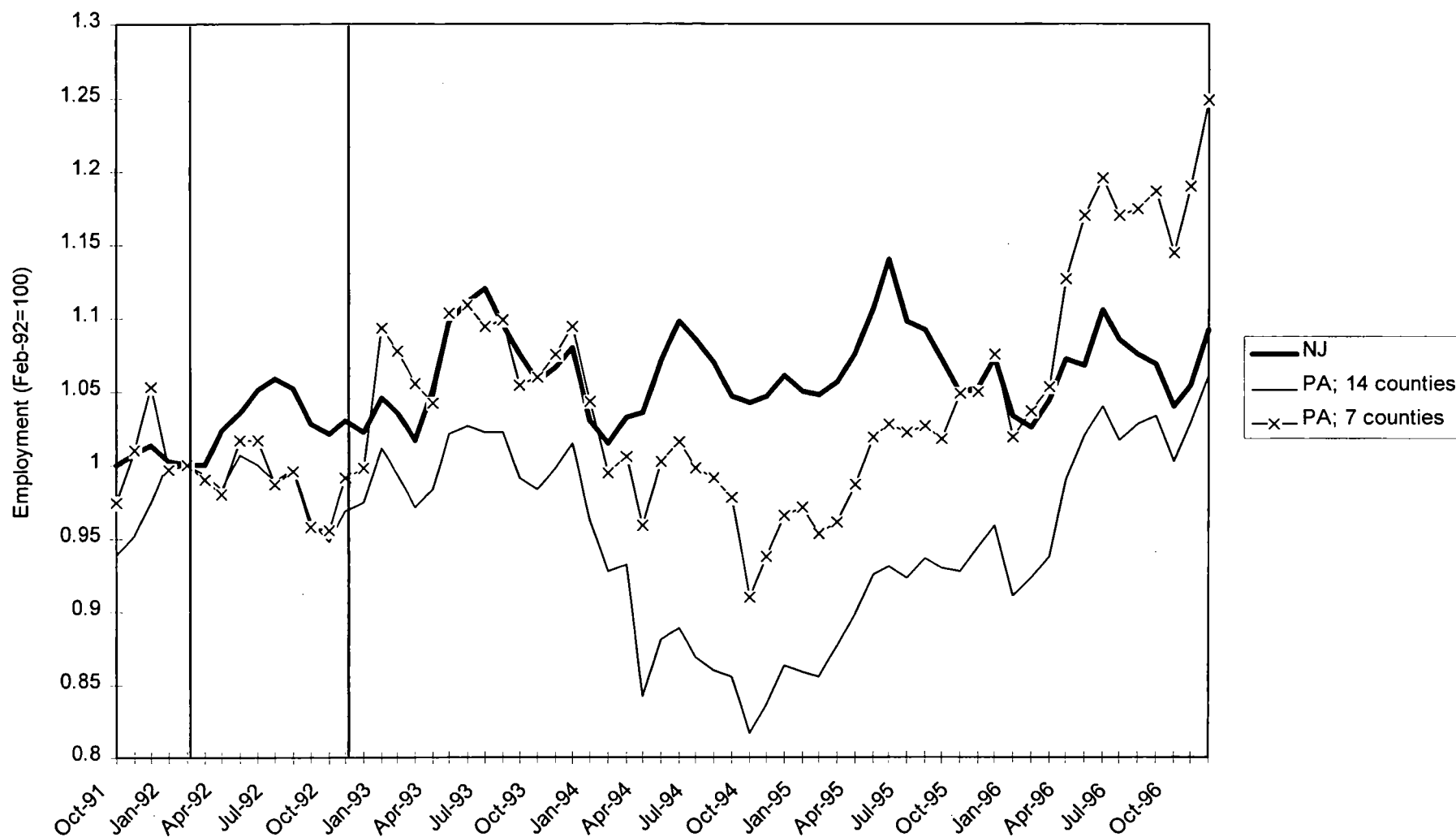
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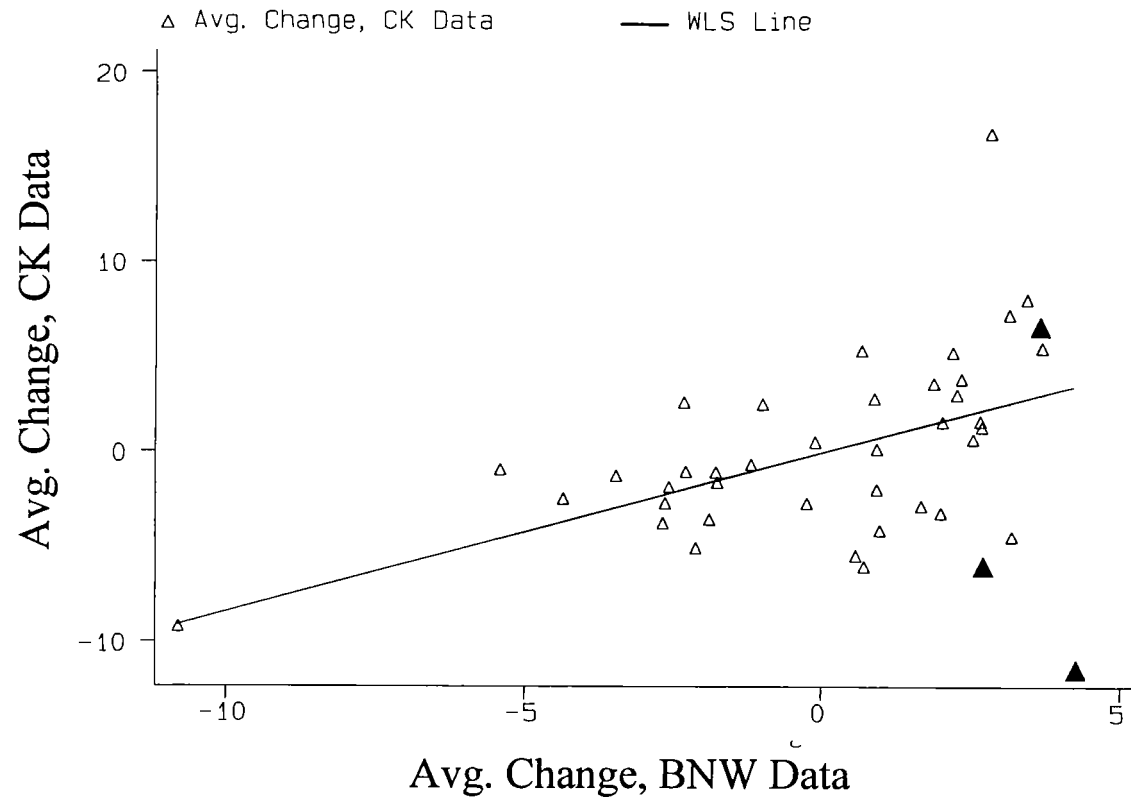
Figure 1
Employment in NJ and PA Fast Food Restaurants, Oct. 1991 to Dec. 1996



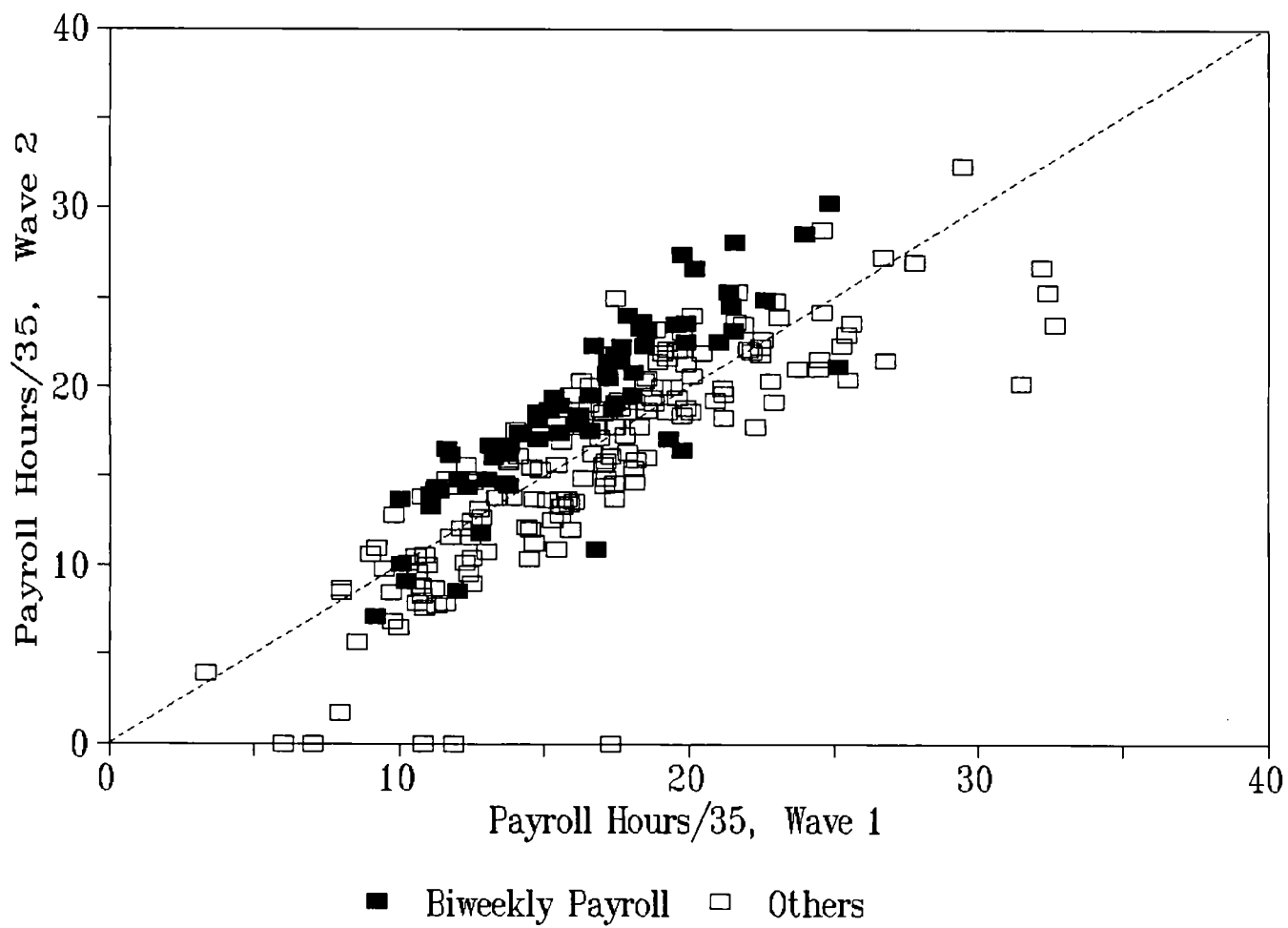
Source: Authors' calculations based on BLS ES-202 data.

Note: Vertical lines indicate dates of original Card-Krueger survey.

Figure 2: Graph of CK Data vs. BNW Data
at the 3-Digit Zip Code by Chain Level



Notes: Shaded triangles indicate Berman/EPI Pennsylvania sample. The line shown on the graph is the WLS regression fit using the subsample collected by NW. Weights are the number of restaurants in the cell based on CK data.



Appendix Figure: Hours in Wave 2 versus Wave 1, by Type of BNW Payroll Data

Table 1: Descriptive Statistics for Fast-Food Restaurants Drawn from BLS ES-202 Data and Card-Krueger Survey

Means with Standard Deviations in Parentheses:									
	<u>New Jersey</u>			<u>7 Pennsylvania Counties</u>			<u>14 Pennsylvania Counties</u>		
	Before	After	Change	Before	After	Change	Before	After	Change
<u>A. BLS ES-202 Data</u>									
Feb-Mar to Nov-Dec 92	37.2 (19.9)	37.6 (21.0)	0.41 (9.82)	42.5 (23.2)	42.4 (23.5)	-0.12 (10.94)	44.8 (53.7)	44.3 (59.9)	-0.53 (12.32)
Feb-92 to Nov-92	37.2 (19.9)	37.8 (20.9)	0.57 (10.12)	42.7 (23.8)	42.2 (23.2)	-0.54 (12.82)	44.9 (53.6)	44.4 (60.4)	-0.58 (13.83)
Mar-92 to Mar-93	37.2 (20.1)	34.8 (20.0)	-2.48 (13.99)	42.3 (22.8)	37.5 (18.6)	-4.80 (22.74)	44.7 (54.0)	40.7 (54.5)	-4.0 (18.1)
<u>B. Card-Krueger Survey Data</u>									
Feb-92 to Nov-92	29.8 (12.5)	30.0 (13.0)	0.19 (9.82)	33.1 (14.7)	30.9 (10.6)	-2.23 (11.98)	NA	NA	NA

Notes: Sample sizes for the first two rows are 437 for NJ, 127 for PA 7 counties, and 250 for PA 14 counties; sample sizes for third row are 436, 127, and 250, respectively; sample sizes for the last row are 309 for NJ and 75 for PA. The 7 PA counties used in the middle columns are the same counties used in Card and Krueger (1994); these 7 counties are a subset of the 14 counties in the last three columns (see text). The unit of observation for the BLS data is the "reporting unit," which in some cases includes multiple establishments. The unit of observation in the Card-Krueger data is the individual restaurant.

Table 2: Basic Regression Results; BLS ES-202 Fast-Food Data and Card-Krueger Survey Data

Explanatory Variables	Dependent Variable:			
	<u>Change in Levels</u>	<u>Change in Levels</u>	<u>Proportionate Change</u>	<u>Proportionate Change</u>
	(1)	(2)	(3)	(4)
<u>Panel A: All of NJ and 7 Pennsylvania Counties, BLS Data</u>				
NJ Indicator	0.536 (1.017)	0.225 (1.029)	0.007 (0.029)	0.009 (0.029)
Chain Dummies and Sub-unit Dummy Var.	No	Yes	No	Yes
Reg. Std. Error	10.09	9.99	0.286	0.281
R-Squared	0.001	0.029	0.000	0.046
<u>Panel B: All of NJ and 14 Pennsylvania Counties, BLS Data</u>				
NJ Indicator	0.946 (0.856)	0.272 (0.859)	0.045 (0.024)	0.032 (0.024)
Chain Dummies and Sub-unit Dummy Var.	No	Yes	No	Yes
Reg. Std. Error	10.80	10.63	0.303	0.294
R-Squared	0.002	0.042	0.005	0.071
<u>Panel C: Original Card-Krueger Survey Data</u>				
NJ Indicator	2.411 (1.323)	2.488 (1.323)	0.029 (0.050)	0.030 (0.049)
Chain and Co. Ownership Dummies	No	Yes	No	Yes
Reg. Std. Error	10.28	10.25	0.385	0.382
R-Squared	0.009	0.025	0.001	0.024

Notes: Each regression also includes a constant. Sample size is 564 for panel A, 687 for panel B, and 384 for panel C. Sub-unit dummy variable equals one if the reporting unit is a sub-unit of a multi-unit employer. For comparability with the BLS data, employment in the CK sample is measured by the total number of full- and part-time employees. Standard errors in parentheses.

Table 3
Sensitivity of New Jersey Employment Growth Differential to Specification Changes;
BLS ES-202 Fast-Food Restaurant Sample

Specification and Sample	Change in Levels (1)	Proportionate Change (2)	Sample Size
Panel A: NJ and 7 PA Counties			
1. Basic Specification	0.225 (1.029)	0.009 (0.029)	564
2. Excluding Closed Stores	0.909 (0.950)	0.031 (0.024)	549
3. Excluding Closed Stores Unless Imputation Code=9	0.640 (0.973)	0.022 (0.025)	553
4. Drop Large Outliers	0.251 (0.970)	0.009 (0.028)	563
5. Proportionate Change with Initial Employment In Base	---	-0.001 (0.032)	564
6. Excluding New Jersey Shore	0.032 (1.092)	0.008 (0.030)	480
7. March 1992 to March 1993 Employment Change	2.345 (1.678)	0.007 (0.035)	563
8. February 1992 to November 1992 Employment Change	1.05 (1.10)	0.013 (0.032)	564

- Continued -

Table 3: Continued

Specification and Sample	Change in Levels (1)	Proportionate Change (2)	Sample Size
Panel B: NJ and 14 PA Counties			
1. Basic Specification	0.272 (1.029)	0.032 (0.024)	687
2. Excluding Closed Stores	0.639 (0.776)	0.055 (0.021)	671
3. Excluding Closed Stores Unless Imputation Code=9	0.338 (0.787)	0.044 (0.021)	675
4. Drop Large Outliers	0.72 (0.78)	0.032 (0.023)	685
5. Proportionate Change with Initial Employment In Base	---	0.020 (0.024)	687
6. Excluding New Jersey Shore	0.069 (0.924)	0.030 (0.025)	603
7. March 1992 to March 1993 Employment Change	1.196 (1.258)	0.009 (0.027)	686
8. February 1992 to November 1992 Employment Change	0.624 (0.927)	0.027 (0.024)	687

Notes: The table reports the coefficient (with standard error in parentheses) for the New Jersey dummy variable from a regression of the change in employment (column 1) or proportionate change in employment (column 2) on a New Jersey dummy variable, chain dummy variables, a dummy variable indicating whether the restaurant is reported as a sub-unit of a multi-establishment employer, and a constant.

Table 4: Descriptive Statistics for Levels and Changes in Employment by State, BNW Data

	Means With Standard Deviations in Parentheses:						Difference in Differences NJ-PA (std. error)
	<u>New Jersey</u>			<u>Pennsylvania</u>			
	Before	After	Change	Before	After	Change	
<u>Total Payroll Hours/35:</u>							
1. Pooled BNW Sample	17.5 (5.5)	17.5 (5.9)	-0.1 (3.4)	15.1 (4.0)	15.9 (5.9)	0.8 (3.5)	-0.85 (0.49)
2. NW Subsample	17.7 (6.1)	16.7 (6.3)	-1.0 (3.3)	13.4 (3.8)	12.4 (4.9)	-1.0 (3.5)	-0.05 (0.61)
3. Original Berman Subsample	17.1 (3.5)	19.3 (4.3)	2.1 (2.7)	16.9 (3.4)	20.4 (4.3)	3.4 (2.1)	-1.28 (0.63)
<u>Non-Management Employment:</u>							
4. Pooled BNW Sample	24.8 (6.0)	28.4 (6.8)	3.6 (3.0)	29.0 (5.5)	31.3 (6.8)	2.2 (4.7)	1.39 (1.20)

Notes: See text for description of employment variables and samples. Sample sizes are as follows. Row 1: New Jersey 163; Pennsylvania 72. Row 2: New Jersey 114; Pennsylvania 40. Row 3: New Jersey 49; Pennsylvania 23. Row 4: New Jersey 19; Pennsylvania 33.

Table 5: Estimated Regression Models for Change in Average Payroll Hours/35, BNW Data

	Specification:									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
New Jersey	-0.85 (0.49)	--	--	--	--	-0.36 (0.44)	-0.57 (0.47)	-0.66 (0.41)	-0.09 (0.42)	-0.10 (0.42)
NW Sample	--	-3.49 (0.42)	--	--	--	-3.44 (0.43)	--	--	--	-0.43 (0.58)
Franchise Owner Number ^{a/}	--	--	-0.25 (0.05)	--	--	--	-0.24 (0.05)	--	--	0.04 (0.05)
<u>Chain Dummies:</u>										
Roy Rogers	--	--	--	-3.56 (0.81)	--	--	--	-3.14 (0.85)	-1.98 (0.89)	-1.80 (1.00)
Wendy's	--	--	--	-0.85 (0.67)	--	--	--	-0.71 (0.67)	-1.35 (0.70)	-1.29 (0.71)
KFC	--	--	--	-6.51 (0.90)	--	--	--	-6.30 (0.90)	-6.56 (0.89)	-6.53 (0.98)
Company-Owned	--	--	--	-0.89 (0.76)	--	--	--	-1.31 (0.81)	-0.72 (0.95)	-0.84 (0.97)
<u>Payroll Data Type:</u>										
Bi-weekly	--	--	--	--	1.73 (0.52)	--	--	--	1.65 (0.52)	1.62 (0.53)
Monthly	--	--	--	--	-2.60 (0.48)	--	--	--	-1.06 (0.89)	-0.97 (0.93)
R-squared	0.01	0.23	0.10	0.41	0.30	0.23	0.42	0.10	0.45	0.46
Standard Error of Regression	3.47	3.07	3.32	2.70	2.95	3.08	2.69	3.32	2.62	2.63

Notes: Standard errors in parentheses. Sample consists of 235 stores. Dependent variable in all models is the change in average weekly payroll hours divided by 35 between wave 1 and wave 2.

^{a/} Number between 1 and 19 representing the identity of the franchise owner.

Table 6: Estimated Relative Employment Effects in New Jersey for
Alternative Samples and Specifications, BNW Data

	Pooled BNW Sample	Neumark- Wascher Sample	Original Berman Sample
<u>A. Change in Average Payroll Hours/35</u>			
1. No Controls	-0.85 (0.49)	-0.05 (0.61)	-1.28 (0.63)
2. Exclude First Franchisee, No Controls	0.37 (0.56)	-0.11 (0.62)	--
3. Controls for Chain and Ownership	-0.66 (0.41)	-0.27 (0.53)	-0.95 (0.64)
4. Controls for Chain, Ownership and Payroll Period	-0.09 (0.42)	-0.22 (0.54)	0.58 (0.72)
<u>B. Change in Payroll Hours/35 Using First Pay Period per Restaurant</u>			
5. No Controls	-0.55 (0.50)	0.18 (0.63)	-0.85 (0.67)
6. Controls for Chain, Ownership and Payroll Period	0.07 (0.43)	-0.15 (0.52)	0.96 (0.78)
<u>C. Proportional Change in Average Payroll Hours/35</u>			
7. No Controls	-0.06 (0.05)	-0.00 (0.07)	-0.09 (0.07)
8. Controls for Chain and Ownership	-0.05 (0.05)	-0.03 (0.07)	-0.04 (0.07)
9. Controls for Chain, Ownership and Payroll Period	-0.01 (0.05)	-0.03 (0.07)	-0.08 (0.08)

Notes: Pooled BNW sample has 235 observations; NW sample has 154 observations; original Berman sample has 71 observations. In row 2, data for 26 restaurants owned by one franchisee are excluded. In this row only, pooled BNW sample has 209 observations; and NW sample has 151 observations. Dependent variable in panel A is the change in average payroll hours between the first and second waves, divided by 35. Dependent variable in panel B is the change in payroll hours for the first payroll period reported by each store between the first and second waves, divided by 35. Dependent variable in panel C is the change in average payroll hours between the first and second waves, divided by average payroll hours in the first and second waves. Standard errors in parentheses.

Table 7: Comparisons of Employment Growth by Chain and Zip-code Area, Card-Krueger data versus Berman-Neumark-Wascher Data

	NJ and PA	NJ Only	PA Only
<u>A. Using Combined BNW Sample</u>			
Intercept	-0.32 (0.56)	0.41 (0.50)	-3.91 (1.77)
Change in Employment in BNW Sample	0.78 (0.22)	0.90 (0.19)	0.65 (0.68)
R-squared	0.22	0.38	0.09
Standard Error	8.97	7.35	10.76
P-value: intercept=0, slope=1	0.47	0.65	0.07
Number of Observations (Chain × Zip-code Cells)	48	37	11
<u>B. Using Combined BNW Sample Excluding Data from One Franchisee</u>			
Intercept	-0.26 (0.54)	0.36 (0.51)	-3.52 (1.67)
Change in Employment in BNW Sample	0.87 (0.21)	0.91 (0.20)	0.93 (0.73)
R-squared	0.28	0.39	0.17
Standard Error	8.56	7.40	10.27
P-value: intercept=0, slope=1	0.71	0.72	0.14
Number of Observations (Chain × Zip-code Cells)	46	36	10

Notes: Dependent variable in all models is the mean change in full-time employment for fast-food restaurants of a specific chain in a specific 3-digit zip code area, taken from the Card-Krueger data set. Independent variable is the mean change in payroll hours divided by 35 for fast-food restaurants (in the same chain and zip code area) taken from the BNW data set. In panel B, restaurants in the BNW sample obtained from the franchisee who provided Berman's Pennsylvania data are deleted prior to forming average employment changes by chain and zip code area. All models are fit by weighted least squares using as a weight the number of observations in the chain-by-zip-code cell in the Card-Krueger data set. Standard errors in parentheses.

Appendix Table 1: Effects of Payroll Period on Payroll Hours in Waves 1 and 2 and on Changes in Payroll Hours, BNW Data

	Hours/35, Wave 1			Hours/35, Wave 2			Change in Hours/35			Burger King Franchisees Change in Hours/35		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Biweekly Payroll Data	-3.25 (0.94)	--	-2.65 (0.98)	-1.57 (0.99)	--	-1.00 (1.03)	1.68 (0.49)	--	1.65 (0.52)	1.11 (0.34)	--	1.03 0.40
Monthly Payroll Data	-2.66 (1.68)	--	-3.11 (1.68)	-3.74 (1.77)	--	-4.17 (1.77)	-1.09 (0.88)	--	-1.06 (0.89)	-0.91 (0.65)	--	-0.89 (0.66)
New Jersey	--	2.11 (0.76)	1.67 (0.80)	--	1.44 (0.79)	1.58 (0.84)	--	-0.66 (0.41)	-0.09 (0.42)	--	-0.84 (0.37)	-0.17 (0.41)
R-Squared	0.11	0.09	0.12	0.24	0.23	0.25	0.45	0.42	0.45	0.15	0.04	0.15
Standard Error	4.98	5.02	4.94	5.24	5.25	5.21	2.61	2.69	2.62	1.59	1.67	1.60
P-value for Excluding Payroll Type Variables ^{a/}	0.002	--	0.013	0.065	--	0.059	0.000	--	0.001	0.001	--	0.001

Notes: Models in columns 1-9 are estimated on sample of 235 restaurants. Models in columns 10-12 are estimated on sample of 94 Burger King restaurants only. Models in columns 1-9 include controls for chain and company ownership. Standard errors in parentheses.

^{a/}Probability value of F-test for exclusion of two indicators for type of payroll data.

EMPLOYMENT POLICIES INSTITUTE

AN OPEN LETTER

To Professors David Card and Alan Krueger

March 18, 1998

Dear Professors:

After reading your recent *Washington Post* op-ed ("Unemployment Chimera"), I find that the only thing more amazing than your continuing claim that minimum wage hikes increase entry-level employment is the sophistry you use to support this claim. In March 1995, the Employment Policies Institute revealed your *American Economic Review* article on the 1992 New Jersey Minimum Wage Hike as a sham foisted upon the academic community. After EPI demonstrated that the data you collected were fraught with errors, your colleagues tagged that study "a monument to poor survey methodology." Now you have "re-analyzed" the New Jersey hike using "representative" data, but your new findings are no more credible than the old ones. So, once again, EPI is alerting interested parties to the half-truths and deceptions you pass off as "research". This time we hope to get the message out in time to save the *AER* from further embarrassment. I've outlined many of your *Post* comments/assertions as well as EPI's response.

C-K: *Richard Berman of the Employment Policies Institute (EPI), for example, argued that our (1992 survey) data were "worse than flawed" because they were collected from a telephone survey of fast-food managers.*

EPI: The Card-Krueger survey data have been criticized by virtually every knowledgeable reviewer because of the poorly-worded questions used by the interviewers and the incredibly inconsistent responses collected, not because the data were collected from a telephone survey of fast-food managers. Your colleague, Professor Finis Welch, confirms this assessment: "After reviewing the survey instrument and the analytical data file from the Card/Krueger survey, I agree with the EPI criticism. The numbers are incredible." (Welch 1995).

C-K: *Our most recent study revisits the New Jersey-Pennsylvania comparison using employer-reported payroll records collected by the Bureau of Labor Statistics (BLS) through the Unemployment Insurance System. Even critics acknowledge that this database is the most comprehensive and accurate one available for studying employment trends.*

EPI: Even if the database were the "most comprehensive and accurate one available for studying employment trends," a statement that critics *do not* acknowledge, the way Card-Krueger (1998) uses this database leaves much to be desired. This database provides the number of employees and the number of hours worked. Card-Krueger (1998) analyzes only the number of employees, *no it doesn't*

CHANGING THE DEBATE

AN OPEN LETTER

To Professors David Card and Alan Krueger

Page 2 of 4

ignoring the number of hours worked. Obviously, the number of hours worked is a superior measure because the simple number of employees gives equal weight to employment of part-time and full-time workers. In Card-Krueger (1998), a firm that replaces two 40-hour per week workers with three 20-hour per week workers has its employment increase by 50 percent rather than decline by 25 percent.

C-K: *About one-third of the restaurants used by Neumark and Wascher were gathered (and not in a random manner) by the EPI, an employer-funded group opposed to the minimum wage.*

EPI: EPI collected data for the areas immediately adjacent to the New Jersey-Pennsylvania border, where the restaurant sales environment in the two states are most similar. Neumark and Wascher (1997) added data farther away from the border to make their sample more closely match the Card-Krueger survey data. (Also, note that the 1992 Card-Krueger survey collected employment data from seven non-contiguous rural counties in Eastern Pennsylvania but collected data from all of New Jersey, including Newark, Jersey City, and Trenton. Interestingly, the survey excluded Philadelphia, even though it is part of the same CMSA as Trenton. As shown in Figure 1, former Massachusetts Governor Elbridge Gerry had nothing on Card and Krueger's creative sampling geography.)

C-K: *Since 1982, nearly two-dozen studies have concluded that modest minimum-wage increases have no detectable effects on employment.*

EPI: Professor Krueger provided us with this list of citations (attached). Of the 26 "studies" listed, eleven are peer-reviewed journal articles. Four of these eleven were written by Card and/or Krueger, and three of these appeared in a special issue of *Industrial Labor Relations Review* organized and edited by Krueger. Also, three of the four examine the effects of minimum wage increases in Texas, California, and New Jersey rather than the federal minimum wage. Two rely upon data collected by the authors themselves, and we have seen that survey design is not their strong point.

The most recent and definitive study of the employment effects associated with federal minimum wage increases was the 1995 *American Economic Review* article by Professors Deere, Murphy, and Welch. That article finds that the 1990-91 minimum wage increases caused significant job loss among teenagers aged 15-19 and among high school drop-outs aged 20-24. The authors conclude "When the cost of employing low-wage laborers is increased, fewer low-wage workers are employed."

C-K: *We believe our findings merely reflect the law of supply: If employers pay more, they will hire and retain more workers.*

EPI: Go back to Econ 101. Apparently, you are confused about who supplies labor and who demands labor. The "law of supply" states that there is a direct relationship between the price of

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AN OPEN LETTER

To Professors David Card and Alan Krueger

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a good and the amount offered for sale, e.g., at higher wages, more workers will offer their services. It says *nothing* about demand for workers. The law of demand, however, does. It says that, at higher wages, employers will demand less labor. Of course, employers *could* hire more workers at a higher minimum wage, but why would they *need* more workers at the higher minimum wage? Raising the minimum wage *reduces* demand; it does not increase demand. *vacancies*
Hence, employers will uniformly reduce employment in response to a minimum wage hike. In a situation where an employer needs more employees and can afford to pay higher wages, he will offer a higher wage *voluntarily*. He doesn't need the government to tell him to do so.

C-K: *When the minimum wage rises, low-wage employers are forced to raise wages. Some choose to fill vacancies, raising employment.*

EPI: And some are forced into bankruptcy. Your statement is a direct violation of the law of demand. It implies that, at higher prices for labor, employers demand more labor. Moreover, if low-wage employers needed more workers *after* a mandated increase in the minimum wage, why wouldn't they voluntarily hire more workers prior to the minimum wage increase?

C-K: *Some would argue that it's worth the risk of job loss to increase the meager earnings of minimum-wage workers.*

EPI: This is a specious argument because, according to BLS data, fewer than one in five minimum-wage workers lives in poverty. Research by Burkhauser, Couch, and Glenn (1996) shows that only 15% of the gains from minimum wage increases go to families living in poverty. Neumark and Wascher (1997) demonstrate that previous minimum wage hikes actually *increased* rather than decreased the number of families living in poverty.

C-K: *Of course, it is still too early to evaluate fully the effects of the last minimum wage increases.*

EPI: It is still too early to evaluate fully the effects of the September 1, 1997 federal minimum wage increase, but there are sufficient data to evaluate the effects of the October 1, 1996 federal minimum wage increase. Following the 1996 increase, the overall employment-to-population rate rose, but the teen employment rate *fell*. Using data from the Bureau of Labor Statistics, EPI calculates that approximately 380,000 entry-level job opportunities were destroyed by the 1996 hike. This analysis is available for review at our web site: www.epionline.org.

C-K: *(James) Glassman refers to a study by Charles Brown of the University of Michigan, which he says "cites 19 studies between 1970 and 1991 and concludes, 'a 10 percent increase in the minimum wage reduced teen employment by 1 to 3 percent.' " Never mind that Brown's study was published in 1982 and explicitly favored the bottom of this range.*

AN OPEN LETTER**To Professors David Card and Alan Krueger****Page 4 of 4**

EPI: Had you paid more attention to economics than to politics, you would know that Brown updated his 1982 study in a 1996 article appearing in a book published by the American Enterprise Institute. It is this 1996 article, not the 1982 article, to which Glassman refers.

C-K: *We have taken no position on the pending legislation to raise the minimum wage. Elected officials can best decide whether these risks are worth taking.*

EPI: Unfortunately, elected officials are using your flawed research to make these decisions. For example, Rep. David Bonior (D-MI) in a January 14, 1998 press release included the following statement: "*And in a soon-to-be-released study, noted economists David Card and Alan Krueger found that in the wake of the 1996 wage increase, fast-food employment in Pennsylvania actually went up 11 percent.*" Why did Card-Krueger provide a noted Democratic proponent of minimum wage hikes with a "soon-to-be-released" study of the 1996 minimum wage increase if they are not taking sides on this issue?

During a February 1998 interview on National Public Radio interview, you, Professor Krueger, were asked about President Clinton's proposal to raise the federal minimum wage to \$6.15 by January 1, 2000. You replied, "I guess I'd be less confident that another increase in the minimum wage, so quickly after the previous one, would have no effect on employment. I would think it's probably more likely that it could have an adverse effect."

David Card must be distressed.

Sincerely,



Richard Berman

Employment Policies Institute

cc: Interested Parties



CONGRESSIONAL BUDGET OFFICE
U.S. CONGRESS
WASHINGTON, D.C. 20515

June E. O'Neill
Director

March 26, 1998

The Honorable James M. Jeffords
Chairman
Committee on Labor and Human Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for your letter requesting information on the private-sector and intergovernmental mandates implications of S. 1805, the Fair Minimum Wage Act of 1998. This bill, as introduced by Senator Kennedy on March 19, 1998, would increase the federal minimum wage rate in two annual \$0.50 steps to \$6.15 per hour. CBO's mandate statements for the bill are attached. The private-sector statement includes an analysis of the bill's potential impact on employment.

The bill would impose both a private-sector and an intergovernmental mandate, as defined in Public Law 104-4, because it would require employers to pay a higher minimum wage rate than they are required to pay under current law. CBO estimates that the mandate costs would exceed the \$100 million annual threshold established in the law for private-sector mandates and the \$50 million threshold established in the law for intergovernmental mandates in each year beginning in fiscal year 1999.

If you wish further details on these estimates, we will be pleased to provide them. The CBO staff contact for the private-sector estimates is Ralph Smith, who can be reached at 226-2659. For state and local costs, the staff contact is Marc Nicole (225-3220).

Sincerely,

A handwritten signature in cursive script that reads "June E. O'Neill".
June E. O'Neill

Attachments

c: The Honorable Edward M. Kennedy
Ranking Minority Member



**CONGRESSIONAL BUDGET OFFICE
PRIVATE-SECTOR MANDATE STATEMENT**

March 26, 1998

S. 1805

Fair Minimum Wage Act of 1998

*As introduced and referred to the Senate Committee on Labor and Human Resources
on March 19, 1998*

SUMMARY

S. 1805 would amend the Fair Labor Standards Act of 1938 (FLSA) to increase the minimum wage rate under the Act from \$5.15 per hour to \$5.65 per hour on January 1, 1999, and to \$6.15 per hour on January 1, 2000.

PRIVATE-SECTOR MANDATES CONTAINED IN BILL

S. 1805 contains a mandate on private-sector employers covered by the FLSA. It would require those employers to pay a higher minimum wage rate than they are required to pay under current law.

ESTIMATED DIRECT COST TO THE PRIVATE SECTOR

CBO's estimate of the direct cost of the private-sector mandate in S. 1805 is displayed in the following table.

DIRECT COST OF PRIVATE-SECTOR MANDATE

Provision	Fiscal Year (dollars in billions)				
	1999	2000	2001	2002	2003
Increase the minimum wage rate	2.7	7.4	7.9	7.0	6.2

BASIS OF THE ESTIMATE

S. 1805 specifies that the minimum wage is to increase from \$5.15 to \$5.65 per hour on January 1, 1999, and to \$6.15 on January 1, 2000. Other sections of the FLSA providing different rules for certain workers and employers, including the provision permitting employers to pay teenagers \$4.25 per hour during the first 90 consecutive days of employment, would not change.

To estimate the direct cost to private employers, information was used on the number of workers whose wages would be affected in January 1999 and subsequent months, the wage rates these workers would receive in the absence of the enactment of the proposal, and the number of hours for which they would be compensated.

The estimate was made in two steps. CBO used data from the Current Population Survey (CPS) to estimate how much it would have cost employers to comply with the mandate had they been required to do so in early 1998. Second, these estimates were then used to project the costs to employers beginning in January 1999, taking into account the expected decline in the number of workers in the relevant wage range. The remainder of this section discusses the way this estimate was constructed and limitations of the data and methods.

The methods used for this estimate are similar to those used for CBO's estimates of proposals made in 1996, the most recent year in which bills to increase the federal minimum wage rate were considered on the floor of the Senate and the House. Unlike in 1996, CBO only has information about the number of workers in the relevant wage range for a very short time period since the current minimum wage rate became effective. In preparing the estimates in 1996, CBO was able to use data from several years when the minimum wage was at the then-existing rate of \$4.25 per hour. The current rate of \$5.15 per hour was implemented in September 1997. As more information becomes available, this estimate might need to be revised.

Estimates from the Current Population Survey

Data on hourly wage rates contained in the January 1998 CPS provide CBO's estimate of the number of private-sector workers in that month who were paid in the relevant range. At that time, about 2.2 million workers in the private sector were paid exactly \$5.15 per hour and an additional 9.5 million workers were paid between \$5.16 and \$6.14 per hour. (About 1.5 million additional workers reported being paid \$5.00 per hour; as discussed below, it is assumed that these workers were also covered by the \$5.15 minimum wage and were

misreporting their wage rates.) Roughly one-quarter of the workers in the relevant wage range were teenagers. Based on information from the Bureau of Labor Statistics, it is assumed that about 30 percent of those teenagers were in their first 90 days of employment with their current employer and therefore not covered by the increase in the minimum wage.¹

CBO estimates that if the workers in the private sector who had been paid between \$5.00 and \$5.64 per hour in January 1998 had been paid \$5.65 instead (with no change in the number of hours worked), their employers would have paid them approximately \$300 million in additional wages in that month. If the workers who had been paid between \$5.00 and \$6.14 had been paid \$6.15, their employers would have incurred an additional wage bill of about \$900 million in that month. Moreover, employers would have had to pay the employers' share of the payroll taxes on these additional wages; these taxes are included in CBO's estimate of the total direct cost of the mandate.

Applying the Estimates from the CPS to the Projection Period

The monthly cost to employers of the proposed increases in the minimum wage would be smaller in the future because the number of workers in the affected range will decline. For example, during the eight-year period starting in 1981 when the minimum wage remained at \$3.35 per hour, the number of workers paid exactly that rate declined from 4.2 million to 1.8 million, as market forces and increases in state minimum wage rates raised the level of wages paid. In 1996, CBO used data from the March 1992 and March 1995 CPS to estimate that the cost of complying with a minimum wage of \$5.15 per hour would have fallen by almost 40 percent over this three-year period, or about one percent per month.

CBO assumes that the direct mandate cost would continue to decrease at this rate throughout the projection period. Thus, the monthly cost of raising the minimum wage to \$5.65 in January 1999 would be roughly 87 percent of the cost estimated using the January 1998 data. The estimated cost of raising the minimum wage to \$6.15 in January 2000 would be about 79 percent of the cost of doing so in January 1998.

Estimates for each fiscal year were then made by aggregating the monthly costs. The estimate for fiscal year 1999 is the smallest because that period only includes an increased minimum wage for nine months. The estimate for 2000 includes the cost of a \$5.65 minimum wage for three months and a \$6.15 minimum wage for nine months. The estimate of the direct cost to the private sector is highest for 2001, when all twelve months would be at \$6.15 per hour.

¹ This estimate is derived from information on job tenure, by age, provided by the Bureau of Labor Statistics, based on supplemental questions included in the February 1996 Current Population Survey.

Limitations

Estimates of the direct cost of this mandate are uncertain for at least two reasons. First, the main source of data -- the January 1998 CPS -- is subject to sampling error and other problems when used for this purpose. For example, CBO assumed that the workers who reported being paid \$5.00 per hour after the minimum wage had risen to \$5.15 were actually earning \$5.15 because there is no evidence that compliance with the Fair Labor Standards Act fell.² The wage rates of other low-wage workers -- some of the workers who reported being paid below \$5.00 per hour and some of the workers not paid on an hourly basis -- would also be affected by an increase in the statutory minimum.³ Second, there is no solid basis for projecting the future number of workers who would have wage rates in the relevant range, their precise wage rates, nor the number of hours they would work under current law. The annual decline estimated from the 1992-1995 period could turn out to be too rapid or too slow.

INDIRECT EFFECTS OF AN INCREASE IN THE MINIMUM WAGE

An increase in the minimum wage rate from \$5.15 to \$6.15 would require employers to raise the wage rates paid to the lowest-paid workers covered by the FLSA by 19 percent, and would require employers to raise the wages of workers in the range between the old and the new statutory rates by smaller amounts. As under current law, employers could still pay teenage workers \$4.25 per hour during their first 90 calendar days.

Economists have devoted considerable energy to the task of estimating how employers would respond to such a mandate. Although most economists would agree that an increase in the minimum wage rate would cause firms to employ fewer low-wage workers (or employ them for fewer hours), there is considerable disagreement about the magnitude of the reduction. It has proven difficult to isolate the effects of past changes in the minimum wage. Moreover, the estimates from such analyses are hard to apply to future changes.

Based on CBO's review of a number of these studies, a plausible range of estimates for illustrating the potential losses is that a 10 percent increase in the minimum wage would result in a 0.5 percent to 2 percent reduction in the employment level of teenagers and a

² Staff within the Department of Labor's Employment Standards Administration, the agency responsible for enforcing the FLSA, report no increase in the number of complaints filed since the minimum wage increased to \$5.15.

³ In January 1998, there were almost 2 million workers who reported being paid an hourly wage rate of less than \$5.00. Some workers, such as employees in retail firms whose gross volume of sales is less than \$500,000 are not covered by the minimum wage, while others, such as certain tipped workers, are covered but can be paid a lower wage rate.

smaller percentage reduction for young adults (ages 20 to 24).⁴ These estimates would produce employment losses for an increase in the minimum wage of the extent provided in this bill of roughly 100,000 to 500,000 jobs. The individuals whose employment opportunities would be reduced are likely to include the least-skilled job-seekers who might benefit most from the work experience.

This range of employment impacts is the same as CBO estimated two years ago when Congress was considering a 21 percent (\$0.90 per hour) increase in the minimum wage.⁵ At that time, the low end of the range seemed more realistic because the number of workers in the relevant wage range and the size of the minimum wage relative to the average wage were relatively low. This time, however, those special considerations do not apply because less time has elapsed since the most recent increase in the minimum wage. About 50 percent more workers are in the affected wage range now than were in the relevant wage range when the 1996 legislation was being considered. Likewise, the minimum wage is currently about 41 percent of the average hourly earnings of production or nonsupervisory workers in the private sector, compared with about 36 percent just before the 1996 legislation was enacted.

But two additional differences from the situation that existed in 1996 could reduce employment impacts. First, the labor market is exceptionally tight, with the total unemployment rate at 4.6 percent and the teenage unemployment rate at 14.7 percent (February 1998). In 1996, the total unemployment rate was nearly one point higher and the teenage unemployment rate was two points higher. Second, the most recent increase in the minimum wage amended the FLSA to permit employers to pay teenagers \$4.25 per hour for the first 90 days, and the current bill would not change this provision. The literature on which the estimates reported above are based did not reflect such a differential. Presumably, the differential could result in fewer employment losses for teenagers, more losses for adults, and fewer losses overall. Although recent data indicate that few employers are using the option, its availability could cushion employment losses if labor markets weakened.

In addition to its effect on employment levels, an increase in the minimum wage could have many other economic impacts. For example, one consequence that has received considerable attention is its potential effects on the earnings of low-wage workers. CBO estimates that

⁴ See, for example, Alison J. Wellington, "Effects of the Minimum Wage on the Employment Status of Youths: An Update," *Journal of Human Resources*, Vol. XXVI, No. 1 (Winter 1991), pp. 27-46; Charles Brown, "Minimum Wage Laws: Are They Overrated?" *Journal of Economic Perspectives*, Vol. 2, No. 3 (Summer 1988), pp. 133-145; David Card and Alan B. Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton University Press, 1995), and Marvin H. Kosters, editor, *The Effects of the Minimum Wage on Employment* (AEI Press, 1996).

⁵ On March 25, 1996, CBO provided an estimate of the cost to the private sector of S. 413, which would have increased the minimum wage rate in two annual steps, from \$4.25 per hour to \$5.15 per hour. That bill did not include the youth differential and other special provisions that were contained in the legislation enacted later that year.

the direct effect of the proposed increase would be to increase the aggregate earnings of workers who would otherwise have received between \$5.15 and \$6.14 per hour by over \$7 billion in 2001. An indirect effect of the increase in the minimum wage might be that employers would also voluntarily raise the wage rates of workers who were already being paid just above the new rate in order to maintain differentials (the "spillover effect").

PREVIOUS CBO ESTIMATE

On March 3, 1998, CBO issued an estimate of S. 1573, which would increase the minimum wage rate in three annual steps to \$6.65 per hour and then would adjust the minimum wage thereafter to reflect changes in the Consumer Price Index. The current estimate of the direct cost to the private sector is based on the same methodology.

ESTIMATE PREPARED BY:

Ralph Smith (226-2659)

ESTIMATE APPROVED BY:

Joseph Antos
Assistant Director for Health and Human Resources



CONGRESSIONAL BUDGET OFFICE INTERGOVERNMENTAL MANDATES STATEMENT

March 25, 1998

S. 1805

Fair Minimum Wage Act of 1998

*As introduced and referred to the Senate Committee on Labor and Human Resources
on March 19, 1998*

SUMMARY

S. 1805 would amend the Fair Labor Standards Act of 1938 (FLSA) to increase the minimum wage rate under the act from \$5.15 to \$5.65 per hour on January 1, 1999, and to \$6.15 per hour on January 1, 2000.

INTERGOVERNMENTAL MANDATES CONTAINED IN BILL

S. 1805 contains an intergovernmental mandate as defined in the Unfunded Mandates Reform Act (UMRA) because state, local, and tribal governments would be required to pay a higher minimum wage to employees than they are required to pay under current law.

ESTIMATED DIRECT COSTS OF MANDATES TO STATE, LOCAL, AND TRIBAL GOVERNMENTS

**Is the Statutory Threshold (\$50 million in 1996, adjusted annually for inflation)
Exceeded?**

Yes, beginning in federal fiscal year 1999.

Total Direct Costs of Mandates

	By Fiscal Year, in Millions of Dollars				
	1999	2000	2001	2002	2003
Direct Costs	160	500	540	470	420

These amounts include the estimated increase in wages and payroll taxes that state, local, and tribal government employers would be required to pay to raise the wage rates of all employees who would otherwise have been paid between \$5.15 and the proposed rate. According to the Bureau of the Census, total state, local, and tribal government payroll exceeded \$450 billion in 1995.

BASIS OF ESTIMATE

Under S. 1805, the minimum wage would increase from \$5.15 to \$5.65 per hour on January 1, 1999, and to \$6.15 on January 1, 2000. The provision of the FLSA permitting employers to pay teenagers \$4.25 per hour during the first 90 consecutive days of employment, as well as other sections providing different rules for certain workers and employers, would not change.

CBO estimated the number of workers whose wages would be affected in January 1999 and subsequent months, the wage rates these workers would receive in the absence of the enactment of the proposal, and the number of hours for which they would be compensated. CBO found that fewer than 10 percent of the affected workers were employed by state, local, or tribal governments.

The estimate was made in two steps. First, CBO used data from the Current Population Survey (CPS) to estimate how much it would have cost employers to comply with the mandate had they been required to do so in early 1998. Second, these estimates were then used to project the costs to employers beginning in January 1999, taking into account the expected decline in the number of workers in the relevant wage range. Limitations of the data and methods are discussed in more detail in the private-sector mandate statement that accompanies this statement.

**APPROPRIATION OR OTHER FEDERAL FINANCIAL ASSISTANCE PROVIDED
IN BILL TO COVER MANDATE COSTS**

None.

ESTIMATE PREPARED BY:

Marc Nicole (225-3220)

ESTIMATE APPROVED BY:

Paul N. Van de Water
Assistant Director for Budget Analysis

March 4, 1998

3-5-98

Memorandum

To: The President
From: Nancy Hernreich
Kari Oudenhoven
Re: Minimum wage increase

Handwritten notes:
To the President
Robert Pollin
J. to Jy
Bowles

Abe Pollin sent you this editorial which was submitted to the Washington Post by his son, Robert Pollin, a professor of economics at the University of California Riverside.

He avidly supports your proposal to increase the minimum wage to \$6.15. He writes in contrast to an article that was published by James Glassman. Glassman claims that increasing the minimum wage will actually result in a worse situation since the demand for employees and service will decrease. Pollin disagrees by citing that there are many other factors that affect job conditions, such as the unemployment rate and recession levels. With the current state of the economy, this increase is a modest step toward raising more families above the poverty line.

Additionally, increasing the wage leads to more committed workers with a lower turnover rate. He recalls Henry Ford doubling the average salary to almost \$5 a day. He went for a 400 percent yearly turnover rate to an almost flawless turnover and absenteeism rate. Since 1968 the country has strongly regressed in its commitment to low-wage workers and their families, and it is time to raise the standards.

Handwritten notes:
copied
opening
Bowles



CENTRE
GROUP

Dear Mr. President:

I thought you enjoy
reading this piece about
the minimum wage
written by my son
Robert.

Best personal
regards

Alte

Betty:

Abie Pollin asked
me to give this to
the President. Please

Thanks

Dan

Abie
Summary

A MINIMUM WAGE INCREASE WILL HELP WORKERS

By Robert Pollin
Professor of Economics
University of California-Riverside
Riverside, CA 92521-0427
(909) 787-5037 ext. 1579 (office); (909) 788-8106 (home)
(909) 787-5685 (fax); Pollin@mailucr.edu (e-mail)

March 1, 1998

Submitted to Washington Post opinion-editorial section, as a "Taking Exception" column.

[TEXT IS 966 WORDS]

If Congress increases the minimum wage from its current rate of \$5.15 an hour to \$6.15 over two years, as President Clinton has proposed, some 10 million low-wage workers and their families will enjoy increases in their living standard. The increase is still not enough so that a full-time working person earning the minimum wage can support a family of three above the poverty line. But it will reduce hardships for millions of families which—despite overall economic growth—have experienced a generation of decline in both average as well as minimum wages. Indeed, the minimum wage today is a full 30 percent less than its 1968 peak level.

But James Glassman argues in a recent column ("Don't Raise the Minimum Wage, 2/24/98) that increasing the minimum wage will actually hurt the very low-wage workers it intends to help, because it will make these workers less attractive to employers, and thus increase unemployment among them. Glassman invokes a "law" of economics which states, as he puts it, "all else being equal, if you raise the price of something (for instance, labor), then the demand for it (for instance, by employers) will decline."

Guided by his understanding of this law, Glassman dismisses the most important research on minimum wages of the past generation, that of Profs. David Card of University of California-Berkeley and Alan Krueger of Princeton. Card and Krueger showed that when New Jersey raised its state-wide minimum wage in 1992 by 19 percent over the national minimum wage, employment in New Jersey's fast-food restaurants along the border with Pennsylvania remained stable, even though the New Jersey restaurants faced stiff competition from the nearby Pennsylvania restaurants that could still pay their workers the lower national minimum wage. Glassman similarly dismisses a simple observation made by President Clinton, among others: that jobs opportunities have been improving, not worsening, since the

*Minimum Wage op-ed submitted to Washington Post
Prof. Robert Pollin
March 1, 1998
Page 2*

minimum wage began rising in October 1995 in two steps to its current \$5.15, after having been stuck at \$4.25 for five years.

How can we reconcile this evidence that raising the minimum wage does not appear to worsen employment conditions for low-wage workers with the law of economics invoked by Mr. Glassman? The key issue is the qualifying phrase in the law--"all else being equal"--which Glassman acknowledges but then ignores. This qualification tells us that the law holds--that raising minimum wages will increase unemployment--only when nothing else is changing when the minimum wage is raised. But it is far more plausible that many things are likely to be changing along with a minimum wage increase, some of which will have a significant impact on jobs.

First of all, people tend to work harder after they are given a raise, since they become more committed to keeping their job. Absenteeism and turnover fall, and businesses are freed from spending lots of time and money in recruiting, hiring, training, and retaining workers.

Such considerations are not trivial. Henry Ford recognized this in 1913, when he nearly doubled the wage he was offering production workers to a then unheard of \$5 a day. Altruism was not his motive. Before offering that wage increase, the turnover rate at Ford Motors was roughly 400 percent. Over the course of a year, in other words, Henry Ford found himself hiring four times the average number of workers he actually needed to staff production. Rates of absenteeism were similarly high. By implementing the \$5-a-day wage, Ford almost completely eliminated turnover and absenteeism.

I observed similar patterns in recent research with colleagues concerning the municipal "living wage" ordinance that was passed last March in Los Angeles. The LA ordinance requires firms working under contract with the city to pay their employees a minimum hourly wage of \$7.25. We found that many firms were already paying living wages to all their employees, and that these firms competed successfully with firms that paid minimum wages. According to owners and managers of the "living wage firms" that we interviewed, the key to their competitive success was that they operated a high

*Minimum Wage op-ed submitted to Washington Post
Prof. Robert Pollin
March 1, 1998
Page 3*

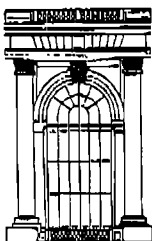
morale/high productivity work environment, which included, as with Ford in 1913, almost no absenteeism or turnover.

Other factors will also affect job conditions when minimum wages rise. The most important is that when the demand for products is high, businesses will normally push hard to meet that demand. They will not lay-off workers or stop hiring, regardless of whether minimum wages are rising. For example, because demand was expanding strongly last year when the minimum wage rose to \$5.15, this increase did not raise unemployment, but rather "turned into one of the non-events of 1997" according to the Wall Street Journal.

By the same token, jobs will dry up when demand for products is falling, as happens in a recession, regardless of what recent changes have been in minimum wages. Because the number of jobs available depends far more on overall demand in the economy than the minimum wage, there is, in fact, no stable statistical relationship over time between U.S. unemployment rates and changes in the minimum wage.

In 1968, the minimum wage provided a living standard 17 percent above the official poverty line for a three-person family, while the unemployment rate was near a post World War II low of 3.6 percent. The U.S. economy is now 50 percent more productive than it was in 1968. And yet, at the current \$5.15 minimum wage, a three-person family with one minimum wage worker today lives 20 percent below the official poverty line. No economic law can explain this 30-year regression in this country's commitment to low-wage workers and their families. In light of this history, President Clinton's proposal for a \$6.15 minimum wages can be clearly seen as only a modest step toward restoring a modicum of fairness in the economy.

Robert Pollin is Professor of Economics at University of California-Riverside and co-author of *The Living Wage: Building a Fair Economy* (The New Press, forthcoming 8/98).



UNITED STATES SENATE
REPUBLICAN
POLICY COMMITTEE

Larry E. Craig, Chairman
 Jade West, Staff Director
 347 Russell Senate Office Building
 Washington, DC 20510
 (202) 224-2946
<http://www.senate.gov/~ipc/>

February 13, 1998

It's Not the Minimum Wage, It's the Maximum Taxes

Growth in Taxes Outstrips Wage Growth In Clinton Years

Concerned over what they perceive as less than adequate remuneration for America's workers, President Clinton and Senator Kennedy have announced their intention to further increase the minimum wage, despite having raised it twice in the last two years. They are right to be concerned, Americans have been financially squeezed — especially throughout the five years of President Clinton's administration. However, it is not Wall Street's parsimony that is doing the squeezing, as liberals claim, but Washington's voracious tax appetite. In fact, if President Clinton and Senator Kennedy are really serious about finding the culprit, they should start their investigation with a mirror.

According to a February 2 news release by the Department of Commerce's Bureau of Economic Analysis (BEA), wages and salaries rose 6.7 percent in 1997 — well ahead of the 1.7 percent growth in inflation. However, despite this robust growth, the BEA reports that it was only about half the 11.4 percent growth in personal tax payments. Nor was 1997 an anomaly, throughout the past five years — the entire Clinton term in office — wage growth has been below the growth of personal tax payments according to BEA.

If the cynical politics were not so obvious, this Clinton-Kennedy election year ploy would be laughable. However, it can serve one important purpose: To fairly place the blame for why American families have proportionally less and less to save, spend, and invest. The fact is, liberal policies are shifting more and more of wages to Washington and away from America's families.

Trying to Legislate Prosperity...

Senator Kennedy has announced his intention in a 1/15/98 Dear Colleague letter for *"three annual increases of 50 cents in the minimum wage in each of the next three years — to bring the level to \$6.65 an hour on September 1 in the year 2000...."*

President Clinton has joined in this misguided effort to legislate prosperity: *"Because these times are good, we can afford to take one simple, sensible step to help millions of workers struggling to provide for their families: We should raise the minimum wage"* (Clinton Speech of the Union, 1/27/98). President Clinton announced February 12, that he would seek to raise it by a dollar in two fifty-cent increases over the next two years.

Of course, were it really possible to legislate prosperity, the Soviet Union would not only still be standing, but flourishing. In fact just the opposite has been true: Liberals like Clinton and Kennedy have been very successful at reducing prosperity legislatively.

Tax Growth Has Exceeded Wage Growth Under Clinton

The BEA data clearly show how successful taxes have been at outpacing wage and salary growth. The BEA tabulation of total wages and salaries paid to all employees (both government and private sector) — in other words, America's paycheck — in 1997 was \$3.877 trillion, an increase of 6.7 percent from 1996. The BEA tabulation of total payments (taxes, user fees, etc.) to government at all levels (federal, state, and local) by individuals — in other words, America's tax bill — in 1997 was 987.8 billion, an increase of 11.4 percent. In short, BEA's data show that America's tax bill rose faster than its paycheck. Americans are therefore making more, but taking home proportionally less of their paychecks.

Nor is this just a one-year trend. As the BEA data below show, this is a trend that has existed throughout the Clinton administration's five-year tenure. Looking back over BEA's data since 1959 (see Table and Graph on following pages):

- Since 1993, the growth in personal tax payments has outstripped that of wages and salaries.
- Prior to 1993, the faster growth of taxes than wages had not occurred since 1989, the first year of the Bush administration.
- Not since 1980-1981, had there been more than two consecutive years in which tax growth had exceeded wage growth.
- Only one other period 1965-1969 has equalled and only one other period (1976-1981) has exceeded this record of excessive tax growth.
- Only Carter (1977-1980) and Clinton can show tax growth exceeding that of wages and salaries in each year of his presidency.
- In fact only once in the four Democrat presidencies (Kennedy/Johnson: 1961-1968; Carter: 1977-1980; and Clinton: 1993-1997) since BEA began collecting data, has tax growth not exceeded that of wages and salaries — 1964.

This record of excessive tax growth is not only confirmed by President Clinton's latest budget — it is expected to continue. Last year, federal tax revenue reached its highest level since World War II, as a percentage of G.D.P. — 19.8%. This level has been approached only twice since World War II: in 1969 resulting from the Vietnam War, and in 1981 because of inflation arising from the Carter administration. Total federal revenues will reach 19.9% of G.D.P. this year.

These are not just abstract figures, as Senate Majority Leader Trent Lott pointed out in his response to the President's State of the Union address, they have a real impact on America's families. The typical American family's total tax burden (federal, state, local) is 38% — more than a third — of the family income. Taxes consume one-third of everything America produces annually (32% of G.D.P. in the third quarter of 1997) and while government income increased nearly 1,000% in the past 30 years, family incomes have risen only half that much (492%).

And the trend is expected to continue. According to the Senate Budget Committee, federal receipts will reach a post-World War II record of 20.1 percent of GDP next year if President Clinton's budget is enacted.

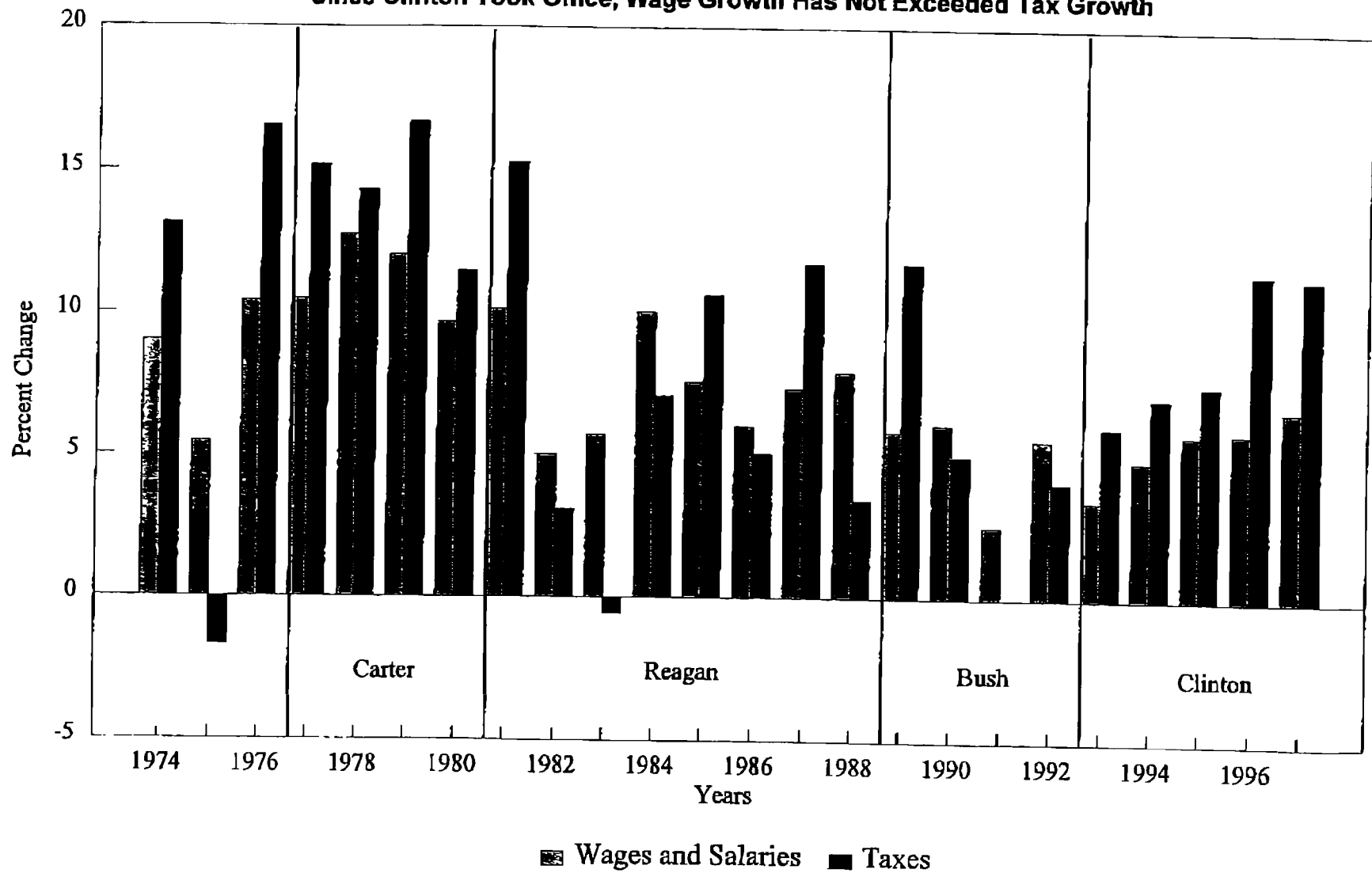
Are Liberals Trying to Hide Culpability?

It's no wonder Americans feel financially squeezed. Washington's tax growth has exceeded America's wage growth for the last five years. So while they have earned more, they have taken home proportionally less. While President Clinton and Senator Kennedy have been unconcerned about raising taxes, they now profess concern about the family financial squeeze their policies caused. Their solution? More federal interference to correct the problem of earlier federal interference. In short, they seek to make Main Street pay Pennsylvania Avenue's bill.

This record of excessive tax growth raises the question as to why President Clinton and Senator Kennedy are really trying to raise the minimum: Do they really want to raise America's prosperity or do they merely want to hide their culpability in lowering it through excessive tax growth? If their goal is really to raise America's take home pay they should start by cutting the demagoguery and the taxes. To paraphrase Clinton's 1992 campaign slogan: It's not the minimum wage, it's the maximum taxes, stupid.

Wage Growth vs. Personal Tax Growth: 1974-1997

Since Clinton Took Office, Wage Growth Has Not Exceeded Tax Growth



Wage & Salary Growth and Personal Tax Growth: 1960-1997

[Personal taxes and wage & salary numbers are in billions of dollars]

	Personal Taxes	% Change	Wage & Salary	% Change	Tax Growth Exceeds Wage Growth
1960	48.7	9.4	272.8	5.0	X
1961	50.3	3.3	280.5	2.8	X
1962	54.8	8.9	299.3	6.7	X
1963	58	5.8	314.8	5.2	X
1964	56	-3.4	337.7	7.3	
1965	61.9	10.5	363.7	7.7	X
1966	71	14.7	400.3	10.1	X
1967	77.9	9.7	428.9	7.1	X
1968	92.1	18.2	471.9	10.0	X
1969	109.9	19.3	518.3	9.8	X
1970	109	-0.8	551.5	6.4	
1971	108.7	-0.3	583.9	5.9	
1972	132	21.4	638.7	9.4	X
1973	140.6	6.5	708.7	11.0	
1974	159.1	13.2	772.6	9.0	X
1975	156.4	-1.7	814.6	5.4	
1976	182.3	16.6	899.5	10.4	X
1977	210	15.2	993.9	10.5	X
1978	240.1	14.3	1120.8	12.8	X
1979	280.2	16.7	1255.9	12.1	X
1980	312.4	11.5	1377.7	9.7	X
1981	360.2	15.3	1517.6	10.2	X
1982	371.4	3.1	1593.9	5.0	
1983	369.3	-0.6	1685.3	5.7	
1984	395.5	7.1	1855.1	10.1	
1985	437.7	10.7	1995.9	7.6	X
1986	459.9	5.1	2116.5	6.0	
1987	514.2	11.8	2272.7	7.4	X
1988	532	3.5	2453.6	8.0	
1989	594.9	11.8	2598.1	5.9	X
1990	624.8	5.0	2757.5	6.1	
1991	624.8	0.0	2827.6	2.5	
1992	650.5	4.1	2986.4	5.6	
1993	690	6.1	3089.6	3.5	X
1994	739.1	7.1	3240.7	4.9	X
1995	795.1	7.6	3429.5	5.8	X
1996	886.9	11.5	3632.5	5.9	X
1997	987.8	11.4	3877.2	6.7	X

*Source: Department of Commerce's Bureau of Economic Analysis

Economic Policy Institute

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

Memo to John Orzag

From Jared Bernstein

Re: Family Composition and Min Wg Workers

Date: March 16, 1998

Hi John,

These data come from the 1997 March CPS. We judge the March data to be superior to the basic monthly CPS (or the Earnings files) when it comes to examining family or household level income. We use the outgoing rotation group from the March file, since we judge these to be better data with which to calculate hourly wages. Since we are in March of 1997 (after the first but before the second step of the recent increase), we use \$4.75-\$5.15 as the affected range.

We find:

- 40% of all households (including one person units) have a sole breadwinner. Of course, the vast majority of these workers (96%) earn above the minimum wage;
- excluding one person units, that percentage falls to 34%;
- here's a new statistic you might find useful: of the 2 million HHs in the affected range in March 97, half were headed by females; if we restrict the sample to female-headed HHs with kids, there are 900,000 HHs in the sweep of which 56% are female heads.

Effect of Minimum Wage Increase on Cost of Workfare Programs

Talking Points

- There is one additional concern that we should be mindful of, as we consider what level of increase to propose in the minimum wage. As you know, Republicans made a concerted effort last year to roll back labor protections for those on workfare. Many Governors supported this effort, arguing they could not afford to pay the minimum wage for workfare jobs.
- A larger minimum wage increase will add to the pressure that Governors feel on this issue.
- So far, we have beaten back the Republicans' efforts, and persuaded Democratic Governors not to ally themselves with Republican Governors on this issue. However, some Democratic Governors remain very concerned about this issue. Their support of Republican proposals would give that effort new momentum.

Background

- In May, the Labor Department ruled that most workfare programs are subject to the Fair Labor Standards Act and other labor protections, including payment of the minimum wage.
- Governors have complained loudly that the DOL ruling severely hampers their ability to establish work programs for welfare recipients. The law requires states to put 50% of their welfare recipients to work by the year 2002, or face penalties. Welfare benefits are not high enough in some states to support payment of the minimum wage for 20 or 30 hours a week.
- DOL's ruling led the Republican leadership in Congress to seek to roll back current law labor protections for workfare jobs. We were able to hold the line and stop these efforts, but we can expect the issue to re-emerge this year.
- Any minimum wage increase will increase the number of states whose welfare benefits are not large enough to fund a minimum wage workfare job. As the size of the minimum wage increase goes up, so do the number of states with problems.

States Whose Welfare Benefits Can't Support a Minimum Wage Workfare Job		
Minimum Wage	Families of 2	Families of 3
Current Minimum Wage	8 states	No states
Increase of 50 cents (\$5.65)	15 states	1 state

Increase of \$1 (\$6.15)	21 states	2 states
Increase of \$2 (\$7.15)	36 states	9 states

Thinking About the Minimum Wage

Congress and the Administration are wrangling over proposals to raise the minimum wage. The Clinton Administration enthusiastically endorses the idea. Senator Dole first maneuvered to prevent the issue from reaching the floor of the Senate before then attempting to link a vote on the minimum wage with efforts to reduce the federal tax on gasoline. Republican leaders in the House are opposed to a higher minimum wage. Nevertheless, a group of twenty Republicans has joined Democrats calling for an increase, and this might make a vote on it inevitable. Any politician would find it difficult to oppose such a popular measure. Therefore, while not in our base forecast, an increase in the minimum wage appears increasingly likely. The Administration proposes an increase of 90 cents, or about 21%, from \$4.25 to \$5.15 per hour, half occurring this July and the rest next July. A Republican version would raise the minimum by \$1, with half occurring 90 days after enactment and the rest one year later.

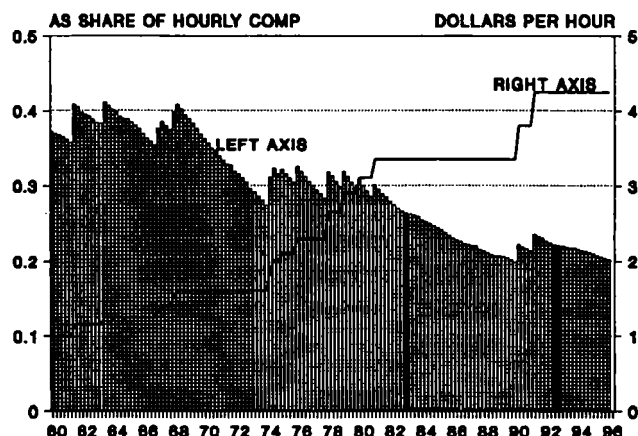
The real federal minimum wage is near an historic low. In the early 1960s, for example, when the nominal minimum wage was about \$1, it equaled roughly 40% of average hourly compensation. (See the accompanying figure.) By 1995, the nominal minimum climbed to \$4.25 but, as a percent of hourly compensation, declined to just 20%. Currently, the federal minimum is less than the minimum required in ten states. It was last raised during the Bush Administration by 90 cents, or 27%, from \$3.35 to \$4.25, half occurring in April of 1990, the rest one year later; a separate "training minimum" for teenagers also was introduced, but has been largely ignored. Since then, the real minimum wage has declined back to its level immediately preceding 1990's rise. In 1995, roughly 2 million hourly workers earned the current minimum, and about 8 million more earned from \$4.26 up to the Administration's proposed minimum of \$5.15.

Microeconomic employment effects. If demand curves slope downward and markets work as described in our elementary textbooks, then raising the minimum wage should reduce the demand for low-skilled labor. The only question is: how much? There is considerable empirical work on the issue, much of which does imply that raising the minimum wage reduces employment of the low-skilled. For example, in 1981, after reviewing the available evidence, the congressionally mandated Minimum Wage Study Commission concluded that the elasticity of teenage employment with respect to the real minimum wage was between -0.1 and -0.3.

If the elasticity of demand for teenager labor is typical of low-skilled workers generally, then what do these elasticities imply today about the potential loss of employment among those affected by the Administration's proposal? To see, we began with a detailed distribution by wage (with groupings every five cents) of workers paid hourly rates in 1995. (This unpublished table is part of the Current Population Survey and was supplied to us by the Bureau of Labor Statistics.) Then, we proceeded as follows. First, we assumed that no one working below the current minimum would be directly affected by the new, higher minimum; these are mostly workers in jobs not covered by the minimum wage. Second, we assumed that no one working above the new minimum would be directly affected either; i.e., there is no "ripple effect" through the structure of real wages above the new minimum. Third, we assumed that everyone working at hourly wages between the current and new minimums would see their wage rise to \$5.15. This, for example, is a 21% increase for those currently earning \$4.25, but only a 3% increase for those earning currently earning \$5.00. Fourth, for each group, we calculated the potential loss in jobs as the product of the percent change in that group's wage, an elasticity of demand, and the number of workers in that group. Fifth, we summed to a total across all groups.

For an elasticity of demand of -0.2, the mid-point of the Commission's range, the projected loss in employment came to 189 thousand. This number is biased up to the extent that employees in the "sweep" between the old and new minimums work at jobs not covered by the minimum wage. Nevertheless, larger figures can be generated by assuming a ripple effect. In one experiment, for example, we assumed that all workers currently earning between \$4.25 and \$6.00 an hour would see their wage rise by amounts ranging from 21% (for those currently at the minimum) through progressively smaller increases, until the ripple disappeared at wages above \$6.00. Then, the projected loss in jobs rose to 330 thousand. This figure is biased up for two reasons; (1) as before, not all workers in the sweep are covered by the

THE MINIMUM WAGE



minimum wage; and (2) obviously, not all employers currently paying above \$5.15 will find it necessary to raise their wage. Still, using a consensus estimate fifteen years old, one might sensibly argue that the proposed hike in the minimum wage will directly cost somewhere between two hundred thousand and three hundred thousand jobs. A copy of the worksheet in which these calculations were performed is available from LHM&A.

More recent research has discovered impacts that, while generally adverse, seem smaller than those summarized by the Commission and sometimes are not statistically distinguishable from zero. Indeed, in one hotly debated study, Princeton Economists David Card and Alan Krueger found that, in New Jersey, employment at fast-food restaurants actually rose after a hike in that state's minimum wage. Their work provoked a strenuous professional attack that focused on econometric technique and methods used to collect, sample and pool data. We are skeptical of the findings, but two decades ago estimates of job losses caused by increases in the minimum wage were so compelling that questions of technique were of secondary importance. Seen from afar, the professional flap over this work is, in itself, evidence of some uncertainty about the effects of the minimum wage on employment.

Why might the effects on employment have become smaller over time? One explanation might be that the real federal minimum wage has fallen enough that it no longer constitutes a binding constraint on some employers who either already abide by their own state's higher minimum or who pay a wage above the federal minimum anyway. Another possibility is that the increasing prevalence of part-time workers affords employers more flexibility to respond to a higher minimum wage by reducing hours without cutting payrolls. It might also be that the elasticity of demand for low-skilled labor actually falls as the real wage declines. Some have sought to explain the results of Card & Krueger as a logical outcome of a labor market that is dynamic and in which information is both imperfect and costly to acquire. Ongoing turnover means that employers must continually advertise to attract candidates and that new recruits, once hired, must be first trained and then retained. Potential workers not only must have incentive to seek employment but, once hired and trained, must discover that the job is what they expected and wanted. All of this might happen better at a higher wage. So, it is argued, an increase in the minimum wage could actually raise employment — although it's not clear why this wasn't true before.

All governmental efforts to redistribute income distort markets' outcomes, imposing costs on some while conferring benefits on others. At the microeconomic level, the benefits of the minimum wage accrue to those who keep their jobs while enjoying higher pay. The costs are born primarily by those losing a job, many of whom are thereby denied a chance to grab the first rung on a ladder to better economic opportunities and a successful integration into mainstream America. Whether raising the minimum wage is desirable or not depends, in part, on how the benefits of the policy compare to its costs. Perhaps because the perceived costs have shrunk through time, the risks associated with a higher minimum wage seem increasingly acceptable to both political parties, particularly given today's climate of fiscal restraint in which everyone is looking off budget to demonstrate their concern for the economically disadvantaged. This is probably why last year 101 prominent economists, including Nobel Laureates Ken Arrow, James Tobin and Larry Klein, wrote in support of the Administration's proposal that "overall effects on the labor market, affected workers, and the economy would be positive."

We believe that raising the minimum wage will increase modestly structural unemployment among the low-skilled. Given our earlier calculations, and considering the slight weakening in professional conviction suggested in recent research, a figure like 200 thousand seems defensible to us, and this is what we assumed for microeconomic job losses in the simulation reported below. We cannot, however, say whether this is a better or worse way to redistribute income than other possible policies intended to accomplish the same result.

Finally, keep in mind that for the minimum wage to result in a reduction in employment, it must be binding on employers. So, if there is generalized inflation in nominal wages, then a single increase in the nominal minimum wage should not have significant lasting effects on employment because, after initially rising, the real minimum eventually will fall to a non-binding level. Even a one-time increase in the real minimum wage should not have a lasting effect on employment if there are generalized increases in real wages arising from technical advance. Through the intermediate term, however, an increase in the nominal minimum wage can cost jobs, and repeated increases that prevent the real minimum from falling to a non-binding level can permanently reduce opportunities for employment.

Effects on NAIRU and the unemployment gap. If some low-skilled workers lose their jobs as a result of a higher minimum wage, but nonetheless elect to remain in the labor force, there occurs an increase in "structural" unemployment that initially raises the Non-Accelerating Inflation Rate of Unemployment, or NAIRU. The actual unemployment also rises by the same

amount, so there is no immediate effect on the unemployment gap and, at least on this score, no ramifications for monetary policy. However, if the Federal Reserve fails to recognize the increase in NAIRU and attempts to prevent the actual unemployment rate from rising, first wages and then prices might accelerate. If the unemployed workers became discouraged and withdrew from the labor force, both NAIRU and the actual unemployment rate fall back close to their original levels.

Long-run price effects. At the macro level, consider the fundamental equation of exchange, $MV = PQ$, which states that the product of money (M) and its velocity (V) equals nominal output expressed as the product of price (P) and quantity (Q): If, as a first approximation, both the stock of money and its velocity are fixed, then, in the long-run, an increase in the real minimum wage that causes a reduction in employment (and hence output) must cause a corresponding rise in the aggregate price level. This effect has to be very small if the microeconomic loss of employment is only a few tenths of one percent of the total workforce and is concentrated among workers with relatively low productivity. However, as discussed next, the near-term impact on inflation is considerably larger.

The minimum wage in WUMM and short-run inflation dynamics. The Washington University Macro Model does not have a labor market for low-skilled workers and so cannot handle the purely microeconomic impact that an increase in the minimum wage might have on employment and real wages. Nor have we ever succeeded in isolating a robust empirical relationship between the level of the real minimum wage and the effective NAIRU implicit in the model's Phillips Curve. If we believe these effects are important enough to consider seriously, they must be imposed on the model judgmentally.

Our equation for wage inflation does, however, capture short-run "shocks" emanating from changes in the federal minimum wage by including a term defined as the change in the real minimum wage scaled by the ratio of the nominal minimum wage to average hourly compensation; the scale factor adjusts in crude fashion for variations in the percentage of employees working for pay at or near the minimum. The coefficient on this term 1 captures the effect on hourly compensation of pay hikes enjoyed by those earning between the old and new minimums and allows for the possibility of a "ripple effect" through the *nominal* wage structure immediately above the new minimum. Statically, the equation suggests that the Administration's proposal to raise the minimum wage in two equal increments of 45 cents would raise the growth rate in hourly compensation, measured 4th-quarter-to-4th-quarter, by about a quarter of a percentage point in 1996 and by a like amount in 1997. This is consistent with our own off-line assumptions about the impact of Administration's proposal on the wages paid to hourly workers at the low end of the current wage distribution. We think it also squares with what happened in 1990 and 1991, the last time the minimum wage was raised.

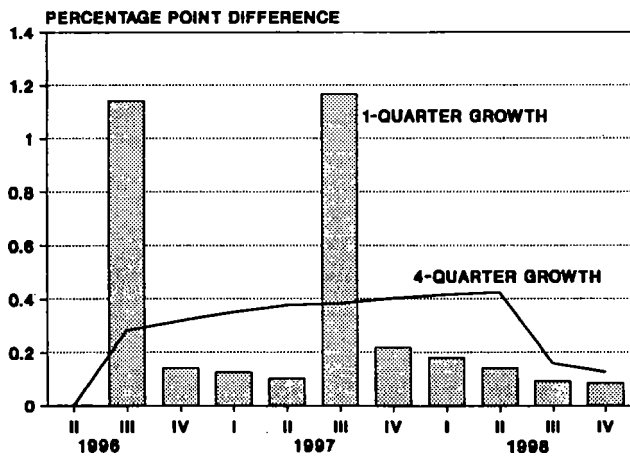
With a brief lag, the wage shock is passed through to the aggregate price level, so that there is no lasting impact on the structure of real wages. The extent of the pass-through to prices depends upon the cyclical state of the economy, but the effect generally is to reduce both the real money stock and real wealth, thereby producing a *macroeconomic* contraction of aggregate demand and employment. The resulting rise in unemployment is temporary and, in any event, is conditioned by the assumed monetary response. It should not be confused with the microeconomic effects on employment discussed above.

A minimum wage scenario. To see how an increase in the minimum wage might effect the near-term economic outlook, we constructed an alternative scenario incorporating the Administration's proposal to raise the minimum by 45 cents in the second quarter of 1996 and by another 45 cents in the second quarter of 1997. Adjusting down the demand for hours, we built into the simulation an assumption that the higher minimum wage results in a microeconomic loss of about 200 thousand jobs within half a year. By itself, this adjustment produces an excessive estimate of lost income because the model treats the newly unemployed workers as if their productivity, and hence their earnings, were average rather than below. To offset this bias, we simultaneously adjusted up hourly compensation to correct for the differentially low pay earned by those most likely to face unemployment. We also assumed that NAIRU increases by a corresponding amount, and that new structurally unemployed don't become discouraged workers. The near-term price shock was not allowed to reduce real food or energy prices or real government spending. The monetary response was assumed to be governed by our Federal Reserve reaction function. The results of the simulation are presented on the accompanying page of figures.

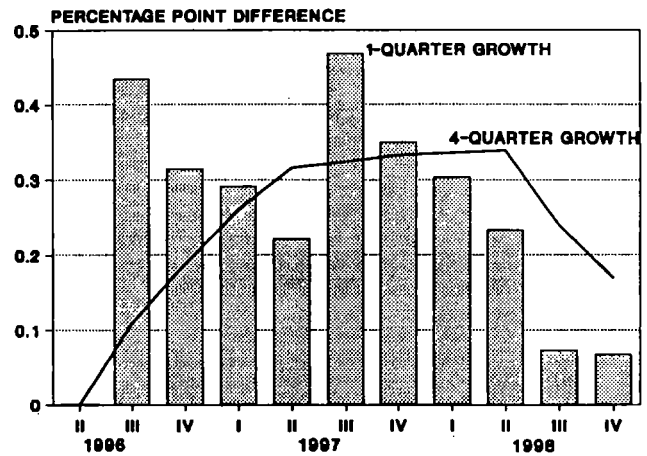
In the third quarters of both 1996 and 1997, when the minimum wage rises, growth in hourly compensation is boosted by over a percentage point at an annual rate; in the intervening quarters wage inflation also is higher—the result of a modest wage/price spiral consequent to the initial shocks. Over the four quarters of 1996, wage inflation is about 0.3 percentage point higher, and over 1997, about 0.4 percentage point. The CPI also is boosted, by 0.2 percentage point over 1996 and by 0.3 percentage point over 1997. Only in 1998 does the inflationary effect begin to dissipate.

The Impact of the Minimum Wage Alternative vs. Base

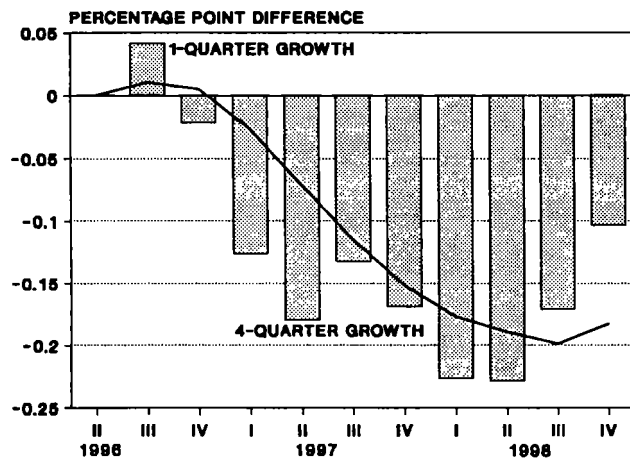
COMPENSATION PER HOUR



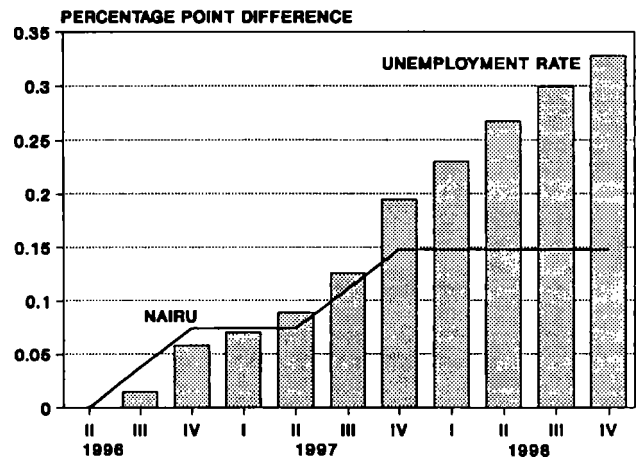
CONSUMER PRICE INDEX



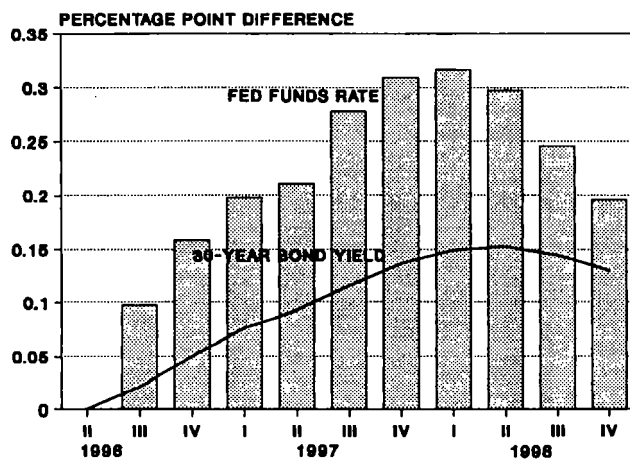
REAL GDP



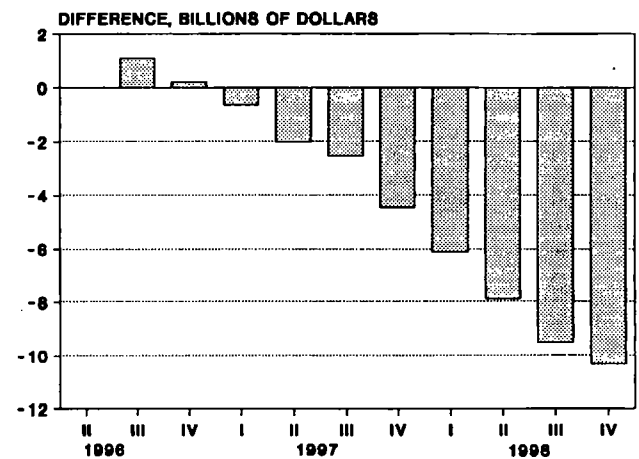
UNEMPLOYMENT RATE & NAIRU



INTEREST RATES



FEDERAL DEFICIT



The Fed leans against the higher inflation and, as a result, the funds rate is higher over much of the simulation by between 20 and 30 basis points; the long-term interest also rises but, given the lags in our term-structure equation, by smaller amounts. At the end of 1998, the civilian unemployment rate is up about 0.3 percentage point, about half of which is the assumed structural increase in NAIRU. Growth in real GDP is reduced by one tenth over 1996, two tenths over 1997 and one tenth over 1998.

**President Clinton Believes That If You Work Full-time,
You Should Not Have to Raise Your Children in Poverty**

Today, single parents working full-time with two kids can raise their family out of poverty (see column 1 of attached table). In 1998, a full-time, year-round minimum wage now earns \$10,300 per year. The Earned Income Tax Credit increases this worker's take-home pay by \$3,729; and payroll taxes subtract \$788. This means that this worker is left with \$13,241 -- \$19 more than the estimated poverty threshold for 1998.

The reason this worker is able to lift a family of three out of poverty is because of the 1993 EITC expansion and the 1996 minimum wage increase. Columns 2 and 3 show this clearly. Without either, this family would be \$3,169 below the poverty line (see column 3). With only the EITC expansion and no minimum wage increase, this family would be \$1,972 below the poverty line. (See column 2) In other words, a full-time minimum wage worker is nearly \$3,200 better off today than if President Clinton had not fought to expand the EITC and raise the minimum wage.

However, without another minimum-wage increase, this family of three will fall below the poverty line. While the EITC grows with the rate of inflation, the minimum wage does not. By 2000, without a minimum-wage increase, this family would fall short of the poverty line by \$432. (See columns 6 and 7)

The President's minimum wage proposal will help ensure that -- as costs continue to increase -- we fulfill his goal of ensuring that parents who work full-time can bring up their children out of poverty. As Columns 4 and 5 show, the President's proposal to increase the minimum wage will mean that a full-time minimum wage worker can raise two kids out of poverty.

	①	②	③	④	⑤	⑥	⑦
	Current	w/o '96 Min. Wage Hike	w/o '96 Hike & Expanded EITC	With Minimum Wage Increase		Without Min. Wage Increase	
	1998	1998	1998	1999	2000	1999	2000
Minimum Wage	5.15	4.25	4.25	5.65	6.15	5.15	5.15
FT,YR MW Worker	\$10,300	\$8,500	\$8,500	\$11,300	\$12,300	\$10,300	\$10,300
Poverty Threshold (3 People)	\$13,222	\$13,222	\$13,222	\$13,526	\$13,824	\$13,526	\$13,824
Earned Income Tax Credit	\$3,729	\$3,400	\$2,203	\$3,804	\$3,880	\$3,804	\$3,880
Payroll Taxes	\$788	\$650	\$650	\$864	\$941	\$788	\$788
MW+EITC (minus payroll taxes)	\$13,241	\$11,250	\$10,053	\$14,240	\$15,239	\$13,316	\$13,392
Poverty Gap (3 Person Family)	\$19	(\$1,972)	(\$3,169)	\$714	\$1,415	(\$210)	(\$432)

NOTE: Poverty thresholds and EITC amounts are estimates based on 1996 and 1997 levels, respectively.

955-2298

THE WHITE HOUSE
WASHINGTON

January 26, 1998

MEMORANDUM FOR THE PRESIDENT

FROM: GENE SPERLING

SUBJECT: Minimum Wage

On August 20, 1996, you signed the Small Business Job Protection Act, which raised the minimum wage in two steps from \$4.25 to \$5.15 (from \$4.25 to \$4.75 on October 1, 1996, and from \$4.75 to \$5.15 on September 1, 1997). With these recent increases, the current minimum wage is, in real terms, about where it was in the mid-1980s. Senator Kennedy has therefore proposed a significant further increase in the minimum wage. His proposal is to increase the minimum wage to \$7.25 per hour by 2002, through 50-cent increases in 1998, 1999, and 2000, and then 30-cent increases in 2001 and 2002. This proposal would return the real minimum wage to approximately its level in the late 1970's by 2002.

The economics of the minimum wage involve difficult tradeoffs. On the one hand, as Senator Kennedy emphasizes, raising the minimum wage helps to increase earnings at the lower end of the income distribution -- the part of the distribution that, until recently, suffered most from real income declines. Leading academics, such as Alan Krueger of Princeton, believe that the recent increases in the minimum wage have played a significant role in stemming the downward trend in wages for the lower skilled.

On the other hand, if the minimum wage were raised too much, it could cause disemployment among some of the most vulnerable participants in the labor market -- from African American males to teenagers and former welfare recipients. The difficulty, then, is deciding at what point the potential disemployment effects become significant enough to outweigh the beneficial distributional effects.

If we decide to support an increase, there are two additional issues you will need to consider: one, when to make the increase effective; and two, how many stages to increase the minimum wage. On the former, we may want to propose to make any increase effective in 1999 or 2000, not in 1998, to ensure that we give businesses a reasonable warning. On the latter issue, the Labor Department emphasizes that changing the minimum wage entails administrative and enforcement costs on the Department and on businesses. They would prefer fewer -- but larger -- step increases; in other words, they prefer one 30-cent increase to two 15-cent increases.

Options:

We have several options, as delineated below:

Option I. Adopt Kennedy Minimum Wage Proposal: Increase minimum wage to about \$7.25 by 2002, through 50-cent increase in 1998, 1999, and 2000, and then indexing it to the rate of inflation thereafter (about 30-cent increases each year).

Pros:

- Returns minimum wage to real level of late 1970's.
- Provides substantial wage increase to low-wage workers.
- Would unify liberal-wing of the Democratic party.

Cons:

- Your entire economic team believes that this approach is too aggressive and are concerned that Senator Kennedy's proposal could prove damaging to the employment prospects of low-skilled workers, as well as to the general macroeconomic performance of the economy.
- Janet Yellen and Treasury would prefer to have more time to analyze the effects of the most recent increases before enacting increases that go well beyond the bounds of the evidence already accumulated.
- The increase in 1998 may be harshly criticized by business as not permitting enough advance warning. Moreover, important validators for your 1996/97 minimum wage increase -- such as Alan Krueger, David Card of Berkeley, and Larry Katz of Harvard -- would oppose this approach.
- Some may argue that an increase this large could lead employers to pass the higher minimum wage onto customers in the form of higher prices.

Variation of Option I: One variation of this option would be to limit Kennedy's proposal to the first two increases -- the 50-cent increases in 1998 and 1999 -- and then re-evaluate further increases based on the experience with those two increases. If we were to adopt this proposal, it is possible that Senator Kennedy would sign onto it. However, your economic team believes that even this option is too aggressive. Raising the minimum wage by \$1 over the next two years could unnecessarily increase the risk of disemployment effects.

Option II. Adopt Position to Split the Difference and Maintain Real Value of Minimum Wage, Without Explicit Indexation Proposal: Increase minimum wage to \$6.15 by 2002 (roughly halfway between the current level and Senator Kennedy's 2002 proposal, and slightly above the level that would maintain real value of minimum wage). The increases could take the form of a 25-cent increase in 1999, 2000, 2001, and 2002. Alternatively, we could propose a 50-cent raise in 1999 and another 50-cent raise in 2002.

Pros:

- Your entire economic team supports a moderate increase in the minimum wage in the range of this Option. Secretary Rubin, Secretary Herman, Gene Sperling, Janet Yellen, and Secretary Shalala agree that this Option would help millions of low-wage workers, while not creating a significant risk to the economy or the labor market prospects of low-skilled workers.
- Slightly improves real value of minimum wage over budget horizon. To keep the real value of the minimum wage at its current level, we would have to raise it to approximately \$5.90 in 2002.
- Fulfills 1992 campaign promise to have the minimum wage "keep pace with inflation."

Cons:

- Democrats may complain that the increase is too small, and that this approach takes away the issue in 2000. This proposal would not return the real value of the minimum wage to its level of the 1970s. On the other hand, business may still complain that the increases are too soon.
- The economy could reverse its impressive performance over the past several years, and the increases in the outyears would then pose potential risks to low-skilled unemployment.

Variation A of Option II: A Single 40-Cent Increase in 1999. Proposing to raise the minimum wage to \$6.15 per hour by 2002 is equivalent to increasing it by 20 cents per year. One alternative would be to propose a single 40-cent increase in 1999. This would be consistent with reaching \$6.15 per hour by 2002, but would provide flexibility for macroeconomic conditions and would allow Democrats to reopen the minimum wage issue in 2000. This variation is supported by your economic advisers.

Variation B of Option II: A Single 50-Cent Increase in 1999. John Podesta is concerned that a single 40-cent increase is not enough to attract Democrats, such as Senator Kennedy. He believes we would be "a year late and a dime short." If you adopt a single increase, John argues that we should propose a 50-cent increase because it would be more likely to gain support from Democrats. However, your economic team believes that one 50-cent increase in 1999 would be large enough to risk potential disemployment effects.

Option III. More Aggressive Minimum Wage Increase: This option splits the difference between what your economic advisers are comfortable with and Senator Kennedy's proposal. It would increase the minimum wage to \$6.00 by 2000. The increases could take the form of a 35-cent increase in 1998 and two 25-cent increases in 1999 and 2000. Alternatively, we could propose a 45-cent raise in 1999 and a 40-cent raise in 2000.

Pros:

- More likely to get support of liberal Democrats. And since it covers a different time frame than Kennedy's proposal (2000 vs. 2002), may not be viewed as competing proposal.
- Since this proposal would be more controversial, could create a more significant debate.
- Provides simple message: we believe minimum wage should be \$6 per hour by the turn of the century.

Cons:

- Since this proposed increase is slightly larger in real terms than going to \$6.15 by 2002, your economic team would be concerned that there could be disemployment effects.
- May lose support of moderate Democrats and Republicans, especially from Southern states. Moreover, important validators, such as Alan Krueger, Larry Katz, and David Card, would not support this large an increase.

Option IV. Wait and See: Do not endorse increase in minimum wage at this time. Argue that we support minimum wage, but too early to increase again because we need to learn from the facts of the recent hikes.

Pros:

- Provides more time to study effects of most recent increases.
- Could be presented as not taking a stance on Kennedy -- thus could allow Kennedy to push for his relatively large increase without an Administration proposal to distract attention.
- Allows issue to be raised during 2000 cycle if desired.

Cons:

- Allows the minimum wage to deteriorate in real terms over time.
- May be criticized by Democrats as not supporting an important objective.

Recommendations:

I discussed this issue at a meeting of the NEC principals on Thursday night. Your entire economic team could support a moderate increase in the minimum wage to maintain its real value. Therefore, your economic advisers recommend that you support an increase in the minimum wage to \$6.15 by 2002.

You should know that your advisers considered explicitly indexing the minimum wage to the rate of inflation. However, we rejected this approach for a number of reasons: (1) it would be difficult for us to argue that we should index the minimum wage, when we were willing to veto the balanced budget over the indexation of capital gains; (2) if we indexed the minimum wage this year, many Democrats would argue that we locked it in at an historically low level; (3) the Labor Department would have difficulty administering annual minimum wage increases (as noted above); and (4) since the minimum wage would automatically rise each year, it would take away a good political issue for those who believe the minimum wage is an important tool to help low-income families.

_____ **Option I:** Approve Kennedy proposal to raise minimum wage to \$6.65 in 2000 and then index it to inflation.

_____ **Option II:** Approve increase to \$6.15 by 2002, to maintain real value of minimum wage and split the difference with Kennedy's proposal.
(RECOMMENDED BY ECONOMIC TEAM)

_____ **Variation A of Option II:** Approve 40-cent increase in 1999, maintaining real value of minimum wage, while allowing flexibility for macroeconomic conditions and the issue to be revisited in 2000. (RECOMMENDED BY ECONOMIC TEAM)

_____ **Variation B of Option II:** Approve 50-cent increase in 1999, which would gain additional Democratic support, but would be outside the range that your economic team is comfortable with.

_____ **Option III:** Approve more aggressive increase to \$6.00 by 2000.

_____ **Option IV:** Wait and see, do not take position at this point

_____ Discuss further

February 18, 1998
Penn, Schoen & Berland Associates

Minimum Wage

There is some reticence on the part of some House members on the minimum wage. While small business may oppose it (8 of 10 small business people vote Republican as it is) and this concern is a fair one, this concern does not resonate with the voters, where the minimum wage in these good times is still a consensus issue. This is a great vice against the Republicans, as in the congressional races that push Republicans to oppose it, this makes it a powerful issue for Democrats.

3 in 4 Support raising the minimum wage, with an argument that it will hurt small businesses and the economy only bring it down to a solid 67% support.

75/22% support/oppose raising the minimum wage.

56% strongly + 19% somewhat support
11% strongly + 11% somewhat oppose

Democrats: 94/6, Republicans: 53/43, Independents: 75/19

Opponents of raising the minimum wage have said that President Clinton's proposal to raise the minimum wage will hurt small businesses and therefore hurt the economy. Knowing this, **67/29%** support/oppose raising the minimum wage.

46% strongly + 21% somewhat support
14% strongly + 15% somewhat oppose

Democrats: 80/47, Republicans: 45/50, Independents: 65/30

EMBARGOED FOR RELEASE:
12:01 a.m., Friday, May 29, 1998

CONTACT: Ed Lazere, Michelle Bazie,
Herbert Schaffner (202) 408-1080

NEW FINDINGS FROM OREGON SUGGEST MINIMUM WAGE INCREASES CAN HELP WELFARE-TO-WORK EFFORTS

The earnings of Oregon welfare recipients who found jobs rose substantially when the state's minimum wage increased in 1997 and again in 1998, according to a new study released by the Center on Budget and Policy Priorities.

Between late 1996 and early 1998, the Oregon minimum wage went from \$4.75 an hour to \$6 an hour as a result of a successful ballot initiative. During that period, the analysis shows, the average wage of newly employed welfare recipients rose 76 cents an hour — a nine percent increase after adjusting for inflation. The minimum wage increase appears to have helped not only welfare recipients who earn the minimum wage but also those earning slightly above the new minimum wage, reflecting a "ripple effect" that often accompanies minimum wage hikes.

The study shows that the recent wage increases are unique. They are much more significant than the wage growth nationally among a similar group of low-wage working women. And they contrast with *declining* real wages among Oregon welfare recipients in the years just prior to the increase.

Oregon's minimum wage is now the highest in the nation. It also is close to the level proposed in federal legislation to raise the national minimum wage. As a result, the Oregon findings provide evidence useful for assessing the potential national impact of a federal minimum wage hike on parents leaving welfare and on other low-wage workers.

Wage Trends Turn Positive Immediately After the Minimum Wage Increase

The wage data from Oregon's welfare agency highlighted in the study are striking.

- The average starting wage of Oregon parents leaving welfare fell five percent, adjusting for inflation, during the three years *prior* to 1997, when the state's minimum wage remained at \$4.75 an hour.
- This trend reversed itself immediately following the January 1997 increase to \$5.50 an hour in the state's minimum wage. Between the last quarter of 1996 and the last quarter of 1997, the average starting wage rose from \$6.15 an hour to \$6.65 an hour, or more than five percent adjusting for inflation.

Oregon Minimum Wage Findings

Page 2

12:01 a.m. Friday, May 29, 1998

- In the first quarter of 1998, after a further increase in the Oregon minimum wage to \$6 an hour, welfare recipients who found work earned an average of \$6.91 an hour.

"Debates over raising the minimum wage often focus on the issue of who will benefit," said Ed Lazere, the author of the Center study. "These findings confirm that minimum wage increases can help low-income parents who are trying to support their families by working." The study notes that any minimum wage workers are in low-income families, that the large majority are adults, and that many are their family's primary breadwinner.

The Oregon minimum wage increase has helped not only welfare recipients who earn the minimum wage but also those who find jobs paying slightly above the minimum wage. The report found that among welfare recipients obtaining full-time jobs, the proportion earning more than \$6 an hour rose from roughly half in 1996 to two-thirds in 1997. The state's 1997 minimum wage stood at \$5.50 an hour.

The Center's study concludes from the Oregon experience that an increase in the federal minimum wage above \$5.15 an hour would likely have positive effects across the nation on the wages of welfare recipients who move into jobs. Just as in Oregon, adults who leave welfare for work nationwide typically have very low earnings, often at the minimum wage or just slightly above it.

Other Factors Do Not Explain the Results

In assessing the wage data, the Center's study concluded that other factors — particularly the state's strong economic growth — could *not* explain the recent sharp rise in earnings among welfare recipients. For example, economic growth in Oregon was solid prior to the state's minimum wage increase in 1997, while real wages for welfare recipients were falling.

The study also found that the five percent inflation-adjusted increase in earnings of Oregon welfare recipients in 1997, following the minimum wage increase, was much greater than wage growth nationally among low-wage women, which equaled one percent after adjusting for inflation. In the three years prior to 1997, the trend in wages among Oregon welfare recipients lagged behind the nationwide trend among low-wage women.

No Adverse Effect on Employment Evident

The study also attempted to discern whether the Oregon minimum wage increases had a negative effect on employment opportunities. While no systematic study of this issue has been conducted, the available measures examined in the Center's report did not suggest

Oregon Minimum Wage Findings

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12:01 a.m. Friday, May 29, 1998

evidence of significant job losses.

- Data from Oregon's welfare agency indicate that the share of welfare recipients finding work rose modestly in 1997 following the increase in the minimum wage.
- Employment growth in retail trade, the industry most likely to be affected by a minimum wage increase, was positive in 1997 and followed the same pattern as overall employment growth in Oregon. Employment rose in 1997 both in retail and overall, although at a somewhat slower rate than in 1996. Both figures appear to reflect a modest slowdown in the state's overall rate of economic growth, not the increase in the minimum wage.

"The strong U.S. economy has done little to lift the earnings of workers at the bottom of the income scale, and wage inequalities remain at record-wide levels," Lazere observed. "The Oregon findings suggest that raising the federal minimum would help make work pay for parents seeking to leave welfare and support their families."

The Center on Budget and Policy Priorities is a nonpartisan research organization and policy institute that conducts research and analysis on a range of government policies and programs, and specializes in issues related to fiscal policy, labor standards, social welfare and nutrition policy. It is supported primarily by foundation grants.

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 **CENTER ON BUDGET
AND POLICY PRIORITIES**

May 28, 1998

**NEW FINDINGS FROM OREGON SUGGEST MINIMUM WAGE INCREASES
CAN BOOST WAGES FOR WELFARE RECIPIENTS MOVING TO WORK**

By Ed Lazere

Introduction and Summary

Debates over raising the minimum wage often focus on the issue of who will benefit from lifting the wage floor. Some claim that increasing the minimum wage does little for low-income families, because minimum wage earners frequently are teenagers or secondary workers in middle-class families. While the benefits of minimum wage increases are not targeted solely on low-income families, many of the workers whose earnings rise as a result of such increases are in low-income families. In addition, the large majority of minimum wage workers are adults, and many are the primary breadwinner in their family.

New evidence from Oregon suggests that minimum wage increases can have a significant effect on parents who leave welfare for work. As a result of a successful state ballot initiative, the Oregon minimum wage rose from \$4.75 an hour to \$5.50 an hour in January 1997 and then to \$6.00 an hour in January 1998.¹ Data from Oregon's welfare agency show that the earnings of parents who moved from welfare to work were boosted as a result of these increases.

- The average starting wage of Oregon parents leaving welfare fell five percent, adjusting for inflation, during the three years *prior* to the January 1997 increase in the state minimum wage.
- This trend reversed itself immediately after the increase. The average starting wage jumped from \$6.15 an hour in the last quarter before the 1997 minimum wage increase took effect to \$6.43 an hour in the first quarter following the increase. By the fourth quarter of 1997, the average starting wage had reached \$6.65 an hour, an increase of more than five percent, adjusting for inflation, over the same quarter of the prior year.

¹ The ballot initiative called for a three-step increase in the state's minimum wage. The third step will be an increase to \$6.50 an hour in January 1999.

These wage increases are unlikely to have occurred simply as a result of the state's strong economy. Economic growth in Oregon was solid prior to the state's minimum wage increase in 1997, but real wages for welfare recipients still declined during that period.

- The average starting wage for welfare recipients rose again following the second increase in the minimum wage. In the first quarter of 1998, welfare recipients who found work earned an average of \$6.91 an hour, up substantially from the end of 1997. Overall, the average wage for these workers is now 76 cents an hour higher than before the state minimum wage increase took effect.

The minimum wage increase in Oregon boosted the earnings both of welfare recipients who found jobs at the minimum wage and of many who found jobs paying slightly above the minimum wage. For example, among welfare recipients who found full-time jobs, the proportion earning more than \$6 an hour rose from roughly half in 1996 to two-thirds in 1997.

This analysis also examines whether the increase in Oregon's minimum wage had a negative overall effect on employment opportunities of welfare recipients. While no systematic study of this issue has been conducted, the available evidence does not suggest a negative change in employment opportunities. The share of welfare recipients finding work rose modestly in 1997 following the increase in the minimum wage. In addition, employment growth in retail trade, the industry most likely to be affected by a minimum wage increase, was positive in 1997 and followed the same pattern as overall employment growth in Oregon. Both overall employment and retail employment rose in 1997, although at a somewhat slower rate than in 1996. The change in employment growth between 1996 and 1997 reflects a modest general slowdown in the state's rate of economic growth, not the increase in the minimum wage. If the minimum wage increase had reduced job growth significantly, it is likely that the trend in retail trade employment would have been significantly worse than the trend in overall employment.

The Oregon findings have implications for the debate over raising the federal minimum wage. The Oregon minimum wage hikes have raised the state's minimum wage from a level equal to the federal minimum wage to a level somewhat above the current federal minimum wage. (In late 1996, the federal minimum wage rose to \$4.75 an hour, which made it equal to the 1996 Oregon minimum wage. The federal minimum wage then rose to \$5.15 an hour in September 1997, below the 1997 Oregon minimum wage of \$5.50 an hour at that time.)

In addition, academic studies and recent findings from state welfare-to-work efforts indicate that adults who leave welfare for work typically have very low

earnings, often at the minimum wage or just slightly above it. As a result of these low earnings, many families in which parents leave welfare for work continue to live in poverty. Thus, the Oregon experience suggests that an increase in the national minimum wage to a level modestly above \$5.15 an hour would be likely to have positive effects nationwide on the wages of adults leaving welfare for work. For the same reasons, the Oregon findings also suggest that increases in state minimum wages could boost the earnings of welfare recipients when they find work.

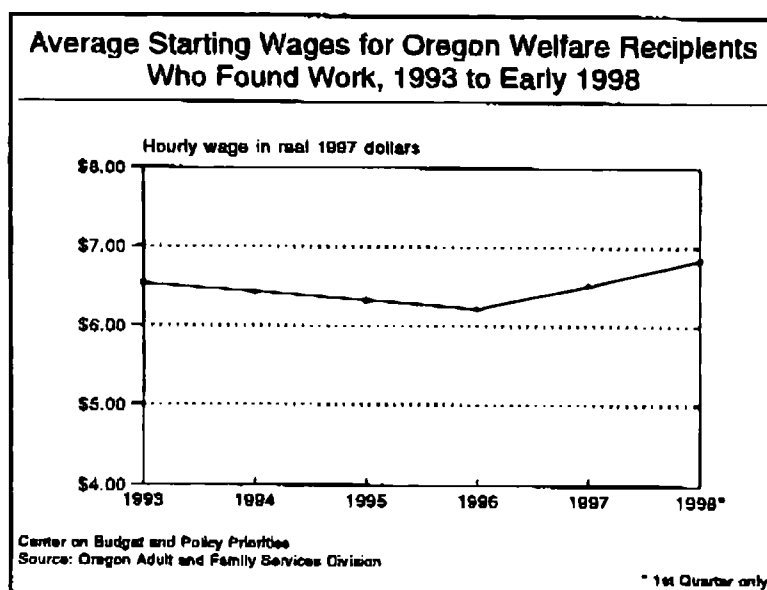
The Wages of Oregon Welfare Recipients Who Found Work Before and After the State's Minimum Wage Increase

The Adult and Family Services Division of the Oregon Department of Human Resources is the agency responsible for the state's welfare to work programs. The agency regularly collects information on the earnings of welfare recipients who move into the labor force.² The Oregon data show a distinct change in the wage trend among welfare recipients who found work in 1997, following the increase in the state's minimum wage. Between 1993 and 1996 the state's minimum wage remained at \$4.75 an hour. During that period:

- The average hourly starting wage of welfare recipients who found jobs — including both part-time and full-time jobs — went from just under six dollars an hour in 1993 to just above that level in 1996.
- When adjusted for inflation, the average starting wage of welfare recipients who found work was five percent *lower* in 1996 than the average in 1993. (See figure and table.)

These trends changed markedly immediately following the increase in Oregon's minimum wage on January 1, 1997. The average wage of Oregon's welfare recipients moving to work began to rise noticeably after the first boost in the state's minimum wage, and again after the second boost.

² The wage data reflect hourly wage information provided by welfare recipients to the welfare department. The large majority of recipients reporting wage information are participants in the state's welfare-to-work program. The remainder are recipients who find work outside of the state's JOBS program and report their wage information to caseworkers for benefit re-determination purposes. It is likely that the state data do not include all recipients who find work; for example, some recipients may choose to leave the welfare program when they find a job and thus would not need to report other wage information. Nevertheless, these data were collected in a consistent manner throughout the period covered in this report and thus are likely to accurately reflect changes over time. In addition, these data are used by the state as a performance measure for its welfare reform efforts.



- Between the last quarter of 1996 and the first quarter of 1997, the average wage for this group rose 28 cents an hour. This was the largest quarter-to-quarter change in the entire period from 1993 through 1997.
- By the last quarter of 1997, the average wage stood at \$6.65 an hour, or 50 cents higher than in the similar period of 1996. Adjusting for inflation, this represented a one-year wage increase of 5.4 percent.
- The Oregon minimum wage rose to \$6.00 an hour in January 1, 1998. Early data following this increase suggest that it also has had a significant positive impact on the wages of welfare recipients who find work. The average wage for newly employed welfare recipients reached \$6.91 in the first quarter of 1998.

The minimum wage increase appears to have affected a substantial proportion of Oregon's welfare recipients who found work in 1997. In the last quarter of 1997, for example, nearly one-third of the welfare recipients who found work — including half of those who found part-time work — earned the state's new minimum wage of \$5.50 an hour. This substantial clustering of wages at the new minimum wage level strongly

suggests that many of these workers would have earned less than \$5.50 without the increase in the state's wage floor.³

In addition to raising the earnings of minimum wage workers directly, the Oregon minimum wage increase also appears to have raised the wages of workers with earnings modestly above the new minimum wage level. During Oregon's 1996 fiscal year (from July 1995 to June 1996), roughly half — 48 percent — of the welfare recipients who found full-time work earned more than six dollars an hour. By the last quarter of calendar year 1997, more than two-thirds — 68 percent — of welfare recipients who found full-time work had earnings this high. Most of this increase occurred in the share of workers earning between six dollars and eight dollars an hour, or somewhat above the new minimum wage level of \$5.50 an hour. Minimum wage increases typically have such a "ripple effect," which may reflect attempts by employers to maintain pay differences between minimum wage workers and those with slightly higher earnings when minimum wages rise.

Table I
Average Starting Wages for Oregon Welfare Recipients who Found Work, 1993 to Early 1998

Before Minimum Wage Hike*	Average Starting Wage	
	In Nominal Dollars	In 1997 Dollars
1993	\$5.89	\$6.54
1994	5.95	6.44
1995	6.01	6.33
1996	6.08	6.22
4th Quarter, 1996	6.15	6.27
After 1997 Minimum Wage Hike		
Average	6.52	6.52
1st Quarter	6.43	6.47
2nd Quarter	6.47	6.48
3rd Quarter	6.55	6.54
4th Quarter	6.65	6.61
After 1998 Minimum Wage Hike		
1st Quarter	6.91	6.85
* Annual figures reflect averages of quarterly figures for the relevant year.		
Source: Oregon Adult and Family Services Division, Department of Human Resources		

³ Data from Oregon's Adult and Family Services division on the distribution of wages prior to the minimum wage increase are limited. They reflect only those welfare recipients who found full-time work, and the only figures on welfare recipients with earnings below the new minimum are for those earning less than \$5.00 an hour. The available figures show that 17 percent of welfare recipients who found full-time work in the 1996 fiscal year earned less than \$5.00 an hour. Since the vast majority of workers are covered by minimum wage laws, most of the workers earning less than five dollars an hour would have benefited from the state's minimum wage increase.

The Oregon minimum wage increase thus affected both welfare recipients who found work at the minimum wage and those who found jobs paying slightly above the minimum wage, which together represent a sizable share of Oregon welfare recipients who move into jobs. As a result of the broad effect, the average increase in the wages of all welfare recipients who moved into the workforce — 50 cents an hour from the end of 1996 to the end of 1997 — equaled a substantial fraction of the 75 cent increase in the state's hourly minimum wage.

It should be noted that the wage increases revealed by the Oregon data could reflect in part the state's growing economy and its impact on wages. For three reasons, however, the economy appears unlikely to be the primary cause. First, Oregon experienced solid economic growth prior to the 1997 minimum wage hike. Per capita income of Oregon residents rose seven percent between 1993 and 1996, adjusting for inflation. This was greater than the five percent growth in inflation-adjusted per capita income for the nation as a whole during this period. Yet despite this strong growth, the starting wages of Oregon welfare recipients who found work *fell* in inflation-adjusted terms during this period.

Second, while the state's continued economic expansion could have resulted in a growing shortage of available workers, which would have placed upward pressure on wages, this does not appear to be the case. The state's unemployment rate fell from 7.3 percent in 1993 to 4.8 percent in 1995, but then rose to 5.9 percent in 1996. The rate then remained steady at 5.8 percent in 1997. If the state were experiencing a significant shortage of workers, it would be reflected in a declining unemployment rate in recent years.

Third, the 1997 wage increases among Oregon welfare recipients stand out when compared with wage data for the nation as a whole. While national-level data on the wages of adults who move from welfare to work are not available, the Oregon findings can be compared with the wage trend nationally for a similar group of low-wage working women.⁴ The comparison shows that prior to the Oregon minimum wage increase, the wage trend was worse among Oregon welfare recipients who found work than among low-wage working women nationally. Following the 1997 state minimum wage increase, however, wage growth for Oregon welfare recipients was greater than among low-wage women nationwide.

⁴ The national comparison group was selected to match as closely as possible the profile of Oregon welfare recipients who moved into work. The comparison group was limited to working women because most adult welfare recipients are women. The *low-wage* level is the 20th percentile wage level among all female workers, as calculated by the Economic Policy Institute. Some 80 percent of women earned more than this level and 20 percent earned less. Between 1993 and 1996, the 20th percentile wage level among women was slightly more than \$6 an hour, or roughly equal to the average wage of Oregon welfare recipients who moved into jobs in that period.

- Between 1993 and 1996, the average wage among welfare recipients in Oregon fell nearly five percent, adjusting for inflation, compared with a one percent decline in the real wages of the typical low-wage female worker nationally.
- In 1997, the average hourly wage for Oregon welfare recipients moving into jobs rose 5.4 percent, also adjusting for inflation, while the typical low-wage female worker experienced a one percent increase in real wages.⁵

Assessing the Employment Effects

One of the major concerns raised about raising the minimum wage is that it can reduce employment prospects for low-skilled workers, under the assumption that some employers reduce the number of employees or the hours they work to offset the increase in wage costs per employee. In recent years, some have argued that the employment prospects of welfare recipients in particular would be adversely affected by an increase in the minimum wage. At the state level, some also argue that an increase in the state minimum wage would result in the migration of jobs to neighboring states.

While these concerns are important and must be considered, the weight of recent research findings on the minimum wage suggests that moderate increases from current minimum wage levels would not have adverse employment effects. No systematic studies of the employment impact of the Oregon minimum wage increase have been conducted to date. Two available measures, however — the proportion of welfare recipients moving to work and employment growth in retail trade, the industry most affected by the minimum wage — do not suggest that the state's minimum wage increase had a significant adverse effect on employment opportunities.

Employment Trends Among Welfare Recipients

The Oregon Adult and Family Services Division reports that the share of welfare recipients who found work in 1997 — 7.3 percent in an average quarter — was slightly

⁵ The hourly wage for the typical low-wage female nationwide — i.e., the 20th percentile wage among women — equaled \$6.13 an hour in 1993, \$6.08 an hour in 1996, and \$6.15 an hour in 1997, with all figures measured in 1997 dollars. It is worth noting that the increase between 1996 and 1997 may in part reflect the increase in the federal minimum wage from \$4.75 an hour to \$5.15 an hour in September 1997. In other words, the wage growth at this level may have been less than one percent if the federal minimum wage had not been increased.

higher than in 1996 before the state's minimum wage was increased. In 1996, an average of 6.4 percent of welfare recipients found work in an average quarter. At the same time, the *number* of welfare recipients who found jobs declined during this period, from an average of 5,850 a quarter in 1996 to an average of 4,875 per quarter in 1997. Because the state's total welfare caseload fell by a greater magnitude during this period, the *percentage* of all recipients who found work rose modestly.

These findings support an interpretation that job opportunities for Oregon welfare recipients did not worsen in 1997. It is reasonable to expect that as the total number of welfare recipients declines, the number finding jobs would also decline, simply because the number of welfare recipients who potentially could find work would be smaller. If job opportunities for welfare recipients had worsened significantly, both the number and proportion of welfare recipients finding work would likely drop, as more welfare recipients stayed on the rolls without a job.

At the same time, welfare caseloads may fall for a variety of reasons, including welfare policy changes. If caseloads decline significantly among groups of families that would not have been likely to find work had they remained on welfare, the number of welfare recipients finding jobs would not necessarily drop significantly. This could occur, for example, if changes in welfare programs made assistance less attractive or more difficult to obtain or if some families chose to leave welfare or not to begin receiving welfare to avoid using up time-limited assistance. (Such families may be able to get support from friends or relatives.) It is important to note that welfare caseloads have declined faster in Oregon in recent years than in almost every other state. While the state's caseload decline is partly the result of a strong economy, it clearly reflects policy changes as well.

Because welfare caseloads in Oregon have declined dramatically, and because the characteristics of the state's welfare recipients may have changed significantly, it is difficult to use the data on the proportion of welfare recipients finding work to assess with certainty whether job opportunities for welfare recipients have changed significantly. Nevertheless, the data do not indicate that finding a job became harder for welfare recipients in 1997.

Retail Trade Employment

Retail trade is the industry with the largest proportion of employees earning at or near the minimum wage. It is likely that employment growth in retail trade would be weaker than employment trends in other industries if an increase in the minimum wage had led businesses to reduce the number of employees. This did not happen in Oregon in 1997 following the increase in the state's minimum wage.

Table II shows the growth rate in retail trade employment and in all other industries in Oregon since 1995. There are two things to note about this table. First, each year during this period, retail trade employment rose at a slower pace than the rest of the labor force. Because employment in retail trade was growing more slowly than employment in other industries before the state's minimum wage was raised, the lower growth rate of retail employment in 1997 reflects a continuation of a trend and does not appear, at first blush, to be related to the minimum wage increase.

Second, the table shows that the overall growth rate in Oregon employment was lower in 1997 than in 1996, a reflection that the state's strong economic growth had slowed somewhat. The data also show that the slowdown in the rate of retail trade employment growth — from 3.1 percent in 1996 to 2.8 percent in 1997 — was actually smaller than the decline in the growth rate for employment in all other industries — from 4.2 percent to 3.5 percent.⁶ If the

minimum wage increase had adversely affected employment opportunities for low-wage workers, it is likely that the growth rate in retail trade employment would have fallen by a greater margin than the fall in the overall employment growth rate. Because the slowdown in job growth was more modest in retail trade than in other industries these data also suggest that the minimum wage increase was not a leading factor behind the modest slowdown in the state's economic growth rate in 1997.

The Oregon Employment Department did expect some reduced growth in retail trade employment as a result of the minimum wage increase. After factoring in the impact of the state's 1997 minimum wage increase, the department estimated that there would be 282,200 retail jobs in Oregon in 1997. That is one percent lower than the department's estimate of 285,100 retail trade jobs in the absence of the minimum wage increase.⁷ Actual figures for 1997 — which show that Oregon had 284,400 retail jobs, or

Table II
Oregon Employment Growth Rates, 1995-1997

	1995	1996	1997
Total non-farm	4.1%	4.0%	3.4%
Retail Trade	3.4	3.1	2.8
Total less retail trade	4.2	4.2	3.5

Source: U.S. Bureau of Labor Statistics

⁶ When the change is measured in percentage terms, the 1997 growth rate in retail trade employment was 10 percent lower than the 1996 growth rate. The 1997 employment growth rate for all other industries was 15 percent lower than the 1996 growth rate.

⁷ Oregon Employment Department, unpublished data, March 1997. The simulation also estimated that when the minimum wage increase enacted in 1996 was fully implemented, i.e., when the state's minimum wage reaches \$6.50 an hour in 1999, retail employment will be about three percent lower than it would have been if the minimum wage had not been increased. The simulation also estimated that the number of
(continued...)

slightly more than the number projected for the year — support the Employment Department's forecast of modest job losses following the minimum wage increase.⁸

Research on the Minimum Wage's Effect on Employment

These indicators from Oregon are consistent with recent academic research showing that at the current level, moderate increases in the minimum wage would not have adverse employment effects. This includes studies of increases in the federal minimum wage in the early 1990s and in 1996, as well as increases at the state level.

Among the research on state minimum wages are studies of an increase in the California minimum wage in 1988 and in the New Jersey minimum wage in 1992. The New Jersey minimum wage was raised to \$5.05 an hour in 1992. Adjusting for inflation, that equals \$5.90 in 1998 dollars, or roughly the same as the 1998 Oregon minimum wage level. The study of the New Jersey minimum wage increase compared employment growth in fast-food restaurants in the state with employment growth in nearby eastern Pennsylvania, where the minimum wage was not raised. The study found that employment trends were as favorable in New Jersey as in Pennsylvania.⁹ In response to questions about this study's methods, the authors prepared a 1998 re-analysis using new data from the Bureau of Labor Statistics. The new research confirms the initial findings.

Studies of recent increases in the federal minimum wage also have found no adverse effect on employment nationally. A May 1998 study by the Economic Policy Institute used four different tests to measure the employment effects of the 1996-97 increase in the federal minimum wage to \$5.15 an hour. The tests typically showed small changes in employment for most groups — in some cases positive and in other cases negative — with virtually all of the changes being statistically insignificant. The one test that showed fairly substantial and statistically significant employment effects found that the minimum wage increase boosted the employment of low-wage workers.

⁷ (...continued)

non-health service jobs will be about one percent lower in 1999 than it otherwise would have been as a result of the minimum wage increases. Overall, the department estimated that there would be 12,600 fewer jobs in the state in 1999 as a result of the minimum wage increase, a reduction of less than one percent.

⁸ As part of its standard measurement of employment, the Oregon Employment Department will revise all 1997 employment figures early in 1999. The revised figure for the number of retail trade jobs thus may differ slightly from the figure noted in this report.

⁹ David Card and Alan Krueger, "Minimum Wages and Employment: a Case Study of the Fast Food Industry in New Jersey and Pennsylvania," *American Economics Review*, September 1984, and "A Reanalysis of the Effect of the New Jersey Minimum Wage Increase on the Fast-Food Industry with Representative Payroll Data," Princeton University, January 1998.

The authors concluded that the tests "fail to find any systematic, significant job loss associated with the 1996-97 increases."¹⁰

Implications for a Federal Minimum Wage

The Oregon findings have significant implications for the federal minimum wage debate. Just as in Oregon, parents who leave welfare for work throughout the nation tend to earn at or near the minimum wage. Nationwide, half of the single mothers who received welfare assistance for at least part of the year but also worked at least part of the year earned less than \$5.15 an hour in 1996 — the most recent year for which data are available — while 63 percent earned less than \$6.15 an hour. (The federal minimum wage, which stood at \$4.25 an hour at the beginning of 1996 was raised to \$4.75 an hour in October 1996 and to \$5.15 an hour in September 1997. The leading proposal to raise the federal minimum wage would lift the wage floor to \$6.15 an hour by 2000.)

In addition, the Oregon data are consistent with research showing that the recent increase in the federal minimum wage boosted the earnings of low-income families generally. A study by the Economic Policy Institute on the two-step increase in the minimum wage from \$4.25 an hour in 1996 to \$5.15 an hour in 1997 found that minimum-wage workers frequently reside in low-income working families and that low-income families benefited the most from the increase. The EPI study found that among working families with a working adult, those in the bottom fifth of the income distribution received five percent of total family income nationally, but they received 35 percent of the benefit from the minimum wage increase. The study also found that 58 percent of the earnings gains from the minimum wage increase went to the bottom two-fifths of families in terms of income. The EPI study also looked at the impact on wages for adults with less than a high school education and for teenagers; it found that there were substantial wage increases among these groups, particularly among minorities.¹¹

¹⁰ Jared Bernstein and John Schmitt, *Making Work Pay: The Impact of the 1996-97 Minimum Wage Increase*, Economic Policy Institute, Washington, D.C., May 1998, page 1.

¹¹ Bernstein and Schmitt, *op cit*. The study shows, for example, that 30 percent of working women aged 20 to 54 with less than a high school degree earned \$5.15 an hour or less in the six months prior to the first step of the recent federal minimum wage increase in October 1996. During the six months following the second step of the increase, to \$5.15 an hour, the share of teens with earnings below this level dropped to 13 percent. (According to EPI, some workers continued to earn below \$5.15 despite the increase in the federal minimum wage because not all workers are covered by the minimum wage law, because some employers may not have been complying with the law, and because some workers may have inaccurately reported their earnings in the Census Bureau survey from which these data were drawn.)

Together, these findings suggest that the recent increases in the federal minimum wage are likely to have raised the incomes of a substantial share of the parents who left welfare for work. It further suggests that additional increases in the federal minimum wage would lift the earnings of these families even more, helping families make a successful transition to work and remain off welfare.