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**EMPLOYMENT
POLICIES
INSTITUTE
FOUNDATION**

JANUARY 18, 1995

***STATEMENT OF
CARLOS BONILLA
CHIEF ECONOMIST***

***PRESENTED BEFORE
COMMITTEE ON ECONOMIC AND
EDUCATIONAL OPPORTUNITIES
HEARINGS ON WELFARE REFORM***

U.S. HOUSE OF REPRESENTATIVES

Abstract

Moving welfare recipients into the workplace while assuring income adequacy remains the main stumbling block to welfare reform. Any policy that aims to reform welfare in this direction will have to break sharply with the conventional wisdom of the past in order to be successful. Significantly, new research findings from the Employment Policies Institute Foundation show that:

- Raising the minimum wage to increase the earnings of those leaving welfare has the effect of making welfare leavers *less* employable. States that raised their minimum wages in the late 1980s saw 40 percent longer spells of welfare receipt than did states which left their minimum wages unaltered. At the same time, these higher wage states saw work-related welfare terminations fall by 20 percent. As many have argued, "making work more attractive" through higher wages does induce individuals to join the workforce and seek out these positions. These individuals, however, had higher skill levels than did welfare recipients and crowded them out of the workforce. The same phenomena has been confirmed to take place among low-skill adults at the minimum wage, raising the specter of increasing dependency through a welfare reform approach predicated on forcing higher entry-level wages.
- Too much emphasis has been placed on the initial wages in entry level employment and too little on the earnings growth that has been documented to take place among the overwhelming majority of entry level workers. Within a short number of years after starting in entry level, workers who started in service sector occupations have average earnings that are comparable to those of workers who started the work lives in other sectors, even manufacturing.

The core of the welfare reform debate is focused on two questions: How do we move welfare mothers off of public assistance and into the workforce; and, once working, how do we assure that these women and the families dependent on them have sufficient income.

The magnitude of these problems is important to understand. From the Survey of Income and Program Participation spanning 1985 to 1990, we see that almost 10 percent of the women who reported that they were the mother or guardian of children under the age of 18 received benefits from the Aid to Families with Dependent Children Program for at least one survey month. Of the group who received welfare, less than half ended their period of benefits receipt because of employment. The rest of the welfare exits were primarily demographic in nature, reflecting loss of eligibility due to marital status or changes in family composition and age.

Most of the jobs—70 percent—taken by women leaving welfare were either service or *Technical, Sales, and Administrative Support* (TSAS) jobs. About a quarter of the TSAS jobs were as waitress in the food service industry, a fifth were cashiers and sales positions, and another fifth were nurses aides, orderlies and attendants. About 20 percent of welfare-to-work transitions involved employment as packagers, sewing machine operators, and assemblers.

The immediate observation is that these positions are among the less well paid positions in the American economy. Raising the earnings potential of people exiting welfare, to both make work a more attractive option and to assure a set standard of living, is where the debate is joined over how to implement work-based welfare reform.

Raising Earnings

That many of the jobs taken by those leaving welfare pay at or near the minimum wage has led a number of observers to recommend an increase in the minimum wage as a component of welfare reform. Reports describe the Administration as debating an increase of either 75c

or \$1.00 an hour. While such an increase would indeed raise the pay in these jobs—for full time work, a \$1.00 an hour increase translates as \$2,000 a year—it does not tell us what happens to the ability of welfare leavers to get these jobs.

The Employment Policies Institute Foundation has today released a research report on exactly this topic. This research, *Jobs taken by Mothers Moving from Welfare to Work and the Effects of Minimum Wages on this Transition*¹, was carried out by Peter Brandon at the Institute for Research on Poverty, at the University of Wisconsin. Dr. Brandon looked at the patterns of welfare exits among mothers who identified themselves as having received benefits under the *Aid to Families With Dependent Children* (AFDC) program. The research focused on the spells of welfare as well as the exits from the AFDC program.

To identify the effects of higher minimum wages on work-related welfare terminations, Dr. Brandon compared the work patterns of women receiving welfare in states that raised their minimum wages in the late 1980s compared to those women whose state of residence imposed no increase. (This methodology is consistent with much of the recent work on minimum wages, some of which has received considerable attention.) Increases in the minimum wage occurred in about 20 percent of the welfare spells identified.

Across the three waves of the data that were used in this analysis, roughly 20 percent coincided with an increase in the minimum wage. The average spell of AFDC receipts for the entire sample was 14.5 months. But, spells of welfare receipt

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that overlapped a minimum wage increase were much longer. Rather than the 14.5 month

average, these spells lasted more than 20 months. Raising the minimum wage increased by over 40 percent the length of time women spent receiving welfare.

To understand the dynamics of this longer period of welfare receipt it is helpful to look at the work patterns. More than 50 percent of mothers receiving AFDC benefits in a state which raised its minimum stayed out of the labor market over the entire survey period. In contrast, only 40 percent of mothers in those states which did not raise the minimum wage stayed

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out of the labor market. This 20 percent difference in labor force participation cannot be explained by differences in disability status, marital status, or subsequent births. In short, the higher minimum wage had an unambiguously negative effect on the ability of welfare mothers to use work as an exit from public assistance.

How can an increase in the minimum wage reduce work effort? After all, higher wages are supposed to make work more attractive and draw people into the work force. Why should welfare mothers react differently and work less after the minimum wage rises?

Consider what happens in the face of a higher wage for a job. The higher minimum wage draws in an expanded pool of job applicants. Individuals who were unwilling to do a particular job at \$3.35 an hour may be willing to work at \$4.25. Overall, the larger pool of applicants for these jobs reduces the probability that any one individual who applies for a job will get hired. The probability of getting hired falls most for those with the least skills. How

do people respond in this situation?

Many of them find that their skills compare unfavorably with those newly available in the market, and conclude that the odds of securing employment make the process of applying for a job too "expensive" given the expected outcome. This is a process not unlike that surrounding college applications. Regardless of how much you may want to go to MIT, if you feel that the competition is so steep as to keep you from gaining admittance you may not even apply.

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On the labor demand side of the market a reinforcing pattern takes place. In the face of higher costs employers will want to be more selective about who they hire. The expanded applicant pool gives them the incentive and ability to be more selective.

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All other things being equal, employers

will always try to hire the applicant with the best skills for the job. Given the extended period during which welfare recipients receive benefits—the Ways and Means Committee's *Green Book* tells us that 65 percent of recipients are on the AFDC program for at least 8 years—it is unlikely that the highest skill applicants will be those seeking an exit from the welfare system.

To test this view of the labor market we asked Dr. Kevin Lang² at Boston University to investigate the *composition* of employment following a minimum wage increase. Dr. Lang's research also relied on the differences that existed among states in their minimum wage rates.

Because of these differences, the 1990-91 federal increase in the minimum wage had a greater impact in those states that had *not* raised their minimum than it did in states which already had implemented higher rates.

Consistent with the labor market just described, Dr. Lang concludes that the displacement of welfare recipients after a minimum wage mirrored the experience of a larger population: low skill adults at the minimum wage were displaced by teens and students following a minimum wage increase, and full time employment was replaced by part time employment. Note

... adults at the minimum wage were displaced by teens and students after the minimum wage was increased... A \$1 difference in average wages in the food service industry was associated with a 9 percentage point decline in the employment of adults at the minimum wage.

that this is not a new phenomena. A \$1 difference in average wages in the food service industry was associated with a 9 percentage point decline in the employment of adults at the minimum wage. In 1939 the Department of Labor reported that "workers who had been receiving less than the [new minimum wage of] 25 cents had been laid off and replaced by more efficient workers."³ Many teens and students have skills which compare favorably with those of adults whose skills do not command more than the minimum wage.

Raising the minimum wage will not only reduce the employability of welfare leavers, it may even increase the number of working adults unable to find a port of entry into the workforce. Workers with marginal job skills who are barely employable at \$4.25 are least likely to be hired or retained at \$5.25. If we are serious about fostering transitions away from welfare and towards work then we must move away from the "entitlement mentality" that rules

federal support programs and accept that the workplace operates under a different set of rules: a reciprocal relationship emphasizing the ability of workers to pay the cost of their wages through output and productivity.

The Prospects for Earnings Growth

Our concern for the level of earnings of those leaving welfare centers in part on a great fallacy: that workers in entry-level jobs, earning at or near the minimum wage, are destined to stay at this pay scale absent federal intervention. In fact, analysis of the Current Population Survey⁴ shows that while 25 percent of teens aged 16-17 work at the minimum wage, this percentage falls dramatically with increased time spent in the workplace. By age 30 only 2 percent of workers are employed at the minimum wage and only half of them are employed full time. If 98 percent of Americans can move beyond the minimum wage by age 30, public policy should focus on the reasons why the remaining two percent cannot move beyond the entry level and target its efforts on the problems specific to those workers.

Unfortunately, the public policy debate has failed to take into account the earnings growth that takes place after entry-level work. That debate has merely looked at entry level wages, pronounced them inadequate, and ignored the important role that entry level employment opportunities confer. A number of recent studies have documented this effect.

Using the High School and Beyond Survey, Dr. Jeff Grogger of the University of California (Santa Barbara) looked at the earnings growth of non-college bound men. Looking only at individuals who reported never attending college, Dr.

...earnings growth in the first four years after leaving high school was largely unaffected by the industry in which the worker began his work life...

Grogger found that earnings growth in the first four years after leaving high school was largely unaffected by the industry in which the worker began his work life. Even workers who began in the food service occupations so heavily used in welfare-to-work transitions showed earnings growth similar to that of other workers.

Looking at workers over a longer term, Dr. Frederick Tannery from the University of Pittsburgh found similar results. Although initial earnings were indeed determined by the industry in which one worked, these differences disappeared over time and did not re-appear. Even as

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much as 12 years after entering the labor market there is no significant difference in earnings that can be attributed to the industry in which a worker was first employed. Workers who began in manufacturing were showing earnings levels comparable to those who began in retail trade.

Even more striking, Dr. Tannery documents the earnings growth of individuals who began work in different sectors. Workers who began in food service in the late 1970s saw average earnings rise over 400 percent by 1990.

When it comes time to evaluate welfare-to-work transitions, the discourse has all too often assumed that no earnings growth among entry-level workers is possible unless government intervenes in the labor market. While there are some individuals for whom that may be true, there is no reason to assume that it need be the defining experience for the vast majority. The majority—75 percent—of welfare mothers have at least a high school degree⁵, the highest

education level for half of all Americans. The majority of them are capable of much the same earnings growth.

Training and Employment Growth

In stark contrast to the consistent earnings growth after entry level employment, the record of federal training programs can only be described as abysmal. Enrollees who received classroom training under the Job Training Partnership Act showed lower earnings 18 months after entering the programs than did a randomly selected control group which never underwent this training. In the evaluation of the California GAIN (*Greater Avenues for Independence*) program carried out by the Manpower Demonstration Research Corporation, the only promising results were in Riverside County, California. Riverside County relied heavily on moving individuals into the workforce. The other evaluation sites, in contrast, relied most heavily on "job training" and showed markedly lower earnings growth. As Senator Kennedy said last week, "We have scores of job training programs, costing billions of dollars a year—and workers are not getting their money's worth."* The record of government training efforts pales in comparison to what we know can happen with private sector work.

Youth and Work

Concern has been voiced over the years that too many of the nation's youth have shortchanged their educational attainment by working rather than devoting full time to their studies. This, it is feared, will lead to lower skills as an adult and to a lifetime of low-skill work. Although their

Seven to ten years after leaving high school, those students who had worked moderate hours while in school (roughly 20 or less) were earning \$4,000 a year more than other students.

earnings as teens may provide them with disposable income greater than their non-working peers, the price will be paid as adults. In fact, just the opposite is true. Dr. Christopher Ruhm⁷, University of North Carolina at Greensboro, used the National Longitudinal Survey of Youth to explore the relationship between in-school work and subsequent economic attainment. He found that youths who worked while in school significantly outearned students who did not work. Seven to ten years after leaving high school, those students who had worked moderate hours while in school (roughly 20 or less) were earning \$4,000 a year more than other students. This estimation included a lengthy set of variables to control for the influence of family income, residence, and other socio-demographic characteristics. This is particularly striking given that most working youths accept employment in low-wage service jobs. These jobs obviously provided them with a long term benefit in the labor market.

Conclusion

Welfare dependency is not a problem that arose overnight, and we cannot expect that welfare reform will immediately end that dependency. Rather, we must accept that the majority of those leaving welfare will inevitably have to work at an entry-level job at the entry-level wage. That transition, however, cannot take place if we make the entry-level job unattainable to those who need them most. The evidence that low-skill adults are displaced by more capable workers when the minimum wage rises should rule out any such action in the name of welfare reform. At the same time, the demonstrated earnings growth that has been seen to take place from entry-level employment shows that the route to welfare reform lies not in more government training programs but in more private sector experience. In contrast to the failed training

programs of the past, a job, most any job, has shown itself capable of generating the earnings growth which will make welfare reform a reality.

1. Peter Brandon (Institute for Research on Poverty), *The Jobs Taken by Mothers Moving from Welfare to Work and the Effects of Minimum Wages on this Transition*, The Employment Policies Institute Foundation, January 1995.
2. Kevin Lang (Boston University), *Minimum Wage Laws and the Distribution of Employment*, The Employment Policies Institute Foundation, January 1995.
3. Department of Labor, Interim Report of the Administrator of the Wage and Hour Division, for the period August 15 to December 31, 1938, Washington D.C, 1939.
4. The Employment Policies Institute Foundation, staff report, *The Low Wage Workforce*.
5. U.S. House of Representatives, Committee on Ways and Means, *Green Book*, 1992.
6. Senator Edward Kennedy, January 11, 1995, cited in *The Daily Labor Report*, Bureau of National Affairs, January 12, 1995.
7. Christopher Ruhm (University of North Carolina, Greensboro), *The Effects of High School Work Experience on Future Economic Attainment*, The Employment Policies Institute Foundation, May 1994.

Preliminary:
Comments Welcome

THE EFFECTS OF NEW JERSEY'S MINIMUM WAGE INCREASE ON FAST FOOD EMPLOYMENT

A RE-EVALUATION USING PAYROLL RECORDS.

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* Neumark is Professor of Economics at Michigan State University, and a faculty research fellow of the National Bureau of Economic Research. Wascher is Senior Economist at the Board of Governors of the Federal Reserve System. We thank Bruce Fallick, Harry Holzer, Spencer Krane, and John Strauss for helpful comments, and David Card and Alan Krueger for providing their data. We are grateful to Carlos Bonilla of the Employment Policies Institute (EPI), and to participating franchise owners, for providing us with the payroll data. The EPI is funded by business contributions and generally opposes minimum wage increases. However, the research described in this paper was conducted independently of the EPI, and neither author received any remuneration for conducting the research. The views expressed do not necessarily reflect those of the Employment Policies Institute, or of the Federal Reserve Board or its staff.

I. Introduction

A recent study by David Card and Alan Krueger (1994) reported evidence that contrasts sharply with the conventional view that minimum wage increases reduce employment of low-wage workers. In particular, Card and Krueger (hereafter CK) surveyed fast-food establishments in New Jersey and Pennsylvania before and after the minimum wage in New Jersey rose from \$4.25 to \$5.05. A comparison of changes in employment in New Jersey and Pennsylvania provides a simple "differences-in-differences" comparison to test the prediction that minimum wage increases reduce employment of affected workers. Contrary to this prediction, CK find "no evidence that the rise in New Jersey's minimum wage reduced employment at fast-food restaurants in the state ..." and even that "the increase in the minimum wage increased employment ..." (p. 792). Given the prominence that this study has received, both in support of recent proposals to increase the federal minimum and as evidence against the competitive labor market model, we believe that a careful re-evaluation of its results is warranted.

In this paper, we present new evidence based on actual payroll records from Burger King and Wendy's franchises in New Jersey and Pennsylvania, most of which are also in CK's sample. We compare results using these payroll data to those using CK's data, which were collected by a telephone survey. We have two findings to report.

First, the data collected by CK appear to indicate implausibly large employment variation over the eight-month period between their surveys. The standard deviations of the employment changes in their data exceed those in the payroll data by a factor of four to eight.

Second, estimates of the employment effect of the New Jersey minimum wage increase from the payroll data lead to the opposite conclusion from that reached by CK. Whereas CK's full sample, as well as their subset of Burger King and Wendy's franchises, points to a positive

employment effect, the payroll data indicate a negative effect: For this subset of franchises, CK's data imply that the New Jersey minimum wage increase (of 18.8 percent) resulted in an employment increase of 20.8 percent relative to the Pennsylvania control group, an elasticity of 1.10.¹ In contrast, our estimates based on the payroll data suggest that the New Jersey minimum wage increase led to a 4.8 percent decrease in employment in New Jersey relative to the Pennsylvania control group, an elasticity of employment with respect to the minimum wage of -0.25.

II. Card and Krueger's Results

The first row of Table 1 reports descriptive statistics and the main result from CK's data: On average, over a period of about eight months following New Jersey's minimum wage increase, employment at fast-food restaurants in New Jersey grew by 2.72 more full-time equivalents (FTE's) than in Pennsylvania (column (6)).² As shown in column (1), this difference arises from a small employment increase in New Jersey (0.66 FTE's) and a large employment decline in Pennsylvania (2.1 FTE's).

The first row of the table also illustrates that there are some extremely large employment changes in CK's data. The largest employment decline is 41.5 FTE's, the largest increase is 34 FTE's, and the standard deviations of employment change are 8.4 in New Jersey and 10.8 in

¹For the full sample, their estimates imply that the minimum wage increase led to an employment increase of 12.8 percent, or an elasticity of 0.68.

²As in CK, full-time equivalents are defined as the number of full-time non-management employees, plus one-half the number of part-time non-management employees, plus the number of management employees. We exclude those restaurants that closed, which is the reason the figures differ slightly from those in CK's Table 3.

Pennsylvania.³ Given that the mean level of employment in the first survey was 21.1, the variability of employment change in CK's data is surprising, and provides a motivation for re-evaluating their minimum wage study using an alternative data source.

III. The Payroll Data

By contacting franchise owners, administrative payroll data were obtained for Burger King and Wendy's franchises in over one-third of the zip codes in which CK's restaurants were located.⁴ CK's data set does not include a unique restaurant identifier (such as an address), so we were unable to match up individual units. However, their data set does include the first three digits of the zip code in which each surveyed restaurant is located, enabling us to match units by location. Whenever possible, an attempt was made to collect data from all franchises in a chain in the zip code, so that the restaurants included in CK's survey should also appear in our data set. We were able to obtain data on all franchises in a chain for seven zip code/chain pairs (three in Pennsylvania and four in New Jersey), and data on some franchises for an additional seven zip code/chain pairs.⁵ All together, we were able to obtain data on 71 Burger King and Wendy's franchises. There were 179 such franchises in CK's data set.

Contact was made with franchisees identified in the Chain Operators Guide. These

³A corresponding statistic appears in the footnotes to CK's Table 4, where they report that the standard deviation of employment change for the whole sample is 8.8.

⁴We have so far been unable to obtain data from other chains or company-owned stores. The initial data collection effort focused on Burger King restaurants because they constitute over 40 percent of CK's sample.

⁵The initial data collection efforts focused on current franchisees in the zip code. For Pennsylvania, we have been able to verify from information on franchise agreements that, for those zip codes for which we have data on all franchises currently operating in the zip code, we also have data on all franchises operating at the time of CK's study. For New Jersey, we have so far only been able to verify this for the Wendy's franchises.

franchisees were asked to retrieve their payroll records for the pay periods spanning the dates for each wave of CK's survey.⁶ Generally, the restaurants submitted data either orally or by fax on the total number of hours worked by non-management employees.⁷ We then converted the hours data into full-time equivalent employees (FTE's) assuming a full-time workweek of 35 hours.

The payroll data that we obtained are more limited than CK's data in two respects. First, we have payroll data only for Burger King and Wendy's franchises. Second, we were able to obtain data only on non-management employment, whereas CK also had data on managerial employment. On the other hand, our measure of total hours probably provides a better estimate of FTE's than CK were able to obtain from their survey, since they simply recorded the numbers of full-time and part-time workers.

Given the limitations of our data, we start by examining the sensitivity of the differences-in-differences estimates using CK's data, restricting attention first to non-management FTE's, then to franchises, and finally to Burger King and Wendy's franchises. This provides a test of whether CK's estimates are robust to restricting the universe of sampled restaurants, or to restricting attention to non-management employment, and establishes a baseline with which to compare the results from the payroll data. These estimates are reported in the remaining rows of Table 1. As column (6) shows, none of these restrictions overturns

⁶Because we cannot uniquely identify the restaurants in CK's data set (and because CK's data set does not include the date of the first wave of the survey), this is the closest we can come to matching up the time period in the two data sources.

⁷We also considered attempting to obtain ES-202 reports. However, these are reported by company, not establishment, and most franchisees own many restaurants, frequently in a number of chains. We did, however, independently contact each franchise owner who supplied data, and verified that they provided numbers from their payroll databases. Frequently, the franchisees obtained the data directly from ADP.

CK's basic result that employment grew faster in New Jersey, although the estimated standard error of the difference in mean employment changes grows as the sample size falls.⁸ If anything, the estimated positive employment effect is larger for non-management employees at Burger King and Wendy's franchises.⁹ Thus, our findings (reported below) from the payroll data of negative employment effects of minimum wages are unlikely to arise from restricting attention to non-management employment at these franchises.

IV. Comparisons of the Employment Variability in the Payroll and Telephone Survey Data

Table 2 provides a comparison of CK's data and the payroll data, broken down by the first three digits of the zip code in which franchises are located. In order to provide a fair comparison of variability in the two data sources, when we obtained data for more than one payroll period within the time frame of CK's surveys, we randomly selected data for one period.^{10,11} Later, when we examine the implied minimum wage effects using the payroll data, we obtain the most accurate estimates possible by averaging over data for multiple payroll periods to estimate employment levels.

The top panel reports on zip codes for which we have data from all franchises. The

⁸CK also report, in row 3 of their Table 5, that excluding managers has no effect on their conclusions.

⁹The same is true if the implied change is calculated relative to initial employment; thus, this larger employment change is not attributable to Burger King and Wendy's franchises having higher employment levels.

¹⁰Averaging over multiple pay periods would tend to decrease the variability of employment change in the payroll data, compared with CK's data.

¹¹We also exclude, as noted earlier, the restaurants in CK's data set that closed by the second wave of the survey. Since they set employment to zero after the restaurant closes, and we obtained data on only one such restaurant, the inclusion of these restaurants would make the relative variability in their data even more pronounced.

payroll data indicate substantially less variation in employment over time than do CK's data. For these zip codes, the standard deviations of employment change in CK's data are 9.1 for New Jersey and 18.4 for Pennsylvania. In contrast, in the payroll data the corresponding standard deviations are 2.2 and 2.3. The minimums and maximums similarly are less extreme in the payroll data. The same is also true in the second panel, which reports data for zip codes in which we have data on only some franchises.

The higher variability in CK's data is not driven by one or two outliers. Figures 1 and 2 show histograms for the initial employment levels and employment changes in the two data sources. Figure 1 is for those zip codes in which we have payroll data on all franchises, and Figure 2 is for those zip codes in which we have payroll data on any franchise. The upper left-hand panels in each figure show the distribution of initial employment levels in CK's data, while the lower left-hand panels show the same distribution for the payroll data. In zip codes for which we were able to obtain data on all franchises (Figure 1), the employment levels in the payroll data are more clustered in the 10-25 range and exhibit fewer extremely large values. The middle panels show the same histograms for employment levels at the time of the second survey. Again, the payroll data exhibit much less employment variability, although CK's data are less variable in the second wave than in the first. Finally, the two right-hand panels show the histograms for employment changes. Here the contrast is striking, with the employment changes in CK's data much more dispersed than in the payroll data. The same qualitative conclusions are apparent in Figure 2, where we show histograms for franchises in all zip codes represented in the payroll data.

We find the striking variability of employment changes in CK's data relative to that in the payroll data very troublesome. We suspect that the problem is that the questions eliciting employment levels in CK's survey were too imprecise. CK first verified that they were

speaking with a manager or assistant manager. They then asked "How many full-time and part-time workers are employed in your restaurant, excluding managers and assistant managers?"

Survey respondents were not given any time period over which to define employment, and their answers may well have ranged from employment on the shift during which the telephone survey took place, to employment over an entire payroll period. Moreover, because different managers may have been interviewed in the two waves of the survey, there is no reason to believe that the responses in the first and second waves were based on the same "definition" of employment, which may explain the much higher variability of employment change. In contrast, the payroll data provide total hours worked for a well-defined payroll period (which is specified as either weekly, bi-weekly, or monthly), on a consistent basis for the two survey periods, and should therefore be more reliable.¹²

V. Representativeness of the Payroll Data

Having documented what seems like excess variability of employment change in CK's data for the franchises and zip codes for which we have payroll data, a legitimate concern is whether or not the universe from which observations in the payroll data set are sampled are representative of CK's sample in terms of the variability of employment change. For example, managers in particular chains may be more involved with maintaining payroll records and

¹²As a check on the validity of the payroll data, we verified that there were no instances in which CK's data indicated a restaurant closing, while the payroll data did not indicate a restaurant closing, in a zip code/chain combination for which we obtained payroll data on all franchises. (While CK's data appear to indicate overly large employment changes, they were careful to document restaurant closings, so this is one dimension on which we can assess the reliability of our data.) In fact, there was only one restaurant closing in the payroll data set, and there was not a corresponding closing in the same chain and zip code as in CK's data. But in the zip code/chain combination in which the closing occurred, we sampled twice as many franchises as did CK.

therefore have answered the telephone survey on a more consistent basis over time.

The histograms in the first two columns of Figure 3 address this question. The first column shows the histograms for employment change for the Burger King/Wendy's, Roy Rogers, and Kentucky Fried Chicken (KFC) restaurants in CK's data. In fact, the histograms indicate more variability of employment change in the Burger King and Wendy's restaurants than for either of the other two chains. The data for KFC, in particular, exhibit considerably less variability, although there are still some rather large employment changes. The second column displays the same information for franchises only, with similar conclusions. Thus, while we have no way of contrasting the variability of employment change in the two data sources for Roy Rogers and KFC, it seems reasonable to believe that we overstate to some extent the excess variability of employment change in CK's survey data by focusing on Burger King and Wendy's, although true employment may also be more variable in these latter chains.

On the other hand, the last column of Figure 3 shows that the variability of employment change in CK's data in the zip codes for which we have payroll data is similar to the variability in the zip codes for which we do not have payroll data. Thus, along this dimension we do not overstate the variability of employment change in CK's data.

Before turning to a comparison of estimated employment effects in the payroll data and the survey data, it is also appropriate to consider the representativeness of the universe from which the payroll data were drawn in terms of employment effects of minimum wages. In Table 1, we showed that restricting the sample to Burger King and Wendy's franchises (and to non-management employment) does not alter the finding of a positive employment effect of minimum wages in CK's data. The first two columns of Table 3 explore this question more fully, reporting estimates of the employment effect of minimum wages for Burger King and Wendy's franchises, and then separately for Roy Rogers and KFC restaurants, using CK's

data.¹³ The estimated employment effect for Burger King and Wendy's restaurants is positive and significant whether or not we restrict attention to franchises only, similar to the findings in Table 1. The estimated effect for Roy Rogers is smaller than for the sample of all restaurants, and effectively zero for franchises only. In contrast, the estimates for KFC restaurants are negative and relatively large (although insignificant). This contrast across chains is of interest, because the lower variability of employment change for Roy Rogers, and especially for KFC restaurants, suggests that, if we had payroll data for these chains, any differences between the payroll and survey data might be less pronounced. However, these regression estimates indicate that the chains with the greatest variability of employment change (based on the survey data) also contribute the most to the positive employment effects of minimum wages in CK's data. Thus, if (as reported below) the payroll data indicate negative, rather than positive, employment effects for these chains, it is reasonable to believe that a similar conclusion would be reached from payroll data on all chains.

Finally, we are also interested in the representativeness of our sampled zip codes in terms of the estimated employment effects of minimum wages. This is of interest for two reasons. First, had we sampled zip codes in Pennsylvania with particularly low employment growth and zip codes in New Jersey with particularly high employment growth--so that for the zip codes we sampled the difference between employment growth in New Jersey and Pennsylvania was particularly high--then regression to the mean could lead to lower positive estimated employment effects of minimum wages than CK obtain, or even negative effects (since the regression to the mean would be in opposite directions in the two states). Second, we want to be sure that the different results we get for the payroll data reflect differences between

¹³In this table, we report regression results rather than differences in mean employment changes.

the two data sources, not differences between the zip codes for which we do and do not have payroll data. The last two columns of Table 3 indicates that the zip codes for which we have payroll data are representative in terms of differences in employment growth. The regression estimates for the zip codes for which we do and do not have payroll data are nearly identical, both indicating faster employment growth in New Jersey of 3.7 FTE's.

VI. Comparisons of Estimated Employment Effects in the Payroll and Telephone Survey Data

The average employment changes by state, and the implied employment effects of minimum wages, also differ in the two data sources. The most compelling comparison is for those zip code/chain combinations for which we have complete data. As shown in the top panel of Table 2, for this subset of the data CK's data indicate employment declines in Pennsylvania in two of the three zip codes. In contrast, the payroll data show employment increases in all three zip codes. As shown in the row labeled "*Total, PA,*" the payroll data indicate average employment growth of 3.4 FTE's, compared with an average employment decline of 1.4 FTE's in CK's data. For New Jersey, CK's data indicate faster employment growth for two zip code/chain combinations than do the payroll data, while the payroll data indicate faster employment growth than CK's data for the other two combinations. On average, however, CK's data show faster employment growth in New Jersey (4.4 FTE's, vs. 2.6 FTE's in the payroll data). Because CK's statistical experiment identifies the effect of minimum wages on employment from the difference between employment growth in New Jersey and Pennsylvania, these differences in average employment growth suggest that the payroll data may imply negative, rather than positive, employment effects from an increase in the minimum wage.

Table 4 reports the fundamental results from our re-evaluation of the New Jersey-Pennsylvania minimum wage study using the payroll data. The first row repeats the results

from Table 1 using CK's data, showing (in column (5)) that non-management employment grew by an additional 4.25 FTE's in New Jersey relative to Pennsylvania, following the minimum wage increase in New Jersey. The regression estimate in column (6), which controls for differences in employment growth by chain, is nearly identical, with an increase of 4.22 FTE's in New Jersey relative to Pennsylvania. Columns (7) and (8) show the implied elasticity of employment with respect to the minimum wage from this estimate, and the corresponding percent increase in employment. The implied elasticity of 1.10 and the increase in employment of 20.8 percent (when the minimum wage rose by 18.8 percent) are surprisingly large, but estimated imprecisely.¹⁴

The second row of Table 4 shows the results obtained when we use the payroll data instead of CK's data. In contrast to CK's results, the payroll data imply a decrease of 0.97 FTE's, which is significant at the ten-percent level. The implied elasticity of employment with respect to minimum wages is -0.29, which is a bit larger than findings in other minimum wage studies suggesting that the elasticity lies in the range -0.1 to -0.2 (e.g., Brown, et al., 1982, and Neumark and Wascher, 1992). Of course, it is not clear what elasticity we ought to expect for fast-food employment based on the existing research, which estimates overall employment effects for teenagers or young adults.¹⁵

¹⁴The high elasticity is partly attributable to the restrictions imposed on the sample, as outlined in Table 1. For the total change in FTE's for all units, the elasticity implied by the estimates in Table 1 is 0.68. Looking at non-management employment only, the elasticity rises to 0.87. Restricting attention to franchises, it rises to 0.93. Finally, restricting attention to Burger King and Wendy's franchises only, the elasticity rises to 1.11. Nonetheless, we regard even an elasticity of 0.68 as surprisingly high.

¹⁵CK argue that if the conventional labor demand model is correct such estimates should provide a lower bound for minimum wage effects on fast-food employment, presumably because a relatively large proportion of fast-food workers earn at or near the minimum wage. However, the minimum wage effect will also depend on the elasticity of substitution between labor and other inputs (or between low-skill and high-skill labor). We are not aware of any estimates of

Finally, to this point we have used the payroll data set in which we randomly selected one payroll record within the periods in which CK's surveys were conducted, in order to provide the fairest comparison of the variability of employment in the two data sources. However, we can obtain a more precise estimate of employment in these periods by averaging across all possible payroll records within CK's survey periods. Estimates using these averages are reported in the last row of the table, and in our view provide the best estimates from the payroll data. In this case, the estimated disemployment effect of the New Jersey minimum wage increase is slightly smaller (-0.82), and again significant at the ten-percent level. This estimate implies an elasticity of employment with respect to a change in the minimum wage of -0.25 and an employment loss of 4.8 percent in New Jersey relative to Pennsylvania.¹⁶

CK also present results in which they regress employment changes on a measure of the gap between the minimum wage and the starting wage initially paid by the restaurant, and find a positive effect, in contrast to the conventional prediction. We do not have information on the starting wages paid at the franchises on which we have payroll data, and therefore cannot assess this evidence as directly as we can address CK's differences-in-differences results. However, we can estimate the average starting wage in the zip code, assign this average to establishments in the payroll data that are located in the same zip code, and estimate their specification.

Such results are reported in Table 5. We begin by reporting CK's regression for their whole sample, for non-management employment, using the actual starting wage to construct the

the relative magnitudes of the elasticity of substitution in this industry.

¹⁶One might also consider weighting by the number of payroll records used in constructing each average. This had little influence on the estimates.

wage gap measure.¹⁷ The implied elasticity with respect to the minimum wage is 0.86. The second row reports estimates of the same equation, for the subset of Burger King and Wendy's franchises. The elasticity is higher than the corresponding elasticity of 1.10 from the differences-in-differences comparison in Table 4. The third row shows the effect of using the mean starting wage in the zip code (for the corresponding chain) to construct the wage gap measure, instead of the actual reported starting wage, as we have to do with the payroll data. The point estimate is similar, and the standard error increases, as we would expect. The following row reports results for CK's data, using only those zip codes for which we have payroll data. As for their larger sample, the estimated coefficient on the wage gap is positive, indicating that any differences that arise from using the payroll data are not attributable to the restriction to a subset of zip codes.

Finally, we move on to the results from the payroll data. The fourth row of the table reports estimates of the same specification, using the payroll data, where we use a randomly selected payroll record within CK's survey dates. In contrast to the results obtained with CK's data, the estimated coefficient on the wage gap variable becomes negative, with a t-statistic of about one. In the last row, we report what we believe to be our best estimates, using the averages of employment levels in the payroll records. We again get a negative effect of the wage gap variable, although it is still insignificant. The implied elasticity is -0.19, in line with the elasticity obtained from the differences-in-differences comparison, and in contrast to CK's results.

¹⁷The estimated coefficient of 16.5 is close to the estimate reported in column (iii) of their Table 4. Again, the sample differs slightly because we have excluded those restaurants that closed by the time of CK's second survey.

VII. Conclusions

This paper describes our re-evaluation of Card and Krueger's findings from the New Jersey-Pennsylvania minimum wage study, using data from actual payroll records for a sample of fast-food restaurants which overlaps considerably with CK's sample. Our analysis of these payroll data reveals two findings. First, the data collected by CK indicate employment variation with standard deviations four to eight times larger than is observed in the payroll data, variation that, to us, seems implausibly large. Second, whereas CK's data imply that the New Jersey minimum wage increase led to an employment increase in New Jersey relative to the Pennsylvania control group, the payroll data imply that the minimum wage increase led to a 4.8 percent decline in employment in New Jersey relative to the Pennsylvania control group, or an elasticity of -0.25. Thus, the payroll data raise doubts regarding the quality of CK's data, and suggest, contrary to CK's conclusion, that New Jersey's minimum wage increase had a negative effect on employment.

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Table 1: Employment Changes in the Card/Krueger Data,
Alternative Samples and Employment Definitions

	By State					NJ - PA	
	<u>Mean</u>	<u>Std. dev.</u>	<u>Min.</u>	<u>Max.</u>	<u>Obs.</u>	<u>Diff. in diff.</u>	<u>Std. error</u>
<u>All units:</u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Change in Total FTE's							
Pennsylvania	-2.1	10.8	-41.5	22.8	74	2.72	1.35
New Jersey	.66	8.4	-34	34	304		
Change in Non-management FTE's							
Pennsylvania	-2.3	10.7	-43.5	23.8	75	2.90	1.33
New Jersey	.59	8.2	-34	35	310		
<u>Franchises only:</u>							
Change in Non-management FTE's							
Pennsylvania	-2.4	12.4	-43.5	23.8	49	3.23	1.90
New Jersey	.88	8.8	-34	35	203		
<u>Burger King and Wendy's franchises only:</u>							
Change in Non-management FTE's							
Pennsylvania	-3.0	13.0	-43.5	23.8	41	4.25	2.23
New Jersey	1.3	10.0	-34	35	138		

Includes all establishments open for both the first and second interviews.

Table 2: Card/Krueger Data vs. Payroll Data, Changes in Non-Management Employment, Burger King and Wendy's Franchises

	Card/Krueger Data					Payroll Data				
	Mean change	Std. dev.	Min.	Max.	Obs.	Mean change	Std. dev.	Min.	Max.	Obs.
	in FTE's					in FTE's				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Zip codes with payroll data on all franchises:</u>										
<i>Burger King:</i>										
PA, 194__	-5.4	14.3	-30	15	8	2.6	2.3	-2.0	6.9	10
PA, 190__	6.0	22.7	-43.5	23.8	7	4.1	1.5	1.9	6.2	9
PA, 189__	-11.3	14.5	-21.5	-1	2	4.0	3.9	0.7	9.0	4
NJ, 088__	8.9	8.6	-5	22.5	7	2.9	2.5	-1.6	4.9	8
NJ, 086__	-2.6	10.3	-16	9	4	2.2	2.1	-1.0	4.7	5
NJ, 072__	0.0	...	0	0	1	3.2	0.8	2.7	3.8	2
<i>Wendy's:</i>										
NJ, 088__	4.6	6.7	-2.5	13.5	4	2.2	2.5	-3.0	4.6	8
Total, PA	-1.4	18.4	-43.5	23.8	17	3.4	2.3	-2.0	9.0	23
Total, NJ	4.4	9.1	-16	22.5	16	2.6	2.2	-3.0	4.9	23

Zip codes with payroll data on some franchises:

Burger King:

NJ, 087__	2.2	4.7	-1.5	7.5	3	3.3	...	...	...	1
NJ, 085__	3.6	3.5	-0.5	8	4	2.2	0.8	1.3	3.4	5
NJ, 083__	4.3	1.8	3	5.5	2	3.5	...	...	...	1
NJ, 080__	4.0	9.3	-14	26	14	4.2	...	...	...	1
NJ, 078__	-5.4	11.7	-25.5	4	6	0.5	1.6	-0.7	2.7	4
NJ, 076__	3.6	9.8	-13.5	18.5	7	2.5	1.4	0.7	4.5	6
NJ, 070__	1.2	9.7	-23.8	17	20	2.9	1.4	1.1	5.0	7
Total, NJ	1.8	9.2	-25.5	26	56	2.4	1.5	-0.7	5.0	25

We cannot match up data establishment by establishment within each chain/zip code cell, since we cannot identify individual establishments in the Card/Krueger data. FTE's in the Card/Krueger data are the number of non-management full-time workers plus one-half of the number of non-management part-time workers. ~~FTE's in the payroll data are total non-management hours divided by 35.~~ Card and Krueger's initial survey was taken over the period Feb. 15-March 4, 1992, and the second was taken over the period Nov. 5-Dec. 31, 1992. Because we cannot match establishments across the two data sources, and because CK's data set does not include interview dates for the first wave, we simply obtained records for as many payroll periods as possible within these dates. For the payroll data, we have data on one to four payroll periods that fall within this period. We randomly selected one payroll period. Payroll data are reported either weekly, bi-weekly, or monthly. The monthly reports refer to February or November. We divided hours reported by 2 for bi-weekly reports, and by 4 for monthly reports.

40 100 7.1 110 2.75 .25 1090
 40 40 28.5 285 110 35 2
 35 35 100 20 300 200 200
 35 110 35 2 35 110

Figure 1--Employment Levels and Changes in the Two Data Sources
Zip Codes with Payroll Data on All Franchises

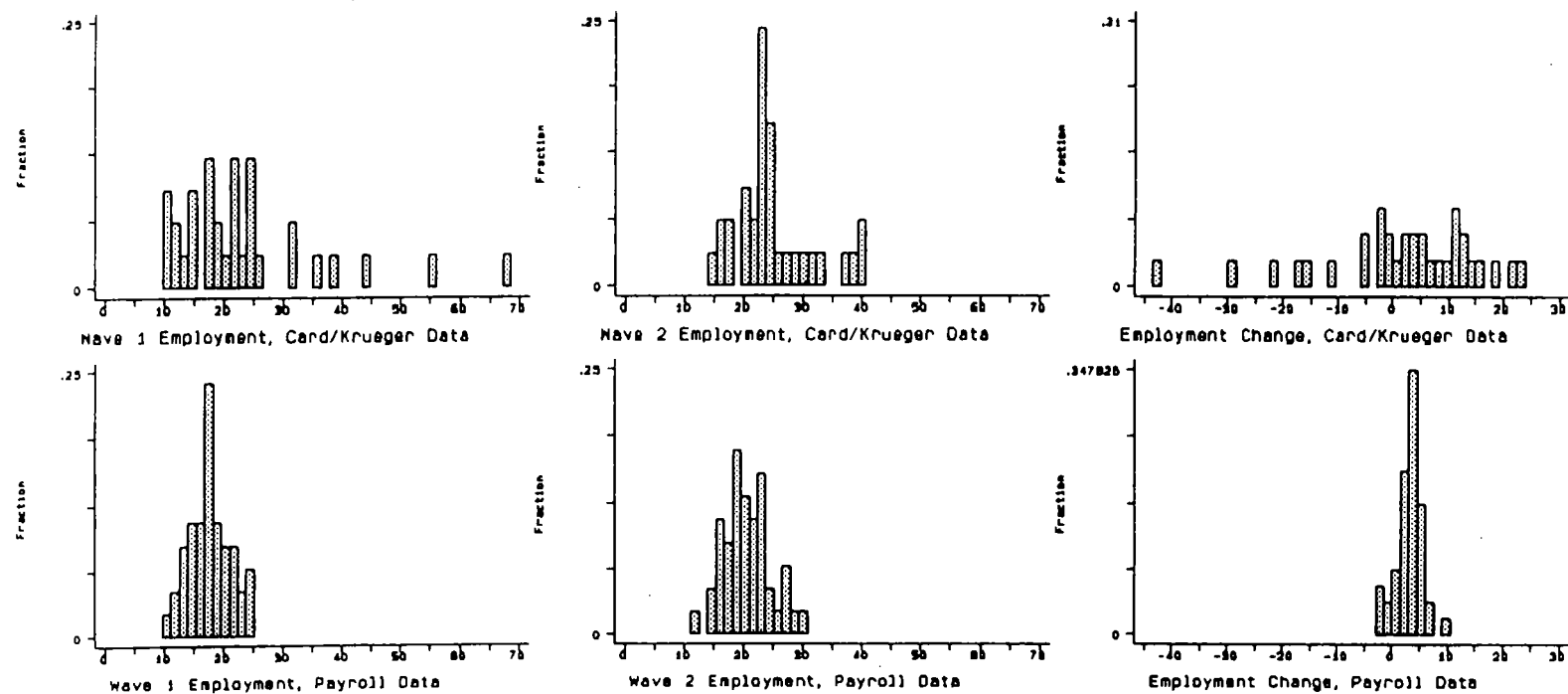


Figure 2--Employment Levels and Changes in the Two Data Sources
Zip Codes with Payroll Data on Any Franchises

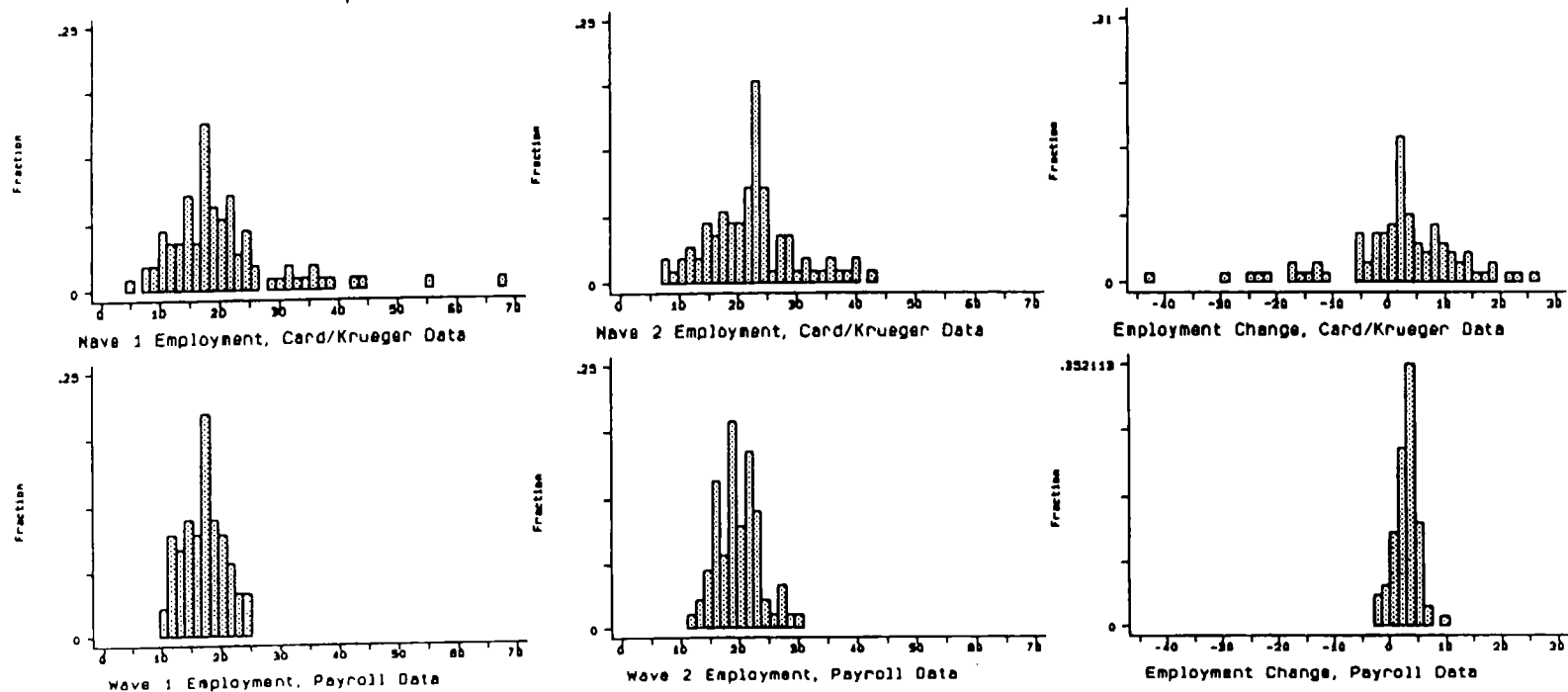


Figure 3--Histograms by Ownership, Restaurant Chain, and Zip Code

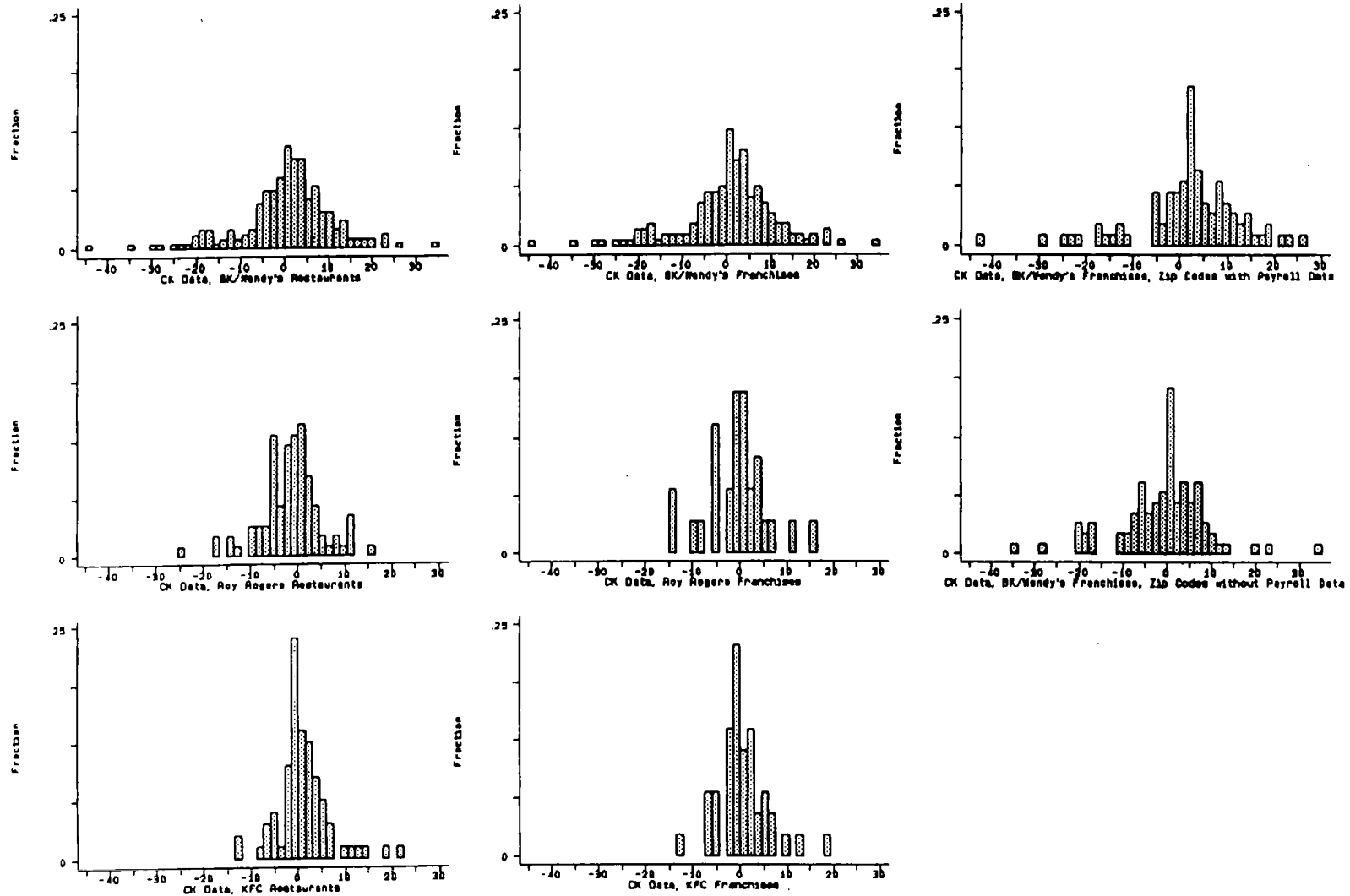


Table 3: Regression Estimates of Minimum Wage Effects in Card/Krueger Data,
by Ownership, Restaurant Chain, and Zip Code

	<u>All Restaurants</u>	<u>Franchises</u>	<u>Zip codes with payroll data</u>	<u>Zip codes without payroll data</u>
	(1)	(2)	(3)	(4)
BK/Wendy's	4.51	4.22	3.70	3.71
	(1.71)	(1.93)	(3.13)	(2.41)
Obs.	213	179	89	90
Roy Rogers	1.72	0.09		
	(1.84)	(3.60)		
Obs.	92	29		
KFC Restaurants	-1.08	-1.79		
	(1.82)	(2.91)		
Obs.	80	44		

See notes to Table 1. Each entry is the estimated coefficient of the New Jersey dummy variable from a regression of the change in non-management employment on this dummy and an intercept. For samples including franchises and company-owned stores, a dummy is also included for company-owned stores. For sample including Burger King and Wendy's establishments, a dummy variable for Wendy's is included. Standard errors are reported in parentheses.

Table 4: Card/Krueger Data vs. Payroll Data, Changes and Percent Changes in Non-Management Employment, Burger King and Wendy's Franchises

	PA		NJ		Diff. in mean change	Regression est. of difference	Implied elasticity	Effect of NJ minimum wage increase
	Mean change in FTE's (1)	Obs. (2)	Mean change in FTE's (3)	Obs. (4)				
<u>Card/Krueger data:</u>	-3.0	41	1.3	138 (2.23)	4.25 (1.93)	4.22	1.10	20.8%
<u>Payroll data:</u>	3.4	23	2.5	48	-0.97 (0.57)	-0.92 (0.53)	-0.29	-5.4%
<u>Payroll data, using averages of payroll records:</u>	3.4	23	2.1	48	-0.88 (0.51)	-0.82 (0.47)	-0.25	-4.8%

See notes to Table 1. The regression estimate is from a regression of the change in employment on the intercept, a dummy variable for New Jersey, and a dummy variable for the chain. The elasticities and implied effects in columns (7) and (8) are computed at the sample means, using the regression estimates.

Table 5: Card/Krueger Data vs. Payroll Data, "Wage Gap" Regressions for Changes and Percent Changes in Non-Management Employment, Burger King and Wendy's Franchises

	Wage gap using mean starting wage				
	<u>Wage gap</u>	<u>in zip code</u>	<u>R²</u>	<u>N</u>	<u>Elasticity</u>
	(1)	(2)	(3)	(4)	(5)
<u>Card/Krueger data,</u> <u>all restaurants:</u>	16.5 (5.9)	...	0.03	366	0.86
<u>Card/Krueger data,</u> <u>Burger King and Wendy's</u> <u>franchises:</u>	28.0 (10.2)	...	0.04	168	1.28
	...	27.4 (13.6)	0.02	168	1.25
<u>Card/Krueger data,</u> <u>Burger King and Wendy's</u> <u>franchises, zip codes</u> <u>with payroll data:</u>	...	37.9 (23.4)	0.04	84	1.67
<u>Payroll data:</u>	...	-4.2 (4.0)	0.02	69	-0.22
<u>Payroll data, using</u> <u>averages of payroll</u> <u>records:</u>	...	-3.5 (3.6)	0.03	69	-0.19

The mean wage gap is calculated from the Card/Krueger data by zip code using the appropriate sample. The sample is smaller for CK's data because the starting wage had to be available. The elasticity is evaluated at the sample means of the starting wage (or the mean starting wage in the zip code calculated from the Card/Krueger data), the mean employment level, and a minimum wage of \$4.25. All regressions also include dummy variables for the restaurant chains. Standard errors of the regression estimates are reported in parentheses.

MINIMUM WAGE QUESTIONS RELATED TO THE CHIEF ECONOMIST'S BOOK

Q: In your Chief Economist's recent book, it is written, "the minimum wage is a classic example of an employer mandate." Why are you willing to impose another unfunded employer mandate on American business? Won't this bill fall under the new unfunded mandates bill on state and local governments?

Given that the real value of the minimum wage has eroded so much over the last 15 years it is now much less of a mandate on businesses and the public sector than it used to be. And last year the after-tax profits of the S&P 500 hit a six-year high. Productivity has been growing. Most businesses can, thus, afford the increase in the minimum wage.

Q: The President has said that the EITC is a far more effective way of lifting the poor out of poverty than the minimum wage. And your Chief Economist's study on the minimum wage found that the effect of a minimum wage increase on the standard of living of families with low earnings was modest. Shouldn't we just rely on expansions of the EITC to lift families out of poverty?

The minimum wage and the EITC, working together, can to help lift families out of poverty. The President expanded the Earned Income Tax Credit (EITC) as a way for low and moderate income families to make ends meet. But we can not rely on the EITC alone to make work pay. Between 82 and 86 percent of eligible workers receive the EITC. Further expansions of the EITC would drain the Treasury, and either increase the phase-out distortions associated with the EITC or reduce the targeting of the program. While the minimum wage makes every hour of work pay, the EITC is distributed in a single lump-sum payment. Nonetheless, the minimum wage complements the EITC.

The President and Congress expanded the EITC in the 1994 budget without a single Republican vote.

Q: According to your Chief Economist, when you spoke last summer about increasing the minimum wage from \$4.25 to \$4.75, the value of low-wage firms such as restaurants and hotels decreased by 1 to 2 percent relative to the market. Now, you propose to increase the minimum wage by 90 cents. Won't an increase in the minimum wage cause the value of these firms to decline even more? Isn't this another example of President Clinton proposing policies that are anti-business and anti-profits?

It is important to recognize that the change in value of low-wage firms dissipated within 10 days of the news that I proposed increasing the minimum wage. My memorandum hardly had an effect on the stock market values of firms affected by the minimum wage.

The last time the minimum wage was increased (1990-91), affected businesses saw their profits

skyrocket relative to the market. From 1991 to 1993, businesses, that cited the minimum wage increase as leading to higher costs in their annual report, saw their profits increase an astonishing 50 percent relative to the rest of the market. As Card and Krueger note in their book, there is no systematic evidence to suggest that news about a minimum wage hike induces investors to adjust their valuation of firms downwards.

During the past 2 years, American companies got much of what they wanted -- lower deficits and two historic market-opening trade pacts.

Q: The minimum wage is overrated as an effective method to reduce poverty. Your Chief Economist has written that, "...proponents [of the minimum wage] tend to exaggerate its effects on poverty." And he called the minimum wage a 'blunt instrument for reducing overall poverty.' If the minimum wage is not going to significantly help the working poor, then why should we consider this bill?

The minimum wage is perfectly targeted for low wage workers. However, wage and family income are not the same thing, but minimum wage workers are disproportionately poor. Nearly 50 percent of workers who earn the minimum wage are part of families that are in the bottom 20 percent of working families; families that earn less than \$360 a week. Further, the average minimum wage worker brings home about half of his or her family's earnings.

For a full-time, year round minimum wage workers, a 90 cent increase would raise yearly income by \$1,800 -- as much as the average family spends on groceries in over 7 months. And the minimum wage increase provides another crucial measure to reward work and ensure that there is a strong incentive to choose work over welfare.

Q: Your Chief Economist finds that after the increase in the minimum wage in New Jersey, the price of meals at the restaurants affected increased by 4 percent. If you consider that lower-income workers spend more of their money on food than do higher-income workers, won't a minimum wage increase help only the lucky few, and disproportionately hurt all low-income workers by raising their cost of living?

An increase in the minimum wage will provide a pay raise to over 11 million working Americans, so a minimum wage hike will help more than a lucky few.

A recent independent study by WEFA concluded that the President's proposal to raise the minimum wage would increase the overall price level by less than one-tenth of one percent. In other words, a good that costs \$1,000 would then cost \$1,001. Providing a pay raise to 11 million people at a cost of \$1 per thousand dollars spent is a tradeoff I will gladly accept.

Q: In 1988 the CBO estimated that increasing the minimum wage to \$5.00 would cause up to one-half million workers to lose their jobs. If you care about the jobs of American people so much, why are you proposing a massive job killing bill?

The numbers you cite come from a 1988 Congressional Budget Office study which estimated that an increase in the minimum wage from \$3.35 -- the minimum at the time -- to \$5.05, a 50 percent wage increase, would eliminate between 250,000 and 500,000 jobs. A 50 percent increase in the current minimum wage of \$4.25 would amount to \$6.40 an hour. The estimate that you cite -- which has also been included in the RNC talking points -- has little bearing on the current debate on the minimum wage.

[The following questions from CONG. DeLay
were submitted for the Record. Responses were provided by the
Council of Economic Advisors .7

Jon, if you
could send some info
re: these questions,
that would be great. -CF

MINIMUM WAGE

In his State of the Union speech, President Clinton asked Congress to increase the minimum wage. He has proposed an increase of 90 cents to \$5.15 per hour.

What are the economic costs, as you see it, to raising the minimum wage?

If there aren't any, and this is the best way to help the working poor, why not raise it to \$10 per hour? What rationale did you use to come up with the 90 cent increase?

Surely raising the minimum wage will raise costs for state and local governments and the private sector.

Do you agree?

Isn't this essentially an unfunded mandate?

In June of 1992, the President said, "We can increase the earned income tax credit by a couple of billion dollars a year and, far more efficiently than raising the minimum wage, lift the working poor out of poverty."

Was the President wrong when he made this statement and if not, why has he proposed this minimum wage increase while at the same time scaling back the earned income tax credit?

You've stated that you believe that raising the minimum wage is the best way to help the working poor. CBO staff economists, however, have shown that 85% of minimum wage workers are not poor but are teenagers in middle income families.

Aren't the President's efforts misguided in this area?

Do you agree that the EITC is a better way to increase the paychecks for families that really need it? Isn't it better than increasing the minimum wage which is a mandate of business and is questionable in terms of whether it's helpful to the families that need the income?

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To <i>Jon DeLay</i>	From <i>Chris Fogle</i>	
Co. <i>Dept. of Labor</i>	Co. <i></i>	
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Fax # <i>219-4902</i>	Fax # <i>395-6853</i>	

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MINIMUM WAGE QUESTIONS

Q: What are the economic costs, as you see it, to raising the minimum wage?

Some people have been spreading a faulty syllogism. That raising the minimum wage causes job loss, and therefore, the minimum wage should not be raised. First of all, this is faulty because in the best research, modest increases in the minimum wage have not been found to be associated with job loss. And, even if there was some job loss, it almost certainly the case that raising the minimum wage raises the total income going to low-wage workers. In other words, virtually every study has found that the amount by earnings go up for people who keep their jobs exceeds the amount by which it goes down for anyone who might incur unemployment. Moreover, when the unemployed find new jobs, they are better paying jobs.

Q: If there aren't any, and this is the best way to help the working poor, why not raise it to \$10 per hour? What rationale did you use to come up with the 90 cent increase?

In the last five years, a majority of the studies on the minimum wage in peer-reviewed journals have found that a *moderate* increase in the minimum wage would not lead to job loss. A rise in the minimum wage to \$10 per hour is not a moderate increase, and therefore, it would most likely be associated with job loss. The Administration choose a 90-cent increase because increases of similiar magnitude have not led to unemployment.

Q: Raising the minimum wage will raise cost for state and local governments and the private sector. Do you agree? Isn't this essentially an unfunded mandate?

Given that the real value of the minimum wage has eroded so much over the last 15 years it is now much less of a mandate on businesses and the public sector than it used to be, even with the proposed increase.

Q: Was the President wrong when he made this statement and if not, why has he proposed this minimum wage increase while at the same time scaling back the earned income tax credit?

First of all, the President is not scaling back the Earned Income Tax Credit (EITC).

The EITC was expanded in 1993 as a way for low and moderate income families to make ends meet, and it has been very successful. But expanding the EITC is not enough. In order to ensure that there is a strong incentive for work over welfare, there needs to be a multi-tiered strategy. The EITC fulfilled its part of the plan. The EITC imposes a steep marginal tax rate on some workers; the minimum wage make each hour of work pay more. 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. Moreover, further expansions would drain the Treasury, and increase the work disincentives associated with the phase-out range. The minimum wage complements the EITC.

Q: Aren't the President's efforts misguided in this area? ...

The minimum wage is perfectly targeted for low-wage workers. However, wage and family income are not the same thing, but minimum wage workers are disproportionately poor. Fully 47 percent of workers who would be affected by the President's proposal have family earnings in the bottom 20 percent of all working families; families that earn less than \$360 per week. The average worker who would be affected by the President's proposal brings home half of his or her family's earnings; 38 percent of those affected are the sole breadwinner in their family. An increase in the minimum wage of 90 cents would mean a \$1,800 raise for a full-time, year-round minimum-wage worker. This is not an insignificant sum for low-income families struggling to make ends meet on the minimum wage. Indeed, it is as much as the average family spends on groceries in seven months.

Moreover, 64% of minimum wage workers are adults age 20 or over. In fact, only one in 14 workers affected by the proposed minimum wage increase is a teenage student from a family with above-average earnings.

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News

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CONSUMER EXPENDITURES IN 1993

Average annual expenditures per consumer unit continued to rise at a moderate rate, increasing about 3 percent from 1992 to 1993, according to results from the Consumer Expenditure Survey released by the Bureau of Labor Statistics, U.S. Department of Labor. Expenditures had risen about 1 percent in 1992 and 4 percent in 1991. The increase in expenditures from 1992 to 1993 matched the increase in general price levels, as measured by the Consumer Price Index (CPI).

The percent changes in expenditures from 1992 to 1993 varied among the major components of spending. The largest increases were for health care and entertainment which rose by 9 percent and 8 percent, respectively. Food expenditures rose 3 percent, and housing rose 2 percent. Expenditures on apparel and services declined by 2 percent over the period. Consumer Expenditure Survey data for 1991, 1992, and 1993 are shown below.

Annual expenditures of all consumer units and percent changes, Consumer Expenditure Survey, 1991-93

Item	1991	1992	1993	Percent change	
				1991-92	1992-93
Number of consumer units	97,918	100,019	100,049		
Income before taxes ¹	\$33,901	\$33,854	\$34,868		
Average age of reference person	47.5	47.6	47.8		
Average number in consumer unit:					
Persons	2.6	2.5	2.5		
Earners	1.4	1.3	1.3		
Vehicles	2.0	1.9	1.9		
Percent homeowner	63	61	63		
Average annual expenditures	\$29,614	\$29,846	\$30,692	0.8	2.8
Food	4,271	4,273	4,399	0	2.9
Food at home	2,651	2,643	2,735	-.3	3.5
Food away from home	1,620	1,631	1,664	.7	2.0
Housing	9,252	9,477	9,636	2.4	1.7
Apparel and services	1,735	1,710	1,676	-1.4	-2.0
Transportation	5,151	5,228	5,453	1.5	4.3
Health care	1,554	1,634	1,776	5.1	8.7
Entertainment	1,472	1,500	1,626	1.9	8.4
Personal insurance and pensions	2,787	2,730	2,908	-1.3	5.7
Other expenditures	3,392	3,274	3,218	-3.5	-1.7

¹ Income values are derived from "complete income reporters" only.

CONSUMER PRICE INDEX CHANGES, SELECTED GOODS AND SERVICES

December 1991-December 1994

Expenditure Category	Percent Change in Consumer Price Index (CPI-U)
All items	8.6
Food and Beverages	7.2
Rent	9.1
Transportation Services	11.3
Medical Care Services	19.4
White Bread	14.2
Cereal	11.4
Rice, Pasta, Cornmeal	10.5
Prescription Drugs	12.8
Auto Insurance	15.7
Newspapers	14.0
School Books and Supplies	12.3
Day Care, Nursery School	15.0

Characteristics of minimum wage workers: 1994

BLS data on minimum wage earners are derived from the Current Population Survey (CPS), a nationwide sample survey of households which includes questions that enable the identification of hourly-paid workers and their hourly wage rate. According to survey estimates for 1994, some 66.5 million American workers were paid at hourly rates, representing 61.6 percent of all wage and salary workers.¹ Of those paid by the hour, about 2.1 million were reported earning exactly \$4.25, the prevailing Federal minimum wage, and another 2 million were reported with wages below the minimum. Together, these 4.1 million workers with wages at or below the minimum made up 6.2 percent of all hourly paid workers.² The attached tables present unpublished data on a wide array of demographic and socioeconomic characteristics for low-wage workers. The following are some highlights from the 1994 data.

- Minimum wage workers tend to be young. Slightly over half of workers earning \$4.25 or less are under 25, and almost one-third are teenagers (that is, age 16-19). Among teenagers paid hourly rates, about 14 percent earned \$4.25 and another 10 percent were reported as being paid less. Of all workers age 25 and over, 4 percent earned the minimum wage or less. However, among those age 65 and over, the proportion was about 11 percent. (Tables 1 and 6.)
- About 8 percent of women paid hourly rates reported wages at or below the prevailing Federal minimum, compared to about 5 percent of men. This ratio generally held for full-time workers. Among part-time workers, however, who are much more likely than full-time workers to earn the minimum wage or less, men were slightly more likely than women to be low-wage workers. Overall, part-time workers were five times as likely as their full-time counterparts to be paid \$4.25 or less (16 versus 3 percent). (Table 1.)
- The proportion of hourly-paid workers receiving \$4.25 or less was about 6 percent for whites, 7 percent for blacks, and 9 percent for Hispanics. For each group, women were more likely than men to be low-wage earners. (Table 1.)
- Of the four broad geographic census regions, the Northeast had the lowest proportion of hourly workers with earnings at or below \$4.25 (about 5 percent), while the South had the highest (about 8 percent). (Table 2.)
- By major occupational group, the proportion of hourly-paid workers whose earnings were reported at or below \$4.25 ranged from a low of 1 percent for persons employed in precision production, craft, and repair positions, to a high of 18 percent for those in service jobs. Slightly over half of all low-wage workers in 1994 were in service-type occupations. (Table 3.)
- Among major industry groups, the proportion of workers with reported hourly wages at or below \$4.25 was highest in retail trade (16 percent), agriculture (11 percent), and services (6 percent). Just over half of all low-wage workers were employed in retail trade, and another one-fourth worked in services. It should be recognized that for many working in these industries, tips and commissions may supplement the hourly wages received. (Table 4.)
- The likelihood of a worker being paid the minimum wage or less is inversely related to the level of education attained. Among hourly paid workers age 16 and over, 5 percent of those who had a high school diploma but had not gone on to college earned the minimum or less, roughly twice the proportion for those who had obtained a college degree. (Table 5.)

Source: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages. For more information about the data in this table package, call (202) 606-6378.

¹ Data are for wage and salary workers, excluding the incorporated self-employed, and refer to earnings on a person's main job. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls (adjusted for the estimated census population undercount). For further information, see "Revisions in the Current Population Survey Effective January 1994," in the February 1994 issue of *Employment and Earnings*.

² It should be noted that the presence of a sizable number of workers with wages below the minimum does not necessarily indicate violations of the Fair Labor Standards Act, as there are exemptions to the minimum wage provisions of the law. Moreover, an apparent increase in the estimated number of workers earning less than the minimum in 1994 likely reflects a number of factors associated with the new CPS, and does not necessarily indicate an increase in the ranks of the below-minimum group. These factors include certain technical features of CPS interviewing and processing practices in 1994, the introduction of the 1990 census-based population controls, as well as changes in the questionnaire and in survey methodology. The estimates of the numbers of minimum and subminimum wage workers presented in the accompanying tables pertain to workers paid at hourly rates; salaried and other non-hourly workers are excluded. As such, the actual number of workers with earnings at or below the prevailing minimum is undoubtedly understated. Research has shown that a relatively smaller number and share of salaried workers and others not paid by the hour have earnings that, when translated into hourly rates, are at or below the minimum wage. However, these workers are not included in the attached tables because of data concerns that arise in statistically estimating their number. For further information, see Steven Haugen and Earl Meikor, "Estimating the number of minimum wage workers,"

Table 1. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by selected characteristics, 1994 annual averages

Characteristic	Number of workers (In thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
SEX AND AGE											
Total, 16 years and over	68,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
16 to 24 years	15,258	2,217	1,271	946	22.9	53.7	59.6	47.4	14.5	8.3	6.2
16 to 19 years	5,493	1,295	767	528	8.3	31.4	36.0	26.5	23.6	14.0	9.6
25 years and over	51,291	1,911	861	1,050	77.1	46.3	40.4	52.6	3.7	1.7	2.0
Men, 16 years and over	33,528	1,565	891	674	50.4	37.9	41.8	33.8	4.7	2.7	2.0
16 to 24 years	7,939	955	617	338	11.9	23.1	28.9	16.9	12.0	7.8	4.3
16 to 19 years	2,773	583	360	203	4.2	14.1	17.8	10.2	21.0	13.7	7.3
25 years and over	25,589	610	274	336	38.5	14.8	12.9	16.8	2.4	1.1	1.3
Women, 16 years and over	33,021	2,563	1,241	1,322	49.6	62.1	58.2	66.3	7.8	3.8	4.0
16 to 24 years	7,319	1,262	654	608	11.0	30.6	30.7	30.6	17.2	8.9	8.3
16 to 19 years	2,720	712	387	325	4.1	17.3	18.2	16.3	26.2	14.2	11.9
25 years and over	25,702	1,301	587	714	38.6	31.5	27.5	35.8	5.1	2.3	2.8
RACE, HISPANIC ORIGIN, AND SEX											
White	55,151	3,384	1,657	1,727	82.9	82.0	77.7	86.6	6.1	3.0	3.1
Men	27,956	1,273	696	577	42.0	30.8	32.6	28.9	4.6	2.5	2.1
Women	27,196	2,111	961	1,150	40.9	51.2	45.1	57.6	7.8	3.5	4.2
Black	8,586	561	358	205	12.9	13.6	16.7	10.3	6.5	4.1	2.4
Men	4,116	214	138	78	6.2	5.2	6.4	3.9	5.2	3.3	1.9
Women	4,471	347	220	127	6.7	8.4	10.3	6.4	7.8	4.9	2.8
Hispanic origin	7,130	612	401	211	10.7	14.8	18.8	10.6	8.6	5.6	3.0
Men	4,308	315	220	95	6.5	7.6	10.3	4.8	7.3	5.1	2.2
Women	2,822	297	181	116	4.2	7.2	8.5	5.8	10.5	6.4	4.1
FULL- AND PART-TIME STATUS AND SEX											
Full-time workers	49,682	1,519	734	785	74.7	36.8	34.4	39.3	3.1	1.5	1.8
Men	28,224	674	342	332	42.4	16.3	16.0	16.6	2.4	1.2	1.2
Women	21,458	845	392	453	32.2	20.5	18.4	22.7	3.9	1.8	2.1
Part-time workers	18,773	2,602	1,385	1,207	25.2	63.0	65.4	60.5	15.5	8.3	7.2
Men	5,251	889	548	341	7.9	21.5	25.7	17.1	18.9	10.4	6.5
Women	11,522	1,713	847	866	17.3	41.5	39.7	43.4	14.9	7.4	7.5

NOTE: Data exclude the incorporated self-employed. Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls. Also note that the distinction between full- and part-time workers is based on hours usually worked. In 1994, these data will not sum to totals because full- or part-time status on the principal job is not identifiable for a small number of multiple jobholders.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

2. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by census region and division and 11 large States, 1994 annual averages

Region, division, States	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	68,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Northeast	12,111	580	242	338	18.2	14.1	11.4	16.9	4.8	2.0	2.8
New England	3,390	138	43	95	5.1	3.3	2.0	4.8	4.1	1.3	2.8
Middle Atlantic	8,721	442	199	243	13.1	10.7	9.3	12.2	5.1	2.3	2.8
Midwest	17,784	1,046	464	582	26.7	25.3	21.8	29.2	6.9	2.8	3.3
East North Central	14,779	837	358	479	22.2	20.3	16.8	24.0	5.7	2.4	3.2
West North Central	2,985	210	106	104	4.5	5.1	5.0	5.2	7.0	3.6	3.5
South	22,559	1,686	908	777	33.9	40.9	42.8	38.9	7.5	4.0	3.4
South Atlantic	7,879	516	254	261	11.8	12.5	11.9	13.1	6.6	3.2	3.3
East South Central	3,782	185	84	101	5.7	4.5	3.9	5.1	4.9	2.2	2.7
West South Central	10,899	986	571	415	16.4	23.9	26.8	20.8	9.0	5.2	3.8
West	14,115	815	617	298	21.2	19.7	24.2	14.9	6.8	3.7	2.1
Mountain	4,074	276	142	134	6.1	6.7	6.7	6.7	8.8	3.5	3.3
Pacific	10,040	539	375	164	15.1	13.1	17.6	8.2	5.4	3.7	1.6
California	7,344	491	362	129	11.0	11.9	17.0	6.5	6.7	4.9	1.8
New York	3,759	206	99	107	5.6	5.0	4.6	5.4	6.5	2.6	2.8
Texas	4,405	410	225	185	6.6	9.9	10.6	9.3	9.3	5.1	4.2
Pennsylvania	3,202	182	85	94	4.8	4.4	4.1	4.7	5.7	2.7	2.9
Illinois	3,187	190	70	120	4.8	4.6	3.3	6.0	6.0	2.2	3.8
Ohio	3,168	211	101	110	4.8	5.1	4.7	5.5	6.7	3.2	3.5
Florida	3,310	227	98	129	5.0	5.5	4.8	6.5	6.9	3.0	3.9
Michigan	2,738	171	71	100	4.1	4.1	3.3	5.0	6.2	2.6	3.7
New Jersey	1,759	55	12	43	2.6	1.3	0.6	2.2	3.1	0.7	2.4
North Carolina	1,870	103	54	49	2.8	2.5	2.5	2.5	5.5	2.9	2.6
Massachusetts	1,551	63	18	45	2.3	1.5	0.8	2.3	4.1	1.2	2.9

NOTE: The four major regions and nine census divisions of the United States are as follows:

Northeast

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Middle Atlantic: New Jersey, New York, and Pennsylvania

Midwest (formerly North Central):

East North Central: Illinois, Indiana, Michigan, Ohio, and Wisconsin

West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota

South:

South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North

Carolina, South Carolina, Virginia, and West Virginia

East South Central: Alabama, Kentucky, Mississippi, and Tennessee

West South Central: Arkansas, Louisiana, Oklahoma, and Texas

West:

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming

Pacific: Alaska, California, Hawaii, Oregon, and Washington

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 3. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by major occupation group, 1994 annual averages

Occupation	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	66,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Managerial and professional specialty	8,500	137	68	68	12.8	3.3	3.2	3.4	1.6	0.8	0.8
Executive, administrative, and managerial	3,604	43	17	26	6.3	1.0	0.8	1.3	1.2	0.5	0.7
Professional specialty	4,996	94	52	42	7.6	2.3	2.4	2.1	1.9	1.0	0.8
Technical, sales, and administrative support	21,179	900	610	290	31.8	21.8	28.6	14.5	4.2	2.9	1.4
Technicians and related support	2,465	34	18	16	3.7	0.8	0.8	0.8	1.4	0.7	0.6
Sales occupations	8,660	581	408	172	10.0	14.1	19.2	8.6	8.7	6.1	2.8
Administrative support, including clerical	12,054	285	183	102	18.1	6.9	8.6	5.1	2.4	1.5	0.8
Service occupations	12,311	2,250	945	1,305	18.5	54.5	44.3	65.4	18.3	7.7	10.6
Private household	389	95	17	78	0.6	2.3	0.8	3.9	24.4	4.4	20.1
Protective service	1,418	50	34	16	2.1	1.2	1.6	0.8	3.5	2.4	1
Service, except private household and protective	10,504	2,105	890	1,212	15.8	51.0	41.9	60.8	20.0	8.5	11
Food service workers	5,163	1,577	570	1,007	7.8	38.2	28.7	50.5	30.6	11.0	19.5
Health service workers	1,827	118	69	49	2.7	2.9	3.2	2.6	8.5	3.8	2.7
Cleaning & building service workers	2,269	184	116	68	3.4	4.5	5.4	3.4	8.1	5.1	3.0
Personal service workers	1,246	226	138	88	1.9	5.5	6.5	4.4	18.1	11.1	7.1
Precision production, craft, and repair	8,894	96	48	48	13.4	2.3	2.3	2.4	1.1	0.5	0.5
Mechanics and repairers	2,990	33	15	18	4.5	0.8	0.7	0.9	1.1	0.5	0.6
Construction trades	3,060	27	10	17	4.6	0.7	0.5	0.9	0.9	0.3	0.6
Other precision, production, craft, and repair	2,843	35	22	13	4.3	0.8	1.0	0.7	1.2	0.8	0.5
Operators, fabricators, and laborers	14,469	614	386	218	21.7	14.9	18.6	10.9	4.2	2.7	1.5
Machine operators, assemblers, and inspectors	6,742	237	143	94	10.1	5.7	6.7	4.7	3.5	2.1	1.4
Transportation and material moving	3,281	91	50	31	4.9	2.2	2.8	1.6	2.8	1.8	0.9
Handlers, equipment cleaners, helpers, and laborers	4,446	286	193	93	6.7	6.9	9.1	4.7	6.4	4.3	2.1
Farming, forestry, and fishing	1,196	132	66	66	1.8	3.2	3.1	3.3	11.0	5.5	5.5

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 4. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage, by major industry group, 1994 annual averages

Industry	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	66,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Private sector	57,927	3,847	1,963	1,884	87.0	93.2	91.6	94.9	6.6	3.4	3.3
Goods-producing industries	18,295	435	246	189	27.5	10.5	11.6	9.5	2.4	1.9	1.0
Agriculture	924	99	51	48	1.4	2.4	2.4	2.4	10.7	5.5	5.2
Mining	367	3	2	1	0.6	0.1	0.1	0.1	0.8	0.5	0.3
Construction	3,747	49	19	30	5.6	1.2	0.9	1.5	1.3	0.5	0.8
Manufacturing	13,256	283	173	110	19.9	6.9	8.1	5.5	2.1	1.3	0.8
Durable goods	7,809	99	47	52	11.7	2.4	2.2	2.6	1.3	0.6	0.7
Nondurable goods	5,446	184	126	58	8.2	4.5	5.9	2.9	3.4	2.3	1.1
Service-producing industries	39,632	3,412	1,707	1,705	59.6	82.7	80.1	85.5	8.6	4.3	4.3
Transportation and public utilities	3,743	58	32	26	5.6	1.4	1.5	1.3	1.5	0.9	0.7
Wholesale trade	2,035	67	42	25	3.1	1.6	2.0	1.3	3.3	2.1	1.2
Retail trade	14,249	2,255	1,075	1,180	21.4	54.8	50.4	59.1	15.8	7.5	8.3
Finance, insurance, and real estate services	2,820	44	20	24	3.9	1.1	0.9	1.2	1.7	0.8	0.9
Private households	16,986	989	536	451	25.5	24.0	25.2	22.6	5.8	3.2	2.7
Other services	478	105	21	84	0.7	2.5	1.0	4.2	22.0	4.4	17.6
Business, auto, and repair services	18,508	683	517	366	24.8	21.4	24.2	18.3	5.3	3.1	2.2
Personal services	3,505	145	98	47	5.3	3.5	4.6	2.4	4.1	2.8	1.3
Entertainment and recreation	1,693	178	94	84	2.5	4.3	4.4	4.2	10.5	5.6	5.0
Professional services	1,044	136	91	45	1.6	3.3	4.3	2.3	13.0	8.7	4.3
Forestry and fisheries	10,247	417	231	186	15.4	10.1	10.8	9.3	4.1	2.3	1.8
Forestry and fisheries	20	7	3	4	0.0	0.2	0.1	0.2	(1)	(1)	(1)
Public sector	8,623	281	180	101	13.0	6.8	8.4	5.1	3.3	2.1	1.2
Federal	2,104	31	22	9	3.2	0.8	1.0	0.5	1.5	1.0	0.4
State	2,095	101	68	33	3.1	2.4	3.2	1.7	4.8	3.2	1.8
Local	4,424	148	89	59	6.6	3.6	4.2	3.0	3.3	2.0	1.3

1 Percent not shown where base is less than 50,000.

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 5. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing minimum wage by educational attainment, 1994 annual averages

Years of school completed	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	66,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	8.2	3.2	3.0
Less than a high school diploma	11,575	1,633	971	662	17.4	39.6	45.5	33.2	14.1	8.4	5.7
Less than 1 year of high school	2,962	323	193	130	4.5	7.8	9.1	6.5	10.9	6.5	4.4
1 to 3 years of high school	7,590	1,199	718	481	11.4	29.1	33.7	24.1	16.8	9.5	6.3
4 years of high school, no diploma	1,022	112	81	51	1.5	2.7	2.9	2.8	11.0	6.0	5.0
High school graduates or more	54,975	2,494	1,161	1,333	82.6	60.4	54.5	66.8	4.5	2.1	2.4
High school graduates, no college	26,464	1,269	609	660	39.8	30.7	28.6	33.1	4.8	2.3	2.5
Some college, no degree	15,339	905	431	474	23.0	21.9	20.2	23.8	5.9	2.8	3.1
Associate degree	5,658	147	85	62	8.5	3.6	3.0	4.1	2.6	1.1	1.4
Occupational program	3,183	73	33	40	4.8	1.8	1.5	2.0	2.3	1.0	1.3
Academic program	2,472	74	32	42	3.7	1.8	1.5	2.1	3.0	1.3	1.7
College graduates, total	7,516	174	58	118	11.3	4.2	2.6	5.9	2.3	0.7	1.6
Bachelor's degree	6,160	152	50	102	9.3	3.7	2.3	5.1	2.5	0.8	1.7
Master's degree	1,100	13	4	9	1.7	0.3	0.2	0.5	1.2	0.4	0.8
Professional degree	189	5	1	4	0.3	0.1	0.0	0.2	3.0	0.6	2.4
Doctoral degree	87	4	1	3	0.1	0.1	0.0	0.2	4.6	1.1	3.4

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 7. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by sex, marital status, and age, 1994 annual averages

Sex, marital status, and age	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	86,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Never married	21,385	2,417	1,347	1,070	32.1	58.6	63.2	53.6	11.3	6.3	5.0
16 to 24 years	12,567	1,969	1,139	830	18.9	47.7	53.4	41.6	15.7	9.1	6.6
25 years and over	8,818	448	208	240	13.3	10.9	9.8	12.0	5.1	2.4	2.7
25 to 54 years	8,529	427	202	225	12.6	10.3	9.5	11.3	5.0	2.4	2.6
Married, spouse present	34,561	1,134	516	618	51.9	27.5	24.2	31.0	3.3	1.5	1.8
16 to 24 years	2,260	192	102	90	3.4	4.7	4.8	4.5	8.5	4.5	4.0
25 years and over	32,301	943	415	528	48.5	22.8	19.5	26.5	2.9	1.3	1.6
25 to 54 years	28,009	763	340	423	42.1	18.5	15.9	21.2	2.7	1.2	1.5
Other marital status	10,603	577	269	308	15.9	14.0	12.6	15.4	6.4	2.5	2.9
16 to 24 years	431	57	31	26	0.6	1.4	1.5	1.3	13.2	7.2	6.0
25 years and over	10,172	520	238	282	15.3	12.6	11.2	14.1	5.1	2.3	2.8
25 to 54 years	8,259	382	167	215	12.4	9.3	7.8	10.8	4.6	2.0	2.6
MEN											
Total, 16 years and over	33,528	1,565	891	674	50.4	37.9	41.8	33.8	4.7	2.7	2.0
Never married	11,790	1,107	672	435	17.7	26.8	31.5	21.8	9.4	5.7	3.7
16 to 24 years	8,729	891	574	317	10.1	21.6	26.9	15.9	13.2	8.5	4.7
25 years and over	5,061	216	98	118	7.6	5.2	4.6	5.9	4.3	1.9	2.3
25 to 54 years	4,919	205	96	109	7.4	5.0	4.5	5.5	4.2	2.0	2.2
Married, spouse present	17,823	344	164	180	26.8	8.3	7.7	9.0	1.9	0.9	1.0
16 to 24 years	1,063	65	35	20	1.6	1.3	1.6	1.0	5.2	3.3	1.9
25 years and over	16,760	289	129	160	25.2	7.0	6.1	8.0	1.7	0.8	1.0
25 to 54 years	14,355	201	96	105	21.6	4.9	4.5	5.3	1.4	0.7	0.7
Other marital status	3,918	114	55	59	5.9	2.8	2.6	3.0	2.9	1.4	1.5
16 to 24 years	147	9	8	1	0.2	0.2	0.4	0.1	6.1	5.4	0.7
25 years and over	3,769	105	47	58	5.7	2.5	2.2	2.9	2.8	1.2	1.5
25 to 54 years	3,307	86	37	49	5.0	2.1	1.7	2.5	2.6	1.1	1.5
WOMEN											
Total, 16 years and over	33,021	2,563	1,241	1,322	49.6	62.1	58.2	66.3	7.8	3.8	4.0
Never married	9,596	1,310	675	635	14.4	31.7	31.7	31.8	13.7	7.0	6.6
16 to 24 years	5,839	1,078	566	513	8.8	26.1	26.5	25.7	18.5	9.7	8.8
25 years and over	3,757	233	111	122	5.6	5.6	5.2	6.1	6.2	3.0	3.2
25 to 54 years	3,610	223	106	117	5.4	5.4	5.0	5.9	6.2	2.9	3.2
Married, spouse present	16,738	790	382	408	25.2	19.1	16.5	22.0	4.7	2.1	2.6
16 to 24 years	1,197	137	67	70	1.8	3.3	3.1	3.5	11.4	5.8	5.8
25 years and over	15,542	654	286	368	23.4	15.8	13.4	18.4	4.2	1.8	2.4
25 to 54 years	13,654	561	243	318	20.5	13.6	11.4	15.9	4.1	1.8	2.3
Other marital status	6,687	461	213	248	10.0	11.2	10.0	12.4	6.9	3.2	3.7
16 to 24 years	284	48	23	25	0.4	1.2	1.1	1.3	16.9	8.1	8.8
25 years and over	6,403	414	191	223	9.6	10.0	9.0	11.2	8.5	3.0	3.5
25 to 54 years	4,951	295	130	165	7.4	7.1	6.1	8.3	6.0	2.6	3.3

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 6. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by sex and detailed age, 1994 annual averages

Sex and age	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
BOTH SEXES											
Total, 18 years and over	66,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Under 25 years	15,258	2,217	1,271	948	22.9	53.7	59.6	47.4	14.5	8.3	6.2
16 to 19 years	5,493	1,295	787	528	8.3	31.4	36.0	28.5	23.6	14.0	9.6
20 to 24 years	9,766	922	604	418	14.7	22.3	23.6	21.0	9.4	5.2	4.3
25 years and over	51,291	1,911	861	1,050	77.1	46.3	40.4	52.8	3.7	1.7	2.0
25 to 34 years	18,179	814	374	440	27.3	19.7	17.5	22.1	4.5	2.1	2.4
25 to 29 years	8,896	438	206	230	13.4	10.6	9.7	11.5	4.9	2.3	2.6
30 to 34 years	9,284	378	168	210	14.0	9.2	7.9	9.5	4.1	1.8	2.3
35 to 44 years	16,280	491	211	280	24.4	11.9	9.9	14.0	3.0	1.3	1.7
35 to 39 years	8,757	266	108	160	13.2	6.4	5.0	8.0	3.0	1.2	1.8
40 to 44 years	7,503	225	105	120	11.3	5.5	4.9	6.0	3.0	1.4	1.6
45 to 54 years	10,357	266	123	143	15.6	6.4	5.8	7.2	2.6	1.2	1.4
45 to 49 years	6,022	146	73	73	9.0	3.5	3.4	3.7	2.4	1.2	1.2
50 to 54 years	4,335	120	50	70	6.5	2.9	2.3	3.5	2.8	1.2	1.6
55 to 64 years	5,028	181	77	104	7.6	4.4	3.6	6.2	3.8	1.5	2.1
55 to 59 years	3,138	90	36	54	4.7	2.2	1.7	2.7	2.9	1.1	1.7
60 to 64 years	1,890	92	41	51	2.8	2.2	1.9	2.6	4.9	2.2	2.7
65 years and over	1,467	158	76	82	2.2	3.8	3.6	4.1	10.8	6.2	5.6
65 to 69 years	882	81	41	40	1.3	2.0	1.9	2.0	9.2	4.6	4.5
70 years and over	585	77	36	42	0.9	1.9	1.6	2.1	13.2	6.0	7.2
MEN											
Total, 16 years and over	33,528	1,565	891	674	50.4	37.9	41.8	33.8	4.7	2.7	2.0
Under 25 years	7,939	955	617	338	11.9	23.1	28.9	16.9	12.0	7.8	4.3
16 to 19 years	2,773	583	380	203	4.2	14.1	17.8	10.2	21.0	13.7	7.3
20 to 24 years	5,165	372	237	135	7.8	9.0	11.1	6.8	7.2	4.6	2.6
25 years and over	25,589	610	274	336	38.5	14.8	12.9	16.8	2.4	1.1	1.3
25 to 34 years	9,758	280	139	141	14.7	6.8	6.5	7.1	2.9	1.4	1.4
25 to 29 years	4,850	175	87	88	7.3	4.2	4.1	4.4	3.6	1.8	1.8
30 to 34 years	4,908	105	52	53	7.4	2.5	2.4	2.7	2.1	1.1	1.1
35 to 44 years	7,984	144	66	78	12.0	3.5	3.1	3.9	1.8	0.8	1.0
35 to 39 years	4,340	79	39	40	6.5	1.9	1.8	2.0	1.8	0.9	0.9
40 to 44 years	3,624	65	27	38	5.4	1.6	1.3	1.9	1.8	0.7	1.0
45 to 54 years	4,860	68	24	44	7.3	1.8	1.1	2.2	1.4	0.5	0.9
45 to 49 years	2,830	34	14	20	4.3	0.8	0.7	1.0	1.2	0.5	0.7
50 to 54 years	2,030	32	9	23	3.1	0.8	0.4	1.2	1.6	0.4	1.1
55 to 64 years	2,348	48	25	23	3.5	1.2	1.2	1.2	2.0	1.1	1.0
55 to 59 years	1,468	23	10	13	2.2	0.6	0.5	0.7	1.6	0.7	0.9
60 to 64 years	880	24	15	9	1.3	0.8	0.7	0.5	2.7	1.7	1.0
65 years and over	661	71	21	50	1.0	1.7	1.0	2.5	10.7	3.2	7.6
65 to 69 years	385	35	13	22	0.6	0.8	0.6	1.1	9.1	3.4	5.7
70 years and over	278	34	7	27	0.4	0.8	0.3	1.4	12.3	2.5	9.8
WOMEN											
Total, 16 years and over	33,021	2,563	1,241	1,322	49.6	62.1	58.2	66.3	7.8	3.8	4.0
Under 25 years	7,319	1,262	664	608	11.0	30.6	30.7	30.5	17.2	6.9	8.3
16 to 19 years	2,720	712	387	325	4.1	17.3	18.2	16.3	26.2	14.2	11.9
20 to 24 years	4,599	550	267	283	6.9	13.3	12.5	14.2	12.0	5.8	6.2
25 years and over	25,702	1,301	587	714	38.6	31.5	27.5	35.8	5.1	2.3	2.8
25 to 34 years	8,422	634	235	299	12.7	12.9	11.0	15.0	6.3	2.8	3.6
25 to 29 years	4,045	261	119	142	6.1	6.3	5.6	7.1	6.5	2.9	3.5
30 to 34 years	4,377	273	116	157	6.6	6.6	5.4	7.9	6.2	2.7	3.6
35 to 44 years	8,298	347	145	202	12.5	8.4	6.8	10.1	4.2	1.7	2.4
35 to 39 years	4,417	186	66	120	6.6	4.5	3.1	6.0	4.2	1.5	2.7
40 to 44 years	3,879	161	79	82	5.8	3.9	3.7	4.1	4.2	2.0	2.1
45 to 54 years	5,497	199	100	99	6.3	4.8	4.7	5.0	3.6	1.8	1.8
45 to 49 years	3,192	111	59	52	4.8	2.7	2.8	2.6	3.5	1.8	1.6
50 to 54 years	2,305	88	41	47	3.5	2.1	1.9	2.4	3.8	1.8	2.0
55 to 64 years	2,680	134	52	82	4.0	3.2	2.4	4.1	5.0	1.9	3.1
55 to 59 years	1,670	87	26	41	2.5	1.6	1.2	2.1	4.0	1.6	2.5
60 to 64 years	1,010	68	27	41	1.5	1.6	1.3	2.1	6.7	2.7	4.1
65 years and over	806	87	55	32	1.2	2.1	2.6	1.8	10.8	6.8	4.0
65 to 69 years	497	44	27	17	0.7	1.1	1.3	0.9	8.9	5.4	3.4
70 years and over	309	43	28	15	0.5	1.0	1.3	0.8	13.9	9.1	4.9

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 8. Employed wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by hours usually worked per week, 1994 annual averages

Hours usually worked	Number of workers (in thousands)				Percent distribution				Percent of all workers paid hourly rates		
	Total paid hourly rates	At or below \$4.25			Total paid hourly rates	At or below \$4.25			At or below \$4.25		
		Total	At \$4.25	Below \$4.25		Total	At \$4.25	Below \$4.25	Total	At \$4.25	Below \$4.25
Total, 16 years and over	66,549	4,127	2,132	1,995	100.0	100.0	100.0	100.0	6.2	3.2	3.0
Hours vary	3,849	501	243	258	5.8	12.1	11.4	12.9	13.0	6.3	6.7
0 to 34 hours	15,036	2,263	1,235	1,028	22.6	54.8	57.9	51.5	15.1	8.2	6.8
0 to 4 hours	310	57	21	36	0.5	1.4	1.0	1.8	18.4	6.8	11.6
5 to 9 hours	810	150	78	72	1.2	3.6	3.7	3.8	18.5	9.6	8.9
10 to 14 hours	1,444	304	188	116	2.2	7.4	8.8	5.8	21.1	13.0	8.0
15 to 19 hours	2,245	394	235	159	3.4	9.5	11.0	8.0	17.8	10.6	7.1
20 to 24 hours	4,566	614	355	259	6.9	14.9	16.7	13.0	13.4	7.8	5.7
25 to 29 hours	2,015	302	156	148	3.0	7.3	7.3	7.3	15.0	7.7	7.2
30 to 34 hours	3,645	442	203	239	5.5	10.7	9.5	12.0	12.1	5.6	6.6
35 hours or more	47,665	1,364	655	709	71.6	33.1	30.7	35.5	2.9	1.4	1.5
35 to 39 hours	4,778	342	162	180	7.2	8.3	7.6	9.0	7.2	3.4	3.8
40 hours or more	42,887	1,022	493	529	64.4	24.8	23.1	26.5	2.4	1.1	1.2
40 hours	35,696	861	442	419	53.6	20.9	20.7	21.0	2.4	1.2	1.2
41 hours or more	7,191	161	51	110	10.8	3.9	2.4	5.5	2.2	0.7	1.5
41 to 44 hours	1,019	18	10	8	1.5	0.4	0.5	0.4	1.8	1.0	0.8
45 to 48 hours	2,782	54	19	35	4.2	1.3	0.9	1.8	1.9	0.7	1.3
49 hours	2,479	62	16	46	3.7	1.5	0.8	2.3	2.5	0.6	1.9
50 hours or more	901	26	6	22	1.4	0.7	0.3	1.1	3.1	0.7	2.4

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994 annual averages.

Table 9. Workers paid hourly rates and minimum wage workers, by sex, 1979-1994
(Numbers in thousands)

Year	Total wage and salary workers	Workers paid hourly rates					
		Total	Percent of wage and salary workers	Paid less than the prevailing minimum wage	Paid the prevailing minimum wage	Total paid the prevailing minimum wage or less	Percent of hourly paid workers
						Number	
Both sexes							
1979	85,773	50,637	59.0	2,846	3,907	6,753	13.3
1980	85,780	50,210	58.5	3,017	4,581	7,588	15.1
1981 (end 1970 weights)	86,651	50,770	58.6	3,440	4,201	7,641	15.1
1981 (begin 1980 weights)	88,516	51,849	58.6	3,513	4,311	7,824	15.1
1982	87,368	50,846	58.2	2,348	4,148	6,496	12.8
1983	88,290	51,820	58.7	2,077	4,261	6,338	12.2
1984	92,194	54,143	58.7	1,838	4,125	5,963	11.0
1985	94,521	55,782	59.0	1,639	3,899	5,538	9.9
1986	96,903	57,529	59.4	1,599	3,461	5,060	8.8
1987	99,303	59,552	60.0	1,468	3,229	4,697	7.9
1988	101,407	60,878	60.0	1,319	2,608	3,927	6.5
1989	103,480	62,389	60.3	1,372	1,790	3,162	5.1
1990 (Q2 1990 - Q1 1991)	103,587	62,112	60.0	2,221	968	3,189	5.1
1991 (Q2 1991 - Q1 1992)	102,872	61,782	60.1	2,351	3,365	5,716	9.3
1992	103,688	62,683	60.5	1,896	2,866	4,762	7.6
1993	105,068	63,216	60.3	1,668	2,518	4,188	6.6
1994 (begin new CPS)	107,989	65,549	61.6	1,995	2,132	4,127	6.2
Men							
1979	48,389	27,771	57.4	820	1,318	2,138	7.7
1980	47,641	27,075	56.8	957	1,654	2,611	9.6
1981 (end 1970 weights)	47,769	26,936	56.4	1,090	1,489	2,579	9.6
1981 (begin 1980 weights)	48,844	27,576	56.5	1,119	1,533	2,652	9.6
1982	47,591	26,481	55.8	697	1,587	2,284	8.8
1983	47,856	26,831	56.1	565	1,658	2,243	8.4
1984	50,022	28,140	56.3	490	1,626	2,116	7.5
1985	51,015	28,893	56.6	440	1,544	1,984	6.9
1986	51,942	29,666	57.1	408	1,338	1,744	5.9
1987	52,938	30,474	57.6	364	1,283	1,647	5.4
1988	53,912	31,058	57.6	311	1,066	1,377	4.4
1989	54,789	31,687	57.8	379	733	1,112	3.5
1990 (Q2 1990 - Q1 1991)	54,573	31,355	57.5	732	318	1,050	3.3
1991 (Q2 1991 - Q1 1992)	53,879	31,010	57.6	781	1,301	2,082	6.7
1992	54,135	31,510	58.2	628	1,164	1,792	5.7
1993	54,776	31,699	57.9	651	1,032	1,583	5.0
1994 (begin new CPS)	56,570	33,528	59.3	674	891	1,565	4.7
Women							
1979	37,384	22,866	61.2	2,026	2,589	4,615	20.2
1980	38,140	23,135	60.7	2,060	2,927	4,987	21.6
1981 (end 1970 weights)	38,882	23,834	61.3	2,350	2,711	5,061	21.2
1981 (begin 1980 weights)	39,672	24,294	61.2	2,394	2,778	5,172	21.3
1982	39,777	24,365	61.3	1,651	2,561	4,212	17.3
1983	40,433	24,989	61.8	1,492	2,603	4,095	16.4
1984	42,172	26,003	61.7	1,348	2,499	3,847	14.8
1985	43,506	26,869	61.8	1,198	2,356	3,554	13.2
1986	44,961	27,863	62.0	1,192	2,125	3,317	11.9
1987	46,365	29,078	62.7	1,105	1,946	3,051	10.5
1988	47,495	29,820	62.8	1,008	1,542	2,550	8.8
1989	48,691	30,702	63.1	994	1,056	2,050	6.7
1990 (Q2 1990 - Q1 1991)	49,014	30,757	62.8	1,489	650	2,139	7.0
1991 (Q2 1991 - Q1 1992)	48,993	30,771	62.8	1,570	2,064	3,634	11.8
1992	49,554	31,173	62.9	1,268	1,702	2,970	9.5
1993	50,292	31,617	62.9	1,117	1,486	2,603	8.2
1994 (begin new CPS)	51,419	33,021	64.2	1,322	1,241	2,563	7.8

* The prevailing Federal minimum wage was \$2.90 in 1979, \$3.10 in 1980, and \$3.35 in 1981-89. The minimum wage rose to \$3.80 in April 1990, and to \$4.25 in April 1991.

NOTE: Data exclude the incorporated self-employed. Data for 1994 are not directly comparable with data for 1993 and earlier years due to the redesign of the Current Population Survey and the introduction of 1990 census-based population controls. For further information, see "Revisions in the Current Population Survey Effective January 1994," in the February 1994 issue of Employment and Earnings.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey (CPS). For more information about the data in this table, call (202) 606-6378.

Table 1. Distribution of wage and salary workers paid hourly rates, by selected characteristics, annual averages 1994

(Numbers in thousands)-Continued

Characteristic	Total paid hourly rates	Less than \$4.25	\$4.25	\$4.26 to \$5.14	\$4.26 to \$4.69	\$4.70 to \$5.14	\$5.15 to \$5.49	\$5.50 to \$5.74	\$5.75 to \$5.99	\$6.00 or more
RACE AND HISPANIC ORIGIN										
White										
Total, 16 years and over.....	55,151	1,727	1,657	6,782	2,103	4,680	1,223	1,590	679	41,492
Men.....	27,956	577	696	2,782	833	1,949	434	668	231	22,568
Women.....	27,196	1,150	961	4,001	1,270	2,731	789	922	448	18,924
Black										
Total, 16 years and over.....	8,586	205	356	1,385	439	946	229	268	105	6,038
Men.....	4,116	78	136	551	168	383	77	112	34	3,127
Women.....	4,471	127	220	834	271	562	152	156	70	2,911
Hispanic origin										
Total, 16 years and over.....	7,130	211	401	1,219	363	856	172	273	92	4,763
Men.....	4,308	95	220	641	170	471	84	159	51	3,057
Women.....	2,822	116	181	578	194	384	87	113	41	1,706
FULL- AND PART-TIME STATUS AND SEX										
Full-time workers										
Total, 16 years and over.....	49,682	785	734	3,847	984	2,863	875	1,230	553	41,657
Men.....	28,224	332	342	1,781	414	1,367	328	584	219	24,637
Women.....	21,458	453	392	2,066	569	1,497	546	646	334	17,021
Part-time workers										
Total, 16 years and over.....	16,773	1,207	1,395	4,671	1,663	3,008	636	706	261	7,898
Men.....	5,251	341	548	1,709	627	1,082	209	232	61	2,150
Women.....	11,522	866	847	2,961	1,036	1,925	426	474	200	5,748

NOTE: Data exclude the incorporated self employed.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994.

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Table 2. Distribution of wage and salary workers paid hourly rates, by major occupation group, annual averages 1994
(Numbers in thousands)

Occupation	Total paid hourly rates	Less than \$4.25	\$4.25	\$4.26 to \$5.14	\$4.26 to \$4.69	\$4.70 to \$5.14	\$5.15 to \$5.49	\$5.50 to \$5.74	\$5.75 to \$5.99	\$6.00 or more
Total, 16 years and over.....	66,549	1,995	2,132	8,531	2,648	5,883	1,512	1,941	816	49,622
Managerial and professional specialty.....	8,500	68	69	408	108	300	98	118	36	7,704
Executive, administrative, and managerial.....	3,504	26	17	148	41	108	39	59	16	3,199
Professional specialty.....	4,996	42	52	260	67	193	59	59	19	4,505
Technical, sales, and administrative support.....	21,179	290	610	2,860	909	1,951	573	693	282	15,871
Technicians and related support...	2,465	16	18	72	15	57	13	24	7	2,317
Sales occupations.....	6,660	172	409	1,930	681	1,249	363	368	130	3,286
Administrative support, including clerical.....	12,054	102	183	858	213	646	197	301	145	10,268
Service occupations.....	12,311	1,305	945	2,944	1,010	1,933	440	498	240	5,939
Private household.....	389	78	17	109	22	87	2	12	1	170
Protective service.....	1,418	16	34	145	37	108	24	47	23	1,129
Service, except private household and protective.....	10,504	1,212	893	2,689	951	1,738	413	439	216	4,641
Precision production, craft, and repair.....	8,894	48	48	318	66	252	69	115	36	8,261
Mechanics and repairers.....	2,990	18	15	80	14	66	20	35	8	2,814
Construction trades.....	3,060	17	10	90	14	75	11	30	5	2,897
Other precision production, craft, and repair.....	2,843	13	22	148	37	110	38	50	23	2,549
Operators, fabricators, and laborers.....	14,469	218	396	1,730	485	1,245	304	460	193	11,168
Machine operators, assemblers, and inspectors.....	6,742	94	143	637	162	475	135	188	101	5,445
Transportation and material moving occupations.....	3,281	31	60	204	49	155	37	76	25	2,849
Handlers, equipment cleaners, helpers, and laborers.....	4,446	93	193	890	274	615	131	196	68	2,874
Farming, forestry, and fishing.....	1,196	66	66	272	71	200	29	56	28	679

NOTE: Data exclude the incorporated self employed.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994.

Table 3. Distribution of wage and salary workers paid hourly rates, by major industry group, annual averages 1994
(Numbers in thousands)

Industry	Total paid hourly rates	Less than \$4.25	\$4.25	\$4.26 to \$5.14	\$4.26 to \$4.69	\$4.70 to \$5.14	\$5.15 to \$5.49	\$5.50 to \$5.74	\$5.75 to \$5.99	\$6.00 or more
Total, 16 years and over.....	66,549	1,995	2,132	8,531	2,648	5,883	1,512	1,941	816	49,622
Private sector.....	57,927	1,894	1,953	7,964	2,491	5,473	1,395	1,795	734	42,191
Goods producing.....	18,295	189	246	1,228	294	935	227	368	161	15,876
Agriculture.....	924	48	51	217	58	159	20	43	24	521
Mining.....	367	1	2	12	2	10	1	1	1	349
Construction.....	3,747	30	19	166	35	130	11	53	6	3,461
Manufacturing.....	13,256	110	173	834	199	635	195	271	130	11,544
Durable goods.....	7,809	52	47	386	85	302	97	133	61	7,032
Nondurable goods.....	5,448	58	126	448	114	333	98	138	68	4,512
Service producing.....	39,632	1,705	1,707	6,736	2,197	4,538	1,168	1,427	574	26,315
Transp. and public utilities..	3,743	26	32	142	38	103	25	64	21	3,432
Wholesale trade.....	2,035	25	42	156	35	121	34	55	17	1,707
Retail trade.....	14,249	1,180	1,075	3,944	1,444	2,500	639	681	261	6,469
Eating and drinking.....	4,875	977	630	1,601	678	923	179	169	69	1,252
Finance, ins., & real estate..	2,620	24	20	134	26	108	39	67	39	2,295
Services.....	16,986	451	538	2,361	655	1,706	430	560	236	12,412
Private households.....	478	84	21	139	29	110	3	17	1	213
Other services.....	16,508	366	517	2,222	626	1,596	426	543	234	12,199
Business and repair.....	3,505	47	98	551	128	423	83	146	57	2,523
Personal services.....	1,693	84	94	388	110	278	71	109	34	914
Entertainment and recr. . .	1,044	45	91	264	91	172	31	44	13	556
Professional and related..	10,247	186	231	1,018	297	721	242	244	129	8,197
Forestry and fisheries....	20	4	3	2	-	2	-	-	1	10
Government.....	8,623	101	180	567	157	410	118	146	81	7,431
Federal.....	2,104	9	22	41	13	29	6	19	10	1,997
State.....	2,095	33	68	214	62	152	34	46	25	1,675
Local.....	4,424	59	89	312	83	229	77	80	46	3,759

- Data not available.

NOTE: Data exclude the incorporated self employed.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994.

ה'תר"ל ד'א' אצל - כנעטש'ה פארש

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HOURLY RATE	
Total.....	66,549
Under \$1.35.....	996
Under \$2.50.....	672
\$2.50 - \$2.99.....	178
\$3.00 - \$3.34.....	146
\$3.00 - \$3.04.....	114
\$3.05 - \$3.09.....	5
\$3.10 - \$3.19.....	7
\$3.20 - \$3.29.....	19
\$3.30 - \$3.34.....	1
\$3.35.....	15
\$3.36 - \$3.49.....	10
\$3.40 - \$3.44.....	2
\$3.45 - \$3.49.....	8
\$3.50 - \$3.79.....	108
\$3.50 - \$3.54.....	61
\$3.55 - \$3.59.....	4
\$3.60 - \$3.64.....	8
\$3.65 - \$3.69.....	7
\$3.70 - \$3.74.....	3
\$3.75 - \$3.79.....	24
\$3.80.....	7
\$3.81 - \$3.99.....	13
\$3.81 - \$3.84.....	0
\$3.85 - \$3.89.....	7
\$3.90 - \$3.94.....	3
\$3.95 - \$3.99.....	2
\$4.00.....	814
\$4.01 - \$4.24.....	32
\$4.01 - \$4.04.....	1
\$4.05 - \$4.09.....	3
\$4.10 - \$4.14.....	5
\$4.15 - \$4.19.....	10
\$4.20 - \$4.24.....	14
\$4.25.....	2,132
\$4.26 - \$4.49.....	916
\$4.26 - \$4.29.....	6
\$4.30 - \$4.34.....	60
\$4.35 - \$4.39.....	659
\$4.40 - \$4.44.....	102
\$4.45 - \$4.49.....	89
\$4.50 - \$4.99.....	2,898
\$4.50 - \$4.54.....	1,300

See footnotes at end of table.

Table A. Distribution of wage and salary workers paid hourly rates, annual averages 1994

(Numbers in thousands)-Continued

Total

HOURLY RATE	
\$4.55 - \$4.59.....	88
\$4.60 - \$4.64.....	116
\$4.65 - \$4.69.....	227
\$4.70 - \$4.74.....	82
\$4.75 - \$4.79.....	679
\$4.80 - \$4.84.....	83
\$4.85 - \$4.89.....	132
\$4.90 - \$4.94.....	122
\$4.95 - \$4.99.....	68
\$5.00 - \$5.49.....	6,229
\$5.01 - \$5.04.....	12
\$5.05 - \$5.09.....	71
\$5.10 - \$5.14.....	119
\$5.15 - \$5.19.....	109
\$5.20 - \$5.24.....	115
\$5.25 - \$5.29.....	843
\$5.30 - \$5.34.....	112
\$5.35 - \$5.39.....	125
\$5.40 - \$5.44.....	109
\$5.45 - \$5.49.....	100
\$5.50 - \$5.99.....	2,756
\$5.50 - \$5.74.....	1,941
\$5.75 - \$5.99.....	816
\$6.00 - \$6.99.....	7,830
\$7.00 - \$7.99.....	6,891
\$8.00 - \$8.99.....	6,085
\$9.00 - \$9.99.....	4,159
\$10.00 or more.....	24,657

NOTE: Data exclude the incorporated self employed.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1994.

Table 9. Workers paid hourly rates and minimum wage workers, by sex, 1979-1993
(Numbers in thousands)

Year		Total wage and salary workers	Workers paid hourly rates					
			Total	Percent of wage and salary workers	Paid less than the prevailing minimum wage	Paid the prevailing minimum wage	Total paid the prevailing minimum wage or less	
							Number	Percent of hourly paid workers
Both sexes								
1979	85,773	50,637	59.0	2,846	3,907	6,753	13.3	
1980	85,780	50,210	58.5	3,017	4,581	7,598	15.1	
1981 (end 1970 weights)	86,651	50,770	58.6	3,440	4,201	7,641	15.1	
1981 (begin 1980 weights)	88,516	51,869	58.6	3,513	4,311	7,824	15.1	
1982	87,368	50,846	58.2	2,348	4,148	6,496	12.8	
1983	88,290	51,820	58.7	2,077	4,261	6,338	12.2	
1984	92,194	54,143	58.7	1,838	4,125	5,963	11.0	
1985	94,521	55,762	59.0	1,639	3,899	5,538	9.9	
1986	96,903	57,529	59.4	1,599	3,461	5,060	8.8	
1987	99,303	59,552	60.0	1,468	3,229	4,697	7.9	
1988	101,407	60,878	60.0	1,319	2,608	3,927	6.5	
1989	103,480	62,389	60.3	1,372	1,790	3,162	5.1	
1990 (Q2 1990 - Q1 1991)*	103,587	62,112	60.0	2,221	968	3,189	5.1	
1991 (Q2 1991 - Q1 1992)	102,872	61,782	60.1	2,351	3,365	5,716	9.3	
1992	103,688	62,683	60.5	1,896	2,866	4,762	7.6	
1993	105,068	63,316	60.3	1,668	2,518	4,186	6.6	
Men								
1979	48,389	27,771	57.4	820	1,318	2,138	7.7	
1980	47,641	27,075	56.8	957	1,654	2,611	9.6	
1981 (end 1970 weights)	47,769	26,936	56.4	1,090	1,489	2,579	9.6	
1981 (begin 1980 weights)	48,844	27,576	56.5	1,119	1,533	2,652	9.6	
1982	47,591	26,481	55.6	697	1,587	2,284	8.6	
1983	47,856	26,831	56.1	585	1,658	2,243	8.4	
1984	50,022	28,140	56.3	490	1,626	2,116	7.5	
1985	51,015	28,893	56.6	440	1,544	1,984	6.9	
1986	51,942	29,666	57.1	408	1,336	1,744	5.9	
1987	52,938	30,474	57.6	364	1,283	1,647	5.4	
1988	53,912	31,058	57.6	311	1,066	1,377	4.4	
1989	54,789	31,687	57.8	379	733	1,112	3.5	
1990 (Q2 1990 - Q1 1991)	54,573	31,355	57.5	732	318	1,050	3.3	
1991 (Q2 1991 - Q1 1992)	53,879	31,010	57.6	781	1,301	2,082	6.7	
1992	54,135	31,510	58.2	628	1,164	1,792	5.7	
1993	54,776	31,699	57.9	551	1,032	1,583	5.0	
Women								
1979	37,384	22,866	61.2	2,026	2,589	4,615	20.2	
1980	38,140	23,135	60.7	2,060	2,927	4,987	21.6	
1981 (end 1970 weights)	38,882	23,834	61.3	2,350	2,711	5,061	21.2	
1981 (begin 1980 weights)	39,672	24,294	61.2	2,394	2,778	5,172	21.3	
1982	39,777	24,365	61.3	1,651	2,561	4,212	17.3	
1983	40,433	24,989	61.8	1,492	2,603	4,095	16.4	
1984	42,172	26,003	61.7	1,348	2,499	3,847	14.8	
1985	43,506	26,869	61.8	1,198	2,356	3,554	13.2	
1986	44,961	27,863	62.0	1,192	2,125	3,317	11.9	
1987	46,365	29,078	62.7	1,105	1,946	3,051	10.5	
1988	47,495	29,820	62.8	1,008	1,542	2,550	8.6	
1989	48,691	30,702	63.1	994	1,056	2,050	6.7	
1990 (Q2 1990 - Q1 1991)	49,014	30,757	62.8	1,489	650	2,139	7.0	
1991 (Q2 1991 - Q1 1992)	48,993	30,771	62.8	1,570	2,064	3,634	11.8	
1992	49,554	31,173	62.9	1,268	1,702	2,970	9.5	
1993	50,292	31,617	62.9	1,117	1,486	2,603	8.2	

* The prevailing Federal minimum wage was \$2.90 in 1979, \$3.10 in 1980, and \$3.35 in 1981-89. The minimum wage rose to \$3.80 in April 1990, and to \$4.25 in April 1991.

NOTE: Data exclude the incorporated self-employed. Estimates based on sample weights applicable to 1970 census population controls are not strictly comparable to those weights applicable to 1980 controls. Data for 1981 are shown both ways. Although the new weights caused the number of wage and salary workers to rise by 1.9 million, hourly paid workers to rise by 1.1 million, and those at or below the minimum wage to rise by 183,000, percentages and medians changed very little or not at all. See "Revisions to the Current Population Survey Beginning in January 1982," Employment and Earnings, February 1982, pp. 8-15, for more information.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey.
For more information about the data in this table, call (202) 606-6378.

HISTORY OF THE FEDERAL MINIMUM WAGE RATES UNDER THE FAIR LABOR STANDARDS ACT - 1938 THROUGH 1991

Minimum hourly wage of workers in jobs first covered by:

<u>Effective Date</u>	<u>1938 Act¹</u>	<u>1961 Amendments²</u>	<u>1966 et.al. Nonfarm Farm</u>	
Oct 24, 1938	25¢			
Oct 24, 1939	30¢			
Oct 24, 1945	40¢			
Jan 25, 1950	75¢			
Mar 1, 1956	\$1.00			
Sep 3, 1961	1.15	\$1.00		
Sep 3, 1963	1.25	1.00		
Sep 3, 1964	1.25	1.15		
Sep 3, 1965	1.25	1.25		
Feb 1, 1967	1.40	1.40	\$1.00	\$1.00
Feb 1, 1968	1.60	1.60	1.15	1.15
Feb 1, 1969	1.60	1.60	1.30	1.30
Feb 1, 1970	1.60	1.60	1.45	1.30
Feb 1, 1971	1.60	1.60	1.60	1.30
May 1, 1974	2.00	2.00	1.90	1.60
Jan 1, 1975	2.10	2.10	2.00	1.80
Jan 1, 1976	2.30	2.30	2.20	2.00
Jan 1, 1977	2.30	2.30	2.30	2.20
Jan 1, 1978	2.65 ³			
Jan 1, 1979	2.90			
Jan 1, 1980	3.10			
Jan 1, 1981	3.35			
Apr 1, 1990	3.80 ⁴	3.35 ⁵		
Apr 1, 1991	4.25	3.35		

¹ The 1938 Act applied to employees engaged in interstate commerce or in the production of goods for interstate commerce.

² The 1961 amendments extended coverage primarily to employees in large retail and service trades as well as local transit systems, large construction firms, and gasoline service station employees.

³ MW applies to all covered, non-exempt workers except certified Section 14 workers.

⁴ Beginning April 1, 1990, employers may pay a training wage of at least 85% of the MW (but not less than \$3.35 an hour) for up to 90 days to employees under age 20, except for migrant or seasonal agricultural workers or H-2A workers.

⁵ Grandfather clause - Employees who do not meet the tests for individual coverage and whose employers were covered by the FLSA on March 31, 1990, and fail to meet the increased ADV test must continue to receive, among other things, at least \$3.35 an hour.

Federal minimum wages in constant dollars, using alternative price indices

Year	Nominal minimum wage *	Purchasing Power in 1994 dollars using CPI-U	Purchasing Power in 1994 dollars using CPI-W	Purchasing Power in 1994 dollars using CPI-U-X1
1938	\$0.25	\$2.63	\$2.56	
1939	0.30	3.20	3.12	
1940	0.30	3.18	3.10	
1941	0.30	3.02	2.95	
1942	0.30	2.73	2.66	
1943	0.30	2.57	2.51	
1944	0.30	2.53	2.47	
1945	0.40	3.29	3.22	
1946	0.40	3.04	2.97	
1947	0.40	2.66	2.59	
1948	0.40	2.46	2.41	
1949	0.40	2.49	2.43	
1950	0.75	4.61	4.51	
1951	0.75	4.28	4.18	
1952	0.75	4.19	4.09	
1953	0.75	4.16	4.06	
1954	0.75	4.13	4.04	
1955	0.75	4.15	4.06	
1956	1.00	5.45	5.33	
1957	1.00	5.27	5.14	
1958	1.00	5.13	5.00	
1959	1.00	5.09	4.97	
1960	1.00	5.01	4.89	
1961	1.15	5.70	5.56	
1962	1.15	5.64	5.51	
1963	1.25	6.05	5.91	
1964	1.25	5.98	5.83	
1965	1.25	5.88	5.74	
1966	1.25	5.72	5.58	
1967	1.40	6.21	6.07	\$5.71
1968	1.60	6.81	6.66	6.29
1969	1.60	6.46	6.31	6.03
1970	1.60	6.11	5.97	5.74
1971	1.60	5.85	5.72	5.51
1972	1.60	5.67	5.53	5.34
1973	1.60	5.34	5.21	5.03
1974	2.00	6.01	5.87	5.71
1975	2.10	5.78	5.65	5.54
1976	2.30	5.99	5.85	5.74
1977	2.30	5.62	5.50	5.39
1978	2.65	6.02	5.88	5.82
1979	2.90	5.92	5.78	5.81
1980	3.10	5.58	5.44	5.58
1981	3.35	5.46	5.34	5.51
1982	3.35	5.14	5.03	5.19
1983	3.35	4.98	4.89	4.98
1984	3.35	4.78	4.72	4.78
1985	3.35	4.61	4.56	4.62
1986	3.35	4.53	4.49	4.53
1987	3.35	4.37	4.34	4.37
1988	3.35	4.20	4.17	4.20
1989	3.35	4.00	3.98	4.01
1990	3.80	4.31	4.29	4.31
1991	4.25	4.62	4.61	4.63
1992	4.25	4.49	4.48	4.49
1993	4.25	4.36	4.35	4.36
1994	4.25	4.25	4.25	4.25

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.
Jan-95

* The effective dates for minimum wage increases are presented

BASIC METHODOLOGY

There are 12.26 million workers who would be affected by the proposed minimum wage increase. The average worker affected works 30 hours per week. The average increase in the wage rate would be 48 cents. We assume that they also work 50 weeks per year. (Source: Economic Policy Institute)

Of the 12.26 million affected workers, the Economic Policy Institute estimates that 1.37 million (11.15%) received food stamps in the last year. So, these 1.37 million workers have an increase in wage income of \$986 million (1.37 million times 50 weeks per year times 48 cents times 30 hours per week). An Urban Institute working paper estimates that the marginal tax rate for food stamps is between 5 and 10 percent--that means that a one dollar increase in income translates into a 5 to 10 cent reduction in food stamp benefits. Thus, a \$986 million increase in wage income would reduce food stamp outlays by as much as \$102 million per year. Over seven years, a minimum wage increase could potentially reduce food stamp expenditures by as much as \$780 million.

Of the 12.26 million affected workers, the Economic Policy Institute estimates that 693 thousand (5.65%) received AFDC in the last year. So, these 693 thousand workers would receive a \$499 million increase in wage income. An Urban Institute working paper estimates that the marginal tax rate for AFDC is between 50 and 65 percent. Thus, a \$499 million increase in wage income would reduce AFDC outlays by as much as \$325 million per year. Over seven years, a minimum wage increase could potentially reduce AFDC outlays by as much as \$2.5 billion.

There are at least two major reasons why this methodology overestimates the effect of a minimum wage increase on AFDC and food stamp outlays:

- (1) In order to determine the impact of a minimum wage increase on the federal budget, we need to cut the yearly savings in half since the federal government pays about half of all AFDC outlays. Thus, over seven years, a minimum wage increase could potentially reduce federal AFDC outlays by as much as \$1.25 billion.
- (2) The Economic Policy Institute used the Current Population Survey (CPS) in order to determine the number of affected workers who also received AFDC and food stamps. Because of the survey design, the respondent answers questions about his/her current job: wage rate, occupation, hours, etc. The respondent is also asked if he/she received AFDC or food stamps in the last year. Therefore, it is possible, for example, that someone received welfare six months ago, but was able to get off the doles and is currently working at a job paying \$4.50 an hour. According to the CPS, he/she would be counted as an affected worker who is also received welfare. However, there would be no welfare savings since he/she no longer receives welfare benefits. This effect will tend to overstate the real budgetary impact of a minimum wage increase on the federal budget.

Finally, this methodology does not completely address the impact of a minimum wage increase on the federal budget: it ignores the effect on discretionary spending, on EITC expenditures, Medicaid expenditures, and public housing. These effects will cut in different directions. A minimum wage increase would most likely increase discretionary spending (since some federal employees would be in the affected pool) and spending on the EITC (since the family income of many minimum wage workers is in the range where increased earnings translates into a larger EITC benefit). However, a minimum wage increase would also tend to decrease expenditures for programs like Medicaid and public housing.

Summary:

The President's proposal to increase the minimum wage to \$5.15 per hour would likely reduce federal government spending by some \$2 billion over the next seven years.

BASIC METHODOLOGY



There are 12.26 million workers who would be affected by the proposed minimum wage increase. The average worker affected works 30 hours per week. The average increase in the wage rate is 48 cents. We assume that they also work 50 weeks a year. (Source: Economic Policy Institute)

Of the 12.26 million affected workers, the Economic Policy Institute estimates that 1.37 million (11.15%) receive food stamps. So, these 1.37 million workers have an increase in wage income of \$986 million. An Urban Institute working paper estimates that the marginal tax rate for food stamps is 5.2% -- that means that a one dollar increase in income translates into a 5 cent reduction in food stamp benefits. Thus, a \$986 million increase in wage income would reduce food stamp outlays by \$51 million per year (\$255 million over 5 years).

Of the 12.26 million affected workers, the Economic Policy Institute estimates that 693 thousand (5.65%) receive AFDC. So, these 693 thousand workers have an increase in wage income of \$499 million. An Urban Institute working paper estimates that the marginal tax rate for AFDC is 62.7% -- that means that a one dollar increase in income translates into a 63 cent reduction in welfare benefits. Thus, a \$499 million increase in wage income would reduce AFDC outlays by \$313 million per year (\$1.56 billion over 5 years).

To summarize: The President's proposal to increase the minimum wage by 90 cents to \$5.15 per hour would have the desirable affect of reducing government spending on Food Stamps and AFDC by approximately \$1.82 billion over 5 years.



Readers Report

something wrong with this picture?

Jane Sjogren
Associate Professor
Simmons College
Boston

DAVID CARD'S SIDE OF THE MINIMUM-WAGE BROUHAHA

Paul Craig Roberts writes, in "A minimum-wage study with minimum credibility" (Economic Viewpoint, Apr. 24): "Michigan State University Professor David Neumark and Federal Reserve economist William Wascher acquired the actual payroll data from fast-food establishments in New Jersey and Pennsylvania. The payroll data show that fast-food employment did not increase in New Jersey after the minimum wage increase. [Instead, it declined 4.8% relative to the control group in neighboring Pennsylvania.]"

On the contrary, Neumark and Wascher did not acquire the payroll data. Rather, the data were acquired from a selected group of franchisees by the Employment Policy Institute (EPI), an organization funded by business contributions and opposed to minimum-wage increases. EPI then provided data to Neumark and Wascher.

The data set used in my study with Alan Krueger of the effect of the New Jersey minimum wage includes 410 restaurants from four fast-food chains: Burger King, KFC, Roy Rogers, and Wendy's. Our sample includes both company-owned and franchise outlets. The payroll data set used by Neumark and Wascher includes 71 restaurants in the Burger King and Wendy's chains, all owned by franchisees. Neumark and Wascher have not shown that results based on "the actual payroll data" differ from the results reported in our study. They have not even analyzed data for the same restaurants, or the same restaurant chains, or for stores operated by the same groups of owners.

David Card
Professor of Economics
Princeton University
Princeton, N.J.

Editor's Note: New Jersey's experience is hotly debated in the economic profession. The study by Card and Krueger was based on a telephone survey of outlets of four fast-food restaurant chains. It concluded that employment in New Jersey outlets rose after the state raised the minimum wage in 1992, while employment fell in neighboring Pennsylvania, where the minimum wage did not change. Neumark and Wascher, using payroll data from

CORRECTIONS & CLARIFICATIONS

"From the microbrewers who brought you Bud, Coors..." (Marketing, Apr. 24) erred in stating that Anheuser-Busch Cos. and Miller Brewing Co. have spent decades acquiring smaller rivals. Until their recent microbrewery deals, neither company had made significant acquisitions of rival brewers.

In Inside Wall Street (May 8), a graphic was misplaced and mislabeled. The chart tracking the stock of Teva should have accompanied the item on Specialty Equipment, whose path the graphic really reflects.

two chains, found that employment rose in New Jersey but rose even faster in Pennsylvania. Neumark says he verified by phone that the data provided by EPI were complete. He says his study, still collecting data, has compared results only with the similar portion of Card's restaurants.

Roberts claims that the data used in the Card-Krueger study of minimum wages are obviously flawed and that the publication of this paper casts serious doubts on Card's competence as an economist as well as on the standards at *The American Economic Review*.

Roberts dramatically overstates the flaws. He notes that the data contain large variations hard to explain. In economics, data often look like this—and well-understood ways exist to assess the consequences of such variation for empirical results. One of us did a statistical re-analysis of the Card-Krueger data and found the basic findings unaffected by this variation. The study by Neumark and Wascher cited by Roberts performs a service by collecting additional data on this point. That their findings contradict Card's and Krueger's is evidence of healthy discourse on a difficult empirical problem—not, as Roberts asserts, evidence of incompetence.

Anyone who follows economics literature knows that Card is among the most careful and conscientious people doing empirical work in labor economics. Roberts' attempt to portray Card otherwise is a blatant effort to intimidate dissenting voices.

Jim Rebitzer
Sloan School, MIT
Cambridge, Mass.

Lowell Taylor
Heinz School
Carnegie Mellon University
Pittsburgh

Paul Craig Roberts says that to argue that an increase in the minimum wage may raise employment denies "the law of demand, the cornerstone of economic science." Nonsense!

Economists have long known that under the widespread imperfect competition in our economy, raising the minimum wage can lower the critical marginal or incremental cost of hiring additional workers. Where there is no effective minimum wage, hiring more workers may require offering higher wages not only to new workers but also to existing ones, making the additional costs prohibitive. If the minimum wage is set high enough to be effective, increased hiring may entail an incremental cost equal to only the wages paid to the additional workers, since existing workers have already had their wages raised. Hence, companies may indeed increase employment when the minimum wage is raised.

The study was properly received as ingenious and outstanding. But it was only one of a number of recent studies showing that the minimum wage did not significantly reduce employment. Roberts' attacks on the American Economic Assn. and on Card, who is to receive the AEA's highest award for an economist under 40, are nasty and unjustified. I have served on the committees that make the awards; they are not given to those who do shoddy work.

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Editor's note: Eisner is a past president of the American Economic Assn.

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Moderate increases in minimum wage have little effect on unemployment

In a June 12 Op-Ed article ("Facts and fiction about the minimum wage"), Richard Berman, of the fast-food-industry-sponsored Employment Policies Institute, repeats inaccurate attacks against minimum-wage research by Princeton professors David Card and Alan Krueger.

In a study published in January in the prestigious *American Economics Review*, Card and Krueger found that the 1992 increase in New Jersey's state minimum wage did not reduce employment in fast-food restaurants, relative to a control group in Pennsylvania, where the minimum was unchanged. Mr. Card and Mr. Krueger, who are two of the most respected labor economists in the country, based their conclusion on a telephone survey that met the highest professional standards.

Mr. Berman, rehashing argu-

ments he first made months ago in a *Wall Street Journal* Op-Ed, argues that the telephone survey created "inaccuracies" in Card and Krueger's "underlying data," that rendered their findings "meaningless." To support his position, Mr. Berman cites a paper by economists David Neumark and William Wascher, who analyzed payroll records for a small fraction (17 percent) of the restaurants in the Card and Krueger study.

However, Mr. Berman fails to understand that the correct interpretation of both studies is that the 19 percent increase in the minimum wage had no significant effect on fast-food employment. Mr. Card and Mr. Krueger found a slight increase in employment; Mr. Neumark and Mr. Wascher, with a much smaller, less representative, sample, found a decrease. The clear point is that neither change

was statistically significant by the standards that economists use to evaluate their results.

Mr. Card and Mr. Krueger have not, as Mr. Berman asserts, "refused to acknowledge" the "new facts" about their data. As Mr. Berman knows, they have defended their research ably, most notably at a June 1 forum sponsored by the America Enterprise Institute.

While Mr. Berman can represent the interests of minimum-wage employers in the fast-food industry, he is hardly qualified to assess the "facts" about the emerging body of evidence on the minimum wage, nearly all of which points to minimal effects for moderate increases in the minimum wage.

JOHN SCHMITT
Economist
Economic Policy Institute
Washington

4

Myth and Measurement: The New Economics of the Minimum Wage

A Review

by

**Finis Welch¹
Texas A & M University**

"The book will interest everyone involved in the minimum wage debates, and it will cause economists to question seriously the models they use and how they do empirical research."

**Ronald G. Ehrenberg, Cornell University
Princeton University Press filer announcing the book.**

Ron is right. I question David Card and Alan Krueger's models and how they do empirical research. Although the notoriety surrounding *Myth* suggests important conclusions that challenge economists' fundamental assumptions, I am convinced that the long run impact will not be to revise our assumptions regarding employment effects of minimum wages. It is more likely that the work will be soon forgotten or if there is a lasting effect it will be to spur, by negative example, a much-needed consideration of standards for the collection and distribution of primary data.

With very few exceptions, labor economists have been content with performing their work from introspection and logic alone and/or from analyzing secondary data where collection methods are well documented and publicly available. Although it is the sum and substance of economic history and experimental economics, the collection and analysis of primary data is new to us. Two of the authors' studies derive from their own surveys. As a profession, we and especially our peer-reviewed journals must develop standards for the description and release of such data and it might even be useful if we would establish guidelines for the collection of surveys. There are also questions concerning standards and responsibilities when one finds results that contradict widely held opinions. It may be good shortrun debate strategy to announce one's results as loudly as possible and then attack critics and the existing literature as either inept or inconsistent or both, but the result will have a more durable impact if the time and energy devoted to defending it was devoted instead to examination of alternative interpretations. *Myth's* primary argument is that increases in minimum wages do not reduce employment. If this result is robust the authors, who after all know more of the fine details of their work than anyone else, can only gain from critical review.

¹I am grateful to my colleagues, Ray Battalio, Donald Deere, Tom McCurdy and Kevin Murphy for suggestions and for comments on a previous draft. The opinions are my own.

Myth is built around four articles. Three of them were published in the October 1992 issue of this journal. The fourth—the one about fast food restaurants in New Jersey and Pennsylvania—was published in the *American Economic Review (AER)*. It is coauthored by David Card and Alan Krueger. Two others were written by David Card alone and the fourth was coauthored by Larry Katz and Alan Krueger. The one about fast food restaurants in Texas by Katz and Krueger and the Card/Krueger one rely exclusively on telephone surveys collected by or under the direction of the authors. Both papers provide only a brief description of the survey methodology. Copies of the analytical data file have been made available along with a copy of the questionnaire for the New Jersey/Pennsylvania Survey. To my knowledge, there has been no public release of any part of the Texas Survey.²

My review concentrates on the New Jersey/Pennsylvania paper. There is little to say about the Texas Survey paper. I have been unable to get the data and the authors' analysis is inconclusive. David Card's two studies are discussed only briefly.

The New Jersey Study

The 1989 Amendment to the Fair Labor Standards Act was first debated in Congress in 1988 and subsequently signed into law in November 1989. It called for an April 1, 1990 increase in the federal minimum from \$3.35 to \$3.80 per hour to be followed by an April 1, 1991 increase to \$4.25. In February 1990, before the first of the two federal increases took effect, the New Jersey Legislature passed a bill calling for an April 1, 1992 increase in the state minimum wage to \$5.05. The Card/Krueger Study uses Pennsylvania, where the minimum remained at the federal level of \$4.25 as a control for measuring employment effects of the New Jersey increase in the minimum wage.

David Card's two earlier papers rely on the Outgoing Rotations File of the Current Population Survey (CPS) to infer effects on teen employment of other increases in the minimum wage so it is instructive to compare Pennsylvania and New Jersey using the same CPS data before we examine the alternative data used

²In preparing for this review, I sent letters to each author of each paper (so that Alan Krueger got two) requesting whatever survey information was available. Specifically, I asked for the questionnaire, interviewer instructions, coder instructions, the full machine-readable data file of responses as well as the analysis file (i.e., the edited file) that was used for the paper. Later, over the phone, I asked both David Card and Alan Krueger for the same material plus anything they had on pre-test results for the survey instrument.

David Card's response was that he had sent me the questionnaire and analysis file (which he had) and that he did not have the other stuff. Regarding New Jersey/Pennsylvania, Alan Krueger said he believed they had sent me all that was required. Regarding the Texas Survey for the paper with Larry Katz, Krueger protested that he would get me everything I requested when he got the chance. When I indicated my deadline for this review, he said that would be too soon. Evidently, Larry Katz did not receive my letter. The Katz/Krueger paper indicates in text and footnote that the data and questionnaires are available on request.

43.4 33.3 46 47.8

by the authors. In 1988 when the federal increases were just beginning to be discussed and before the New Jersey debates, the teenage employment rate in Pennsylvania was 45.8 percent; it was 44.9 percent in New Jersey.³ In the year following New Jersey's minimum wage increase, teenage employment in Pennsylvania was 43.6 percent, within sampling error of the 1988 level.⁴ In contrast, the teenage employment rate in New Jersey had fallen to 34.5 percent—seventh lowest among U.S. states.⁵

The author's study is based on a telephone survey of fast food stores from four chains, Burger King, KFC, Roy Rogers and Wendy's. The first wave of the survey in late February and early March of 1992 was immediately before New Jersey increased its minimum to \$5.05—although the increase had been on the books for over two years. The second wave was conducted seven to eight months after the increase in November and December of 1992.

The baseline survey covered 410 establishments with completed interviews (331 in New Jersey and 79 in Pennsylvania) and the authors report an 87 percent completion rate on the first wave. The second wave had a reported 90 percent completion by telephone leaving 39 nonresponses which were subsequently contacted directly. The direct contact showed that 10 of the nonrespondents were closed (either temporarily, for repair and renovation, or permanently) and of the 29 remaining, 28 consented to personal interviews.

The survey was recently challenged by the Employment Policy Institute (EPI) in an editorial by Richard Berman in the *Wall Street Journal* and a supporting background paper, "The Crippling Flaws in the New Jersey Fast Food Study". The first part of the challenge (citing employment levels at each of the two survey waves for a number of stores) is that on the surface the data are incredible. The second part refers to an attempt to match the survey data with payroll records. In a companion paper by David Neumark and William Wascher, the survey and its analytical results are challenged by comparing the payroll records with the Card/Krueger employment tallies. 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.

It is not clear that the interview process was formalized. There has been no response to my requests for anything regarding interviewer instructions and training, coder instructions, and/or pre-test results. The two key questions, wages and employment, invite inaccurate responses.

³As with Card's earlier studies, teenagers include men and women ages 16-19. The employment rate calculations use the CPS Earnings Study sample weights. Since each of the wage increases occurs on April 1, years are defined as the 12 months beginning on that date.

⁴The change in Pennsylvania's employment rate is -2.2 percent and the standard error of the change is 2.3 percent; the 1988 and 1992 levels are less than one standard deviation apart.

⁵The states with lower teen employment in 1992 are Washington D.C., Mississippi, West Virginia, New York, Louisiana and Arizona.

Immediately after the introduction the employment quiz begins:

1. How many full-time and part-time workers are employed in your restaurant, excluding managers and assistant managers?
2. And how many managers and assistant managers?

The interview form has two spaces for the answer to the first question (full-time and part-time) and one space for the second. Aside from the presumption that assistant managers cannot be part-time and, aside from the obvious point that neither part- nor full-time is defined, the compound nature of the first question would confuse respondents.⁶

The wage questions are no better:

4. What is the average starting wage for a nonmanagement employee at your restaurant today?
5. Is it the same starting rate for full-time and part-time workers?

Question 4 has two blanks where an interviewer would write a response (a non-what?). The first blank is for a numeric response and the second is for "minimum wage" so that the coder can fill in the applicable value. Question 5 has two spaces, one for part-time and the other for full-time. Although the second wage question appears to have been intended to draw two responses, many might believe a simple "yes" or "no" would suffice. In any case, reviewers cannot examine the coded responses to Questions 4 and 5 for evidence of the confusion one expects them to elicit because the "analysis" file that is distributed contains only one starting wage for each survey wave with no indication as to whether it is taken from Question 4 or Question 5.

Among the 79 survey records shown for Pennsylvania, 68 have valid wage records in each of the two waves. At the baseline interview 22 of these 68 are coded as having a starting wage of \$4.25 (the applicable minimum) while the remaining 46 had higher starting wages, ranging from \$4.35 to \$5.50/hour. By the time of the second wave, 13 of the 22 (59 percent) that initially paid \$4.25 had increased their starting wage. It may not be surprising that starting wages increased, but would it be surprising if they fell? Among the 46 who initially paid more than the minimum, who therefore could reduce wages without violating federal law, 27 (also 59 percent) are coded as having done so by the time of the second interview! Among the 331 records for New Jersey, 302 have valid starting wage observations for each survey wave and 23 of them had first wave starting wages above \$5.05/hour. They are the only ones that could lower the starting wage without violating New Jersey law. The analysis files shows that 19 of the 23 (83 percent) lowered their starting wage and 18 of the 19 lowered the starting wage to the second wave minimum of \$5.05/hour!

It is tempting to argue that the fact of falling wages is itself proof that the increased minimum has reduced employment opportunities among firms that would otherwise pay wages below the minimum. The

⁶The questionnaire has no interviewer check items nor any directions regarding responses to questions by store representatives.

"proof" is that those who would otherwise pay more can, with the increased minimum, find an adequate supply of labor at a reduced wage. Of course the alternative to this argument is that there is so much random noise in the data that they should be dismissed altogether. The employment data support the second view.

Before examining patterns of changes in employment, it is worth pointing out that the coded levels of employment are anomalous. In particular, in the coded responses to the baseline survey, there are 28 records that report fractional (the fraction is always one-half) full-time employees, there are 29 records that report fractional numbers of part-time employees and there is one record that reports a fractional number of managers.⁷ One can imagine a case where part-time employees work 20 hours per week such that someone who works 10 hours is one-half of a part-timer from an hours worked perspective. Even in this case, it is hard to imagine what is meant by one-half of a full-time employee. Perhaps someone who works 60 hours is a full-timer and a half. These alternative interpretations suggest that full-time and part-time are defined and there is no indication that they are.

Recall that the employment question begins "[h]ow many full-time and part-time...." making it unclear whether the interviewer is asking for the combined or separate count of part- and full-time workers. The coded responses to the first interview show 67 stores with no full-time employees (other than managers) and 311 stores with full-time employees among the 378 that were open and have valid responses to employment questions in both survey waves. Thus 18 percent of the stores have no full-time employees at the time of the baseline interview. Strikingly, 46 of the 311 (15 percent) who initially had full-time employees reportedly had none by the second interview, 7-8 months later. Conversely 47 of the 67 (70 percent) who initially had no full-time employees are coded as having added them by the time of the second interview. The magnitude of these swings is not trivial. Employment averaged a little over 21 workers in both interviews.⁸ The stores that lost all full-time workers, lost 10.7 on average. The stores that initially had none and are coded as having added 10.4 on average by the time of the second interview. Is the technology so flexible and in such rapid flux or are the coded responses dominated by error?

Consider the following. Among the 378 stores with valid non-zero employment in both survey waves, average first wave employment is 21.14 and average second wave employment is 21.27. This trivial difference in averages between survey waves is associated with astonishing changes within stores, however. The largest

⁷Noting this anomaly, I asked Alan Krueger (over the phone) how it could be explained. He seemed surprised that such observations exist and suggested that in cases where the respondent was unsure whether particular employees were part-time or full-time they (meaning him, his coauthor, or assistants) may have divided them 50/50 between part- and full-time. Of the 48 records with fractional employees, when summed over types, only 10 sum to integer numbers of employees as they would if some employees were divided between part- and full-time.

⁸Following Card and Krueger, employment is full-time equivalence with part-time workers counted as one-half.

gain is 34 employees, the largest loss is 41.5, and the standard deviation of the change is 9.0 employees! In examining changes in employment between the two survey waves it is important to recall that noise dominated data regrees toward means.

When the first wave data are arrayed by full-time equivalent employment, we discover an amazing fact. The 21 restaurants with the smallest employment averaged only 7.5 employees at the time of the baseline survey. What is unusual about these firms is that in the interval between the first and second interviews, employment increased for *every one of them* to an average of 12.9 employees. This amounts to a 71 percent gain in 7-8 months. At the opposite extreme, the 22 largest restaurants averaged 47.4 employees at the baseline and employment fell for *every one of them* in the 7-8 months between interviews. The second-wave average is 27.6 employees for a 42 percent loss. As with the changes in wages, we could invent an esoteric theory to explain the great equalization in firm size that apparently occurred in New Jersey and Pennsylvania in a very brief period.⁹ Or, we could simply note that independently of state and survey wave effects, the correlation between first and second interview employment is only 0.552. This is, frankly, astonishing for two surveys conducted in the same year.

Are these the kind of data you would recommend as the basis of national policy?

The Texas Study

This is the study that relies on the survey of 100 fast food restaurants in Texas. I have been unable to secure the data on which it is based and, therefore, have little to say about it.¹⁰ Perhaps the most interesting feature is that in regressions attempting to explain employment changes one cannot reject the hypothesis that all estimated coefficients are jointly zero. In other words, this study is uninformative. This raises a fundamental scientific point that pervades all of the Card/Krueger studies summarized in *Myth*. Namely, a finding of an inconclusive result does not prove there is no effect. Every introductory statistics course stresses this point *ad nauseam*.

⁹Certainly if the phenomenal wage and employment equalization is real, the story for fans of industrial organization is much more exciting than the null result for minimum wage effects.

¹⁰In comparison to the reported response rates for the New Jersey/Pennsylvania Survey (87 percent first wave; 90 percent second wave before personal interview) the response rates for the Texas Survey appear unusually low (57 percent on the first wave and a 66 percent second wave response). It appears that the completed two-wave survey included less than 4 in 10 of those initially contacted.

The Two Card Papers

David Card's first paper examines teenage employment responses to the 1988 increase in California's minimum wage. Using a control or comparison group of "comparable" states—Georgia, Florida, New Mexico, Arizona and Dallas/Ft. Worth—where the minimum did not change, he concludes that the wage hike in California did not reduce teenage employment. Georgia? New Mexico? Dallas?

When the minimum wage was increased, California's teenage employment fell only briefly and then rebounded above previous levels. The problem with attributing the employment increase to the wage hike is that California's economy was expanding while the comparison areas were stagnant.

Each of the four cornerstone papers in *Myth* calculates the cost of an increase in the minimum wage by calculating what it would cost to raise the wages observed before the increase to the level of the new minimum. California raised its minimum from \$3.35 to \$4.25/hour on July 1, 1988. Using the same CPS data as Card and California teenage wages in January-March of 1988, I find that in order to increase every wage in the \$3.35-\$4.24 range to \$4.25, the average wage would have increased by 4.33 percent. When the exercise is repeated for April-June the increase is 5.68 percent.

Since wages between \$3.35 and \$4.25 continue to be reported after July 1, I repeated the exercise for the last two quarters of 1988. In July-September the average would have increased 1.21 percent and for the final quarter, the average wage would have increased 1.04 percent by raising wages in the \$3.35-\$4.24 range to \$4.25. I do not know whether the below minimum wages that are reported result from non-compliance or from reporting and coding error, but I do know that the after-the-fact calculations estimate the exaggeration in the before-the-fact calculations. By subtracting the cost increase calculations for July-December from the calculations for January-June, we have an estimate that the increase in the minimum wage in California raised the average cost of hiring teenagers by 3-4.5 percent. We, in fact, see far larger quarter-to-quarter changes in average wages when the minimum is held constant. For example, the average teen wage fell 6.5 percent between the first and second quarters of 1988 when the minimum was \$3.35/hour and it fell 9.3 percent between the third and fourth quarters when the minimum was \$4.25/hour. Two points are relevant. First, in an expanding economy the employment response to an exogenous increase in costs of 3-4.5 percent may be hard to detect from a relatively small sample of the population. Second, labor markets are dynamic and wages fluctuate in response to many factors especially for teenagers who are predominately students. There are seasonal shifts in supply and demand; there is trend and cycle; there is composition—today's working teens are not the same as tomorrows who may be either more or less productive; there is sampling error since we observe a small fraction of workers; and, finally, there is measurement error. The quarterly fluctuations in average wages indicate that the background noise in wages may dominate the signal of the higher minimum.

The simple before-and-after comparisons of the California Study are interesting but their reliability is at best conjectural.

The second Card Study examined differences across states in changes in teenage employment surrounding the 1990 increase in the federal minimum wage. According to Card, if increases in the minimum reduce employment then it follows that the reductions should be greatest in the states with the lowest wages because compliance with the increased minimum is more expensive in those states. My colleagues, Donald Deere, Kevin Murphy and I (1995) have criticized this idea by pointing out that the low wage states are in the South and Southwest where relative employment growth was most rapid. The 1990 increase in the federal minimum was only half as large as the 1988 increase in California and the employment responses to it were probably proportionately smaller. Is it surprising that the increase did not reverse the regional patterns of employment growth that have become so familiar in the last few decades?

Concluding Comments

My review has concentrated on what I see as the primary weaknesses of the studies that form the foundation of *Mfyt*. The twin issues are data quality and the "experiments" being reviewed. I have avoided the purely economic issues but they ought to be mentioned.

First, two of the four studies are restricted to the fast food industry. Nothing, repeat nothing, in ordinary competitive theory predicts that employment in any given industry or in any given restaurant will decline in response to an increase in the minimum wage. The questions revolve around factor intensities. Suppose that Chinese and Mexican restaurants are low-wage labor intensive relative to fast food chains, like those of the Katz/Krueger and Card/Krueger Surveys, that specialize in fried chicken and hamburgers. Suppose also that Chinese and Mexican food are consumer substitutes for hamburgers and fried chicken. In this case, an exogenous increase in the cost of low-wage labor will raise the cost of Chinese and Mexican food relative to the cost of hamburgers and fried chicken. If the consumer substitution between restaurant foods swamps factor substitution within fast food restaurants, the demand for low-wage labor in fast food restaurants will increase in response to an increased wage.

The same point, in somewhat different clothes, holds for firms within an industry. Assume that the technology of fast food production is such that larger firms are less intensive (i.e. have smaller expenditure shares) in low-wage labor. In this case an exogenous increase in the cost of low-wage labor increases the size of the most efficient firms. If all firms are identical, the output of every firm increases. Numbers of firms will fall, but numbers can fall because some existing firms close or because some that would otherwise open do not. It is hard for surveys, even well-designed surveys, to identify those firms that otherwise would have opened. Finally, there is the "dynamic monopsony" theory offered by the authors. It, frankly, does not pass

the straight-faced test. I live in a college town that has several dozen fast food restaurants, but only one Wendy's. Do Messrs. Card and Krueger really believe that if Wendy's increased its employment, say, by adding another two or three part-time students, that would raise the wage that I have to pay to have my lawn mowed? I direct their attention to the "mono" in monopsony. Just how many fast food chains are there? And, what is their share of total low-wage employment, singly, and *en masse*?

Returning to the four cornerstones of *Myth*: The Texas Study can be dismissed. There are no conclusions to examine. The New Jersey Study is a monument to poor survey methodology. The two studies by David Card use control groups that are questionable—and I think, misleading—and the "experiments" have little "bite". David Card's two papers and the Katz/Krueger paper appear in this journal (October 1992) as part of a symposium organized by Alan Krueger. The New Jersey/Pennsylvania Survey is published in the *American Economic Review* as testimony to the vagaries of the review process.

As I indicated in the introduction, the importance of *Myth* lies in the questions it raises. There is really no question about surveys; they ought to be planned carefully and conducted systematically. Questions should be clear and concise. Interviewers should be trained and armed with check item questions to clarify ambiguous responses. Contingencies should be considered and reactions to them should be standardized and committed to writing. And, methods and procedures should be distributed for critical review. There is, however, a question as to the use of primary data. I have always thought that our reliance on generally available secondary data is an important safeguard. It is clearly dangerous to the science if we each have our own "pocket" surveys that reportedly contain earth-shattering results.

Finally and most important, there is the confusion between an inconclusive result in a statistical experiment and "proof" that the answer is indeed inconclusive. When we return empty-handed from a long search, it is tempting to announce that there is no treasure in "them thar hills" but the only proof that we have to offer is that we did not find it.

What Will a 10% ... 50% ... 100% Increase in the Minimum Wage Do?

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Economists, like Gilbert and Sullivan's Englishmen, are divided into two basic groups. On one side are those who believe that responses to price incentives are usually large -- Big Responders (BR). On the other side are those who believe that responses to price incentives are generally small -- Small Responders (SR).

Present a BR with an exogenous change in price or wage -- for instance a mandated increase in the minimum -- and his prior is that there will be a large response in quantities. BRs feel comfortable with perfect competition, Hecksher-Ohlin trade models; factor price equalisation; large responses in effort and hours to marginal taxes; welfare traps; arbitrage of financial opportunities across national lines; large employment losses to administered wages. Forced to choose between a first-approximation economic model with an infinite elasticity of response and one with zero elasticity, the BR economist opts for infinity: "in the long run, there are many substitutes, new competitors, suppliers, etc."

Present an SR with a change in price or wage, and his prior is that quantities will not change much. SRs feel comfortable with input-output analysis, imperfect competition, factor content analyses of the effects of trade on employment, the correlation of investment and savings across countries, backward-bending supply curves, and the persistence of economic rents. Forced to choose between a first-approximation model with infinite elasticity of response and one with zero elasticity, the SR economist opts for zero: "in real world, costs of adjustment are large, uncertainty slows responses, habits change gradually, etc."

What does the BR-SR divide have to do with the Card and Krueger volume? A lot. Along with its other valuable contributions, the book provides the most important evidence in recent years on the SR side of this recurrent debate. It does this through an exemplary empirical analysis of the effects of minimum wages, on which most economists tend to be

BRs by inclination.

It is important to recognise at the outset that there is little in economic analysis to help us decide whether quantity responses to price incentives are likely to be large or small. Many economists expect larger responses in the long run; or when budget constraints are important. Logic tells us that massive changes in prices (say, tripling our wages) that turn balance sheets from the black to the red will have large effects on quantities (the Deans might close down our departments). But whether the BR or SR perspective applies to minimum wages in the range observed in the U.S. is a purely empirical question. It does not have to do with acceptance or rejection of neoclassical economic theory. There is no theoretic or a priori reason for assuming that minimum wages that average 40-50% of hourly earnings in manufacturing have large or small effects on employment, or even that minimum wages that average 70 or 80% of average earnings will necessarily do so. Indeed, economic theory is so "rich" that it offers us monopsony models that predict increases in employment in response to minimum wages. Only careful empirical analysis can determine the magnitude of employment responses to the minimum. The BR-SR divide is an empirical one.

This book offers the most careful and wide-ranging analysis of the empirical evidence on minimum wages in the U.S. that any social scientist could ask for. On many issues, the evidentiary base is sufficiently diffuse to allow economists with different priors to reach different conclusions -- to make a lawyers' case, as it were, for their preferred BR or SR world. (Labor economists think this is true of virtually all macro-economic studies, where conclusions seemingly hinge on assumptions -- called structural models -- that determine what one sees in limited time series data, because the evidence does not "speak for itself").

This is not the case for assessing the short or medium run effects of the minimum wage on employment. Minimum wages change in discrete exogenous jumps over time and across areas that creates "natural experiments". Card and Krueger exploit this variation admirably. Indeed, they do so in such a way as to provide an exemplary example of how to do empirical economics. The authors examine not one, not two, but many such experiments to judge the minimum wage's employment effects. They (and colleagues) gathered new data or analysed available CPS files, before/after recent changes in minimum wages, with control groups, where feasible. They looked at evidence on the effects of the minimum on the distribution of earnings and, using event studies, of the effect of announced increases on the value of firms and on prices. Forget for the moment the results or possible data problems in particular parts of the work. If you want to find out what the world says about an issue, rather than to force the world into your prior structural model, this is the way to do it. Richard Lester, to whom the book is dedicated, has been greatly honored by such a depthful analysis.

The only thing missing, which I would have liked to see, are some detailed case investigations of low wage employers' response to the minimum, or better yet, some ethnographic experience, to enrich the book. Such analysis would please Lester, also, if I am not mistaken. A few Ronald Reagan style anecdotes would go a long way to diffusing some of the criticisms the book has received from employer groups.

The chapter that I found weakest was on foreign experiences, which also is largely the case of limited information. Here, recent British work on the abolition of wages councils yields SR results consistent with those in this book: no adverse change in employment (Machin and Manning). And analysis of the employment consequences of comparable worth

in Australia found little or no job losses for women from large mandated increases in their pay (Gregory and Duncan).

There is more support for the SR view in empirical analysis than most economists have recognised.

Methodology aside, Card and Krueger reach strong and in some cases, surprising conclusions, or, rather and more properly, they report empirical results that yield these conclusions: negligible employment effects in most cases, and positive employment effects in some well-designed natural experiments. Their summary table (table 12.1) shows 6 positive employment effects, of which 2 are significant, and one 0 effect.

Are the results believable? They are generated by well-designed analyses, but even the best natural experiment does not have the power of a controlled laboratory experiment, so we (and the authors) must apply some prior judgement. It could be, for instance, that the minimum wage is not truly exogenous (as they suggest in some cases), or that BR level employment effects simply take longer to take effect.

To economists with an SR orientation, the results will fit with priors and thus surely pass any believability test. To those who work with data, the quality of the analysis makes the results believable, largely because the design of most of the studies is such that "ceteris paribus" is much more than a theorists fable. I read table 12.1 as rejecting negative effects rather than showing that minimum wages raise employment and would be surprised if further work found much additional evidence that minimum wage increases were associated with employment gains. But empirical analysis is full of surprises.

Economists with a BR orientation who give more weight to priors than to evidence

will find the results troubling. But they cannot simply denounce the findings. One virtue of Card and Krueger's book is that it has shifted the burden of proof about the employment effects of the minimum wage. Even a cursory look at data from the last decade provides support for their position as opposed to a BR view of the U.S. minimum. During the 1980s, the Reagan Administration cut the real minimum wage. Employment of the group most affected, teenagers, fell relative to that of adults. Unemployment rates improved at most a whisker relative to those of adults. At the end of the decade/early 1990s, the federal minimum was increased and several states raised their minimum. If you thought these changes would have noticeable adverse effects on employment, Card and Krueger show otherwise. To answer a slightly paraphrased version of Charlie Brown's 1988 question, "yes, Virginia, the employment effects of the minimum wage were overrated".

Maybe there is a case for BR employment changes to the minimum over some long time horizon. This book does not reject the possibility that ten years after, say, New Jersey raised its minimum (and maintains the level of the minimum relative to other wages), employment in low wage sectors might be lower than it would otherwise be. To test this possible BR claim will, however, be exceedingly difficult, because economies change so much over a decade (Card and Krueger mention inflation; I would stress structural changes) that even the most creative economist will find it hard to make *ceteris paribus* all that believable. For this reason, I would bet the family house that no one will find large employment effects of the minimum wage over longer periods (if they can find such) with the authority that Card and Krueger have rejected employment responses in the time periods they explore. Empirical analysis of quantitative responses to price incentives is most

convincing over periods when the structure of the economy, technology, etc can safely be viewed as fixed.

In an era with rising inequality, it is natural to look anew at the minimum wage as a possible way to improve the earnings of low paid workers, and thus at the policy implications of a major volume on the minimum. The authors suggest that their results should lead to "a reorientation of policy discussions away from the efficiency aspects of the minimum wage and toward distributional issues" (p 393). I hope this is the case. In recent years the BR view has dominated much public discussion -- supply side economics typically posit large responses to prices, taxes, regulations etc. Discussions of regulations and administered wages or other mandatory labor costs are often said to explain European unemployment problems. Textbook discussion of minimum wages has the same flavor: stressing job losses not wage gains. Increases in the minimum thus seem exceedingly dangerous, and its supporters are often viewed as populists with little knowledge of economics. This book goes a long way to redressing this imbalance. Perhaps it will be part of an overall resurgence of SR economics. At the least, it should make it respectable to discuss the minimum wage as a policy option, with benefits and costs, in an era of rising inequality.

What factors ought we to consider as part of a "reorientation" of public discussion?

There are, in my view, five issues in assessing the policy of using the minimum wage to help low paid workers.

1. Does the minimum redistribute income to low wage workers? It will do so if the estimated elasticity is below one. The book shows that modest increases in the minimum are

likely to have no effect on employment. While there are researchers, notably Neumark and Wascher, who argue the opposite, the debate is over whether there is "no" effect, modest positive employment effects, or small negative effects, to the minimum. It is not about whether or not there are large negative effects.

2. Does the minimum divide the work force into insiders, employed permanently at the minimum, and outsiders, longterm jobless because of the minimum?

In the U.S. labor market with high turnover, particularly in low wage jobs, it is hard to make the case for such a division; even analysts who believe in segmented labor markets do not draw the European insiders (employed) - outsiders (unemployed) division. The studies by Topel and Juhn, Murphy, and Topel of employment at the lower end of the wage structure make it clear that low and falling wages, not excessively high minimum or other administered wages, have reduced employment at the bottom tier of the wage distribution.

3. Are low wage workers low income workers? No one who advocates the minimum wage wants to raise the pay of teenaged kids in upper income families at the expense of lower income consumers. If the result of an effective minimum is that Harvey Poor pays more for his hamburger so Melissa or Roderick Well-to-Do can earn more pocket money, the minimum will be redistributive, but in a regressive direction. In chapter 9 of the book, Card and Krueger show that currently many workers paid around the minimum are, in fact, from low income families: one-third of workers whose wages were affected by the 1990 and 1991 increases in the minimum came from the bottom 10 percent of the earnings distribution. The widening dispersion of wages has meant that more low skill young adults earn "teenage" wages. Card and Krueger do not explore the distribution of consumer products that use

minimum wage type labor. I would expect lower income families to purchase more such products, but I would also expect the differences in consumer spending patterns to be modest.

4. How does the minimum fit with other economic policies? We all know that, despite the valiant efforts of the Invisible Hand, at best we live in a second best world. The effects of the minimum wage or of any other policy must be judged in the context of numerous other policies and institutions. Many on both sides of the aisle in the Congress favor Earned Income Tax Credits as a way to improve the economic well-being of low wage workers. EITCs subsidize low wage employers. Minimum wages "tax" those employers. The two policies would seem to complement one another. While no one has analysed the quantitative interactions between these (and other) policies, my guess is that the minimum looks better in the second best world in which we live than it does in most textbooks.

The bottom line question is:

5. What is a reasonable level of the minimum to redistribute income without risking sizeable job loss?

Myth and Measurement -- the new economics of the minimum wage makes a convincing case that we have overestimated the dangers of job losses and that level of the minimum that does more good than harm is probably much higher than many economists have previously thought. The book shows as best as empirical economics can that 10%-20% increases in the current U.S. federal minimum will not harm employment (much if at all). It is properly cautious in extrapolating analysis of minimum in the range found in the U.S. to potentially much higher minima. At some point, every SR economist becomes a BR

economist. A 100% increase in the minimum? A 200% increase? I know (sadly) that if you raise my pay to rock star levels, my employers will disemploy me, tenure and my singing talents notwithstanding. Still, if within plausible ranges, the minimum has little effect on employment, per Card and Krueger; if low wages reduce employment through supply responses, per Juhn, Murphy, and Topel; and if earnings inequality has become a major national problem, as we all recognise, policy debate should concentrate on the question of "what level of the minimum can redistribute income to low paid workers without serious job loss?" We do not have too many weapons in the policy arsenal to raise the pay of low wage workers. The book has raised my assessment of what level of minimum wage could redistribute income without causing job losses. I predict it will do the same to yours.

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November 7, 1994

**** DRAFT MEMORANDUM ****

The Administration promised to revisit the minimum wage after the impact of health care reform on the low-wage labor market was resolved. It now appears that health care reform in the next session of Congress likely will have only a modest impact on labor costs for low-wage employees, so this seems an appropriate time to return to the minimum wage issue. This memorandum provides background on the minimum wage, a political analysis of the minimum wage, an analysis of substantive arguments for and against a minimum wage hike, and policy options.

I. Background

The Federal minimum wage is currently \$4.25 an hour. The minimum wage was last increased in April 1991 from a level of \$3.80 in 1990. The minimum wage had been frozen at a nominal level of \$3.35 per hour from 1981 to 1990. Figure 1 shows the value of the minimum wage adjusted for inflation each year in constant 1993 dollars. The real value of the minimum wage is now above its value from 1988 to 1990 but is below its value for every other year going back to 1955. The recent expansion in the EITC, while very helpful, does not offset the erosion in the value of the minimum wage. A worker in a full-time, full-year job earning the minimum wage would generate a family income below the poverty level even for a family of two and substantially below the level for larger families.

The low value of the minimum wage is reflected in the most recent Census data on poverty. Data for 1993 show that even in the current recovery the poverty rate has risen, and the bottom of the income distribution has lost ground. In 1993, some 16.2 percent of full-time, year round workers earned too little to lift a family of four out of poverty; in 1979 only 12 percent of full-time, year round workers were in this situation.

The minimum wage has two important purposes. First, the minimum wage raises the bargaining power for the working poor who are not represented by unions and have low skills. The minimum wage may also have a slight "ripple" effect, whereby wages of workers earning somewhat more than the minimum are increased to maintain internal wage standards. As a result, the minimum wage is an anti-poverty program. Although the minimum wage is not a targeted policy (like the Earned Income Tax Credit), it still is a reasonably effective anti-poverty policy. Thus, many observers criticize the minimum wage as anti-poverty program by arguing that many of the beneficiaries are teenagers and other "secondary earners" from middle class families with multiple earners. Nevertheless, most research shows that increases in the minimum wage substantially increase the incomes of many low-income families and reduce the incident of poverty.

The second purpose of the minimum wage is as a part of a minimal set of labor standards to try to spur firms to create and maintain the high-performance workplaces necessary for a strong economy. The minimum wage induces firms to train their workers and take a high-value

added/low turnover strategy -- it blocks the so called "low road" strategy of high turnover, high vacancies, continual recruitment, and low training.

The standard criticism of the minimum wage is that it raises employer costs and reduces employment opportunities for teenagers and disadvantaged workers. Recent research finds no convincing evidence of significant adverse employment consequences of moderate increases in the minimum wage. While a huge increase could have significant negative effects on employment, moderate increases (e.g., \$0.50 to \$1.00 an hour) are not likely to do much to reduce employment.

II. Political Issues

A. A Brief History of Minimum Wage Legislation

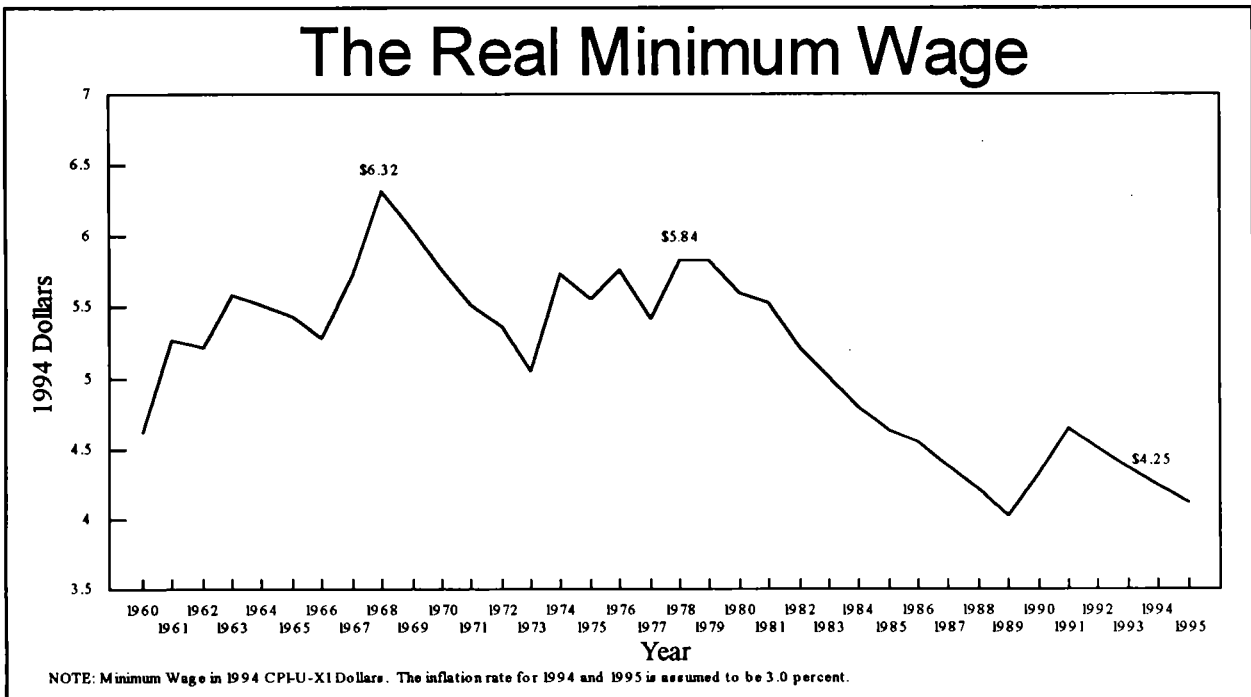
Since 1938, Congress has periodically amended the Fair Labor Standards Act to raise the level of the minimum wage to almost half the average manufacturing wage every two to four years. **Every Democratic Administration since Franklin D. Roosevelt has raised the minimum wage.** The minimum wage has also increased under most Republican Administrations. In the years between increases, the real value of the minimum was eroded by inflation, causing the sawtooth pattern in the real value of the minimum shown in Figure 1. In 1977 Congress amended the Fair Labor Standards Act to raise the minimum wage to \$2.65 in 1978, \$2.90 in 1979, \$3.10 in 1980, and to \$3.35 in 1981. Under President Reagan, the historical pattern of periodic increases in the minimum was halted.

In March of 1987 Senator Kennedy and Representative Hawkins introduced legislation to increase the minimum wage to \$4.65 an hour by 1990. In September 1988, then-Vice President Bush announced during the Presidential campaign that he could support an increase in the minimum wage. Later that month, however, a Republican-led filibuster thwarted Kennedy and Hawkins's effort to raise the minimum wage. The vote fell 5 votes short of reaching cloture.

In early March of 1989, Congress and President Bush again took up the issue of raising the minimum wage. The Bush administration promised to veto any legislation that would go beyond its proposal of raising the minimum to \$4.25 per hour, with a "training wage" of \$3.35. On March 23, 1989 the House voted by a 248-171 margin to raise the minimum to \$4.55 per hour by 1991. The Senate followed the House on April 12, 1989 and voted 62-37 in favor of the Senate minimum-wage increase bill. After conference, both houses of Congress approved a bill to raise the minimum to \$4.55 per hour in mid-May, 1989. The number of votes fell short of the required number to override a Presidential veto, however. President Bush vetoed this legislation in June 1989, and the override votes fell short of two-thirds.

Congress took up the minimum wage again in the Fall of 1989. In November 1989 the House voted by a margin of 382-37 to increase the minimum wage to \$3.80 on April 1, 1990,

Figure 1. Value of Minimum Wage in 1994 Dollars



and to \$4.25 on April 1, 1991, and to set a 60-day subminimum wage (15% less than the minimum) for teenagers. The Senate passed identical legislation by a vote of 89-8 one week later. President Bush signed this bill into law.

Because the federal minimum wage has not been increased only twice in the last 15 years, many states have enacted state minimum wages that exceed the federal minimum. New Jersey, for example, has a \$5.05 per hour minimum wage. Alaska, DC and Iowa also have minimum wages above the Federal level.

Last year five bills were introduced in the House and Senate to raise or index the minimum wage:

- H.R. 281 (Miller of California) -- Would index the minimum wage to the cost of living in the same manner as Social Security benefits are indexed. Introduced January 5, 1993; referred to Committee on Education and Labor.

- H.R. 692 (Sanders of Vermont; 49 Democratic cosponsors) -- Would increase the minimum wage to \$5.50 in 1994 and index to cost of living. Introduced January 27, 1993; referred to Committee on Education and Labor.

○ H.R. 3267 (Blackwell) -- Would increase the minimum wage to \$7.00 per hour; referred jointly to Committees on Appropriations and Education and Labor.

○ H.R. 3278 (Sabo of Minnesota; 7 Democratic cosponsors) -- Would increase the minimum wage to \$6.50 and deny employers a tax deduction for excessive compensation (more than 25 times the lowest compensation paid any other employee). Introduced October 13, 1993; referred jointly to Committees on ways and Means and on Education and Labor.

○ S. 562 (Wellstone of Minnesota) -- Would increase the minimum wage incrementally 1994 through 1997, and index it to one-half the average hourly earnings for private, nonagricultural workers in 1998 and thereafter. Introduced March 11, 1993; referred to Committee on Education and Labor.

Support for a minimum wage increase in the next Congress is likely to be weaker than it was in 1989, or than in the current Congress. For example, many Republicans supported the 1989 legislation in large part because President Bush provided them cover. Also, the minimum had not increased in 8 years in 1989, and was at an even lower real value than it is today. Finally, the next Congress is likely to be more Republican and shift further to the right than the current Congress. Republicans traditionally oppose minimum wage increases. When the Republicans took over the New Jersey state legislature in 1992, for example, their second action (after repealing the increase in the state sales tax) was to roll back an increase in the state minimum wage.

Another issue likely to surface in the next Congress is the Unfunded Mandates bill. This bill would require CBO to perform a cost-benefit study of all mandates on public and private entities. If this bill passes, it likely will make future increases in the minimum wage more difficult. The prospect of this bill passing may raise the priority of a minimum wage increase.

We also believe that on the merits a stronger argument can be made for a minimum wage increase now than was the case in 1989. For one thing, the poverty rate is higher now than it was in 1989, and a minimum wage increase is expected to reduce poverty. In addition, recent research casts doubt on the importance of the traditional drawback to a minimum wage increase, supposed adverse employment effects.

Finally, in Putting People First and during the campaign, candidate Clinton promised to increase and then index the minimum wage to prevent a decline in the purchasing power of the minimum wage. Seeking a minimum wage increase at this time will enable the President to try to deliver on another campaign promise.

There is no opportunity to increase the minimum wage in the current Congress. The Congress is reconvening only to consider the GATT.

B. Key Constituency Groups

The AFL-CIO has voiced its support for a minimum wage increase. The AFL-CIO has lost on several issues that it feels passionately about; most importantly health care reform, NAFTA, striker replacement, and OSHA reform. Although a minimum wage increase is not on the very top of the AFL-CIO's agenda at this time, it is an important issue to unions, especially the SEIU. Support for a minimum wage increase will definitely help with the AFL-CIO.

Other constituency groups that would favor a minimum wage increase include women's groups (women currently make up 66% of minimum-wage earners) and civil rights groups.

Public opinion polls continually show considerable support for a minimum wage hike. For example, a 1992 Time-CNN poll found that 74% of the public favored raising the minimum wage to make work a more attractive alternative to welfare. A 1993 poll for NBC News and the Wall Street Journal found that 64% of the public favored raising the minimum wage and 31% opposed. Other opinion polls have found that a majority of Republicans as well as Democrats favor a minimum wage increase. Moreover, a 1992 Gallup poll found 75% of the public supported indexing the minimum wage. A majority of the public even supports a minimum wage hike if they are first told that a minimum wage rise will cost some people their jobs. Finally, polls generally find that support for a minimum wage increase is strongest among women and minorities.

Balancing this support for a minimum wage hike is a somewhat better organized opposition than was the case in 1989. The NFIB, for example, has strongly opposed past minimum wage increases. Many of those groups opposed to a minimum wage increase have already demonstrated their influence in opposing health care reform. In addition, conservative think tanks will oppose a minimum wage increase on ideological grounds. Finally, some New Democrat groups may oppose a minimum wage increase.

III. Research Findings

Adverse Employment Effects?

The potential effect of a minimum wage increase on employment has been the principal argument raised in opposition to such an increase. While the potential employment effects of a minimum wage increase surely need to be considered, the weight of the empirical evidence suggests that the effects of a moderate raise from its current level are likely to be negligible. This conclusion is based on a variety of recent studies employing different methodologies; the studies examined the effects of raises in the federal minimum wage both across the nation and in particular states, as well as the effects of raising state minimum wages above the federal level.

For example, studies of the federal minimum wage examined the effects of a 90 cent increase in two increments over a two-year period. One of the state studies examined the effects

of New Jersey recently raising its state minimum wage by 80 cents, from \$4.25 an hour to \$5.05 an hour; another examined the effects of California increasing its minimum wage 90 cents from \$3.35 an hour in 1987 to \$4.25 an hour in 1988 (which would equal \$5.20 in 1993 dollars). All of these studies found that the minimum wage increases did not reduce employment opportunities.

Some recent studies of raises in the minimum wage have found that it had a negative effect on employment. These studies have been sponsored and widely circulated by hard-line opponents to the minimum wage such as the Employment Policy Institute, a group funded by the restaurant and hospitality industries. These other studies, however, have methodological flaws that bias their results. For example, the most widely cited of these studies was conducted by David Neumark and William Wascher. Their study, however, mistakenly assumes no teenagers are simultaneously attending school and working, when this is in fact a common occurrence. They also use a measure of the value of the minimum wage that skews their findings.

Most significantly, the time-series evidence that has traditionally been used to argue for an adverse effect of the minimum wage on employment, no longer find a statistically significant effect of the minimum wage if more recent data are used in the analysis.

Richard Freeman of Harvard University -- long considered one of the nation's preeminent labor economists -- just completed a review of the studies of the employment effects of the minimum wage. He concluded:

"At the level of the minimum wage in the late 1980s, moderate legislated increases did not reduce employment and were, if anything, associated with higher employment in some locales.

Studies based on employment across economic units such as states and counties yield more disparate results. Most studies, however, reject the notion that the late 1980s-early 1990s increases had adverse employment effects, and the studies that find adverse effects prior to those increases obtain small elasticities [meaning small employment effects] that confirm the effectiveness of the minimum in redistributing wage income.

These studies do not suggest or prove that *any* increase in the minimum wage -- no matter how large -- would have only desirable effects. But the outcomes of the studies suggest that the labor market functions in a more complicated manner than has been assumed by those contending that virtually any rise in the minimum wage results in a significant decrease in employment levels. In particular, when the minimum wage is at especially low levels, as it is today, the employment effects of a moderate increase in the minimum wage may be modest or negligible.

One theoretical explanation for why a minimum wage increase may not reduce employment -- and may actually increase employment -- is that many low-wage employers currently operate with many vacancies and high turnover. Rather than voluntarily raise pay for all their workers, these employers choose to continually recruit and train workers. Modestly raising the minimum wage would enable these firms to fill their vacancies and lower turnover.

(It would also cut into the firms' profits, which is why the firms don't raise wages on their own.) On the other hand, if the minimum rises too much, the firms may not want to fill their vacancies. In current employment situation wages have been stubbornly stagnant for low-wage workers, inspite of rising employment and recruiting pressures. For example, the help-wanted index is near its five-year high, yet real wage rates show no sign of increase at the bottom of the income distribution. These conditions make it unlikely that a minimum wage increase will substantially harm employment.

It should also be noted that employment has grown well ahead of schedule in the last 20 months. The President promised 8 million net new jobs in 4 years, and so far the economy has grown by 4.62 million jobs. **If job growth continues at this pace, employment will increase by over 11 million jobs in 4 years.** Under the most pessimistic estimates, a 50 cent increase in the real value of the minimum wage will reduce employment growth by 70,000 jobs -- and still increase total payroll for minimum-wage workers. The risks of reducing job growth at this time are much less than they were 2 years ago. Furthermore, the jobs discussion has already turned to the issue of job quality. Raising the minimum wage will help to improve the average wage in the low-wage sector, which has had declining pay for the last 15 years.

Income Distribution

The stereotype that most minimum-wage workers are teenagers from middle class families is false. Two-thirds of minimum-wage workers are adults. The dramatic changes in the wage structure the last 15 years (i.e., the rise in wage dispersion) has meant that many prime-age workers are earnings wages at, or near, the minimum wage. Moreover, recent data indicate that this trend has continued. Thus, in the current economic environment an increase in the minimum wage has the potential to reach more low-income families than in the past.

A great deal of research now suggests that the minimum wage effectively raises the income of low-wage workers. The average minimum-wage earner brings in 40% of his or her family's labor income. Research indicates that the states that were more heavily affected by the 1990 and 1991 minimum wage increases experienced greater reduction in poverty and faster income growth of low-wage workers. Moreover, several researchers have concluded that the decline in the real value of the minimum wage is a major cause for the rise in wage dispersion in the 1980s, especially for women.

Subminimum Wage

The youth subminimum wage or training wage that was enacted in 1989 for a three year period has now expired. Much evidence suggests that employers very rarely took advantage of the subminimum wage. Indeed, the low use of the subminimum wage makes employers claims that the minimum wage increases caused major problems suspect. Nevertheless, if allowing a subminimum or training wage softens opposition to a minimum wage increase, it may be worth

the trade. When the subminimum wage expired, business group did not complain.

EITC

In designing the parameters of the EITC expansion, the combined value of full-time minimum wage earnings, plus EITC benefits, plus food stamps, and minus payroll taxes, was compared to the poverty line. The proposed EITC increase for families with two or more children was set at a level that would lift a family of four with a full-time minimum wage worker out of poverty.

The Administration's EITC proposal, incorporated in the House bill, would attain this objective virtually precisely. But two of the assumptions made in the calculation should be highlighted. First, to reach the objective, the calculation assumed that the value of the minimum wage would equal \$4.50 an hour in 1994 dollars.¹ Second, the assumption of the receipt of food stamps -- valued at more than \$3,000 for a family of four with minimum wage earnings -- is often unwarranted. Substantially less than half of working poor families receive food stamps.

All this suggests there is virtually no room to maneuver in terms of cutting back our proposed expansions in the EITC. Nevertheless, the Senate reduced the proposed increases in a variety of ways. For example, the Senate provisions make it somewhat less likely that families with full-time workers will be lifted out of poverty. A family of four with two children would receive a maximum EITC benefit that would be \$56 lower than under the House bill. Such a family with a full-time minimum wage worker would therefore fall \$56 further below the poverty line.

The Senate's elimination of the new, small EITC for childless workers also is very troubling. Poor childless workers would no longer receive an offset for the new energy taxes they may have to pay. In addition, more than any other group of taxpayers, poor childless workers have been hit hardest by tax increases since 1980. Several of these increases contained regressive tax provisions that included an EITC offset for working poor families with children, but did not include an offset for poor workers without children. As a result, the overall federal tax burden of the poorest fifth of households without children has risen a dramatic 38 percent since 1980.

The minimum wage has some advantages over the EITC for certain populations. First, the EITC is only claimed by about 80% of eligible families. Second, the EITC is generally paid in a lump sum, whereas the benefits of a minimum wage hike are enjoyed with every pay check. Third, for low-wage workers the EITC may have the inadvertent effect of causing a labor supply-increase, which in turn depresses wages. The minimum wage will elevate wages, thus helping to offset this undesirable side effect. Thus, the minimum wage should be viewed as a

¹A minimum wage level of \$4.50 an hour in 1994 is consistent with indexing the wage floor at its 1992 level of \$4.25 an hour.

complement to the EITC, rather than a substitute.

IV. REFORM OPTIONS

Indexation

Arguments for and against indexing the minimum wage include the following:

For

- * Would provide for small, predictable increases that businesses could adjust to relatively easily.
- * Would prevent a possible unfunded mandates bill from blocking future minimum wage increases.
- * Would provide a fixed level of support upon which other social policies could be constructed.
- * Would be consistent with Administration's make work pay effort; otherwise, net income of minimum wage earner could fall relative to inflation.

Against

- * Minimum wage might be fixed at a sub-optimal level (too high or too low), or might be indexed to a series that moves too quickly or too slowly.
- * From a Congressional perspective, removes the minimum wage from the deliberative process, undermining legislative oversight. Indexing did not prove popular during the last minimum wage debate.
- * The concept of indexing wages or benefits has generally been declining in popularity.

If a decision is made to index the minimum wage, it would be sensible to index it to a measure of wage inflation (e.g., the wage of the 25th percentile worker) rather than the general consumer price index. Indexing to a wage measure would link the value of the minimum wage more closely to labor market conditions -- minimum wage workers would share equally in whatever wage gains are made from year-to-year. Note that wages have not been rising as fast as the CPI in recent years, so indexing the minimum wage to the CPI could very well increase the minimum wage at a faster pace than is justifiable. Using a wage of a low-wage earner would ensure that the minimum wage does not move too far out of step with the wages of low skill workers, if the shape of the wage distribution should change.

If the issue of indexing becomes the subject of debate, it is likely that traditional supporters of a strong minimum wage (low-income organizations and unions) will advocate for the oft-stated goal of indexing the minimum wage to half the average private nonsupervisory wage. With the average hourly wage now equal to \$10.86, half this standard would yield a minimum wage of about \$5.40. The arguments for scaling back from the 50 percent goal include political constraints, the costs of health reform, and the additional support from the EITC.

Health Insurance Offset

A new option would be to provide employers with a credit against the minimum wage for providing health insurance. For example, if the minimum wage is set at \$4.75 per hour, and an employer provides health insurance valued at \$2,000 per year (\$1 per hour), then the employer would be allowed to pay \$4.25 per hour (the current minimum wage).

For

- * This option will dovetail nicely with legislation to press employers to expand health care coverage.
 - * There is precedent for this type of an option since employers may currently offset tips against the minimum wage.
 - * Relatively few minimum-wage employers who provide health insurance will probably take advantage of this option, just like a tiny fraction of employers paid the subminimum wage.
 - * Most employees would prefer to receive \$4.25 per hour and health insurance than \$4.75 and no health insurance.
- Moreover, government may save money from reduced medicaid payments if employers take this option.

Against

- * It may be administratively difficult to verify employer costs of providing health insurance.

Options for raising the minimum wage level

Presumably, the earliest that the Administration would present a minimum wage proposal would be in January 1995, with any suggested increases not to go into effect until the latter half of 1995 or the beginning of 1996.

Option 1. No raise, defer decision.

For

- * Legislative agenda is already crowded; introducing minimum wage bill could undermine other key initiatives.
- * The new Congress may be so conservative to make a minimum wage increase out of the question.

Against

- * A delay would make it extremely likely that a minimum wage increase will not be enacted before 1996.
- * Minimum wage would remain at historically low level. Minimum wage workers would continue to face falling real earnings.
- * In the short run, the Administration would not achieve its make work pay goal.
- * There are few other policy options that would increase the pay of low-wage workers as quickly, or as surely, as a minimum wage increase.

Option 2. Index the minimum wage at \$4.50 an hour in 1994 dollars. This level could be justified in two ways. First, the level is consistent with indexing the wage floor since 1992, when the commitment to index the minimum wage was first made. Second, like health care reform, the argument could be made that the net increase in the minimum wage would be more than 25 cents, with some of the increase being paid out in increased health care coverage.

For

- * Would meet campaign pledge to index the minimum wage. Would be consistent with lifting a family of four with a full-time minimum wage worker out of poverty, once EITC benefits and food stamps are counted.
- * A 25 cent increase would be well within the range of increases in the minimum wage that studies suggest would have no impact on employment, even considering potential increases in health care costs.

Against

- * A 25 cent increase would make up only a small fraction of the ground the minimum wage has lost to inflation. Indexing the minimum wage at \$4.50 an hour would lock into law a minimum wage level 19 percent below its average real value in the 1970s.
- * Similarly, a 25 cent increase would be an increase of six percent from its \$4.25 level. Every other minimum increase ever enacted was at least 24 percent. (In most cases, the increases were spread out over several years.)
- * While opposition to a 25 cent increase would be somewhat less vehement than opposition to a larger increase, it would likely still be intense. Particularly if indexing were dropped out of the bill during the legislative process, this proposal could lead to a high-stakes political struggle over a relatively minor change in policy.

Option 3. Increasing the minimum wage to a value of \$4.75 an hour in 1994 dollars through a series of two increases (e.g., 1995 and 1996), and then index. For example, two increases of 40 cents each could be proposed, with the second increase occurring January 1996, yielding a minimum wage of \$5.05 an hour. A minimum wage of \$5.05 an hour in 1996 is equivalent to a minimum wage of about \$4.75 an hour in 1994 dollars. (In other words, a proposal to increase the minimum wage to \$4.75 an hour in 1994 and then to index it would yield a minimum wage of about \$5.05 an hour in 1996.)

For

- * Although this proposal would result in a more significant increase in the minimum wage than the other proposals, it can be viewed as moderate.
- * If the minimum wage were to equal its average value of the 1970s in 1996, it would equal about \$5.90 an hour, after adjusting for inflation. A minimum wage of \$5.05 an hour in 1996 would be 85 cents -- or 14 percent -- below its average real value in the 1970s.
- * The New Jersey minimum wage is \$5.05 per hour, and has not had any noticeable effect on employment.
- * The amount of the increase and the resulting value of the minimum wage, after adjusting for inflation, would still fall within the range of recent changes in the minimum wage which were not associated with negative employment effects (the combined effect would fall towards the outside edge of the range).

Against

- * Some will argue that this is a big, not a moderate, jump in the value of the minimum wage. The proposal will likely draw strong opposition.
- * The argument will be made that, in conjunction with health care reform, the proposal will be burdensome to small businesses and will impede employment growth.

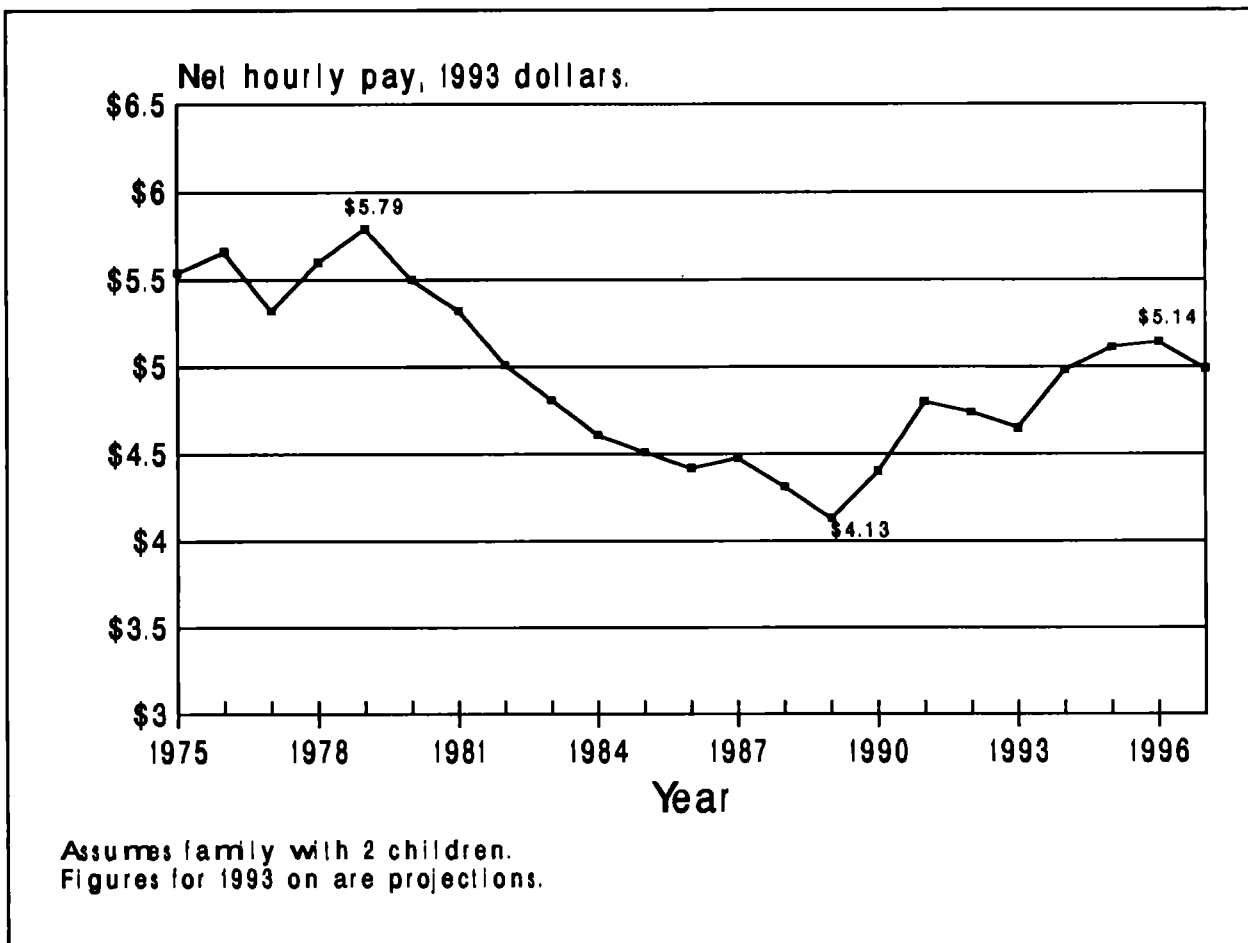


Figure 2. Net real hourly pay for a full-time minimum wage earner with two children, accounting for EITC and payroll taxes, 1975-1997

Misc:

** uchitelle's october 4th article suggests that co's are having trouble filling job vacancies.

For example, increasing the minimum wage to \$4.75 an hour in 1994 dollars would fall well within the range of increases examined by the above studies finding no adverse effect on employment.

* Similarly, changes in the minimum wage have not kept pace with changes in the wages of other workers in the economy. In the 1950s and the 1960s, the minimum wage averaged more than half of the average wage of private nonsupervisory workers. In the 1970s, it averaged 46 percent of the average wage. Currently, it equals 39 percent of the average wage. (See Table 1.)

Table 1. Historic value of the minimum wage

	<u>Purchasing power</u> <u>in 1993 dollars</u>	<u>Minimum wage as a percent</u> <u>of the average private</u> <u>nonsupervisory wage</u>
1960s avg.	\$5.35	52.2%
1970s avg.	5.43	45.8
1980s avg.	4.67	40.4
Current	4.25	39.3

* Absent any change in the minimum wage, for full-time year-round minimum wage earners living in families with two or more children, the combined value of minimum wage earnings and the EITC, minus payroll taxes, would be less than the average combined value in the 1970s. This can be seen by examining Figure 2, which calculates the net hourly pay for a minimum wage worker, when the EITC is added in and the payroll tax is subtracted out. The net hourly pay of a minimum wage worker in 1996 will be \$5.14, or below the worker's net hourly pay of \$5.79 in 1979 (both amounts are expressed in 1993 dollars).²

* In addition, since low-income families with less than two children qualify for a smaller EITC than workers with two or more children, minimum wage earners with less than two children already have significantly lower net incomes than in the 1970s.³

The EITC expansion was designed to ensure that the combined value of full-time minimum wage earnings, plus EITC benefits, plus food stamps, minus payroll taxes, would lift a family of four out of poverty. To reach this objective, the calculation assumed that the value of the minimum wage would equal at least \$4.50 an hour in 1994 and would be indexed to inflation. (The assumption of the receipt of food stamps -- valued at more than \$3,000 for a family of four with minimum wage earnings -- is often not applicable. Less than half of working

² In 1993 inflation-adjusted dollars, the value of the minimum wage was \$5.67 per hour in 1979. For a full-time minimum wage worker, the hourly value of the EITC was \$.47, and the hourly cost of payroll taxes was \$.35, yielding a net hourly wage of \$5.79. If the minimum wage remains unchanged from current law, in 1996, its real value will equal \$3.88 an hour, the corresponding EITC benefit for a family with two or more children will be \$1.55 and payroll taxes will be \$.30, yielding a net hourly wage of \$5.14.

³ The increase in the EITC is not a complete offset to the decline in the minimum wage for several other reasons. One is the delivery of EITC payments is usually not timely; virtually all EITC recipients receive their benefits in one lump sum payment when they file their taxes. (Treasury, HHS, and Labor Department officials are involved in the welfare reform effort to improve the delivery system, but it is a thorny problem that is unlikely to be fully addressed.) Not only is the minimum wage delivered in a more timely manner for struggling families -- with each paycheck -- a combined minimum wage/EITC approach reflects a balanced sharing of the burden of "making work pay" between the public and private sectors.

poor families now receive food stamps. The reforms made in the reconciliation bill will increase participation somewhat but will have no effect on the standard food stamp grant for most of the working poor.)

- * An unintended effect of EITC is labor supply shifts out, depressing wages.

DETERMINED TO BE AN
ADMINISTRATIVE MARKING
INITIALS: JAM DATE: 11/15/17
2016-0531-F

MEMORANDUM

DATE: AUGUST 29, 1995
SUBJECT: MINIMUM WAGE EXECUTIVE ORDERS

~~CONFIDENTIAL~~

Summary

As requested, we have prepared a draft executive order that would prohibit government agencies from doing business with federal contractors that pay below \$5.15 per hour.

Attached to this memorandum are: (1) the draft executive order relating to federal contractors and the minimum wage; (2) the press packet released by the White House on February 3, 1995 accompanying your legislative proposal to increase the minimum wage; (3) an excerpt on the minimum wage from your May 19, 1995 speech for the 75th Anniversary celebration of the Labor Department's Women's Bureau; and (4) a legislative background brief describing how members of Congress voted when the minimum wage was last increased in 1989.

Message

- * The nation's leading economic problems are stagnant wages and declining real incomes for working families.
- * The federal government should not contribute to the wage and income problems facing working families.
- * The President has presented Congress with a legislative proposal to increase the minimum wage 90 cents from its current \$4.25 per hour. This initiative would assure that people who work hard and play by the rules receive a living wage of \$5.15 per hour. Congress has refused to act.
- * If Congress won't act, President Clinton will. The President will use his executive authority to guarantee a living wage --- \$5.15 per hour --- for everyone working in firms that do business with the federal government.
- * At a minimum, the federal government should not do business with corporations that pay workers less than a living wage.

Discussion

I. Increasing the Minimum Wage for Employees of Federal Contractors

A. How the Executive Order Would Work

This draft executive order would establish that "[i]t is the policy of the executive branch in procuring goods and services that . . . federal agencies shall contract with companies that pay their employees no less than \$5.15 an hour." This policy would be enforced in two ways. First, every government contract entered into after the effective date of the executive order (the date you sign it) would include a clause in which the contractor agrees to pay a minimum wage of \$5.15 per hour. Second, any contractor that pays below \$5.15 could have all of its government contracts terminated. The executive order does not provide for any exceptions.

The Secretary of Labor would enforce and administer the order. If the Secretary finds that a contractor is not paying a minimum wage of \$5.15, he would transmit a finding to the heads of contracting agencies or departments who, in turn, must terminate all contracts with the contractor unless the contractor pays all of its employees at least \$5.15 per hour within a time specified by the Secretary.

Like the "striker replacement" executive order, this draft order is premised on the authority delegated to the President by Congress in the Federal Property and Administrative Services Act of 1949 "to provide for the Government an economical and efficient system for . . . procurement and supply." Some economic theories suggest that increasing the wages of low-wage workers will result in an increase in those workers' productivity and, in turn, to increases in efficiency that will offset the cost to federal contractors of the higher wages. Thus, the federal government would, according to these theories, procure its goods and services from more efficient, more economical federal contractors.

B. Possible Variations in this Executive Order

(1) Use CEO Pay as a Trigger: The executive order could be made to apply only to federal contractors that pay their chief executive officer (or other top executive) more than 100 times the lowest wage paid to their employees. This approach would dramatize the growing wage disparity in our economy. On the other hand, it undermines the central moral argument which supports raising the minimum wage: every worker is entitled to a living wage, regardless of who employs them or how much others in their organization earn. Further, using a CEO pay trigger may weaken the nexus to economical and efficient procurement, the legal prerequisite for presidential action of this type.

(2) Use Profits as a Trigger: The executive order could also be made to apply only to federal contractors that earn above average profits. This approach would juxtapose the huge economic returns being yielded by capital (e.g., the soaring stock market) with the decline in

middle and working class family incomes. On the other hand, it suffers from both of the infirmities outlined above (i.e., undermining the moral argument and attenuating the procurement nexus), plus it would require an administrative apparatus to decipher each contractors' profits.

C. Arguments For and Against the Executive Order

(1) Pro: This draft executive order will demonstrate your commitment to increasing working families' wages (particularly for the lowest wage workers) and distinguish you from a congressional majority that refuses to even consider your legislative proposal to increase the minimum wage. The minimum wage has fallen 27% in real terms since 1979 and, without adjustment, will fall to its lowest real value in forty years in 1996. It is arguable that the growing disparity in family incomes and wealth is the most pressing issue for middle and working class families. This executive order would make your moral position clear --- you will not allow the federal government to do business with any company that contributes to declining real wages for low-wage workers.

(2) Con: This executive order is premised entirely on economic theory, much of which will be difficult to explain in simple terms to the public, that is outside the mainstream of scholarly economic thought; accordingly, it is unclear whether reliable third parties will validate the arguments set forth in the preamble. Further, it is unclear whether theory alone is adequate to support an executive order. Even accepting the theories as true, it is also unclear whether the nexus between a minimum wage increase and efficient and economical procurement is sufficiently close to pass judicial scrutiny.

Preliminary research has not disclosed any executive order, outside the context of President Roosevelt's extraordinary powers during World War II, that directly sets wages for employees of federal contractors; that is, this executive order could be unprecedented. The closest analogy may be President Carter's Executive Order No. 12092 which required federal contractors to certify that they were in compliance with voluntary wage and price guidelines established by the President's Council on Wage and Price Stability. Finally, this executive order could lend support to attacks that President Clinton and the Democrats want big government. A slippery slope argument is easily made: "If Bill Clinton can require federal contractors to pay a higher minimum wage, is he going to require a pay increase for all workers? Will he require all federal contractors to follow his health plan? To finance abortions through their health plans?"

(3) Likely Constituency Responses: The labor movement and other advocates for low-wage workers will likely support the executive order. Federal contractor groups and representatives of the business community (e.g., the Chamber of Commerce, the National Association of Manufacturers), as well as the Republican congressional majority, will oppose the executive order. Since a substantially larger group of federal contractors will be affected, it is reasonable to expect a much more vigorous negative response from the business community than the striker replacement executive order evoked. Litigation and congressional

action (e.g., efforts to overturn the executive order, appropriations riders blocking enforcement of the order) will likely result.

D. The EO's Costs Are Difficult to Estimate

A very rough estimate of the costs of the executive order suggests that it will cost federal contractors not more than \$2.1 billion per year. Please note, however, that the data needed to make a precise estimate of the cost of the minimum wage executive order are not available. Estimates of worker wages and the number of workers involved do, however, permit this crude projection.

The assumptions employed to reach the above estimate likely bias the estimate upward. First, many federal contractors (e.g., construction, service) are required to pay a prevailing wage above the minimum wage by the Davis-Bacon Act and the Service Contract Act. Second, federal contractors' firms tend to be larger and, as a result, may have a smaller percentage of minimum wage workers than firms in the economy as a whole. Accordingly, the total number of workers affected by the executive order is probably smaller than that assumed in the calculations to reach the above estimate. Certain structural changes to the executive order (e.g., adding a threshold, narrowing the definition of "federal contractor") would further reduce the number of workers covered and the commensurate costs.

On the other hand, this estimate does not take into account any "ripple" effect that minimum wage increase might have on the wages of workers that currently earn \$5.15 or slightly more. The ripple effect would tend to increase the costs of the executive order to federal contractors.

II. Two Approaches to Announcing the Executive Order

Should you decide to proceed, you should consider two approaches to announcing the executive order.

You could announce the executive orders in a speech --- such as your forthcoming address to the Alameda Central Labor Council's Labor Day Picnic --- or radio address and then sign the order soon before, the same day, or soon thereafter. This approach gives the White House control over timing and press arrangements. It also provides an opportunity to brief potential supporters without tipping off opponents. On the other hand, it could inspire congressional retaliation in the appropriations/reconciliation/debt ceiling process.

Or, you could announce in a speech or radio address that you are giving Congress a 90-day (or until Christmas or New Year's Eve) deadline before which it must enact your proposed 90-cent increase in the statutory minimum wage. If it does not act by the time the deadline is reached, you would issue the executive order. This approach puts the onus

squarely on Congress' shoulders. It also allows you to wield all of your available authority to keep the minimum wage from falling to its lowest real value in 40 years (which it will in 1996 if there is no adjustment). On the other hand, this approach allows opponents time to organize and, possibly, to seek judicial intervention. It also offers words when bold action might send a stronger and clearer message.

Attachments

DRAFT 4
August 25, 1995

ENSURING THE ECONOMICAL AND EFFICIENT ADMINISTRATION AND COMPLETION OF FEDERAL GOVERNMENT CONTRACTS

PREAMBLE

Some economic theories suggest that requiring federal contractors to pay a higher minimum wage will lead to increases in efficiency that will offset the cost to federal contractors of the higher wage. The minimum wage has fallen 27% in real terms since 1979 and, without adjustment, will fall to its lowest real value in forty years at the end of 1996. Meanwhile, labor productivity has increased 17% since 1979.

These theories suggest that the productivity of low-wage workers is depressed when the minimum wage falls significantly in real terms. These conditions can lead to greater levels of "shirking" (*i.e.*, reduced efforts by workers), higher turnover, lower morale, and longer periods in which needed jobs remain unfilled. Raising the minimum wage may lead to efficiency gains among federal contractors that employ low-wage workers by reducing shirking, lowering turnover, increasing morale, and reducing the periods of time during which needed jobs remain unfilled. In sum, productivity is lower when workers are paid an obsolete minimum wage and, as a result, the federal government receives lower quality, less reliable, and less timely goods for each taxpayer dollar. By paying a higher wage to low-wage workers, federal contractors will increase worker productivity. The federal government will procure its goods and services from more efficient, more economical federal contractors.

The market may not address this problem on its own. The problems of turnover, shirking, low morale, and extended job-slot vacancies likely result from a minimum wage which is too low to attract new workers and retain incumbent workers. However, employers cannot lure a new worker into a particular job with a higher wage without giving everyone else in that job a pay increase. Thus, in the absence of a requirement that they pay a higher wage, employers choose lower levels of employment and output rather than increasing the wages paid to all of their low-wage workers.

NOW, THEREFORE, to ensure the economical and efficient administration and completion of Federal Government contracts, and by the authority invested in me as President by the Constitution and the laws of the United States of America, including 40 U.S.C. 471 and 486(a) and 3 U.S.C. 301, it is hereby ordered as follows:

Section 1: It is the policy of the executive branch in procuring

goods and services that, to ensure the economical and efficient administration and completion of Federal Government contracts, Federal agencies shall contract only with companies that pay their employees no less than \$5.15 per hour of work. All Government contracting agencies shall include in every Government contract hereafter entered into the following provision:

"During the course of the contract the contractor agrees that all employees of the contractor will be paid no less than \$5.15 an hour."

Sec. 2.(a) The Secretary of Labor ("Secretary") may investigate any Federal contractor to determine whether the contractor is paying any of its employees less than \$5.15 per hour of work.

(b) The Secretary shall receive and may investigate complaints that the contractor is paying any employee less than \$5.15 per hour of work.

(c) The Secretary may hold such hearings, public or private, as he or she deems advisable, to determine whether any contractor is paying any employee less than \$5.15 per hour of work.

Sec. 3. (a) When the Secretary determines that a contractor has paid any employee less than \$5.15 per hour of work, the Secretary may make a finding that it is appropriate to terminate the contract for convenience. The Secretary shall transmit the finding to the head of any department or agency that contracts with the contractor. All Government contracts with the contractor shall be immediately terminated unless the contractor commences within a time specified by the Secretary to pay all of its employees no less than \$5.15 per hour of work.

(b) Each contracting agency shall cooperate with the Secretary and provide such information and assistance as the Secretary may require in the performance of the Secretary's functions under this order.

Sec. 4.(a) The Secretary shall be responsible for the administration and enforcement of this order. The Secretary may adopt such rules and regulations and issue such orders as may be deemed necessary and appropriate to achieve the purposes of this order.

(b) The Secretary may delegate any function or duty of the Secretary under this order to any officer in the Department of Labor or to any other officer in the executive branch of the Government, with the consent of the head of the department or agency in which that officer serves.

Sec. 5. This order is not intended, and should not be construed, to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its

agencies, its officers, or its employees. The order is not intended, however, to preclude judicial review of final agency decisions in accordance with the Administrative Procedure Act, 5 U.S.C. 701 et seq.

Sec. 6. This order is effective immediately.

THE WHITE HOUSE

PRESIDENT CLINTON ANNOUNCES INCREASE IN MINIMUM WAGE

Friday, February 3, 1995

To reward work in an economy that in 1994 saw the best job growth in a decade, President Clinton will today announce his proposal to raise the minimum wage to \$5.15 an hour over two years -- through two 45 cent increases.

This news comes in the midst of more good news today for the economy under the Clinton administration. This morning, the Department of Labor reported that more than 6 million jobs have been created since President Clinton took office. In addition, the unemployment rate has dropped 20 percent to date under President Clinton.

A fact sheet and charts on the President's minimum wage proposal are attached.

House Minority Leader Richard Gephardt (D-MO) will open the announcement in the Rose Garden today, followed by Senate Minority Leader Tom Daschle (D-SD). The Vice President will then speak and introduce the President for his remarks.

-30-30-30-

REWARDING WORK: THE CASE FOR INCREASING THE MINIMUM WAGE

The President's proposal would increase the minimum wage from \$4.25 to \$5.15 over two years, through two 45 cent increases. The last increase, passed by an overwhelming, bipartisan vote in 1989, and implemented in 1990 and 1991, was also a 90 cent increase in two 45 cent stages. For a full-time, year-round worker at the minimum wage, a 90 cent increase would raise yearly income by \$1,800 -- as much as the average family spends on groceries in over 7 months.

MAINTAINING THE HISTORIC VALUE OF WORK: If the minimum wage were to stay at its current level of \$4.25, it would fall to its lowest real level in 40 years. Indeed, the real value of the minimum wage is now 27% lower than it was in 1979, and has fallen 54 cents in real value since its last increase in April 1991. The first half of the President's 90 cent proposal simply restores the minimum wage to its value at the time of the last increase.

RAISING THE MINIMUM WAGE PRIMARILY HELPS ADULT WORKERS -- MOST OF WHOM RELY ON THEIR MINIMUM WAGE JOB TO SUPPORT THEIR HOUSEHOLDS: Nearly two-thirds of minimum wage workers are adults (64%); over one-third of minimum wage workers (39%) are the sole breadwinners in their families; and the average minimum wage worker brings home half of his or her family's earnings. Thus, a rise in the minimum wage is a significant boost to the standard of living of millions of households.

REWARDS WORK OVER WELFARE: The minimum wage increase provides another crucial measure to reward work and ensure that there is a strong incentive to choose work over welfare.

NEARLY 11 MILLION WORKERS WOULD BENEFIT FROM THE PRESIDENT'S PROPOSAL TO INCREASE THE MINIMUM WAGE: Nearly 11 million workers, paid by the hour, earn between \$4.25 and \$5.14. Research indicates that an increase in the minimum wage to \$5.15 could have a "ripple" effect on the couple million workers who earn within 50 cents of the new minimum wage.

EMPIRICAL EVIDENCE SHOWS THE PRESIDENT'S PROPOSAL CAN INCREASE WAGES WITHOUT COSTING JOBS: Over a 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 that shows that large state increases in the minimum wage did not result in significant job impacts. As Nobel Laureate Robert Solow stated: "[T]he evidence of job loss is weak. And the fact that the evidence is weak suggests that the impact on jobs is small."

A 90 CENT INCREASE IN THE MINIMUM WAGE WILL LIFT A FAMILY OF FOUR OUT OF POVERTY. The dramatic extension of the Earned Income Tax Credit helped lift hundreds of thousands of working families out of poverty. Yet, by 1996, even the EITC is not enough to lift above the poverty line a family of four making the minimum wage. With the 90-cent minimum wage increase, food stamps, and the EITC, a family of four with a full-time, year round minimum wage worker would be lifted above the poverty line.

THE LAST MINIMUM WAGE INCREASE -- ALSO 90 CENTS -- GARNERED STRONG BIPARTISAN SUPPORT. In 1989, the minimum wage was passed by votes of 382 to 37 (135 Republicans) in the House, and 89 to 8 in the Senate (36 Republicans) and was supported by Senator Dole and Representative Gingrich.

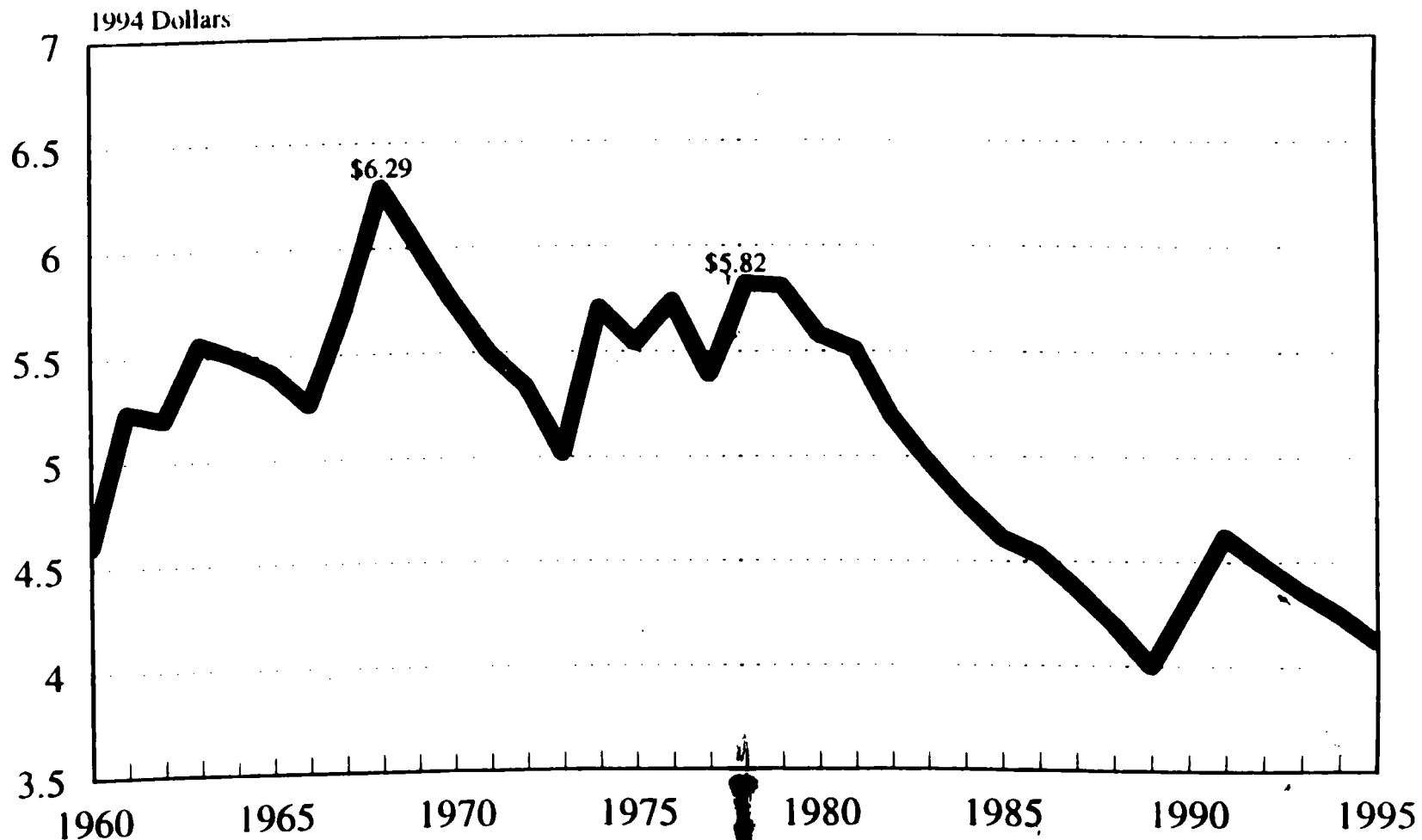
Appendix Table. Value of the Minimum Wage, 1955-1995

<u>Year</u>	<u>Value of the Minimum Wage, Nominal Dollars</u>	<u>Value of the Minimum Wage, 1995 Dollars*</u>	<u>Minimum Wage as a Percent of the Average Private Nonsupervisory Wage</u>
1955	\$0.75	\$3.94	43.9%
1956	1.00	5.16	55.6
1957	1.00	5.01	52.9
1958	1.00	4.87	51.3
1959	1.00	4.84	49.5
1960	1.00	4.75	47.8
1961	1.15	5.41	53.7
1962	1.15	5.36	51.8
1963	1.25	5.74	54.8
1964	1.25	5.67	53.0
1965	1.25	5.59	50.8
1966	1.25	5.43	48.8
1967	1.40	5.90	52.2
1968	1.60	6.49	56.1
1969	1.60	6.21	52.6
1970	1.60	5.92	49.5
1971	1.60	5.67	46.4
1972	1.60	5.51	43.2
1973	1.60	5.18	40.6
1974	2.00	5.89	47.2
1975	2.10	5.71	46.4
1976	2.30	5.92	47.3
1977	2.30	5.56	43.8
1978	2.65	6.00	46.6
1979	2.90	5.99	47.1
1980	3.10	5.76	46.5
1981	3.35	5.68	46.2
1982	3.35	5.36	43.6
1983	3.35	5.14	41.8
1984	3.35	4.93	40.3
1985	3.35	4.76	39.1
1986	3.35	4.67	38.2
1987	3.35	4.51	37.3
1988	3.35	4.33	36.1
1989	3.35	4.13	34.7
1990	3.80	4.44	37.9
1991	4.25	4.77	41.1
1992	4.25	4.63	40.2
1993	4.25	4.50	39.2
1994	4.25	4.38	n/a
1995	4.25	4.25	n/a

*Adjusted for inflation using the CPI-U-X1.

The Real Minimum Wage

1960-1995



NOTE: Minimum wage is in 1994 CPI-U-X1 Dollars. The inflation rate for 1995 is assumed to be 3.2 percent.

THE WHITE HOUSE

WASHINGTON

August 30, 1995

MEMORANDUM TO THE PRESIDENT

FROM: LAURA TYSON
BO CUTTER

SUBJECT: PROPOSED EXECUTIVE ORDER REGARDING MINIMUM
WAGE

We oppose an Executive Order requiring federal contractors to pay a minimum wage higher than the statutory minimum wage. (Gene Sperling is out of the country, but we believe he would agree.)

- . As a matter of process, we should not make as complex a decision as this one with as little analysis as has been carried out to date.
- . The proposed Executive Order would further complicate federal procurement, raising an additional barrier to working with the Federal Government, and would be inconsistent with the overall direction of federal procurement policy. We have not analyzed the long-run costs the Government would experience as firms shift away from federal work.
- . The proposed Executive Order would raise federal procurement costs, and, therefore, because budgets will not expand, may well result in lower employment derived from federal procurement.
- . The proposed Executive Order raises a number of other detailed issues we have not been able to analyze in this short a time period: How would the international operations of affected firms be treated? Would firms cut back on benefits? Are we legally able to terminate contracts?
- . Finally, the basic justification for such an Executive Order -- that it would increase overall economic efficiency -- is not supportable for a measure applying only to part of the economy. Larry Katz, who is, as you know, a leading proponent of this argument when applied to the whole economy, would probably publicly criticize it in this case.
- . We think our current minimum wage position is right and a political winner. We do not need to jeopardize our position with one action we have not thought through. If you wish, we can initiate a process immediately to develop a more thorough analysis and provide you with a better basis for a decision.