

# **The 1992 New Jersey Minimum Wage Increase**

## *How Much Did it Affect Family Income?*

**David A. Macpherson**  
*Florida State University*

---

May 1996

**EMPLOYMENT  
POLICIES**  

---

**I N S T I T U T E**

# **Executive Summary**

## **The 1992 New Jersey Minimum Wage Increase: How Much Did it Reduce Poverty?**

The vast majority of economists agree that minimum wage hikes create a tradeoff: lost jobs for some, but increased benefits for others. Recent research has investigated the losers in this tradeoff by examining the composition of job loss. After an increase, minority teens, welfare mothers, and other low-skilled adults are displaced from the workforce by middle-class teenagers who are lured to jobs by the higher wage.

In this paper, Florida State University economist David Macpherson identifies the beneficiaries of an increase. His findings on the 1992 New Jersey increase from \$4.25 per hour to \$5.05 per hour indicate that minimum wage increases do very little to help poor families. Rather, those helped by an increase tend to be young, single, and part of middle and upper income families.

Macpherson's thesis – examined by means of the federal government's 1991 and 1992 Current Population Survey (CPS) Outgoing Rotation Group (ORG) files – is that New Jersey's minimum wage increase provided little benefit to those it was most intended to help. He finds that the annual family income of minimum wage workers increased by an average of just one percent following the increase. Moreover, fewer than 10% of those who benefited from the raise were in families making less than \$10,000 a year. A full 70% were in families making more than \$20,000 a year.

By documenting New Jersey's failure to help the poor through raising its minimum wage, Macpherson demonstrates the wage's inadequacy as a tool of income redistribution (a point stressed by Bill Clinton in his 1992 presidential campaign). Increased minimum wages dissolve work opportunities for the poor and least-skilled while infusing small, almost insignificant, sums into wealthier families – in New Jersey's case, the average beneficiary of an increase lived in a family with an annual income of \$38,873. Even the 10% of beneficiaries whose family incomes were below \$10,000 saw their total family income increase by only 6.9% on average, or \$337.

The majority of those on the positive side of the minimum wage tradeoff were young, single, and well above any government poverty threshold. Almost half the beneficiaries in New Jersey were younger than 25; 23.6% were between the ages of 16 and 19, and 20.6% were between 20 and 24. A full 55.9% had never been married. The average family with a minimum wage worker who benefited from the increase had an annual income of almost \$40,000. Even the age group which the increase benefited most – those aged 25-34 – only saw a \$482, or 1.6%, increase in family income.

Economic research has long shown that the poor and least skilled are often forced out of the workforce by a minimum wage increase. The new evidence presented on the following pages demonstrates that even those who benefit from an increase see very limited income growth.

**Richard B. Berman**  
Executive Director

# Introduction

The effects of the minimum wage have recently received much attention from economists after being ignored for several years. The revival of interest in the topic has been sparked by several studies finding negligible or positive employment effects of minimum wage increases. Other investigations have found contrary results.<sup>1</sup>

A related issue that has garnered much less scrutiny is the income distribution effects of the minimum wage. Supporters of a higher minimum wage generally point to the equalizing effects on the income distribution and argue an increase in the minimum wage would help diminish poverty. Opponents counter that many minimum wage workers are in middle and upper-income families. The sparse empirical evidence has led to a murky conclusion partly due to differing empirical approaches and sampling frames.<sup>2</sup>

To further shed light on this question, this study examines the distributional effects of the April 1992 New Jersey increase in the minimum wage from \$4.25 to \$5.05 per hour. This minimum wage hike has generated a lot of research interest since it was relatively large and surrounding states did not change their minimum wage laws. Again, the debate has been focused on the employment effects of this “natural experiment.”<sup>3</sup> The distributional aspects of the increase, however, have not been addressed. It is important to do so given the importance of the 1992 New Jersey minimum wage increase in the current debate and the lack of clarity regarding the distributional effects of higher minimum wages.

This study’s results clearly indicate that the 1992 New Jersey minimum wage increase had an extremely modest impact on the distribution of income. The average increase in the annual income of minimum wage workers was only \$397. This increased the family income of these workers by a meager 1.0%. Even for the minimum wage workers in families with incomes of less than \$10,000 per year, the improvement in family income was only 6.7% (assuming no reduction of hours of work due to the minimum wage hike).

The study is organized as follows. The data employed to calculate some of the consequences of a higher minimum wage are described in the second section, and a statistical portrait of the workers affected by the minimum wage increase is provided in the third section. The impact of the increase on the distribution of family income is discussed in the fourth section.

## The Data

To analyze the distributional effects of the 1992 New Jersey minimum wage increase, data are drawn from the April 1991 through March 1992 Current Population Survey (CPS) Outgoing Rotation Group (ORG)

---

<sup>1</sup> While Katz and Krueger (1992), Card (1994a, 1994b), and Card and Krueger (1995) find minimal evidence of employment declines, Neumark and Wascher (1992, 1996) and Williams and Mills (1995) report negative employment consequences of increases in the minimum wage. Kennan (1995) in his review article argues the data is too noisy to measure precisely the employment effects of the minimum wage.

<sup>2</sup>Horriagan and Mincy (1992) find that hourly minimum wage workers are evenly distributed across the family income distribution of all hourly wage workers. Card and Krueger (1995) argue that since Horriagan and Mincy only examined hourly wage workers, the effect of the minimum wage on the income distribution is understated. They find that, when salaried workers are included in the sample, minimum wage workers disproportionately come from low income families. Even and Macpherson (1996) also find that minimum wage workers are overly represented from low income families, but find the majority of minimum wage workers are not the sole earners in the family. As a consequence, they find that over 75% of minimum wage workers contribute less than 50% of family income.

<sup>3</sup> The empirical evidence has been mixed on this issue. Using surveys of fast-food restaurant managers conducted before and after the increase, Card and Krueger (1995) concluded the higher minimum wage tended to increase employment. This study has been criticized on a variety of econometric grounds by Hamermesh (1995) and Welch (1995). Neumark and Wascher (1996), using payroll data, find that the minimum wage increase tended to reduce employment in fast-food restaurants.

files. The time period is the one-year before the rise in the minimum wage on April 1, 1992. The CPS ORG has the important advantage of being a large and representative sample of the population.

The main sub-sample of the CPS data employed here includes wage and salary workers who are residents of New Jersey, 16 years of age or older, and whose hourly wage is between \$4.25 and \$5.04. Observations missing data necessary to compute the hourly wage, family income, or other relevant variables are deleted from the sample. For hourly workers, the hourly wage rate is the hourly wage reported by the worker. For salaried workers, the hourly wage is calculated by dividing usual weekly earnings by usual hours worked per week.<sup>4</sup>

Family income is reported as a categorical variable and includes all sources of money income received in the prior 12 months.<sup>5</sup> To assign a dollar value to these categories, mean values of family income for persons in each income range were calculated from a sample of New Jersey residents in the March 1991 CPS.<sup>6</sup> Though the CPS ORG provides measures of hourly earnings and hours worked, it does not indicate the number of weeks worked per year. Thus, to generate annual income estimates for workers affected by the higher minimum wage, an alternative data source must be used and merged with the CPS ORG. Fortunately, the April 1993 CPS provides such a measure and the mean usual weeks worked was calculated for all workers earning \$4.25-\$5.04 per hour and by various demographic groups (family income, race, and age category) in this wage range.<sup>7</sup>

## Who Was Affected By the 1992 Minimum Wage Increase?

A vivid statistical portrait of the workers affected by the minimum wage increase (i.e., those earning \$4.25-\$5.04) emerges from Table 1, which presents the means of demographic variables for such workers. For comparison purposes, means for all New Jersey residents and workers who are 16 years of age and older are also included. The results reveal that a large fraction of workers affected by the higher minimum wage are young. In fact, 23.6% of affected workers are between 16 and 19 years of age, and an additional 20.6% are between 20 and 24 years of age. Thus, 44.2% of affected workers are 24 or younger.

The affected workers are less involved in the labor market than the average New Jersey worker. Almost one-half of the affected workers are employed part time, while only one-sixth of all New Jersey employees work part time. In addition, the affected workers are employed 3 fewer weeks per year than the typical worker.

The affected workers differ from the average New Jersey resident in several other dimensions. The affected workers tend to be less educated, as they are nearly twice as likely not to have completed high school as the average New Jersey resident. Also, they are more likely to be never-married (55.9%) and hispanic (24.8%) than the population as a whole.

---

<sup>4</sup> It is important to note that the reported hourly wage excludes tips, commissions, and overtime pay. On the other hand, the usual weekly earnings measure includes this type of income. The use of the reported hourly wage has the advantage of reduced measurement error and the downward bias it causes is slight (Card and Krueger (1995) report that only 8% of minimum wage workers receive such income).

<sup>5</sup>The income ranges are less than \$5,000; \$5,000-\$7,499; \$7,500-\$9,999; \$10,000-\$12,499; \$12,500-\$14,999; \$15,000-\$17,499; \$17,500-\$19,999; \$20,000-\$24,999; \$25,000-\$29,999; \$30,000-\$34,999; \$35,000-\$39,999; \$40,000-\$49,999; \$50,000-\$74,999; and \$75,000 and up.

<sup>6</sup> The March CPS reports family income received in the prior year as a continuous variable. Very similar results occurred when a national rather than a New Jersey based sample was employed to generate the mean income values.

<sup>7</sup> A national rather than New Jersey sample was used since the April 1993 CPS was conducted after the 1992 minimum wage increase. Furthermore, the sample size of such workers in New Jersey would be too small to be reliable.

The family income of the affected worker is somewhat lower than the average New Jersey resident (\$38,873 versus \$51,248). However, less than 10% of the minimum wage workers are in families with an income of less than \$10,000. In fact, 70% are in families with an income of \$20,000 or more.

The location of affected workers is quite similar to the distribution of all New Jersey residents. The evidence suggests that they are somewhat more likely to live in the Jersey City PMSA and less likely to reside in the Middlesex-Somerset-Hunterdon PMSA.

One potential reason for the minimum wage increase leading to a muted effect on family income is the cross-state border employment of minimum wage workers. To examine this issue, table 2 presents the fraction of workers earning less than \$5.00 per hour by proximity to the border across time.<sup>8</sup> Overall, the increase in the minimum decreased the percentage of workers earning less than the minimum wage from 38.6% to 21.0%.<sup>9</sup> The breakdown by border status reveals that the decline in the percentage of workers earning less than the minimum wage was 16.5% in border locations but 20.9% away from the border. This indicates that cross-border employment may have reduced some of the effect of the minimum wage increase on family income. However, this evidence is only suggestive because of the modest differential and sample sizes.

## **The Effects of the Higher Minimum Wage on the Distribution of Family Income**

Table 3 provides calculations of the annual income increases for workers affected by the minimum wage increase as well as the resulting impact on family income. The top row shows the mean increase in annual income was only \$397 ( $\$.284 \text{ per hour} * 30.2 \text{ hours per week} * 46.7 \text{ weeks per year}$ ). Since the average family income of the affected workers was \$38,873 per year, the resulting increase in family income was a minute 1%.<sup>10</sup>

When the results are broken out by family income, they show the minimum wage increase was a very weak antipoverty measure. The increase in family income was only \$337 (or a 6.9% rise) for persons in families with less than \$10,000 of annual income. This group represents less than 10% of all minimum wage workers. The next highest family income group (\$10,000-\$19,999) received a \$471 increase in income. The family income increase was greater for these workers because they worked 4 more hours per week and had a somewhat greater wage gain than those in the lowest income category. However, this resulted in only a 3.3% increase in family income. Overall, 69% of the total income increase went to individuals in families with incomes of \$20,000 or more.

A similar pattern emerges when the results are examined by race. For whites, the average increase in family income was 0.9%. For blacks, the income was twice as large (1.8%), mostly due to a lower family income level and a greater number of hours worked than whites.

---

<sup>8</sup> The sample is made up of workers earning \$4.25-\$5.30. The sample includes workers up to \$5.30 since Card and Krueger (1995) indicate the "ripple effect" is restricted to those workers earning within \$0.25 of the minimum wage. A cutoff of \$5.00 was chosen since a large number of workers report earning \$5.00 after the minimum wage increase. This is likely the result of rounding by respondents.

<sup>9</sup> Workers may earn less than the minimum wage after the increase for a variety of other reasons including noncompliance, measurement error, and exemption.

<sup>10</sup> These calculations are based on the assumption that all affected workers increase their wage to the new minimum wage of \$5.05 per hour. Hence, we are not allowing for noncompliance or exemptions from the law. As a check, the means were also calculated for minimum wage workers for the year after the increase and they were very similar to those of the affected workers.

Lastly, when the findings are broken out by age, only modest effects are seen. Two-fifths of the income gains were to persons who were under the age of 25. Even 25-34 year olds, who experienced the largest increase in family income (\$482), had only a 1.6% increase in family income.

## **Summary and Conclusions**

Two conclusions emerge from this study of the distributional effects of the 1992 New Jersey minimum wage increase. First, the workers affected by the minimum wage increase tended to be younger, less educated, and more often single than the typical New Jersey resident. In addition, the affected workers were more likely to be employed part time and work fewer weeks per year than the average worker.

Second, the impact of the increase on the distribution of family income was meager. The average increase in family income for minimum wage workers was only \$397, or a 1% rise. Furthermore, the increase did little to reduce poverty since nearly 70% of the income gain went to families with incomes of \$20,000 or more.

**Table 1**  
**Means for Selected Variables**

| Variable                       | Affected Workers | All Workers | All 16 + |
|--------------------------------|------------------|-------------|----------|
| Female                         | 52.2             | 48.2        | 52.5     |
| Race:                          |                  |             |          |
| White                          | 78.5             | 83.3        | 83.4     |
| Black                          | 15.6             | 12.3        | 12.3     |
| Other Race                     | 5.9              | 4.4         | 4.3      |
| Hispanic                       | 24.8             | 9.4         | 8.7      |
| Marital Status:                |                  |             |          |
| Married, Spouse Present        | 30.3             | 57.6        | 55.4     |
| Divorced, Widowed, Separated   | 13.8             | 13.2        | 17       |
| Never Married                  | 55.9             | 29.2        | 27.6     |
| Years of Schooling:            |                  |             |          |
| 0 to 8                         | 12.1             | 4.3         | 8.2      |
| 9 to 11                        | 26.5             | 8.5         | 12.8     |
| 12                             | 35.2             | 35.6        | 35.1     |
| 13-15                          | 17.5             | 21.6        | 19.8     |
| 16 and up                      | 8.7              | 30          | 24       |
| Age:                           |                  |             |          |
| 16-19                          | 23.6             | 4.2         | 6.5      |
| 20-24                          | 20.6             | 10.2        | 8.7      |
| 25-34                          | 21.7             | 29          | 22.6     |
| 35 +                           | 34.1             | 56.6        | 62.2     |
| PMSA Location:                 |                  |             |          |
| Not in MSA/ Not Identified MSA | 7.8              | 5.3         | 5        |
| Newark                         | 26.8             | 25.1        | 25.1     |
| Bergen-Passaic                 | 14.4             | 16.9        | 17.7     |
| Middlesex-Somerset-Hunterdon   | 7.6              | 13.6        | 12.5     |
| Monmouth-Ocean                 | 13.4             | 11.4        | 12.6     |
| Jersey City                    | 9.7              | 5.4         | 5.8      |
| Camden                         | 17.3             | 18.2        | 14.8     |
| Trenton                        | 3                | 4.1         | 3.9      |

**Table 1 (continued)**

| Variable   | Affected Workers | All Workers | All 16 + |
|--|------------------|-------------|----------|
| Family Income:   |                  |             |          |
| Average  | 38,873           | 56,629      | 51,248   |
| <\$10,000  | 9.5              | 4.9         | 9.9      |
| \$10,000 to \$19,999   | 19.4             | 8.4         | 12.4     |
| \$20,000 to \$39,999   | 37.2             | 30.2        | 29.3     |
| \$40,000 and up  | 33.9             | 43.5        | 48.4     |
| Usual Hours of Work Per Week:  |                  |             |          |
| Average  | 30.2             | 38.2        | NA       |
| <20  | 21.7             | 5.9         | NA       |
| 20-34  | 27               | 10.9        | NA       |
| 35+  | 51.3             | 83.3        | NA       |
| Usual Weeks Worked   | 46.7             | 49.9        | NA       |
| Wage   | 4.77             | 13.33       | NA       |
| N  | 470              | 7,205       | 12,885   |
| <p><b>Note:</b> Data source is the April 1991-March 1992 ORG CPS. Affected workers are defined as those persons earning \$4.25-\$5.04 per hour. All workers are defined as all wage and salary workers. Weeks worked based on a national sample of workers derived from April 1993 CPS. All means are calculated using CPS sample weights.</p> |                  |             |          |



**Table 2**  
**Percent of Workers Earning \$4.25-4.99 by Year and Border Status**

| Border Status   | 1991<br>% in Class | % Earning \$4.25-\$4.99 |      |        |
|---|--------------------|-------------------------|------|--------|
|   |                    | 1991                    | 1992 | Change |
| All   | 100.0              | 38.6                    | 21.0 | -17.6  |
| Near Border   | 76.0               | 38.4                    | 21.9 | -16.5  |
| Awayfrom Border   | 24.0               | 39.1                    | 18.2 | -20.9  |
| <p><b>Note:</b> Data source is the April 1991-March 1993 ORG CPS. 1991 Includes 1991:2-1992:1, while 1992 includes 1992:1-1993:1. The away-from-the-border area includes not in MSA / not identified MSA; Monmouth-Ocean PMSA; and Trenton PMSA. The border area includes the rest of the state. The sample includes those persons earning \$4.25-\$5.30 per hour. All means are calculated using CPS sample weights.</p> |                    |                         |      |        |

**Table 3**  
**Income Increases for Workers Affected by Minimum Wage Increase**

| <b>Group</b>  | <b>% in Class Before Increase</b> | <b>Annual Income Increase</b> | <b>% Increase In Family Income</b> | <b>% Share of Total Income Increase</b> |
|---|-----------------------------------|-------------------------------|------------------------------------|---|
| All   | 100                               | 397.41                        | 1.0                                | 100                                     |
| <b>Family Income:</b>   |                                   |                               |                                    |   |
| \$0 to 9,999  | 9.5                               | 337.48                        | 6.9                                | 8.1                                     |
| \$10,000 to 19,999  | 19.4                              | 471.37                        | 3.3                                | 23.0                                    |
| \$20,000 to 39,999  | 37.2                              | 392.62                        | 1.3                                | 36.7                                    |
| \$40,000 and up   | 33.9                              | 377.20                        | 0.5                                | 32.2                                    |
| <b>Race:</b>  |                                   |                               |                                    |   |
| White   | 78.5                              | 376.62                        | 0.9                                | 74.4                                    |
| Black   | 15.6                              | 518.39                        | 1.8                                | 20.4                                    |
| Other   | 5.9                               | 416.01                        | 1.3                                | 6.2                                     |
| <b>Age:</b>   |                                   |                               |                                    |   |
| 16-19   | 23.6                              | 312.30                        | 0.6                                | 18.6                                    |
| 20-24   | 20.6                              | 413.97                        | 0.9                                | 21.5                                    |
| 25-34   | 21.7                              | 482.86                        | 1.6                                | 26.4                                    |
| 35 +  | 34.1                              | 382.02                        | 1.1                                | 32.7                                    |
| <b>Note:</b> Data source is the April 1991-March 1992 ORG CPS. Affected workers are defined as those persons earning \$4.25-\$5.04 per hour. All means are calculated using CPS sample weights. |                                   |                               |                                    |   |

## Biography

Dr. David A Macpherson is an Associate Professor of Economics at Florida State University and Research Director of the Pepper Institute for Aging and Public Policy. Trained in empirical labor economics, Macpherson completed his doctoral and undergraduate work at Pennsylvania State University. In addition to his extensive research on the minimum wage, he has studied pension coverage, wage discrimination and unions.

Macpherson has published more than two dozen articles on these subjects in widely respected economic journals, including the *Review of Economics and Statistics*, the *Journal of Labor Economics*, the *Journal of Human Resources*, and the *Industrial and Labor Relations Review*.

He has received several research grants, including three from the United States Department of Labor. The Bureau of National Affairs also publishes annual editions of a work Macpherson authors with fellow Florida State University economist Barry Hirsch, the *Union Membership and Earnings Data Book*. Next year, the W.E. Upjohn Institute for Employment Research will publish a book entitled *Pensions and Productivity* which Macpherson co-authored with Drs. Christopher Cornwell and Stuart Dorsey.

Macpherson has also won several teaching awards. Before joining the faculty of Florida State University, he served in the Economics Department at Miami University (Ohio).

## References

- Card, David. "Using Regional Variation in Wages to Measure the Effects of the Federal Minimum Wage." *Industrial and Labor Relations Review* 46 (October 1992): 22-37 (a).
- \_\_\_\_\_. "Do Minimum Wages Reduce Employment? A Case Study of California, 1987-1989." *Industrial and Labor Relations Review* 46 (October 1992):38-54 (b).
- \_\_\_\_\_ and Krueger, Alan B. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton NJ: Princeton University Press, 1995.
- Even, William E., and Macpherson, David A. "The Consequences of Minimum Wage Indexing." Mimeographed. March 1996.
- Hamermesh, Daniel S. "Comments for Review Symposium on *Myth and Mismeasurement: The New Economics of the Minimum Wage* by David Card and Alan B. Krueger" *Industrial and Labor Relations Review* 48 (July 1995): 835-838.
- Horrigan, Michael W. and Mincy, Ronald B. "The Minimum Wage and Earnings and Income Inequality." *Uneven Tides*, edited by Sheldon Danziger and Peter Gottschalk, NY: Russell Sage Foundation, 1993.
- Katz, Lawrence F. and Krueger, Alan B. "The Effect of the Minimum Wage on the Fast-Food Industry." *Industrial and Labor Relations Review* 46 (October 1992): 6-21.
- Kennan, John. "The Elusive Effects of Minimum Wages." *Journal of Economic Literature* 33 (December 1995): 1949-65.
- Neumark, David and Wascher, William. "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws." *Industrial and Labor Relations Review* 46 (October 1992): 55-81.
- \_\_\_\_\_. "The Effect of New Jersey's Minimum Wage Increase on Fast-Food Employment: A Re-Evaluation Using Payroll Records." unpublished manuscript, January 1996.
- Williams, Nicolas and Mills, Jeffrey A. "The Minimum Wage and Teenage Employment: Is There a Relationship?", unpublished manuscript, September 1995.
- Welch, Finis. "Comments for Review Symposium on *Myth and Mismeasurement: The New Economics of the Minimum Wage* by David Card and Alan B. Krueger" *Industrial and Labor Relations Review* 48 (July 1995): 842-848.