

**THE MINIMUM WAGE:
INCREASING THE REWARD FOR WORK**

March 2000

A REPORT BY THE NATIONAL ECONOMIC COUNCIL
WITH THE ASSISTANCE OF THE COUNCIL OF ECONOMIC ADVISERS
AND THE OFFICE OF THE CHIEF ECONOMIST, U.S. DEPARTMENT OF LABOR

EXECUTIVE SUMMARY

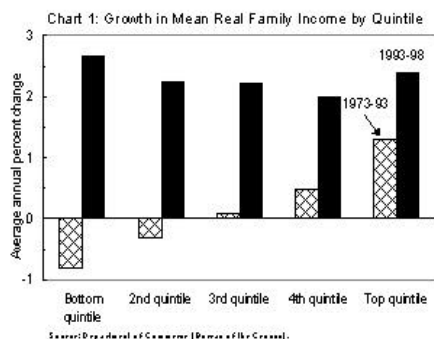
- **Raising the Minimum Wage by \$1 to \$6.15 an Hour Would Potentially Benefit More than 10 Million American Workers—Most of Whom are Adult Workers.** An analysis of labor market data shows that in 1999, 10.1 million hourly paid workers made between \$5.15 and \$6.14 an hour, and thus would potentially benefit from a \$1 increase in the minimum wage. About 69 percent of these workers are adults (age 20 or over), about 60 percent are women, about 45 percent worked full-time, and about 33 percent were parents with children under 18 years old. In 1997, the earnings of average minimum wage workers accounted for 54 percent of their family's total earnings.
- **Raising the Minimum Wage to \$6.15 an Hour Would Restore the Real Value to What It Was in 1982.** Since it was first established in 1938, the minimum wage has been increased 19 times. Between January 1981 and March 1990, the minimum wage was fixed at \$3.35 an hour, while prices rose by nearly 50 percent. The proposal to raise the minimum wage by \$1 over two years would restore the real value of the minimum wage to what it was in 1982.
- **Increasing the Minimum Wage Would Help Hard-Pressed Families Pay for Groceries, Rent, and Other Necessities.** Raising the minimum wage from \$5.15 to \$6.15 would raise the annual earnings of a full-time worker by about \$2,000 a year. A study of spending by low-income families found that they spend on average about \$300 per month on groceries and about \$400 per month on rent. Thus, for a full-time worker, the minimum wage increase would translate into enough money to pay for nearly 7 months of groceries or 5 months of rent.
- **Recent Increases in the Minimum Wage Had No Discernable Negative Effect on Employment.** Since the minimum wage increase in 1996, the economy has created more than 10 million jobs and the unemployment rate has fallen from 5.2 percent in September 1996 to 4.1 percent in February 2000, near its lowest level in thirty years. Labor market trends for workers most affected by the minimum wage increase—including younger workers, workers with lower educational levels, and minorities—also show no negative impact of the minimum wage on employment. Numerous careful economic studies, including ones by David Card and Alan Krueger, have shown that increasing the minimum wage has no negative effect on employment. Recent research has even suggested that higher wages can increase employment, because they increase employers' ability to attract, retain, and motivate workers. And they benefit workers by increasing the reward to work.
- **The Minimum Wage Plays a Key Role in Ensuring That All Workers Share in a Growing Economy.** In the last seven years, incomes have grown nearly as strongly at the bottom as at the top of the income distribution, ending a decades long increase in inequality. In contrast, in the previous two decades inequality widened, as poorer families saw their incomes decline in real terms. Research has shown that the decline in the real value of the minimum wage from 1979 to 1988 was responsible for approximately 24 percent of the increase in wage inequality experienced by men and about 32 percent of the increase in wage inequality for women.

- **The Minimum Wage Has Helped Reduce the Welfare Caseload.** By increasing the reward to work, a higher minimum wage attracts new workers into the workforce. An analysis by the Council of Economic Advisers showed that higher federal and state minimum wages were responsible for 10 to 16 percent of the decline in welfare caseloads between 1996 and 1998.
- **The Minimum Wage and the Earned Income Tax Credit Are Complementary.** A working parent with two children earning the minimum wage in 1993 made \$10,563 with the EITC (in 1998 inflation-adjusted dollars)—well below the poverty line. With the 1993 increase in the EITC and the 90 cent increase in the minimum wage in 1996 and 1997, a comparably situated family in 1998 was above the poverty line—making \$13,268—a 26 percent inflation-adjusted increase in its standard of living.

1. INTRODUCTION

The American economy is in the midst of the longest economic expansion in history. Since January 1993, the economy has created nearly 21 million new jobs. The unemployment rate in February 2000 was 4.1 percent, near its lowest level in three decades. The overall performance of the economy has only grown stronger over time. In the last four years, labor productivity has grown at a 2.9 percent annual rate and GDP has grown at a 4.4 percent annual rate. At the same time, the underlying core inflation rate in 1999 was 1.9 percent—the lowest rate since 1965.

In contrast to the previous twenty years, the strong economy of the last seven years has contributed to shared growth across all income groups and substantial poverty reduction. As



indicated in Chart 1, incomes have grown nearly as strongly at the bottom as at the top of the income distribution, ending a decades long increase in inequality. The poverty rate has fallen to 12.7 percent, the lowest level since 1979. The strong labor market has been beneficial to people across the economic and demographic spectrum. In 1999, the unemployment rates for African Americans and Hispanics fell to the lowest levels ever recorded.

Strong growth is necessary but not sufficient to produce sustained income gains and poverty reduction. Also

important are policies that insure that all workers are rewarded for their work. The Clinton Administration has consistently sought to make work pay through a range of policies, including expanding the Earned Income Tax Credit in 1993, reforming welfare in order to increase work incentives, and increasing investments in child care for working parents. And an additional key element was the 1996-97 increase in the minimum wage. These policies interact in a beneficial way for low-income families. For instance, a working parent with two children earning the minimum wage in 1993 made \$10,563 with the EITC (in 1998 inflation-adjusted dollars), well below the poverty threshold. With the 1993 increase in the EITC and the 90 cent increase in the minimum wage in 1996 and 1997, a comparably situated family in 1998 was above the poverty level—making \$13,268—a 26 percent inflation-adjusted increase in their standard of living.

This report examines the role that the minimum wage plays in increasing the reward to work and boosting incomes for workers at the bottom of the earnings distribution. The report also examines the recent evidence about the effect of the minimum wage on employment.

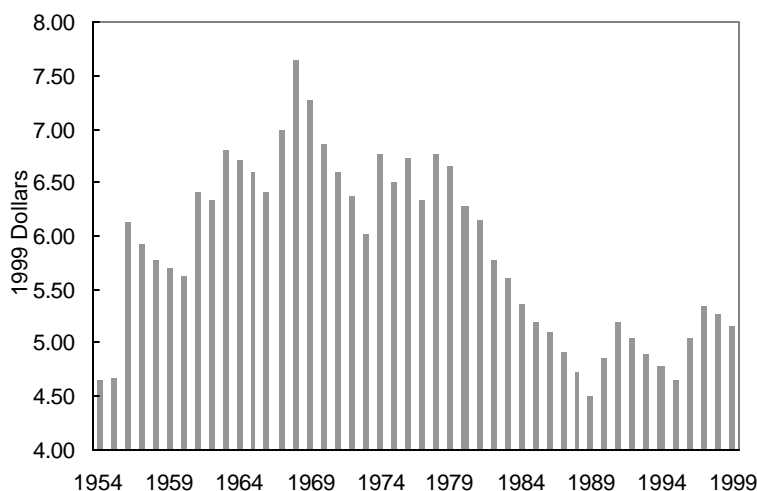
2. BACKGROUND ON THE MINIMUM WAGE

A federal minimum wage of 25 cents was first established as a part of the Fair Labor Standards Act of 1938 (FLSA). Since its inception, the federal minimum wage has been increased 19 times, and the FLSA has been amended numerous times to expand the workers covered by the minimum wage provision. In recent years, about two thirds of wage and salary workers have been covered by the FLSA minimum wage. (Workers who are exempt most often are in executive, administrative, and professional occupations.)

The federal minimum wage reached its highest value in real terms in 1968, at \$7.67 in 1999 dollars (see Chart 2). With five increases during the 1970s, the minimum wage held its value at approximately \$6.60. The last increase of the 1970s left the inflation-adjusted value at \$6.66. From January 1981 through March 1990, the minimum wage was unchanged, while at the same time prices rose by nearly 50 percent. This eroded the real value of the minimum wage at the end of the 1980s to \$4.50. The dollar level of the minimum wage was increased from \$3.35 to \$3.80 in 1990 and to \$4.25 in 1991. In real terms the value of the minimum wage was still well below the 1968 peak.

Even with the modest inflation of the 1990s, the minimum wage lost value, falling to \$4.65 in 1995. By 1996, the minimum wage adjusted for inflation was approaching a 40-year low. Inflation had largely wiped out the last increase in the minimum wage in 1990. In August 1996, Congress passed and President Clinton signed into law a two-step increase, lifting the minimum wage from \$4.25 to \$5.15. The first step of that increase went into effect October 1, 1996 and the second step on September 1, 1997. More recently, President Clinton proposed to increase the minimum wage by \$1 over two years, raising it to \$6.15. If the full increase were implemented in 2001, this would restore the real value of the minimum wage to its 1982 level, about 75 percent of the 1968 peak value.

Chart 2: Real Level of the Minimum Wage



Source: Department of Labor (Bureau of Labor Statistics).

3. THE 1996-97 MINIMUM WAGE INCREASE

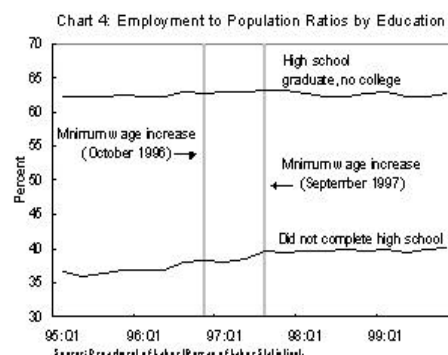
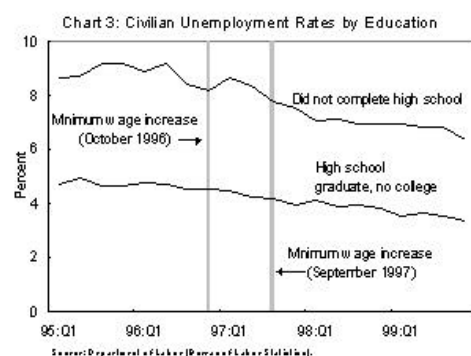
The \$0.90 increase in the minimum wage in 1996 and 1997 is estimated to have benefited almost 10 million American workers.¹ This section examines the impact of this increase on employment and the distribution of wages.

Effect on Employment

Since the 1996-97 increase in the minimum wage, the American economy—and labor markets in particular—have continued to perform very strongly. Between September 1996 and February 2000, 10.2 million jobs were created—an average of 248,000 per month, even stronger job growth than in the previous 2 years. In retail trade, which has a large concentration of minimum wage workers, there were 1.4 million new jobs. Over this same period the overall unemployment rate fell from 5.2 percent to 4.1 percent.

In addition, welfare rolls have declined 44 percent since welfare reform was enacted in August 1996. A report by the Council of Economic Advisers (1999) suggests that 10 to 16 percent of the welfare caseload decline from 1996 to 1998 was attributable to the increases in federal and state minimum wages. Other important factors were changes in welfare policy and the decline in unemployment.

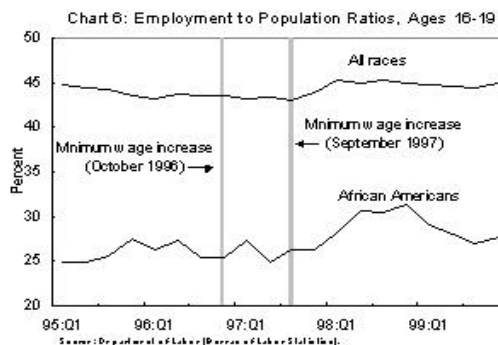
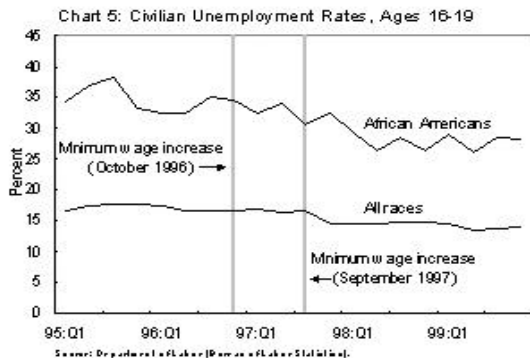
The strong labor market of the last four years, however, is not definitive proof that the minimum wage has no adverse effects on employment. Numerous other factors affect the job market, and workers paid at or near the minimum wage are a relatively small fraction of the overall workforce. A better test of the impact of minimum wage increases is the experience of workers most likely to be affected by the increases. An examination of data for these workers also shows no discernable negative effect of the last minimum wage increase. For example, adults (age 25 and above) with lower levels of education generally have relatively low wages. As Chart 3 indicates, though, quarterly unemployment rates have generally declined for both high school graduates with no college and those with less than a high school education. Chart 4 shows, similarly, that over the past five years the employment to population ratio generally held steady or increased for both groups of adults. No visible disruptions to these trends are apparent following either the 1996 or 1997 minimum wage increases. Comparable observations pertain for teenage workers in general, and for African American teens specifically (Charts 5 and 6).²



¹ See Bernstein and Schmitt (1998).

² One careful statistical analysis (Neumark, 1999) shows that the 1996-97 minimum wage increases had no effect on the general employment of 16-19 year olds.

These data provide evidence that the minimum wage increase did not have a major negative effect on employment. Still, as suggestive as this evidence is, it does not provide rigorous statistical tests that control for the myriad of factors that affect employment. Section 5 reviews the evidence from recent economic studies.



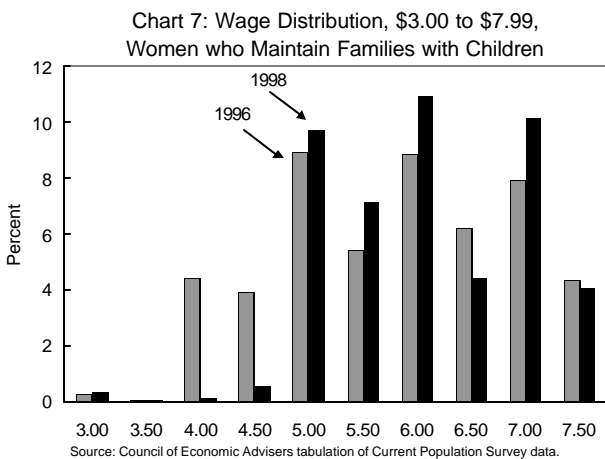
Effect on Wages for Low-income Workers

Recent increases in the minimum wage in the U.S. have improved the distribution of wages at the low end of the distribution. Fortin and Lemieux (1997) demonstrate the importance of the minimum wage in boosting wages at the low end, and reducing wage inequality. They show that the decline in the real value of the minimum wage from 1979 to 1988 was responsible for approximately 24 percent of the increase in wage inequality experienced by men and about 32 percent of the increase in wage inequality for women. Card and Krueger (1995) conclude that the 1990-91 minimum wage increase reversed about 30 percent of the increase in wage inequality that occurred during the previous decade.

The effect of the recent minimum wage increase—in October 1996 and September 1997—on the wage distribution is clearly evident in wage data. Statistics tabulated from the Current Population Survey (CPS), show that in the first two quarters of 1996, when the federal minimum wage was \$4.25, about 10 percent of all hourly wage workers earned less than \$5.00.³ The minimum wage increase (to \$5.15) clearly increased wages in the low end of the distribution; by the first two quarters of 1998, the fraction of workers earning less than \$5.00 declined to 2 percent.

³ The analysis presented in this paper excludes salaried and other non-hourly workers. Research has shown, however, 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. BLS does not routinely estimate hourly earnings for nonhourly workers because of data concerns that arise in producing these estimates. See Haughen and Mellor (1990) for further information.

Chart 7 illustrates the effect of the 1996-97 minimum wage increases on the low end of the wage distribution (\$3.00 to \$7.99) for just one demographic group of interest, women who maintain families and have at least one child present in the household.⁴



families and have at least one child present in the household.⁴ For 1996, the distribution of wages shows that a relatively small share of workers with hourly wages earn between \$3.00 and \$3.99.⁵ In contrast, a substantial fraction earned between \$4.00 and \$4.49. (The chart shows the distribution by 50-cent increments.) This jump, of course, reflects the clustering of workers whose wages were at or near the minimum wage. The comparable distribution for 1998 indicates a shift that was clearly due to the change in minimum wage policy. In the first two quarters of 1996, about 9 percent of these women earned less

than \$5.00. By the first two quarters of 1998, this fraction declined to 2 percent.

At the same time, an increasing share of workers earned wages above \$6 and \$7, suggesting that the increase in the minimum wage had spillover benefits for workers above the minimum wage. Such spillover effects have been documented more formally in research by Grossman (1983), Katz and Krueger (1992), and Card and Krueger (1994).

4. RAISING THE MINIMUM WAGE TO \$6.15: WHO IS DIRECTLY AFFECTED?

Raising the minimum wage from \$5.15 to \$6.15 would raise the annual earnings of a full-time worker by about \$2,000 a year. A study of spending by low-income families found that they spend on average about \$300 per month on groceries and about \$400 per month on rent. Thus, for a full-time worker, the minimum wage increase would translate into enough money to pay for nearly 7 months of groceries or 5 months of rent. This section provides a detailed examination of the workers that would benefit from a further increase in the minimum wage.

Characteristics of Minimum Wage Workers in 1999

Evidence about workers who currently earn the minimum wage is available from unpublished tabulations provided by the Bureau of Labor Statistics (BLS) based on data from the CPS. In 1999, 72.3 million workers were paid at hourly rates, representing about 61 percent of wage and salary workers. It is estimated that 3.3 million workers—4.6 percent of all workers who are paid an hourly rate—earn a wage at or below the current \$5.15 Federal minimum. Of these 3.3 million workers, about 1.1 million reported a wage at exactly \$5.15, while the remainder, 2.2

⁴ A family maintained by a woman is one in which the householder (person in whose name the housing unit is rented or owned) is female, and no spouse is present. Here we examine such households when a child under 18 is present.

⁵ The presence of workers with reported wages below the minimum wage does not necessarily indicate violations of the Fair Labor Standards Act. There are several reasons why the reported wage for a worker may be below the Federal minimum. First, certain workers are exempt from the minimum wage provisions of the law, including workers for whom tips might serve to supplement the hourly wages received. Second, there may be a misreporting or rounding in the survey responses. When the minimum wage is \$5.15, for example, a large number of workers report a wage of exactly \$5.00.

million, earned a wage less than \$5.15. A study by Bernstein and Schmitt (1998) indicated that in 1997 the earnings of average minimum wage workers accounted for 54 percent of their family's total earnings.

Selected demographic and economic characteristics for these workers are presented in Table 1. The statistics indicate that about 70 percent of workers earning \$5.15 or less were age 20 or older. 64 percent of these workers are women.

How Many Workers would be Affected by an Increase in the Minimum Wage?

Using the CPS data described above, it is possible to examine the number and characteristics of workers who would potentially receive a pay raise from a \$1.00 increase in the federal minimum wage. Table 2 presents the number of individuals who currently have an hourly wage between \$5.15 and \$6.14. This table indicates that:

- There are approximately 10.1 million workers within this wage range—about 14 percent of all workers paid an hourly rate.
- 69 percent of the affected workers are adults age 20 or older.
- About 60 percent of these workers are women.
- 16 percent are African American and 20 percent are Hispanic.
- 37 percent are the household head or a spouse who contributes to family income.

Other respected studies have looked at the question of who would potentially benefit from an increase in the minimum wage, focusing on family and income characteristics. Some highlights from these studies are:

- Parents with children under 18 years old comprise almost 33 percent of those potentially affected. (Bernstein, Hartmann, and Schmitt, 1999).
- Over 50 percent of the proposed gains would go to households with incomes less than \$25,000 per year. (Bernstein, Hartmann, and Schmitt, 1999).
- 45 percent of the gains go to families with incomes below 200 percent of the poverty level, and an additional 19 percent to families with income below 300 percent of the poverty level. (Burkhauser, 1999).

There are other workers who would also likely benefit from a \$1.00 minimum wage increase in addition to those workers that report hourly wages between \$5.15 and \$6.14. As noted above, a number of the over 900,000 workers who report a \$5.00 per hour wage are also likely to be workers currently at the minimum wage, but mis-reporting their earnings. There is also evidence, as discussed earlier, that workers who earn wages just above the new minimum can see their pay rise as a result of the minimum wage increase. To help gauge the size of this group in the event of a minimum wage increase to \$6.15, Table 2 also presents the number of workers with hourly wages between \$6.15 and \$7.14. In 1999 there were approximately 8.4 million such workers, many of whom could indirectly benefit from a minimum wage increase.

Appendix A presents a breakdown of the number of workers that would benefit by state. While the most populous states would have the greatest number of workers in these wage categories (California, for example, has almost 1.5 million workers with wages between \$5.15 and \$6.14) the evidence suggests that thousands of workers in every state would potentially benefit from a \$1.00 increase in the minimum wage.

Table 1. Employed Wage and Salary Workers Paid Hourly Rates with Earnings At or Below Minimum Wage, 1999

Characteristic	Number of workers (in thousands)		Percent distribution		Percent of workers in demogra phic group who earn \$5.15 or less
	Total paid hourly rates	Paid \$5.15 or less	Total paid hourly rates	Paid \$5.15 or less	
Total, 16 years and over	72,306	3,340	100.0	100.0	4.6
AGE					
16 to 19 years	6,600	1,006	9.1	30.1	15.2
20 and over	65,706	2,334	90.9	69.9	3.6
SEX					
Men, 16 years and over	36,073	1,214	49.9	36.3	3.4
Women, 16 years and over	36,233	2,126	50.1	63.7	5.9
RACE AND HISPANIC ORIGIN					
White	58,999	2,698	81.6	80.8	4.6
African American	10,126	515	14.0	15.4	5.1
Hispanic	9,402	513	13.0	15.4	5.5
FULL- AND PART-TIME STATUS					
Full-time workers	54,931	1,320	76.0	39.5	2.4
Part-time workers	17,227	2,010	23.8	60.2	11.7
FAMILY RELATIONSHIP					
Husbands	17,609	242	24.4	7.2	1.4
Wives	16,996	622	23.5	18.6	3.7
Women who maintain families	5,395	288	7.5	8.6	5.3
Men who maintain families	1,815	50	2.5	1.5	2.8
Other persons	30,491	2,082	42	62	28

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. Also note that the distinction between full- and part-time workers is based on hours usually worked. 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, 1999 annual averages.

Table 2. Distribution of Wage and Salary Workers Paid Hourly Rates, 1999

Characteristic	Number of workers (in thousands)		Percent distribution		Percent of workers in demographic group who fall in wage category	
	\$5.15 - \$6.14	\$6.15 - \$7.14	\$5.15 - \$6.14	\$6.15 - \$7.14	\$5.15 - \$6.14	\$6.15 - \$7.14
Total, 16 years and over	10,093	8,370	100.0	100.0	14.0	11.6
AGE						
16 to 19 years	3,133	1,482	31.0	17.7	47.5	22.5
20 and over	6,960	6,888	69.0	82.3	10.6	10.5
SEX						
Men, 16 years and over	4,076	3,405	40.4	40.7	11.3	9.4
Women, 16 years and over	6,018	4,965	59.6	59.3	16.6	13.7
RACE AND HISPANIC ORIGIN						
White	8,027	6,668	79.5	79.7	13.6	11.3
African American	1,602	1,336	15.9	16.0	15.8	13.2
Hispanic	1,989	1,447	19.7	17.3	21.2	15.4
FULL- AND PART-TIME STATUS						
Full-time workers	4,563	5,301	45.2	63.3	8.3	9.7
Part-time workers	5,512	3,048	54.6	36.4	32.0	17.7
FAMILY RELATIONSHIP						
Husbands	851	990	8.4	11.8	4.8	5.6
Wives	1,821	1,962	18.0	23.4	10.7	11.5
Women who maintain families	855	807	8.5	9.6	15.8	15.0
Men who maintain families	171	167	1.7	2.0	9.4	9.2
Other persons	6,396	4,445	63	53	84	58

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. Also note that the distinction between full- and part-time workers is based on hours usually worked. 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, 1999 annual averages.

5. ECONOMIC RESEARCH ON THE EFFECT OF THE MINIMUM WAGE ON EMPLOYMENT

The impact of a moderate increase in the minimum wage on employment is a key question for policymakers. Clearly, while an increase in the minimum wage benefits those workers who receive it, some have raised concerns that these direct gains may be partially or fully offset if the minimum wage increase leads to greater unemployment among lower income workers. Section 3 discussed some of the aggregate evidence from the 1996-97 experience. This section discusses the economic theory and empirical evidence behind the effects of the minimum wage on employment.

Recent Economic Theory on the Impact of the Minimum Wage on Employment

The traditional economic theory of supply and demand predicts that an increase in the minimum wage above the market rate would increase the cost faced by employers, causing them to reduce employment. Recent theoretical analyses, however, have challenged this conventional wisdom, examining reasons why some employers may respond to a moderately higher minimum wage by expanding employment. Specifically, higher wages can help firms attract better workers, motivate them to work harder, and retain them for longer periods. (While firms always have the option of increasing their pay rate, some managers leave wages unchanged because of reluctance to increase average labor costs.) At least five papers—recently published in peer-reviewed economics journals—rigorously study this logic.⁶ These papers show that a moderate minimum wage can have a positive effect on employment. In general, then, an increase in the minimum wage has an ambiguous effect on employment. The only way to determine the effect in practice is to look at the empirical evidence.

Recent Empirical Evidence on Employment Effects

In an important book, economists David Card and Alan Krueger (1995) provide a critical analysis of previous research, and present their own extensive exploration of the wide variation in minimum wages across states found in the late 1980s and early 1990s. Their work shows that there were no negative employment effects even for teenagers, the group for whom any disemployment effects should be most apparent. Similarly, their detailed analysis fails to find disemployment effects of a minimum wage in the retail trade or in employment of fast food restaurants. More recent studies confirm these results.

Employment in Fast Food Restaurants. To determine the impact of minimum wages on employment, one would like to gather data from firms prior to a minimum wage increase and see how firms adjust employment relative to other similar firms for which the minimum wage does not increase. New work by Card and Krueger (forthcoming) comes closest to doing this. In 1992, New Jersey imposed a higher minimum wage, and yet the neighboring state of Pennsylvania did not. And then in 1996 an increase in the federal minimum wage affected Pennsylvania but not New Jersey. These two episodes provide an experiment that can be used to infer the effects of a minimum wage increase on employment. Card and Krueger use the BLS's employer-reported payroll files from 1991 through 1997 to evaluate employment growth of fast

⁶ See Bhaskar and To (1999), Dickens, Machin, and Manning (1999), Lang and Kahn (1998), Manning (1995), and Rebitzer and Taylor (1995). Additional discussion of these models are found in Chapter 11 of Card and Krueger (1995).

food restaurants in New Jersey and nearby counties in Pennsylvania. They conclude that the minimum wage changes had very little (and possibly slightly positive) effect on employment.⁷

The British Experience. Dickens, Machin, and Manning (1999) studied the British experience with minimum wages. They found “...strong evidence that [minimum wages] compressed the distribution of earnings and no evidence that they have reduced employment.”

6. CONCLUSION

The evidence is convincing that moderate increases in the minimum wage have provided meaningful additional earnings for many of America’s most hard-pressed working families with no discernible negative employment effects. Increasing the minimum wage is one of the ways that government can help ensure that everyone continues to share in the benefits of growth. When the minimum wage was fixed from 1981 to 1990, the wages and incomes of poorer workers fell in real terms. Thanks to the 1996-97 minimum wage increase, today the minimum wage is helping to ensure that a single parent with two children does not have to raise his or her children in poverty.

The minimum wage is just one component of an overall strategy for insuring that all families benefit from the nation’s economic growth. The President’s proposed expansion in the Earned Income Tax Credit—to increase benefits for families with three or more children, reduce the marriage penalty, and reduce the phaseout rate—would enhance the value of a higher minimum wage, especially for families with more children and thus greater needs. At the same time, the President is committed to continuing to make important investments in people. Since 1993, the budget for education and training programs has nearly doubled and the President is proposing record increases for a number of key education programs, including Head Start, in his FY 2001 budget. Together, these policies are an investment in continued strong and shared economic growth.

⁷ While some critics of Card and Krueger expressed concern about their data collection, the most recent research uses BLS employment records and finds basically the same results.

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Appendix: Distribution of Wage and Salary Workers Paid Hourly Rates by State, 1999

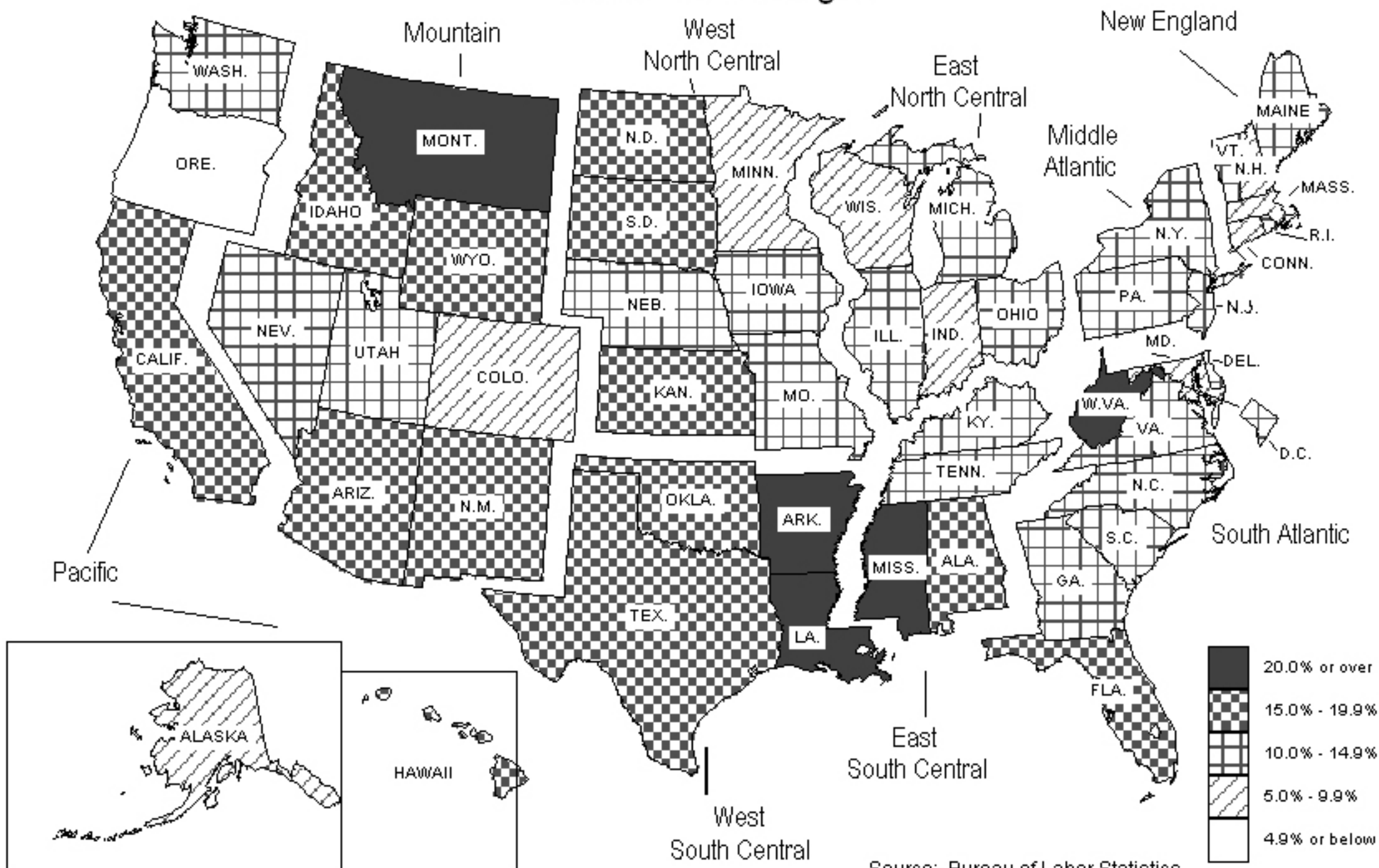
	Number (in thousands)		Percent of All Wage and Salary Workers	
	\$5.15 to \$6.14	\$6.15 to \$7.14	\$5.15 to \$6.14	\$6.15 to \$7.14
Total	10,093	8,370	13.9	11.6
Alabama	202	146	18.1	13.1
Alaska	9	13	5.5	7.6
Arizona	200	157	15.2	11.9
Arkansas	130	101	20.9	16.2
California	1,463	1,023	17.4	12.1
Colorado	79	92	7.3	8.4
Connecticut	62	70	7.5	8.6
Delaware	22	21	10.8	10.0
DC	12	12	10.0	10.7
Florida	597	530	15.5	13.8
Georgia	267	248	13.1	12.3
Hawaii	47	29	15.0	9.4
Idaho	58	45	15.6	12.3
Illinois	428	354	13.2	10.8
Indiana	180	209	9.8	11.4
Iowa	103	91	11.2	9.9
Kansas	123	96	15.6	12.3
Kentucky	157	161	14.2	14.7
Louisiana	297	123	25.9	10.7
Maine	45	39	11.8	10.4
Maryland	125	137	9.5	10.5
Massachusetts	161	162	9.6	9.7
Michigan	341	312	11.3	10.3
Minnesota	115	121	8.0	8.4
Mississippi	146	74	22.7	11.5
Missouri	172	169	11.9	11.8
Montana	54	32	21.5	12.7
Nebraska	67	68	13.2	13.6
Nevada	60	60	11.2	11.3
New Hampshire	29	31	8.2	8.5
New Jersey	205	187	10.6	9.8
New Mexico	75	39	18.0	9.1
New York	566	395	14.8	10.3
North Carolina	247	223	12.4	11.2
North Dakota	34	29	18.3	15.9
Ohio	427	356	12.7	10.6
Oklahoma	170	126	19.6	14.5
Oregon	35	184	3.7	19.7
Pennsylvania	454	338	13.8	10.3
Rhode Island	37	25	13.4	9.3
South Carolina	153	116	14.9	11.3
South Dakota	33	29	15.2	13.7
Tennessee	208	216	13.6	14.2
Texas	929	653	18.5	13.1
Utah	61	84	10.1	14.0
Vermont	21	20	12.4	11.5
Virginia	218	207	13.6	12.8
Washington	180	158	10.9	9.6
West Virginia	106	60	22.2	12.8
Wisconsin	157	177	8.9	10.0
Wyoming	25	19	17.8	13.8

Note: Workers in the \$5.15 to \$6.14 category would be directly affected by a \$1.00 increase in the minimum wage. Those in the \$6.15 to \$7.14 category could be affected by spillovers.

Source: U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey, 1999.

Percentage of workers paid hourly rates earning between \$5.15 and \$6.14 per hour, by State (U.S. percentage = 14.0 percent)

1999 annual averages



Source: Bureau of Labor Statistics