THE MINIMUM WAGE: AN UPDATED REPORT

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EXECUTIVE SUMMARY

- **Raising the Minimum Wage Could Help Millions of Workers.** In the third quarter of 2000, 2.6 million workers earned wages at or below the Federal minimum wage of $5.15. Another 6.9 million workers earned wages of less than $6.15 ($1.00 above the minimum wage), and still another 3.4 million workers who earn less than $6.65 ($1.50 above the minimum wage).

- **The Majority of Minimum Wage Workers Are Adults.** Of the 9.5 million workers with wages below $6.15, 68 percent are adults (age 20 or older); 35 percent help support a family; and 63 percent are women. Fourteen percent of these workers are African-American and 19 percent are Hispanic.

- **The Minimum Wage Is Now Only 65 Percent of Its 1968 Value.** The Federal minimum wage is currently $5.15, substantially less than its real value in the late 1960s. In 1968 the minimum wage was worth $7.92 in 2000 dollars. The average real value of the minimum wage from 1960 to 1980 was $6.83. An individual working full-time at the minimum wage would earn $10,300 a year, only 60 percent of the poverty level for a family of four.

- **The Recent Increases in the Minimum Wage Had Little or No Discernable Negative Impact on Employment.** Since the minimum wage increase in 1996, the economy has created more than 11.8 million jobs and the unemployment rate has fallen from 5.2 percent in September 1996 to 4.0 percent in December 2000, near its lowest level in thirty years. Some economic studies have concluded that the minimum wage changes had little negative effects on employment. The currently low unemployment rates and forecasted rates of GDP growth indicate a continued strong labor market and suggest that negative effects of moderate minimum wage increases are unlikely.

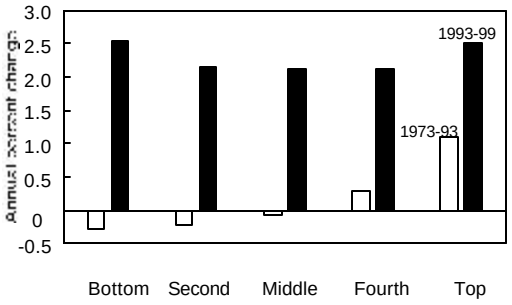
- **The Minimum Wage and Earned Income Tax Credit Work Together for Low-Wage Workers.** The minimum wage is an important tool for wage distribution: research shows that the decline in the real value of the minimum wage from 1979 to 1988 was responsible for approximately 24 percent of the increase in wage inequality experienced by men and about 32 percent of the increase in wage inequality for women. The Earned Income Tax Credit (EITC) works in conjunction with the minimum wage to ensure a livable wage for low-income families. In 1999 the EITC lifted an estimated 4.1 million people out of poverty. A higher minimum wage increases the effectiveness of the EITC in increasing the incomes of the lowest-wage workers. Currently, an individual working full-time at the minimum wage would earn $10,300 per year. The EITC could increase this annual income to as much as $14,188.

1. INTRODUCTION

An important aspect of the current economic expansion is that its gains have been widely shared. Low-wage workers in particular are experiencing the benefits of the new economy, and are doing so to a greater extent than in the previous two decades. While the strong economy has played an important role in increasing the incomes of the low-income workers, Administration policies, such as the 1996 and 1997 increases in the minimum wage, have also contributed to recent wage gains.

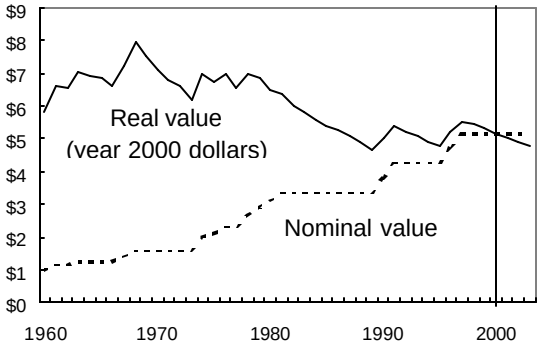
The recent gains in income generated by the economy have benefited families across the income distribution. Mean real household incomes rose 16 percent for those in the bottom quintile, and by similarly large amounts elsewhere in the distribution-a significant change from the preceding years (see Chart 1). A large portion of this income growth is due to increased employment. Between January 1993 and December 2000, the economy created 22.5 million new jobs. The overall unemployment rate in December 2000 was 4.0 percent, and unemployment rates for blacks at 7.6 percent, Hispanics at 5.7 percent and teenagers at 13.1 percent were at or near historic lows. Poverty levels have fallen to 11.8 percent in 1999, the lowest level since 1979.

Chart 1: Growth in real household income by quintile, 1973-93 and 1993-99 averages



Despite this substantial growth, the wages of many workers remain at or below the minimum wage. In the third quarter of 2000, about 2.6 million workers earned wages equal to or below the Federal minimum of $5.15. Another 6.9 million earn between $5.15 and $6.14. To ensure that these and other low-income Americans enjoy a reasonable standard of living requires not only a strong economy, but also policies that adequately reward work. Administration policies such as the Earned Income Tax Credit, child care subsidies, and increases in the minimum wage are all designed to increase the returns to work for lower income Americans. Continued support of these policies is necessary if the rewards of the new economy are to be continually shared.

Chart 2: Value of the minimum wage



Note: Projected values calculated if minimum wage is not increased and assumes 2.5% annual inflation after Nov. 2000

The minimum wage in particular requires attention. The real value of the minimum wage fluctuates as inflation erodes its real value and increases restore some value, but the overall trend has been a general decline. (See chart 2.) In 1968, the real value of the minimum wage attained a peak of $7.92, in 2000 dollars; the average real value of the minimum wage from 1960 to 1980 was $6.83.[1] Since then, the real value has declined, as nominal increases have been more than offset by inflation. During the 1980s, the real value of the minimum wage fell

[1] To calculate the real value of the minimum wage in past years we use the CPI-U. Using the research oriented CPI-U-RS would provide slightly different figures.

from $6.48 to $4.65. Increases in the early and mid 1990s have mostly offset the inflation effects during the 1990s. Still, the real value of the minimum wage has fallen by 37 cents since the most recent nominal increase took effect in 1997.

For families with a sole wage earner, the minimum wage provides a meager living at best. For example, an individual who worked full-time[2] at the minimum wage would have a total wage income of $10,300, which, in 2000, only reaches 73 percent of the poverty level for a family of three, 60 percent of the poverty level for a family of four, and in 1999, only 21 percent of the median family income.[3] This is a 4 percentage point decline relative to the poverty benchmarks, and 2 percentage point decline relative to the median family income since the current minimum wage took effect in 1997. Even with the current low inflation rates, the real value of the current minimum wage will continue to fall unless increases are legislated.

After 8 years of rapid growth, the economy is beginning to slow, but growth is expected to remain positive. The December 2000 Blue Chip consensus projection for GDP growth is 3.1 percent in 2001. Unemployment rates are also well below historical averages and are projected to remain low--the Blue Chip projection is 4.3 percent for 2001. These trends suggest that workers will continue to benefit from a strong labor market and moderate increases in the minimum wage could provide benefits to low-income workers with little risk of negative effects.

This report examines the role that the minimum wage plays in increasing the reward to work and raising 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. It concludes that moderate increases in the minimum wage can increase substantially the incomes of low-wage workers with little if any negative side-effects.

2. EMPLOYMENT EFFECTS OF INCREASING THE MINIMUM WAGE

In the last twenty five years, the Fair Labor Standards Act has been amended three times to increase the minimum wage. From 1977 to 1981, it was increased from $2.30 to $3.35; from 1989 to 1991, it was increased from $3.35 to $4.25; and from 1995 to 1997, it was increased from $4.25 to $5.15.

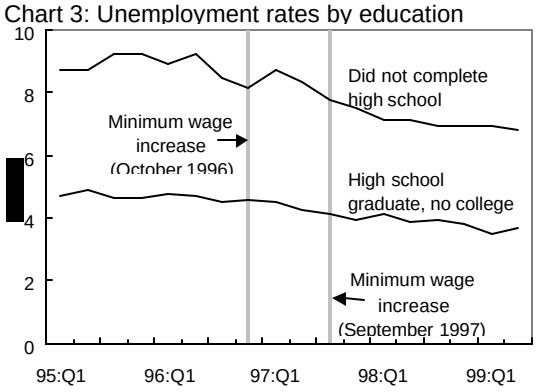
Traditional economic theory of supply and demand predicts that an increase in the minimum wage above the market rate would increase the cost of labor to employers, causing them to reduce employment. Recent theoretical analyses, however, have challenged this conventional wisdom, examining reasons why some employers may respond to a moderately higher minimum wage by expanding employment. Specifically, higher wages can help firms attract better workers, motivate those employees to work harder, and retain them for longer periods. Several recent studies have analyzed this latter possibility.[4] Given the ambiguous predictions of economic theory, the way to determine the effect in practice is to look at the empirical evidence.

[2] For the following illustrations, "full-time" is assumed to be 2000 hours in a calendar year.
[3] We use the 2000 poverty guidelines published by the Department of Health and Human Services.
[4] See 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).

Employment patterns and the increase in 1996-97

In 1996-97 the minimum wage was raised by 90 cents in two increments. Subsequently, the American economy—and labor markets in particular—continued to perform very strongly. Between September 1996 and December 2000, 11.8 million jobs were created—an average of 231,000 per month, even stronger job growth than in the 2 years prior to September 1996. In retail trade, which has a large concentration of minimum wage workers, there were 1.6 million new jobs. Over this same period the overall unemployment rate fell from 5.2 percent to 4.0 percent.

Chart 3: Unemployment rates by education



More importantly, the labor markets that have the highest numbers of low-wage workers also experienced no discernable negative effects from the minimum wage increases. Just the opposite occurred—conditions in these markets continued to improve. 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. Similarly, over the past five years the employment to population ratio generally held steady or increased for both groups of adults, as well as for teenage workers, and for African American teens in particular. These data provide evidence that minimum wage increases can be compatible with continued job growth. Still, as suggestive as this data is, it does not provide rigorous statistical tests that control for the myriad of factors that affect employment. Perhaps employment would have increased even more dramatically in the absence of a minimum wage increase. Thus, we review recent econometric studies that account for some of these factors and may provide a better indication of the employment effects of the minimum wage.

Econometric Evidence on Employment Effects

Two researchers, David Card and Alan Krueger (2000), examine the impact of a minimum wage increase of about $.80 in New Jersey in the early 1990s. In 1992, New Jersey raised its minimum wage to $5.05 while the neighboring state of Pennsylvania did not, staying at the Federal level of $4.25. In 1996 there was an increase in the federal minimum wage which affected Pennsylvania but not New Jersey, which already had a higher state minimum wage. 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 food restaurants in New Jersey and nearby counties in Pennsylvania. They conclude that the minimum wage changes had very little negative (and possibly slightly positive) effect on employment.[5]

[5] While some critics of Card and Krueger expressed concern about their data collection (see Neumark and Wascher, 2000), the most recent research avoids this concern by using Bureau of Labor Statistics employment records and finds basically the same results.

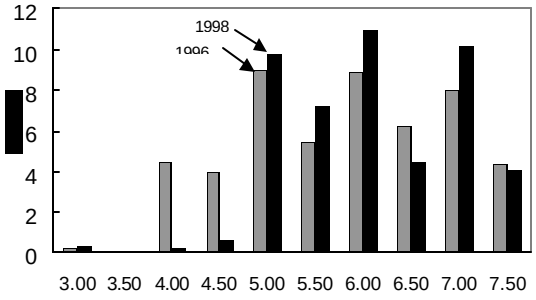
This "experiment," of increasing the minimum wage and making no other changes, is hard to mimic in the real world where many changes take place simultaneously. Thus, there are a variety of different estimates of the employment effects of the minimum wage, based on different data and different empirical methods. For the most part, recent research and reviews of this literature conclude that either there are no significant employment effects, or that the effects are modest, and are most likely restricted to lesser-skilled teens.[6]

3. WAGE EFFECTS OF THE MINIMUM WAGE

The $0.90 increase in the minimum wage in 1996 and 1997 is estimated to have benefited almost 10 million American workers.[7] This section examines the impact of this increase on the distribution of wages.

Earlier increases in the minimum wage in the U.S. have been shown to 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.

Chart 4: Wage Distribution, $3.00 to $7.99,
Women who Maintain Families with Children



The effect of the last minimum wage increase—in October 1996 and September 1997—on the nominal 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.[8] 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.

Chart 4 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

[6] See the reviews by Brown, Gilroy, and Kohen (1982), Brown (1988), and Card and Krueger (1995) and the recent articles by Dickens, Machin, and Manning (1999), Neumark (1999), and Neumark and Wascher (2000).
[7] See Bernstein and Schmitt (1998).
[8] 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.

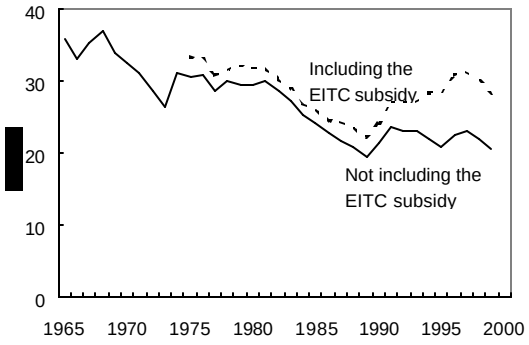
families and have at least one child present in the household.[9] For 1996, the distribution of wages shows that a relatively small share of workers with hourly wages earn between $3.00 and $3.99.[10] In contrast, a substantial fraction earned between $4.00 and $4.49. (The chart shows the distribution 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.

Increases in the minimum wage may also have spillover effects benefiting higher wage workers, particularly if employers endeavor to maintain similar levels of relative wages. These effects have been documented in Katz and Krueger (1992), and Card and Krueger (1994). There is also evidence of such spillovers in chart 4; the number of workers earning wages above $6.00 and $7.00 increased sharply with the increase in the minimum wage.

The minimum wage and the Earned Income Tax Credit

The minimum wage works with the Earned Income Tax Credit (EITC) to help raise the incomes of low-wage workers. Operating through the income tax system, the EITC provides a wage subsidy for qualified low-income workers. The amount of the subsidy depends on how much the family earns and on whether the family has zero, one, or two or more children. Currently, families with two or more children received a subsidy of 40 cents for every dollar of earned income up to a threshold that is indexed to inflation. In 2000, the maximum credit was $3,888, available when earnings reach $9,700. This tax credit is refundable, so that even families who pay little or no income tax can benefit fully from the tax provision. The credit remains at $3,888 until earnings reach $12,700 and then gradually declines. For two-child families it phases out completely when earned income reaches $31,152. Families with no children and one child are eligible for lower subsidies.

Chart 5: Income of a full-time minimum wage worker relative to median family income



Note: The maxium EITC Subsidy is that for a family with two or more eligible children.

The EITC significantly raises the income of qualified individuals. For example, in 2000 a family with two children and one full-time worker paid the minimum wage would be eligible for the maximum credit of $3,888. This additional income would be enough to lift that family just over the poverty line in 2000. In 1999 the median

[9] 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.

[10] 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 reports a wage of exactly $5.00.

family income was $49,940. In that year, the maximum EITC of $3,816 would have brought total income for a family with a single full-time minimum wage worker up to 28 percent of the median family income (see chart 5).[11]

The EITC has done much to reduce poverty. In 1999 approximately 4.1 million people were lifted out of poverty by the EITC, 2.3 million of whom were children. While the EITC is thus important for low-income workers, it does not eliminate the need for an acceptable minimum wage. The vast majority of those claiming an earned income credit receive the credit when they file their tax returns. In contrast, employees paid a higher minimum wage will get an increase in their regular paychecks, which can be used more readily to meet daily needs. In addition, if the minimum wage is raised, the EITC subsidy will be based on a higher wage and many of those with the lowest incomes will receive a greater credit. Thus, increasing the minimum wage is an important and effective approach to increasing the income of low-wage earners, working with the EITC.

4. INCREASES IN THE MINIMUM WAGE AND THE TARGET POPULATION

The most recent increase in the minimum wage, carried out in 1996 and 1997, increased the Federal minimum by $0.90 per hour. This change corresponds to a $0.97 increase in 2000 dollars. The total changes in previous rounds of minimum wage increases have been even larger in real terms. The increases legislated in 1977 totaled $2.53 in 2000 dollars and the 1989 increases were equal to $1.17 in 2000 dollars. A simple average of the 1996, 1989 and 1977 changes corresponds to a current real increase of $1.56 in the minimum wage. Wage increases of $1.00 to $1.50 would have substantial effects on the incomes of low-wage workers. An increase of $1 an hour in the current minimum wage would raise the annual earnings of a full-time minimum-wage worker by about $2,000 a year, assuming no change in employment status or hours worked. A change of $1.50 would increase the yearly income of a full-time minimum-wage worker by $3,000.[12]

Characteristics of Minimum Wage Workers in 2000

The majority of benefits of a minimum wage increase would accrue to those currently earning wages at or just above the minimum wage. A summary of the characteristics of these workers is available from unpublished tabulations provided by the Bureau of Labor Statistics (BLS) based on data from the CPS. In the third quarter of 2000, 72.8 million workers were paid at hourly rates, representing about 60 percent of wage and salary workers. Approximately 828,000 workers earn a wage equal to the current $5.15 Federal minimum and an additional 1.7 million workers earn wages below the federal minimum.[13] Thus, approximately 3.5 percent of hourly workers earn wages at or below the Federal minimum wage. Also, as shown in table 1:

[11] For workers with zero or one child the EITC subsidy rate and income limits are lower than for those with two children. Tax payers with one child receive a 34 percent subsidy up to a maximum of $2,353; those with no children are only eligible for a 7.65 percent subsidy up to a maximum of $353. Also, the EITC credit is gradually reduced after earnings reach a certain level. These limits are $12,700 for taxpayers with one or more children, and $5,800 for those with no children.

[12] These income increases ignore income or payroll taxes.

[13] Some workers are exempt from the minimum wage, for example tipped employees and outside sales workers.

- Minimum wage employment is not limited to teenagers. Nearly 68 percent of workers earning $5.15 or less per hour were age 20 or older and 47 percent are over the age of 25.
- 36 percent of minimum wage (or lower) workers are helping to support a family.
- 43 percent are working full-time.
- 63 percent of these workers are women. Among those women who are paid by the hour, 4.5 percent earn wages at or below the Federal minimum. For men this figure is substantially lower; just 2.6 percent of male hourly employees earn wages less than or equal to the minimum wage.
- There are also slight differences in wage rates by race and ethnicity: 3.3 percent of African American hourly workers earned the minimum wage or less compared to 3.6 of whites and 2.8 percent of Hispanics.

Table 1: Employed Wage and Salary Workers Paid Hourly Rates with Earnings At or Below Minimum Wage, 3rd Quarter 2000.

Charateristic	Number of Workers (in thousands)	Percent distribution
Total, 16 years and over	2,569	100.0
AGE		
16 to 19	838	32.6
20 and over	1,733	67.5
25 and over	1,213	47.2
SEX		
Men	951	37.0
Women	1,619	63.0
RACE AND HISPANIC ORIGIN		
White	2,122	82.6
African-American	334	13.0
Hispanic	278	10.8
FULL- AND PART-TIME STATUS		
Full-time workers	1,111	43.2
Part-time workers	1,439	56.0
FAMILY RELATIONSHIP		
Husbands	170	6.6
Wives	491	19.1
Women who maintain families	229	8.9
Men who maintain families	31	1.2
Other persons	1,646	64.1

Note: Percentages do not add to 100 percent due to missing values.
Source: Department of Labor (Bureau of Labor Statistics), unpublished tabulations.

How Many Workers Would Be Affected by an Increase in the Minimum Wage?

Workers with wage rates slightly above the current minimum wage would also likely benefit from an increase in the minimum wage. In keeping with the magnitudes of past increases in the minimum wage, we examine the characteristics of those earning within $1.00 of the current minimum (less than $6.15 per hour) and those earning between $1.00 and $1.50 above the current minimum ($6.15-$6.64). Assuming no change in employment, the former group is likely to see an increase in wages if the minimum wage is increased by $1.00 or more, and the latter, if an increase is of at least $1.50. Table 2 presents the distribution of individuals who currently have an hourly wage within each of these categories and the characteristics of those workers.

- There are approximately 9.5 million workers with wage below $6.15 per hour—nearly 13 percent of all hourly workers. An additional 3.4 million workers are within $1.00 and $1.50 of the minimum wage ($6.15-$6.64), or 4.6 percent of all hourly employees. Assuming no change in employment, an increase of $1.50 could therefore provide direct benefits to 17.6 percent of hourly employees.

Table 2: Distribution of Wage and Salary Workers Paid Hourly Rates, 3rd Quarter 2000.

Characteristic	Percent Distribution	
	Paid $6.14 or less	Paid $6.15-6.64
Total, 16 years and over	100.0	100.0
AGE		
16 to 19	32.4	24.8
20 and over	67.6	75.2
25 and over	46.5	53.8
SEX		
Men	40.0	38.5
Women	60.0	61.5
RACE AND HISPANIC ORIGIN		
White	81.3	81.8
African-American	14.4	13.6
Hispanic	18.7	17.8
FULL- AND PART-TIME STATUS		
Full-time workers	47.2	60.1
Part-time workers	52.5	39.7
FAMILY RELATIONSHIP		
Husbands	8.4	10.1
Wives	17.4	19.8
Women who maintain families	8.0	9.8
Men who maintain families	1.4	2.9
Other persons	64.5	57.4

Note: Percentages do not add to 100 percent due to missing values.

Source: Department of Labor (Bureau of Labor Statistics), unpublished tabulations.

- The majority of those benefiting are adults. 68 percent of those with wages below $6.15 are age 20 or older as are 75 percent of those with wages between $6.15 and $6.65.
- Women also benefit disproportionately. About 60 percent of the first group of workers are women as are 62 percent of the second.
- 14 percent of those earning less than $6.15 are African American and 19 percent are Hispanic. The figures for those earning between $6.15 and $6.64 are 14 and 18 percent.
- Families benefit as well. Among those earning the minimum wage or less, approximately 35 percent are a household head or a spouse who contributes to family income. Among those in the $6.15-$6.64 interval the fraction is 43 percent.

5. CONCLUDING REMARKS

The economic expansion and economic policies of the last eight years have substantially raised the wage levels of many individuals, including those at the low end of the wage distribution. Poverty rates have fallen and household incomes have increased for nearly all subgroups. However, despite the dramatic gains, two important concerns remain. First, many workers have wages at or below the Federal minimum, or wages that are only marginally higher than minimum wage. For these workers, even full-time employment at the current minimum wage is unlikely to provide sufficient earnings to lift family income above the poverty line. Second, the value of the minimum wage has eroded over time in real terms and will continue to erode unless legislative action is taken. The minimum wage is currently equal to just 65 percent of its 1968 value, and 75 percent of its average value between 1960 and 1980.

Furthermore, evidence from recent minimum wage increases indicates that there are likely to be little or no negative employment effects of such an increase. Employment of low skilled workers continued to increase following the 1996 and 1997 increases in the minimum wage. Some academic studies also found no negative effects of recent increases. In this time of low unemployment and continued economic growth, it is likely that the dominant effect of an increase in the minimum wage would be to increase the incomes of those at the lower end of the wage distribution.

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