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Winners and Losers of Federal and State Minimum Wages

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Stanford University

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

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Winners and Losers of Federal and State Minimum Wages

Executive Summary

In this study, economists Thomas MaCurdy and Frank McIntyre of Stanford University simulate the effects of a minimum wage increase in a world with no job loss or decreased profit margins. Their research shows that whereas one in four of the poorest workers gain from an increase in the minimum wage, three in four of the poorest workers lose from shouldering the costs of higher prices resulting from the wage increase. The authors find that when these benefits and costs are considered, the minimum wage is ineffective as an anti-poverty policy. Specifically, they conclude that

- "[L]ow-wage families are not necessarily low-income families. So, contrary to conventional wisdom, raising minimum wages poorly targets the poor"; and
- "when minimum wage increases are paid for by higher prices,…prices rise in a way that implies a burden more regressive [i.e., taking a larger fraction from the poor] than a sales tax."

The authors project the impacts on families by income class, inferring which families receive higher earnings from an increase in the minimum wage and which pay for this increase through higher prices for goods produced by low-wage labor. They examine the effects of a hypothetical increase of the minimum wage from $4.25 to $5.75 in 1996. A wage of $5.75 in 1996 dollars is about $6.25 in 2000 dollars, which is comparable with the $6.15 minimum recently considered by Congress.

Benefits and Costs of a Minimum Wage Increase

Although minimum wage advocates often cite helping poor families as the primary justification for raising the minimum wage, this study finds that the majority of the poor can actually lose from such wage hikes even if they do not lose jobs, work opportunities or benefits. Policymakers ought to ask such fundamental questions as: Do the benefits go to the intended target—poor families? What are the costs, and how much is borne by rich families as opposed to poor families? Are minimum wages a sensible anti-poverty measure? Or are better, cheaper and more effective measures available?

When the minimum wage is increased, employers of affected low-wage workers face increases in their labor costs including not just wages, but also associated costs such as payroll taxes. The authors consider several ways in which an employer can respond to the increased labor costs.

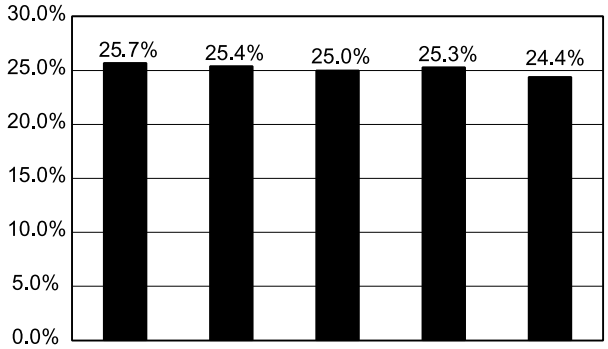
- First, a business can cut back the number of hours of labor it uses by reducing hours per employee and/or the number of employees. Either way, the employees bear the cost for the higher wages in their reduced work. The authors note that many other researchers have studied and measured such losses.
- Second, if the firm is sufficiently profitable, an employer may accept lower profits. However, the authors note that this is unlikely because the employers of low-wage workers are typically in highly competitive industries and have relatively low profit rates.
- Third, an employer can raise prices and accept the risk of consequently losing customers or business.

In practice, employers are likely to respond in more than one way. For example, even if employers pass costs on to their customers in higher prices, they may also be driven by competition to mini-

mize costs by substituting capital or high-skilled labor for low-wage labor.

In their study, MaCurdy and McIntyre consider how much minimum wage workers' earnings would rise if businesses raised wages but did not alter either hours of work or workers' other benefits. They also consider how much prices for the goods and services produced by minimum wage labor would rise if employers raised prices rather than reducing hours or accepting profit losses. Using economic input-output relationships, they then consider how these price increases would ripple through the economy. They track businesses purchasing these higher priced goods and services, and in turn passing these cost increases on to consumers and other businesses. This allows them finally to use data on family consumption patterns to assess how the price increases affect families in various income groups.

Figure 1. Percentage of Families in Each Income Quintile Who Benefit from a Minimum Wage Increase



Impacts of an Increase in the Federal Minimum Wage

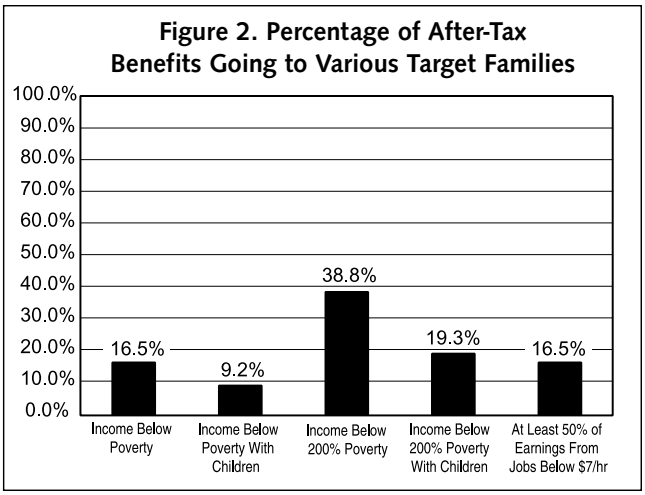
Their results show just how few of the benefits from an increase in the federal minimum wage would flow to the poorest families. Although all low-income families would pay for minimum wage hikes through higher prices, Figure 1 shows that only about one in four would benefit from an increase by having a worker who receives higher earnings. Moreover, the authors find that after taxes, only about 24 percent of the mandated wage increases would go to earners in the poorest 20 percent of families. This share going to the poorest families is significantly lower than the after-tax share going to the richest 40 percent, which receives about 35 percent of the wage increases after taxes. As shown in Figure 2, families in poverty would receive only 17 percent of the increases in earnings after taxes. Consequently, raising the minimum wage is an inefficient way of targeting the poor.

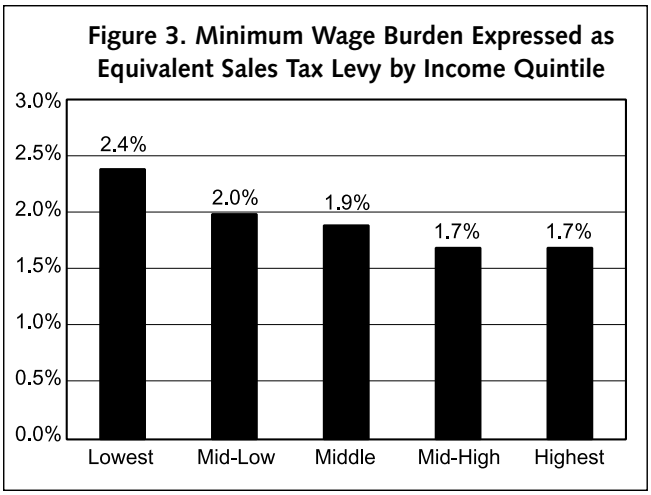
What is even worse for the poor is that they end up paying for benefits that go to the nonpoor. Expressed as a percentage of families' total nondurable consumption, the extra cost in higher prices is slightly above 1 percent for families of all income groups. If equivalent revenue were raised from families by the imposition of a federal sales tax, the analysis demonstrates that poor families would pay a higher tax rate to finance the costs of minimum wages than more affluent families. As shown in Figure 3, families with incomes in the lowest 20 percent would pay the equivalent of a 2.4 percent sales tax, whereas families with incomes in the top 20 percent and top 40 percent would pay the equivalent of a 1.7 percent sales tax. Thus, the lowest income group would pay at a higher rate than the top income groups.

Economists consider a tax "regressive" if low-income taxpayers pay the same or a greater fraction of their income in tax as higher-income taxpayers, and "progressive" if low-income taxpayers pay a lower fraction than higher-income taxpayers. According to the authors, the cost of living increases produced by raising the minimum wage impose a burden on poor families that is more regressive than a sales tax.

Impacts of an Increase in the State Minimum Wage

The authors also studied the benefits and costs of a comparable increase in a state minimum wage imposed individually in the states of California, Florida, New York and Texas. The families benefiting from a minimum wage hike are the same regardless of





whether the wage increase is mandated by the federal or state governments. Thus, the benefits from a state minimum wage increase are just as poorly targeted to those in poverty as the benefits from a federal increase. The authors also find that the distribution of costs across income groups from a state increase is similar to that for a federal increase. As shown in Figure 3, when a state minimum wage hike is compared with a sales tax, the lowest 20 percent income group would pay at a rate higher than the highest 20 percent (and 40 percent) income group in all four of the states considered.

Conclusion

The authors liken a minimum wage hike that is paid for through higher prices to a public program that "taxes" all families to transfer income almost evenly across the income distribution. In view of this, it is fair to ask whether public support for raising the minimum wage relies on misconceptions about the resulting distribution of costs and benefits. As the authors put it:

> [I]t seems certain that there would be little public support for a national sales tax levied only on selective commodities and used to transfer income in nearly equal amounts to 1 out of every 4 wealthy families as well as to 1 in 4 poorer families. Yet, when one considers passing the costs of the minimum wage through prices, this is the effective outcome of a minimum wage increase.

— Richard S. Toikka
Chief Economist

Winners and Losers of Federal and State Minimum Wages

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Winners and Losers of Federal and State Minimum Wages[1]

By Thomas MaCurdy and Frank McIntyre

Introduction

The widespread popularity of higher minimum wages draws primarily on two beliefs: first, that raising the minimum wage will increase incomes of poor families and, second, that in doing so the minimum wage imposes very little public or social cost. The first belief appears uncontroversial. After all, it seems obvious how low-wage workers would benefit from an increase in the minimum wage. It is also obvious that a breadwinner earning the minimum wage alone does not provide enough income to support a family above the poverty line without additional government assistance. The broad appeal of this view has encouraged policy makers in Washington, DC, to put forth legislation raising the federal minimum wage every year since its last hike in 1997. Currently, ten states and the District of Columbia have a minimum wage over the federal minimum. In recent years, over 50 city/county governments have adopted their own "living wage" initiatives further leapfrogging federal/state levels for local employers providing publicly funded goods and services.

If an increase in the minimum wage is intended to address poverty, however, it is not sufficient to merely compare the level of the minimum wage with the poverty level. Instead, we should judge its effectiveness as an instrument of antipoverty policy. In doing so we need to ask several fundamental questions: Do the benefits go to the intended target, the poor? How are these benefits financed? Is it a progressive system, so more of the burden falls on the rich? Although other criteria may also be relevant, a distributional analysis is clearly key to an evaluation of the minimum wage from an antipoverty perspective.

This brings us to the second common belief: that minimum wages can be increased at little or no cost. This, of course, cannot be literally true. If it were, all wages should be increased. Those most familiar with the issues understand that the amount beneficiaries gain cannot be larger than what all others must pay. Imposing wage controls on labor will surely not raise total income in an economy, and, in fact, elementary economics dictates that such market distortions lead to reduced total income implying less overall benefits than costs. The effectiveness of raising the minimum wage as an antipoverty program then, is a question of redistribution. Some persons will gain and others will lose. Moreover, the gainers and losers may differ according to which jurisdiction adopts the minimum wage law; the groups paying for a federal increase need not be the same as those paying for a state or city increase.

How a jurisdiction's economy pays for a minimum wage increase may be less obvious than how people benefit from it. But the money to pay for higher wages must be paid by someone. At the most simplistic level, the employer pays for the increase. However, businesses do not actually pay, for they are merely economic organizations that facilitate transactions among individuals. Employers have three possible responses to the higher labor costs imposed by the minimum wage. They can reduce employment or adjust other aspects of the employment relationship (e.g., less fringe benefits or training opportunities), in which case some low-wage workers pay themselves through loss of their jobs or by receiving fewer benefits; firms can decrease profits, in which case owners pay; or employers can increase prices, wherein consumers pay.

Most debate concerning who bears the cost of the minimum wage has focused on loss of employment by low-wage workers. This source, however, has been broadly dismissed by minimum wage proponents in recent years on the basis of several (albeit much disputed) studies that found little or no job loss following earlier federal and state minimum wage increases. Of course, even if these findings do hold up, they do not refute the fact that the minimum wage will have economic costs. Although the extra resources needed to cover higher labor costs could theoretically come out of profits, several factors suggest that this source is the least likely to bear costs. Capital is highly mobile and will eventually leave any industry that does not yield a return comparable to that earned elsewhere. This means that capital, and hence profits, will not bear any significant portion of a "tax" imposed on a particular factor of production. Stated differently, employers in low-wage industries are typically in highly competitive industries such as restaurants and retail stores, and the only option for these low-profit-margin industries becomes lowering exposure to low-wage labor or raising prices. With jobs presumed to be unaffected, this leaves higher prices as the most likely candidate for covering minimum wage costs. In fact, supporters of living wage initiatives often admit that slight price increases to pay for the higher labor costs follow minimum wage hikes.

This study evaluates the antipoverty effectiveness of the minimum wage. It uses simulations that take into account both who benefits and who pays for the wage increase assuming that its costs are all passed on solely in the form of higher consumer prices. More specifically, the simulations presume firms raise prices to cover the full amount of the higher labor costs induced by an increase in the minimum wage. These higher prices are costs borne by consumers of goods and services produced with minimum wage labor, with price changes presumed not to induce shifts in spending patterns. In actuality, we expect consumers to balance between higher prices and fewer purchases of items produced by low-wage labor, and employers to balance between higher prices, lower employment and lower profits. It is these behaviors and a rapidly changing economy that make price effects from a minimum wage increase very difficult to isolate. Such behaviors would also yield lower price changes than our simulations assume here, but it additionally implies employment effects as well. In contrast, our approach maintains the assumption of a steady level of employment, the "best-case" scenario asserted by minimum wage proponents. Although highly stylized and probably unrealistic, our analysis demonstrates that the minimum wage can have unintended distributional effects, even in the absence of the employment losses predicted by economic theory.

The distributional consequences of raising a minimum wage will surely depend on whether the federal government passes such legislation or a locality does. At the federal level, price increases will apply nationally and cover costs of all low-wage labor employed anywhere in the country. When adopted in a locality, prices rise to cover only those workers employed in the community. The price changes will differ according to the industrial mix of the nation or the community, and the impact on consumers will depend on their particular purchased bundles of goods and services, including where these items are produced in the case of the locality. Thus, minimum wage laws may be more effective as an anti-poverty program when implemented for the nation than for a locality, or vice versa.

To investigate this possibility, this study compares the distributional impacts of a federal versus state-only minimum wage law. For the state-only increases, the analysis considers the consequences of minimum wage hikes on the residents of the states of California, Florida, New York and Texas. Comparing these findings with the impacts of a federal increase on these residents offers key insights into which policies yield the greatest redistribution of income to the poorest families. For both the cost-benefit and the federal-state comparisons, we consider the hypothetical effects of a 1996 increase in the federal minimum wage from $4.25 to $5.75. This is instead of what actually occurred—namely the minimum wage rose in November 1996 and

then again in 1997 to $5.15.[2] Adjusting for inflation, $5.75 in 1996 is about $6.25 in 2000 dollars—which brings us into the range of minimum wage increases that policymakers are currently considering.

Nine sections make up the remainder of this report. Section 2 lays the groundwork for our no-job-loss assumption by reviewing the possible options for paying for a minimum wage increase and what is known about these options. Section 3 provides an overview of our simulation methodology, including descriptions of the data used. Section 4 summarizes who benefits from an increase in the federal minimum wage, and Section 5 reports how consumers pay for this increase. Section 6 combines the results on benefits and costs to get an estimate of the net effects for families at different points in the income distribution. Section 7 shows how a federal increase in the minimum wage impacts the residents of California, Florida, New York, and Texas, and Section 8 considers how the distribution of costs would have differed if the increase in these states had been state-only rather than a federal increase. Section 9 discusses qualifications of the simulation exercise, and finally, Section 10 summarizes the general conclusions about the minimum wage as an antipoverty policy.

Table 2.1

Corporate Returns by Major Industries Employing Large Shares of Low-Wage Workers ($ Billions)

Major Industry	Total Receipts	Net Income	Profit Rate (Income/Receipts)
Total All Industries	$13,360.0	$577.3	4.3%
Food Stores	$374.4	$5.5	1.5%
Other Retail Trade	$355.9	$6.4	1.8%
Department Stores	$350.7	$9.3	2.7%
General Contractors	$262.0	$4.2	1.6%
Eating & Drinking Places	$168.9	$3.7	2.2%
Entertainment	$111.3	$1.7	1.5%
Apparel & Accessories	$92.4	$1.9	2.1%
Personal Services	$38.2	$1.9	5.0%

Source: Internal Revenue Service, Corporate Income Tax Returns, 1994.

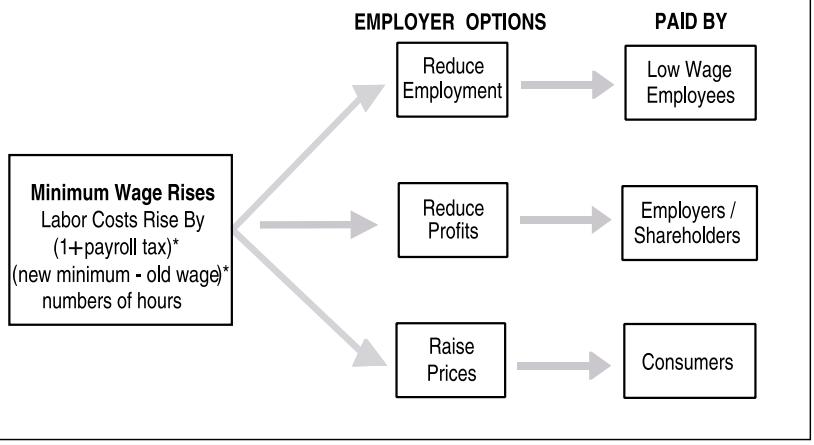
2. Paying for the Minimum Wage

Compared with previous work, these simulations represent a very different approach to assessing the distributional effects of the minimum wage because they account for the costs of the policy change. To place this work in the context of the economics literature, this section reviews the alternative strategies firms can use to pay higher wages mandated by a minimum wage increase. For each strategy, we provide an overview of the economic reasoning and evidence to date. Finally, we relate these findings to our basic assumptions for the simulations. Our goal is to make clear how our simulated results fit into the past research on minimum wage effects.

2.1 The Employer's Problem

Figure 2.1 characterizes the employer's problem in the face of a minimum wage increase. The firm's payroll costs rise by the gap between its old wage and the new minimum multiplied by the number of hours worked at this wage. The firm will also have to pay additional payroll taxes on the higher earnings, so its cost increase exceeds the additional earnings received by workers. The firm can react in a variety of ways, depending on market conditions. These choices are represented by the center column of boxes. First, the employer can cut back the number of hours worked by low-wage employees by reducing their hours or reducing the number of employees. Either way, low-wage workers themselves pay for the higher wages

FIgure 2.1
Employer Options In Response To A Minimum Wage Hike



through reduced work. Second, employers could accept lower profits, assuming they are sufficiently profitable to absorb the extra costs. Finally, employers could raise prices and accept the risk of losing customers as a result. The next three subsections look at each of these strategies in turn.

2.2 Reducing Employment

Historically, economics research on the minimum wage has focused on the issue of employment losses. This focus draws on a fundamental element of economic theory: All else being equal, one purchases less of a good as the price rises. Just as consumers would buy less steak as the price of beef rises and substitute chicken instead, an employer may hire less low-wage labor as the price of that labor rises, and perhaps substitute machinery instead. For each potential employee, the firm decides whether having an additional worker will increase the firm's revenue sufficiently to justify that worker's wage. For most firms, there comes a point where the extra revenue generated by an extra worker declines, perhaps because, for example, there are a fixed number of machines. As mandated wages rise, the extra revenue generated by the least productive workers becomes insufficient to justify their wages, so employment falls.

The vast majority of research on the minimum wage has focused on these employment effects, and the economic debate over these effects has become an important element of the policy debate. For a number of years, the conventional wisdom has held that a 10 percent increase in the minimum wage would reduce teenage employment by 1 to 3 percent. However, a set of studies combined together in Card and Krueger's 1995 book *Myth and Measurement* provided contradictory results. Although the Card and Krueger findings are quite controversial, they have been very influential in policy circles. For this reason, we feel it is valuable to review both sides of this ongoing debate.

The 1 to 3 percent employment decline was the conclusion of a 1982 survey article by Brown, Gilroy and Kohen. This article examined 25 time-series studies of youth employment published between 1970 and 1981, all using aggregate data from the Current Population Survey (CPS). The survey also examined a smaller number of cross-sectional studies that found decreases in teenage employment ranging from zero to more than 3 percent for a 10 percent increase in the minimum wage. Significant employment effects were also found in later studies. For example, Currie and Fallick (1996) found that a 4 percent increase in wages (the average for those workers directly affected by the increase) led to a 3 percent decrease in the probability of young workers remaining employed in 1982.

The studies in *Myth and Measurement*, including one based on California's increase to $4.25 in 1988, stand in clear opposition to these widely accepted findings. They not only fail to find negative effects of minimum wages on employment, but in some cases they actually estimate positive effects. The four central studies differ in the wage increases examined and data sets used, but all four compare a group affected by the minimum wage

increase to one that should be unaffected and attribute the difference in outcomes between these groups to the minimum wage change. Each of these studies has also been subject to critique and reexamination.

The Card and Krueger (1994) study that has received the greatest attention focuses on employment in fast food restaurants. Card and Krueger examined the effect of the increase in New Jersey's minimum wage in 1992, comparing employers in New Jersey and adjoining areas of Pennsylvania. Paradoxically, they found that employment at the restaurants in Pennsylvania fell after New Jersey's wage hike. (Katz and Krueger find similar results using surveys of low-wage and high-wage firms in Texas after the 1990/91 federal minimum wage increase.) However, the study relies on survey data collected by the authors, and there have been a number of criticisms of this data. Neumark and Wascher's (1999) analysis of payroll data for similar restaurants in the same areas reached the opposite conclusion, finding negative effects consistent with the earlier literature.

There is similar conflict around the California study (Card, 1992b), which compared employment growth in California to that of other states following California's minimum wage increase from $3.35 to $4.25 in 1988. Card found that the increase in the California teenage employment rate from 1987 to 1989 was 5.6 percentage points higher than in the control states where the minimum wage had not changed. He also examined the effects on retail trade employment. Using data from the unemployment insurance system, he found an increase in California retail trade employment, relative to the same control group, of 1.0 percentage point, and a decrease of 2.0 percentage points in employment at California eating and drinking establishments. From these results, he concludes that the minimum wage increase did not significantly decrease employment in California. As before, the result depends heavily on the appropriateness of the comparison. There may be reason for skepticism: From 1987 to 1989 California's economy was growing more than one-third faster than any of the control states (Arizona, Florida, Georgia, New Mexico and Texas) and more than twice as fast as some. The additional growth may have obscured any job loss caused by the minimum wage change. A re-examination of the California increase by Kim and Taylor (1995) used County Business Patterns data to compare the change in California employment from 1988 to 1989 with that in the United States as a whole. They analyzed industries within the retail trade sector and controlled for California-specific and industry-specific growth. They found that industries where the minimum wage increase had more bite suffered larger employment losses; for every 1 percent increase in the minimum wage, they estimate that employment fell by 0.9 percent.

Finally, looking across states before and after the 1990 federal increase, Card (1992a) found that states with larger shares of teenagers working at low wages were not more likely to experience a decline in teenage employment. (Although he does not suggest a positive effect in this case.) Deere, Murphy and Welch (1995b) reanalyzed the same data. Like Card, they found no significant employment effects when comparing "low-wage" and "high-wage" states. However, when they compared groups of employees more and less likely to be affected, they found large employment effects. Controlling for business cycle effects, they found that the minimum wage hike reduced the employment rates of teenagers (by 7.3 percent for males and 11.4 percent for females) and of adult high school dropouts (by 3.1 percent for males and 5.2 percent for females). Deere et. al. (1995b) believe that the difference in results can be traced to faster overall employment growth in low-wage states during the period of the study.

It may be possible to reconcile the two sides of the debate by examining the role of short-term versus long-term adjustment. Baker, Benjamin and Stanger (1999) demonstrate that the same data (in this case province-to-province differences in Canadian minimum wages over time) can yield positive and insignificant results (the Card and Krueger findings, 1995) as well as negative and

significant results (the classic economic findings). These alternative findings can arise from analytical approaches that put more weight on short-term variation (Card and Krueger's difference-in-differences approach, 1995) or more weight on long-term variation (Neumark and Wascher's inclusion of more lagged minimum wage effects, 1999).

Card and Krueger (1995) conclude by saying, "we believe that, on average, the employment effects of a minimum-wage increase are close to zero" (p. 383). The publicity around their studies gave minimum wage supporters an economic basis for refuting the predictions of employment losses. Although mounting evidence both continues to support the strong theoretical predictions of negative employment effects (at least in the long run) and reconciles the Card and Krueger (1995) results with earlier findings, the employment-loss argument has lost much of its impact in the public debate.

Even in the absence of employment effects, one cannot conclude that there are no costs to the minimum wage. It merely suggests that we need to look more carefully at other aspects of the question; aspects we turn to in the next two sections.

2.3 Reducing Profits

Since the minimum wage forces employers to pay higher wages, voters commonly assume that minimum wages will be paid out of employer profits. There are several reasons why this is not likely. First, low-wage employers are less likely than other employers to have large profits. The firms that typically employ low-wage workers are in highly competitive industries. Income tax return data for major industries that employ low-wage workers show that most of these industries have lower net income than the average across all industries, as shown in Table 2.1. Low-wage workers are also more likely to work for small employers. (Card and Krueger, 1995) We expect small employers to face greater competition in both the labor market and the product market, meaning that they are unable to command monopoly power in the hiring of workers or in the setting of product prices, and therefore have lower profits.

Second, even among the most profitable firms, capital is unlikely to bear the costs of a wage increase. This is especially true for large, publicly traded firms. It is a general result in public finance that taxes are borne by those who are least able to adjust. Capital stock markets are extremely efficient, and the supply of capital is very price sensitive—meaning that a small decrease in the returns to capital will cause investors to move their money into a firm with better returns. Firms therefore cannot reduce the returns on their stock and still expect investment.

Unfortunately, there is virtually no research on this subject, largely because of the difficulty of getting accurate data. Card and Krueger (1995) take a first stab at the issue using an event study of stock prices of firms that employ many low-wage workers such as McDonald's and Wal-Mart. However, stock prices follow investors' expectations about future profitability, so the connection between stock prices and the minimum wage is tenuous at best. Card and Krueger find little systematic relationship between excess returns and news about minimum wage changes.

Thus, despite the popular belief that firms pay for minimum wage increases through lower profits, there is no empirical evidence to date supporting this hypothesis, and economic theory gives strong reasons why this would not occur.

2.4 Raising Prices

The final option listed on Figure 2.1 is to raise prices. The labor demand curve, which leads to the basic conclusions about employment effects, assumes that product prices are held constant. This is a reasonable assumption for firms that compete with other firms that are not affected by the minimum wage increase, such as out-of-state or overseas firms. However, many of the industries that employ minimum wage workers do not compete in world markets. These include the types of service industries that make up the largest share of low-wage employers: eating and drinking establishments and retail trade. For these industries, an increase in the

minimum wage may represent an industry-wide increase in costs. Therefore, prices for low-wage goods will rise. (Output will also fall, depending on the price sensitivity of consumers.) In this scenario, some of the burden of the minimum wage increase falls on the consumers of low-wage products.

There is anecdotal evidence to support the claim that prices rise as a result of minimum wage increases. For example, the National Restaurant Association (1998) reports that as many as 42 percent of restaurateurs raised prices following the 1996 minimum wage increase. Wilson (1998) also notes that restaurant menu prices increased 2.6 percent in 1997. Furthermore, inflation in the service sector rose 2.8 percent in 1997 after the minimum wage increase compared with the more modest 1.7 percent increase in the overall inflation rate.

Although rigorous research on the subject is limited, three recent articles analyze the impact of a minimum wage increase on prices. Lee and O'Roark (1999) use an input-output model similar to the one described below to estimate price effects in the food and food-service industries. Assuming that employment is fixed in the short run, they calculate the change in consumer prices due to the higher labor costs imposed by a minimum wage increase. They find that a $0.50 minimum wage increase would raise consumer prices of food and kindred products by approximately 0.3 percent. Moreover, the same increase would raise prices by 0.9 percent in eating and drinking establishments, an industry with a higher concentration of minimum wage workers and larger share of labor costs. They also consider the impact of both wage spillovers and a larger increase in the minimum wage. A spillover effect in this case refers to an increase in the wages of those earning slightly more than the minimum wage in addition to wage increases of minimum wage workers. Under these scenarios, they find that consumer prices increase slightly more, but never by more than 1.5 percent, in eating and drinking establishments and by 0.4 percent in food and kindred products.

Aaronson (1997) also explores the effects of increasing the minimum wage on restaurant prices using a competitive market model. He uses several data sources on restaurant prices in the United States and Canada and exploits the variation in time and location of minimum wage laws to form his estimates. His results suggest that restaurant prices rise almost one-for-one with increases in labor costs. A 1 percent increase in the minimum wage is associated with an increase in restaurant prices of approximately 0.07 percent in both countries. Moreover, he finds that these price adjustments are a short-run phenomenon and concentrated in the quarter before and the quarter after the enactment of the minimum wage increase. In fact, he also finds suggestive evidence that these price effects dissipate over time.

Wilson (1998) takes a different approach and instead of concentrating on a single industry, he looks at the macroeconomic price response attributable to a minimum wage increase. Using the Mark 11 U.S. Macro Model, an econometric model of the U.S. economy, he estimates the economy-wide price effects of increasing the federal minimum wage by $1.00 per hour over the course of 2 years (1999 and 2000). He finds that prices would be 0.2 percentage points higher in 1999 and 0.1 percentage point higher in 2000. He also calculates that the consumer cost of the wage increase would be approximately $2.4 billion in fiscal year 1999 and $4.1 billion in fiscal year 2000 due to higher prices and lower real wages.

Lastly, two of the Card and Krueger studies, the New Jersey/Pennsylvania (1994) and the cross-state comparison (1995), include information on price effects. In both of these studies, prices increased faster in the affected states. The comparison between New Jersey and Pennsylvania concludes that "prices rose 4 percent faster as a result of the minimum-wage increase." (Card and Krueger, 1995, p. 54) In the cross-state comparisons, the estimates on prices are very imprecise. Still, Card and Krueger believe that two different sources of data (city-specific CPIs and observations on hamburger prices collected by the American Chamber of Commerce Research Association) indicate the same pattern of faster price increases

in areas more affected by minimum wage increases. In fact, they find that the relationship between higher wages and these higher prices approximates the labor share of product costs, a result consistent with the theory that most of the costs are being passed on in higher prices.

Thus, the existing evidence on the price effects of increasing the minimum wage suggests that some of the burden of the increased wage bills faced by low-wage firms is in fact passed on to the consumer through higher prices. Although the magnitude of this effect may be ambiguous, the direction of the price response seems clear.

2.5 Summary: Assumptions on Paying for the Minimum Wage

For the purposes of this study, we are assuming no employment or profit losses from minimum wage increases. Although most economists remain convinced that increases in the minimum wage will decrease employment, studies by Card and Krueger have convinced many policymakers that such employment effects are very minimal. Alternatively, there is no evidence that minimum wage increases are paid out of firm profits. This leaves price adjustments. If all of the costs of the minimum wage are passed on to consumers in the form of higher prices, then price increases should reflect the wage increase multiplied by labor's share of the total cost. Surprisingly, given that we would expect some of the additional cost to be paid through lower employment or lower profits, the small amount of research that has been conducted on price effects of the minimum wage is consistent with this conclusion. Of course, in order to have no job losses and no profit loss, consumers must continue to purchase the same amount of low-wage goods at the higher price. Thus, our simulations make three related assumptions:

- Consumers do not reduce consumption as prices rise;
- All increased labor costs are passed on in higher prices; and
- Low-wage workers remain employed at the same number of hours after the minimum wage rises.

The same assumptions hold whether the wage increase is enacted at the federal level or at the state level. A state-only increase obviously has a much smaller impact on labor costs nationally and therefore on prices nationally. However, we may be more willing to believe that consumers are not as sensitive to price changes in a relatively closed economy with fewer outside options. It may be easier, for example, to substitute non–New York goods in response to higher New York prices than it is to substitute non-U.S. goods when U.S. prices rise. We will return to these issues in Section 8.

Taken together, our three assumptions allow us to simulate the expected effects of the minimum wage increase in a relatively clean manner. We do no necessarily believe that these assumptions hold in reality. It is more likely that firms will combine the three strategies. As we have seen, the ongoing variability in the low-wage labor market makes it difficult to detect even sizable employment effects. If firms use several strategies at once, the effects on employment, profits and prices are all individually diluted; for this reason, it would be difficult to detect these effects empirically with enough precision to be useful. Assessing the effects in a simulation environment, on the other hand, allows us to better understand the implications of the minimum wage—in this case, when we allow for the no-job-loss assumption that is currently very popular.

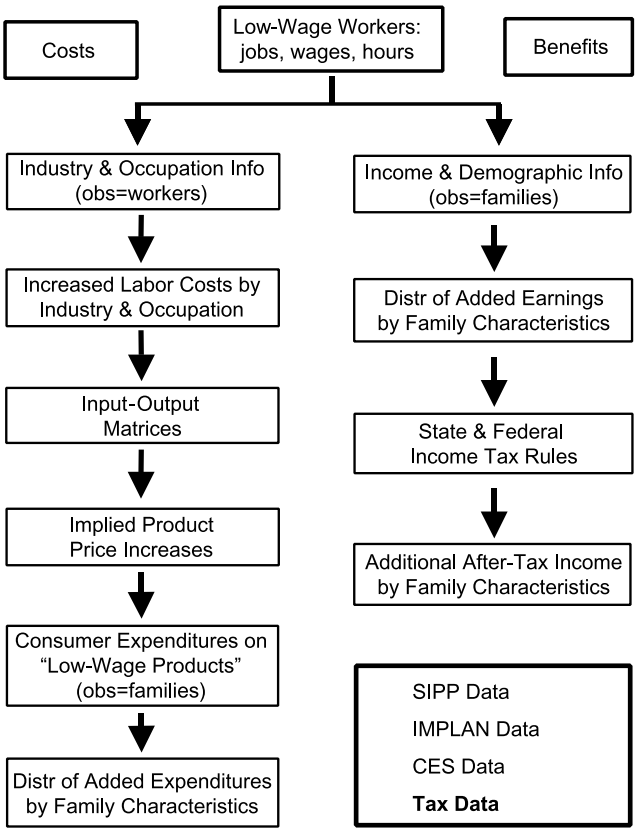
3. Overview of Methodology and Data

Although our main theoretical focus has been on costs, to understand the distributional effects of a minimum wage increase, it is vital to also consider benefits. For this reason, our analysis is split, unsurprisingly, into two main branches: benefits and costs. In this section, we provide an overview of the methodology and the data used in both branches.

3.1 Data

The two sides of the simulation analysis—benefits and costs—require two different data sets. To determine benefits, we rely on data from the Survey

Figure 3.1
Steps in Developing Distributional Results



of Income and Program Participation (SIPP). The SIPP is a nationally representative survey of households conducted by the U.S. Census Bureau. We model the population based on SIPP data from 1996. The SIPP data set provides information on households, families and individuals older than 15 years of age. It includes monthly data on income and earnings by source, wages and hours worked, demographic characteristics, family structure and public assistance program participation. These data allow us to identify low-wage workers, their occupations and industries, their family income, and sufficient information to determine income tax burdens under alternative income scenarios. Thus, we can use the SIPP to simulate both the before- and after-tax effects of a minimum wage increase on the family income of families with low-wage workers.

To relate price increases to a family's purchases, we rely on data from the Consumer Expenditure Survey (CES), matched to the same time period as the SIPP. This survey includes information on family expenditures on a variety of goods and services. It also includes a number of income measures and demographic characteristics, including family structure. Although the income and demographic measures are not as precise as those in the SIPP, in both data sets we can identify the same major categories of families—categories such as position in the income distribution, poverty level or welfare status.

To follow the money from the workers who benefit to the products they produce and finally to the consumers of these products, we use national input-output tables. These tables are constructed by the Minnesota IMPLAN Group, Inc. from databases on employment, value added, output and product demand for 528 industrial sectors for all states and counties in the United States The IMPLAN data are derived from data collected by the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics and the U.S. Census Bureau, among other sources.

Figure 3.1 lays out the information collected from each of these data sets and how they are used in the two branches of the analysis. These steps will become clearer as we describe the methodology below.

3.2 Overview of Methodology

First we calculate from the SIPP data the number of workers affected by the minimum wage increase, the number of hours they work, and the additional earnings when wages are moved up to the new minimum. This information is used both for the benefits and the costs calculations.

On the benefits side, we want to understand how much families of different types benefit from the wage increase. Families benefit through higher after-tax earnings of low-wage workers in the family. To calculate this benefit, we determine the earnings increases for all low-wage workers in a family, assuming no change in work hours, and then recalculate the

after-tax income for the family as a whole.

Costs to families are more challenging to infer. The minimum wage increase results in higher labor costs due to both higher wages and higher payroll taxes, primarily Social Security contributions. The simulation assumes that firms respond to higher labor costs by increasing prices; thus consumers of goods produced with low-wage labor face higher prices (and higher sales taxes, since sales taxes are based on price). Using information in the SIPP on the industries employing low-wage workers, we can identify how much total costs rise in different industries. We then use input-output tables to translate higher industry costs into the prices of final consumer goods.

Once industries are mapped to consumer goods, we can use the CES to relate price increases to the goods actually consumed by in-state families, as opposed to out-of-state families. In this way, we can assess which families pay for the minimum wage increase through higher prices.

4. Who Benefits from a Federal Minimum Wage Increase?

This section first shows how to calculate the additional before-tax and after-tax earnings for each family. It then examines how these additional earnings are distributed across families by income level, with an emphasis on particular types of families that might be considered the most important targets of minimum wage policy. Lastly the section reviews the previous work that has been done on the distribution of benefits.

4.1 Calculating the Distribution of Benefits

The family's benefit is calculated as follows. For each worker in the family identified as earning an hourly wage below the new legally specified minimum wage level, we assume his or her hourly wage rises to the new minimum, that is, from as low as $4.25 (the old minimum) to exactly $5.75 (in 1996 dollars). We use the new wage rate to calculate the implied increase in total earnings for each worker during the year based on the annual number of hours worked.

We raise family gross earnings and income by the combined increase in earnings of all family members. This is the gross benefit. For the after-tax benefit, we adjust the increased income for tax changes, accounting for (1) the federal income tax, including the appropriate standard deductions and exemptions for the family's size and structure; (2) the Earned Income Tax Credit (EITC); (3) the state income tax, including the appropriate standard deductions and exemptions for the family's size and structure; and (4) Social Security contributions. Thus, our procedure yields a family-level benefit value of both gross and after-tax income for families with low-wage workers.

We used 1996 schedules for federal taxes. We had ready access to state tax software based on 1993 schedules and so we used 1993 tables for state taxes after inflating the relevant cutoffs and deductions up to 1996 dollars. We are therefore ignoring state tax code changes (other than inflation adjustment) since 1993. The exception to this are the states we will focus on later. For those four states we update the software to 1996. All results are presented in 2000 dollars.

The strategy of calculating benefits at the family level permits us not only to determine the before- and after-tax benefits of the wage increase, but also to relate these benefits to other family characteristics. We can assess the fraction of benefits received by families sorted by quintile in various income distributions, by income as a multiple of the poverty level, by presence of children, by headship and marriage status, by wage distribution or by dependency on public assistance. These results are presented below. Further information is given in the data Appendix Table B.1.

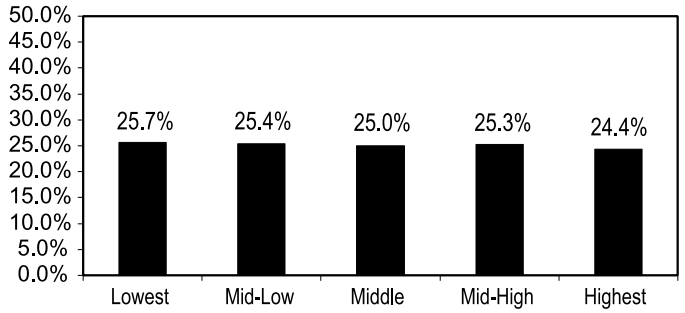
4.2 Distribution of Benefits Across Families by Income: Before and After Tax

The first issue in determining which types of families benefit from the minimum wage increase is to ask which families include workers who earned less

than $5.75 (in 1996 dollars) prior to the increase. We start by dividing families into five income quintiles. Each income quintile represents one fifth or 20 percent of families in the United States, so the lowest income quintile includes the 20 percent of families with the lowest income, the highest income quintile represents the 20 percent of families with the highest income, and so forth.

Figure 4.1
Percentage of Families in Each Income Quintile Who Benefit From A Minimum Wage Increase

Source: Appendix Table B.1



For each of these five quintiles, Figure 4.1 shows the share of families that include one or more low-wage workers. The result is perhaps surprising. The minimum wage population is almost perfectly distributed across the income distribution: 25.7 percent of families in the lowest quintile include low-wage workers and therefore benefit from the minimum wage increase. This drops about 1 percentage point as we move into higher income brackets: 24.4 percent of families in the highest income quintile have a worker who will benefit from a minimum wage increase. Thus, approximately one in four families benefit, regardless of their income.

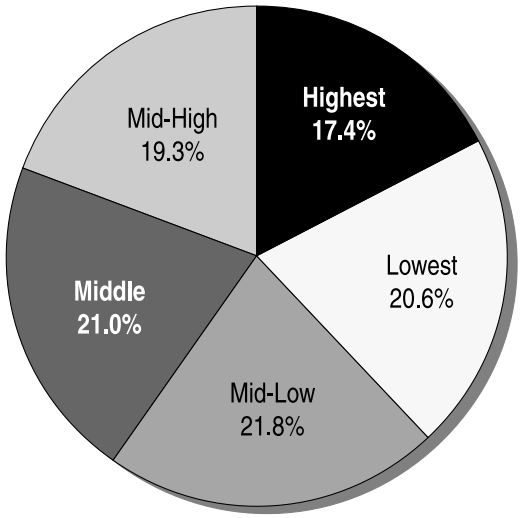
Perhaps the more relevant question is where do the dollars go? If high-income households have low-wage workers who typically work fewer hours than the low-wage workers at the bottom of the distribution—part-time teenagers as opposed to family breadwinners—then we would expect the dollars of the wage increase to flow disproportionately to the poorer families. Figure 4.2 presents the distribution of additional earnings across the five quintiles. If the benefits were identical for all families, each quintile would receive 20 percent of the extra earnings. A quintile group receives more than its share of the additional earnings if it receives more than 20 percent.

The story here is the same. Benefits are evenly divided across quintiles. Of the five quintiles, the mid-low and the middle group do slightly better. The 40 percent of families ranked from the 20th to the 60th percentiles in the income distribution receive 43 percent of the additional earnings from the minimum wage. Conversely, the top 40 percent of families receive almost 37 percent of the extra earnings. Finally, the poorest 20 percent of families get a little more than 20 percent of the additional earnings. The minimum wage increase distributes money to families at all income levels with little preference given to any group.

Since our tax system is progressive, the distribution of extra earnings changes when we consider the shares of earnings after taxes, as illustrated in Figure 4.3. Of the original $31 billion dollars in higher earnings, 22 percent is due in income and payroll taxes. The poorest families lose less of their extra earnings to taxes: their share drops 2 points from 20.6 percent to 18.7 percent. After taxes,

Figure 4.2
Percentage of Pre-Tax Benefits Distributed by Income Quintile

Source: Appendix Table B.1

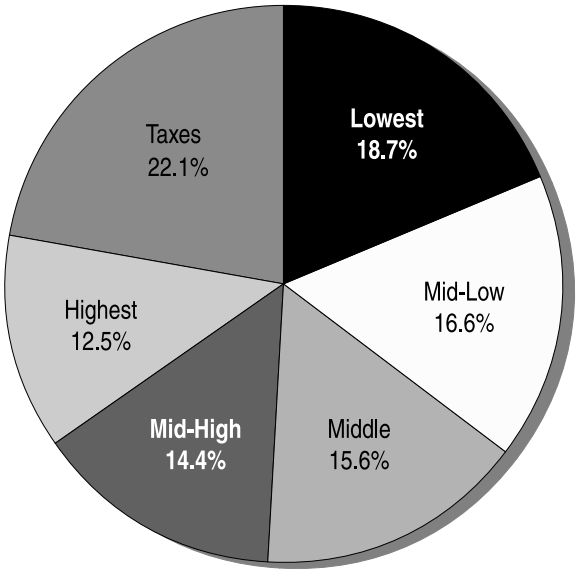


the bottom income quintiles fare better. The mid-low and middle quintiles share 32 percent of the extra earnings, whereas the share to the top 40 percent falls from 37 percent to 27 percent.

Ranking families by income does not take into account family size. For example, a single person with an income of $20,000 is far better off financially than a family of five living on the same income. Poverty thresholds differ by family size, so we can use income relative to the poverty threshold as a measure of economic well-being for families of different sizes. It also allows us to consider directly the question of what share of the benefits from the minimum wage goes to families in poverty. This question is answered by Figure 4.4. Looking again at after-tax shares, we see that the 15 percent of families that are living in poverty receive 17 percent of the benefits of the minimum wage hike. However, another 23 percent of the benefits go to families with income above 300 percent of poverty. Thus, the share of additional earnings going to poor families is slightly larger than their share in the population, but the majority of the additional earnings do not go to poor (or near poor) families.

Figure 4.3
Percentage of After-Tax Benefits by Income Quintile

Source: Appendix Table B.1



4.3 Benefits to Other Target Families

When the minimum wage is compared with poverty thresholds for families of three or four, we are implicitly calling on the minimum wage as a strategy to help support poor families with children. Indeed we may be more concerned about families with children who depend on the minimum wage for their livelihood. The minimum wage increase has also been proposed as a method to help families such as those moving from welfare to work. How does the minimum wage increase benefit these "target" families?

Table 4.1 looks at the share of the increased earnings that goes to families with children who depend on low wages as a main source of income. We define low wages in this case as less than $7 an hour in year 2000 dollars. This is slightly larger than the actual minimum wage group but it may be better to consider all working families who make wages this low rather than just those who are exactly at the minimum wage line. In any case, this group includes all minimum wage workers: 4.8 percent of families both support children and receive more than half of the family's total income from low-wage earnings. Although these families do receive a much greater share of the increased earnings relative to their share in the population (19.1 percent of the before-tax increase going to this 4.8 percent), four-fifths of the increased earnings go to families outside of this target group. Therefore, whereas we may believe that a minimum wage income is too meager to support a family, only a tiny fraction of families are supporting children with low-wage earnings and most of the increased income does not go to these families.

Turning to welfare, Table 4.2 presents similar data for families receiving welfare at some time during the year. Our broadest definition of welfare includes families receiving cash aid (prior to welfare reform) and families receiving food stamps, which are typically working families. Welfare families with children account for 7 percent of families; they would

receive about 12 percent of the additional earnings generated by a minimum wage increase.

4.4 Previous Results on the Distribution of Benefits

A number of previous studies have assessed the expected distributional effects of minimum wage increases by family income. All of these studies use data from the Current Population Survey (primarily the March supplemental survey data). The studies examine actual or proposed minimum wage increases from the 1970s (from $2.00 to $2.65) to the early 1990s, with percentage increases ranging from 22 to 50 percent. The results are surprisingly consistent: As Horrigan and Mincy (1993) conclude, "Although minimum wage increases have modest effects on *earnings* inequality, they have virtually no effect on *income* inequality."

Table 4.3 places our results alongside the results of four studies that examine the distribution of additional earnings across all income groups. In these studies, families are divided either by gross income level (deciles or quintiles) or by family income relative to the poverty level. Looking at income quintiles, both Johnson and Browning (1983) and Horrigan and Mincy (1993) show that the additional minimum wage earnings are only mildly redistributive, with somewhat larger benefit to families in the second to lowest income quintiles.

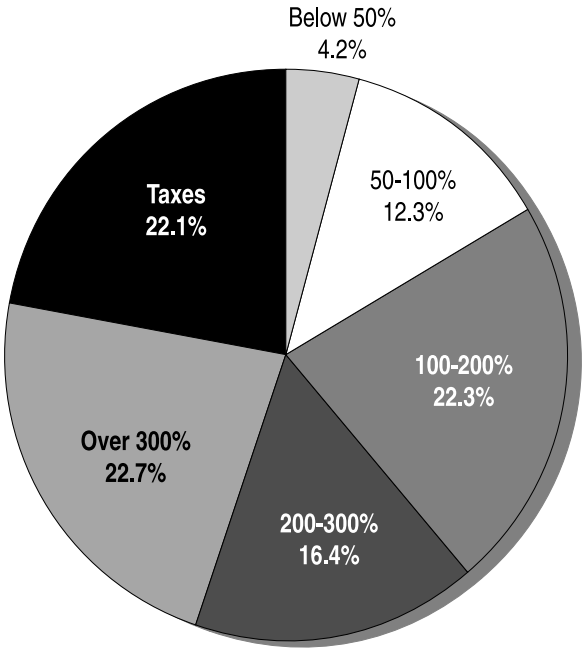
When results are reported by income relative to poverty instead of income quintile, the findings are similar. Although the Burkhauser and Finegan (1989) and the Burkhauser, Couch and Glenn (1996) studies report only the share of affected workers by income-to-poverty group rather than the share of all families in these groups, the share of increased income is not significantly different from the population shares. For example, in the 1989 study, 18 percent of affected workers had incomes below poverty, whereas 13 percent of affected workers have income below poverty in the 1996 study. Thus, affected workers in poverty get slightly less in the 1996 study. Workers in the over 300% of poverty group got less than their population shares both in 1989 and the 1996 studies.

Our results are almost identical to the previous studies. We match the broad outline found by examining income quintile and the more focused poverty level simulations. On the benefits side, our simulation falls directly in line with prior literature.

Within this literature, only Johnson and Browning (1983) consider the costs of the minimum wage beyond employment effects. Given a proposed increase from $2.30 to $2.80, they calculate that additional earnings would result in a $5.6 billion increase in gross family income. The distributional effects of this increase are reported in Table 4.3. They then go two steps further. First, they recognize that someone must pay for these additional earnings. Therefore, they distribute the $5.6 billion in costs across all households in proportion to disposable income, which they consider approximately equal to a general increase in price level.[3] They then take the net income change (from adding gross benefits and subtracting gross costs) and adjust it to get after-tax and after-transfer income.

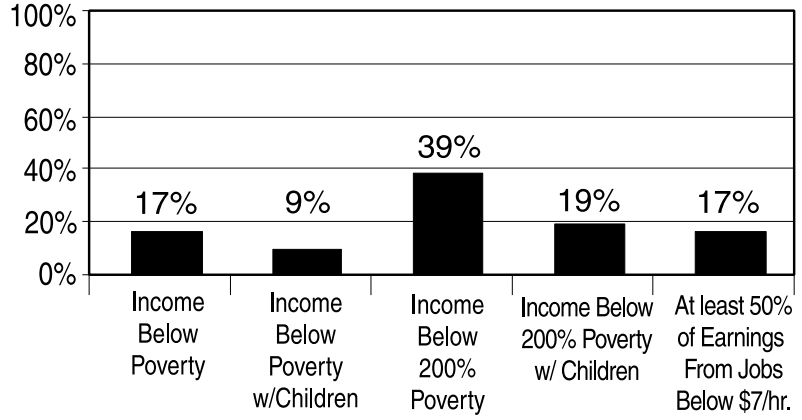
Figure 4.4
Percentage of After-Tax Benefits by Ratio of Income to Poverty Line

Source: Appendix Table B.1



They find that the final income distribution is nearly identical to the pre-increase income distribution.

Figure 4.5
Percentage of After-Tax Benefits Going to Various Families
Source: Appendix Table B.1



4.5 Summary: Distribution of Benefits

The minimum wage increase is an inefficient way to boost the incomes of those supporting families with low-wage work. Figure 4.5 summarizes the share of increased earnings that go to families we typically think of as the intended beneficiaries of minimum wage increases. Only 16.5 percent of benefits go to people supported primarily by minimum wage work. About 19 percent of the increased earnings go to families with children living below 200 percent of the poverty threshold, a common definition of the working poor or near poor. If we include all poor and near-poor families, with and without children in the household, 39 percent of after-tax benefits go to the poor. A larger share of the before-tax benefits go to such families however, unlike most welfare programs, increased earnings from the minimum wage are taxable. So 22 percent of the increased earnings are collected back in income and payroll taxes. Even after taxes, 1 in 4 dollars of increased earnings goes to families in the top 40 percent of the income distribution.

5. Who Pays for a Federal Minimum Wage Increase?

The benefits of a minimum wage increase are readily observed. Those families who have a worker at a low-wage job are well aware of exactly how much money they can expect to gain from a minimum wage increase. These families have reason to be happy about minimum wage increases. Section 4 showed that they are spread across the income spectrum and compose approximately a fourth of the population. Thus there is a large segment of the population that policymakers could benefit from increasing the minimum wage.

There is an even larger segment of the population that loses from a minimum wage increase. As prices rise on goods that rely on low-wage workers, all consumers of the product are essentially subsidizing the low-wage worker. As we will show in this section, prices rise on a wide variety of goods, imposing across-the-board price increases that hit all consumers. One of the goals in this paper is to make clear who bears these costs. Then policymakers can judge whether the benefits are sufficient to impose the costs of higher prices on consumers.

As we noted earlier, increasing the minimum wage increases the before-tax earnings of working families by $31 billion. From the employer's perspective, however, the increase in labor costs will be greater than the increase in earnings since, in addition to higher earnings, employers also will have to pay higher payroll tax contributions of more than $2 billion. These after-tax labor costs of $33 billion are the total annual cost of the minimum wage hike for employers of minimum wage workers.

We have assumed that all added labor costs are passed on in the form of higher prices, and firms neither lose profits nor reduce employment. To assess the distributional effects of the minimum

wage increase, we translate the additional labor costs into product prices to gauge how much prices have to increase to cover the new costs. We then examine family consumption patterns to identify the added costs per family.

For a federal minimum wage increase, we assume a national market in determining how prices change. Thus we determine how much prices rise in the United States as a whole, and impose these price increases on all consumers. Then we see how the consumption costs are distributed across families broken down by income, marital status, and presence of children. In Section 7, we compare the effects on American consumers of this federal wage increase to the effects of a federal increase on consumers of particular states.

5.1 Attributing Labor Costs to Price Increases

The first step in determining who pays for the minimum wage hike is calculating the impact of the increased labor costs on the total cost of final goods and services produced. Our analysis assumes that if the cost of labor increases in a particular industry, the price of that industry's output will rise to increase consumer expenditures by the same amount. However, there are two ways for the total cost of goods to increase after a minimum wage increase. First, there is the direct effect on the cost of labor for industries hiring low-wage workers. Second, there is the indirect effect through intermediate goods. Although some portion of an industry's output is consumed by final users (e.g., households and government), the rest of the output is allocated to intermediate use, where the output of the original industry becomes an input for another. Thus, even if an industry employs no minimum wage workers, the prices for that industry's output may rise because the industry uses goods or contracts for services produced with minimum wage labor. This feedback through intermediate uses continues ad infinitum, so the price shock from the wage hike propagates throughout the economy. Appendix A describes in detail how we use input-output analysis to account for this feedback and infer ultimate price changes in goods and services attributable to an increase in the minimum wage.

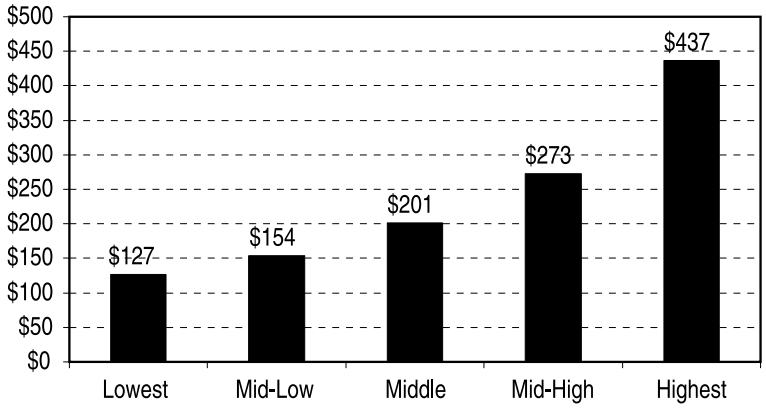
We start by determining the industries that employ low-wage workers. From the SIPP, we can identify all industries that employed workers at wages below the new minimum of $5.75. Considering all low-wage workers in a given industry, we can infer the total increase in industry labor costs resulting from the wage hike. In addition to increased earnings, firms must also make additional employer contributions for Social Security on the higher earnings. Taken together, we define the combined increase in earnings plus contributions as the total cost increase for the industry. For the federal increase in the minimum wage (our base case), these costs apply to all U.S. workers and all U.S. industries. For a state increase in the minimum wage (our alternative scenario), these additional costs apply only to in-state workers and in-state industries.

The next step is to translate these cost increases into price increases on final goods. Since we have a value for the cost increase in each industry, and we know each industry's contribution to each final good, we can infer the increased cost of the final consumption goods of each industry. The input-output tables give only extremely broad definitions of final goods (government, consumer goods, etc.), including exports. Each industry in the input-output tables is matched to a set of commodities that it produces. Thus we know how much prices rise for any given type of commodity. We place each of these commodities into a bundle, such as food inside the home, food outside the home, rent or home ownership costs, automobile expenditures, out-of-pocket health care and many others. We determine how much more it costs to produce the goods in each bundle due to the wage law, and then we apply this price increase as a percentage change in the price of the goods. These price increases are what we use to determine the effect of the minimum wage on consumers.

We are now parallel to the starting point on the benefits side. Once we have an estimate of the price increase for consumer goods, we use the CES to

Figure 5.1
Average Annual Cost by Income Quintile (2000$)

Source: Appendix Table B.2



determine how much of each good families buy. Here we perform an identical bundling of goods into the same categories as we mentioned above. Then we apply the price increase previously computed to determine how much more money the consumer must spend in order to purchase the same amount that they purchased before. Adding up across bundles we get an estimate of the increased expenditures required for a family to maintain its original level of consumption after the price increases.

As with the benefit side, analyzing costs at the family level allows us to relate the expenditure increases to family characteristics. In particular, we measure the additional costs to families according to their income and consumption quintile, income relative to the poverty level, welfare status, marriage status, classification as female headship and the presence of children. All of these can be found in the data appendix as Table B.2.

5.2 Price Increases From Increased Labor Costs

After payroll taxes, the $1.50 increase in the minimum wage costs U.S. employers of low-wage labor $33 billion annually. We can understand the effect of the minimum wage by considering the effect on a subset of heavily impacted industries. The direct increase in labor costs by industry/commodity is listed in the first column of Table 5.1. Based on the cost translation from the input-output procedure, the second column shows the final increase in costs to U.S. industries, including the cost of intermediate goods. In a number of cases, the final cost increase is lower than the direct increase in labor costs. This can be caused by one of two things. The final users of the outputs may be outside the United States In this way, we export some of the costs of the wage increase. Alternatively the costs may be redirected to government expenditures (which we do not track) or into other goods—thus showing up elsewhere on the table as "final costs" for some other commodity. This also explains the cases where final costs are greater than direct costs. The industry uses as inputs the output from other industries employing low-wage workers. For example, a large portion of the construction industry is building residential homes. These homes then become an input to the real estate industry, which sells the homes. Thus, much of the direct costs to the construction industry show up in the real estate industry's final costs.

The magnitude of the final price rise, of course, depends on the size of the labor cost increase relative to the industry's overall costs of production. Although we have reported costs by industry, we are actually interested in the price increase on the final consumer goods produced by those industries. Ninety-three percent of the additional labor costs are paid for domestically, accounting for almost $31 billion nationally. To calculate the price effects, we have to map industries and commodities from the input-output results into personal consumption items. For example, we map grocery stores, dairy product stores, retail bakeries and food stores into the expenditure category "food inside the home." For broad groups of consumption goods, Table 5.2 reports the share of the total cost increase in the United States paid through these consumer items. Food outside the home accounts for the largest share of additional costs, as we would expect, since eating and drink-

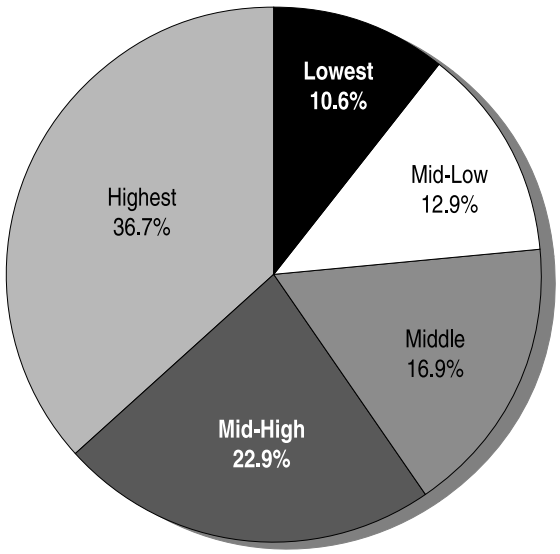
ing establishments are the industry far and away most affected by the increased labor costs. However, as this table also shows, the higher prices occur in a very long list of goods purchased by families.

For each good, dividing the additional costs by the total expenditures on that good yields a percentage cost increase. We refer to these price increases as implicit incremental tax rates on household consumption goods. Essentially, the incremental tax rate tells us the rate by which consumer prices must increase to cover the total costs added by the minimum wage hike. Table 5.3 presents examples of the size of the incremental price increases for different goods and services. These price increases are relatively small, usually, although not always, less than 2.5 percent. Education and social services, moving and storage, food outside the home and miscellaneous personal services such as beauty and barber shops experience the largest incremental price increases. It is worth noting that although these price increases appear small enough to justify the assumption that consumption levels do not change, most families facing these higher prices do not receive additional earnings, so the higher prices will require either a reduction in consumption or a reduction in savings.

5.3 How Do the Simulation Price Increases Compare With the Previous Literature?

We find price increases due to a minimum wage hike that are comparable, although not identical, to those found in the few previous studies. Lee and O'Roark's (1999) input-output model is the only study that approaches the question with an analogous simulation method. As noted in Section 2, they find that a 12 percent increase in the minimum wage leads to a 0.89 percent increase in the prices of eating and drinking establishments and a 0.30 percent increase in those of food and kindred products. We consider a 35 percent minimum wage increase; therefore, in order to compare price effects across studies, Lee and O'Roark's figures must be tripled. Thus their 2.7 percent increase for food consumed outside the home should be compared with our 4.1 percent increase. For food consumed

Figure 5-2
Percentage of Minimum Wage Costs by Income Quintile
Source: Appendix Table B.2



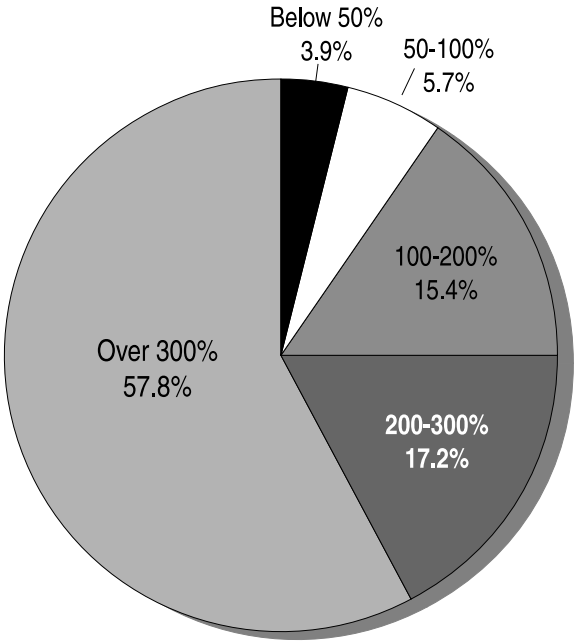
in the home, we found price effects almost equal to theirs: We find a 0.8 percent increases in prices, whereas they suggest a 0.9 percent increase. The most obvious difference between the two studies is that Lee and O'Roark do not account for the additional payroll costs that employers must bear when the minimum wage increases. In contrast, we include the 7.5 percent payroll tax, which increases our estimates relative to theirs. Accounting for this difference, the gap between our price effects and theirs narrows for food outside the home and widens for food inside the home.

Our calculations are also in the same range as those found by Aaronson (1997), who uses an econometric estimation strategy to relate price changes at a given time and place to changes in the minimum wage. After his estimates are scaled for a comparable 35 percent increase in the minimum wage, he finds a 2.45 percent increase in restaurant prices, approximately 1.7 percentage points less than our calculation. Much of this difference probably stems from the difference in methodology; Aaronson attempts to estimate what we simulate.

Lastly, when we simulate the effect of a 35 percent minimum wage hike on economy-wide prices, we arrive at an overall increase of 0.86

Figure 5.3
Percentage of Minimum Wage Costs Paid by Income Relative to Poverty

Source: Appendix Table B.2



percent. We find this by calculating a weighted sum of our individual industry price effects, using consumption shares in the economy as weights. In comparison, Wilson (1998) finds that a 19.4 percent increase in the minimum wage causes economy-wide prices to rise by 0.2 percent in the first year after the change and by an additional 0.1 percent in the second year. Put in terms of a wage change of the same magnitude as we consider, Wilson finds a 0.54 percent overall price increase. It is not surprising, however, that our calculations are larger than Wilson's. We calculate price effects in the absence of any employment effects, whereas the macroeconomic model used by Wilson likely attempts to account for any changes in employment caused by a wage increase. Since we assume no employment adjustments occur, our price effects are an upper bound to what Wilson was attempting to estimate.

5.4 Distribution of Costs Across Families

These implicit tax rates allow us to calculate the distribution of costs across families, just as we previously calculated the distribution of benefits across families. We use consumption data from the CES and apply the implicit tax rates to actual purchases by consumers. Nationally, consumers pay $31 billion more for goods after the minimum wage increase. As we did for the benefits side, we consider the different costs for families by income quintile, income relative to the poverty level, family structure and welfare recipiency.

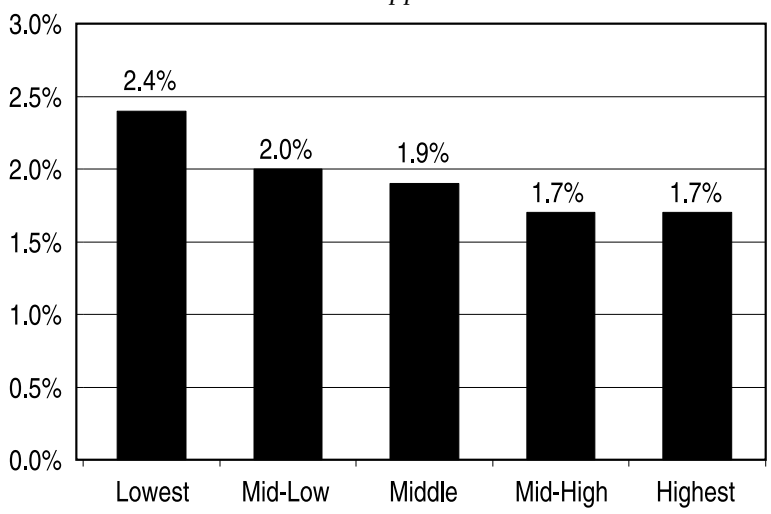
On average, each family pays $238 more per year for their purchases after the minimum wage increase. The exact amount a family pays depends on its level of consumer expenditures, which typically varies by income. For this reason, it is again helpful to distinguish the costs in higher prices in the five income quintiles. Figure 5.1 shows the average annual cost for families in each of the income quintiles. These costs range from $127 annually for families in the lowest category to $437 for the richest families.

If we translate these costs into shares of the total costs, we get Figure 5.2. The richest 20 percent of families pay 37 percent of the costs for the minimum wage, while the poorest 40 percent carry 24 percent of the burden. We can also consider the distribution by income relative to poverty as in Figure 5.3. When we looked at benefits, we saw that families living below the poverty threshold received a smaller share of the benefits than families with incomes more than triple the poverty threshold. On the cost side, families living in poverty pay only 10 percent of the costs, compared with the 58 percent of costs paid by families with incomes greater than 300% the poverty threshold. In this way, the costs appear to be targeted better than the benefits.

One of the realities of minimum wage policy is that families are unlikely to associate these minor price increases directly with the wage increase. Imagine, however, a sales tax that had the identical effect. That is, instead of increasing wages, the government could impose a sales tax on specific products and the proceeds from the tax could be given to supplement the earnings of low-wage workers. Of course, no such tax is being considered, but it is useful to consider the price effects

Figure 5.4
Minimum Wage Burden Expressed as Equivalent Sales Tax Levy by Income Quintile

Source: Appendix Table B.2



in this context. In this way we can evaluate the minimum wage increase just as we would a potential new tax.

There is an important distributional difference between a sales tax and a minimum wage price hike. Sales taxes specifically exclude goods that are considered necessities, such as health care, housing and food purchases. By excluding goods that are important to low-income families, the sales tax is more progressive (i.e., taking a higher percentage from the rich than from the poor) than it otherwise would be. The minimum wage price increases do not include this redistributive feature. Prices go up on a variety of goods; many of which are purchased just as much by the poor as by the rich. So to take the same amount of money from each group as the minimum-wage-induced price hike does, we would have to charge higher sales taxes on the poor than on the rich. If the minimum wage hike were as progressive as a sales tax, this feature would disappear and the sales tax would increase the same for everyone.

Figure 5.4 shows the sales tax increase that would have to be imposed on each income quintile to collect the same amount as implied by the minimum wage increase. So a family in the lowest income quintile that lived in California, where sales tax is already 8.25%, could expect to pay an extra 2.4 percentage points for a total tax of 10.65% on all goods subject to a sales tax. As this figure shows, this would be a regressive sales tax increase, meaning that the minimum wage would impose a higher effective sales tax on low-income families than it would impose on middle- and higher-income families. The poorest families would face a 2.4 percentage point increase in sales tax, whereas the richest families would have an increase of only 1.7 percentage points. So although the rich pay more in terms of dollars, a "minimum wage tax" would be more regressive than a sales tax.[4]

5.5 Summary: Distribution of Costs

Overall, consumers would pay $31 billion annually to fund a federal minimum wage increase of $1.50. These costs are incurred through price increases of up to 5 percent on a broad range of goods and services produced throughout the United States. For the average family, this translates to $238 in increased costs per year, although the amount varies by income level, ranging from $127 for the poorest families to $437 for the richest. For families, the additional costs annually amount to a 1.7 to 2.4 percent increase in the effective sales tax, with the tax rates the highest for the poorest families.

Looking across the income distribution, the implicit increase in the sales tax is highest for the lowest income quintile, those in the lowest consumption quintile, and for those with income below half of the poverty line. The increase is smallest for those families in the top income range. Thus, if one values progressive taxation, one should be wary of minimum wage laws.

6. Net Effects of a Federal Minimum Wage Increase

In the introduction, we posed the question of the target effectiveness of the minimum wage, where we consider the policy well targeted if the benefits accrue disproportionately to low-income families and the costs fall disproportionately on high-income families. The previous two sections examined separately the benefits and the costs of the minimum wage for different categories of families, assuming that all costs are passed through as higher prices. We now bring these two sides together. In this section, we explore the net effects across different groups of families to examine how well the minimum wage increase meets this goal. We then turn to the aggregate costs and benefits for U.S. workers, consumers and taxpayers.

6.1 Net Effects by Income Quintile

Although the data from our two surveys (the SIPP and the CES) are not completely comparable, we can get a suggestion of the net distributional effects of the minimum wage increase by matching the quintile estimates for benefits and costs. Table 6.1 presents these net effects. In each case, we distinguish families with low-wage workers from other families.

Within each income group we have two kinds of families, those with low-wage workers and those without. These two types of families are the basis for understanding what a minimum wage law does to income distribution, since only some families benefit but all families pay through higher prices. Thus the costs listed are the costs that all families pay due to the rise in prices. The benefits listed only go to families who have a minimum wage worker. Note that the benefits given in the third-to-last column are net benefits; the column is calculated as the average benefit to a family with a minimum wage worker minus the average cost the family will pay in higher priced goods. As an example, 25.7 percent of the families in the bottom income quintile have a minimum wage worker. These families on average get $929 in after-tax benefits.[5] On average they pay $127 in higher prices. Thus, their net (of increased prices) benefit in Table 6.1 is $929 – $127 = $802. The last table column averages these numbers by taking into account the fact that only about one in four families gets the benefit listed, whereas all families pay the costs.

The table shows that half of the redistribution of income to the bottom quintile occurs between poor people instead of from rich to poor people. For example, on net, the average amount a family in the lowest income quintile received was $112 annually from the minimum wage increase. Thus, there is some redistribution from wealthy families to poorer families. Unfortunately the "average" family we present is entirely mythical; there is a sharp distinction between a family that wins and a family that loses. Within the lowest income quintile, only a family with a low-wage worker received a net benefit, making $802 more than they paid out in higher prices. These families represent about one in four families in the lowest income quintile. The other three fourths of families lost an average of $127 in higher prices and received no additional earnings. Thus, a minimum wage proposal is equivalent to taking $127 dollars from three poor (bottom fifth) families, totaling $381, plus $421 dollars from nonpoor families and giving the sum, $802, to a fourth poor family. Thus three out of four poor families pay half for half the benefits received by the few poor families that benefit.

As one moves up the income distribution, the costs begin to outweigh the benefits, so that the average family in the highest income quintile paid on net $277. High-income families with low-wage workers still averaged more in additional earnings than they paid in higher prices. Averaging across all families, the net effect, seen in the last column of the last row, is negative, since 22 percent of benefits go to taxes.

6.2 Aggregate Costs and Benefits

In considering the benefits and costs, we have primarily concentrated on the effects for different types of families. However, it is helpful to keep in

mind the magnitude of the minimum wage increase, and its distribution among workers, taxpayers and consumers. Nationwide, the wage law would have resulted in higher annual expenditures of $33 billion. The cost of a minimum wage increase of the size we simulate is comparable to the amount spent annually by the federal government for the Earned Income Tax Credit program.

The top panel of Table 6.2 summarizes the allocation of these total benefits across different economic agents. From the national minimum wage increase, low-wage workers receive $31 billion annually in higher gross earnings, but only $24 billion dollars in higher after-tax income. The rest goes to income and payroll taxes.

The cost side is reported in the lower panel of Table 6.2, where costs are split between consumers and taxpayers, in and out of the United States (due to exports). On net, the aggregate cost for consumers exceeds the increase in after-tax earnings by $4.7 billion or 16 percent. This net loss shows up in Table 6.1 as the negative per family net benefit listed in the last row and column.

7. Federal Effects on Individual States

Up to now we have concentrated on the national picture of a federal minimum wage increase. This is fine as a starting point, but minimum wage changes may have different consequences locally than they do nationally. We want to know if different states are affected differently by a change in the minimum wage. The effects of a wage increase may depend on whether it occurs at the state level or at the federal level. This is because a federal minimum wage imposes higher costs across the United States, whereas a state wage increase only affects the goods and services produced in that state. This section and the next address these two possibilities. This section examines how the picture changes when we consider how four different states are affected by a federal minimum wage increase. Section 8 simulates the effects of a state imposing its own state minimum wage law above the federal minimum wage.

We simulate the wage change for California, Florida, Texas and New York. These states are in geographically distinct regions of the United States. They represent different industrial mixes and they have consumption patterns that differ enough to potentially affect minimum wage targeting. Moreover, sufficient numbers of people have been interviewed in these states to allow for precise simulation.

7.1 Changes in the Simulation

This section performs a simulation much like what was discussed at the national level in Sections 4, 5 and 6. Because the goal is to simulate how a federal wage change affects an individual state, the simulation simply restricts analysis to the data on consumers and workers from that state. The methodology is the same with minor adjustments. Benefits, as before, are much easier to compute than costs. Since benefits are solely based upon an individual's wage and hours worked, the computation is identical to what we previously explained and straightforward.

The other half is to establish how consumers in the state are affected by the higher nationwide prices because, although we only look at one state at a time, the increase in the wage will affect wages and prices for everyone in the economy. In Section 5 we established how the prices of goods change due to a nationwide increase in the federal minimum wage. We apply the price increases we computed for that simulation to the goods purchased by the consumers in our state of focus. Then we do things as we did before; we determine how much more money is required for them to purchase the exact bundle of goods that they did purchase. This extra cost they would have to pay is their share of the cost burden of a wage increase.

7.2 How Are the Benefits of a Federal Minimum Wage Distributed In-State?

As mentioned, benefits will be computed just as before, but this doesn't mean that all states will look the same. We should expect differences stem-

ming from the difference in work and wage patterns across states. A minimum wage in the South will cut farther into the wage distribution than the same minimum wage in the Northeast, because wages are lower in the South; thus the law will affect more workers. Also, labor force participation may differ across states. As a higher percentage of people in a state work, we expect that more people will be impacted by a higher minimum wage.

Look first to Table 7.1. This gives a breakdown of benefits by state and income quintile. Quintiles are defined within state, so each quintile represents a fifth of the state's population, ranked by income. We give the same basic information we provided at the national level, although this time as a table: how much of the group is comprised of minimum wage workers, how much of the minimum wage population is in the group and how benefits of the wage increase are dispersed both before and after taxes. Benefits are still dispersed across all income quintiles, but there are interstate differences in the extent of this dispersion.

New York and Texas are the most extreme. In New York, far from targeting the poor, the minimum wage almost becomes a middle-class program. Whereas the bottom fifth only get 13% of the benefits, families who lie in the middle to upper range between 40% and 80% on the income distribution get half of the before-tax benefits. Even after taxes the top income quintile actually gets more of the money than the lowest quintile. Within quintile, we can look at what percentage of families benefit. Note that only 14% of families in the lowest quintile benefit at all from the wage increase. To turn it around, 86% of New York's poorest families reap no benefits from a minimum wage increase.

Since wages are generally higher in New York, the minimum wage affects fewer people in each quintile. But the sharp dip to 14% in the lowest quintile, when all the other quintiles have more than 20% of families benefiting, suggests that people in the lowest quintile are not as actively involved in the workforce. Thus they cannot benefit from wage hikes.

Texas shows a much better targeted wage increase. Almost 40% of families in the lowest income quintile would benefit. Whereas in New York gains are concentrated in the middle- and upper-income brackets, in Texas the bottom 40% of families take in almost half of the before-tax benefits from an increase. The largest share of gains goes to the poorest people. The highest income quintile gets less than 12% of before-tax gains. Of course, Texas looks good mostly in the comparison. Once we account for taxes, only 42 cents of every dollar actually makes it to the poor or near-poor of the bottom 40 percent.

California and Florida increases look more like the aggregate United States rise. Before-tax benefits are evenly distributed in Florida, whereas there is some advantage given to the poor in California. Forty-five percent of California before-tax benefits make it to the bottom 40% of the income distribution. Florida gives 40% of before-tax benefits to its bottom 40%, slightly worse than the United States numbers.

The differences that we have outlined persist systematically throughout the various demographic breakdowns. New York would give 13% to those below the poverty level. This drops to 6% when we look at those who have children. Compare this to the U.S. figures where 9% of the money goes to families with children living in poverty. Since New York and the United States in general both have about 6% of poor families with children, this difference is due to the difference in work and wage patterns between New Yorkers and other Americans. Texas has slightly more families with children living in poverty—7.6% to New York's 5.9 percent. This is a partial explanation for why twice as large a percentage of dollars flows to this group than in New York. But the biggest reason is that on average, Texan poor families are more likely to be working at very low wages.

We can see this difference in work and wages in Table 7.2. This examines families with children on the basis of their work decisions. As previously noted, minimum wage programs are put forward as a means to help people trying to support a family. Thus, we want to see how well it hits this tar-

get group. Working families with children are 36% of Texan families and only 26% of New York families. Extrapolating from the table, about 5% of Texan families with children report no earnings, whereas in New York the number is 10 percent. So New York has lower labor force participation among families with children. Obviously those families who are not working will not benefit from a minimum wage increase. This explains part of the gap between Texas and New York.

We further subdivide the families by their wage. Once again we classify low-wage workers as those making less than $7 an hour in 2000 dollars. Almost 7% of Texan families make more than half of their earnings from low-wage jobs. Compare that with New York where the number falls to 3 percent. Previously, we found that Texan families are more likely to be working; now we see that those that are working are much more likely to be low-wage workers. These two factors account for the differences we see between New York and Texas. The United States' numbers lie in the middle of these two extremes, as do the California numbers. Florida, which has about the same percentage of working families with children as New York, has a much higher percentage of low-wage workers.

What about welfare recipients? In Table 7.3 we look at welfare recipient families with at least one child. Approximately 6 to 8 percent of families with children receive some form of welfare aid, with 6% in Florida and New York and 8% in Texas and California. In the United States, 47% of welfare recipients with children benefited from a national wage increase. Texas is above average at 56 percent. New York is not even in the ballpark; just over a quarter of New York's welfare recipients with children benefit from a wage increase, and as a group they receive only 6% of the benefits.

The most striking result is the similarity of the state and national targeting of the wage law. All of the states exhibit the same patterns of poor targeting; the benefits are distributed across the whole income distribution. Tables B.3-B.6 in the appendix provide more detail on the results we relate here. Although there are notable differences in the size of various effects across states, the general conclusions of our national analysis are not altered.

7.3 How Well are the Costs of a Federal Minimum Wage Increase Targeted Within State?

Price increases are determined nationally and then imposed equally on all consumers. So states will differ only if state consumption patterns differ enough to affect who bears the burden of the increase. Specifically, state differences will depend on consumption in two ways. First, states that have a higher cost of living or that simply consume more are going to carry more of the burden than other states. This is the interstate effect that will change which state pays more but will not change how well costs are targeted within state. Second, within-state targeting of costs (i.e., making the rich bear the burden and not the poor) depends on the relative amount that people spend on goods that bear the burden of the price increase. If rich people and poor people look about the same across states in terms of how much of their income they sped on different things, then costs will be targeted about the same as at the national level.

It turns out that consumption is stable enough within state so as not to matter, although across states it does have some implications. Within states, costs are targeted about as well in each state as they are at the national level. Table 7.4 shows that the bottom 20% of families in the income distribution pays about 10% of the costs, whereas the top fifth pay somewhere over 35% of the costs. The top fifth pay the largest share in California and New York at 38% while in Florida and Texas they only pay 36 percent. The middle three income brackets take in the other half of the costs. Other distributional breakdowns can be found in the data appendix, Tables B.7-B.10, but the results are similar to the point of monotony.

To bring the numbers into easily identifiable terms we perform the same "sales tax" simulation we proposed in Section 5; we calculate how many percentage points increase one would have to increase sales tax in order to raise the same rev-

enue from the same groups as a minimum wage does. The results, also reported in Table 7.4, look much the same as at the national level. Low-income people are charged a higher sales tax than the middle class or rich. The tax is the highest in New York—charging an additional 3 percentage points in sales tax to those in the lowest income quintile but only 2 points to the top half. Texans pay the least, ranging from 2% for the poorest quintile to 1.5% for the richest quintile. This fits our assertion that the costs would flow to the states with higher costs of living.

7.4 Net Costs and Benefits Across States of a Federal Minimum Wage Increase

In Section 6 we broke down a federal increase by the families that benefited and those that paid but did not benefit. We follow a similar strategy here. Our state simulation of a federal increase is based on having a truly national market for goods and services. Thus, the price increases are shared across all states based on consumption, whereas benefits are handed out based on wages. Of course, consumption will probably be higher in places with higher wages. As noted earlier, states with higher wages have fewer minimum wage workers and so have fewer families that benefit from a minimum wage hike. This means that states with lower per capita consumption and lower wages such as Texas are going to pay less and benefit more than states with high consumption and high wages such as New York.

First we look at the total dollars involved. Table 7.5 gives a breakdown of aggregate costs and benefits comparable to Table 6.2, except by state and focused on consumers. The first row lists total benefits by state. The second row is the amount of after-tax money that goes as benefits to residents of a particular state. The third row is the money that goes to taxes through payroll and income tax. The bottom half breaks down the costs. It gives the cost imposed on consumers of the state by the wage increase and then the residual cost, which is borne by the residents of other states and government expenditures. Unfortunately, this simulation did not provide a ready means of separating the government from the out-of-state purchases.

Note that New York bears a disproportionate burden of the costs compared with what it gains. Although most states can expect the government to foot some of the bill, New York consumers pay out almost as much as the gross benefits received by employees. On the other end of the spectrum is Texas whose cost structure is astounding. Of the 3 billion dollars in costs, fully a third are paid for by the government and out-of-state consumers. This is the interstate effect alluded to in the last section: Benefits follow the low-wage states, whereas costs follow consumption. If a dollar in New York bought as much as a dollar in Texas then we would feel good about this arrangement because the states with more poor people benefit and states with more rich people pay. Although to some degree this may be what is happening, some of the costs are being imposed on New Yorkers not because they are better off but merely because they have universally higher prices. Thus, they pay more because of the price increase but benefit less because wages are generally above the minimum.

We compare in Table 7.6 the costs paid by all families to the benefits received by families with minimum wage workers. This is comparable to the Table 6.1 presented earlier for the national wage increase. Benefits to poor minimum wage families range from $810 in Florida to $1,034 in Texas. This accounts for the money these families pay out in higher prices for goods. Averaging across families, net benefits are highest in Texas at $736 with all the other states clustered a little above $600.

Costs paid by poor families without a minimum wage worker vary from $113 in New York to $137 in Florida. Looking at all families, the average cost for non–low-wage families ranges from $227 in Texas to $253 in California. Average costs in Florida and New York are almost as low as Texas and are close to the national average of $238. These numbers are tightly grouped. In no state does the average cost for a family vary from the national numbers by more than 7 percent. This suggests that consumption patterns are relatively stable across states.

The most volatile measurement, from which much of the interstate difference stems, is the percentage of low-wage workers in a state. Thirty percent of Texas families have a low-wage worker, whereas only 21% of New York families do. Thus even if all else were equal, Texas per-family benefits would be half again more than those of New York since so many more workers are at the minimum wage.

Using the fraction of the population that has a minimum wage worker we can calculate the net redistribution across the income brackets. Texas once again stands out. On net, the poorest Texans gain $325 per family. This is far better than Florida and New York, which give $92 and $35, respectively, per family to the lowest quintile. The U.S. is slightly higher at $112 per family going to the lowest quintile.

The redistribution numbers turn negative as one moves into higher income brackets. This is primarily because costs are rising since, as we have already shown, benefits are evenly distributed across the income quintiles. Costs peak in California at $484 for a family without a minimum wage employee that is in the top fifth of the income distribution. Regardless of the state, families with minimum wage workers come out ahead. Universally a minimum wage law treats high-income families with a minimum wage worker better than it treats the poor who lack a minimum wage worker—transferring money to this subgroup of the rich and taking it from most of the poor.

The average net benefit for all families is negative in most states because some benefits are taxed away. If a state bears little of the national burden but has many people who are low-wage workers, it is possible to have a net gain. Texas is in this situation, siphoning money off from other states to pay its low-wage workers netting $66 per family.

7.5 Summary

States' targeting is not radically different from that of the nation. Although Texas targets much better than the nation as a whole, after taxes it still does not get half of the money to families in the bottom 40% of income. In New York, the minimum wage gives more to middle-income families than it does to the lowest-income–quintile families. These differences are driven by the fact that almost two-fifths of Texas families in the lowest income quintile have someone working at a low-wage job, whereas New York has just over a third the number—14 percent. Costs are targeted within state the same as at the national level. Across states, high-wage and high-consumption states subsidize the low-wage and low-consumption states. Thus, whereas Florida, New York and California all pay more money than they get after taxes, Texas actually gets more than it pays even with taxes figured in. A minimum wage law imposed at the federal level will benefit some states and hurt others. Within states, the effects are very similar to the national effects.

8. Effects of State Minimum Wage Increases

Thus far, we have considered the effects of a federal minimum wage increase on the United States as a whole and on four states individually. Section 7 compared how a federal minimum wage increase affects individual states versus the nation at large. However, this is not the only policy option available. Eleven states currently have a state minimum wage higher than the federal level, and many other states are considering doing the same. Thus, we would like to know if there are any differences in a state minimum wage hike as opposed to a federal hike. The outcome of a state policy depends on the state's particular characteristics. In this section, we look specifically at the effects of a state increase on the state residents. So, for example, we ask what would be the result of the Florida legislature raising the Florida minimum wage, assuming that the national minimum wage were left at its historic level of $4.25. Note that these are hypothetical changes; in fact, California is the only state considered that has actually enacted a higher state minimum wage.

8.1 Changes in the Basic Simulation

Considering a state minimum wage increase requires a modification of our methodology for calculating costs attributable to a wage increase.

Section 5 described the method of allocating costs of a federal increase, which is done with national level input-output tables. To allocate the costs of a state increase, it is important to get state-specific information. States differ considerably in the quantities and types of products they produce. Furthermore, the way in which industries interact within a state may vary across states. Therefore, we use the state-level input-output tables for each of the four states considered. These tables are designed analogously to the national-level tables previously described, and we use them to estimate how the costs of a state-level increase are dispersed across commodities. Note that just like at the federal level, the final outputs of these tables are broad categories of goods, such as consumption, government and exports; but when we estimate how much is "exported," we are dealing with goods that leave the state, not just those that leave the country. The rest of the simulation is done in a parallel fashion to what was done in Section 7 when we simulated the impact of a federal minimum wage increase on individual states.

8.2 How Are the Benefits of a State Minimum Wage Increase Distributed Within State?

Benefits are determined in precisely the same fashion as for the federal increase. It does not matter to the person getting the money whether the increase is at the state or the national level. So benefits under a state minimum wage are distributed identically to those presented in Section 7 for a federal minimum wage increase. Thus, a state increase targets just as poorly as a federal increase. Families across the whole income distribution will benefit almost equally from the mandate.

8.3 How Well Are the Costs of a State Minimum Wage Increase Targeted Within State?

Since benefits are the same under a state increase as under a federal increase, total costs of the increase are also the same. However, this does not mean that the costs are distributed in the same way. The division of costs among groups may depend on whether the wage law is imposed federally or at the state level. In the federal analysis, we treat the United States as a single market; per capita costs of a wage increase in an individual state are shared equally across the United States instead of only being imposed on that state. This allows for a larger interstate redistribution of costs, distributing the burden of high-cost states across the nation, thus decreasing the burden for high-cost states and simultaneously increasing it for low-cost states. As noted earlier, the benefits of a state (and therefore the costs that must be paid) increase with the number of low-wage workers. For example, as discussed in Section 7, the per capita costs of a wage increase in Texas are very high. However, under a federal increase, the burden of these costs is not assumed solely by Texans, rather it is partially paid for by workers in states that have fewer low-wage workers.

For a state-level simulation, this widespread interstate redistribution across states does not occur. Each state must absorb its own costs except for those goods that are explicitly exported out of state. The exported costs are absorbed by residents of other states and countries. Thus, if a state exports a large share of its goods, it will be able to export the costs of the wage increase as well. Of course, we assume that demand does not change. Since the state is now charging higher prices than other states it is likely that, in reality, demand for its goods will fall. Our simulation does not capture this potential demand drop because we explicitly assume that no employment changes occur and that therefore consumers do not reduce consumption due to the price increase. The effect of state exports on the aggregate costs for each state are discussed below, but we look first at how the costs are targeted within the state.

Table 8.1 reports the same information as Table 7.4, giving a state-by-state breakdown of costs by income quintile. It is immediately apparent that the targeting of costs under a state increase is very similar to targeting under a federal increase. In all four states, families in the low-

est quintile of the income distribution pay approximately 10% of the costs and those in the top quintile pay about 35-40 percent. Relative to the other states, costs in Florida are targeted poorly; the top quintile pays less than their peers in other states (35.5%), whereas the lowest quintile pays more (11.6%). But the situation is only marginally better in California, the state with the best distribution, where the highest quintile assumes 38.8% of the burden and the lowest quintile pays just less than 96 percent. Thus, within each state the distribution of costs is similar.

Under a federal increase, the average annual cost to a family varied little across states, since the interstate redistribution tended to equalize per-family costs. Under a state increase this changes: per-family costs across states differ more because there is no redistribution of the costs across states. Family costs are highest for all income quintiles in Texas, where families in the lowest income quintile pay $182 on average and those in the highest income quintile pay about three times more—$572. However, in New York, where the burden of a minimum wage increase is much less, average costs are $101 for the bottom fifth and $402 for the top fifth. Costs for all quintiles in California and Florida are slightly higher than those in New York. Appendix Tables B.11-B.14 provide more detailed breakdowns of the distribution of costs across different demographic groups; however, the results resemble those that we have already found.

Following the approach of previous sections, we also simulate the effective "sales tax" that would have to be imposed on families to raise the same revenue and impose the same distribution of costs as under a minimum wage change. Taxes follow the same pattern as earlier simulations; they are largest for the poor and then taper off as income increases.

Comparing the magnitude of the "sales tax" comparison across states reveals that some states fare better under a federal wage change than a state one, whereas other states do worse. The difference in the magnitude of taxes is the largest in Texas. For a federal increase, the bottom 20% would have to pay an additional 2.0% in sales tax and the top fifth would have to pay 1.5 percent. Taxes are 50% greater under a state increase: 2.9% for the bottom fifth and 2.2% for the richest fifth. Florida residents also pay more than under a federal change, but to a lesser degree. In contrast, both California and New York residents face lower taxes under state legislation than federal. For example, the poorest fifth pay 2.6% in taxes in New York under a state increase relative to 3.0% under a federal wage change. Similarly, for members of the highest income quintile, taxes are 1.8% and 2.0%, respectively.

These magnitude differences across states underscore the effect of interstate redistribution of costs among states when a federal increase is imposed. Under a state policy, an individual state is solely responsible for the costs of the mandate. Accordingly, the net effect of a state minimum wage increase will differ from that of a federal minimum wage increase because high-cost states are no longer subsidized by lower-cost states. The next section addresses this in more detail.

8.4 Net Costs and Benefits Across States of a State Minimum Wage Increase

Table 8.2 gives the net effects of state minimum wage laws across the four states. The table is comparable to Table 7.5, which looks at a federal law. Total benefits are divided between receipts of low-wage workers and money used to pay payroll and income taxes. Total costs are spread across in-state consumers, out-of-state consumers and the government. Unlike the simulation for a federal increase, we are able to separately identify the costs paid by out-of-state consumers and those paid by the government.

As noted in the previous section, the only way for a state to bear less than the full burden of its minimum wage increase is to "export" the cost by increasing price of goods it exports. However, Table 8.2 reveals that only a small share of a state's costs are passed on to other states through exports. Although the share of costs exported varies

across states, it ranges only between 6% in Florida and 10% and 11% in New York and California, respectively. Texas exports about 7% of the burden. Furthermore, the share assumed by the government is equivalently small, also ranging from 6% to 10% across states. Thus, more than 80% of the costs of a state minimum wage increase are born by state residents. Californians, New Yorkers and Texans all bear 83% of costs for their respective state increases, while residents pay 88% in Florida. Looking at the industries affected, it is easy to understand why so little of the cost is exported. Much of the minimum wage cost is concentrated in service industries (such as retail and fast food) that are unlikely to move across state borders.

These cost shares of states' residents are much more uniform across states under a state increase than under a federal increase. The similarity arises because, with the exception of exports, each state pays the entirety of its costs. Remember that this is not the situation found in Table 7.5 for a federal minimum wage increase, where the per capita costs are divided equally among states. This difference benefits some states and hurts others. For example, California and New York bear larger shares of a federal minimum wage increase: 89% and 91%, respectively. On the other hand, Florida and Texas, in particular, are largely subsidized by other states, paying 81% and 59% of the costs of the wage increase, respectively. Thus this exercise highlights the different advantages states face under different types of wage changes. New York and Texas are most affected by the difference. New York is clearly better off under a state, rather than a federal, minimum wage change. Texan consumers pay far less under a federal program. The large costs of their program are shouldered by other states.

Turning to the net effects of a state minimum wage on families, Table 8.3 shows how the costs vary across states. In New York, Florida and California the benefits and costs for families are remarkably similar to those due to a federal increase, listed in Table 7.6. There are minor changes in the amounts each family pays or receives, but the pattern remains the same: Moving up the income distribution, benefits for families with low-wage workers decrease and costs for families without low-wage workers increase. Given the aggregate results above, it is not surprising that families in California and New York pay less on average under a state change, $27 and $33, compared with $45 and $54 under the federal increase, respectively. Florida, on the other hand, sees average costs for all families rise slightly under a federal increase: $34 instead of $17. The story in Texas is more dramatic. Although the pattern of benefits and costs across the income distribution resembles that of the others, the changes in the magnitude of costs and benefits are much larger than in other states. Under the state increase, Texans must internalize most of the tremendous cost of an increased wage, and the additional costs are spread equally across the income distribution. All families without low-wage workers pay about 40% more under a state increase ($319 instead of $227). Moreover, the average net effect for all families in Texas is negative, costing each family $26, whereas under the federal law, where the interstate redistribution benefited Texans, the net effect was a gain of $66 per family.

8.5 Summary

There are two ways to look at the difference between the federal and the state wage laws. We can look at how benefits and costs are distributed within state across residents or we can look at how states fare in comparison with each other as money is redistributed across states. A state-level wage law does not change how costs and benefits are distributed across state residents, but it does change how the costs are distributed across states.

At the family level, poor targeting of benefits still exists and costs increase across families as income rises. Benefits are distributed in precisely the same way and costs tend to be distributed very closely as well. Both state and federal increases result in some families getting money at the expense of other, equally poor, families. The majority, usually around three-fourths, of families in the lowest income quintile get nothing, but pay

higher prices due to the wage law. Thus they fare worse than those with low-wage workers in the highest income quintile.

The main difference between the two types of minimum wage increases is the proportion of the cost of the increase born by a state's residents. This changes because of the redistributive effect of a national market in the federal increase. In this respect, California and New York assume a much smaller burden under a state increase than a federal one. Texas, on the other hand, which has many low-wage workers, does much better under a national wage change where costs are spread out across states. When Texas raises the wage in the absence of a federal increase, it imposes a very high burden (averaging $319) on the families without minimum wage workers.

The policy implications do not significantly change. The minimum wage does not target its benefits or its costs very well. Analyzing federal versus state wage laws, it appears that the federal law can redistribute income from high-income to low-income states. A state minimum wage in excess of the federal standard usually manages to export some of its costs out of state, but its residents still pay somewhere between 80 and 90% of the costs. Thus, when considering a federal minimum wage one should consider how different regions will both benefit and pay.

9. Limitations of the Analytical Approach

There are three major limitations to this analytical approach. First, relaxing the assumptions on no employment effects and no profit losses will change the results, both in absolute and distributional terms. Second, the simulations provide only a partial analysis in the economic sense. That is, the results do not represent a stable equilibrium. Third, the analysis does not tell us who actually benefited from and who actually paid for the 1996 increase in the federal minimum wage. We consider each of these limitations in turn.

The first limitation is the extreme assumptions on price, employment and profit. We have assumed that employers pay for the higher labor costs through higher prices alone. What happens if we relax that assumption? Allowing employment losses reduces the benefits of the minimum wage. The impact of this on the distribution of benefits depends on how employment reductions are implemented. Theoretically, all hours could be reduced evenly, so the benefits are reduced without any change in their distribution. In this case, families with low-wage workers have smaller wage increases and families without face smaller price increases.

On the other hand, it is unlikely that the employment reductions would be spread evenly. Within the low-wage group, higher-skill workers are more likely to remain employed (or be drawn into the labor force) whereas lower-skill workers may have a lower probability of employment. This feature arises, for example, in the search model developed by Lang and Kahn (1998). In testing this model, they find evidence that minimum wage laws shift employment away from adults in favor of teenagers and students. Assuming that adult low-wage workers are more likely than average to reside in lower-income families and teenage low-wage workers are more likely to come from higher-income families, employment losses might disproportionately affect low-income families.

On the other hand, if we allowed profit losses in our simulation, the outcomes would change in two ways. The benefit side would be unchanged, but there would be smaller price increases. We would need to add an accounting of the distribution of profits from firms with low-wage workers, developing a before-tax and after-tax loss calculation parallel to the benefits calculations. Unfortunately, the information necessary to develop such a calculation is not available. We would predict, however, that this change would shift net benefits toward lower-income families, given that wealth is more concentrated than income, although small business owners (who are more likely to employ low-wage workers) may fall anywhere in the income distribution.

The second limitation of this analysis is the fact that the results are not in equilibrium. We assumed that consumers bought the same amount of

low-wage goods despite higher prices. Unless the families of low-wage workers buy all the low-wage goods, some families will face higher prices without having higher earnings. To buy the same number of low-wage goods, these families would have to reduce their spending on other goods (or reduce savings). This lower spending reduces the returns to non–low-wage work, reducing the wages for non–low-wage workers. Thus, the assumptions only hold in equilibrium if an increase in the minimum wage lowers the income of higher-wage workers.

This counterintuitive implication is important for understanding the role of taxes in the model. As earnings increase, tax revenues rise more than government costs, so the government appears to benefit from the higher wage. Thus, it appears that the government can use this additional revenue to improve the target effectiveness of the policy. However, in equilibrium, tax revenues from non–low-wage work are reduced, so the government does not actually receive a net benefit. In fact, if taxes are progressive with wages, government revenues could fall on net.

The challenge of creating a model with a stable equilibrium is not an issue in empirical analyses of the actual effects of the minimum wage increase. Several studies have begun to identify the impacts of the 1996 minimum wage increase. For example, Neumark, Schweitzer and Wascher (1999a) found that the increase raised the income of some poor families, but also increased the share of families that are poor or near-poor. However, the debate over employment effects demonstrates the difficulty of detecting small changes following a minimum wage increase. The price effects, even assuming complete pass-through of labor costs to prices, are smaller than the employment losses typically found. Therefore, it is unlikely that we will be able to detect these price changes with any degree of statistical certainty. On the other hand, we believe that the price effects should be included in the policy debate, because they affect all families, even those who believe that minimum wage policy has no effect on them. We believe the simulations are a useful way to assess these effects, both for recent and future minimum wage changes.

10. Conclusion

Advocates of higher minimum wages often cite helping poor families as the primary motive for raising its value. Families primarily supported by low-wage earnings will receive a substantial portion of the benefits the story goes, and, moreover, increasing minimum wages imposes very little public or social cost. Supporters contend that employment impacts experienced by low-wage workers are small, if any at all, and the pass-through of labor costs to prices induces negligible changes.

This report evaluates this proposition, examining the distributional consequences of raising both the federal and state-only minimum wages, with the state-only assumed to take place in California, Florida, New York and Texas. Using U.S. Census data from 1996, the exercise conducted here presumes that the minimum hourly wage was boosted to $6.25 in 2000 dollars, that low-wage workers earned this higher wage with no change in their employment or any reduction in other forms of compensation, that these higher labor costs were fully passed on to consumers through higher prices, and that consumers simply paid the extra amount for the goods produced by low-wage labor with no change in their quantities purchased. The cost of this increase amounts to approximately $30 billion, a cost in the ballpark of government expenditures budgeted for either the federal EITC, AFDC/TANF, or Food Stamp program. Our analysis determines the extent to which various groups of families benefit from higher earnings, and the higher amounts that these groups pay as consumers through higher prices. Combining these two sides yields a picture of who gains and who pays for minimum wage increases, including the net effects for families.

The distributional picture portrayed by this analysis sharply contradicts the view maintained by proponents of the minimum wage. The increased earnings received by the poorest families is only marginally higher than that received by the wealthiest. Considering a federal increase, one in four families in the top fifth of the income distribution have a low-wage worker, which is the same

share as in the bottom fifth. Virtually as much money goes to the highest-income families as to the lowest. Whereas advocates compare the wage levels with the poverty threshold for a family to make the case for raising the minimum wage, less than $1 in $5 of the additional earnings goes to families with children that rely on low-wage earnings as their primary source of income. Moreover, as a before-tax increase, 22% of the incremental earnings are taxed away as Social Security contributions or state and federal income taxes. The message of this study—supported by earlier work on this topic—is clear: Low-wage families are not necessarily low-income families. So, contrary to conventional wisdom, raising minimum wages poorly targets the poor.

Turning to who pays the costs of an increase in the federal minimum wage paid through higher prices, our analysis reveals the richest fifth of families do pay a much greater share (three times more) than those in the poorest fifth. This outcome reflects the fact that the wealthier families simply consume a lot more. However, when viewed as a percentage of expenditures, the picture looks far less appealing. Expressed as a percentage of families' total nondurable consumption, the extra costs from higher prices are slightly above 1% for families of all income groups. The picture worsens further when one considers costs as a percentage of consumption normally included in the calculation of state sales taxes, which excludes a number of necessities such as food and health care. Here, the implied costs approximately double as a percentage of expenditure. More important, the minimum wage costs as a share of taxable annual expenditures monotonically fall with families' income. In other words, the costs imposed by the minimum wage are paid in a way that is more regressive than a sales tax.

On net, the minimum wage has slight distributional effects across income levels. That is, low-income families are slightly better off on average, whereas high-income families pay more in higher prices than they benefit from higher earnings. However, the transfer is much more within groups. Only one in four low-income families could benefit from the last minimum wage increase, but all low-income families face higher prices. Meanwhile, an equal number of high-income families also benefit.

When considering distributional impacts of a federal increase in the minimum wage on the residents of individual states, differences do arise when compared with the nation overall. As shown in Table 7.1, poorer families in Texas receive a two-to-three times larger percentage share of the after-tax benefits than their higher-income coresidents. In contrast, poorer families in New York receive less of a percentage than any of their wealthier coresidents. These differences across states reflect the fact that poor families in Texas tend to support themselves by low-wage earnings more than those living in New York. Still, even in Texas, less than one in four dollars sees it way to these families in the lowest 20% of the income distribution; and only about two in five dollars makes it to families in the lowest 40% of families. The distribution of consumption costs paid by families at differing income levels is quite similar across states and to the patterns seen at the national level.

The distributional story for state-only increases in the minimum wage is substantially the same as that for a federal increase. The benefit picture is exactly the same, since we consider the same increase for the state minimum as we entertained for the federal level. The cost side does differ slightly. In our simulations some of the costs of an increase are paid by consumers living outside the state. So, a portion of costs are exported and not counted as being paid by state residents. This exportation of the costs is marginal, however, and, of course, this favorable circumstance critically presumes that consumers living outside the state willingly purchase the same quantities of goods and services produced in the state even though prices of these items are now higher relative to their other options. In any case, the distributional picture is essentially unchanged. The extra consumption costs families pay is roughly a constant proportion of their total nondurable consumption, and families at lower income levels pay a higher percentage than they would if a sales tax were

imposed in the state to support the state-only wage hike. Once again then, the costs imposed by the minimum wage through prices imply a burden that is more regressive than a sales tax.

This report contributes to the minimum wage debate by demonstrating that minimum wage laws can have important economic costs even in the absence of employment losses and that these costs may partially undermine the antipoverty goals of the increase. Politically, support for the minimum wage depends strongly on the apparent clarity of who benefits and the inability to trace the costs to the wage increase, whether these costs are higher prices or slower job growth or gradual cutbacks in employee benefits. When minimum wage increases are paid for by higher prices, the resulting costs raise consumption expenditures not unlike the imposition of a sales tax, except prices rise in a way that implies a burden more regressive than a sales tax. It seems certain that there would be little public support for a national sales tax levied only on selective commodities and used to transfer income in nearly equal amounts to one of every four wealthy families as well as to one of four poorer families. Yet, when one considers passing the costs of the minimum wage through prices, this is the effective outcome of a minimum wage increase.

Table 4.1
Minimum Wage Benefits in the United States by Wage Distribution
(Projections for 1996 in 2000 $)

Family Characteristics	% All Families	Increase to $6.25 per hour				
		% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
Families w/ Children	**33.1%**	**36.5%**	**48.0%**	**45.5%**	**36.0%**	**$763**
Families w/ Children & Earnings	**31.1%**	**38.8%**	**48.0%**	**45.5%**	**36.0%**	**$763**
50% Family Earnings from:						
Jobs paying below $7/hr	**4.8%**	**79.3%**	**15.0%**	**19.1%**	**16.5%**	**$1,118**
Jobs paying at most $9/hr	**3.3%**	**46.0%**	**6.1%**	**5.4%**	**3.9%**	**$648**
Jobs paying at most $12/hr	**4.9%**	**37.3%**	**7.3%**	**6.3%**	**4.7%**	**$653**
Jobs paying over $12/hr Single	**16.8%**	**29.3%**	**19.6%**	**14.6%**	**11.0%**	**$571**

* The “Average Net Benefit” averages over families that have a minimum wage worker. It is not the average over the whole population.

Table 4.2
Minimum Wage Benefits Received by Welfare Status in the United States
(Projections for 1996 in 2000 $)

Family Characteristics	% All Families	Increase to $6.25 per hour				
		% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
Welfare Recipient with Children	**6.9%**	**46.6%**	**12.8%**	**12.2%**	**11.1%**	**$881**
On AFDC or SSI	**4.6%**	**42.6%**	**7.7%**	**6.8%**	**6.5%**	**$853**
Single	**3.1%**	**38.5%**	**4.7%**	**3.9%**	**4.0%**	**$858**

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table 4.3
Distribution of Additional Earnings from Minimum Wage Increases by Family Income

Families Grouped by:	Results from Figures 4.2 & Table B.1	Johnson & Browning (1983)[a]	Burkhauser & Finegan (1989)[b]	Horrigan & Mincy (1993)[c]	Burkhauser, Couch, Glenn (1996)[d]
Income Quintiles					
Lowest	**21%**	**21%**	**-**	**21%**	**-**
Mid-Low	**22%**	**22%**	**-**	**24%**	**-**
Middle	**21%**	**20%**	**-**	**22%**	**-**
Mid-High	**19%**	**19%**	**-**	**18%**	**-**
Highest	**17%**	**19%**	**-**	**16%**	**-**
Family Income Relative to Poverty Level					
<1	**17%**	**-**	**18%**	**-**	**13%**
1-2	**30%**	**-**	**27%**	**-**	**27%**
2-3	**22%**	**-**	**23%**	**-**	**25%**
>3	**31%**	**-**	**32%**	**-**	**35%**

[a] Calculated from Johnson and Browning (1983) Table 2, Column 2, no employment effects, equal proportionate increase in subminimum wages.

[b] Calculated from Burkhauser and Finegan (1989) Table 3, Simulation II, universal coverage, no employment effects.

[c] Horrigan and Mincy simulation assumes incomplete coverage and employment effects.

[d] Calculated from Burkhauser, Couch and Glenn (1996) Table 8.

Table 5.1
Cost Increase Due to Minimum Wage Increase for the Top 30 Industries
(in Millions of 2000 $)

Industry	Direct Costs	Final Costs
Eating and Drinking Places	6732.8	6603.77
Other Retail Trade	1814.6	1740.7
Grocery Stores	1680.79	1583.3
Real Estate	568.83	1498.38
Elementary and Secondary Schools	1300.95	1338.78
Households, Miscellaneous Personal Services	1229.71	1221.12
Hospitals	491.65	809.78
Colleges and Universities	780.96	797.59
Department Stores	795.98	791.55
Miscellaneous Entertainment and Recreation	671.51	708.89
Apparel and Accessories	703.69	691.86
Motor Vehicle Dealers	540.41	618.17
Child Day Care Services	566.29	599.68
Utilities	60.9	597.49
Meat Products	110.27	511.84
Construction	892.13	509.49
Health Services	421.74	503.59
Nursing and Personal Care	421.6	495.45
Religious Organizations	431.96	473.49
Physician Offices	171.36	443.78
Wholesale Goods	676.35	405.4
Beauty and Barber Shops	382.88	396.28
Social Services	322.3	390.2
Government	1157.88	374.15
Hotels and Motels	757.17	344.4
Insurance	226.36	314.31
Apparel and Accessory Stores	283.45	299.52
Banking and Savings	182.09	271.76
Agricultural Production	711.04	247.25
Automotive Repair	262.61	238.92

All others	**7883**	**5091**
	$33,234.37	**$30,911.23**

Table 5.2
Share of Increased Costs Due to Minimum Wage Increase by Personal Consumption Item

Good or Service	CA	FL	NY	TX	US
Food - Inside home	9.16%	7.85%	10.24%	10.75%	10.02%
Food - Outside home	21.11%	20.39%	17.13%	19.24%	22.43%
Household misc. personal services	8.97%	4.86%	3.89%	6.20%	5.74%
Child day-care services	1.67%	2.36%	0.67%	1.68%	2.04%
Laundry and cleaning	0.41%	0.41%	0.11%	0.47%	0.37%
Appliance repair	0.02%	0.03%	0.02%	0.01%	0.03%
Utilities	2.21%	2.58%	2.93%	2.08%	2.35%
Moving and storage	0.38%	0.97%	0.39%	0.61%	0.49%
Business services	0.18%	0.15%	0.15%	0.16%	0.14%
Legal services	0.38%	0.15%	0.59%	0.28%	0.24%
Landscape services	0.62%	0.29%	0.09%	0.38%	0.14%
Clothing	7.17%	3.27%	8.98%	1.94%	3.59%
Furniture	0.78%	0.91%	0.69%	0.87%	0.79%
Rent	7.13%	6.23%	5.22%	6.41%	5.12%
Hotels and motels	1.97%	2.24%	1.01%	1.14%	1.03%
Entertainment and recreation	3.13%	3.88%	3.10%	2.98%	3.72%
Car purchases	1.52%	3.34%	1.74%	3.15%	2.77%
Auto services	1.79%	1.79%	2.51%	2.16%	1.40%
Air transportation	0.40%	0.33%	1.14%	0.32%	0.31%
Health (out-of-pocket expenses)	6.81%	7.38%	8.34%	9.93%	8.60%
Financial services	2.18%	2.42%	2.60%	1.60%	2.20%
Education (out-of-pocket expenses)	5.54%	6.81%	8.44%	12.85%	9.38%
Trade	9.77%	13.44%	11.11%	7.58%	9.93%
Other	6.70%	7.92%	8.90%	7.24%	7.21%

Table 5.3
Price Increases by Personal Consumption Item Due to Minimum Wage Increase

Good or Service	CA	FL	NY	TX	US
Food - Inside home	0.63%	0.64%	0.65%	1.17%	0.77%
Food - Outside home	3.67%	4.09%	2.79%	5.04%	4.09%
Household misc. personal services	4.69%	3.02%	2.54%	6.02%	3.75%
Child day-care services	1.36%	3.46%	0.81%	2.37%	2.16%
Laundry and cleaning	0.72%	0.88%	0.16%	1.13%	0.76%
Appliance repair	0.16%	0.36%	0.21%	0.26%	0.28%
Utilities	0.36%	0.35%	0.42%	0.36%	0.35%
Moving and storage	2.52%	7.05%	5.02%	5.79%	4.07%
Business services	0.19%	0.27%	0.17%	0.29%	0.18%
Legal services	1.12%	0.46%	2.24%	0.74%	0.60%
Landscape services	1.20%	0.54%	0.28%	1.43%	0.32%
Clothing	1.45%	0.99%	1.79%	0.56%	0.77%
Furniture	0.56%	0.57%	0.55%	0.82%	0.57%
Rent	0.47%	0.67%	0.37%	0.98%	0.50%
Hotels and motels	1.97%	3.28%	1.20%	2.24%	1.17%
Entertainment and recreation	1.49%	2.16%	1.67%	2.49%	1.90%
Car purchases	0.17%	0.31%	0.26%	0.24%	0.24%
Auto services	0.61%	0.77%	1.06%	1.59%	0.57%
Air transportation	0.32%	0.40%	0.93%	0.54%	0.30%
Health (out-of-pocket expenses)	0.07%	0.09%	0.09%	0.15%	0.10%
Financial services	0.53%	0.58%	0.64%	0.50%	0.57%
Education (out-of-pocket expenses)	3.51%	3.83%	3.45%	13.07%	5.12%
Trade	0.11%	0.17%	0.12%	0.12%	0.12%
Other	0.07%	0.10%	0.10%	0.11%	0.08%

Table 6.1
Net Effect of Federal Minimum Wage Increase for United States Families by Income Level
(Projections for 1996 in 2000 $)

Family Characteristics		Share of Families:		Net Benefit/(Cost) for Families:		
		With Low-Wage Workers	Without Low-Wage Workers	With Low-Wage Workers	Without Low-Wage Workers	All
By Income Quintile	Lowest	25.7%	74.3%	$802	($127)	$112
	Mid-Low	25.4%	74.6%	$681	($154)	$58
	Middle	25.0%	75.0%	$595	($201)	($2)
	Mid-High	25.3%	74.7%	$457	($273)	($88)
	Highest	24.4%	75.6%	$217	($437)	($277)
All Families		25.2%	74.8%	$550	($238)	($40)

Table 6.2
United States Allocations of Projected Benefits and Costs Attributable to Federal Minimum Wage Increases
(in Millions of 2000 $)

Beneficiaries/ Payees	Component of Benefits/Costs	Increase to $6.25
Allocation of Benefits		
All Low-Wage Workers and Taxpayers	Total Increase in Expenditures on Goods and Services Produced by Low-Wage Labor	$33,292
Minimum-Wage Workers	Increase in Employees' Gross Earnings	$31,117
	Increase in Employees' After-Tax Earnings	$24,237
Taxpayers	Total Payroll and Income Tax Gains From Increased Low-Wage Earnings	$9,056
Allocation of Costs		
All Consumers and Taxpayers	Total Increase in Expenditures on Goods and Services Produced by Low-Wage Labor	$33,292
United States Consumers	Consumer Goods	$28,953
Consumers Outside United States	Consumer Goods	$2,238
US Taxpayers	Increase in Federal, State & Local Govt Expenditures	$2,102

Table 7.1
Federal Minimum Wage Benefits Received by Income Quintile
(Projections for 1996 in 2000 $)

Income Quintiles by State		Increase to $6.25 per hour				
		% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
California By Income Quintiles	Lowest	27.2%	22.9%	22.3%	20.3%	$997
	Mid-Low	26.6%	22.5%	23.1%	18.4%	$905
	Middle	22.4%	18.8%	19.8%	14.7%	$877
	Mid-High	22.7%	19.2%	17.9%	13.4%	$783
	Highest	19.6%	16.6%	16.9%	11.5%	$777
Florida By Income Quintiles	Lowest	24.2%	19.1%	19.1%	17.3%	$947
	Mid-Low	23.0%	18.2%	21.3%	16.6%	$945
	Middle	27.8%	22.0%	17.8%	14.3%	$673
	Mid-High	24.7%	19.6%	20.7%	16.3%	$868
	Highest	26.5%	21.0%	21.2%	15.6%	$779
New York By Income Quintiles	Lowest	13.8%	13.4%	13.0%	12.3%	$1,071
	Mid-Low	20.7%	20.1%	20.4%	14.2%	$820
	Middle	22.7%	22.1%	26.2%	18.3%	$966
	Mid-High	22.2%	21.6%	23.3%	16.5%	$894
	Highest	23.5%	22.8%	17.1%	12.8%	$651
Texas By Income Quintiles	Lowest	38.7%	26.0%	26.6%	24.8%	$1,156
	Mid-Low	32.2%	21.7%	22.6%	17.7%	$980
	Middle	28.7%	19.3%	20.9%	15.8%	$985
	Mid-High	26.9%	18.2%	18.1%	14.4%	$959
	Highest	22.0%	14.8%	11.7%	9.0%	$735

*The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table 7.2
Minimum Wage Benefits Across States by Wage Distribution
(Projections for 1996 in 2000 $)

Family Characteristics	% All Families	Increase to $6.25 per hour				
		% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
California						
Families w/ Children	35%	34%	51%	50%	40%	$879
Families w/ Children & Earnings	32%	37%	51%	50%	40%	$879
50% Family Earnings from:						
Jobs paying below $7/hr	5%	84%	18%	23%	20%	$1,231
Jobs paying at most $9 / hr	3%	50%	7%	7%	5%	$780
Jobs paying at most $12 / hr	5%	38%	7%	6%	5%	$721
Jobs paying over $12 / hr Single	18%	24%	18%	14%	10%	$626
Florida						
Families w/ Children	29%	38%	44%	47%	38%	$887
Families w/ Children & Earnings	28%	40%	44%	47%	38%	$887
50% Family Earnings from:						
Jobs paying below $7/hr	5%	80%	16%	20%	18%	$1,186
Jobs paying at most $9 / hr	4%	37%	6%	6%	4%	$793
Jobs paying at most $12 / hr	4%	36%	6%	5%	4%	$639
Jobs paying over $12 / hr Single	13%	32%	17%	16%	12%	$749
New York						
Families w/ Children	29%	31%	43%	43%	31%	$843
Families w/ Children & Earnings	26%	34%	43%	43%	31%	$843
50% Family Earnings from:						
Jobs paying below $7/hr	3%	81%	12%	20%	15%	$1,498
Jobs paying at most $9 / hr	2%	34%	4%	3%	2%	$615
Jobs paying at most $12 / hr	4%	34%	7%	5%	4%	$621
Jobs paying over $12 / hr Single	16%	28%	21%	15%	11%	$591
Texas						
Families w/ Children	38%	39%	49%	48%	40%	$994
Families w/ Children & Earnings	36%	41%	49%	48%	40%	$994
50% Family Earnings from:						
Jobs paying below $7/hr	7%	86%	19%	26%	23%	$1,431
Jobs paying at most $9/hr	4%	53%	7%	6%	5%	$796
Jobs paying at most $12/hr	6%	38%	7%	7%	5%	$851
Jobs paying over $12/hr Single	18%	26%	15%	10%	8%	$616

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table 7.3
Federal Minimum Wage Benefits Received by Welfare Recipients with Children
(Projections for 1996 in 2000 $)

State	% All Families	Increase to $6.25 per hour				
		% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
California	**8.4%**	**43.6%**	**15.5%**	**15.0%**	**13.8%**	**$1,001**
Florida	**6.4%**	**46.7%**	**11.8%**	**11.8%**	**10.7%**	**$944**
New York	**6.3%**	**25.6%**	**7.9%**	**5.8%**	**5.9%**	**$876**
Texas	**8.3%**	**55.8%**	**15.5%**	**17.7%**	**16.3%**	**$1,272**

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table 7.4
Federal Minimum Wage Costs Paid by Income Quintiles
(Projections for 1996 in 2000 $)

Family Characteristics		Increase to $6.25 per hour			
		% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
California By Income Quintiles	Lowest	9.9%	$125	1.1%	2.3%
	Mid-Low	13.9%	$176	1.1%	2.2%
	Middle	16.5%	$209	1.1%	2.0%
	Mid-High	21.4%	$271	1.2%	2.0%
	Highest	38.3%	$484	1.3%	1.8%
Florida By Income Quintiles	Lowest	11.9%	$137	1.2%	2.5%
	Mid-Low	13.0%	$150	1.1%	2.0%
	Middle	18.6%	$213	1.1%	2.1%
	Mid-High	20.8%	$238	1.1%	1.8%
	Highest	35.8%	$410	1.2%	1.8%
New York By Income Quintiles	Lowest	9.6%	$113	1.2%	3.0%
	Mid-Low	12.2%	$144	1.0%	2.3%
	Middle	17.2%	$203	1.1%	2.0%
	Mid-High	23.0%	$272	1.2%	2.0%
	Highest	38.0%	$445	1.3%	2.0%
Texas By Income Quintiles	Lowest	10.8%	$122	1.1%	2.0%
	Mid-Low	12.3%	$141	1.0%	1.8%
	Middle	18.0%	$204	1.0%	1.6%
	Mid-High	23.0%	$262	1.1%	1.7%
	Highest	35.8%	$406	1.1%	1.5%

Table 7.5
Aggregate Costs and Benefits to States of a Federal Minimum Wage Increase
(in Millions of 2000 $ with Percentages in Parentheses)

Benefits and Costs	California	Florida	New York	Texas
Total Benefits	**$4,136 (100%)**	**$1,937 (100%)**	**$1,989 (100%)**	**$3,279 (100%)**
Low-Wage Workers	**$3,028 (73%)**	**$1,441 (74%)**	**$1,370 (69%)**	**$2,501 (76%)**
Taxes	**$1,108 (27%)**	**$496 (26%)**	**$619 (31%)**	**$778 (24%)**
Total Costs	**$4,136 (100%)**	**$1,937 (100%)**	**$1,989 (100%)**	**$3,279 (100%)**
In-State Consumers	**$3,663 (89%)**	**$1,568 (81%)**	**$1,805 (91%)**	**$1,926 (59%)**
Out-of-State Consumers and Government Expenditures	**$473 (11%)**	**$369 (19%)**	**$184 (9%)**	**$1,353 (41%)**

Table 7.6
Net Effect of Federal Minimum Wage Increase for Families by Income Level
(Projections for 1996 in 2000 $)

Family Characteristics		Share of Families:		Net Benefit/(Cost) for Families:		
		With Low-Wage Workers	Without Low-Wage Workers	With Low-Wage Workers	Without Low-Wage Workers	All
California By Income Quintile	Lowest	27.2%	72.8%	$872	($125)	$146
	Mid-Low	26.6%	73.4%	$729	($176)	$65
	Middle	22.4%	77.6%	$668	($209)	($13)
	Mid-High	22.7%	77.3%	$512	($271)	($93)
	Highest	19.6%	80.4%	$293	($484)	($332)
All Families		23.7%	76.3%	$615	($253)	($45)
Florida By Income Quintile	Lowest	24.2%	75.8%	$810	($137)	$92
	Mid-Low	23.0%	77.0%	$795	($150)	$67
	Middle	27.8%	72.2%	$460	($213)	($26)
	Mid-High	24.7%	75.3%	$630	($238)	($24)
	Highest	26.5%	73.5%	$369	($410)	($204)
All Families		25.2%	74.8%	$613	($230)	($17)
New York By Income Quintile	Lowest	13.8%	86.2%	$958	($113)	$35
	Mid-Low	20.7%	79.3%	$676	($144)	$26
	Middle	22.7%	77.3%	$763	($203)	$16
	Mid-High	22.2%	77.8%	$622	($272)	($74)
	Highest	23.5%	76.5%	$206	($445)	($292)
All Families		20.6%	79.4%	$645	($235)	($54)
Texas By Income Quintile	Lowest	38.7%	61.3%	$1,034	($122)	$325
	Mid-Low	32.2%	67.8%	$839	($141)	$175
	Middle	28.7%	71.3%	$781	($204)	$79
	Mid-High	26.9%	73.1%	$697	($262)	($4)
	Highest	22.0%	78.0%	$329	($406)	($244)
All Families		29.7%	70.3%	$736	($227)	$66

Table 8.1
State Minimum Wage Costs Paid by Income Quintiles
(Projections for 1996 in 2000$)

Family Characteristics		Increase to $6.25 Per Hour			
		% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
California By Income Quintiles	Lowest	9.6%	$112	1.0%	2.1%
	Mid-Low	13.7%	$160	1.0%	2.0%
	Middle	16.5%	$194	1.0%	1.8%
	Mid-High	21.5%	$252	1.1%	1.9%
	Highest	38.8%	$454	1.2%	1.7%
Florida By Income Quintiles	Lowest	11.6%	$144	1.3%	2.6%
	Mid-Low	13.1%	$163	1.2%	2.2%
	Middle	18.8%	$232	1.3%	2.3%
	Mid-High	20.9%	$258	1.2%	1.9%
	Highest	35.5%	$437	1.3%	1.9%
New York By Income Quintiles	Lowest	9.4%	$101	1.0%	2.6%
	Mid-Low	12.6%	$135	1.0%	2.1%
	Middle	17.3%	$186	1.0%	1.8%
	Mid-High	23.0%	$247	1.1%	1.8%
	Highest	37.7%	$402	1.2%	1.8%
Texas By Income Quintiles	Lowest	11.4%	$182	1.6%	2.9%
	Mid-Low	12.1%	$193	1.4%	2.5%
	Middle	17.6%	$280	1.4%	2.2%
	Mid-High	23.1%	$368	1.6%	2.4%
	Highest	35.9%	$572	1.6%	2.2%

Table 8.2
Aggregate Costs and Benefits to States of a State Minimum Wage Increase
(in Millions of 2000 $)

	California	Florida	New York	Texas
Total Benefits	**$4,136 (100%)**	**$1,937 (100%)**	**$1,989 (100%)**	**$3,279 (100%)**
Low-Wage Workers	**$3,028 (73%)**	**$1,441 (74%)**	**$1,370 (69%)**	**$2,501 (76%)**
Taxes	**$1,108 (27%)**	**$496 (26%)**	**$619 (31%)**	**$778 (24%)**
Total Costs	**$4,136 (100%)**	**$1,937 (100%)**	**$1,989 (100%)**	**$3,279 (100%)**
In-State Consumers	**$3,424 (83%)**	**$1,701 (88%)**	**$1,647 (83%)**	**$2,716 (83%)**
Out-of-State Consumers	**$447 (11%)**	**$115 (6%)**	**$206 (10%)**	**$235 (7%)**
Government Expenditures	**$265 (6%)**	**$121 (6%)**	**$136 (7%)**	**$329 (10%)**

Table 8.3
Net Effect of a State Minimum Wage Increase for Families by Income Level
(Projections for 1996 in 2000 $)

Family Characteristics		Share of Families:		Net Benefit/Cost for Families:		
		With Low-Wage Workers	Without Low-Wage Workers	With Low-Wage Workers	Without Low-Wage Workers	All
California By Income Quintile	Lowest	27.2%	72.8%	$885	($112)	$159
	Mid-Low	26.6%	73.4%	$745	($160)	$81
	Middle	22.4%	77.6%	$683	($194)	$2
	Mid-High	22.7%	77.3%	$531	($252)	($74)
	Highest	19.6%	80.4%	$323	($454)	($302)
All Families		23.7%	76.3%	$633	($234)	($27)
Florida By Income Quintile	Lowest	24.2%	75.8%	$803	($144)	$85
	Mid-Low	23.0%	77.0%	$782	($163)	$54
	Middle	27.8%	72.2%	$441	($232)	($45)
	Mid-High	24.7%	75.3%	$610	($258)	($44)
	Highest	26.5%	73.5%	$342	($437)	($231)
All Families		25.2%	74.8%	$596	($247)	($34)
New York By Income Quintile	Lowest	13.8%	86.2%	$970	($101)	$47
	Mid-Low	20.7%	79.3%	$685	($135)	$35
	Middle	22.7%	77.3%	$780	($186)	$33
	Mid-High	22.2%	77.8%	$647	($247)	($49)
	Highest	23.5%	76.5%	$249	($402)	($249)
All Families		20.6%	79.4%	$666	($214)	($33)
Texas By Income Quintile	Lowest	38.7%	61.3%	$974	($182)	$265
	Mid-Low	32.2%	67.8%	$787	($193)	$123
	Middle	28.7%	71.3%	$705	($280)	$3
	Mid-High	26.9%	73.1%	$591	($368)	($110)
	Highest	22.0%	78.0%	$163	($572)	($410)
All Families		29.7%	70.3%	$644	($319)	($26)

Table B.1
Minimum Wage Benefits Received by Various Families in United States
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour				
			% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
By Income Quintiles	Lowest	20.0%	25.7%	20.5%	20.6%	18.7%	$929
	Mid-Low	20.0%	25.4%	20.2%	21.8%	16.6%	$835
	Middle	20.0%	25.0%	19.8%	21.0%	15.6%	$796
	Mid-High	20.0%	25.3%	20.1%	19.3%	14.4%	$730
	Highest	20.0%	24.4%	19.4%	17.4%	12.5%	$654
Family Income Relative to Poverty Level	≤.5	5.9%	22.4%	5.3%	3.8%	4.2%	$806
	.5 - 1	9.5%	33.7%	12.7%	13.4%	12.3%	$984
	1-2	21.6%	30.3%	26.0%	29.9%	22.3%	$872
	2 - 3	19.5%	27.3%	21.1%	21.6%	16.4%	$786
	>3	43.5%	20.2%	34.9%	31.3%	22.7%	$659
Married Families w/ Children		23.0%	36.1%	33.0%	32.2%	24.0%	$741
Single Families w/ Children		10.1%	37.4%	15.0%	13.3%	12.0%	$811
Female-Headed		8.3%	39.0%	12.9%	11.0%	10.2%	$801
Families w/ 3 or more children		7.1%	40.5%	11.4%	11.1%	9.1%	$812
Income Below Poverty Level		15.4%	29.4%	18.0%	17.2%	16.5%	$932
With Children under 18		5.5%	44.6%	9.8%	9.1%	9.2%	$957
Married		1.7%	49.6%	3.4%	3.8%	3.5%	$1,038
Single		3.8%	42.3%	6.4%	5.3%	5.7%	$914
Income Below Twice Poverty Level		37.0%	29.9%	43.9%	47.1%	38.8%	$897
With Children under 18		13.0%	43.6%	22.5%	23.1%	19.3%	$872
Married		6.2%	47.3%	11.7%	13.5%	10.1%	$882
Single		6.8%	40.1%	10.8%	9.6%	9.2%	$862
Income in Lowest 20% of Families		20.0%	25.7%	20.5%	20.6%	18.7%	$929
With Children under 18		4.1%	41.6%	6.8%	5.9%	6.4%	$956
Married		0.8%	45.3%	1.4%	1.6%	1.7%	$1,196
Single		3.3%	40.7%	5.4%	4.3%	4.7%	$892
Income in Lowest 40% of Families		40.0%	25.6%	40.6%	42.4%	35.4%	$882
With Children under 18		9.3%	41.7%	15.4%	14.8%	13.2%	$872
Married		3.1%	47.3%	5.9%	6.9%	5.4%	$930
Single		6.1%	38.9%	9.5%	7.9%	7.8%	$835
Families w/ Children & Earnings		31.1%	38.8%	48.0%	45.5%	36.0%	$763
50% Family Earnings from:							
Jobs paying below $7/hr		4.8%	79.3%	15.0%	19.1%	16.5%	$1,118
Jobs paying at most $9/hr		3.3%	46.0%	6.1%	5.4%	3.9%	$648
Jobs paying at most $12/hr		4.9%	37.3%	7.3%	6.3%	4.7%	$653
Jobs paying over $12/hr Single		16.8%	29.3%	19.6%	14.6%	11.0%	$571
Welfare Recipient with Children		6.9%	46.6%	12.8%	12.2%	11.1%	$881
On AFDC or SSI		4.6%	42.6%	7.7%	6.8%	6.5%	$853
Single		3.1%	38.5%	4.7%	3.9%	4.0%	$858
Government's Share						22.1%	

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table B.2
Federal Minimum Wage Costs Paid by Various Families in United States
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	10.6%	$127	1.2%	2.4%
	Mid-Low	20.0%	12.9%	$154	1.1%	2.0%
	Middle	20.0%	16.9%	$201	1.1%	1.9%
	Mid-High	20.0%	22.9%	$273	1.1%	1.7%
	Highest	20.0%	36.7%	$437	1.2%	1.7%
Family Income Relative to Poverty Level	≤.5	6.1%	3.9%	$152	1.2%	2.3%
	.5 - 1	10.5%	5.7%	$130	1.1%	2.2%
	1-2	23.4%	15.4%	$157	1.1%	2.0%
	2 - 3	19.7%	17.2%	$209	1.1%	1.8%
	>3	40.3%	57.8%	$342	1.2%	1.8%
By Consumption Quintiles	Lowest	20.0%	6.0%	$71	1.2%	3.3%
	Mid-Low	20.0%	10.5%	$124	1.2%	2.5%
	Middle	20.0%	15.9%	$189	1.2%	2.3%
	Mid-High	20.0%	24.0%	$286	1.2%	2.0%
	Highest	20.0%	43.7%	$521	1.1%	1.5%
With Children under 18		33.8%	39.7%	$280	1.2%	1.8%
Married		25.0%	32.6%	$311	1.2%	1.8%
Single		8.8%	7.1%	$191	1.1%	2.0%
Female-Headed		7.4%	5.7%	$182	1.1%	2.1%
Income Below Poverty Level		16.5%	9.6%	$138	1.1%	2.3%
With Children under 18		6.2%	3.7%	$143	1.0%	2.0%
Single		3.4%	1.7%	$119	1.0%	2.3%
Income Below Twice Poverty Level		40.0%	25.0%	$149	1.1%	2.1%
With Children under 18		14.1%	10.3%	$174	1.0%	1.9%
Single		6.0%	3.6%	$145	1.1%	2.1%
Income in Lowest 20% of Families		20.0%	10.6%	$127	1.2%	2.4%
With Children under 18		4.2%	2.4%	$136	1.0%	2.0%
Single		2.8%	1.4%	$116	1.0%	2.3%
Income in Lowest 40% of Families		40.0%	23.5%	$140	1.1%	2.2%
With Children under 18		9.7%	6.3%	$154	1.0%	2.0%
Single		5.4%	3.1%	$138	1.1%	2.2%
Welfare Recipient with Children		4.7%	2.5%	$125	1.0%	2.0%
On AFDC or SSI		3.2%	1.7%	$127	1.0%	2.1%
Single		2.1%	1.0%	$116	1.0%	2.2%

Table B.3
Minimum Wage Benefits Received by Various Families in California
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour				
			% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
By Income Quintiles	Lowest	20.0%	27.2%	22.9%	22.3%	20.3%	$997
	Mid-Low	20.0%	26.6%	22.5%	23.1%	18.4%	$905
	Middle	20.0%	22.4%	18.8%	19.8%	14.7%	$877
	Mid-High	20.0%	22.7%	19.2%	17.9%	13.4%	$783
	Highest	20.0%	19.6%	16.6%	16.9%	11.5%	$777
Family Income Relative to Poverty Level	≤.5	6.5%	23.4%	6.4%	4.5%	4.8%	$850
	.5 - 1	10.3%	39.8%	17.3%	18.4%	16.9%	$1,098
	1-2	22.1%	29.4%	27.4%	30.9%	23.3%	$948
	2 - 3	16.1%	27.2%	18.5%	19.7%	14.9%	$901
	>3	45.0%	16.1%	30.5%	26.5%	18.4%	$677
Married Families w/ Children		24.3%	33.4%	34.2%	34.2%	26.1%	$852
Single Families w/ Children		11.0%	36.1%	16.7%	15.6%	13.9%	$933
Female-Headed		8.3%	36.9%	12.9%	11.1%	10.0%	$877
Families w/ 3 or more children		9.1%	37.3%	14.4%	14.4%	11.8%	$913
Income Below Poverty Level		16.7%	33.5%	23.6%	23.0%	21.7%	$1,031
With Children under 18		7.5%	44.9%	14.1%	13.2%	13.0%	$1,030
Married		3.2%	52.0%	7.0%	7.3%	6.7%	$1,081
Single		4.3%	39.7%	7.1%	5.9%	6.2%	$980
Income Below Twice Poverty Level		38.9%	31.1%	51.1%	53.8%	45.0%	$986
With Children under 18		15.4%	42.5%	27.5%	29.3%	24.6%	$1,001
Married		8.4%	45.8%	16.2%	19.0%	15.0%	$1,029
Single		7.0%	38.5%	11.3%	10.2%	9.7%	$960
Income in Lowest 20% of Families		20.0%	27.2%	22.9%	22.3%	20.3%	$997
With Children under 18		4.6%	40.1%	7.8%	6.3%	6.7%	$965
Married		1.2%	46.6%	2.3%	1.9%	2.0%	$955
Single		3.4%	37.9%	5.5%	4.4%	4.7%	$969
Income in Lowest 40% of Families		40.0%	26.9%	45.4%	45.4%	38.7%	$952
With Children under 18		10.9%	41.8%	19.3%	19.2%	17.1%	$991
Married		4.8%	47.7%	9.7%	11.4%	9.4%	$1,070
Single		6.1%	37.1%	9.5%	7.8%	7.7%	$911
Families w/ Children & Earnings		32.4%	37.3%	51.0%	49.8%	40.0%	$879
50% Family Earnings from:							
Jobs paying below $7/hr		5.2%	84.1%	18.3%	23.2%	20.2%	$1,231
Jobs paying at most $9/hr		3.4%	49.5%	7.1%	6.6%	4.9%	$780
Jobs paying at most $12/hr		4.5%	38.4%	7.3%	6.4%	4.7%	$721
Jobs paying over $12/hr Single		17.7%	24.4%	18.2%	13.7%	10.1%	$626
Welfare Recipient with Children		8.4%	43.6%	15.5%	15.0%	13.8%	$1,001
On AFDC or SSI		7.1%	41.2%	12.3%	12.0%	11.2%	$1,024
Single		4.2%	37.6%	6.7%	6.4%	5.8%	$983
Government's Share						21.7%	

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table B.4
Minimum Wage Benefits Received by Various Families in Florida
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour				
			% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
By Income Quintiles	Lowest	20.0%	24.2%	19.1%	19.1%	17.3%	$947
	Mid-Low	20.0%	23.0%	18.2%	21.3%	16.6%	$945
	Middle	20.0%	27.8%	22.0%	17.8%	14.3%	$673
	Mid-High	20.0%	24.7%	19.6%	20.7%	16.3%	$868
	Highest	20.0%	26.5%	21.0%	21.2%	15.6%	$779
Family Income Relative to Poverty Level	≤.5	5.9%	22.8%	5.3%	3.0%	3.3%	$658
	.5 - 1	8.2%	30.2%	9.8%	13.1%	12.1%	$1,289
	1-2	22.8%	29.5%	26.7%	28.7%	21.9%	$856
	2 - 3	21.8%	26.8%	23.1%	22.1%	17.8%	$802
	>3	41.3%	21.4%	35.1%	33.1%	24.9%	$741
Married Families w/ Children		19.6%	35.1%	27.3%	30.8%	23.3%	$891
Single Families w/ Children		9.8%	43.6%	16.9%	16.1%	14.3%	$880
Female-Headed		8.6%	43.8%	14.9%	14.4%	13.1%	$913
Families w/ 3 or more children		5.5%	47.5%	10.3%	10.5%	8.8%	$894
Income Below Poverty Level		14.1%	27.1%	15.1%	16.1%	15.5%	$1,067
With Children under 18		5.1%	45.1%	9.1%	9.5%	9.5%	$1,088
Married		1.2%	41.6%	2.0%	3.2%	2.8%	$1,465
Single		3.9%	46.1%	7.1%	6.2%	6.7%	$981
Income Below Twice Poverty Level		36.9%	28.6%	41.8%	44.8%	37.4%	$933
With Children under 18		12.7%	44.5%	22.3%	23.0%	19.5%	$908
Married		5.5%	44.9%	9.8%	11.1%	8.5%	$905
Single		7.2%	44.2%	12.5%	11.9%	11.0%	$911
Income in Lowest 20% of Families		20.0%	24.2%	19.1%	19.1%	17.3%	$947
With Children under 18		4.1%	43.7%	7.1%	5.5%	6.0%	$881
Married		0.3%	38.3%	0.5%	0.9%	0.9%	$1,982
Single		3.8%	44.2%	6.6%	4.6%	5.1%	$801
Income in Lowest 40% of Families		40.0%	23.6%	37.4%	40.3%	33.9%	$946
With Children under 18		8.9%	42.0%	14.9%	15.5%	13.6%	$954
Married		2.4%	38.3%	3.7%	4.5%	3.4%	$975
Single		6.5%	43.4%	11.2%	11.0%	10.2%	$947
Families w/ Children & Earnings		27.7%	40.2%	44.2%	46.9%	37.6%	$887
50% Family Earnings from:							
Jobs paying below $7/hr		4.9%	79.6%	15.5%	20.4%	17.6%	$1,186
Jobs paying at most $9/hr		3.8%	36.8%	5.6%	5.9%	4.3%	$793
Jobs paying at most $12/hr		4.1%	36.2%	5.8%	4.8%	3.6%	$639
Jobs paying over $12/hr Single		13.2%	32.3%	16.9%	15.9%	12.1%	$749
Welfare Recipient with Children		6.4%	46.7%	11.8%	11.8%	10.7%	$944
On AFDC or SSI		3.9%	46.8%	7.2%	7.5%	6.9%	$1,002
Single		2.8%	42.7%	4.8%	4.6%	4.5%	$986

Government's Share	**19.9%**

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table B.5
Minimum Wage Benefits Received by Various Families in New York
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour				
			% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
By Income Quintiles	Lowest	20.0%	13.8%	13.4%	13.0%	12.3%	$1,071
	Mid-Low	20.0%	20.7%	20.1%	20.4%	14.2%	$820
	Middle	20.0%	22.7%	22.1%	26.2%	18.3%	$966
	Mid-High	20.0%	22.2%	21.6%	23.3%	16.5%	$894
	Highest	20.0%	23.5%	22.8%	17.1%	12.8%	$651
Family Income Relative to Poverty Level	≤.5	6.6%	11.7%	3.7%	2.8%	3.4%	$1,066
	.5 - 1	10.8%	20.5%	10.7%	9.8%	8.9%	$967
	1-2	21.0%	23.5%	24.0%	30.4%	20.2%	$984
	2 - 3	17.9%	24.9%	21.6%	24.9%	18.4%	$987
	>3	43.7%	18.8%	39.9%	32.0%	23.2%	$678
Married Families w/ Children		19.5%	34.0%	32.3%	33.7%	22.6%	$817
Single Families w/ Children		9.4%	23.7%	10.8%	9.1%	8.6%	$923
Female-Headed		8.3%	22.8%	9.2%	6.7%	6.6%	$831
Families w/ 3 or more children		5.8%	33.2%	9.3%	13.6%	9.8%	$1,229
Income Below Poverty Level		17.3%	17.2%	14.5%	12.6%	12.3%	$992
With Children under 18		5.9%	27.1%	7.7%	6.2%	6.7%	$1,014
Married		1.4%	48.1%	3.3%	3.1%	2.8%	$1,001
Single		4.5%	20.5%	4.5%	3.2%	3.9%	$1,023
Income Below Twice Poverty Level		38.4%	20.6%	38.4%	43.0%	32.6%	$987
With Children under 18		12.3%	30.6%	18.4%	20.3%	14.9%	$949
Married		5.5%	42.9%	11.4%	13.8%	8.4%	$856
Single		6.9%	20.8%	6.9%	6.5%	6.5%	$1,103
Income in Lowest 20% of Families		20.0%	13.8%	13.4%	13.0%	12.3%	$1,071
With Children under 18		3.8%	18.6%	3.4%	3.3%	4.2%	$1,413
Married		0.4%	45.4%	0.8%	0.7%	1.1%	$1,503
Single		3.4%	15.7%	2.6%	2.5%	3.1%	$1,384
Income in Lowest 40% of Families		40.0%	17.2%	33.5%	33.5%	26.5%	$921
With Children under 18		8.5%	28.3%	11.7%	11.2%	9.0%	$899
Married		2.4%	49.1%	5.7%	7.2%	4.5%	$917
Single		6.1%	20.1%	5.9%	4.0%	4.5%	$881
Families w/ Children & Earnings		25.8%	34.4%	43.1%	42.8%	31.2%	$843
50% Family Earnings from:							
Jobs paying below $7/hr		3.0%	81.2%	11.7%	19.7%	15.0%	$1,498
Jobs paying at most $9/hr		2.2%	33.6%	3.6%	2.9%	1.9%	$615
Jobs paying at most $12/hr		3.9%	34.2%	6.5%	5.4%	3.5%	$621
Jobs paying over $12/hr Single		15.8%	27.8%	21.3%	14.7%	10.8%	$591
Welfare Recipient with Children		6.3%	25.6%	7.9%	5.8%	5.9%	$876
On AFDC or SSI		4.7%	22.0%	5.0%	3.6%	3.7%	$862
Single		3.9%	19.3%	3.7%	2.4%	2.6%	$839

* The “Average Net Benefit” averages over families that have a minimum wage worker. It is not the average over the whole population.

Table B.6
Minimum Wage Benefits Received by Various Families in Texas
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour				
			% Receiving Low-Wage Earnings	% Low-Wage Pop	% of Gross	% of Net	Average Net Benefit*
By Income Quintiles	Lowest	20.0%	38.7%	26.0%	26.6%	24.8%	$1,156
	Mid-Low	20.0%	32.2%	21.7%	22.6%	17.7%	$980
	Middle	20.0%	28.7%	19.3%	20.9%	15.8%	$985
	Mid-High	20.0%	26.9%	18.2%	18.1%	14.4%	$959
	Highest	20.0%	22.0%	14.8%	11.7%	9.0%	$735
Family Income Relative to Poverty Level	≤.5	7.3%	33.7%	8.3%	6.2%	7.3%	$1,065
	.5 - 1	9.8%	42.8%	14.1%	17.1%	15.1%	$1,296
	1-2	22.1%	40.2%	29.9%	35.3%	27.3%	$1,105
	2 - 3	20.3%	31.3%	21.3%	20.4%	15.8%	$889
	>3	40.5%	19.3%	26.3%	21.1%	16.2%	$740
Married Families w/ Children		26.6%	37.2%	33.3%	33.5%	26.6%	$967
Single Families w/ Children		10.8%	43.0%	15.7%	14.8%	13.6%	$1,050
Female-Headed		8.7%	46.0%	13.5%	11.9%	11.1%	$994
Families w/ 3 or more children		8.5%	43.2%	12.4%	13.8%	11.9%	$1,167
Income Below Poverty Level		17.1%	38.9%	22.4%	23.3%	22.4%	$1,211
With Children under 18		7.6%	53.0%	13.6%	13.7%	13.9%	$1,246
Married		3.5%	51.5%	6.1%	6.9%	6.8%	$1,337
Single		4.1%	54.2%	7.4%	6.8%	7.2%	$1,171
Income Below Twice Poverty Level		39.2%	39.6%	52.3%	58.6%	49.7%	$1,150
With Children under 18		15.7%	49.6%	26.2%	29.4%	25.5%	$1,179
Married		9.0%	50.0%	15.1%	18.8%	15.0%	$1,208
Single		6.7%	49.1%	11.1%	10.6%	10.5%	$1,138
Income in Lowest 20% of Families		20.0%	38.7%	26.0%	26.6%	24.8%	$1,156
With Children under 18		5.4%	55.3%	10.1%	9.9%	10.8%	$1,292
Married		1.9%	61.2%	3.9%	4.2%	4.7%	$1,437
Single		3.5%	52.1%	6.2%	5.7%	6.1%	$1,199
Income in Lowest 40% of Families		40.0%	35.4%	47.7%	49.2%	42.5%	$1,076
With Children under 18		10.9%	48.0%	17.6%	17.8%	16.8%	$1,152
Married		4.9%	48.2%	8.0%	9.4%	8.2%	$1,235
Single		6.0%	47.9%	9.6%	8.5%	8.6%	$1,084
Families w/ Children & Earnings		35.6%	40.8%	49.0%	48.3%	40.2%	$994
50% Family Earnings from:							
Jobs paying below $7/hr		6.6%	86.1%	19.1%	25.8%	22.5%	$1,431
Jobs paying at most $9/hr		4.0%	52.9%	7.2%	6.2%	4.7%	$796
Jobs paying at most $12/hr		5.7%	38.4%	7.3%	6.6%	5.2%	$851
Jobs paying over $12/hr Single		17.5%	26.0%	15.3%	9.7%	7.8%	$616
Welfare Recipient with Children		8.3%	55.8%	15.5%	17.7%	16.3%	$1,272
On AFDC or SSI		4.1%	44.4%	6.1%	5.9%	5.7%	$1,132
Single		2.4%	49.2%	3.9%	4.0%	4.1%	$1,271

Government's Share	**18.3%**

* The "Average Net Benefit" averages over families that have a minimum wage worker. It is not the average over the whole population.

Table B.7
Federal Minimum Wage Costs Paid by Various Families in California
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	9.9%	$125	1.1%	2.3%
	Mid-Low	20.0%	13.9%	$176	1.1%	2.2%
	Middle	20.0%	16.5%	$209	1.1%	2.0%
	Mid-High	20.0%	21.4%	$271	1.2%	2.0%
	Highest	20.0%	38.3%	$484	1.3%	1.8%
Family Income Relative to Poverty Level	≤.5	4.8%	3.0%	$159	1.1%	2.0%
	.5 - 1	12.8%	6.6%	$132	1.0%	2.2%
	1-2	21.6%	13.9%	$162	1.1%	2.1%
	2 - 3	17.5%	15.6%	$226	1.1%	2.0%
	>3	43.3%	60.9%	$355	1.2%	1.9%
By Consumption Quintiles	Lowest	20.0%	6.0%	$76	1.2%	3.7%
	Mid-Low	20.0%	10.6%	$134	1.2%	2.7%
	Middle	20.0%	15.9%	$201	1.2%	2.6%
	Mid-High	20.0%	22.7%	$287	1.1%	2.1%
	Highest	20.1%	44.8%	$565	1.2%	1.6%
With Children under 18		37.1%	41.1%	$280	1.1%	1.9%
Married		28.8%	34.5%	$303	1.1%	1.8%
Single		8.3%	6.6%	$200	1.1%	2.2%
Female-Headed		6.7%	5.1%	$193	1.1%	2.4%
Income Below Poverty Level		17.6%	9.7%	$139	1.0%	2.1%
With Children under 18		8.5%	4.8%	$141	0.9%	1.8%
Single		3.5%	1.7%	$121	1.0%	2.7%
Income Below Twice Poverty Level		39.2%	23.5%	$152	1.0%	2.1%
With Children under 18		17.9%	11.9%	$169	1.0%	1.9%
Single		5.6%	3.1%	$141	1.1%	2.7%
Income in Lowest 20% of Families		20.0%	9.9%	$125	1.1%	2.3%
With Children under 18		5.6%	2.8%	$126	1.0%	2.1%
Single		3.2%	1.4%	$109	1.0%	2.8%
Income in Lowest 40% of Families		40.0%	23.8%	$150	1.1%	2.2%
With Children under 18		13.5%	8.2%	$154	1.0%	1.9%
Single		5.0%	2.6%	$132	1.1%	2.8%
Welfare Recipient with Children		5.8%	3.0%	$133	1.0%	2.3%
On AFDC or SSI		4.8%	2.5%	$132	1.0%	2.5%
Single		2.5%	1.3%	$129	1.0%	2.7%

Table B.8
Federal Minimum Wage Costs Paid by Various Families in Florida
(Projections for 1996 in 2000$)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	19.9%	11.9%	$137	1.2%	2.5%
	Mid-Low	19.9%	13.0%	$150	1.1%	2.0%
	Middle	20.1%	18.6%	$213	1.1%	2.1%
	Mid-High	20.1%	20.8%	$238	1.1%	1.8%
	Highest	20.0%	35.8%	$410	1.2%	1.8%
Family Income Relative to Poverty Level	≤.5	5.5%	3.9%	$162	1.5%	2.7%
	.5 - 1	10.1%	5.8%	$132	1.1%	2.3%
	1-2	28.9%	20.4%	$162	1.1%	2.1%
	2 - 3	20.9%	20.1%	$221	1.1%	1.9%
	>3	34.5%	49.7%	$331	1.2%	1.8%
By Consumption Quintiles	Lowest	19.9%	6.6%	$77	1.3%	3.2%
	Mid-Low	20.0%	11.4%	$131	1.2%	2.7%
	Middle	20.1%	16.9%	$193	1.3%	2.6%
	Mid-High	20.0%	23.2%	$267	1.2%	2.2%
	Highest	20.1%	41.9%	$479	1.1%	1.5%
With Children under 18		27.2%	31.5%	$265	1.2%	1.9%
Married		19.1%	24.5%	$295	1.2%	2.0%
Single		8.2%	7.0%	$196	1.1%	1.8%
Female-Headed		7.0%	5.9%	$195	1.1%	1.8%
Income Below Poverty Level		15.7%	9.7%	$143	1.2%	2.4%
With Children under 18		4.4%	2.7%	$143	1.1%	2.2%
Single		2.3%	1.1%	$110	1.0%	2.1%
Income Below Twice Poverty Level		44.6%	30.2%	$155	1.2%	2.2%
With Children under 18		12.7%	9.6%	$173	1.1%	2.0%
Single		4.9%	2.8%	$131	1.0%	2.0%
Income in Lowest 20% of Families		19.9%	11.9%	$137	1.2%	2.5%
With Children under 18		2.7%	1.3%	$116	1.1%	2.0%
Single		1.7%	0.7%	$94	0.9%	1.9%
Income in Lowest 40% of Families		39.8%	24.8%	$143	1.2%	2.2%
With Children under 18		7.1%	4.5%	$145	1.1%	2.0%
Single		3.7%	1.7%	$109	1.0%	1.8%
Welfare Recipient with Children		3.1%	2.0%	$148	1.0%	1.8%
On AFDC or SSI		1.8%	1.1%	$142	0.9%	1.8%
Single		1.5%	1.0%	$153	0.9%	1.7%

Table B.9
Federal Minimum Wage Costs Paid by Various Families in New York
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	19.9%	9.6%	$113	1.2%	3.0%
	Mid-Low	20.0%	12.2%	$144	1.0%	2.3%
	Middle	20.0%	17.2%	$203	1.1%	2.0%
	Mid-High	20.0%	23.0%	$272	1.2%	2.0%
	Highest	20.1%	38.0%	$445	1.3%	2.0%
Family Income Relative to Poverty Level	≤.5	10.9%	5.7%	$124	1.2%	2.9%
	.5 - 1	11.3%	6.4%	$134	1.1%	2.4%
	1-2	23.3%	16.2%	$164	1.1%	2.4%
	2 - 3	17.3%	14.4%	$196	1.1%	1.9%
	>3	37.2%	57.3%	$363	1.3%	2.0%
By Consumption Quintiles	Lowest	19.9%	5.9%	$69	1.2%	3.4%
	Mid-Low	19.9%	9.6%	$114	1.0%	2.4%
	Middle	20.1%	15.6%	$183	1.1%	2.3%
	Mid-High	20.0%	22.4%	$264	1.2%	2.2%
	Highest	20.1%	46.5%	$546	1.3%	1.9%
With Children under 18		33.3%	40.0%	$283	1.2%	2.1%
Married		23.0%	32.4%	$333	1.2%	2.0%
Single		10.4%	7.6%	$173	1.2%	2.8%
Female-Headed		8.9%	6.8%	$181	1.2%	2.9%
Income Below Poverty Level		22.2%	12.2%	$129	1.1%	2.6%
With Children under 18		8.5%	5.1%	$143	1.0%	2.3%
Single		4.9%	2.2%	$105	0.9%	2.3%
Income Below Twice Poverty Level		45.5%	28.4%	$147	1.1%	2.5%
With Children under 18		15.9%	12.2%	$182	1.1%	2.6%
Single		7.7%	4.9%	$152	1.2%	3.3%
Income in Lowest 20% of Families		19.9%	9.6%	$113	1.2%	3.0%
With Children under 18		5.1%	2.7%	$126	1.0%	2.6%
Single		3.5%	1.4%	$95	1.0%	2.7%
Income in Lowest 40% of Families		39.9%	21.8%	$129	1.1%	2.6%
With Children under 18		10.9%	7.0%	$151	1.0%	2.5%
Single		6.4%	3.2%	$121	1.0%	2.7%
Welfare Recipient with Children		5.8%	2.6%	$108	1.0%	2.8%
On AFDC or SSI		4.7%	2.2%	$111	1.0%	3.0%
Single		3.9%	1.6%	$98	1.0%	3.2%

Table B.10
Federal Minimum Wage Costs Paid by Various Families in Texas
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	10.8%	$122	1.1%	2.0%
	Mid-Low	20.0%	12.3%	$141	1.0%	1.8%
	Middle	20.1%	18.0%	$204	1.0%	1.6%
	Mid-High	20.0%	23.0%	$262	1.1%	1.7%
	Highest	20.0%	35.8%	$406	1.1%	1.5%
Family Income Relative to Poverty Level	≤.5	5.1%	3.4%	$148	1.0%	1.7%
	.5 - 1	11.6%	5.8%	$114	1.0%	2.0%
	1-2	25.8%	18.1%	$159	1.1%	1.8%
	2 - 3	21.4%	19.6%	$208	1.0%	1.6%
	>3	36.1%	53.2%	$335	1.1%	1.6%
By Consumption Quintiles	Lowest	19.9%	5.5%	$63	1.1%	2.9%
	Mid-Low	20.0%	10.6%	$121	1.1%	2.4%
	Middle	20.0%	16.3%	$185	1.2%	2.1%
	Mid-High	20.0%	23.9%	$272	1.2%	1.9%
	Highest	20.1%	43.7%	$495	1.0%	1.3%
With Children under 18		38.9%	45.6%	$266	1.1%	1.6%
Married		28.8%	37.6%	$297	1.1%	1.5%
Single		10.2%	8.0%	$179	1.1%	1.8%
Female-Headed		8.7%	6.5%	$170	1.1%	1.7%
Income Below Poverty Level		16.7%	9.2%	$125	1.0%	1.9%
With Children under 18		7.5%	4.4%	$133	1.0%	1.7%
Single		3.3%	1.4%	$95	1.0%	1.9%
Income Below Twice Poverty Level		42.5%	27.2%	$146	1.1%	1.9%
With Children under 18		17.4%	13.1%	$171	1.0%	1.6%
Single		6.8%	4.3%	$143	1.1%	1.7%
Income in Lowest 20% of Families		20.0%	10.8%	$122	1.1%	2.0%
With Children under 18		5.3%	3.1%	$135	1.0%	1.7%
Single		3.0%	1.2%	$92	1.0%	2.1%
Income in Lowest 40% of Families		39.9%	23.1%	$131	1.0%	1.9%
With Children under 18		11.9%	7.7%	$147	1.0%	1.7%
Single		5.9%	3.4%	$129	1.1%	1.9%
Welfare Recipient with Children		6.8%	3.7%	$125	1.0%	1.8%
On AFDC or SSI		2.7%	1.7%	$143	1.0%	1.9%
Single		1.3%	0.6%	$99	1.0%	2.3%

Table B.11
State Minimum Wage Costs Paid by Various Families in California
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	9.6%	$112	1.0%	2.1%
	Mid-Low	20.0%	13.7%	$160	1.0%	2.0%
	Middle	20.0%	16.5%	$194	1.0%	1.8%
	Mid-High	20.0%	21.5%	$252	1.1%	1.9%
	Highest	20.0%	38.8%	$454	1.2%	1.7%
Family Income Relative to Poverty Level	≤.5	4.8%	2.9%	$142	1.0%	1.8%
	.5 - 1	12.8%	6.3%	$117	0.9%	1.9%
	1-2	21.6%	13.7%	$149	1.0%	2.0%
	2 - 3	17.5%	15.5%	$207	1.0%	1.8%
	>3	43.3%	61.5%	$333	1.2%	1.8%
By Consumption Quintiles	Lowest	20.0%	5.7%	$67	1.1%	3.3%
	Mid-Low	20.0%	10.6%	$124	1.1%	2.5%
	Middle	20.0%	15.7%	$184	1.1%	2.4%
	Mid-High	20.0%	22.8%	$267	1.1%	1.9%
	Highest	20.1%	45.2%	$528	1.1%	1.5%
With Children under 18		37.1%	40.5%	$256	1.0%	1.7%
Married		28.8%	34.1%	$277	1.0%	1.7%
Single		8.3%	6.4%	$182	1.0%	2.0%
Female-Headed		6.7%	5.0%	$175	1.0%	2.2%
Income Below Poverty Level		17.6%	9.3%	$124	0.9%	1.9%
With Children under 18		8.5%	4.7%	$128	0.8%	1.6%
Single		3.5%	1.7%	$110	0.9%	2.5%
Income Below Twice Poverty Level		39.2%	23.0%	$138	0.9%	1.9%
With Children under 18		17.9%	11.7%	$153	0.9%	1.8%
Single		5.6%	3.0%	$128	1.0%	2.4%
Income in Lowest 20% of Families		20.0%	9.6%	$112	1.0%	2.1%
With Children under 18		5.6%	2.8%	$115	0.9%	1.9%
Single		3.2%	1.3%	$99	0.9%	2.5%
Income in Lowest 40% of Families		40.0%	23.2%	$136	1.0%	2.0%
With Children under 18		13.5%	8.0%	$139	0.9%	1.7%
Single		5.0%	2.5%	$119	0.9%	2.5%
Welfare Recipient with Children		5.8%	3.0%	$121	0.9%	2.1%
On AFDC or SSI		4.8%	2.5%	$120	0.9%	2.3%
Single		2.5%	1.2%	$118	0.9%	2.5%

Table B.12
State Minimum Wage Costs Paid by Various Families in Florida
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	19.9%	11.6%	$144	1.3%	2.6%
	Mid-Low	19.9%	13.1%	$163	1.2%	2.2%
	Middle	20.1%	18.8%	$232	1.3%	2.3%
	Mid-High	20.1%	20.9%	$258	1.2%	1.9%
	Highest	20.0%	35.5%	$437	1.3%	1.9%
Family Income Relative to Poverty Level	≤.5	5.5%	3.6%	$162	1.5%	2.6%
	.5 - 1	10.1%	5.9%	$143	1.2%	2.5%
	1-2	28.9%	20.8%	$178	1.2%	2.3%
	2 - 3	20.9%	20.4%	$240	1.2%	2.0%
	>3	34.5%	49.3%	$353	1.3%	2.0%
By Consumption Quintiles	Lowest	19.9%	6.4%	$79	1.3%	3.3%
	Mid-Low	20.0%	11.3%	$139	1.3%	2.8%
	Middle	20.1%	16.5%	$203	1.3%	2.7%
	Mid-High	20.0%	23.3%	$288	1.3%	2.3%
	Highest	20.1%	42.6%	$524	1.2%	1.6%
With Children under 18		27.2%	32.0%	$290	1.3%	2.1%
Married		19.1%	24.8%	$321	1.3%	2.2%
Single		8.2%	7.2%	$218	1.2%	2.0%
Female-Headed		7.0%	6.1%	$217	1.2%	2.0%
Income Below Poverty Level		15.7%	9.5%	$150	1.3%	2.5%
With Children under 18		4.4%	2.8%	$158	1.2%	2.4%
Single		2.3%	1.2%	$124	1.1%	2.3%
Income Below Twice Poverty Level		44.6%	30.3%	$168	1.3%	2.4%
With Children under 18		12.7%	10.1%	$197	1.3%	2.3%
Single		4.9%	2.9%	$148	1.2%	2.2%
Income in Lowest 20% of Families		19.9%	11.6%	$144	1.3%	2.6%
With Children under 18		2.7%	1.4%	$132	1.2%	2.3%
Single		1.7%	0.7%	$107	1.1%	2.1%
Income in Lowest 40% of Families		39.8%	24.8%	$154	1.2%	2.4%
With Children under 18		7.1%	4.7%	$162	1.2%	2.2%
Single		3.7%	1.8%	$121	1.1%	2.1%
Welfare Recipient with Children		3.1%	2.1%	$165	1.1%	2.0%
On AFDC or SSI		1.8%	1.1%	$156	1.0%	1.9%
Single		1.5%	1.0%	$168	1.0%	1.9%

Table B.13
State Minimum Wage Costs Paid by Various Families in New York
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	9.4%	$101	1.0%	2.6%
	Mid-Low	20.0%	12.6%	$135	1.0%	2.1%
	Middle	20.0%	17.3%	$186	1.0%	1.8%
	Mid-High	20.0%	23.0%	$247	1.1%	1.8%
	Highest	20.1%	37.7%	$402	1.2%	1.8%
Family Income Relative to Poverty Level	≤.5	10.9%	5.6%	$111	1.1%	2.6%
	.5 - 1	11.3%	6.6%	$124	1.0%	2.2%
	1-2	23.3%	16.2%	$149	1.0%	2.2%
	2 - 3	17.3%	14.6%	$181	1.0%	1.8%
	>3	37.2%	57.0%	$328	1.2%	1.8%
By Consumption Quintiles	Lowest	19.9%	5.7%	$62	1.0%	3.0%
	Mid-Low	19.9%	9.7%	$104	1.0%	2.2%
	Middle	20.1%	15.7%	$167	1.0%	2.1%
	Mid-High	20.0%	22.8%	$244	1.1%	2.0%
	Highest	20.1%	46.2%	$493	1.2%	1.7%
With Children under 18		33.3%	39.9%	$256	1.1%	1.9%
Married		23.0%	32.2%	$301	1.1%	1.8%
Single		10.4%	7.7%	$158	1.1%	2.5%
Female-Headed		8.9%	6.8%	$165	1.1%	2.6%
Income Below Poverty Level		22.2%	12.2%	$118	1.0%	2.4%
With Children under 18		8.5%	5.4%	$135	0.9%	2.2%
Single		4.9%	2.3%	$99	0.9%	2.2%
Income Below Twice Poverty Level		45.5%	28.4%	$134	1.0%	2.3%
With Children under 18		15.9%	12.4%	$168	1.0%	2.4%
Single		7.7%	5.1%	$142	1.1%	3.1%
Income in Lowest 20% of Families		19.9%	9.4%	$101	1.0%	2.6%
With Children under 18		5.1%	2.8%	$117	0.9%	2.4%
Single		3.5%	1.4%	$89	0.9%	2.6%
Income in Lowest 40% of Families		39.9%	21.9%	$118	1.0%	2.3%
With Children under 18		10.9%	7.4%	$144	1.0%	2.3%
Single		6.4%	3.4%	$116	1.0%	2.6%
Welfare Recipient with Children		5.8%	2.7%	$100	0.9%	2.6%
On AFDC or SSI		4.7%	2.3%	$103	0.9%	2.8%
Single		3.9%	1.7%	$91	0.9%	3.0%

Table B.14
State Minimum Wage Costs Paid by Various Families in Texas
(Projections for 1996 in 2000 $)

Family Characteristics		% All Families	Increase to $6.25 per hour			
			% of Total Costs	Average Annual Cost	% of Total Nondurable Consumption	% of Total "Taxable" Consumption
By Income Quintiles	Lowest	20.0%	11.4%	$182	1.6%	2.9%
	Mid-Low	20.0%	12.1%	$193	1.4%	2.5%
	Middle	20.1%	17.6%	$280	1.4%	2.2%
	Mid-High	20.0%	23.1%	$368	1.6%	2.4%
	Highest	20.0%	35.9%	$572	1.6%	2.2%
Family Income Relative to Poverty Level	≤.5	5.1%	3.5%	$219	1.5%	2.5%
	.5 - 1	11.6%	6.0%	$165	1.5%	2.9%
	1-2	25.8%	18.1%	$225	1.5%	2.6%
	2 - 3	21.4%	19.2%	$286	1.4%	2.2%
	>3	36.1%	53.2%	$470	1.6%	2.2%
By Consumption Quintiles	Lowest	19.9%	5.8%	$92	1.6%	4.2%
	Mid-Low	20.0%	11.1%	$177	1.7%	3.5%
	Middle	20.0%	16.6%	$264	1.7%	3.1%
	Mid-High	20.0%	24.1%	$385	1.6%	2.6%
	Highest	20.1%	42.5%	$676	1.4%	1.8%
With Children under 18		38.9%	44.9%	$368	1.5%	2.2%
Married		28.8%	36.9%	$410	1.5%	2.1%
Single		10.2%	8.0%	$251	1.5%	2.5%
Female-Headed		8.7%	6.5%	$239	1.5%	2.4%
Income Below Poverty Level		16.7%	9.5%	$182	1.5%	2.8%
With Children under 18		7.5%	4.3%	$183	1.3%	2.4%
Single		3.3%	1.4%	$133	1.4%	2.7%
Income Below Twice Poverty Level		42.5%	27.6%	$208	1.5%	2.7%
With Children under 18		17.4%	12.7%	$233	1.4%	2.2%
Single		6.8%	4.1%	$195	1.4%	2.3%
Income in Lowest 20% of Families		20.0%	11.4%	$182	1.6%	2.9%
With Children under 18		5.3%	3.1%	$187	1.3%	2.3%
Single		3.0%	1.2%	$129	1.4%	2.9%
Income in Lowest 40% of Families		39.9%	23.5%	$187	1.5%	2.7%
With Children under 18		11.9%	7.5%	$200	1.4%	2.3%
Single		5.9%	3.3%	$175	1.5%	2.6%
Welfare Recipient with Children		6.8%	3.6%	$171	1.4%	2.4%
On AFDC or SSI		2.7%	1.7%	$196	1.4%	2.6%
Single		1.3%	0.6%	$141	1.4%	3.0%

Appendix A

Description of Approach Applying Input-Output Analysis to Infer Price Increases Attributable to Minimum Wage Increase

This appendix outlines the procedures implemented in our study to calculate the impact of the increased labor costs to industries on the total cost of final goods and services produced. An increase in the minimum wage not only induces a direct effect on the prices of goods produced by industries hiring low-wage workers, it also raises the price of other products that use intermediate goods made with low-wage labor. This feedback through intermediate uses continues ad infinitum, so the price shock from the wage hike propagates throughout the economy.

A.1 Input-Output Analysis

Input-output tables summarize two sources of this feedback. First, the "make" table lists the allocation of a particular industry's output across different commodities it produces. Second, the "use" table shows the proportion of a given industry's total output that is allocated to various intermediate and final users. The use table consists of two components: a square matrix characterizing how much of each commodity's output is used as intermediate goods in other industries, and a rectangular matrix describing how much of a commodity's output ends up as final consumption. There exist five categories of "final uses" in an input-output characterization of an economy:

(1) households (who account for personal consumption),

(2) gross investment,

(3) federal, state and local governments,

(4) inventories, and

(5) exports and imports.

Manipulation of the input-output tables allows us to translate the initial increase of the cost of labor in each of member of a set of industries into long-run increases in the costs to final users of each of the commodities produced by these industries.

To describe this procedure, designate x_0 as a vector whose elements are the increases in labor costs for each industry resulting from the minimum wage hike. Let M be the square make matrix, where the i,jth element of this matrix, m_{ij}, represents the share of commodity j produced by industry i. Denote the square matrix U as that portion of the use matrix showing the allocation of commodities to their respective intermediate uses; its i,jth element u_{ij} shows the proportion of commodity i's output used by industry j. Finally, let the matrix F_k be a diagonal matrix where its f_{ii} element expresses the fraction of commodity i's total production ending up as a final use in one of the five categories listed above. The subscript k on the diagonal matrix F designates the final use under consideration; the matrix $F_A = S_{k=1..5} F_k$ totals all sources of final uses.

In this simple characterization of an economy, the vector $y_0 = M'x_0$ specifies the initial increase in labor costs paid to produce each commodity. Some of the increased costs are passed directly to the final consumers of the commodity, while the rest of the costs are left in the system to feed back through the production of other commodities. The carryover costs in the first round equals $y_1 = F_A[I + M'U']y_0$. After T iterations, $y_T = F_A[I + M'U' + M'U'M'U' + ... + (M'U')^T]y_0$. Since M and U are expressed as fractions, the largest eigenvalue of M'U' is typically less than one. Therefore, as T approaches infinity, the long-run vector of price increases passed on to final consumers is: $y_{LR} = F_A(I-M'U')^{-1}M'x_0$. Note that the vector of price increases to any final user can be calculated by replacing F_A with a diagonal matrix representing the portion of each commodity

allocated to that final use (i.e., F_k).

Within this impact analysis is the assumption that all intermediate and final users possess perfectly inelastic demand for all commodities. Neither households nor firms substitute away from products or inputs which become relatively more expensive. Since output remains constant, y_{LR} is simply a redistribution of the increase in earnings embodied in x_0. If y_{LR} is the overall final use categories of the long-run increase in commodity prices, then $i'y_{LR} = i'x_0$. (See MaCurdy and O'Brien-Strain for greater technical detail.)

A.2 Data Source for Input-Output Tables

The principal data sources are the 1997 input-output tables provided by Minnesota IMPLAN Group, Inc. for the United States and the four states considered in the text: California, Florida, New York and Texas. Unfortunately these IMPLAN tables list gross investment as a final good. Since these higher investment costs will feed back into higher final goods' prices we wish to allocate them to real 'final uses.' To do this we need to take the share of production for each industry that is allocated to gross investment and reallocate it to intermediate use. We do this with the Bureau of Economic Analysis' (BEA) 1992 Capital Flow table.

The BEA Capital Flow table gives a national-level breakdown of what industries use the capital produced by other industries. It is a 'use' matrix like U described above but designed specifically for allocating gross investment. Within a given industry, each dollar that the IMPLAN table lists as a 'final use' in gross investment must be reallocated as an intermediate use of whatever industries use that investment. We utilize the capital flow table to allocate the dollar across the industries that use investment goods from the specific industry we are considering. Thus our U matrix will differ from the table provided by IMPLAN because it will contain not only shares normally considered intermediate use but also additional shares derived from the gross investment category. The BEA does not provide state by state tables and so when we use it for the state level analysis we are assuming that the national shares are a good approximation of the state level uses of investment goods.

The IMPLAN tables list 518 industry/commodity sectors and 11 final use sectors, while the BEA table and the vector of cost increases by industry, x_0, was computed using 1990 Census Industry Classification Codes. For the sake of conformability, the IMPLAN and Census coding schemes were aggregated to a unique classification of 152 commodities/ industries.

Among IMPLAN's eleven final use sectors, five pertain to government consumption; the sum of these five vectors becomes an aggregated government consumption vector. Similarly, IMPLAN divides household consumption into three categories, which we subsequently aggregate to form one household consumption category. We explained above how we deal with the final use category of gross investment. IMPLAN also lists a final use corresponding to net exports. We are interested only in goods which are both produced and consumed in the United States or, in Section 8, the relevant state economy; therefore we leave exports as a separate final use category. IMPLAN does not follow the Department of Commerce convention of listing imports as a final use. Finally, nonzero changes in inventories must be eliminated from the final uses. We simply allocated inventories proportionately across the two domestic final use categories, household and government consumption.

Appendix B
Detailed Statistical Tables

The appendix consists of 14 tables, all of which follow one of two formats. Benefits tables, tables B.1 and B.3-B.6, follow one format and the rest, which are costs tables, follow a slightly modified format. We will describe the format of the benefits tables and then outline how the costs tables differ.

B.1 Format of Benefits Tables

B.1.1 Benefits by Specified Demographic Group

The first column in each table lists the demographic group under consideration. An indented line in the first column indicates that the characteristic in the row is added to the characteristic listed in the non-indented rows above. For example, the 12th row reads "Single Families w/ Children" and the next line is indented, reading "Female-Headed." Thus the indents make it explicit that row 13 refers to female-headed single families with children.

Income Level and Poverty Ranking

The first ten rows of each benefits table are the quintile and poverty level breakdowns used extensively in the text. Note that the numbers for the poverty breakdown are the ratio of family income to the poverty line. Thus a family with a ratio of 2 has an income that is 2 times, or 200% of, the poverty threshold.

Family Structure and Income Level

Next we look at various kinds of families, whether married or single and then more specifically at families with single mothers and large families. We relate this information to our poverty and quintiles information by giving four parallel breakdowns of the poor or near poor. The first two breakdowns are defined as either people with income below the poverty line or below twice the poverty line. The remaining two consist of families in the bottom or bottom two quintiles of the income distribution. For each group we look at those who have children and then divide those into the exhaustive categories of single or married family units.

Hourly Wages

The next grouping is of families with children according to their hourly wages. The first row indicates the characteristics of all families with children who report earnings. The four following rows divide working families into four exhaustive groups. The row designated "Jobs paying below $7/hr" includes families who receive 50% or more of their earnings from jobs paying $7 per hour or less. The row "Jobs paying at most $9/hr" designates families who receive 50% or more of their earnings from jobs paying $9 per hour or less and who cannot be included in the "below $7/hr" group. The row "Jobs paying at most $12/hr" identifies families who receive 50% or more of their earnings from jobs paying $12 per hour or less and who cannot be included in either the "below $7/hr" or the "below $9/hr" groups. Finally, the row "Jobs paying over $12/hr" signifies families who receive 50% or more of their earnings from jobs paying at least $12 per hour.

Welfare Status

The last breakdown divides families according to their welfare status. We narrowly define welfare recipients as those who receive AFDC, SSI, or food stamps. We then make the classification more specific by restricting to those who receive AFDC or SSI. Lastly we look at the effects of the wage increase on unmarried family units with children who get AFDC or SSI.

Share to Government

The last line is only relevant when we consider after-tax benefits. It reports the share of benefits that go to the government.

B.1.2 Different Measures of Benefits Received

Turning to the different measures of benefits that we consider, the first data column, labeled "% All Families," lists the percentage of all families that fall into the given demographic category. The next two columns, "% Receiving Low-Wage Earnings" and "% Low-Wage Pop," are easily confused. "% Receiving Low-Wage Earnings" is the percentage of families in the group who contain at least one worker who benefits by the new minimum wage. These workers are called low-wage workers. In contrast, "% Low-Wage Pop," is the percentage of low-wage workers that are in the group at hand. An example may clarify: looking at the

first row where the group is the lowest income quintile, the second data column ("% Receiving Low-Wage Earnings") is the percentage of families in the lowest quintile that are low-wage. The third data column ("% Low-Wage Pop") is the percentage of low-wage workers that are in the lowest income quintile.

The columns labeled "% of Gross" and "% of Net" are also related, but in a much more straightforward way. "% of Gross" answers the question, "Out of all the dollars that go to workers, what percentage of the pre-tax dollars go to families that fall in this category?" "% of Net"answers the same question for the after tax allocation. Thus across the income quintiles, "% of Gross" must add up to 100% since these groups together include every family. "% of Net," in contrast, will not sum to 100% across quintiles because some of the money leaks out to the government. Adding in the "government's share" cell at the bottom brings the total to 100%.

The last column, "Average Net-Benefit," is the average amount received by a family from the minimum wage increase, given that the family does benefit. Thus, it only averages across the families with low-wage workers.

B.2 Format of Costs Tables

As mentioned earlier, tables B.1 and B.3-B.6 are about benefits while all the other tables outline costs for the United States and the four states we looked at. For the states, costs tables are done for both federal and state wage increases. The format is very similar to that of the benefits tables. We will review the changes in demographic groups and then explain the column headings.

B.2.1 Costs by Specified Demographic Groups

The demographic groups considered should all be very familiar from the benefits analysis. In addition to income quintiles and poverty rankings, we now include consumption quintiles. These may give a more accurate picture than income quintiles because they show which groups are actually consuming little – as opposed to those who may be living on savings or temporarily not earning much and thus have low income but perhaps are not a policy concern.

B.2.2 Different Measures of Costs Paid

The column headings also resemble those found in the benefits tables. The first data column, "% of All Families," gives the percentage of all families that are in the group. Note that the percentages in this column are not identical to those in the comparable benefits table, even though they refer to the same classifications of the same population. For example, the "% of All Families" columns in tables B.1 and B.2 for the United States as a whole differ slightly. This is because the demographic breakdowns for the benefits tables are based on data from the Survey of Income and Participation (SIPP), while those for the costs tables are based on the Consumer Expenditures Survey (CES). The CES does not measure income as well as the SIPP, and thus the minor differences arise.

The "% of Total Costs" column is comparable to the "% of Gross" column in the other tables. It gives the percentage of all dollars paid that are paid by people in that group. "Average Annual Cost" is the average across the group of how much the minimum wage increase cost the family in higher prices. The next to last column, "% of Total Nondurable Consumption," is the percentage the family's total nondurable consumption costs rise due to the wage increase. The last column, "% of Total 'Taxable' Consumption," is the effective 'sales tax' that would have to be imposed on the group in order to distribute the burden across families in the same way that it is distributed under the wage increase. It is computed as the percentage increase in costs for the family for all items that are commonly taxed by sales tax. It excludes rent and house payments, out-of-pocket health care, education and social services payments, food for in-home consumption, and financial services.

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Endnotes

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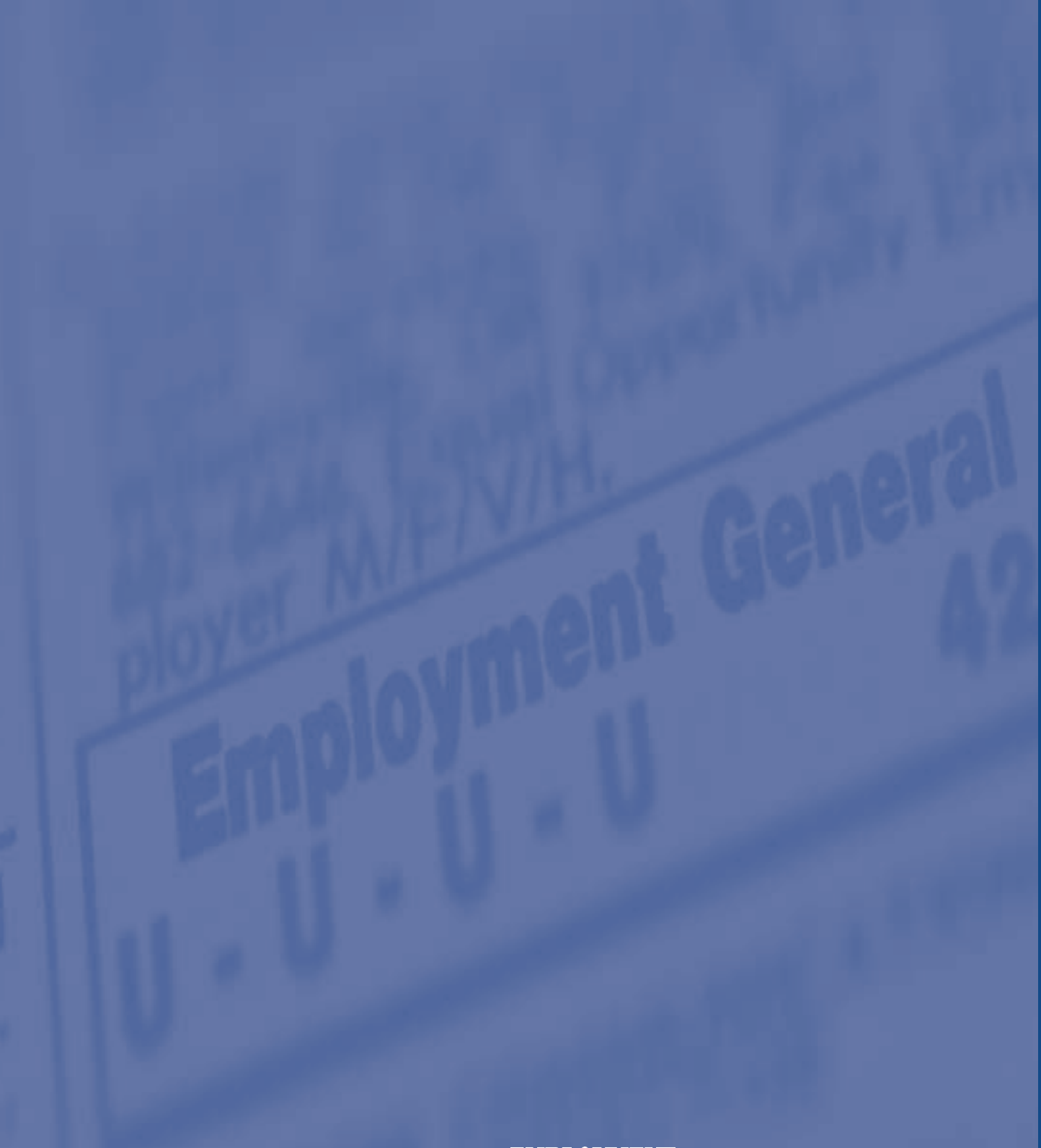
[2] The case for California was actually slightly different. California passed a state minimum wage increase in November of 1996 that raised the minimum wage to $5.00 in March 1997 and then to $5.75 in March 1998. Technically the Minimum wage was still $4.25 in 1996 but it is possible that companies were already starting to adjust by the end of the sample period. No attempt is made to adjust for this phenomenon. If companies were raising wages in late 1996 in anticipation of the coming change, the costs and the benefits of the increase in California would be slightly higher than what one finds here.

[3] They mention two alternative ways of allocating the costs—to factor income and to capital income—which they tried in an different version of the paper. They found that in general their results were insensitive to the ways they shifted costs.

[4] Note that an alternative way to represent the costs per family would have been to look at the costs as a percentage of income. In this way one could compare the minimum wage to an income tax. Such an analysis would not be as useful in understanding the implications for poor families. Incomes tend to fluctuate from year to year much more than consumption levels. Consumption levels, on the other hand, are a better predictor of the long-term financial situation of the family. Due to this variability, the cost as a percentage of income, instead of consumption, would have the poor paying a higher percentage and the rich paying a lower percentage. So the minimum wage would likely be comparable to a regressive income tax.

[5] This number is from the last column, first row of Table B.1 where the "Net" in "Average Net Benefit" refers to after-tax earnings as opposed to pre-tax (or gross) earnings.



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