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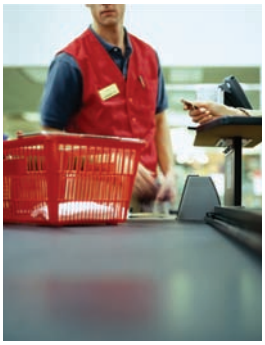
The Potential Economic Impact of Increasing the Minimum Wage in Massachusetts

by Alicia Sasser



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What are the potential costs and benefits to Massachusetts in raising its minimum wage? The Commonwealth's legislature is currently considering a proposal that would increase the state minimum wage in two steps over the next two years to $8.25 per hour by 2007. Since the introduction of House Bill No. 3872 at the end of 2004, there has been considerable debate over its potential benefits and costs. Advocates on both sides of the issue have each released a report on the bill's likely economic impacts. Proponents assert that the purchasing power of the minimum wage has declined over time and that the negative impact on employment from raising the minimum would probably be small. Opponents argue that an increase would boost costs for employers, potentially resulting in higher prices for consumers, significant job loss among low-wage workers, or making Massachusetts less competitive with neighboring states. Given these competing arguments, what is the overall economic impact of this proposal likely to be?

In this report I review the arguments on both sides of the issue. In doing so, I discuss and critique, where applicable, the evidence presented in the two reports that have been issued on either side of the debate. I also produce my own projection of the likely impact of raising the minimum wage on aggregate employment and wages. These calculations use the two reports as a baseline, modifying some of the assumptions to better reflect evidence supported by the economic literature. According to my estimates, the current proposal to increase the minimum wage could have a negative impact on employment ranging from 2,100 to 10,500 jobs, or 1 to 4 percent of workers whose wages would be affected by the bill. On net, the combined impact of the two wage increases would raise aggregate wages by approximately $255 million.

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– Alicia Sasser

The Potential Economic Impact of Increasing the Minimum Wage in Massachusetts

What are the potential costs and benefits to Massachusetts in raising its minimum wage? The Commonwealth's legislature is currently considering a proposal that would increase the state minimum wage in two steps over the next two years to $8.25 per hour by 2007. Proponents assert that the purchasing power of the minimum wage has declined over time and that the negative impact on employment from raising the minimum would probably be small. Opponents argue that an increase would boost costs for employers, potentially resulting in higher prices for consumers, significant job loss among low-wage workers, or making Massachusetts less competitive with neighboring states. Given these competing arguments, what is the overall economic impact of this proposal likely to be?

The current proposal

The Massachusetts legislature last approved an increase in the minimum wage in 1999, raising it from $5.25 per hour to $6.00 per hour in 2000 and then to $6.75 in 2001. Although the 1999 bill also would have indexed the minimum wage to the CPI, this measure was ultimately dropped. The current proposal to increase the minimum wage is intended to reprise the 1999 legislation by restoring the minimum wage to the same real (inflation-adjusted) value in 2007 as was achieved in 2000 and indexing it to inflation thereafter.[1] The main provisions of the current proposal are as follows:[2]

- Increase the state minimum wage in two steps of $0.75 each, from $6.75 per hour to $7.50 per hour in 2006 and then to $8.25 per hour in 2007 (a 22 percent increase in total).
- Index the minimum wage to inflation starting in 2007, based on annual percentage increases in the Consumer Price Index (CPI).
- Establish a commission charged with making recommendations for further minimum wage increases to the Joint Committee on Commerce and Labor every three years beginning in 2010.

The bill currently has the backing of about 50 state representatives. In addition, Governor Romney's office has confirmed that he supports indexing the minimum wage to inflation, but made no mention of whether he supports the immediate increase specified in the bill.[3]

What are the potential costs and benefits to Massachusetts if it raises its minimum wage?

How does Massachusetts compare with other states?

Massachusetts is among 17 states, along with the District of Columbia, with a state minimum wage that is higher than the federal minimum wage of $5.15 per hour (see Table 1). Of note, every New England state except New Hampshire currently has a minimum wage that exceeds the federal level. In addition, Connecticut and Vermont both have minimum wages that are higher than the current rate in Massachusetts. However, if House Bill No. 3872 were approved, the Commonwealth would have the highest state minimum wage in the country. Only in cities such as Boston, San Francisco, and Los Angeles would the prevailing minimum wage be higher.

Citing a significant decline in the purchasing power of the minimum wage due to the rising cost of living in the region, other New England states have also recently

Table 1. Minimum Wage Standards for Selected States

State	Minimum wage (As of 1/1/04)	Indexed to inflation
Alaska	$7.15	
California	$6.75	
Los Angeles	$10.33	Yes
San Francisco	$8.82	Yes
Connecticut	**$7.40**	
Delaware	$6.15	
District of Columbia	$7.00	
Florida	$6.15	
Hawaii	$6.25	
Illinois	$6.50	
Maine	**$6.50**	
Massachusetts	**$6.75**	
Boston	$11.57	Yes
Minnesota	$6.15	
New Jersey	$6.15	
New York	$6.75	
Oregon	$7.50	Yes
Rhode Island	**$6.75**	
Vermont	**$7.25**	**Yes**
Washington	$7.63	Yes
Wisconsin	$5.70	

Sources:
U.S. Department of Labor, state government web sites.

Los Angeles Department of Public Works, Bureau of Contract Administration: **http://www.lacity.org/bca/lw_pdf_files/wage_rates_2005.pdf** (Accessed 01/09/06)

San Francisco Department of Administrative Services, Office of Labor Standards Enforcement: **http://www.sfgov.org/site/olse_index.asp?id=27605.** (Accessed 01/09/06)

City of Boston, Living Wage Division: **http://www.ci.boston.ma.us/bra/pdf/documents/LW-4-FY2006.pdf** (Accessed 01/05/06)

U.S. Department of Labor: **http://www.dol.gov/esa/minwage/america.htm.** (Accessed 01/05/06)

Notes:
In all other states, the current federal minimum wage of $5.15 per hour applies.

Connecticut's minimum will increase to $7.65 as of 01/01/07. New Jersey's will increase to $7.15 as of 10/01/06. New York's will increase to $7.15 as of 01/01/07.

"The minimum wage listed applies to nonsupervisory nonfarm private sector employment. Tipped employees (e.g., wait staff) can be paid a lower minimum wage (for example, $2.63 per hour in Massachusetts)."

The Los Angeles living wage ordinance requires firms to pay either $10.33 per hour or $9.08 per hour with a $1.25 per hour contribution to health benefits, and to provide 12 paid days and 10 unpaid days off per year. The ordinance applies to firms that have service contracts with the city, lease city property, receive $1 million or more in economic development subsidies, or have a food or retail concession agreement with the city.

The Boston living wage ordinance covers only firms holding service contracts with the city of at least $25,000 with at least 25 full-time equivalent employees.

passed or proposed minimum wage increases. These efforts intensified after the U.S. Senate defeated a proposal in March to raise the federal minimum wage for the first time since 1997.[4] For example, in June 2005, the Connecticut state legislature voted unanimously to increase the minimum wage by $0.75 over the next two years, to $7.65 by 2007.[5] In the same month, Vermont legislators agreed to index their state's minimum wage to inflation, increasing the minimum wage in that state to $7.25 by 2006.[6] Earlier in 2005, the New Hampshire House of Representatives passed a bill to increase the minimum wage by $1, but the measure was defeated in the Senate, despite having the support of the governor.[7] Supporters of a higher minimum wage in Maine plan to pursue the issue in 2006.[8]

What are the potential benefits of raising the minimum wage?

A report issued by the Massachusetts Budget and Policy Center (MBPC) outlines the arguments in favor of raising the minimum wage in Massachusetts.[9] In short, proponents emphasize that the purchasing power of the state minimum wage has decreased over time and that for low-wage households the aggregate benefits of higher wages outweigh the potential costs of job losses. Using estimates based on Current Population Survey data, the MBPC report indicates that raising the minimum wage would benefit approximately 261,000 low-wage workers in Massachusetts—about 9 percent of the state's total workforce.[10] Although the report does not explicitly quantify the potential job loss associated with rising labor costs due to the wage increase, a statement signed by 58 of the state's leading economists asserts that any decrease in employment would likely be small.[11]

Both supporters and opponents of the bill agree that the *real* (inflation-adjusted) value of the minimum wage has decreased considerably over time. Using changes in the Consumer Price Index to measure inflation, MBPC calculates that the real value of the minimum wage in Massachusetts has fallen by 22 percent since its peak in 1968, with almost one-third of the decrease occurring since the last minimum wage increase was passed in 2001. In addition, inflation projections issued by the Congressional Budget Office suggest that inflation is likely to completely erase the value of the Commonwealth's previous increase by 2006.

Supporters of the bill argue that the erosion in the minimum wage over time may increase the number of families in poverty, depending on the number of minimum wage workers in a given family. For example, a full-time worker earning the current minimum wage in Massachusetts receives an

annual income of $14,040, just below the 2004 federal poverty threshold of $15,129 for a family with one adult and two children. For a family with two adults and two children, the federal poverty threshold was $19,157—attainable if more than one of the adults is working or if one of the adults earns more than the minimum wage.[12] However, the federal poverty threshold does not estimate actual costs for items such as housing, child care, or out-of-pocket medical expenses and does not account for regional variation in costs.[13] To address these shortcomings, the Economic Policy Institute (EPI) developed a series of basic family budgets by family type, individualized for communities nationwide.[14] For the year 2004, the EPI basic family budget for a family of four with two children and two adults ranged from $52,632 in Pittsfield to $64,656 in the Boston area—more than three to four times what a full-time minimum wage worker would currently earn.[15]

Although these examples show that families relying on minimum wage workers may fall below the poverty threshold, critics argue that individuals who work for the lowest wages are not necessarily members of the poorest families. For example, minimum wage workers may include teens or secondary earners living in higher-income households. Indeed, studies in the economics literature find that increasing the minimum wage has a relatively small impact on reducing the proportion of families below the federal poverty level—on the order of 5 percent.[16]

In response to this criticism, supporters of the proposal point out that raising the minimum wage in Massachusetts would not simply benefit teens or part-time workers. Using Current Population Survey data, MBPC shows that of the 261,000 low-wage workers who would benefit, approximately 75 percent are age 20 years or older and 40 percent work 35 or more hours per week. On average, these workers provide roughly 50 percent of their families' total earnings—with approximately one-third serving as the sole provider of earnings for their families. [17] In addition, MBPC calculates that most of the wage gains associated with increasing the minimum wage (about 60 percent) would accrue to low-income households as opposed to higher-income households that contain a minimum wage worker.

Moreover, as alluded to above, the group of economists supporting the bill has stated that the cost of increasing the minimum wage in terms of jobs lost is likely to be small. Specifically, they state "…we believe that recent studies of minimum wage effects in other states like Massachusetts support the conclusion of the U.S. Council of Economic Advisers that the weight of the evidence suggests that modest increases in the minimum wage have had very little or no effect on employment." In support of this view, the MBPC report indicates that between 2000 and 2004, two of the three sectors that employ large percentages of minimum wage workers (leisure and hospitality and other services) expanded as rapidly in Massachusetts as in the nation as a whole—despite an increase in the Massachusetts minimum wage from $6.00 to $6.75 in 2001. However, it is unclear whether these sectors would have expanded more rapidly during the recent recovery if there had not been a minimum wage increase. In addition, the third sector, retail trade, which accounts for 25 percent of minimum wage employment, contracted more sharply in Massachusetts than in the nation as a whole during this period.

Massachusetts is one of 17 states with a state minimum wage higher than the federal minimum.

Finally, those in favor of the bill note that raising the minimum wage may yield some benefits to employers that can potentially offset the increase in labor costs. For example, the group of economists supporting the bill notes that higher wages might reduce turnover, lower training costs, and increase the purchasing power of low-wage consumers. Also, Governor Romney, during his 2002 campaign, stated that indexing the minimum wage to inflation would "…set a realistic minimum threshold for wages and provide planning certainty for employers…".[18]

What are the potential costs of raising the minimum wage?

Opponents of the bill do not dispute the statistics showing that a significant

number of low-wage workers would benefit from the current proposal, but emphasize that an increase in the minimum wage would raise labor costs for employers, particularly small businesses and retailers. A report conducted by the Beacon Hill Institute (BHI) at Suffolk University (and commissioned by the Retailers Association of Massachusetts) argues that these additional costs may be absorbed by employers, be passed on to consumers in the form of higher prices, or reduce employment among minimum-wage workers.[19]

Increasing the minimum wage in Massachusetts may reduce employment; the question is, by how much?

If employers absorb most of the additional labor costs, then Massachusetts firms may find themselves at a competitive disadvantage relative to firms in neighboring states, particularly New Hampshire – the only New England state that has not increased its minimum wage beyond the federal level. To support this view, the BHI report shows that during the recent recovery, annual employment growth in two of the three sectors that employ large percentages of minimum wage workers (leisure and hospitality and retail trade) was slower in Massachusetts than in New Hampshire. However, at the same time, employment growth in the category of "other services" contracted sharply in New Hampshire while expanding in Massachusetts, suggesting that the two states may differ somewhat in terms of the types of firms that may be competing for low-wage workers. In addition, there are likely to be factors other than the minimum wage that might affect the competitiveness of the two states, such as the cost of living, overall tax structure, or the education level of the workforce.

Rather than absorbing these additional labor costs, employers may be able to pass on some part of the minimum wage increase to consumers in the form of higher prices. BHI cites a U.S. Department of Agriculture study showing that a simulated 19 percent increase in the federal minimum wage (similar to the magnitude of the proposed increase in Massachusetts) would increase prices at eating and drinking establishments by approximately 2 percent. However, the authors of the USDA study caution that because their simulation made the extreme assumption that all of the higher labor costs associated with raising the minimum wage would be passed on to consumers, "these estimates are likely upward bounds of the price effects of a minimum wage increase."[20]

Aside from the impact on employers and consumers, the main focus of arguments against raising the minimum wage is the potential decrease in employment for affected workers. The BHI report estimates that the proposed increase in the Massachusetts minimum wage would cost the state 26,970 jobs (approximately 10 percent of affected workers). This stands in sharp contrast to the "small" impact on employment attested to by the economists in support of the bill. BHI also projects that the loss of jobs would result in $371 million in lost wages, nearly offsetting the $405 million they project in wage gains for those who remain employed.

Opponents of the bill also point out that, rather than laying off workers, employers might reduce the hours of current employees, resulting in underemployment rather than unemployment. Alternatively, firms might reduce employee benefits, such as health insurance contributions, in response to an increase in labor costs associated with the minimum wage. A recent study analyzing the impact of various federal minimum wage increases over a decade finds that a 20 percent increase in the minimum wage reduces employer sponsored health insurance coverage by 4 percent.[21] Opponents also warn that indexing the minimum wage to inflation can add rigidity to the labor market such that real wages cannot adjust downward during periods of recession, possibly resulting in greater unemployment during future downturns.

What is the typical impact of raising the minimum wage on employment?

Most economists agree that, in theory, increasing the minimum wage can lead to a decrease in employment.[22] However, if most workers already earn more than the

minimum wage (as do 90 percent of Massachusetts' workers, according to MBPC), then one would expect only a small decrease in aggregate employment. During a period of economic expansion, employment might actually rise along with an increase in the minimum wage, just not as rapidly as it would have otherwise.

Numerous studies have sought to quantify the effects of raising the minimum wage on employment. The debate centers around how sensitive (or "elastic") the demand for labor is in response to changes in the wage rate. The more sensitive the demand for labor to changes in the wage rate (the greater the elasticity of demand), the greater the reduction in employment. Typically, the minimum wage increase examined in these studies ranges between 16 and 27 percent and generally occurs in two steps over a two-year period, similar to the current increase proposed in Massachusetts.

The preponderance of empirical evidence in the economic literature suggests that increases in the minimum wage do result in decreases in employment, but that this effect is likely to be small. For example, a 1998 survey of 63 labor economists who were asked to provide their "quantitative best estimates" of the effect of increasing the minimum wage by 10 percent reported an average employment effect of -2 percent.[23] In addition, a careful evaluation of the economic literature over the past three decades by Charles Brown, a leading economist in this area, concludes that "the minimum-wage effect is small (and zero is often hard to reject)" and is "centered on an elasticity of -0.10."[24] This means that a 10 percent increase in the minimum wage would be expected to yield on average a 1 percent decrease in employment.

Brown also notes that the degree to which researchers are able to capture the impact on workers directly affected by the minimum wage varies across studies. Some studies use data on workers currently earning the minimum wage, while others focus on particular industries (e.g., retail trade) or demographic groups (e.g., teens) that are most likely to be affected by changes in minimum wage laws. Taking into account this variation across studies, Brown suggests that the elasticity of demand for workers directly affected by minimum wage increases could be as high as -0.5, so that a 10 percent increase in the minimum wage would be expected to yield on average a 5 percent decrease in employment.

What does this mean for Massachusetts?

The observation that raising the minimum wage has a small effect on employment may be due to the fact that increases in the minimum wage are generally modest, affect relatively few workers, or occur during periods of economic expansion when employers and/or consumers are able to absorb the additional labor costs. For Massachusetts, the question is whether the current proposed increase can be expected to have a small impact on employment. The impact of raising the minimum wage on employment is typically calculated as the number of affected workers times the "effective" increase in the minimum wage times the elasticity of demand.

To apply this formula to the minimum wage increase in Massachusetts, I make the following three assumptions:

Number of affected workers: Using the MBPC report as a baseline, I assume the number of affected workers equals the number of workers estimated to be directly affected by an increase in the minimum wage from $6.75 to $8.25 as calculated by MBPC – a total of 261,000 workers.

"Effective" increase in the minimum wage: I assume that the initial proposed increase in the minimum wage from $6.75 to $7.50 is entirely absorbed by employers and is not expected to result in any employment losses. Such a relatively small increase (11 percent) is likely to be absorbed by employers, given the costs associated with employee turnover and/or raising prices for consumers.[25] Indeed, few studies in the literature find (or even look for) an employment effect for such small wage increases. This assumption provides a conservative estimate of the likely employment effects of the proposed bill.[26]

We calculate the effective increase as a weighted average of the wage increase experienced by different groups of affected workers, based on their wage prior to the second proposed increase from $7.50 to $8.25. For the 153,000 workers currently earning less than $7.50 per hour, I assume that the second proposed increase would boost wages by the entire $0.75 (see Table 2).

Table 2. Calculation of the "Effective" Increase in the Massachusetts Minimum Wage From $7.50 to $8.25

Group	Initial wage [A]	New wage [B]	Dollar increase [C] = [B] - [A]	Percentage increase [D] = [C]/[A]*100	Number of workers affected [E]
Workers currently earning less than $7.50 per hour	$7.50	$8.25	$0.75	10%	153,000
Workers currently earning between $7.50 and $8.25 per hour					
10th percentile	$7.50	$8.25	$0.75	10%	10,800
20th percentile	$7.58	$8.25	$0.68	9%	10,800
30th percentile	$7.65	$8.25	$0.60	8%	10,800
40th percentile	$7.73	$8.25	$0.53	7%	10,800
50th percentile	$7.80	$8.25	$0.45	6%	10,800
60th percentile	$7.88	$8.25	$0.38	5%	10,800
70th percentile	$7.95	$8.25	$0.30	4%	10,800
80th percentile	$8.03	$8.25	$0.23	3%	10,800
90th percentile	$8.10	$8.25	$0.15	2%	10,800
100th percentile	$8.18	$8.25	$0.08	1%	10,800
Average across distribution	$7.84		$0.41	5%	
"Effective" wage increase across both groups					8.07%

Notes:
The number of affected workers is as reported in Table 3.

The effective change in wage is calculated as in Table 2.

Average hours worked per week derived from the distribution of hours for affected workers in the MBPC report.

Average weeks worked per year assumes individuals work year-round.

However, workers currently earning more than $7.50 but less than $8.25 would receive varying portions of the increase, depending on where their wage rate fell within this range before the new minimum wage went into effect. The wage increase for these 108,000 workers is determined by dividing workers into 10 equal percentiles and assuming that their initial wages were evenly distributed across the range, so that the first percentile earned $7.50, the second earned $7.58, etc. (Table 2, column A). Given this initial distribution of wages, the first percentile would receive the full increase from $7.50 to $8.25—an increase of $0.75, or 10 percent (Table 2, columns C and D). The second percentile would receive a smaller increase, from $7.58 to $8.25—an increase of $0.68 or 9 percent. Following this methodology, the average effective increase across the distribution is 5 percent.[27]

Across both groups of affected workers (those earning less than $7.50 and those earning between $7.50 and $8.25), the weighted average of the effective increase in the minimum wage is roughly 8 percent.

Elasticity of demand: Based on Brown's comprehensive assessment of the economics literature as discussed above, I use both of his summary estimates as an upper bound (elasticity of -0.50) and a lower bound (elasticity of -0.10) of the potential employment effects. In addition, I also present calculations using the average elasticity of demand from the 1998 survey of economists (elasticity of -0.21).[28]

The alternative calculations presented in Table 3 show that the impact of the proposed increase in the Massachusetts minimum wage on employment is likely to be between 1 and 4 percent of workers affected by the bill. Using the lower bound of the percent change in employment suggests that raising the minimum wage would be expected to yield a decrease in employment of approximately 2,107 jobs or 0.8 percent of affected workers—with most of the job loss falling on those who currently earn less than $7.50. Alternatively, using the upper bound from the literature yields a smaller impact on employment—a loss of 10,535 jobs, or 4

percent of affected workers. If I use the average impact from the 1998 survey of economists, then employment would be expected to decrease by only 4,425 jobs, or 1.7 percent of affected workers. Given that total employment in Massachusetts is roughly 3.2 million, this amounts to a job loss of slightly more than one tenth of one percent (-0.14 percent).

A similar calculation can be done to determine the impact of the proposed increase in the minimum wage on the net gain in aggregate wages. Assuming an employment loss of 1.7 percent, Table 4 shows a net increase of $255 million for those workers that remain employed after the two wage increases. The first increase, from $6.75 to $7.50, is estimated to result in a wage gain of $85 million, based on the assumption that employers will absorb the full amount of this initial wage increase. However, the positive wage gains of the second increase, from $7.50 to $8.25, would be partially offset by the negative wage losses of those workers who become unemployed, resulting in a net gain of $170 million. Combined, the two proposed increases would be expected to yield a net gain of $255 million. For workers earning less than $7.50 previously, the sum of the two minimum wage increases would amount to an additional $1,355 per year per worker. Those currently earning between $7.50 and $8.25 per hour would receive an additional $439 per year per worker on average.

The proposed increase is likely to reduce employment by between 1 and 4 percent for workers whose wages would be affected by the bill.

The bottom line

Although there is a considerable amount of debate over the current proposal to raise the minimum wage in Massachusetts, several key facts seem clear. First, the purchasing power of the minimum wage in Massachusetts has been eroded considerably over time by rising costs of living. Second, increasing the minimum wage would benefit approximately a quarter of a million workers, of which 40 percent work full-time

Table 3. Alternative Calculations of Employment Impact Due to Increasing the Minimum Wage in Massachusetts

	Number of affected workers [A]	"Effective" increase in minimum wage [B]	Elasticity of demand [C]	Estimated number of jobs lost [D] = [A]*[B]*[C]	Estimated impact as a percentage of affected workers [E] = [D]/[A]*100
1. Using the "lower bound" elasticity of demand from the literature	261,000	8%	-0.10	-2,107	-0.8%
Workers previously earning below $7.50	153,000	10%	-0.10	-1,530	-1.0%
Workers previously earning between $7.50 and $8.25	108,000	5%	-0.10	-577	-0.5%
2. Using the "upper bound" elasticity of demand from the literature	261,000	8%	-0.50	-10,535	-4.0%
Workers previously earning below $7.50	153,000	10%	-0.50	-7,650	-5.0%
Workers previously earning between $7.50 and $8.25	108,000	5%	-0.50	-2,884	-2.7%
3. Using the average elasticity of demand from a 1998 survey of economists	261,000	8%	-0.21	-4,425	-1.7%
Workers previously earning below $7.50	153,000	10%	-0.21	-3,213	-2.1%
Workers previously earning between $7.50 and $8.25	108,000	5%	-0.21	-1,211	-1.1%

Notes:
The number of affected workers is based on estimates from the MBPC report.

The "effective" increase in the minimum wage is from Table 2.

Table 4. Impact on Aggregate Wages Due to Increasing the Minimum Wage in Massachusetts

	Number of affected workers [A]	Effective change in wage [B]	Average hours worked per week [C]	Average weeks worked per year [D]	Aggregate change in wages ($ millions) [E] = [A]*[B]*[C]*[D]	Wage impact per affected worker ($ dollars) [F] = [E] / [A]
Increasing minimum wage from $6.75 to $7.50						
Workers previously earning less than $7.50	153,000	$0.41	26	52	$85	
Workers expected to become unemployed	0	0	26	52	$0	
Net increase in wages					$85	$554
Increasing minimum wage from $7.50 to $8.25						
Workers previously earning less than $7.50	153,000	$0.75	26	52	$155	
Workers expected to become unemployed	3,213	-$7.50	26	52	-$33	
Net increase in wages					$123	$801
Workers previously earning between $7.50 and $8.25	108,000	$0.41	26	52	$60	
Workers expected to become unemployed	1,211	-$7.84	26	52	-$13	
Net increase in wages					$47	$439
Total overall net increase in wages	261,000				$255	$976

Notes:
The number of affected workers is as reported in Table 3.

The effective change in wage is calculated as in Table 2.

Average hours worked per week derived from the distribution of hours for affected workers in the MBPC report.

Average weeks worked per year assumes individuals work year-round.

and one-third provide the sole source of earnings for their families. Third, raising the minimum wage to the proposed level of $8.25 per hour would enable a full-time worker to receive an annual income of $17,160, rising above the federal poverty level for a family of three with one working adult and two children.

Assuming an employment loss of 2 percent, net aggregate wages would increase by $255 million.

The crux of the debate centers on the tradeoff between the benefit of increasing wages and the cost of potential job losses. While both sides agree that raising the minimum wage would benefit those low-wage workers who remain employed, opponents of House Bill No. 3782 are concerned that the additional labor costs may lead to a sizable reduction in low-wage employment. However, based on the average employment effect found in the economics literature, increasing the minimum wage by $1.50 in Massachusetts is likely to have a small impact on employment—roughly on the order of 1 to 4 percent of affected workers. In addition, according to the analysis presented in this report, the combined impact of the two wage increases would result in an estimated net wage gain of approximately $255 million. It should be noted, however, that the benefits of this increased wage gain may be diminished if employers respond by cutting hours or reducing their contributions to health insurance.

Although there is some concern that raising the minimum wage might reduce the economic competitiveness of Massachusetts firms relative to firms in neighboring states —particularly New Hampshire—the simplistic sector analysis reviewed here is mixed on this point. Comparing recent employment trends in Massachusetts with those in New Hampshire shows that two of the three sectors that employ large percentages of minimum wage workers grew faster in New Hampshire, while the third sector contracted sharply in that state. Without considering other factors such as the cost of living, overall tax structure, or the education level of the workforce, it would be difficult at best to gauge the impact of raising the minimum wage on the relative competitive-

ness of the two states.

This review of the potential costs and benefits of raising the minimum wage in Massachusetts highlights the complexities surrounding this issue. The Commonwealth's legislature will need to carefully weigh these factors in determining whether the net economic impact supports passage of the current proposal.

Endnotes

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[6] "Lawmakers Agree on Minimum Wage." Associated Press Newswire, June 2, 2005.

[7] Saunders, Anne. "Senate Kills Minimum Wage Increase." Associated Press Newswire, May 26, 2005.

[8] "State Minimum Wage Hike Bad Idea in '06 Too." *Portland Press Herald*, March 7, 2005.

[9] McLynch, Jeff. "Keeping It Real: The Effects of Indexing the Massachusetts Minimum Wage." Massachusetts Budget and Policy Center, November 26, 2004.

[10] These estimates were prepared for MBPC by the Economic Policy Institute in Washington, D.C.

[11] The statement was signed by economists from Bentley College, Boston College, Boston University, Harvard University, MIT, Mount Holyoke College, Northeastern University, Simmons College, Smith College, Tufts University, University of Massachusetts (Amherst, Boston, Lowell), and Wellesley College including one Nobel laureate (Robert Solow).

[12] *Federal Register*, vol. 70, no. 33, February 18, 2005, pp. 8373-8375.

[13] The poverty threshold was developed by multiplying the typical food budget in 1955 by a factor of three since a 1995 USDA survey showed that families of three or more persons typically spent one-third of their after-tax budget on food. The threshold is adjusted for families of various sizes and is updated for inflation each year. U.S. Department of Health and Human Services. "Frequently Asked Questions Related to the Poverty Guidelines and Poverty." http://aspe.hhs.gov/poverty/faq.shtml. Accessed on June 10, 2005.

[14] The EPI basic family budget separately estimates the costs of housing, food, child care, transportation, health care, other necessities, and taxes based on a combination of U.S. Census data and national and/or state-level surveys. Allegretto, Sylvia and Yulia Fungard. "Family Budget Technical Documentation." Economic Policy Institute. http://www.epinet.org/content.cfm/datazone_fambud_budget. Accessed on December 29, 2005.

[15] Note that the EPI basic family budget is calculated for 12 regions within the state. However, within some of the regions (such as the Lawrence area), there may be considerable variation in costs, particularly housing, so that the standard may overstate the minimum income needed depending on which town the family actually resides (e.g., Andover versus Lawrence).

[16] Brown, Charles. 1999. "Minimum Wages, Employment, and the Distribution of Income." In Ashenfelter, O. and D. Card, eds. *Handbook of Labor Economics,* Volume 3.

[17] These estimates were prepared for MBPC by the Economic Policy Institute in Washington, D.C.

[18] "Romney/Healey Set Better Jobs as Top Priority." Romney-Healey Press Release, July 24, 2002.

[19] Tuerck, David and Paul Bachman. "The Economics of a Higher Minimum Wage in Massachusetts." Beacon Hill Institute, Suffolk University, June 2005.

[20] Lee, Chinkook, Gerald Schulter, and Brian O'Roark. "How Much Would Increasing the Minimum Wage Affect Food Prices?" Agricultural Information Bulletin, no. 747-02, U.S. Department of Agriculture, Economic Research Service, May 2000.

[21] Baker, Colin. 2005. "Minimum Wage Mandates and Employer-Sponsored Health Insurance." Working Paper.

[22] Case, Karl and Ray Fair. *Principles of Economics* (New Jersey: Pearson/Prentice Hall), 2005, p. 277.

[23] Fuchs, Victor, Alan Krueger, and James Poterba. "Economists' Views About Parameters and Policies: Survey Results in Labor and Public Economics." *Journal of Economic Literature,* vol. 36 (September 1998), pp. 1387-1425.

[24] Across the more than 50 studies reviewed by Brown, the estimated wage elasticity ranges from -0.87 to +.37 depending on the sample, methodology, and data used. He finds that more recent papers replicating earlier studies with additional years of data generally find less negative effects. In addition, newer studies that use comparisons across states report elasticities that cannot be distinguished from zero, suggesting no effect. Finally, several studies using surveys of fast-food restaurants before and after a minimum wage change actually find a positive impact on employment. Brown, Charles (1999), p. 2154.

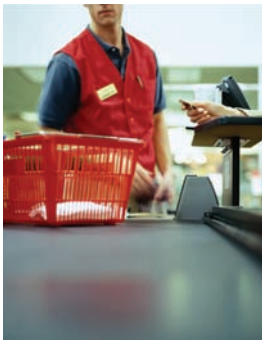
[25] A study conducted by the Political Economy Research Institute (PERI) at UMass Amherst finds little evidence of reduced employment or hours worked in response to the 1998 Boston living wage ordinance. Additional survey data collected by PERI indicates that

covered firms may have taken lower profits rather than reduce employment. (Brenner, Mark. "The Economic Impact of the Boston Living Wage Ordinance." *Industrial Relations,* vol. 44, no. 1, January 2005.)

[26] This assumption is also made by BHI in producing their calculations of the potential employment effects.

[27] This is the same procedure that is described in the BHI report.

[28] It is this last assumption that accounts for the difference between the estimates found in the BHI report and those produced here. Rather than relying on the comprehensive review of the literature discussed above, BHI calculates an average elasticity of demand of -0.31 based on only 6 recent studies and excludes those studies where a positive employment effect was found. The authors then "scale-up" this elasticity by a factor of 4 to arrive at a low-wage elasticity of demand of -1.2.



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