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# Effects of a Paid Sick Leave Mandate on Massachusetts Small Businesses

# **Executive Summary**

A statewide paid sick leave mandate modeled after the legislation currently pending in both the Massachusetts Senate and the House of Representatives would impose new costs on MA employers in the forms of compensation costs associated with paying workers taking paid sick leave, lost production due to more workers taking leave, and new paperwork and recordkeeping costs incurred by complying with the mandate. Assuming passage and implementation of the mandate in 2012, the BSIM forecasts that nearly 16,000 MA jobs could be lost by 2016, and MA real output could decrease by more than \$8.4 billion. Small firms would bear two-thirds of the job losses and more than half of the lost sales. Although the state unemployment rate has gradually fallen and is currently no longer above 8 percent, job creation remains a priority and policymakers would do well to bear in mind the potential negative effects to employment and production that employer mandates can have.

#### Introduction

This report analyzes the potential economic impact of a paid sick leave mandate on Massachusetts employers, workers, and economy. Paid sick leave mandates have re-emerged as a topical policy issue for private enterprise following the recent passage of the first statewide paid sick leave employer mandate in Connecticut. A similar mandate recently up for referendum in Colorado was rejected in November. In Massachusetts, there is legislation currently pending in both the Senate and House of Representatives which, if passed, would establish a minimum time-off standard for paid sick leave by requiring Massachusetts businesses to allow their employees to earn up to a minimum of seven paid sick days per year, and allow them to use up to seven paid sick days per year.

In general, paid sick time is to be provided to employees to care for their own or a family member's physical or mental illness, injury, health condition, need for a medical diagnosis, care, or treatment, or need for a medical procedure or preventive medical care. Paid sick time is also to be provided to help employees prevent or deal with the consequences of domestic abuse, sexual assault, or stalking. In practice, the price of these new mandated entitlements would be new costs imposed on Massachusetts employers which would lead to reduced profitability, lost sales and production, and lost jobs.

The BSIM is a dynamic, multi-region model based on the Regional Economic Models, Inc. (REMI) structural economic forecasting and policy analysis model which integrates input-output, computable general equilibrium, econometric, and economic geography methodologies. It has the unique ability to forecast the economic impact of public policy and proposed legislation on different categories of U.S. businesses differentiated by size of firm. Forecast variables include levels of private sector employment and real output. By comparing simulation results for scenarios which include proposed or yet-to-be-implemented policy changes with the model's baseline forecast, the BSIM is able to obtain estimates of how these policy changes might impact employer firms and their workers.

BSIM inputs in this study consist of (1) new employer costs generated by the proposed mandate and (2) new spending on healthcare-related goods and services due to an increase in paid sick leave taken by employees. Passage and implementation of the mandate is assumed to occur in 2012. Economic forecasts were generated by BSIM for years 2012 through 2016, a five-year window from the supposed date of implementation. The simulation results suggest that if a statewide paid sick leave mandate passes, nearly 16,000 MA jobs could be lost and cumulative MA real output could decrease by over \$8.4 billion by 2016. Small firms would bear two-thirds of the job losses and more than half of the lost sales.

#### **New Employer Costs Generated by a Paid Sick Leave Mandate**

A paid sick leave mandate modeled after the legislation introduced in the Massachusetts Senate and House of Representatives would impose three major costs on employers: compensation costs associated with paying more workers taking paid leave, lost production due to more workers taking leave, and new paperwork and recordkeeping costs incurred by complying with a paid leave mandate. These three costs, and our attempts to model them, are discussed in detail below.

#### A. Employee Compensation

A major cost to employers from this legislation is a "compensation cost" in the form of compensation (both wages and benefits) transferred from employers to employees during their additional paid time off. According to bill language, the Massachusetts mandate would entitle all employees to earn from their employer a minimum of seven paid sick days per year (or the appropriate percentage thereof based upon an accrual rate of one hour of paid leave for every 30 hours worked). The mandate would cover all employees, including part-time and temporary employees. The mandate does not include a size exemption for firms of a particular size class.

The size of employer compensation costs will depend on the amount of additional paid time off that employees take, either for sick leave or to deal with the impact of domestic violence in their lives. This study assumes that employees with newfound access to paid sick leave will use the full seven days of their newly available paid sick leave time. Workers already with access to paid sick leave are assumed to not change the amount of paid leave they take after the mandate is implemented. The paid sick leave these workers have access to is also assumed to be sufficiently

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A 2000 Department of Labor survey on the Family and Medical Leave Act reported that nearly 20 percent of FMLA-covered and -eligible employees who took leave over an 18-month period took their longest leave under FMLA. The percentage of covered and eligible employees who took *any* leave under FMLA is possibly much higher. The FMLA is an unpaid leave policy, and a similar paid leave policy can be expected to have higher take-up rates. According to the report, 54 percent of leave-takers (whether or not they were covered or eligible) who took leave for reasons covered under FMLA reported their longest leave as being between zero and 10 days. The remaining 46 percent reported their longest leave as lasting 11 or more days. The median length of leave taken was 10 days. The report also provides figures on the length of leave-takers' second longest leave: 43 percent reported one to three days, 26 percent said four to five days, 14 percent said six to ten days, and the remainder said 11 or more days. Seventy-five percent of these leave-takers took leave just once during the 18 month period, 15 percent took leave twice, and 10 percent took leave three or more times during the period.

Cross tabulations for the lengths of leave-takers' longest and other leaves are unavailable. Nor are statistics available on the total or average number of leaves taken by leave-takers. The absence of this information obviously introduces an added layer of uncertainty to the modeling process. However, the known duration of the longest and second-longest leaves from the FMLA study combined with (a) data from the Bureau of Labor Statistics (BLS) on worker absences indicating that employed full-time wage and salary private sector workers experience, on average, three work absences per year, and (b) data from the Centers for Disease Control and Prevention (CDC) indicating that employed persons aged 18 years and over (both full-time and part-time) experience an average of 3.8 "work-loss" days in a calendar year, make the modeling assumption that newly-eligible MA workers will use seven days of paid sick leave a not-unreasonable one. (Note that both the BLS and CDC statistics on work absences include workers both with and without access to paid sick leave.) In the absence of more informative distributional data on the number of leaves and the amount of time off taken, we believe that it is as good as any. The fact that the Massachusetts bills also allow workers to take paid "safe time" off increases the likelihood that the seven day assumption constitutes a lower bound.

The cited FMLA statistics can be found in the report "Balancing the Needs of Families and Employers: Family and Medical Leave Surveys 2000" submitted by Westat and funded by the Department of Labor under Contract MS-23F-8144H, available at http://www.dol.gov/asp/archive/reports/fmla/toc.htm. BLS data on worker absences for employed full-time wage and salary workers are available at http://www.bls.gov/cps/cpsaat47.pdf. CDC data on workloss days for employed persons are available at www.cdc.gov/nchs/data/series/sr\_10/sr10\_252.pdf.

<sup>&</sup>lt;sup>1</sup> This assumption is based on existing data on take-up rates for the Family and Medical Leave Act (FMLA), a federal law which entitles eligible employees of covered employers to take unpaid, job-protected leave for specified family and medical reasons. It is assumed that MA workers who become newly eligible for paid sick leave should the mandate be implemented will avail themselves of paid leave in a *similar* fashion to how other workers respond to leave policies outlined in the FMLA. To the extent that there exist disparities between the FMLA and the proposed mandate (*e.g.*, the former provides for unpaid leave, the latter for paid leave; the scope of eligible reasons for taking leave may differ under the two mandates) and regional differences among employers and employees, the pattern of leave-taking by MA workers may differ from patterns of FMLA leave-taking. Nonetheless, the FMLA serves as an important and useful benchmark when analyzing other leave policies given its practical importance and wide reach.

generous that it satisfies the mandate's requirements. Assumptions regarding the amount of paid safe time taken off by workers are discussed later.

Compensation cost estimates were calculated using data and assumptions regarding [1] the number of MA employees newly eligible for paid sick leave, [2] the quantity of additional paid sick leave taken by employees if the mandate passes, and [3] the compensation of these employees. Because of the assumption that employees newly eligible for paid sick leave will take off seven sick days per year, the compensation costs will be dominated by the costs associated with paid sick leave (and not paid safe time). We therefore simplify the estimation of [1] by focusing on the number of MA employees who would be newly eligible for paid sick time if the mandate were implemented.

To estimate [1], industry-level estimates of the percentage of workers without paid sick leave were multiplied by the number of workers in those industries. This calculation produces an estimate of the number of MA employees with no paid sick days—the set of employees newly eligible for paid sick leave if the mandate were implemented. The percent estimates of MA workers ineligible for paid sick leave were derived from employee coverage rates for paid sick leave published by the Institute for Women's Policy Research and the Bureau of Labor Statistics. Industry-level data on the number of MA private sector employees were obtained from the Census Bureau. These figures are shown in **Table 1** along with the calculated estimates for the number of MA employees currently without paid sick days, by industry (right-most column).

BSIM has a unique capacity among forecasting models to generate results for specific firm-size categories. This ability allows for a finer analysis of policy impacts on small firms than other forecasting tools. To produce firm-size-specific outputs, BSIM requires that inputs also be firm-size specific. The estimates of MA employees without paid sick leave in Table 1 therefore need to be allocated to a pre-defined set of firm-size categories.

Table 1: Estimated Number of MA Employees without Paid Sick Days, by Industry

NAICS Industry Code	Private Sector Industry	Percent of Workers without Paid Sick Days Nationally <sup>2</sup>	Number of MA Employees, by Industry <sup>3</sup>	Estimated Number of MA Employees without Paid Sick Days, by Industry
11	Agriculture	67	1,246	835
21	Mining	52	1,193	614
22	Utilities	15	12,660	1,852
23	Construction	75	114,232	85,308
31-33	Manufacturing	48	239,914	115,087
42	Wholesale Trade	29	135,386	39,140
44-45	Retail Trade	55	343,226	188,637
48-49	Transportation/Warehousing	44	77,281	34,073

<sup>&</sup>lt;sup>2</sup> Except for agriculture, industry-level paid sick days coverage rates are taken from Vicky Lovell's *Taking Care: Adequacy and Equity of Paid Leave*, published by the Institute for Women's Policy Research. Lovell's estimates are derived using data from the BLS March 2006 National Compensation Survey, adjusted for eligibility using data from the BLS Nov. 2005 through Oct. 2006 Job Openings and Labor Turnover Surveys (JOLTS). The coverage rate for agricultural workers is taken directly from the BLS March 2011 National Compensation Survey and is not adjusted

using JOLTS data.

<sup>&</sup>lt;sup>3</sup> Estimates of the number of MA employees by industry are taken from the Census Bureau's 2009 Statistics of U.S. Businesses dataset.

51	Information	26	100,551	25,651
52	Finance and Insurance	18	209,550	37,405
53	Real Estate	33	43,746	14,620
	Prof., Scientific, & Tech.			78,382
54	Services	31	251,629	
55	Management	23	83,045	19,291
	Admin., Support, Waste			128,316
56	Man., & Rem. Services	69	185,750	
61	Education	32	191,345	60,656
	Healthcare and Social			158,566
62	Assist.	29	549,052	
	Arts, Entertain., &			33,251
71	Recreation	65	51,227	
	Accommodation and Food			200,044
72	Serv.	78	256,302	
81	Other Services	51	119,796	60,713
	All Industries	48	2,965,885	1,281,607

The approach taken in this study was to distribute the estimates of MA employees currently ineligible for paid sick leave according to the present firm-size distribution of MA employees. To illustrate this process, consider the case of the construction industry where an estimated 85,308 MA construction employees are ineligible for paid sick leave. **Table 2.A** gives Census Bureau data on the distribution of MA employees working construction across firm-size groups. Multiplying the estimated number of MA construction workers without paid sick leave, 85,308, by the percentage shares for the firm-size categories in Table 2.A yields an estimated distribution of construction employees without paid sick leave across firm-size categories (**Table 2.B**). This process was repeated for most 2-digit NAICS industry categories to obtain a matrix of estimated MA employees without paid sick leave by firm-size category and major industry (**Table 2.C**), completing the estimation of [1].

Table 2.A: Distribution of MA Construction Employees, 2009

		No. of Employees per Firm					
	All Construction Employees	1-4	5-9	10-19	20-99	100-499	500+
No. of Employees	114,232	18,928	16,120	17,355	33,176	15,779	12,874
% of Employees	100.00%	16.57%	14.11%	15.19%	29.04%	13.81%	11.27%

Source: Census Bureau, Statistics of U.S. Businesses

Table 2.B: Estimated Distribution of MA Construction Employees without Paid Sick Leave

	All Construction Employees	No. of Employees per Firm						
	without Paid Sick Leave	1-4	5-9	10-19	20-99	100-499	500+	
No. of								
Employees	85,308	14,135	12,038	12,961	24,776	11,784	9,614	
% of								
Employees	100.00%	16.57%	14.11%	15.19%	29.04%	13.81%	11.27%	

Table 2.C: Estimated Number of MA Employees without Paid Sick Leave, by Firm Size and Industry

Industry	No. of Employees per Firm					
Industry	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	248	226	158	0	0	0
Mining	28	41	84	111	163	0
Utilities	0	7	12	59	129	1,641
Construction	14,135	12,038	12,961	24,776	11,784	9,614
Manufacturing	2,294	4,053	7,172	25,044	23,514	53,009
Wholesale Trade	1,819	2,192	3,268	9,489	6,928	15,444
Retail Trade	10,171	11,706	12,363	22,372	12,854	119,171
Transportation/Warehousing	1,124	1,302	1,796	5,343	5,643	18,864
Information	429	531	875	2,785	3,438	17,592
Finance and Insurance	1,014	965	1,197	3,129	4,654	26,445
Real Estate	1,927	1,291	1,502	2,407	2,737	4,755
Prof., Scientific, & Tech. Services	6,764	5,431	6,456	13,778	12,821	33,133
Management	19	15	43	376	1,661	17,177
Admin., Support, Waste Man., & Rem. Services	5,041	4,930	6,347	19,761	22,463	69,774
Education	562	808	1,356	5,258	8,668	44,005
Healthcare and Social Assist.	3,248	5,556	7,204	16,553	28,648	97,357
Arts, Entertain., & Recreation	1,453	1,905	2,966	8,950	7,581	10,397
Accommodation and Food Serv.	7,666	12,935	23,248	56,699	24,835	74,660
Other Services	9,191	10,761	10,780	14,026	7,591	8,362

Regarding [2], the quantity of additional paid leave taken under the mandate will be the sum of additional time off taken by newly eligible workers either for traditional family and medical leave reasons or to deal with the impact of domestic violence in their lives. As mentioned above, employees newly-eligible for paid sick leave are assumed to avail themselves of the full seven days per calendar year allowed under the mandate. This assumption implies that any additional paid time off for safety reasons will only be incurred by those workers who already have access to paid sick leave but do not take seven days or more off in a given year. Current data on the amount of paid sick leave *taken* by private sector workers is not readily available. The most recent data from BLS on paid sick leave days taken by full-time employees is from 1997. At that time, small firm employees took, on average, a minimum of 8.0 paid sick leave days off per year, whereas employees at medium and large firms took, on average, a minimum of 11.2 days off per year. Part-time employees eligible for paid sick leave will likely take fewer sick days off than their full-time colleagues, partly because they will likely have been offered less generous benefits than full-time employees.

Although these rates may have changed over time, the likelihood that these changes leans toward more *liberal* use of sick leave policies is strong, given legislative trends and public opinion with respect to paid sick leave policies. The probability that many, if not most or all, workers with access to paid sick leave already take more than seven work days off per year due to sickness, is therefore also strong. This analysis subsequently assumes that all private sector workers already (prior to the mandate's implementation) eligible for paid sick leave take, and continue to take, at least seven days of paid leave off under their employers' benefit plans. As a consequence, any additional time off taken for safety reasons will not impose a direct cost on employer firms *in the* 

*model*, permitting the analyst to exclude calculations of potential costs to employers associated with paid safe time taken off by victims of domestic violence from the subsequent analysis.

Finally, estimates for [3], employee compensation, were derived using industry-level data on the average workweek lengths of employees and average hourly earnings<sup>4</sup> or wages of employees. Data on average workweek lengths of employees come from the Bureau of Labor Statistics' Current Employment Statistics database, as do data on average hourly earnings for employees. The BLS workweek length and earnings/wage data are given in columns (A) and (B) in **Table 3**. This study assumes that a typical workweek consists of 40 hours and that any time worked during a given week in excess of 40 hours constitutes overtime. It is assumed that workers taking paid leave under the mandate would earn regular, and not overtime, pay. The hourly earnings/wage rates for agriculture, mining, and manufacturing therefore had to be adjusted downward to obtain estimated rates of regular pay for those industries (not shown).<sup>5</sup> The values in column (C) are the implied maximum earnings/wage cost per employee per year (seven work days), obtained by multiplying the respective hourly earnings/wage rates for regular pay by 56 (hours).

BSIM requires inputs to be provided for individual firm-size categories. This was achieved for most industries by multiplying the seven-day earnings/wage costs in column (C) by the industry-by-firm-size matrix of estimated numbers of MA employees without paid sick leave (Table 2.C). The result is an industry-by-firm-size matrix of new compensation costs to employers for providing paid sick leave under the mandate (**Table 4**). These compensation costs are based on the latest data available and are assumed to apply for the year 2012.

Table 3: Estimated Earnings, Wages, and Hours Worked by MA Employees, by Industry<sup>6</sup>

	Avg. # Hrs.		Earnings/Wages
Industry	Worked per Week (A)	Avg. Hourly Earnings/Wages (B)	per Employee for Seven Work Days (C)
Agriculture	43.4	\$27.40	\$1,476.56
Mining	43.6	\$28.00	\$1,505.83
Utilities	33.1	\$22.78	\$1,055.63
Construction	37.7	\$33.41	\$1,763.38
Manufacturing	40.2	\$28.28	\$1,579.75
Wholesale Trade	33.1	\$22.78	\$1,055.63
Retail Trade	33.1	\$22.78	\$1,055.63

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<sup>&</sup>lt;sup>4</sup> Average hourly earnings reported by BLS reflect the actual return to a worker for a stated period and are different from wage rates, which are the amounts stipulated for given units of work or time. BLS earnings do not measure the level of total labor costs on the part of employers since they exclude items like benefits, irregular bonuses, retroactive items, and the employer's share of payroll taxes.

<sup>&</sup>lt;sup>5</sup> For industries where the average workweek length exceeded 40 hours, non-overtime hourly earnings/wages were imputed for use in calculating compensation costs due to the paid sick leave mandate. Overtime pay was assumed to equal 1.5 times regular pay for the relevant industries. Non-overtime earnings/wages were estimated using the equation: Average Weekly Earnings/Wages = (40 Hours) x (Non-Overtime Earnings/Wage Rate) + (Avg. Workweek Length in Hours – 40) x (Overtime Earnings/Wage Rate).

<sup>&</sup>lt;sup>6</sup> All dollar values in Table 3 represent or are derived from 2010 earnings data taken from the Bureau of Labor Statistics' Current Employment Statistics (CES) dataset. When available, MA-specific earnings data were used. In the absence of MA-specific earnings data, national-level data were used.

Transportation/			
Warehousing	33.1	\$22.78	\$1,055.63
Information	36.1	\$35.74	\$1,806.30
Finance and			
Insurance	36.4	\$32.00	\$1,630.72
Real Estate	34.0	\$21.46	\$1,021.50
Prof., Scientific,			
& Tech. Services	35.7	\$34.69	\$1,733.81
Management	37.9	\$32.76	\$1,738.25
Admin., Support,			
Waste Man., &			
Rem. Services	34.0	\$17.82	\$848.23
Education	31.8	\$25.35	\$1,128.58
Healthcare and			
Social Assist.	32.9	\$23.18	\$1,067.67
Arts, Entertain.,			
& Recreation	25.2	\$18.20	\$642.10
Accommodation			
and Food Serv.	25.9	\$12.23	\$443.46
Other Services	32.6	\$22.21	\$1,013.66

Table 4: Estimated Earnings and Wages Paid by Firms to Employees Newly Eligible for Paid Sick Leave, Year 2012

	No. of Employees per Firm					
Industry	1-4	5-9	10-19	20-99	100-499	500+
Agriculture <sup>7</sup>	\$366,040	\$333,393	\$233,474	\$0	\$0	\$0
Mining	\$42,653	\$62,040	\$127,183	\$167,509	\$245,059	\$0
Utilities	\$0	\$7,259	\$12,509	\$62,547	\$136,678	\$1,732,176
Construction	\$24,926,132	\$21,228,300	\$22,854,661	\$43,689,210	\$20,779,239	\$16,953,668
Manufacturing	\$3,624,587	\$6,403,462	\$11,329,961	\$39,562,789	\$37,146,902	\$83,740,617
Wholesale Trade	\$1,920,200	\$2,314,189	\$3,449,769	\$10,016,659	\$7,313,363	\$16,303,087
Retail Trade	\$10,736,656	\$12,357,655	\$13,050,380	\$23,616,466	\$13,569,054	\$125,799,771
Transportation/ Warehousing	\$1,186,834	\$1,374,866	\$1,896,142	\$5,640,487	\$5,956,511	\$19,913,680
Information	\$775,505	\$959,819	\$1,580,500	\$5,030,412	\$6,210,488	\$31,775,873
Finance and Insurance	\$1,653,063	\$1,573,889	\$1,952,006	\$5,102,985	\$7,589,421	\$43,125,188
Real Estate	\$1,968,420	\$1,318,425	\$1,534,521	\$2,458,989	\$2,796,276	\$4,857,552
Prof., Scientific, & Tech. Services	\$11,727,851	\$9,415,766	\$11,193,171	\$23,888,306	\$22,228,639	\$57,446,216
Management	\$33,515	\$26,247	\$74,298	\$653,743	\$2,887,534	\$29,857,773
Admin., Support, Waste Man., &	0.4.07.5.00.5	<b>\$4.404.404</b>	<b>47.202.7</b> 00	<b>* * * * * * * * * *</b>	<b>\$10.071.201</b>	<b>\$50.101.150</b>
Rem. Services	\$4,276,326	\$4,181,401	\$5,383,788	\$16,761,934	\$19,054,204	\$59,184,169
Education	\$633,952	\$911,574	\$1,530,499	\$5,934,173	\$9,782,603	\$49,662,881

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<sup>&</sup>lt;sup>7</sup> The zero values present in this and subsequent tables are not errors. According to Census Bureau data, there are no Massachusetts employees working at agricultural firms with 20 or more employees, mining firms with 500 or more employees, or utility firms with fewer than five employees.

Healthcare and						
Social Assist.	\$3,467,937	\$5,931,909	\$7,691,624	\$17,673,623	\$30,586,733	\$103,944,694
Arts, Entertain., &						
Recreation	\$932,764	\$1,223,263	\$1,904,705	\$5,746,625	\$4,867,626	\$6,675,638
Accommodation						
and Food Serv.	\$3,399,594	\$5,736,253	\$10,309,541	\$25,143,915	\$11,013,204	\$33,108,837
Other Services	\$9,316,919	\$10,908,439	\$10,927,447	\$14,217,856	\$7,695,089	\$8,476,464

The reader will note that the compensation figures given in Table 4 do not represent the total labor cost to employers generated by the paid sick leave mandate (see footnote 4). Significant additional costs include employee benefits and payroll taxes paid by employers for employees newly taking sick leave. To estimate the true labor cost to employers, the figures in Table 4 must be adjusted to account for these factors.

The incorporation of employee benefits into the model was achieved by adjusting the compensation figures in Table 4 upward by a percentage based on the ratios of benefits and wages/salary to total compensation. This adjustment was performed on an industry-by-industry basis. For example, the Bureau of Economic Analysis reports that in 2010, average compensation per private sector employee working in manufacturing totaled \$75,217. Of this figure, \$58,475 was due to wage and salary accruals. The balance of \$16,742 consists of non-cash benefits and other wage and salary supplements, including the employer's share of payroll taxes. In general, an employer's share of payroll taxes equals 7.65 percent of employee wages and salary. Of this 7.65 percent, 6.2 percentage points are intended to help fund old age, survivors, and disability insurance, and 1.45 percentage points go toward helping to pay for Medicare hospital insurance. Subtracting the employer's share of payroll taxes from the balance of \$16,742 therefore yields an estimate of the share of employee compensation represented by non-cash compensation for manufacturing employees, roughly 23.7 percent of total employee compensation.

This share is likely to vary by firm size, given the comparative ease with which large firms can provide non-cash benefits to their employees due to greater financial resources and cost savings achieved through greater purchasing power. In contrast, smaller firms are less able to afford non-cash benefits like health insurance for their workers. For this reason, the percentage share of employee compensation represented by benefits was assumed to vary with the number of workers per firm, with the percentage share represented by benefits being smaller at small firms and larger at large firms. In accordance with this assumption, the cash compensation figures in Table 4 were adjusted by degrees varying by firm size to reflect the costs of non-cash employee compensation to

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<sup>&</sup>lt;sup>8</sup> The balance of \$16,742 includes the employer's share of payroll taxes. Under current law, the employer's share of payroll taxes is 7.65 percent of employee wage and salary. On average, this amounts to 0.0765 x \$58,475, or \$4,473 per manufacturing employee. Subtracting this figure from estimated wage and salary supplements yields \$12,269, roughly 23.7 percent of reported per-employee compensation (not including the employer's share of payroll taxes).

Note that the subtraction of the employer's share of payroll taxes here is done solely to calculate the ratio of non-cash compensation received directly by employees to total compensation received directly by the employee. Payroll taxes are not ignored as an employer cost in this analysis and are introduced at a later stage of the modeling process. The ratio of non-cash compensation to overall compensation for all firms in a particular industry was adopted as the ratio for firms with 100 to 499 employees in that industry. For firms with fewer than 100 employees, this ratio less five percentage points was adopted. For firms with 500 or more employees, this ratio plus five percentage points was adopted.

employers. The resulting adjusted compensation cost figures which include both cash and non-cash compensation are given in **Table 5**.

Table 5: Compensation Costs before Accounting for Taxes, Year 2012

	No. of Employees per Firm					
Industry	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	\$410,167	\$373,584	\$261,620	\$0	\$0	\$0
Mining	\$47,482	\$69,065	\$141,584	\$186,476	\$288,888	\$0
Utilities	\$0	\$9,465	\$16,311	\$81,556	\$190,644	\$2,597,258
Construction	\$28,774,739	\$24,505,959	\$26,383,432	\$50,434,844	\$25,456,939	\$22,125,490
Manufacturing	\$4,380,630	\$7,739,143	\$13,693,246	\$47,815,081	\$47,782,753	\$115,121,247
Wholesale Trade	\$2,121,356	\$2,556,618	\$3,811,157	\$11,065,978	\$8,551,880	\$20,247,852
Retail Trade	\$12,192,943	\$14,033,810	\$14,820,494	\$26,819,731	\$16,337,173	\$161,165,404
Transportation/ Warehousing	\$1,404,631	\$1,627,168	\$2,244,104	\$6,675,577	\$7,492,997	\$26,731,790
Information	\$883,500	\$1,093,482	\$1,800,596	\$5,730,936	\$7,502,724	\$40,855,396
Finance and Insurance Real Estate	\$1,871,987 \$2,167,090	\$1,782,327 \$1,451,492	\$2,210,521 \$1,689,398	\$5,778,801 \$2,707,172	\$9,110,374 \$3,257,833	\$55,073,172 \$6,009,414
Prof., Scientific, & Tech. Services	\$12,914,186	\$10,368,221	\$12,325,420	\$26,304,736	\$25,903,365	\$71,084,742
Management	\$37,932	\$29,706	\$84,090	\$739,903	\$3,464,127	\$38,105,615
Admin., Support, Waste Man., & Rem. Services	\$4,810,736	\$4,703,948	\$6,056,597	\$18,856,663	\$22,712,966	\$75,019,888
Education	\$710,754	\$1,022,010	\$1,715,918	\$6,653,095	\$11,619,097	\$62,710,267
Healthcare and Social Assist.	\$3,960,793	\$6,774,939	\$8,784,741	\$20,185,360	\$37,049,392	\$134,024,238
Arts, Entertain., & Recreation	\$1,017,660	\$1,334,598	\$2,078,063	\$6,269,657	\$5,617,071	\$8,175,145
Accommodation and Food Serv.	\$3,716,770	\$6,271,434	\$11,271,401	\$27,489,792	\$12,736,980	\$40,641,109
Other Services	\$10,224,100	\$11,970,586	\$11,991,444	\$15,602,238	\$8,934,580	\$10,448,385

The figures in Table 5 are estimates of what employers could expect to pay employees newly taking paid sick leave in the absence of tax distortions. They would not be accurate estimates under current tax law, however, which permits employers to deduct the value of certain benefits, like their share of employee health insurance premiums, when calculating income tax liability. This feature of tax law was accounted for in the model by assuming that employers of all sizes (a) pay an income tax rate of 35 percent, (b) have sufficient earnings to deduct the maximum share possible of their contributions toward employee benefits, and (c) actually do deduct the maximum value. Current tax law also requires employers to make federal insurance contributions in the form of payroll taxes on behalf of their employees, an amount equal (generally) to 7.65 percent of employee wages and salary.

To incorporate these features of tax law into the model, the compensation figures in Table 5 were first reduced by an amount equal to 35 percent of the corresponding estimates of non-cash employee benefits. Next, a sum equal to 7.65 percent of the non-benefit (pre-tax) share of compensation was added to each term. The resultant compensation figures are given in **Table 6**.

Table 6: Compensation Costs after Accounting for Taxes, Year 2012

Industry			No. of Employ	yees per Firm		
	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	\$432,525	\$393,948	\$275,881	\$0	\$0	\$0
Mining	\$50,197	\$73,014	\$149,678	\$197,137	\$298,856	\$0
Utilities	\$0	\$9,442	\$16,273	\$81,363	\$185,871	\$2,473,370
Construction	\$30,001,973	\$25,551,131	\$27,508,677	\$52,585,876	\$25,965,720	\$22,066,242
Manufacturing	\$4,490,344	\$7,932,972	\$14,036,198	\$49,012,626	\$47,896,552	\$112,786,338
Wholesale Trade	\$2,249,260	\$2,710,766	\$4,040,946	\$11,733,186	\$8,873,687	\$20,550,886
Retail Trade	\$12,792,071	\$14,723,393	\$15,548,732	\$28,137,578	\$16,769,675	\$161,779,404
Transportation/ Warehousing	\$1,450,972	\$1,680,852	\$2,318,142	\$6,895,817	\$7,570,385	\$26,402,037
Information	\$925,792	\$1,145,825	\$1,886,789	\$6,005,269	\$7,691,829	\$40,959,217
Finance and	φ>20,1>2	ψ1,1 ie,62e	ψ1,000,709	\$0,00 <b>0,2</b> 00	\$7,051,0 <b>2</b> 5	ψ.ο,>ε>, <b>=</b> 17
Insurance	\$1,966,084	\$1,871,917	\$2,321,634	\$6,069,276	\$9,361,838	\$55,345,131
Real Estate	\$2,300,844	\$1,541,079	\$1,793,669	\$2,874,260	\$3,385,074	\$6,107,926
Prof., Scientific, &						
Tech. Services	\$13,710,162	\$11,007,275	\$13,085,108	\$27,926,050	\$26,912,874	\$72,244,016
Management	\$39,847	\$31,206	\$88,336	\$777,262	\$3,560,530	\$38,302,432
Admin., Support, Waste Man., &						
Rem. Services	\$5,065,330	\$4,952,891	\$6,377,125	\$19,854,596	\$23,400,222	\$75,589,632
Education	\$749,345	\$1,077,500	\$1,809,084	\$7,014,324	\$11,986,622	\$63,272,616
Healthcare and Social Assist.	\$4,146,445	\$7,092,496	\$9,196,503	\$21,131,495	\$37,946,306	\$134,231,286
Arts, Entertain., & Recreation	\$1,084,277	\$1,421,963	\$2,214,096	\$6,680,078	\$5,857,470	\$8,339,744
Accommodation and Food Serv.	\$3,956,851	\$6,676,532	\$11,999,468	\$29,265,472	\$13,271,047	\$41,424,129
Other Services	\$10,868,791	\$12,725,403	\$12,747,577	\$16,586,054	\$9,295,468	\$10,633,620

The compensation cost estimates in Table 6 are based on the latest data available, and we assume them to be the costs employers can expect to pay in 2012. Given inflation, these costs can be expected to be higher in 2013 and beyond. To account for inflation, the analysis assumes that employee compensation costs increase annually between 2012 and 2016 at their historical rate of growth during recent years. Based on data from the Bureau of Economic Analysis, the average annual percentage change for nominal full-time private sector employee compensation between 2003 and 2010 was 3.23%. This growth rate was applied to the figures in Table 6 to obtain estimated compensation costs for years 2013 through 2016 (not shown).

The figures in Table 6 and corresponding tables for years 2013 through 2016 represent the final estimated compensation costs to employers created by a paid sick leave mandate in the medium term. It should be noted that these estimates rely upon a key assumption regarding employer behavior, namely, that no preemptive action is taken by employers in anticipation of the mandate's implementation. According to the economic theory of rational expectations, rational agents (business owners) will take actions in the present that optimize the value of expected present and future outcomes. When future expectations change, agents will adjust their behavior in the present to account for the change in expectations. Hypothetically, it is possible that certain employers will seek to offset some of the expected future costs generated by the mandate by

immediately lowering employee compensation, reducing the number of workers employed, eliminating paid vacation, or decreasing other business spending. No such effect was modeled as part of this analysis.

#### **B.** Lost Production Due to Absent Workers

The absence of workers from work causes employers to suffer lost production. Absent workers are unable to produce the goods and services that businesses sell. Given demand, this translates into lost sales which hurt business earnings and profit. A mandated paid sick leave policy will increase the number of work days missed by employees. The financial loss from this increase can be material and is an important consequence of the proposed legislation.

One should take care to note that the "cost" of lost production is separate and different from the compensation cost described earlier. With a paid sick leave mandate, workers are paid compensation whether they are present and healthy or absent and sick. The compensation costs accrue during occasions of worker absence. During these occasions of worker absence, the business is also not producing as many goods and services as it otherwise would. This should translate into lower revenue (and maybe profits) for the firm assuming that the market for the firm's products is not oversupplied and if prices are relatively constant. In the real world, these two assumptions need not hold: sometimes there is too much product available for too little demand, and prices can and often do change. The impact of lost production on firm revenue and profitability is therefore less certain (insofar as modeling is concerned) than the cost of compensating an employee for a given period of time.

Despite the importance of this cost, exogenous production losses were not included in the BSIM forecast because of technical constraints. For one thing, there is a lack of available data necessary to estimate the magnitude and distribution of these production losses across industries. Labor productivity varies by industry, and labor productivity data only exist or are publicly available for select industries. Modeling and simulating the impact of an industry-neutral policy shock (such as the proposed paid sick leave mandate) using BSIM, however, requires input for all major NAICS industry codes. Including production losses in the model would therefore require the estimation of labor productivity for industries with missing data values, creating a potentially large source of error. More important, BSIM is not set up to accept exogenous changes in production levels as input. Rather, the module is designed to receive input in the form of nominal costs to employers or employees, from which it subsequently computes forecasts for production, employment, and other macro variables.

These obstacles prevented the inclusion of exogenous production losses due to increased worker absences to the analysis. However, we should point out that if one actually had a model capable of accepting such production losses and were capable of measuring them with a reasonable degree of accuracy, it is important to avoid double-counting in the sense that such a model might not also accept as input compensation costs like the ones described above in the same way that BSIM does. More could be said about this technical point, but we will not do so here. In any event, to the extent that such production losses are absent from the model, the forecast job and output losses associated with a statewide paid sick leave mandate contained herein may be low.

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<sup>&</sup>lt;sup>10</sup> If supply outstrips demand, adding more goods and services to the market may not generate more revenue. Instead, the additional product might just sit on the shelf as unsold inventory.

One final note concerning production effects due to a paid sick leave mandate: Some contend that a paid sick leave mandate will increase labor productivity among workers, the argument being that sick workers are less productive than healthy workers and spread their germs to co-workers, further reducing firm-wide productivity. While some research has suggested that improved health status among workers might lead to higher productivity growth, the results of other studies urge caution with regard to claims that better health outcomes lead to greater growth. The Congressional Budget Office's official position on this matter is one of agnosticism. Lacking a sufficient body of evidence to sway us from a state of uncertainty, we assume that a paid sick leave mandate would neither increase nor decrease labor productivity.

#### C. Paperwork and Recordkeeping Costs

The proposed mandate would also impose costs on employers in the form of additional paperwork and recordkeeping. Small business owners frequently handle such paperwork and recordkeeping themselves, allocating valuable time and energy to these administrative tasks that could be spent acquiring new customers, making business decisions, or otherwise operating and growing their businesses. According to a 2003 NFIB National Small Business Poll on paperwork and recordkeeping, 39.3 percent of small business owners/managers surveyed indicated that they personally handled their businesses' personnel paperwork and recordkeeping. In that same survey, small business owners/managers responded that they felt \$40 (approximately) was a fair per-hour amount to claim for the time and effort they spent doing paperwork and recordkeeping required by government. To account for this burden, it is assumed that an employer newly providing paid sick leave under the mandate will face a new paperwork and recordkeeping cost of 10 person-hours per year. At \$40 per hour, the paperwork and recordkeeping costs for an employer newly offering paid sick leave translates to \$400 per year.

#### Effects of the Paid Sick Leave Mandate on Private Sector Demand

Employees newly eligible for paid sick leave who use it can be expected to increase demand for healthcare-related goods and services. Employees may, for example, spend their paid sick leave time visiting the doctor's office, going to the dentist, or purchasing and taking medication for an illness. All these activities represent increases in the consumption of healthcare-related goods and services. To account for this effect, it is assumed that demand for private sector healthcare goods and services produced in Massachusetts will increase by a dollar amount equal to the increase in MA employer costs. 14†¥

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<sup>&</sup>lt;sup>11</sup> When assessing potential productivity effects due to changes in the health insurance system during the recent national healthcare reform debate, the Congressional Budget Office issued a report which came to the conclusion that "[b]ecause the impact on health outcomes from major changes to the health care system is uncertain, it is not clear whether such changes would have a substantial impact on overall economic output or productivity." See Congressional Budget Office, "Key Issues in Analyzing Major Health Insurance Proposals" (December 2008).

<sup>&</sup>lt;sup>12</sup> See William J. Dennis, Jr., "Paperwork and Record-keeping," NFIB National Small Business Poll, Volume 3, Issue 5, 2003.

<sup>&</sup>lt;sup>13</sup> The poll asked respondents whether they thought government should compensate them for dealing with the added paperwork and recordkeeping it required of their businesses. Respondents who answered "Yes" were then asked: "What do you think would be a fair per hour amount to claim for your time and efforts?" The average response was \$43.30. Respondents who answered "No" were asked: "If the decision were made to reimburse you, what do you think would be a fair per hour amount to claim for your time and effort?" Their average response was \$40.72.

<sup>&</sup>lt;sup>14</sup> This assumption is reasonable, but it is possible that it overestimates new demand for healthcare goods and services. While some episodes of employees taking sick leave will certainly generate new healthcare expenditures (*e.g.*, paying for a visit to the doctor, dentist, or hospital), other cases may produce no or very little new expenditures. An example of

Increased demand is assumed to be distributed across industries according to historical patterns of healthcare expenditures in Massachusetts. Data on 2009 MA healthcare expenditures from the Centers for Medicare and Medicaid Services were used as the template for new healthcare spending (Table 7). The pattern of MA healthcare expenditures is assumed to be static in the medium term, so new demand is allocated according to the distribution in Table 7 for all forecast years.

Table 7: Healthcare Expenditures in Massachusetts, 2009<sup>15</sup>

Personal Healthcare	50.0%
Hospital Care	18.9%
Physician and Clinical Services	11.2%
Prescription Drugs and Other Nondurables	5.6%
Nursing Home Care	4.2%
Other Health/Residential/Personal Care	3.6%
Dental Services	2.4%
Home Healthcare	2.1%
Other Professional Services	1.4%
Durable Medical Products	0.6%
Total:	100.0%

Source: Centers for Medicare and Medicaid Services

For illustrative purposes, the dollar values of the assumed increases in healthcare expenditures based on the distribution in Table 7 are given below in **Table 8** for year 2012. The estimated total cost to MA employers in 2012 due to a statewide mandate is \$1,827,786,003. Multiplying this sum by the percentages in Table 7 yields the dollar values in Table 8.

the latter set of cases is the case of an employee with a minor cold which simply requires a day or two of rest at home for the employee to fully recuperate. Such an episode does not entail significant new healthcare expenditures. To the extent that demand for MA healthcare goods and services is overestimated, the forecast job and output losses may be

<sup>&</sup>lt;sup>†</sup> This assumption also ignores the presence of workers originally without paid sick leave who took unpaid leave prior to the mandate being implemented, and who begin taking paid leave after implementation. Such workers might be expected to generate no or very little new healthcare spending, since they might already be consuming healthcare while on unpaid leave. According to a survey on the Family and Medical Leave Act (FMLA) conducted by the Department of Labor in 2000, 16.5 percent of employees nationwide took leave in the 18 months preceding the survey. Also, 1.2 percent of employees took leave at least once during that time period and took their longest leave under FMLA. This means that roughly 15 percent of the employee population was taking either unpaid leave or leave under another policy. <sup>4</sup> To the extent that demand for goods and services outside of MA increase due to the mandate, the forecast job and

output losses may be understated. The assumption that only demand for MA goods and services increases is a constraint imposed by BSIM's regional structure.

<sup>&</sup>lt;sup>15</sup> These data are available on the Centers for Medicare and Medicaid Services website, https://www.cms.gov.

Table 8: Estimated New MA Healthcare Expenditures in 2012 Due to Statewide Paid Sick Leave Mandate

Personal Healthcare	\$913,893,001
Hospital Care	\$345,283,664
Physician and Clinical Services	\$204,662,902
Prescription Drugs and Other Nondurables	\$101,726,293
Nursing Home Care	\$76,518,853
Other Health/Residential/Personal Care	\$65,865,085
Dental Services	\$43,944,922
Home Healthcare	\$38,864,584
Other Professional Services	\$25,312,036
Durable Medical Products	\$11,714,661

#### Effects of the Paid Sick Leave Mandate on Government Demand

A statewide mandate will likely allocate powers necessary to successfully administer and enforce the mandate to the appropriate state-level agency. These responsibilities will result in new government costs. The uncertainty of what powers the agency will adopt, how many complaints might be filed, and the availability of state funds to compile information related to compliance of paid sick leave policies, make estimating these costs difficult. The current strained nature of state and local finances also makes it unlikely that a material share of government funds will be allocated toward these new responsibilities in the short term. Hence, for modeling purposes, it was assumed that the net effect on government demand as a consequence of the mandate's implementation is zero.

## Forecast Economic Impact of the Paid Sick Leave Mandate

The BSIM results suggest that a statewide paid sick leave mandate modeled after the legislation introduced in the Massachusetts Senate and House of Representatives could cause substantial job loss and output loss in Massachusetts. Based on the assumptions described above, BSIM forecasts that if such a statewide mandate is implemented:

- Nearly 16,000 MA jobs will be lost by 2016.
- Real output in MA will be \$3.1 billion less in 2016 than if the paid sick leave mandate had not been implemented. (The real output gap will be \$3.1 billion in 2016.)
- Cumulatively, over \$8.4 billion in real output will be lost between 2012 and 2016.

Employment forecasts are presented in **Table 9** and **Figure 1** as employment <u>differences</u> relative to a baseline forecast. The baseline forecast represents the path of the economy if no policy shock occurs and the mandate is not implemented. Negative values indicate job losses, and positive values represent job gains. According to the results, firms with one to four employees are forecast to employ 1,553 fewer workers (9.7 percent of the total employment difference) in 2016 if the mandate goes into effect, firms with five to nine employees are forecast to employ 1,492 fewer (9.3 percent), and firms with ten to 19 employees are projected to employ 1,771 fewer (11.1 percent). Job losses at firms with 20 to 99 employees are forecast to be considerably larger than those in any of the previous three categories. In 2016, these firms are expected to employ 3,916 fewer workers (24.5 percent of all jobs lost). Meantime, 1,818 fewer workers (11.4 percent) are forecast to be employed by firms in the 100-to-499-employee category. Lastly, firms with 500 or more employees are projected to employ 5,445 fewer workers (34.0 percent) in 2016 if the mandate is implemented.

**Table 9: Forecast Employment Difference from Baseline (in Units)** 

Firm Size	Jobs Lost in 2016	% of Jobs Lost in 2016
1 to 4 Employees	1,553	9.7%
5 to 9 Employees	1,492	9.3%
10 to 19 Employees	1,771	11.1%
20 to 99 Employees	3,916	24.5%
100 to 499 Employees	1,818	11.4%
500 or More Employees	5,445	34.0%
< 20 Employees	4,816	30.1%
< 100 Employees	8,732	54.6%
< 500 Employees	10,550	66.0%
All Firms	15,995	100.0%

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<sup>&</sup>lt;sup>16</sup> The term "output" refers to the aggregate output of the Massachusetts economy (Massachusetts's gross domestic product (GDP)). GDP has three possible definitions: (1) the value of final goods and services produced in an economy during a given period (as opposed to raw materials or intermediate goods which are produced or sourced earlier in the production process), (2) the sum of value added during a given period, or (3) the sum of incomes in the economy during a given period. It is a technical term whose significance may be better understood by the reader if she considers that because of the first definition, output serves as a rough proxy for sales.

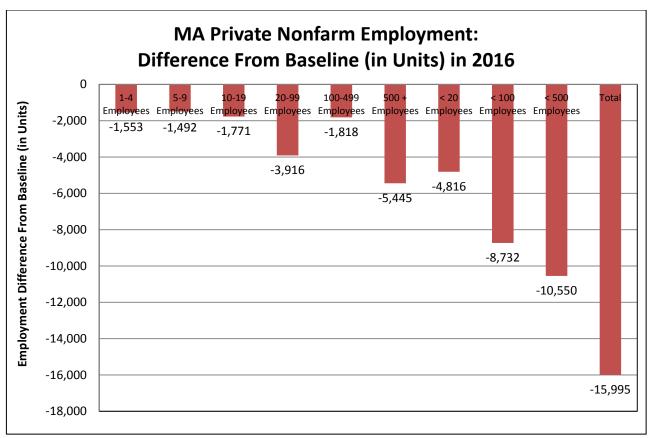


Figure 1

The results suggest that small businesses will shoulder a large percentage of future job losses due to the paid sick leave mandate. Approximately two-thirds of the employment gap in 2016 will be experienced by firms with fewer than 500 employees. <sup>17</sup> In total, these small businesses are projected to employ 10,550 fewer workers in 2016 due to the additional costs imposed by the mandate. Fifty-five percent of the employment gap will be at firms with fewer than 100 employees. Thirty percent of job losses will occur at firms with fewer than 20 employees.

Dividing the percentage share of (forecast) job loss experienced by a firm-size group by that group's (historical) percentage share of private sector employment yields an index of employment change (**Figure 2**). This index serves as an indicator as to whether the job loss forecast for a particular firm-size group is proportionate to the group's existing employment base. The index is normalized to 100. An index value higher than 100 indicates a firm-size group that experiences a disproportionately high number of job losses relative to its current employment share (and vice versa for an index value lower than 100).

Firms with fewer than 100 employees clearly bear a disproportionately large amount of job losses generated by the mandate. The employment change index value for firms with one to four employees, for example, is 163, the result of dividing the percentage share of jobs lost by firms with

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<sup>&</sup>lt;sup>17</sup> This analysis adopts the Small Business Administration's size-of-business threshold of 500 employees to distinguish between small businesses and large businesses. The 500-employee threshold is frequently used by researchers to delineate the small business sector when working with firm-size data.

one to four employees (9.7 percent) by the percentage share of private sector employment currently represented by this firm-size category (6.0 percent). Other firm-size categories with fewer than 100 employees have even higher index values. Firms with five to nine, ten to 19, and 20 to 99 employees have index values of 240, 235, and 191, respectively.

In contrast to firms with fewer than 100 employees, larger firms bear a disproportionately small amount of the job losses generated by the mandate (when the share of private sector employment is used as the reference point). Firms with 100 to 499 and 500 or more employees have index values of 82 and 58, respectively. The dichotomy separating index values below and above the 100 mark highlights the comparatively high sensitivity of very small firms to regulatory costs.

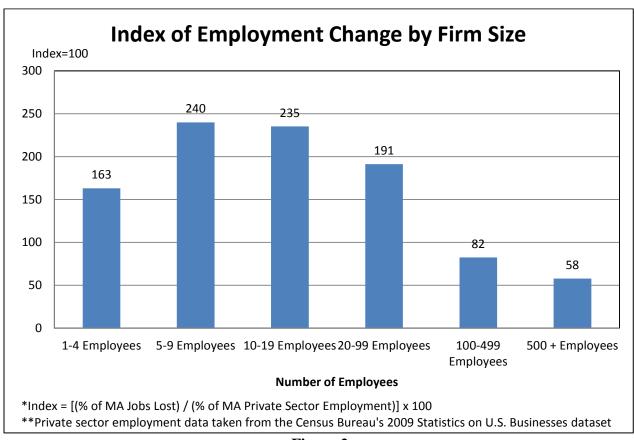


Figure 2

Detailed forecasts for MA real output losses are given in **Table 10** and **Figure 3**. As with employment, the output forecasts are presented as differences relative to a baseline forecast representing the path of the economy if the mandate is not implemented. The annual real output gap is forecast to average approximately \$1.7 billion from 2012 to 2016. In 2016, the output gap is projected to be \$3.1 billion. Over the five years spanning 2012 through 2016, the cumulative real output loss experienced by Massachusetts employers is forecast to total \$8.4 billion.

Small businesses (< 500 employees) are projected to bear approximately 60 percent of all lost output through 2016. Forty-seven (47) percent of the lost output is forecast to occur at firms

with fewer than 100 employees, whereas firms with fewer than 20 employees are projected to shoulder 26 percent of the output loss. As with job losses, the incidence of lost output is projected to be felt most strongly by very small firms.

**Figure 4** presents an index of output change by firm size, constructed analagously to the index of employment change, except with output losses serving as the numerator and gross receipts (a proxy for output) as the denominator. Output losses are most disproportionate for the very smallest firms, those with one to four employees. These firms will bear 9.1 percent of the cumulative output gap through 2016 but currently account for just 4.6 percent of statewide gross receipts, resulting in an index value of 196. The share of output losses faced by larger, but still small firms, is slightly improved, though still disproportionate. Firms with five to nine, ten to 19, and 20 to 99 employees have output change index values of 146, 131, and 135, respectively. As with changes in employment, firms with 100 or more employees bear a disproportionately small amount of lost output. Firms with 100 to 499 and 500 or more employees have output change index values of 85 and 77, respectively.

Table 10: Forecast Cumulative Real Output Lost by 2016 (in Billions of 2000 \$s)

Firm Size	<b>Cumulative Real Output Lost</b>	% of Cumulative Real Output
	by 2016	Difference by 2016
1 to 4 Employees	\$0.763B	9.1%
5 to 9 Employees	\$0.646B	7.7%
10 to 19 Employees	\$0.747B	8.9%
20 to 99 Employees	\$1.803B	21.4%
100 to 499	\$1.060B	12.6%
Employees		
500 or More	\$3.398B	40.4%
Employees		
< 20 Employees per	\$2.156B	25.6%
Firm		
< 100 Employees per	\$3.959B	47.0%
Firm		
< 500 Employees per	\$5.019B	59.6%
Firm		
All Firms	\$8.417B	100.0%

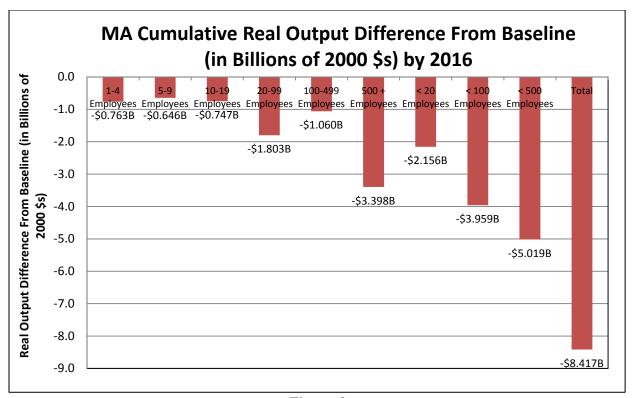


Figure 3

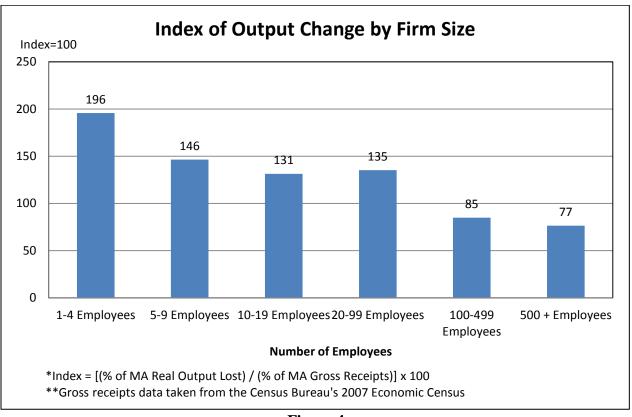


Figure 4

## **Summary**

A statewide paid sick leave mandate modeled after the legislation currently pending in both the Massachusetts Senate and the House of Representatives would impose new costs on MA employers in the forms of compensation costs associated with paying workers taking paid sick leave, lost production due to more workers taking leave, and new paperwork and recordkeeping costs incurred by complying with the mandate. Assuming passage and implementation of the mandate in 2012, the BSIM forecasts that nearly 16,000 MA jobs could be lost by 2016, and MA real output could decrease by more than \$8.4 billion. Small firms would bear two-thirds of the job losses and more than half of the lost sales. Although the state unemployment rate has gradually fallen and is currently no longer above 8 percent, job creation remains a priority and policymakers would do well to bear in mind the potential negative effects to employment and production that employer mandates can have.