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NFIB Research Foundation
January 15, 2010

Evaluating HB 3665 and the Impact of Mandatory Paid Sick Leave on Illinois Small Businesses

This report analyzes the potential economic impact of HB 3665, also known as the Healthy Workplace Act, on Illinois employers, workers, and economy. HB 3665 would establish a minimum time-off standard for paid sick leave by requiring IL employers to provide employees with up to seven sick days with pay during each 12-month period. Paid sick days would have to be provided to employees to care for their own or a family member's physical or mental illness, injury, medical condition, professional medical diagnosis, or care, or to attend a medical appointment for either themselves or family members. This mandate would impose new costs on IL employers that would lead to reduced profitability, lost sales and production, and lost jobs.

To analyze the economic impact of HB 3665, the NFIB Business Size Impact Module (BSIM) of the REMI economic model was employed to forecast the consequences this legislation would have on IL businesses by firm-size category. BSIM consists of a collection of 10 regional economic models designed to measure the effects of macroeconomic changes on firms. The module takes as input new employer costs and spending generated by macroeconomic change(s) of interest and uses them to forecast macro variable outputs like real GDP and employment levels, by firm size. These forecast variables can then be compared to a baseline forecast representing the path of the economy in the absence of any macroeconomic changes. No other general model of which we are aware has the capability to measure the effects of new government policies by firm size.

BSIM inputs in this study consist of new employer costs generated by the mandate described in HB 3665 and new spending on healthcare-related goods and services due to an increase in paid sick leave taken by employees. Passage and implementation of HB 3665 is assumed to occur in 2010. Economic forecasts were generated for years 2010 through 2015. The results suggest that if HB 3665 passes, over 33,000 IL jobs could be lost and IL real GDP could decrease by over \$5 billion by 2015. Small firms would bear the majority of job and output losses.

Description of New Employer Costs Generated by HB 3665

HB 3665 would impose three major costs on employers: compensation costs associated with paying more workers taking paid sick leave, lost production due to more workers taking leave, and new paperwork and recordkeeping costs incurred by complying with a paid sick 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 the bill language, HB 3665 would entitle all employees working in Illinois to “earn a maximum of 7 sick days with pay during a 12-month period, or a pro rata number of paid sick days or hours” based upon certain accrual provisions.¹ The bill defines a “sick day” as “a portion of, or a regular workday when an employee is unable to report to work” in order to care for their own or a family member’s physical or mental illness, injury, medical condition, professional medical diagnosis, or care, or to attend a medical appointment for either themselves or for family members. Sick days could be used as accrued and could also be loaned by employers, at their discretion, to employees in advance of their accrual.

The size of employer compensation costs will depend on the amount of additional paid leave time that employees take off. This study looked at two different scenarios involving disparate assumptions on the amount of additional paid sick leave that would be taken by employees if HB 3665 were implemented.

- **Scenario 1:** IL employees with newfound access to paid sick leave would use all of the paid sick leave they accrue.
- **Scenario 2:** IL employees with newfound access to paid sick leave would not use all of the paid sick leave time they accrue. Instead, these employees are assumed to use 20 percent of their available paid sick leave time.

In both scenarios, it is assumed that workers already with access to paid sick leave do not change the amount of paid leave they take after HB 3665 is implemented. Also, the paid sick leave these workers have access to is assumed to be sufficiently generous that it satisfies the requirements of HB 3665.

Compensation cost estimates for both scenarios were calculated using data and assumptions regarding [1] the number of IL employees newly eligible for paid sick leave under HB 3665, [2] the quantity of additional paid sick leave taken by employees if HB

¹ The bill language concerning accrual provisions is as follow: “Paid sick days shall accrue at the rate of one hour of paid sick time for every 30 hours worked up to the maximum of 7 paid sick days. Employees who are exempt from overtime requirements of the Federal Fair Labor Standards Act . . . will be assumed to work 40 hours in each work week for purposes of paid sick day accrual unless their normal work week is less than 40 hours, in which case paid sick days accrue based upon that normal work week.” Assuming a five-day work week, this language was interpreted to mean that a “regular workday” cannot be longer than 8 hours for the purpose of sick day accumulation.

3665 passes, and [3] the compensation of these employees. 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 IL employees with no paid sick days—the set of employees newly eligible for paid sick leave if HB 3665 were implemented. The percent estimates of IL 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 Department of Agriculture. Industry-level data on the number of IL 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 IL employees currently without paid sick days, by industry (right-most column).

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

NAICS Industry Code	Private Sector Industry	Percent of Workers without Paid Sick Days Nationally ²	Number of IL Employees, by Industry ³	Estimated Number of IL Employees without Paid Sick Days, by Industry
11	Agriculture	67	1,606	1,076
21	Mining	52	10,164	5,234
22	Utilities	15	26,039	3,810
23	Construction	75	261,871	195,565
31-33	Manufacturing	48	666,711	319,821
42	Wholesale Trade	29	315,469	91,202
44-45	Retail Trade	55	652,262	358,483
48-49	Transportation/Warehousing	44	224,871	99,146
51	Information	26	129,050	32,921
52	Finance and Insurance	18	352,619	62,942
53	Real Estate	33	87,547	29,258
54	Prof., Scientific, & Tech. Services	31	376,748	117,357
55	Management	23	159,020	36,940
56	Admin., Support, Waste Man., & Rem. Services	69	460,768	318,299
61	Education	32	139,744	44,299
62	Healthcare and Social Assist.	29	702,964	203,016
71	Arts, Entertain., & Recreation	65	71,872	46,652
72	Accommodation and Food Serv.	78	457,399	357,000
81	Other Services	51	260,050	131,793
--	All Industries	48	5,355,168	2,453,739

² 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 2009 National Compensation Survey and is not adjusted using JOLTS data.

³ Estimates of the number of IL employees by industry are taken from the Census Bureau’s 2006 Statistics of U.S. Businesses dataset.

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 allow. To produce firm-size-specific outputs, BSIM requires that inputs also be firm-size specific. The estimates of IL employees without paid sick leave in Table 1 therefore need to be allocated to a pre-defined set of firm-size categories.

The approach taken in this study was to distribute the estimates of IL employees currently ineligible for paid sick leave according to the present firm-size distribution of IL employees. To illustrate this process, consider the case of the construction industry where an estimated 195,565 IL construction employees are ineligible for paid sick leave. **Table 2.A** gives Census Bureau data on the distribution of IL employees working construction across firm-size groups. Multiplying the estimated number of IL construction workers without paid sick leave, 195,565, 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 IL 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 IL Construction Employees, 2006

	All Construction Employees	No. of Employees per Firm					
		1-4	5-9	10-19	20-99	100-499	500+
No. of Employees	261,871	32,096	33,580	39,053	79,843	45,950	31,349
% of Employees	100.00%	12.26%	12.82%	14.91%	30.49%	17.55%	11.97%

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

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

	All Construction Employees without Paid Sick Leave	No. of Employees per Firm					
		1-4	5-9	10-19	20-99	100-499	500+
No. of Employees	195,565	23,969	25,078	29,165	59,627	34,315	23,411
% of Employees	100.00%	12.26%	12.82%	14.91%	30.49%	17.55%	11.97%

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

Industry	No. of Employees per Firm					
	1-4	5-9	10-19	20-99	100-499	500+
Agriculture ⁴	202	180	69	177	186	264
Mining	246	227	391	939	570	2,862
Utilities	22	21	29	195	117	3,426
Construction	23,969	25,078	29,165	59,627	34,315	23,411
Manufacturing	4,444	7,999	14,717	60,903	70,717	161,040

⁴ The number of IL agricultural employees working for employers with 10-19 or 20-99 employees was unavailable due to confidentiality reasons. It was assumed that the ratio of agricultural employees in these two categories mirrored the ratio of (no. of employees at firms with 10-19 employees for all industries) : (no. of employees at firms with 20-99 employees for all industries).

Wholesale Trade	4,120	5,042	7,267	20,192	15,560	39,021
Retail Trade	15,200	19,763	22,996	52,854	31,323	216,347
Transportation/Warehousing	3,747	3,362	4,311	11,328	11,361	65,037
Information	621	700	1,096	3,029	3,498	23,977
Finance and Insurance	2,790	2,197	2,317	6,950	7,206	41,482
Real Estate	3,873	2,994	2,769	5,608	4,385	9,629
Prof., Scientific, & Tech. Services	11,473	9,167	10,776	21,137	16,052	48,753
Management	38	34	57	696	2,812	33,304
Admin., Support, Waste Man., & Rem. Services	7,973	8,604	11,106	34,957	54,427	201,232
Education	650	898	1,665	8,171	5,816	27,099
Healthcare and Social Assist.	6,479	10,120	12,169	27,245	39,106	107,898
Arts, Entertain., & Recreation	2,237	2,777	4,074	14,494	9,690	13,379
Accommodation and Food Serv.	11,837	19,914	36,314	106,754	45,814	136,366
Other Services	16,739	20,660	20,841	35,377	14,888	23,289

Regarding [2], as described earlier, we modeled two different scenarios with disparate assumptions on the number of sick days newly eligible employees would take. The two assumptions are based on the bill language and data on take-up rates for existing paid leave policies. The first scenario (Scenario 1) assumes that newly eligible employees will each year use the maximum seven days they can accrue per year under HB 3665.

The second scenario (Scenario 2) assumes that newly eligible employees will each year use 20 percent of the maximum paid sick leave time they can accrue, or 1.4 days (0.20 x 7 days) per year. This assumption is based on a 2000 Department of Labor survey on the Family and Medical Leave Act which reported that nearly 20 percent of FMLA-eligible employees who took leave over an 18-month period took their longest leave under FMLA.⁵ In effect, Scenario 2 assumes that newly eligible employees will use their newly accrued paid sick days in proportions similar to how employees taking leave under FMLA currently use theirs. This scenario represents a trajectory of compensation costs where newly eligible employees need the paid sick leave time provided them by HB 3665 and use it in quantities suggested by existing usage rates of FMLA leave.

Finally, estimates for [3], employee compensation, were derived using industry-level data on the average workweek lengths of employees and average hourly earnings⁶ or wages of employees. Data on average workweek lengths of employees came from the Bureau of Labor Statistics' Current Employment Statistics database, as did data on average hourly earnings for non-agricultural employees. For agricultural employees,

⁵ See 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>.

⁶ 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.

wage data from the Department of Agriculture’s National Agricultural Statistics Service were used. The BLS and DOA workweek length and earnings/wage data are given in columns (A) and (B) in **Table 3**. This study assumes that a typical workweek is five days. Column (C) gives the average number of hours worked per day, by industry, based on the data in column (A) and the five-day workweek assumption. Column (D) gives the average daily earnings/wages per worker implied by the figures in columns (B) and (C). The values in column (E) are the implied maximum earnings/wage cost per employee per year (7 days) under Scenario 1 given the values in column (D).

Table 3: Estimated Earnings, Wages, and Hours Worked by IL Employees, by Industry⁷

Industry	Avg. # Hrs. Worked per Week (A)	Avg. Hourly Earnings/Wages (B)	Avg. Daily Hrs. (Assuming 5 Days per Workweek) (C)	Avg. Daily Earnings/Wages (D)	Earnings/Wages per Employee for 7 Work Days (E)
Agriculture	39.0	\$11.09	7.80	\$86.50	\$605.51
Mining	45.3	\$23.01	9.06	\$208.47	\$1,459.29
Utilities	42.7	\$21.87	8.54	\$186.77	\$1,307.39
Construction	41.1	\$30.23	8.22	\$248.49	\$1,739.43
Manufacturing	41.0	\$16.44	8.20	\$134.81	\$943.66
Wholesale Trade	40.1	\$17.60	8.02	\$141.15	\$988.06
Retail Trade	30.2	\$12.20	6.04	\$73.69	\$515.82
Transportation/ Warehousing	36.4	\$18.41	7.28	\$134.02	\$938.17
Information	35.5	\$20.93	7.10	\$148.60	\$1,040.22
Finance and Insurance	37.0	\$21.54	7.40	\$159.40	\$1,115.77
Real Estate	32.7	\$16.38	6.54	\$107.13	\$749.88
Prof., Scientific, & Tech. Services	35.8	\$27.83	7.16	\$199.26	\$1,394.84
Management	36.9	\$22.05	7.38	\$162.73	\$1,139.10
Admin., Support, Waste Man., & Rem. Services	33.6	\$14.88	6.72	\$99.99	\$699.96
Education	32.5	\$18.88	6.50	\$122.72	\$859.04
Healthcare and Social Assist.	32.8	\$19.25	6.56	\$126.28	\$883.96
Arts, Entertain., & Recreation	24.1	\$14.74	4.82	\$71.05	\$497.33
Accommodation and Food Serv.	25.4	\$10.23	5.08	\$51.97	\$363.78
Other Services	33.1	\$15.82	6.62	\$104.73	\$733.10

⁷ With the exception of Agriculture, all dollar values in Table 3 represent or are derived from 2008 earnings data taken from the Bureau of Labor Statistics’ Current Employment Statistics (CES) dataset. When available, IL-specific earnings data was used (construction, manufacturing, wholesale trade, retail trade, information, other services). In the absence of IL-specific earnings data, national-level data was used. No earnings data for agriculture was available, so 2009 wage data from the Department of Agriculture’s National Agricultural Statistics Service was used instead.

As mentioned earlier, BSIM requires inputs to be provided for individual firm-size categories. For Scenario 1, this was achieved for most industries by multiplying the seven-day earnings/wage costs in column (E) by the industry-by-firm-size matrix of estimated numbers of IL employees without paid sick leave (Table 2.C). The exceptions to this process are the mining, utilities, construction, manufacturing, and wholesale trade industries. For these industries, the earnings/wage figures in column (E) were first adjusted downward to remove the impact of overtime pay before multiplication.⁸ The end result is an industry-by-firm-size matrix of new compensation costs to employers for providing paid sick leave under HB 3665 (Table 4). These compensation costs are based on the latest data available and are assumed to apply for the year 2010. The corresponding matrix for Scenario 2 is not presented here, but a similar process was followed except that only 20 percent of earnings/wage figures (adjusted for overtime) were multiplied by the industry-by-firm-size matrix.

Table 4: Estimated Earnings and Wages Paid by Firms to Employees Newly Eligible for Paid Sick Leave, Scenario 1, Year 2010

Industry	No. of Employees per Firm					
	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	\$122,114	\$108,726	\$41,570	\$106,914	\$112,377	\$159,844
Mining	\$299,047	\$275,851	\$475,843	\$1,142,900	\$694,015	\$3,484,496
Utilities	\$25,705	\$24,837	\$34,563	\$231,349	\$139,122	\$4,067,015
Construction	\$40,041,304	\$41,892,665	\$48,720,496	\$99,607,983	\$57,324,835	\$39,109,385
Manufacturing	\$4,042,414	\$7,275,472	\$13,385,995	\$55,394,373	\$64,320,843	\$146,473,681
Wholesale Trade	\$4,055,864	\$4,963,112	\$7,153,541	\$19,876,354	\$15,316,779	\$38,411,187
Retail Trade	\$7,840,551	\$10,194,106	\$11,861,609	\$27,262,904	\$16,157,087	\$111,595,111
Transportation/ Warehousing	\$3,515,533	\$3,154,011	\$4,044,579	\$10,627,258	\$10,658,695	\$61,015,732
Information	\$645,887	\$728,414	\$1,139,723	\$3,150,358	\$3,638,887	\$24,941,487
Finance and Insurance	\$3,113,551	\$2,451,327	\$2,585,564	\$7,754,302	\$8,039,905	\$46,284,821
Real Estate	\$2,904,555	\$2,245,454	\$2,076,042	\$4,205,464	\$3,287,986	\$7,220,538
Prof., Scientific, & Tech. Services	\$16,002,795	\$12,785,812	\$15,031,269	\$29,482,056	\$22,389,400	\$68,002,861
Management	\$42,867	\$38,634	\$64,830	\$793,047	\$3,202,619	\$37,936,862
Admin., Support, Waste Man., & Rem. Services	\$5,580,409	\$6,022,354	\$7,773,697	\$24,468,504	\$38,096,287	\$140,853,463
Education	\$558,247	\$771,470	\$1,430,474	\$7,019,481	\$4,995,903	\$23,278,906
Healthcare and Social Assist.	\$5,727,123	\$8,946,045	\$10,756,545	\$24,083,071	\$34,567,735	\$95,377,508
Arts, Entertain., & Recreation	\$1,112,422	\$1,381,004	\$2,026,312	\$7,208,467	\$4,819,310	\$6,653,870

⁸ 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).

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Accommodation and Food Serv.	\$4,306,073	\$7,244,457	\$13,210,381	\$38,835,005	\$16,666,085	\$49,607,001
Other Services	\$12,271,041	\$15,145,603	\$15,278,612	\$25,934,592	\$10,914,197	\$17,073,495

The reader will note that the compensation figures given in Table 4 do not represent the total labor cost to employers generated by HB 3665 under Scenario 1. 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 first adjusting the compensation figures in Table 4 upward by a percentage based on the ratios of benefits and wages/salary to total compensation. The Bureau of Economic Analysis reports that in 2008, average compensation per private sector employee totaled \$59,909. Of this figure, \$50,028 was reportedly due to wage and salary accruals. The balance of \$9,881 was imputed to consist of benefits. For simplicity, it was assumed that the national average percentage share of compensation represented by benefits (16.5 percent) approximately applied to all industries. The figures in Table 4 were adjusted upward by factors of 1.1 to 1.3 to obtain estimates of total compensation paid to newly-eligible employees under Scenario 1.⁹ Adjusted compensation cost figures which include benefit costs for Scenario 1 are given in **Table 5**.

An identical adjustment was made in the modeling of Scenario 2, but the resultant figures are not presented here. The reader should note that any modeling conventions or adjustments described in the remainder of this paper apply to both Scenarios 1 and 2. For brevity, however, only figures for Scenario 1 are shown.

Table 5: Compensation Costs before Accounting for Taxes, Scenario 1, Year 2010

Industry	No. of Employees per Firm					
	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	\$135,682	\$120,807	\$46,189	\$118,793	\$132,209	\$199,804
Mining	\$338,879	\$312,593	\$539,222	\$1,295,128	\$840,830	\$4,528,756
Utilities	\$28,851	\$27,876	\$38,793	\$259,657	\$166,159	\$5,186,715
Construction	\$44,673,860	\$46,739,414	\$54,357,187	\$111,132,073	\$67,858,274	\$49,290,047
Manufacturing	\$4,508,414	\$8,114,172	\$14,929,103	\$61,780,114	\$76,097,232	\$184,465,292
Wholesale Trade	\$4,508,206	\$5,516,637	\$7,951,359	\$22,093,119	\$18,029,876	\$48,049,994
Retail Trade	\$8,711,724	\$11,326,784	\$13,179,565	\$30,292,116	\$19,008,337	\$139,493,889

⁹ To illustrate the derivation of these factors, consider the case of average compensation for all private sector workers. According to the Bureau of Economic Analysis, in 2008 compensation per employee for private sector workers was \$59,909. Of this, \$50,028 was due to wage and salary accruals. The balance, \$9,881, is assumed to consist of benefits. Benefits therefore represent roughly 16.5 percent of compensation, and wages and salary 83.5 percent. Using these national-level percentages, we assume that for each industry in IL, $(16.5\%) / (83.5\%) = (\text{Industry-Level Benefits}) / (\text{Industry-Level Wages})$. Since $\text{Compensation} = \text{Wages} + \text{Benefits}$, then: $\text{Industry-Level Compensation} = \text{Industry-Level Wages} + [(16.5 / 83.5) \times \text{Industry-Level Wages}] = 1.2 \times \text{Industry-Level Wages}$. A range of factors based around 1.2 was assumed to account differences in compensation composition across firm sizes. Estimates of total compensation for all industries were based on earnings/wage figures without overtime adjustments.

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Transportation/ Warehousing	\$3,906,147	\$3,504,456	\$4,493,977	\$11,808,064	\$12,539,641	\$76,269,665
Information	\$717,652	\$809,349	\$1,266,359	\$3,500,398	\$4,281,043	\$31,176,859
Finance and Insurance	\$3,459,501	\$2,723,696	\$2,872,849	\$8,615,891	\$9,458,712	\$57,856,026
Real Estate	\$3,227,283	\$2,494,949	\$2,306,714	\$4,672,738	\$3,868,219	\$9,025,672
Prof., Scientific, & Tech. Services	\$17,780,883	\$14,206,458	\$16,701,410	\$32,757,841	\$26,340,471	\$85,003,577
Management	\$47,630	\$42,926	\$72,034	\$881,163	\$3,767,787	\$47,421,077
Admin., Support, Waste Man., & Rem. Services	\$6,200,454	\$6,691,505	\$8,637,441	\$27,187,227	\$44,819,161	\$176,066,829
Education	\$620,275	\$857,189	\$1,589,416	\$7,799,424	\$5,877,533	\$29,098,632
Healthcare and Social Assist.	\$6,363,470	\$9,940,050	\$11,951,717	\$26,758,968	\$40,667,923	\$119,221,884
Arts, Entertain., & Recreation	\$1,236,024	\$1,534,449	\$2,251,458	\$8,009,407	\$5,669,777	\$8,317,337
Accommodation and Food Serv.	\$4,784,525	\$8,049,397	\$14,678,201	\$43,150,006	\$19,607,159	\$62,008,751
Other Services	\$13,634,489	\$16,828,447	\$16,976,236	\$28,816,214	\$12,840,231	\$21,341,869

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 under Scenario 1. 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 on behalf of their employees. In general, a tax rate of 12.4 percent is imposed on employee wages, half of which falls on employers and half of which falls on employees. To reflect this cost, each compensation figure in Table 5 was increased by a sum equal to 6.2 percent of the non-benefit share of that particular compensation figure. **Table 6** gives the compensation costs under Scenario 1 after accounting for taxes.

Table 6: Compensation Costs after Accounting for Taxes, Scenario 1, Year 2010

Industry	No. of Employees per Firm					
	1-4	5-9	10-19	20-99	100-499	500+
Agriculture	\$138,504	\$123,320	\$47,150	\$121,264	\$132,235	\$195,728
Mining	\$343,479	\$316,836	\$546,541	\$1,312,708	\$832,474	\$4,379,304
Utilities	\$29,344	\$28,352	\$39,455	\$264,093	\$165,321	\$5,046,975
Construction	\$45,535,026	\$47,640,397	\$55,405,016	\$113,274,337	\$67,725,710	\$48,151,598
Manufacturing	\$4,595,943	\$8,271,706	\$15,218,947	\$62,979,556	\$75,963,388	\$180,249,597
Wholesale Trade	\$4,601,350	\$5,630,616	\$8,115,642	\$22,549,585	\$18,029,932	\$47,057,905
Retail Trade	\$8,892,928	\$11,562,381	\$13,453,700	\$30,922,192	\$19,012,139	\$136,648,214

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Transportation/ Warehousing	\$3,987,395	\$3,577,349	\$4,587,452	\$12,053,672	\$12,542,149	\$74,713,764
Information	\$732,580	\$826,184	\$1,292,699	\$3,573,207	\$4,281,900	\$30,540,851
Finance and Insurance	\$3,531,459	\$2,780,349	\$2,932,604	\$8,795,101	\$9,460,603	\$56,675,764
Real Estate	\$3,294,411	\$2,546,844	\$2,354,693	\$4,769,931	\$3,868,993	\$8,841,548
Prof., Scientific, & Tech. Services	\$18,150,725	\$14,501,952	\$17,048,800	\$33,439,204	\$26,345,739	\$83,269,504
Management	\$48,621	\$43,819	\$73,532	\$899,492	\$3,768,540	\$46,453,687
Admin., Support, Waste Man., & Rem. Services	\$6,329,424	\$6,830,688	\$8,817,099	\$27,752,721	\$44,828,125	\$172,475,066
Education	\$633,176	\$875,019	\$1,622,476	\$7,961,652	\$5,878,709	\$28,505,020
Healthcare and Social Assist.	\$6,495,830	\$10,146,803	\$12,200,312	\$27,315,554	\$40,676,057	\$116,789,758
Arts, Entertain., & Recreation	\$1,261,733	\$1,566,365	\$2,298,288	\$8,176,003	\$5,670,911	\$8,147,664
Accommodation and Food Serv.	\$4,884,043	\$8,216,825	\$14,983,508	\$44,047,526	\$19,611,080	\$60,743,773
Other Services	\$13,918,087	\$17,178,479	\$17,329,341	\$29,415,591	\$12,842,799	\$20,906,495

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 2010. Given inflation, these costs can be expected to be higher in 2011 and beyond. To account for inflation, the model assumes that employee compensation costs increase annually between 2010 and 2015 at their historical rate of growth during the previous decade. Based on data from the Bureau of Economic Analysis, the average annual percentage change for nominal full-time private sector employee compensation between 1998 and 2008 was 3.79%. This growth rate was applied to the figures in Table 6 to obtain estimated compensation costs for years 2011 through 2015 (not shown).

The figures in Table 6 and corresponding tables for years 2011 through 2015 represent the final estimated compensation costs to employers created by HB 3665 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 implementation of HB 3665. According to the economic theory of rational expectations, rational agents 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 accordingly. Hypothetically, it is possible that some employers will seek to offset some of the expected future costs generated by HB 3665 by immediately lowering employee compensation, reducing the number of workers employed, or decreasing other business spending. Neither simulation scenario includes such an effect.

B. Lost Production Due to Absent Workers

In addition to the afore-mentioned compensation costs, increased employee absences would also cause employers to suffer from 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.

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 importantly, 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. It would be inappropriate to enter exogenous production losses into BSIM as input.

These obstacles prevented the inclusion of exogenous production losses due to increased worker absences from the analysis. To the extent that such losses are absent, the forecast job and output losses associated with HB 3665 may be low.

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.¹⁰ 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.¹¹

HB 3665 would require employers to “make and preserve records documenting hours worked by employees and the amount of paid sick days taken by employees, for a

¹⁰ See William J. Dennis, Jr., “Paperwork and Record-keeping,” NFIB National Small Business Poll, Volume 3, Issue 5, 2003.

¹¹ 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.

period of not less than 3 years and . . . make reports from the records as prescribed by rule or order of the Director of the Department [Illinois Department of Labor].” To account for this burden, both simulation scenarios assume that an employer newly providing paid sick leave under HB 3665 will face a new paperwork and recordkeeping cost of 10 person-hours per year. At \$40 per hour, the paperwork and recordkeeping costs for employers newly offering paid sick translates to \$400 per year per employer.

Effects of HB 3665 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, both scenarios assume that demand for private sector healthcare goods and services produced in Illinois will increase by a dollar amount equal to the increase in IL employer costs.^{12†‡}

Increased demand is assumed to be distributed across industries according to historical patterns of healthcare expenditures in Illinois. Data on 2004 IL healthcare expenditures from the Kaiser Family Foundation were used as the template for new healthcare spending in both scenarios (**Table 7**). The pattern of IL 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 (2010 through 2015).

Table 7: Healthcare Expenditures in Illinois, 2004¹³

Hospital Care	38.30%
Physician and Other Professional Serv.	28.80%
Drugs and Other Medical Nondurables	13.50%
Nursing Home Care	7.70%
Dental Services	5.20%

¹² 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 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 IL healthcare goods and services is overestimated, the forecast job and output losses may be low.

[†] This assumption also ignores the presence of workers originally without paid sick leave who took unpaid leave prior to HB 3665 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.

[‡] To the extent that demand for goods and services outside of IL increase due to HB 3665, the forecast job and output losses may be understated. The assumption that only demand for IL goods and services increases is a constraint imposed by BSIM’s regional structure.

¹³ These data are available on the Henry J. Kaiser Family Foundation’s website on state health data, www.statehealthfacts.org.

Home Healthcare	1.90%
Medical Durables	1.50%
Other Personal Healthcare	3.20%
Total: ¹⁴	100.10%

Source: The Kaiser Family Foundation

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 2010. Under Scenario 1, the estimated total cost to IL employers in 2010 due to HB 3665 is \$2,400,314,971. Multiplying this sum by the percentages in Table 7 yields the dollar values in Table 8.

Table 8: Estimated New IL Healthcare Expenditures in 2010 Due to HB 3665, Scenario 1

Hospital Care	\$919,320,634
Physician and Other Professional Serv.	\$691,290,712
Drugs and Other Medical Nondurables	\$324,042,521
Nursing Home Care	\$184,824,253
Dental Services	\$124,816,379
Home Healthcare	\$45,605,984
Medical Durables	\$36,004,725
Other Personal Healthcare	\$76,810,079

Effects of HB 3665 on Government Demand

HB 3665 stipulates that the Illinois Department of Labor shall have the power to adopt rules necessary to administer and enforce the Healthy Workplace Act, including handling complaints filed by employees or employee representatives who believe their rights under the Act have been violated, supervising the payment of unpaid wages owed to employees under the Act, developing and implementing a multilingual outreach program to inform individuals affected by the Act about the availability of paid sick days under the Act, and, subject to appropriation, the annual compilation of information on paid sick leave usage by employees, the demographic characteristics of employees using paid sick days, and the costs and benefits to employers and employees of implementing the paid sick leave policies.

These responsibilities will result in new government costs. The uncertainty of what powers the Department of Labor will adopt, how many complaints might be filed, the scope of the multilingual outreach program, and the availability of state funds to compile information related to paid sick leave policies, make estimating these costs difficult. The current strained nature of IL state finances also makes it unlikely that a material share of the state budget will be allocated toward these new responsibilities in the short term. Hence, neither simulation scenario assumes that government demand will increase as a result of HB 3665.

¹⁴ Figures do not sum to 100% due to rounding.

Forecasted Economic Impact of HB 3665

The BSIM results suggest that HB 3665 could cause substantial job loss and output loss in Illinois. Economic forecasts for the two scenarios are discussed separately below.

Results for Scenario 1

Based on the assumptions in Scenario 1, BSIM forecasts that if HB 3665 is implemented:

- Over 33,000 IL jobs will be lost by 2015.
- Real output in IL will be \$5.7 billion less in 2015 than if HB 3665 had not been implemented. This output gap can be expected to grow larger in years beyond 2015.
- Cumulatively, over \$20 billion in real output will be lost between 2010 and 2015.

Detailed employment forecasts for Scenario 1 are given in **Table 9**. The forecasts are presented as employment differences under Scenario 1 relative to a baseline forecast. The baseline forecast represents the path of the economy if no policy shock occurs and HB 3665 is not implemented. Negative values indicate job losses, and positive values represent job gains. For example, according to the results, firms with 20 to 99 employees are forecast to lose 1,114 jobs in 2010, assuming the mandate goes into effect this year. Additional jobs are lost in subsequent years. By 2015, there will be 7,246 fewer jobs at firms currently with 20 to 99 employees due to the paid sick leave mandate than there would have been had HB 3665 not been implemented.

Table 9: Forecast Employment Difference from Baseline (in Units), Scenario 1

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size (No. of Employees per Firm)	1 to 4	-502	-1,051	-1,503	-1,851	-2,120	-2,326
	5 to 9	-399	-1,004	-1,502	-1,888	-2,189	-2,420
	10 to 19	-445	-1,209	-1,839	-2,327	-2,709	-3,001
	20 to 99	-1,114	-2,938	-4,443	-5,616	-6,534	-7,246
	100 to 499	826	-660	-1,894	-2,864	-3,630	-4,234
	500+	907	-3,411	-7,026	-9,897	-12,176	-13,987
	All Firms	-727	-10,273	-18,207	-24,443	-29,358	-33,214

Table 10 gives the share of job losses that are forecast to occur among small businesses under Scenario 1. The results suggest that small businesses will not only shoulder a large portion of future job losses, but they will also bear the brunt of job losses in the initial stages of the mandate. In 2011, 66.8 percent of the employment gap (jobs lost) will be at firms with fewer than 500 employees. Sixty (60.4) percent of the employment gap will be at firms with fewer than 100 employees. The small business share of the employment gap decreases over time as large firms gradually feel the full impact of the mandate. Still, by 2015, over fifty percent of job losses will have been at small firms (< 500 employees).

Table 10: Small Business Share of Forecast Job Losses, Scenario 1

		Year				
		2011	2012	2013	2014	2015
Firm Size	Firms with Fewer than 20 Employees	31.77%	26.61%	24.82%	23.90%	23.32%
	Firms with Fewer than 100 Employees	60.37%	51.01%	47.79%	46.16%	45.14%
	Firms with Fewer than 500 Employees	66.80%	61.41%	59.51%	58.53%	57.89%

Detailed forecasts for IL real output are given in **Table 11**. As with employment, the output forecasts are presented as output differences relative to a baseline forecast representing the path of the economy if HB 3665 is not implemented. The output gap is forecast to total over \$700 million in lost output in 2010. It is expected to grow in subsequent years and reach a size of nearly \$5.7 billion in 2015. Between 2010 and 2015, over \$20 billion in real output is expected to be lost as a consequence of the paid sick leave mandate. The small business share of these output reductions is given in **Table 12**. The figures indicate that small firms will bear the brunt of production losses.

Table 11: Forecast Real Output Difference from Baseline (in Billions of 2000 \$), Scenario 1

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size (No. of Employees per Firm)	1 to 4	-0.080	-0.154	-0.218	-0.270	-0.313	-0.349
	5 to 9	-0.063	-0.137	-0.201	-0.254	-0.297	-0.333
	10 to 19	-0.071	-0.164	-0.244	-0.310	-0.364	-0.409
	20 to 99	-0.183	-0.416	-0.618	-0.783	-0.921	-1.036
	100 to 499	-0.043	-0.248	-0.425	-0.572	-0.695	-0.798
	500+	-0.334	-0.973	-1.535	-2.008	-2.410	-2.753
	All Firms	-0.774	-2.092	-3.241	-4.197	-5.000	-5.678

Table 12: Small Business Share of Forecast Output Losses, Scenario 1

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size	< 20 Employees per Firm	27.65%	21.75%	20.46%	19.87%	19.48%	19.21%
	< 100 Employees per Firm	51.29%	41.63%	39.52%	38.53%	37.90%	37.46%
	< 500 Employees per Firm	56.85%	53.49%	52.64%	52.16%	51.80%	51.51%

Results for Scenario 2

Under Scenario 2, the forecast job loss and output loss are less than those for Scenario 1, but they are still substantial. Given the assumptions in Scenario 2, BSIM forecasts that if HB 3665 is implemented:

- Nearly 7,000 IL jobs will be lost by 2015.
- Real output in IL will be \$1.2 billion less in 2015 than if HB 3665 had not been implemented. This output gap can be expected to grow larger in years beyond 2015.
- Cumulatively, more than \$4 billion in real output will be lost between 2010 and 2015.

Detailed figures for employment and output forecasts under Scenario 2 are given in **Tables 13-16**. As was the case under Scenario 1, small firms are forecast to shoulder most of the job losses and production losses under Scenario 2.

The employment differences for the two scenarios are plotted in **Figure 1** below to provide the reader with a visual means of analyzing and comparing the two forecasts. Recall that the forecasts are given in terms of employment relative to a baseline forecast. The zero line in this figure represents the baseline forecast. Forecast job losses are therefore plotted using negative values. The downward trend of both the red and blue lines reflects the fact that the employment gap grows as time passes. Output losses for the two scenarios are plotted in a similar fashion in **Figure 2**.

Table 13: Forecast Employment Difference from Baseline (in Units), Scenario 2

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size (No. of Employees per Firm)	1 to 4	-104	-217	-309	-381	-436	-479
	5 to 9	-81	-206	-308	-388	-448	-495
	10 to 19	-91	-248	-377	-477	-556	-616
	20 to 99	-231	-604	-911	-1,151	-1,340	-1,486
	100 to 499	166	-138	-391	-587	-745	-868
	500+	170	-712	-1,451	-2,039	-2,505	-2,873
	All Firms	-171	-2,125	-3,747	-5,023	-6,030	-6,817

Table 14: Small Business Share of Forecast Job Losses, Scenario 2

		Year				
		2011	2012	2013	2014	2015
Firm Size	< 20 Employees per Firm	31.58%	26.53%	24.81%	23.88%	23.32%
	< 100 Employees per Firm	60.00%	50.84%	47.72%	46.10%	45.12%
	< 500 Employees per Firm	66.49%	61.28%	59.41%	58.46%	57.86%

Table 15: Forecast Real Output Difference from Baseline (in Billions of 2000 \$s), Scenario 2

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size (No. of Employees per Firm)	1 to 4	-0.016	-0.032	-0.045	-0.055	-0.064	-0.071
	5 to 9	-0.013	-0.028	-0.041	-0.052	-0.061	-0.068
	10 to 19	-0.014	-0.033	-0.050	-0.063	-0.074	-0.083
	20 to 99	-0.037	-0.085	-0.126	-0.160	-0.188	-0.211
	100 to 499	-0.009	-0.050	-0.087	-0.116	-0.142	-0.163
	500+	-0.071	-0.201	-0.316	-0.413	-0.495	-0.565
	All Firms	-0.160	-0.429	-0.665	-0.859	-1.024	-1.161

Table 16: Small Business Share of Forecast Output Losses, Scenario 2

		Year					
		2010	2011	2012	2013	2014	2015
Firm Size	< 20 Employees per Firm	26.88%	21.68%	20.45%	19.79%	19.43%	19.12%
	< 100 Employees per Firm	50.00%	41.49%	39.40%	38.42%	37.79%	37.30%
	< 500 Employees per Firm	55.63%	53.15%	52.48%	51.92%	51.66%	51.34%

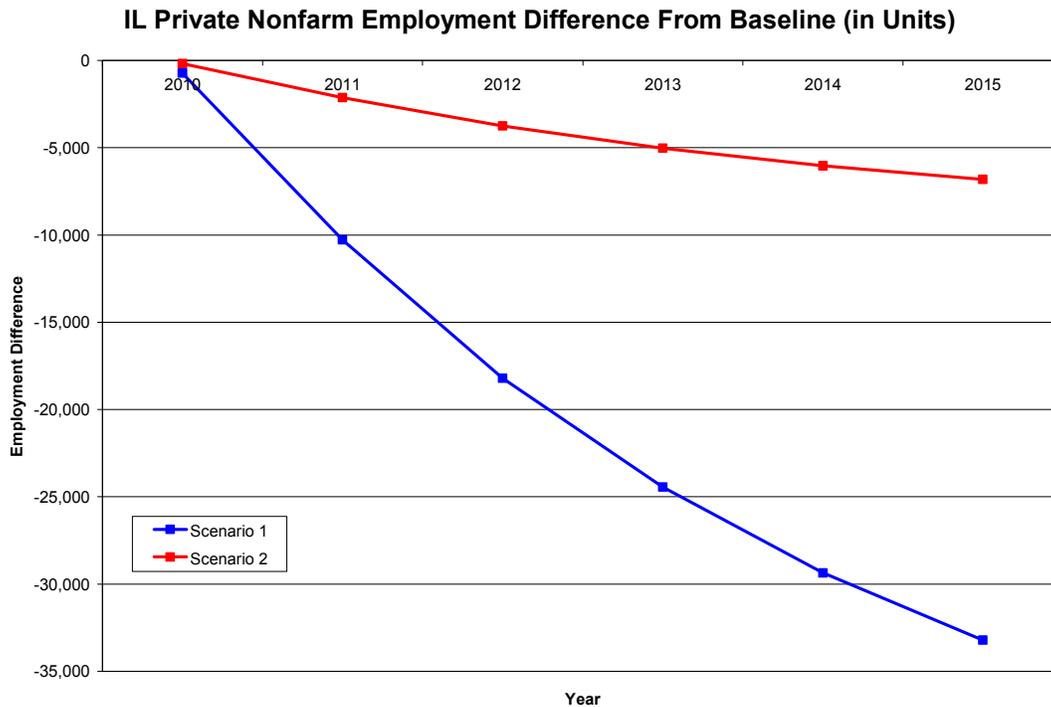


Figure 1

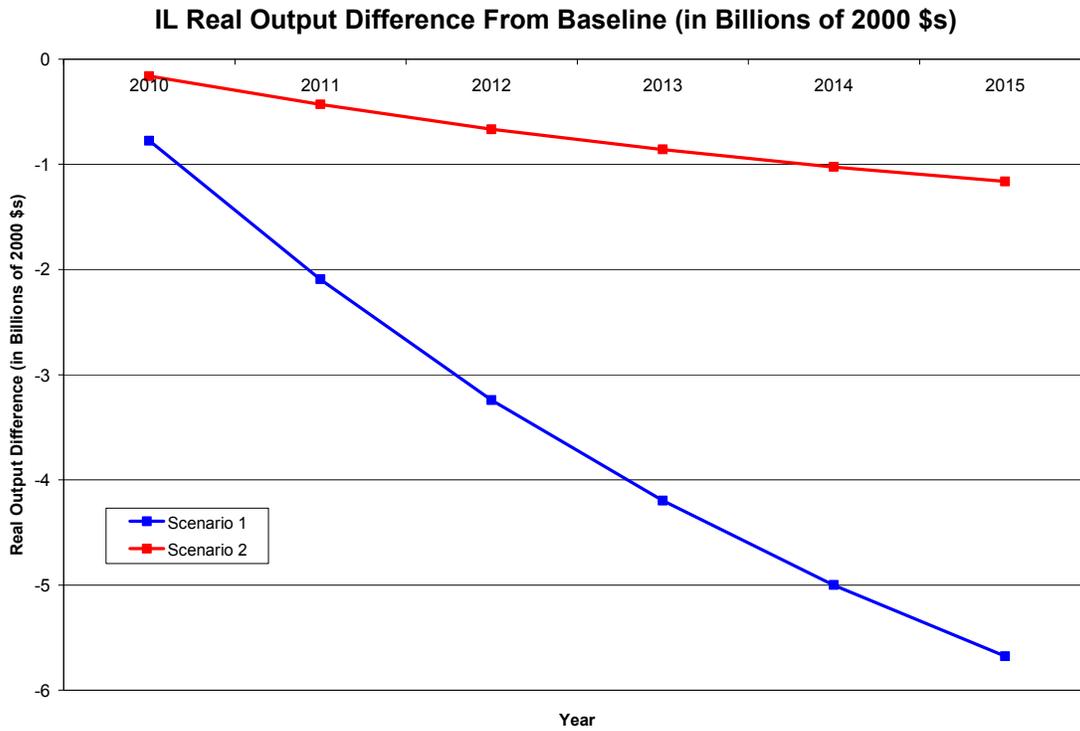


Figure 2

Summary

The paid sick leave mandate proposed in HB 3665 would impose new costs on employers in the forms of compensation costs associated with paying more 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 HB 3665 in 2010, BSIM forecasts that over 33,000 IL jobs could be lost and IL real GDP could decrease by over \$5 billion by 2015. Small firms would bear the majority of job and output losses.